Kaarlo Paloniemi

CREATING BUSINESS OPPORTUNITIES

A CRITICAL REALIST PERSPECTIVE
KAARLO PALONIEMI

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A critical realist perspective

Academic dissertation to be presented with the assent of the Faculty of Economics and Business Administration of the University of Oulu for public defence in Arina-sali (Auditorium TA105), Linnanmäki, on 4 December 2010, at 12 noon

UNIVERSITY OF OULU, OULU 2010
Paloniemi, Kaarlo, Creating business opportunities. A critical realist perspective
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Abstract
The purpose of this research was to gain a more profound understanding of the emergence of the
business opportunities, and to enhance the development of entrepreneurship theory in relation to
this context. This research is to understand two issues: How does a business opportunity emerge?
What makes it possible?
This dissertation builds a conceptual framework of the process of creating the Business
Opportunity and concentrates on three interrelated sub-processes emerging in it: Business Ideation
Process, Business Modeling Process and Business Planning Process. The Business Ideation is
defined as creating an idea of the business opportunity with a clear focus on the customer,
consideration, connection, and/or commitment. The Business Modeling Process is the conceptual
model of the future business opportunity consisting elements such as: value creation; firm’s
internal source of advantage; position in the marketplace; profit making; and entrepreneur’s
perspective. Finally, the Business Planning Process is the implementation plan of the conceptual
business opportunity.

The scientific choices are based on the critical realism that highlights reality simultaneously
as existing independently of its observers and acknowledges the role of an actor (the entrepreneur)
as being constrained by it as well as being able to change it. Furthermore, this dissertation treats
the process of creating the business opportunities as creative process based on the idea of a
personal (or everyday) creativity and the method of creative problem solving.

The results indicate that the nature of the process of creating the Business Opportunities, the
BOC process, allows all people to be treated as entrepreneurs if they play the role of the
entrepreneur by interacting (more or less creatively) with business ideating, business modeling
and business planning processes. Hence, the creative problem solving method utilized in every
sub-process will free the entrepreneur from the restraint of the dominant insight of the opportunity
that sees it as a true vision of the future business venture. Here, the business opportunities are
created during the process. Furthermore, the results show a keen interplay between the process of
creating business opportunities and their exploitation. Hence, the BOC process appears to be an
essential part of the overall entrepreneurial process.

Keywords: business opportunity, creativity, critical realism, entrepreneurial process
Acknowledgements

I would like to express my deepest gratitude to my overall doctoral study supervisor, Professor Rauli Svento. His professional and personal support during my PhD study process has been invaluable. I would also thank my PhD thesis supervisors, Professor Paula Kyrö of Aalto University for her tenacious guidance during this multifaceted research process, and Professor Vesa Puhakka, whose encouragement has been essential for finishing the process. I also wish to thank warmly my two reviewers, Professor Pia Arenius of University of Turku and Professor Ivo Zander of Uppsala University. They both gave me valuable comments for improving my thesis.

I want to express my appreciation to scholars in the field of entrepreneurship, who have discussed with me about the entrepreneurial process. I would also thank my colleagues at the faculty, who have been willing to share my passionate insights of possible ways to understand the process.

I want to acknowledge the importance of the financial support I have received from several sources: Jenny and Antti Wihuri Foundation; Oulun yliopiston Tukisäätiö, Suomen Kulttuurirahasto / Pohjois-Pohjanmaan rahasto, Tauno Tönnning Säätiöt, Oulun yliopiston Taloustieteiden tiedekunta; Oulun yliopiston akateemiset. I also wish to express my thanks to Dr. Seppo Eriksson for the editorial advice and to Michael Haagensen for the revision of the language.

The most sincere gratitude will go to my wife, Marja, and my son, Teemu. I wish to thank Marja for her everlasting support during the many difficult periods in my PhD study process – as well as the few quite pleasant ones. Teemu, I thank you for helping me to understand what English as a foreign language is and is not. I hope that in my future works I am able to show what I have learnt.

Oulu, December 2010

Kaarlo J. Paloniemi
**Abbreviations and key definitions**

<table>
<thead>
<tr>
<th>Abbreviation</th>
<th>Definition</th>
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<tbody>
<tr>
<td>BIP</td>
<td>Business Ideating Process uses CPS method to produce the IofBO as its outcome.</td>
</tr>
<tr>
<td>BM</td>
<td>Business Model is the creative outcome of the Business Modeling Process.</td>
</tr>
<tr>
<td>BMP</td>
<td>Business Modeling Process uses CPS method to produce the BM as its outcome. It is the answers to six questions indentified by the entrepreneur concerning issues: how and for whom the firm will make value; internal sources of advantage; market positioning; how the firm will make money; entrepreneur’s own ambitions.</td>
</tr>
<tr>
<td>BO</td>
<td>Business Opportunity is the key outcome of the BOC process based on new idea(s) or inventions that may or may not lead to the achievement of one or more economic ends and actions that form the conceptual basis of the new business venture.</td>
</tr>
<tr>
<td>BOC process</td>
<td>The process of creating the Business Opportunities is one of the two parallel sub-processes of the entrepreneurial process. It contains sub-processes and outcomes based on creative problem solving (CPS) as follows: BIP and IofBO; BMP and BM; BPP and BP.</td>
</tr>
<tr>
<td>BOE process</td>
<td>The process of exploiting of the Business Opportunity is the other parallel entrepreneurial sub-process. The conceptual BO will be utilized in a real-life business context during the BOE process.</td>
</tr>
<tr>
<td>BP</td>
<td>Business Plan is the creative implementation plan of the conceptual Business Model.</td>
</tr>
<tr>
<td>BPP</td>
<td>Business Planning Process uses CPS method to produce the BP as its outcome and is about concerning how to develop creatively the conceptual BM into a concrete form of a business venture to find acceptance among various shareholders and stakeholders.</td>
</tr>
<tr>
<td>Case</td>
<td>The creation process of the BO, The BOC process, in the ICT industry</td>
</tr>
<tr>
<td>Term</td>
<td>Definition</td>
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<tr>
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<tr>
<td>CPS</td>
<td>The Creative Problem Solving method includes three essential activities: divergence, clustering and convergence. They are utilized in problem statement, idea generation and concept development phases more or less thoroughly in every sub-processes of the BOC process.</td>
</tr>
<tr>
<td>Entrepreneurship</td>
<td>Entrepreneurship is defined broadly as a teleological process directed towards the creation of pecuniary or non-pecuniary value through creating and exploiting of the BO for the entrepreneur, customers, shareholders, and other stakeholders.</td>
</tr>
<tr>
<td>Entrepreneurial process</td>
<td>The Entrepreneurial process includes two processes, the BOC and the BOE process.</td>
</tr>
<tr>
<td>Entrepreneur</td>
<td>The entrepreneur is the role of a person (or a team) in creating BOs in the BOC process and in exploiting it in the actual BOE process.</td>
</tr>
<tr>
<td>ICT</td>
<td>Information and Communication Technology</td>
</tr>
<tr>
<td>IforBV</td>
<td>Idea for a desirable new Business Venture is defined here as an idea or a dream that does not necessary include any specific business-like contents.</td>
</tr>
<tr>
<td>IofBO</td>
<td>Idea of Business Opportunity is defined as the initial business-like idea but still only as a more or less rough insight into the desirable new business opportunity.</td>
</tr>
<tr>
<td>Sub-case</td>
<td>Seven BOC processes conducted by the ICT entrepreneurs in Finland.</td>
</tr>
<tr>
<td>Sub-case Entrepreneur</td>
<td>Founding entrepreneur of a sub-case – the key source of the primary research material in the study.</td>
</tr>
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1 Entrepreneurship

"At the beginning of my journey, I was naive. I didn’t yet know that the answers vanish as one continues to travel, that there is only further complexity, that there are still more interrelationships and more questions.” (Kaplan, 1996)

Since Schumpeter’s The Theory of Economic Development (1911/1934, quoted in Becker and Knudsen 2002; 2004) scholars in entrepreneurship have emphasized the role of the entrepreneur, the individual or team, as one of the important actors in economic development (Davidsson 2007). For example, Baumol (2004: 33, Endnote 5 in the original) emphasizes Schumpeter’s conception of the entrepreneur as a partner of an inventor, as a business person who’s task is to recognize the value of the inventor’s invention, to determine how to adapt to suit the prospective users, and to bring it to the market by promoting its utilization possibilities. This is in line with Acs (2007) and Davidsson (2007) who explicitly combine two historical definitions of entrepreneur, the business owner and a person with specific behaviors to seize economic opportunities, along with the creator of new venture (specifically, the creation of new economic activities in Davidsson).

“Historically entrepreneurship has at least two meanings. First, entrepreneurship refers to owning and managing a business. This is the occupational notion of entrepreneurship. Within this concept of entrepreneurship, a dynamic perspective focuses on the creation of new businesses, while a static perspective relates to the number of businesses owners. Second, entrepreneurship refers to entrepreneurial behavior in the sense of seizing an economic opportunity. This is the behavioral notion of entrepreneurship. Entrepreneurs in the behavioral sense need not be business owners. At the crossroads of behavioral entrepreneurship and the dynamic perspective of occupational entrepreneurship, a new focus has arisen that considers new venture creation as the hallmark of entrepreneurship.” (Acs 2007: 17)

Thus, the behavior of the entrepreneur is understood to focus on the creation of new (business or non-business) ventures. The prior definitions of entrepreneur in literature on entrepreneurship (at least implicitly) equate the owner-manager-entrepreneur with opportunity-seizer-entrepreneur, while Bianchi and Henrekson
Bianchi and Henrekson (2005) depict a slightly different insight to make an explicit difference between the inventor and the entrepreneur: “the inventor produces the ideas, the entrepreneur gets things done” (Bianchi and Henrekson 2005: 13). To follow Schumpeter’s idea means that the entrepreneur’s task is to build a business venture based on the invention. This means that the entrepreneur capitalizes on the invention by innovating.

Schumpeter, whose insight of entrepreneurship as an innovation (or a new combination) that is ready to be introduced to the market, is one of the most frequently cited scholars in the literature on entrepreneurship. However, in the current study the field of entrepreneurship is defined to contain – not only that one – but three different strands of literature on the phenomenon: occupational, structural, and functional perspectives on entrepreneurship (Klein 2008: 176–178).

The occupational perspective defines entrepreneurship merely as self-employment in which the entrepreneur is displayed as either the founder of a new start-up or as an individual who has chosen between employment and self-employment. Studies based on the occupation theory “treat the individual as the unit of analysis” (Foss, Klein, Kor and Mahoney 2008: 76). The structural approach focuses on firms or industries, and treats, for example, the firm as entrepreneurial, that is, merely as a new or small firm. From this perspective the firm or industry is typically treated as the unit of analysis. Finally, the functional perspective on entrepreneurship perceives the domain as function, activity or process – “not an employment category or market structure” (Klein 2008: 177).

The functional perspective relates closely to the additional strand of research, the behavioral perspective, presented by, for example, Gartner (1989), Klofsten (2000; 2005), or Krueger, Reilly, and Carsrud (2000).

Research on entrepreneurship has been mostly related to occupational or structural perspectives, and the entrepreneurial function perspective has been presented in previous literature more often than not as judgment, innovation, alertness, or coordination (e.g. Knight 1921; Schumpeter 1911/1934, quoted in Becker and Knudsen 2002; 2004; Kirzner 1999). The main reason for this is because, on the one hand, both Knight and Kirzner see entrepreneurship as instrumental. Instrumental aspect such as that in the knightian perspective is about decomposing business income into two elements (interest and profit). For Kirzner, the instrumental aspect is about entrepreneurial alertness to explain the market as a clearinghouse. On the other hand, according to Barreto (1989), Schumpeter sees entrepreneurship through the role of the entrepreneur with
activities in the entrepreneurial process; innovation (or more precisely combination) and coordination, respectively. Foss et al. (2008) conclude this debate as follows:

“In each case, these functional concepts of entrepreneurship are independent of occupational and structural concepts. The entrepreneurial function can be manifested in large and small firms, in old and new firms, by individuals or teams, across a variety of occupational categories and market settings (Alvarez and Barney, 2005b). The entrepreneur can be an owner, a manager, or even a team of managers who go through the entrepreneurial discovery process and take actions (Grimm, Lee, and Smith 2006).” (Foss 2008, 76)

The opening chapter details the key issues of the present study. First, the discussion on the process approach on entrepreneurship is opened up in order to highlight the role of the less studied sub-process of entrepreneurship: the discovery process. This is followed by addressing the aims of the current research study. After which, both the scope and the empirical context of the research are to be disclosed. The chapter ends in an overview of the whole research study and its description.

1.1 Entrepreneurship as a process

Previous literature shows clearly how a large number of individuals have started the entrepreneurial process. Two good example of this are given in the case the Panel Study of Entrepreneurial Dynamics (PSED) by Reynolds and Curtin (2007; 2008), and in the Global Entrepreneurship Monitor program (GEM) by Stenholm, Pukkinen, Heinonen, and Kovalainen (2008). According to Stenholm et al., this indicates that nearly every tenth person of adult working population has been involved in entrepreneurship as a nascent entrepreneur or a new business owner.

Entrepreneurship’s role is widely recognized as an important motor of economic development in global and national level whether or not it is seen as either a very old phenomenon in general (e.g. Schildt, Zahra, and Sillanpää 2006) or an embryonic and emerging research area (e.g. Davidsson 2006a). Clearly, the successful actions of entrepreneurs in business will gain wealth in many cases not only to the entrepreneurs themselves but also the society in which they are embedded. In all, societies are gaining from the activities of entrepreneurs due to the products, services and new innovations they have produced in different
organizational context and business ventures. Wakkee (2004) presents this line of thought about the actions of the entrepreneur as follows:

“The entrepreneur is nevertheless the driving force throughout the process: initiating and directing the process from the original idea to the exchange with the market.” (Wakkee 2004: 68)

In addition to the economical perspective on entrepreneurship the research area has also become (or is at least is becoming) a distinct field of research from the academic perspective, too. For example, Brush, Duhaime, Gartner, Stewart, Katz, Hitt, Alvarez, Meyer, and Venkataraman (2003) state explicitly how:

“The entrepreneurship field’s focus on creation activities distinguishes it from perhaps its closest neighbour, the strategy field. For example, though new venture creation [understood here as emerging process with outcomes like new business opportunities, or new economic activities independent of the context] is viewed by strategy researchers as one among a number of strategic options for existing firms, entrepreneurial researchers’ primary focus is on new venture creation across a variety of contexts. Therefore, knowledge created in each field can offer insights for knowledge development in the other.” (Brush, Duhaime, Gartner, Steward, Katz, Alvarez, Meyer, and Venkataraman. 2003: 310, brackets added)

According to Acs, Audretsch, Braunerhjelm and Carlsson (2009), the main focus of entrepreneurship is “on the recognition of opportunities and the decision to exploit them” (15). This statement is consistent with Shane and Venkataraman (2000, 219), as well as Shane, Locke and Collins (2003: 259). They conclude that entrepreneurship (as a whole) is an important process because, for example, new knowledge or technological inventions are converted into new products and services to be introduced into the market by the entrepreneurs’ actions.

The definition of entrepreneurship as a tool for economic activities, employment, growth, and other areas etc. (c.f. Davidsson 2004; Shane 2009), has been widely shared by researchers in the field. The process concerning what happens in the discovery process as well as in the exploitation process (Shane and Venkataraman 2000; 2001), however, has remained more than ambiguous.

Despite the unsettling nature of the discovery process in literature of the entrepreneurial process, nevertheless, the concept of opportunity is more firmly depicted in earlier material. An example of that is to argue that “opportunities are real and independent of the entrepreneurs that perceive them (Casson, 2005)”
This kind of perspective is consistent with economic theories as it highlights the realistic nature of the opportunity, that is, it exists independently in the social reality. At the same time the very same opportunity can be seen from subjective perspective and as “choices made by individuals about how they would like to exploit the opportunity that they have discovered” (ibid.)

The insight on opportunity drawn on the delineations above (Acs et al. 2008) shows quite clearly – but at the same time only implicitly – that inventor’s ideas or knowledge spillover from scientific discoveries are assumed as opportunities with profitability (c.f. Davidsson 2003a). This means that the entrepreneur’s duty is only to get things done (i.e., to start the exploitation of the discovered and presumably profitable opportunity).

In contrast to what is state above, Ardichvili, Cardozo, and Ray (2003) start with arguing how entrepreneurs “identify business opportunities to create and deliver value for stakeholders in prospective ventures” (106) and explicitly argue that “opportunities are made, not found” (ibid.). Following their logic the opportunity discovery can be seen as a process that “begin[s] unformed and become[s] more developed through time” (108). This means that a need for activities occurs before an opportunity (with a full-blown business plan) emerges as ready-to-be-exploited in the context of a new start-up, or a new business venture in the context of an existing business firm. In the words of Ardichvili et al., this also means that opportunities begin “as simple concepts that become more elaborate as entrepreneurs develop them” (109).

### 1.1.1 The focus on entrepreneurial process in this study

In the present study entrepreneurship is studied from the functional and behavioral perspective (Foss et al.: 2008; Klein: 2008). The entrepreneurial process is seen as an important research topic and should be considered within both these perspectives. Therefore the question is not so much of new knowledge, or technological, social, or business invention itself, but of the entrepreneurial process itself and how all the necessary ingredients or sources for that process are put together either through finding them as ready in the environment or through a creative process.

Furthermore, to understand entrepreneurship more thoroughly it is important–not only in the scholarly domain, but also as a societal phenomenon (Davidsson 2003a, 317–348; see also Brush et al. 2003; Low 2001; Schildt et al. 2006; Shane
and Venkataraman 2000; Ucbasaran, Westhead, and Wright 2001; Venkataraman 1997). In addition, several scholars in the entrepreneurship field argue that the entrepreneurial process is at the heart of entrepreneurship (e.g. Shook, Priem, and McGee 2003). In fact, since the late 1980s many researchers have argued that the definition of entrepreneurship is the creation of new organizations or a new way to organize economic activities (e.g. Gartner 1985; 1989; 2001; Davidsson 2003a; 2003b; 2005; Samuelsson 2004). This is in line with Davidsson (2004) whose definition of entrepreneurship is influenced by Kirzner (1973) and “consists of the competitive behaviours that drive the market process ... because it is succinct and gives a satisfactorily clear delineation of the role of entrepreneurship in the society.” (Davidsson 2004: 6, underlined words emphasized in italics in original).

The scholars above have all made a great contribution in influencing our understanding of the entrepreneurial process and what that process entails. However, despite their efforts the field of entrepreneurship is still facing difficulties in understanding the process both as a whole as well as in the detail – at the level of two sub-processes, and the role of different actors and elements in the process.

The current situation in the field opens up need for research which focuses on the discovery process with the activities and phases prior to the start-up or founding the entity. There seems to be a need in the field to understand and explain the process in which the entrepreneur creates BOs (the discovery process). The outcome of this process is exploited during the next process, the opportunity exploitation. This notion is influenced by Davidsson (2004) who concludes that according to Kirzner’s insight “entrepreneurship consists solely of discovery; exploitation is presumably “something else’” (ibid.: 23, quotation marks in original).

Since the discovery process is presented in the prior literature as merely a black box several interesting elements of the process have been omitted from the academic scrutiny. Therefore, issues that already exist such as the business model and business concept, business plan, sources for opportunity, and others, also need to be studied more carefully in the context of the discovery process. Furthermore, the relationship between both the discovery and exploitation processes and a possible additional process (which may mediate the transformation of the more conceptual opportunity discovery to wholly concrete opportunity exploitation) includes fascinating elements that need to be opened up so that we are able to understand the whole entrepreneurial process and the roles and relationship of these two processes in it more thoroughly.
Together with the two sub-processes Alvarez and Barney (2006b) look at the discovery process from two different approaches: the discovery and the creation. To draw on the works of these two scholars and to extend the basic ideas presented in the prior literature it appears possible to state that both these approaches, the discovery and the creation, open up new insights to view the dominant interpretation of the entrepreneurial process, the discovery process (Shane and Venkataraman 2000) from a different perspective. Therefore, the discovery is interpreted here as \textit{process with the outcome:} the business opportunity. That is, the process is about how the entrepreneur puts all the ingredients of it together, in order to be able to enter the market and to serve customers through the products or services of the new business venture.

In closing, the work of researchers such as Hjorth (2001), Steyaert and Hjorth (2006), and Zander (2007), where they have both questioned and criticized the dominant perspective on entrepreneurship is acknowledged here as an important basis for the current study. Equally, the belief of the current study is that if individuals in the field of entrepreneurship understood the emergence of the BO more thoroughly it would be possible to promote it in its role of creating wealth and success for entrepreneurs themselves, as well as for society as a whole.

### 1.2 Research aims

The remainder of this report shows how this study shares the insight of the discovery process presented in the previous material as starting from either a very simple or a more complex idea. Obviously, after reviewing prior literature on the early phases of the entrepreneurial process, the concepts used in this study could have been called in many other ways. However, the process of creating the business opportunities (the BOC process), is referred to the other possible labels. But until the definition of the BOC process is displayed here more explicitly the general label the discovery process will be referred to the various possible labels such as recognition, discovery, creation, identification, and others which are used regularly in the literature.

Together with Davidsson’s works (2003a; 2006b) the seminal study of Shane and Venkataraman (2000) is influenced heavily on the initial designing of the present study. Besides this, what McKenzie, Ugbah, and Smothers (2007) state is acknowledged here as important. According to these scholars, entrepreneurship should not only be defined as economic activities for profit but also as “economic acts of individuals within the broad context of the social, political and economic
environment” (McKenzie et al. 2007: 29; see Katsikis and Kyrgidou 2009). Furthermore, Dana (1995) claims that the domain of entrepreneurship “is not a function of opportunity but rather is a function of the perception of opportunity” (36).

For this study the definition and the role of the business opportunity (BO) is crucial since it is expected to get different answers based on the questions one is asking (see Sarasvathy 2004). Thus, questions and answers that will be presented here will show – if they are compared to the answers drawn on the dominant approach – another way to define both the BO and the process with a BO as an outcome.

It will be argued here that the BO plays a central role in creating new economic activities. These activities will be implemented in the markets, despite the fact that the current literature appears to show the creation of the BO merely in a minor role in the process of creating new economic activity. This kind of opinion becomes evident, for example, in Short, Ketchen, Shook, and Ireland (2009)², and in Busenitz, West III, Shepherd, Nelson, Chandler, and Zacharakis (2003). Busenitz et al. argue that:

“Once a potential opportunity is discovered, the entrepreneur must typically decide whether to gather more information to make a more accurate decision on the “attractiveness” of the opportunity or simply deal with the uncertain opportunity before the window of opportunity closes (Shepherd and Levesque (2000)” (Busenitz et al. 2003: 302, quotation marks in original).

The remainder of the study will show that the mere (recognized, discovered, identified, developed or created) idea for the new business venture of the firm may not yet be defined as a BO. According to the alternative view to be presented here the actual discovery process may start based on an idea such as these. This means that after this the more or less creative process will start, and the BO (i.e. the outcome of that process) will be introduced into the market. In all, the BO is the outcome of the discovery process, which will be introduced into the market – not the initial idea.

To follow this logic it is assumed here that if the actor of the process thinks that the current outcome, the emerged BO, differs from their expectations then the whole process might be abandoned. However, it might just be suspended for some time until the actor(s) of the process generate new insights to carry on with it. Or perhaps somebody else other than the original actor(s) will start their own
discovery process based on the previous one and flesh it out in the exploitation process as their own BO.

The concept of the BO with the other three key elements (entrepreneur, environment, and process) is important for the BOC process. Among these elements the most studied concept is the concept of the human actor: the independent individual(s) who is willing to play the role of entrepreneur, the corporate entrepreneur or intrapreneur – in a word: the entrepreneur. This is in line with Davidsson (2007) who draws on Schumpeter by stating that:

“According to this view [entrepreneurship as the creation of new economic activity], entrepreneur is a theoretical abstraction that refers to one or more individual or as a team in a particular case bring about this change as an individual feat or as a team effort or in sequence; that is, different individuals may fulfill different roles as an entrepreneurial process unfolds over time. The focus is on the activity, on entrepreneurship. . . . , entrepreneur is a role, which individuals exercise on a temporary basis. As soon as the individual is no longer involved in the creation of new economic activity, that person is no longer an entrepreneur (Schumpeter, 1934).” (Davidsson 2007: 288–289, brackets added, underlined words emphasized in italics in original)

The characteristics of the entrepreneur are important part of the process, as their personal human and social capital, intention to play the role of the entrepreneur, or more generally, the whole personal background, (Ardichvili, Cardozo, and Ray 2003; Davidsson and Honig 2003; Gaglio and Katz 2001; Krackhardt 1995; Krueger, Reilly, and Carsrud 2000). The literature on entrepreneurship (see review in van der Veen and Wakkee 2002) recognizes also that the context in which the process is emerging is important.

The environment includes all the factors in which the actor is embedded. One example is the industry for which the BO is created to solve the identified problem (Bhave 1994; Davidsson and Klofsten 2003; Gartner 1985; Krackhardt 1995). Finally, the process itself and the multiple stages, or phases, and activities have been on the agenda of entrepreneurship scholars since the early 1980’s (Ardichvili, Cardozo, and Ray 2003; Bhave 1994; Bygrave 1997; Carter, Gartner, Reynolds 1996; Christensen, Ulhoi, Nergaard 2001; Gartner 1985; Greve 1995; Reynolds 2000; Sarasvathy 1997; Van der Veen and Wakkee 2002; Van de Ven, Venkataraman, Polley, and Garud 1989).

Over the years the role of the actors and environment have been described in detail but both the role and particularly the content of the process have been
described less explicitly. That is, *how the BO is created (or developed) from its initial idea to a potential business in a way that it will be as feasible as possible to be utilized in the particular situation and by the entrepreneur in order to make the expected business to work in the market.*

Of course, there are exceptions to be mentioned here: Bhave (1994) included several explicit stages with activities like recognition, filtration, and refinement of an opportunity in his model. The results of his model, however, connote new business concept merely as ready to be exploited. Among more current scholars, for example, van der Veen and Wakkee (2002) need to be mentioned. They are a good example of researchers who study the black box situation of the entrepreneurial process more thoroughly. They also model the discovery process with the sub-process activities such as: discovery of the initial idea, developing the idea into a BO, and evaluating the BO (see Wakkee 2004).

What is very important here is the notion that it is not about the person (or the team) playing the role of entrepreneur in discovering an opportunity that is ready-to-be developed and fitted in with the economic, political, social, etc. environment and then exploited. Instead, it is about how the actor (i.e., the entrepreneur) faces a more or less demanding task: to begin with just discovering a more or less creative idea for the future business venture. Thus, the real work begins when that idea needs to be created in a more business-like manner in the BOC process.

To follow the logic presented above and the current literature it will be feasible to argue that the *business opportunity*, the BO, is the key concepts in understanding the discovery process but also the entrepreneurial process as a whole. This insight can be found in the definition of entrepreneurship as the process of discovery and exploitation of opportunity (initially in Venkataraman (1997, quoted in Shane and Venkataraman 2000; 2001). The relationship between these two sub-processes, however, is described quite vaguely in Shane and Venkataraman (ibid.), while in Davidsson (2005; 2006b), for example, it is highlighted more explicitly and described as parallel processes.

A good starting point in which to start dealing with the understanding of the discovery process more thoroughly is offered by Sarasvathy (1997), one of the key inspirations for the study. She presents interesting insights into the relationship between the actual business activities in the context of a firm and the entrepreneurial process. These insights, however, leave a question open: *What actually happens during the entrepreneurial process.* The same kind of a *black box situation* can also be seen, for example, in Reynolds (2000). Therefore, in
order to be able to open up the black box a question to be asked might be more like: *How, exactly, the opportunity emerges?*

In fact, if the logic of a question such as this is followed earnestly two related questions will open up. The first question is about the initial idea (Davidsson et al. 2000) and the opportunity. If the answer displays essential differences between these two concepts (idea and opportunity) another question to be asked deals with the origins of the opportunity.

The former question is rarely dealt within the literature. While it is assumed here that this is due to the ontological and epistemological ambiguity, far too many studies on the entrepreneurial process fail to explicate these two concepts (i.e., the idea and the opportunity). The latter question, the origin of the opportunity (treated here as the BO), is connected in the current literature with the dichotomy of rational or creative approaches or activities (see Alvarez 2005a; 2005b; 2008; Alvarez and Barney 2006; 2007a; 2007b; 2008; Dunham and Venkataraman 2002).

Furthermore, the notion of two possible modes of exploitation of the discovered opportunity, i.e., “the creation of new firms (hierarchies) and the sale of opportunities to existing firms (markets)” (Shane and Venkataraman 2000: 224) highlights the importance of the concept of the business model even at the level of the discovery process. To choose a feasible model for the expected business venture already during the discovery process will promote the exploitation process to happen. This is in line with the review of literature focused specifically on perspectives on business model components made by Morris, Schindehutte, and Allen (2005). They argue strongly for basic decision areas to be considered already in the building phase of the business venture (also Morris, Schindehutte, Richardson, and Allen 2006). Thus, to think how the opportunity for a specific business venture emerges, a question becomes meaningful: *How the business model for the business venture is created?*

Finally, the Business Plan is treated in the literature as a key element of the entrepreneurial process. The more recent literature, however, has both supported and criticized the role of planning for organizing of new ventures. For example, Delmar and Shane (2003), and Shane and Delmar (2004), argue for planning the business before undertaking actual business activities. In contrast to what is stated above, Honig and Karlsson (2004) and Honig (2004) highlights their own results to show that “*there is little evidence that planning leads to success*” (Honig 2004: 258). In fact, Honig and Karlsson state that “our results are contrary to rationalist predictions of planning-performance, and are more in line with institutional
predictions” (Honig and Karlsson 2004: 29). Therefore, it seems to be important to raise a question of role of the business planning and ask: What is the role of the business planning in the entrepreneurial process?

To draw on the dominant literature on entrepreneurship and also more or less challenging literature such as Sarasvathy (1997; 2001), Davidsson and PEG research group (2000), Dunham and Venkataraman (2002), and Davidsson (2003a), four ideas to guiding the formation of research aims of the study will be made. The first one is about entrepreneurship containing all the elements of the process, the process itself, and the efforts of the person who undertakes activities in interaction with one’s environment to create a new business venture, in order to be prepared to conduct the actual business activities in the market. The second is about the entrepreneur who is treated as a person who intentionally starts to undertake interactive actions to create a new business venture. The third guiding issue is the BOC process studied from both rational and creative perspective – even based in the same theoretical framework.

Finally, the aims of the research at hand focus on the entrepreneurial process that is understood from the perspective of the BO. The process starts with the idea emerging from humble beginnings as an initial idea of the expected new business opportunity. After this it proceeds with the situation in which the (future) BO will be created as ready for exploiting in the start-up context. In all, this process of creating the BO and its exploitation process is not a linear process but is dependent on the elements and their characteristics, the nature of actions and the external conditions, that are continuously affecting both of these processes.

Therefore, to understand more thoroughly the part of the entrepreneurial process which is presented in the prior literature as either recognized, or discovered, or created (Sarasvathy, Dew, Velamuri, and Venkataraman 2003), an alternative approach is to be utilized in the study. This approach will help to overcome the restrictions of the current dominant theories in the field, in particular the current difficulty of including creativity into the discovery process.

In closing, it has been stated above about the research aim that the study at hand aims to find out what happens in the process of creating business opportunities. This is important since the current literature clearly displays how little it discloses the activities of the entrepreneurial process before the actual start of the exploitation of the BO. That is, before the entrepreneur starts actually to test the feasibility of the BO in the selected market. In all, the focus of this study is to understand the process of creating business opportunities, the BOC process.

Parallel to the great importance of the development of more advance
understanding of the process is the theoretical emphasis on rethinking of the concept of opportunity.

1.3 Research questions

“Determining the research question(s) is an extremely important step in both the quantitative research process and the qualitative research process because these questions narrow the research objective and research purpose to specific questions that researchers attempt to address in their studies (Creswell, 2005; Johnson & Christensen, 2004).” (Onwuegbuzie and Leech 2006: 475)

As argued above the initial research task of the study is to understand what happens in the process of creating business opportunities. This will be done by exploiting the theoretical framework of the process. The aim is not only to try and solve the selected research questions with feasible research questions but also to focus on some alternative and challenging paths identified during the process. For example, Dubé and Paré (2003) claim that research questions should be defined as clear as possible (i.e., at least in the context of positivist case research). Yin (1994) stresses the importance of the use of research questions such as how and why since these kinds of questions “deal with operational links needing to be traced over time rather than mere frequencies of incidence” (Dubé and Paré 2003: 607).

As mentioned above several initial questions have already drawn reasonable attention in the previous studies. Particularly, from the point of view of the philosophy of science (the nexus of ontology–epistemology–methodology; e.g. Guba and Lincoln 1994; Yeung 1997) it seems to be necessary to equal the initial idea for the new business venture to the opportunity if the ontological base is built on realism, or naive realism in its one extreme case. That is, according to realism, opportunities exist out there already to be perceived by the entrepreneur. However, the picture will become more indistinct if the base is built on nominalism, or strong subjectivism6 in its other extreme case that claims that everything is created in the individual’s own head only. In this case the actor is not constrained by the existing stock of ideas / opportunities but, instead, the ideas and the opportunities, the whole social reality, are actually created by their own actions. This means that the opportunities will be only created if only people want to do it.
Therefore it will be interesting to try to understand both the existing stock of opportunities and the created opportunities from the same theoretical perspective. The positivist approach is acknowledged here as treating the reality as dominant actor constraining and enabling individual actions (e.g., everything individuals are able to perceive in the world). Whereas the subjectivist approach puts the individual in to the same kind of position where everything he or she thinks, or imagines will equal with the actual reality. That is, how they perceive it.

To oppose this view, however, only one scientific perspective meets the criteria presented above: the critical realism. It is assumed in the study at hand that the utilization of critical realism will offer feasible theoretical lenses to look at the phenomenon at all three levels of the social reality; the Empirical level, the Actual and at the Real level.

In the Empirical level the focus will be on how the individual actor (an individual person or a team) plays the role of entrepreneur, that is, how the entrepreneur experiences everyday actions in creating the new business venture from scratch. Or, in some cases, an actor such as this creates a new business for an existing business venture. At the Actual level and the Real level the focus of the study is more on the process of creating business opportunities, the BOC process, for the expected business venture to make it possible to promote the understanding of the process.

In all, there seems to be at least a niche for critical realism to offer new insights through which the BOC process presents itself more as a results of the interplay between these two key actors; the reality existing independently from the individual and the individual who is able to change this reality.

Finally, the existence of both the sub-processes of the entrepreneurial process – the discovery and exploitation – is acknowledged widely. However, their relationship has remained quite unexplored. According to the experiences and interpretations of the author of the present study the exploitation process has attained most of the interest in the literature. This has happened mainly because the focus has been on the actual business activities observable at the empirical level. The other process, the discovery, has remained quite unexplored. Therefore, the question to be asked is: whether the role of the discovery process is only to be seen as an initial stage (or phase) and as one-off kind of process; or whether it is possible to see it as the previous literature discloses but at the same time as a latent process that is available all the time to be exploited, if the business opportunity already being exploited in the business firm needs to be re-created, (or re-discovered), etc. (Davidsson 2005; 2006b).
After the elaboration of the prior research the explicit research questions (RQ) and sub-research questions (SRQ) to find out what happens in the process of creating business opportunities are as follows:

Research Question: How does the entrepreneur experience the creation of the BO?

Sub-Research Question 1: How does the entrepreneur experience his or her actions in the BOC process?

Sub-Research Question 2: What is the role of the environment in the creation of the BO?

Sub-Research Question 3: What kind of relationship exists between the two sub-processes of entrepreneurial process?

To look closer at the research question and the three sub-research questions the main focus will be on the process of creating BOs. The main reason for such a decision is based on delimiting the scope of the study as feasibly as possible to promote the theoretical contribution. A further reason to design the present study in this way is to focus on the process itself, and on the actions of the entrepreneur in the process. This is to say that this study is guided by Davidsson (2003a) and others who favor the process. The process and the entrepreneur’s actions are recognized as very important issues that need to be understood well, for example, because they may enhance the definition of entrepreneur to become more explicit than how it is at the present time.

1.4 Scope of the study

Entrepreneurship since Cantillon has been mainly about entrepreneur, one of the three economic agents (landowner, entrepreneur, and hireling). According to Hérbert and Link (1989) for Cantillon entrepreneur is an individual or persons who is someone “who engages in exchanges for profit; specifically, he exercises business judgements in the face of uncertainty” (Hérbert and Link 1989, 42). However, entrepreneurship in Cantillonian thinking is not so much seen as the personality of the entrepreneur but the function which is related to “many different occupations and cut across production, distribution, and exchange” (ibid.). This occupation-free approach is in line with Pozen (2008) who argues that “everyone, it seems, is an entrepreneur these days” (ibid. 283). In fact, Pozen
(2008) discloses on the one hand that this kind of situation in the literature is quite indistinct by stating that:

“A funny thing happened to the entrepreneur in legal, business, and social science scholarship. She strayed from her capitalist roots, took on more and more functions that have little to do with starting or running a business, and became wildly popular in the process. Nowadays, “social entrepreneurs” tackle civic problems through innovative methods, “policy entrepreneurs” promote new forms of government action, “norm entrepreneurs” seek to change the way society thinks or behaves, and “moral entrepreneurs” try to alter the boundaries of duty or compassion. “Ethnification entrepreneurs,” “polarization entrepreneurs,” and other newfangled spinoffs pursue more discrete objectives. Entrepreneurial rhetoric has never been so trendy or so plastic.” (Pozen 2008: 283)

On the other hand, Pozen (2008) argues that what is commonly shared between all these actors is that “all of these actors serve as “change agents” within their respective market niches” (327, quotation marks in original). Hence, the change that the entrepreneur is able to make is seen here as a key characteristic of a broad perspective of entrepreneurship, rather than a person with some specific traits (see Gartner 1989). Therefore, the change itself, the process to create change, and to make it to happen is concluded here as an important stream of entrepreneurship research.

To follow that kind of logic the focus of the study is on the broad process of change. This process is defined here as the entrepreneurial process. Further, the exploitation process, the other part of the entrepreneurial process, is acknowledged here as necessary part of the whole process (Davidsson 2006b) to make the conceptual ideas, or insights, or the BOs actually happen. To focus on the process of creating the BO, the BOC process, however, is seen as feasible as such. That is, to make the study a doable in a thinkable time frame a need exists to narrow the final scope of the study. Therefore, the scope of the study is particularly based on only one of the two sub-processes of the entrepreneurial process: the process of creating BOs, the BOC process.

In addition, the use of labels of the process varies greatly among scholars from recognition, to discovery, to identification and to creation. Here the label used will be from the start of the BOC process. To understand this process and its relationship with the exploitation process is considered as a fundamental
entrepreneurial skill (see Carrier 2008), and as one of the most important skills of successful entrepreneurs (Ardichvili et al. 2003).

Furthermore, the retroductive research strategy is chosen to be utilized in the present study to understand better the phenomenon of entrepreneurship and particularly the BOC process. Together with the critical realist perspective this strategy allows the study to focus on the BOC process in all its variations. In addition, the retroductive research strategy combined with the retrospective interview method as the main mode of method to generate research material is thought as practically relevant.

It may be necessary to notify already at this point of the research report that the need for real time methods is acknowledged here as evident to avoid the problems related to how well people remember past events and their thinking processes. At the same time, the retrospective methods offer in this specific case a feasible alternative because the BOC process is either still ongoing or ended only a few months ago in two of the seven cases. In addition, there are cases in which the process is recurring again and again.

The retroductive research strategy is related to the possibility of moving from merely the description and abstract analysis of new business venture creation to understanding the basic conditions (i.e., structures, and mechanisms seen as key elements of the critical realist perspective in Sayer 2000). This is in line with Mingers (2004) who emphasizes the move “from experiences in the empirical domain to possible structures in the real domain.” (2004: 95). In the present study this will be done by means of the exploitation of the tripartite research process influenced by Chiasson (2001), Danermark, Ekström, Jakobsen, and Karlsson (2002) and Leca and Naccache (2006): The first step of the research strategy starts with bringing new ideas up from the literature to interpret alternatively the observable elements and connections both in the domain of the Empirical and the Actual. The second step is to build a hypothetical model, which involves structures and causal powers located in the domain of Real, as well as processes and events at the level of the Actual. These provide a causal explanation of the phenomenon in question. Finally, the third step is to postulate the theoretical model to empirical scrutiny to interpret the phenomenon from the perspective of all three levels of reality.

The qualitative research material is drawn on experiences of seven entrepreneurs who have started their entrepreneurial processes since the 1980s. Interviews having been conducted between 2004 and 2005, and they were built upon topics such as initial idea, refining the idea, market making, coordination of
new and old resources, and others, that are all found in the previous literature on entrepreneurial process. Due to the unclear and abundant nature of theories and models on entrepreneurship the choice for the selection of theoretical framework was based mainly on Davidsson’s ideas (see Davidsson et al. 2000), because they seem to offer the most feasible starting point and initial theoretical framework to study the phenomenon from the process perspective.

In closing, the second sub-process, the exploitation process, is acknowledged here as relating firmly to the BOC process to fulfill the entrepreneurial process. However, it plays a minor role in the present study because the chosen focus on one particular process, the BOC process, on the one hand, will make it more well-grounded for researcher of a single study to contribute to entrepreneurship as a research domain. On the other hand, however, an interesting but unanswered question still remains to be answered: What is the relationship between these two processes anyhow?

1.5 Overview of study report

While “there is no best practice for reporting case study research” (Eriksson and Kovalainen 2008: 130), one important decision to make before presenting the findings of the case study is how to present the empirical analysis and findings. Chenail presents a list of alternative ways to do a presentation of research materials and results, they are as follows: natural presentation; simple to complex; the first to last; quantitative-informed; theory-guided; narrative presentation; most important to least important; dramatic presentation; or no particular order (1995: 5).

The strategies above are of course only one way to look at the situation. They offer, however, an opportunity to find a way that is convenient for the purposes of the present study. Firstly, the tripartite retroductive research strategy exploited in the study includes possibility to bring new ideas up by using abduction as a way to move away from the traditional course of understanding the entrepreneurial process and the creation of BO. By deduction it offers a way to explicate and demonstrate various aspects of those ideas. Finally, by using induction it makes it possible to evaluate and secure these ideas. The research strategy such as this is influenced by Chiasson (2001), and Creswell (2003), and emerges in a process containing, firstly, a disclosure of alternative knowledge claims (or surprising facts – or just hunches) on the entrepreneurial process, secondly, a generation of a theoretical framework, and finally, a case study to scrutinize the framework.
Therefore, if the research materials will be presented here in a way that resembles the phenomenon studied, the natural strategy will be utilized. Secondly, since the research material arrangement is governed by the researcher's theoretical framework regarding the phenomenon, the theory-driven strategy will be utilized as well.

To follow the logic above the study report will proceed as follows: after the introduction to the field of Entrepreneurship (Ch. 1) this report presents approaches to the Discovery Process in the Previous Literature (Ch. 2) in order to open up both currently dominating insights about the process such as the role of entrepreneur, environment and the opportunity. In addition, this chapter presents a few challenging ideas concerning the process. Then, the following part of the study starts with presenting the main features of critical realism in the context of opportunity creating (Ch. 3) and grounding the research explicitly in the critical realist perspective together with entrepreneurship.

Research report concerning the tripartite research strategy starts with Step one: Elements of the Opportunity Creating Process (Ch.4), which discloses the key elements of the process. Then the second step of the research strategy, Step two: Outlining the BOC process (Ch. 5), presents the theoretical framework of the present study, the process of creating business opportunities (the BOC process). In addition, this section also presents the interplay between the BOC process and the process of exploiting business opportunities, the BOE process.

Then, Step three: Empirical Case study (Ch. 6), starts with presenting the case study research strategy (Ch. 6.1). This section discusses how the empirical section of the research process has been conducted. After this, this chapter discloses the findings of the study.

Finally, chapter 7 discusses what is learned during the study. After summarizing shortly the research process the main focus is put on theoretical conclusions to show and discuss, first, the entrepreneurial process as a whole. Then, the report goes on with discussing the theoretical assumptions of the process as well as the relationship between the critical realist perspective and the focus area of the study, the BOC process. After this, the process of creating business opportunities (the BOC process) will be discussed more thoroughly, i.e., pointing the focus on the process itself as well as the concept of business opportunity (the BO) and the interplay between the BOC process and the exploitation process of the BO (the BOE process). Finally, both the managerial implications and the limitations and future research avenues will be discussed.
Due to the firm interplay between the research strategy and conceptual and empirical parts of the research process the solid arrows show how the research approach chosen for the study influences both the research process during the conceptual part as well as the empirical part of the study. In the same vein both of
these parts have influenced the research strategy, and the ways it is applied in the study.

In all, the aim of the study at hand is to focus on one of the two sub-processes of the entrepreneurial process, the BOC process: the process of creating business opportunities. The key findings of the study display that the approach to opportunity creating as a process with business opportunity, the BO, as an outcome but not a starting point of the process is a feasible way to understand and explain how a business opportunity emerges.

The ontological, epistemological, and methodological point of view this study contributes to the literature by applying a critical realist perspective to the entrepreneurial process studies. The theoretical framework combines the key activities, elements, and phases existing in the prior literature on entrepreneurial process (i.e., structures, causal powers, mechanisms, human agency, and social practices presented in the literature on critical realism). Possibly, based on a framework such as this the study is able to understand and explain what happens in the process in which a person (or a team) is willing to involve the entrepreneurial process to create either an initial business opportunity for their upcoming business venture or to re-create the existing business opportunity again and again during the exploitation process.

From the point of managerial implications the findings of this study will provide new tools for keeping the existing business to meet the objectives of the key persons involved. In addition, the theoretical framework is feasible to educate both students at all levels of the education system as well as everybody who has intentions of starting the entrepreneurial process with desirable ideas for a future business venture.
2 Discovery Process in Previous Literature

“While elements of opportunities may be “recognized,” opportunities are made, not found.” (Ardichvili, Cardozo, and Ray 2003: 106, quotation marks in original)

The current situation of entrepreneurship literature on the discovery process is quite ambiguous and various problems exist. In the beginning of this section a short introduction to the discovery process literature is presented. Then, the roles of the key elements of the process (entrepreneur, environment, opportunity, and the process) and the perceived problems are discussed. Finally, to conclude the discovery process some important and challenging insights will be discussed in order to open up new ways to see the existing problems from another perspective and to create possible but still tentative solutions to resolve these problems.

2.1 Introduction to the literature of the discovery process

Several scholars in the entrepreneurship research field argue that entrepreneurial process is at the heart of entrepreneurship. At the same time some other scholars claim that research on opportunity identification (or opportunity recognition, or discovery, or creation; in a word: Discovery), in particular, is still a relatively new area of research in the entrepreneurship literature (DeTienne and Chandler 2007). In any case, it seems to be the fact that since the late 1980s many researchers have started to share the idea that the creation of new organizations or a new way in organizing economic activities offers a feasible basis to understand entrepreneurship as a entrepreneurial process (e.g. Ardichvili, Cardozo, and Ray 2003; Gartner 1985; 1989; 2001; Davidsson 2003a; 2003b; 2005; Samuelsson 2004; Wakkee 2004). Overall, these scholars mentioned above, for example, have made great contributions to our understanding of the entrepreneurial process and also what is happening during the process. However, despite of all the efforts already made in the field the research is still facing difficulties in understanding the entrepreneurial process in detail or the roles of different elements in the process. In all, the current situation can be depicted in the words of Acs (2007) as follows:

“The idea that, the perception of opportunities is subjective, but opportunities are objective, has a long history in the theory of entrepreneurship.” (Acs 2007: 17)
The way the present study is trying to contribute to the theoretical understanding of the phenomenon, the entrepreneurial process in general, and discovery process of the BO (Sarasvathy et al. 2003) in particular, is to start with categorizing the research on the entrepreneurial process to distinguish the stream of research focused on the entrepreneur and their activities in the business context (or in the context of entrepreneurial process) from the stream of research that focuses on the process itself and the necessary actors in the process. The former approach to the entrepreneurial process has emerged since the 1960s mainly as the trait approach to entrepreneurial process (see the review in Gartner 1989, 49–56). This approach illustrates itself in many ways, for example as follows: “once an entrepreneur, always an entrepreneur, since an entrepreneur is a personality type, a state of being that doesn’t go away” (Gartner 1989: 48).

The basic problem with this approach is the fact that eventually, according to Gartner (1989), the entrepreneur would be like a person who is “someone so full of traits (s)he would have to be a sort of generic ‘Everyman’” (ibid.: 57, quotation marks in original). Gartner’s (1989) reasoning supports Van de Ven (1980) by stating that a lot can be learnt from studies of other fields on this issue (read: leader and leadership as entrepreneur and entrepreneurship, respectively):

“However, no empirical evidence was found to support the expectation that there are a finite number of characteristics or traits of leaders and that these traits differentiate successful from unsuccessful leaders. More recently, research into leadership has apparently made some progress by focusing on the behavior of leader (that is, on what they do instead of what they are) and by determining what situational factors or conditions moderate the effects of the behavior and performance.” (Van de Ven 1980, 86; quoted in Gartner 1989: 58)

According to the latter approach, the entrepreneur is a necessary and sufficient actor in the entrepreneurial process. Meaning that the entrepreneur (an individual person or a group of persons) is viewed through the actual activities they undertake to make the new economic activities emerge and new organization to come into existence. Thus, because the entrepreneur as a person does not equal activities of the same person it may be possible to distinguish the focus on entrepreneur’s actions from the traits of entrepreneur. The key issue of this approach is that while treating the emerging organization, for example the new business firm, as the outcome of the entrepreneurial process, and as the primary level of analysis, at the same time it acknowledges the importance of different
kind of actors and their actions in the process. Therefore, important questions to be asked are: What the entrepreneur does? Based on what assumptions he or she actually does it? Nevertheless, this is not to say that the questions such as who she is (Gartner 1989), and what she knows and whom she knows (see Sarasvathy 2001) is to be forgotten.

To draw on what is stated above it seems to be possible to differentiate between the entrepreneur as a person and as a role. If the latter is a feasible way to define the term entrepreneur then it might also possible be to think that, even though, the role of entrepreneur is necessary and sufficient in the process. Thus, it seems also possible to think that one specific individual or team who is playing the role of entrepreneur may be replaced without prejudicing the entrepreneurial process. This may be the case only as long as somebody (a person or a team) keeps on playing the role of entrepreneur in the process.

In addition, if the activities of entrepreneur are taken to create a new business venture by the means based on the discovery process, it will be necessary to study more thoroughly all the views presented in the literature. As it is already mentioned above all of these three views presented in the literature as characteristics of entrepreneurial process (recognition, discovery, and creation) (Davidsson 2003a; Sarasvathy et al. 2003; Sarasvathy 2008; also Gustafsson 2006) include specific kinds of assumptions. These different perspectives are recognized widely as key activities suitable for the discovery process.

According to Sarasvathy et al., the focus on the creation process will open it up for us to see (or understand and explain if needed) what is happening in it? and who is doing what and for what? One potential way to look at the activities of the actors in the discovery process presented by Sarasvathy (2001) is to focus on different categories of means. In her seminal article on effectuation Sarasvathy details these categories as follows:

“Entrepreneurs begin with three categories of “means”: they know who they are, what they know, and whom they know – their own traits, tastes, and abilities; the knowledge corridors they are in; and the social networks they are a part of. At the level of the firm, the corresponding means are its physical resources, à la the resource-based theory of the firm (Barney, 1991). At the level of the economy, these means become demographics, current technology regimes, and sociopolitical institutions (such as property rights).” (Sarasvathy 2001: 250, quotation marks in original)
The theory presented above focuses on personal characteristics and the importance of the situation in which the entrepreneur lives. All of these seem to be in line also with the focus of the Austrian school (i.e., seeing the entrepreneur as the key actor of the market process). Chabau and Ngijol (2005), however, claim that Sarasvathy (2001), for example, does not explicate whether she follows the Austrian school’s definition in defining the means-ends framework or not.

In contrast to what is stated above, Sarasvathy and Dew (2008) state quite clearly that based on the ideas of the three prominent scholars of the Austrian School of entrepreneurship, von Mises, Shackle, and Lachmann, “in each plan means and ends are riveted by choice. In a world of change plans have to be revised, but such revision is also always a matter of choice of ends and means (Lachmann 1976: 4–57)” (Sarasvathy and Dew 2008: 242).

Also the so called Lachmann’s capital theory has a lot in common with the use of resources and means–ends frameworks in effectual logic (Sarasvathy 2001); entrepreneur acts on the primary resources or means: who they are, or their tastes, traits, abilities; what they know meaning their prior education, experience-based and other types of prior knowledge; and finally, whom they know based on their social and professional networks. In addition, Sarasvathy and Dew (2008) state that:

“Capital assets in effectuation are artifacts created through the actions of entrepreneurs, and therefore a function of the entrepreneur’s means. In other words, what any given entrepreneur sees as the valuable possibilities inherent in any given asset depends on who he or she is, what he or she knows and whom he or she knows. Furthermore, since effectual entrepreneurs often do not know and need not imagine the particular new artifacts that they actually end up creating, there is no assumption whatever in effectuation as to the ’given’ nature of capital assets.” (Sarasvathy and Dew 2008: 242)

What this means is that if Sarasvathy et al. (2003) base their definition of the means-ends framework really on the Austrians School only then it is feasible to argue that effectuation logic if it really is based on the matter of choice on the one hand, and if a entrepreneur actually ends up creating the new artifacts, on the other, then may be a feasible way to combine creativity in its full meaning into their definition of the creative view of entrepreneurial opportunity.

Based on the works of scholars like Davidsson (2003a), Samuelsson and Dahlqvist (2005) and Sarasvathy et al. (2003), it is possible to conclude, that the dominant approach to the foundational assumptions of entrepreneur’s action in
the entrepreneurial process is based on the allocative and recognition view (ibid.). In the same vein are the core insights on ideas “of the individualist and positivist conception of the entrepreneur, reducing the entrepreneur to more or less adept or alert ‘identifier’ of existing opportunities” (Chabau and Ngijol 2005: 20).

On the one hand, this includes also the attempts to explain all social phenomena in terms of the rational calculations made by self-interested individuals (Dunham and Venkataraman 2002), as well as the situations in which people are motivated by the rewards and costs of actions, and also by the profits that they estimate to make (Scott 2000). On the other hand, it may allow people to focus on one’s alertness and idiosyncratic knowledgebase combined with “entrepreneurial imagination and interpretation in order to lead to opportunities” (Dutta and Grossan 2005: 432). In the words of Kirzner this means that:

“Despite the changes over time in Austrian entrepreneurial constructs … it seems reasonable to attribute the perennial Austrian interest in the entrepreneur to the tradition’s consistent subjective thrust.” (Kirzner 1994: 110, quoted in Dutta and Grossan 2005: 432)

That kind of subjective nature of discovery process is also presented in Davidsson (2005) when he argues that:

“. . . – the venture idea is not formed as a complete and unchangeable entity at the sudden flash of insight. Thus, it includes not only what is elsewhere called “idea generation”, “opportunity identification” and “opportunity detection”, but also “opportunity formation” and “opportunity refinement” (Bhave, 1994; de Koning, 1999a, 1999b; Gaglio, 1997).” (ibid: 24, parenthesis in original)

Thus, the line of thought presented above raises the role of subjectivism in the discovery process. The rational based actions may be referred to as the rationality of the decision-making process and judged by examining the relation between the given set of preferences and the action taken in the process. Dunham and Venkataraman (2002) state that if the actions of entrepreneurs follow the rational choice theory three fundamental premises can be identified as follows: firstly, actions that are based on maximizing behavior; secondly, actions which are assumed to be strongly self-interested; and finally, actions that are characterized as social atoms (Dunham and Venkataraman 2002).
In closing, the discussion above raises two questions that need to be answered from the perspective of the present study. Firstly: Is it possible at all for the entrepreneur – or for any human actors – to act creatively in the situation in which opportunities exists independent from the very same actors? Secondly: Could it theoretically be feasible to view all three views through one theoretical lens?

2.2 The role of entrepreneur in the discovery process

In contrast to that line of research more recent researches show that focusing solely on entrepreneurs and their psychological characteristics is almost a meaningless approach to understanding the entrepreneur and his or her actions in the process. That is, the findings show that the variation of characteristics, for example, between entrepreneurs and non-entrepreneurs is smaller than the variation within entrepreneurs.

To conclude, the earlier work seems to assume quite implicitly that "entrepreneurs possess unique but identifiable personality characteristics" and "that an entrepreneur is a "state of being that doesn't change (Gartner, 1988)"" (Shook et al. 2003: 382, quotation marks in original). In contrast, the studies of contemporary scholars show the poor results of the search for an entrepreneurial profile approach in entrepreneurship literature (e.g. Gartner 1989). This means that the main focus is moved from characteristics to human actions. The role of entrepreneur and their actions are still considered as a dominant element in the entrepreneurial process.

In the context of the discovery process both Gartner (1985) and Reynolds (2000) reveal their explicit emphasis on individuals who are not actively working as business persons (i.e., as entrepreneurs who run their own business ventures) but as laypersons who have started the start-up process. In addition, to compare with the prior literature the question who is an entrepreneur is a wrong question (see Gartner 1989). It may be reasonable to ask: how a person becomes entrepreneur?

The latter question is important and supported with a vivid debate on the question such as: Can entrepreneurship be successfully taught? or Are entrepreneurs born or made? (Henry, Hill, and Leitch 2005; Klein and Bullock 2006; Dominguinhos, Carvalho, Costa, and Pereira 2008) The debate is ongoing but one insight is still more or less missing: is it possible to integrate both the born and the made approach to one definition. Dominguinhos et al. believes that it can be done.
“We believe that successful entrepreneurs are not born nor even made, are both! They must engage their natural elements and characteristics with all other skills and capabilities required to drive the business, which can be learned and improved through training and experience. Even the personality traits are flexible and can be changed and developed throughout people life, as much as they are formed based on external factors such as culture, environment and social issues.” (Dominguinhos, Carvalho, Costa, and Pereira 2008: 3)

The idea based on alertness as the motivated propensity (Kirzner 1985, cited in Gaglio and Katz 2001: 96) to formulate the image of the future (i.e., to imagine what could be possible to do differently in the future) and the clear focus on commercial potentials of future situations will support the thinking the opportunity not as the starting point of the process but as a outcome of the BO discovery process. If this kind of logic is followed the BO could be seen both as a result of the discovery process and as ready-to-be-exploited or ready-to-be-used kind of opportunity (see Busenitz et al. 2003; Davidsson 2003a). This means that this kind of opportunity includes the means of the actual business activities, for example, the entrepreneur will need in order to actualize it in the context of the new business start-up.

In closing, the prior literature shows that the dominant definition describes the role of entrepreneur more or less as it is displayed by the Austrians; the entrepreneur mainly recognizes and discovers the market information or business opportunities existing externally in the reality (the discovery approach (or theory) in Alvarez and Barney 2005a; 2005b; 2007a; 2008). Beside this dominant approach, a minor approach is also presented to describe the entrepreneur’s role based on creative actions (e.g. Dunham and Venkataraman 2002; Kirzner 1999).

The basic differences between these two approaches are disclosed, firstly, in defining the relationship between entrepreneur and the environment, the reality: Is the entrepreneur a passive and rational actor who may only perceive the external reality and act based on the possibilities they are able to recognize or discover from it (the dominant approach in Sarasvathy et al. 2003)? Secondly, what kind of relationship the entrepreneur has with other people. That is, are they an active and creative participant who may modify and even create their reality, the social, technical, economic, etc. environment as they are presented in Venkataraman’s (2002) alternative approach?
The latter difference emphasizes the entrepreneur as firmly embedded in the social reality. That is to say that also the entrepreneur who also acts rationally understands clearly the importance of various social structures and situations in which they are embedded. Relationships such as these affect the number and quality of choices available to them. Due to the dominant role of the entrepreneur in the rational process it is taken for granted, however, that the social aspect does not play any role in the decision making process. In contrast to this situation the situation for the creative entrepreneur is quite different. According to Dunham and Venkataraman (2002) the creatively acting entrepreneur interacts more deeply in a far looser and messier decision process. In the beginning of the creative process the generated or created goals – and even the existing goals – are often unclear or at least very fluid by their nature.

### 2.2.1 Entrepreneurial activities to discover opportunities

Rationally thinking it may be feasible to focus only on two of the three views presented above by Sarasvathy et al. (2003) when looking at the entrepreneurial process. These two views (recognition and discovery), emphasize either the final effects of the opportunity creation process or the origins of the opportunity for creation. Views such as these are without any relations with human decisions and actions in the process. In contrast, the creative process focuses clearly on relations such as these by combining the two approaches with it: the combination of the outcome of the recognition process and the origins of the opportunity with the creatively acting human agents.

Related to the creation of business opportunities Rindova, Barry, and Ketchen (2009) focuses on a growing body of research that studies the emergence of an opportunity as the *inside-out* process. This approach is in contrast to the *outside-in* type of process of identifying and seizing opportunities. The former defines the inside-out process as a creation of a human actor whereas the latter is related to something which is produced in the external environment.

The ideas concerning the core of entrepreneurship support the insights that emphasize the focus on explicit business issues in defining entrepreneurship. The definition of entrepreneurship as creating new economic activities is highlighted also by Sarasvathy (2001), Davidsson (2003a), and Dahlqvist (2007). This is also in line with Schumpeter (1934) who sees that the main purpose of entrepreneurship as carrying out new combinations, that is, to introduce new product, services, methods, etc. into the market by means of the innovation
process, including not only the idea of introduction of new combinations but also the pecuniary profit gained from these new combinations. In the words of Buenstorf “entrepreneurial opportunities are neither assumed as exogenously given nor as entirely subjective and self-created by the entrepreneur. Instead, opportunities are understood as the logical outcomes of dynamic economic processes. In turn, their pursuit is an important driving force of sustained dynamic change in the economy.” (Buenstorf 2007, 324)

Because of the narrower scope of the study only directed at business-like activities the definition of entrepreneurial activity is understood in the present study as new activity focused on the creation of the BO. These kinds of activities may emerge in various contexts such as; a new business venture in existing firm context, or a new independent business firm, or even in the context of a new business venture. The new business venture will manifest itself in a situation where the entrepreneur introduces the newly created BO in the market to somebody who is willing to use it as an intentional starting point for his or her own entrepreneurial process.

Thus, the key idea behind this definition is that in the entrepreneurial processes both of the two interrelated processes discovery and exploitation, have occasion to occur and fulfill the entrepreneurial process (see Davidsson 2005; 2006b). The label business emphasizes the need to gain profit, pecuniary or non-pecuniary, from the BO. As stated above this in line with Schumpeter who emphasizes the importance of profit:

“All of Schumpeterian innovations – the new good, the new method of production, and so on – are only of interest (are only innovations!) if they make it possible for there to be a profit. The demand for profit weeds out many possible combinations, one could also say.” (Schumpeter 1911, quoted in Swedberg 2007: 17)

Another approach on entrepreneurial process, the effectuation, emphasizes ideas that challenge the assumption very commonly used in management theories: firms and other organizations, and markets just exist as given. In fact, Sarasvathy and Dew (2005) argue:

“Currently major threads of research in entrepreneurship are based on the paradigm of exploring the universe of all possible markets (however locally or globally) and then exploiting those that are most predictable, and/or score high in terms of expected return calculated a priori or some formal or
To see the entrepreneurial process as effectual reasoning, on the one hand, includes also the assumption that people act in a situation with real uncertainty (Knight 1921, 230 - 232). This means that actors in the process may proceed without any need of prediction of the future because the effectuation process take “a set of means as given and focus on selecting between possible effects that can be created with that set of means” (Sarasvathy 2001: 245). On the other hand, if effectuation follows the line of thought of causational reasoning it means that people in the process are trying to predict the future supply or demand based on their prior experiences and knowledge either the probability or the distribution of, for example, (Sarasvathy 2001: 251).

The effectuation process focuses on the effectuator (i.e., the entrepreneur) who may or may not start only with a pre-calculated opportunity, but with three categories of means: “they know who they are, what they know, and whom they know – their own traits, tastes, and abilities; the knowledge corridors they are in; and the social networks they are part of” (Sarasvathy 2001: 250). The most important issue to notice here is that whatever the effectuator does, they do it with other people. This means that the effectuator is calling people they know, and together they continue the creation of the new venture based on the BO they have managed to build up (or create). Then the effectuator and the stakeholders who have joined the process begin to act upon whatever they can afford to do (Sarasvathy 2001). Sarasvathy and Dew (2005) argue clearly that:

“We do not wish to imply that entrepreneurs do not discover opportunities for new markets using a causal logic. In fact, business schools routinely teach their students to do it that way. Our aim is to show how opportunities can be created as well as discovered – especially, that new markets can actually be created using an alternate logic that is both coherent and useful.” (Sarasvathy and Dew 2005: 253)

Sarasvathy (2001: 259–261) also proposes more specifically that the role of the effectuation process in the creation of BO is to explain how economic artifacts (firms, markets, economies) come to be. According to Sarasvathy, effectuation begins with given set of causes and circumstances of the decision maker (i.e., the actors of the process). After that it focuses on choosing among the most desirable effects that could be produced with the given means (Sarasvathy 2001, 259). In
fact, effectuation can be understood as individual’s activities (or team’s activities) in decision-making based on different knowledge to which they already have access, and with what would be the most feasible way to act. According to Venkataraman and Sarasvathy 2000):

“Effectuation finds its theoretical antecedents in researchers such as March who investigated exploration and exploitation in organizational learning. Organizational learning involves decisions that allocate scarce resources (including attention) between the exploration of new possibilities and the exploitation of old certainties. These decisions are complicated by the fact that their costs and benefits may be dispersed over time and space, and that they are subject to the effects of ecological interaction. Yet, balancing the allocation between exploration and exploitation is crucial to the survival and sustenance of the organization.” (Venkataraman and Sarasvathy 2000: 15)

One particular idea written by Sarasvathy (1997) is important for the purposes of this study. In her paper she argues quite boldly that “the entrepreneurial process is essentially a pre-firm process” (Sarasvathy 1997: 3–4). By this statement she means that the process focuses on transforming an idea into a firm (also van der Veen and Wakkee 2002: 10). The firm is, however, not the only context for an idea to be realized, or the only mode for the exploitation process. In fact, concerning the latter Shane and Venkataraman (2000) argue that there are two modes of exploitation: one is to utilize hierarchy in the form of independent new start-up, and the other to introduce the opportunity in the market.

Sarasvathy’s (1997) tentative insight above concerning the pre-firm process is an example of the idea connected into entrepreneurial process as noted:

“The key insight here is that the entrepreneurial process is a pre-firm process. The entrepreneurial process transforms an idea into a firm. … The idea is modelled as a problem with an initial problem space (consisting of domain variables and their relationships) bounded by initial constraints – for which a solution (or multiple solutions) may or may not exist. The firm is a feasible solution for the problem.” (Sarasvathy 1997)

Here Sarasvathy (1997) differentiates the idea of a particular problem and the process through which the solution of the problem in question is developed (i.e. created in the vocabulary of the present study). The former, the problem, is about to discover an idea for the new business possibility, and the latter about to develop the new business venture through the pre-firm process. According to
Sarasvathy (1997), the idea for a firm precedes the pre-firm. This means at least two things. Firstly, an idea is excluded from entrepreneurial process, although it is understood as an essential predecessor for the process. This tentative insight of Sarasvathy is interpreted in the study at hand as follows: an idea does not equal the BO. Secondly, during the entrepreneurial process, the pre-firm, a tentative solution to the problem is developed (or created) to be utilized in context of a firm.

Based on Sarasvathy’s tentative insights above it will be argued here that an insight or initial idea precedes the becoming firm as something else other than a BO. Actually, to follow logic such as this it means that the BO needs to be developed – or created – by the actor(s) playing the role of entrepreneur in the entrepreneurial process. In addition, what has been said above on the differentiation between idea and pre-firm and firm helps us remarkably to clarify the relationship between, for example, entrepreneurship and other disciplines of business competence (see Baker, Mapes, New, and Szwejczewski 1997), and to make this relationship between entrepreneurial process/ pre-firm and firm more explicit.

To follow this line of thought will help us to deal with every aspects of business venturing from the first idea for a business venture to the actual running of the multifaceted concept called the business firm. In addition, among the business competences one of several sub-concepts is entrepreneurship. A particular business concept such as this is seen as a process through which people act, in order to bring the BO into existence in the context of a new business venture or an existing business firm.

In closing, creativity and creative activities are related to the whole phenomenon of entrepreneurship. This seems to be a feasible insight when we are thinking specifically about the discovery process of a business opportunity from the viewpoint of human actions in the process (i.e., what is happening in the process?). To utilize creativity during the whole discovery process may keep all the alternatives and possibilities open in pursuing the final outcome of the process, the BO.

2.2.2 Concluding insights on entrepreneur’s perspective

Undoubtedly, a certain amount of knowledge of the discovery process already exists but seems to have been forgotten by too many scholars and excluded from the dominant literature. For example, Bhave (1994) discloses insightfully how the
entrepreneurial process proceeds from the initial starting point to running the actual business venture. Furthermore, Sarasvathy’s idea of entrepreneurial process as pre-firm contains an insight that the BO is actually developed – or created – in the entrepreneurial process, and not in the sudden flash as depicted by Kirzner (1997).

To make these development or creation processes happen there always appear to be a need for entrepreneur’s activities (at least in some amount) in developing (or even creating) initial ideas to new business opportunities and to be exploited through daily business actions. If the perspective of the discovery process focuses only on the entrepreneur as a person but not as a player of a role of entrepreneur, then it implies that the entrepreneur’s personal factors direct the researchers to assume that the persons and their traits are the key determinants of the process. Furthermore, if the research on entrepreneurial process starts from the perspective of entrepreneur as a living person, at least two problems will emerge. Firstly, it channels researcher’s attentions heavily toward mere psychology-based and sociology-based perspectives on entrepreneurship. That kind of perspective may be a good thing but from some point of view, other than what is supported in the present study. Secondly, if the entrepreneur’s personal characteristics and one’s activities are taken as basic assumption it may result in an unexpected consequence: the definition of entrepreneurship as the creation of new economic activities with an impact on the market (Davidsson 2003a, Samuelsson 2004) may cease to exist – or at least have only a minor role among different research streams. By overly emphasizing these perspectives the theory on entrepreneurial process undervalues its origin, for example, the idea as it is depicted in Sarasvathy (1997).

In closing, the present study emphasizes the creation approach in the complex social system. That is not to say, however, that a pure creative action outperforms rational action in any types of entrepreneurial at anytime and anywhere. On the contrary, both of these approaches are acknowledged here as feasible to fulfill the overall task of the entrepreneurial process: the creation of new business venture.

Another question is: Do we need the dichotomy that exists between rational and creativity actions? In fact, some scholars already show that there are already insights presented in the literature by Alvarez and Barney (from rational/creative to creative/rational, 2007a), Sarason, Dean, and Dillard (structuration theory, 2006), and Sarasvathy et al. (three views of opportunity, 2003), for example, that these two approaches may be more or less active parts of the same kind of entrepreneurial process. This highlights a challenging idea concerning the actual
possibility to combine all the three basic views (recognition, discovery [treated here as rational], and creation) into one theoretical framework with coherent theoretical assumptions.

2.3 The role of environment in the entrepreneurial process

The role of environment in literature on entrepreneurial process becomes evident when it is seen through the two key elements of the process, the entrepreneur and the opportunity. In the former case it is important to focus on the ways the entrepreneurs see their role in the environment (or the reality) in which they live. Basically, it is acknowledged widely that entrepreneur is embedded in the social, political, economical, etc. environment.

At the same time the question of the environment has remained open. In entrepreneurship literature there are two distinctive ways to see how the situation is presented. Firstly, to follow the way of thinking of the Austrian school (Kirzner 1997) and the discovery theory of Alvarez and Barney it is acknowledgeable that the reality can be seen as external to the entrepreneur. In this case, according to Kirzner, the entrepreneur does not have more information and knowledge from the reality than others but – due to their ability (or alertness) – they seem to know where to find feasible market data (or opportunity) to start the entrepreneurial process. That is, according to the discovery theory in Alvarez and Barney’s (e.g. 2008), entrepreneurs know how to “search – systematically scanning the environment to discover opportunities to produce new products or services” (13) due to their prior knowledge or experiences.

This kind of thinking is in line with the dominant approach to ontological and epistemological positioning in entrepreneurship and entrepreneurial process. The Austrian approach based on positivism and an objectivist view of knowledge allows entrepreneur to gain new market knowledge through observation of the reality. That is not to say, however, that subjectivism is excluded categorically from Austrian view on entrepreneurship. On the contrary: Subjectivism in the Austrian view is presented in the following section (Ch. 2.4.5) by both Shackle and Kirzner.

Secondly, Schumpeter’s way of thinking and the creative approach (Alvarez and Barney 2006b; 2007a; 2008) offer an alternative approach. In this case the entrepreneur is not only forced to discover something that is already present in the environment. But on the contrary, they are able to create something that is non-existent without the actions of the entrepreneur. This means, that environment is
not producing opportunities ‘rather, they are created, endogenously, by the action, reactions, and enactment of entrepreneurs exploring ways to produce new products or services (Baker and Nelson, 2005; Gartner, 1985; Sarasvathy, 2001; Weick, 1979)’ (Alvarez and Barney 2007: 15).

In both cases above, to utilize the opportunity perspective in the environment is an important factor in the entrepreneurial process. Firstly, environment is the main source of business opportunities. These sources can be seen, on the one hand, as almost directly applicable opportunities such as ready-to-be-used. In a case such as this all that happens is that the entrepreneur brings the “agency” (Shane 2003: 7) to it. Or they can be seen as raw materials for opportunities. Based on various kinds of sources (materials, ideas, inventions, etc.) the entrepreneur is able to start the creation of the opportunity (Venkataraman 2002). Eventually the outcome of this process offers the possibility to start the other part of the entrepreneurial process, the exploitation process.

In closing, the fact is that due to the nature of entrepreneurship as social science environment, it is important since every entrepreneur lives in the society – and thus it is more or less embedded into it. Therefore, the continuous interaction with their environment such as this highlights the importance of any single person playing the role of entrepreneur. Similarly, this interaction between different actors is seen as essential in producing opportunities for themselves and the whole society. Venkataraman (2002) concludes this as follows: “we have discovered it or created it, but the fact is, it exists and it exists very much because of our individuality” (11).

Existing literature on the role of the environment in the discovery process reveals the same kind of dichotomy than between the rational and creative actions of an entrepreneur. Firstly, since the environment is seen as existing independently of the human actors it leaves only one role for the entrepreneur: the role of perceiver of the external and already existing reality. Entrepreneur in this case is only able to recognize (or discover) either the ready-to-be-exploited opportunities or the existing but unrecognized market information without any means to participate in the modification or changing of this reality. Secondly, to think the alternative situation the reality is to be created again and again in the mind of the human actor in a more or less close interaction with other people around them. Whereas, the former point of view follows the objectivist approach and deterministic insight of human nature, the latter is based on the subjectivist approach with the ontology of nominalism and voluntaristic human nature (Burrell and Morgan 1979). This highlights the question already presented above:
could it be possible – and theoretically feasible – to include the two perspectives in one framework?

2.4 The role of opportunity in the discovery process

The different definitions of opportunity that are used are quite vaguely defined in the current literature. Thus, to compare one concept to another is very difficult. For example, Venkataraman (1997) argues that opportunity is about a set of ideas, beliefs and actions. All these elements of opportunity promote the creation of future goods and services to be introduced into the markets. Sarasvathy et al. (2003; also Sanz-Velasco and Magnusson 2003) focus more on: new idea(s) (or inventions) that may or may not lead to the achievement of one or more economic ends that become possible through those ideas or inventions; beliefs about things favorable to the achievement of those ends; and, actions that implement those ends through specific (imagined) new economic artifacts. Sarasvathy et al. (2003) are influenced here by Shackle’s insights on enterprising decision making (Batstone and Pheby 1996; Endnote iii) in pointing out the notion of novelty, beliefs and uncertainty as important elements of their definition of opportunity. They also seem to prefer a more open approach to the strict subjectivist approach of Shackle in categorizing the entrepreneurial opportunity.

At present, the predominant definition of the concept of opportunity is made by Shane and Venkataraman (2000). This definition is built upon Casson (1982) to define entrepreneurial opportunities as “those situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production” (Shane and Venkataraman 2000: 220). According to their definition, the entrepreneurial opportunity is limited only to such a phenomenon that focuses on making an impact on the market. This means that they focus on “the commercial viability” (Dimov 2007b: 718) of the new business idea rather than how interesting the idea it may be.

2.4.1 Two approaches to opportunity

A more general approach to understanding opportunity is to think that all scholars mentioned above define the opportunity from different perspectives, or aspects, or at different levels. Based on this it would be a lot more feasible to define ‘opportunity’ as the broadest level concept that means almost the same as ‘possibility’. If somebody says that they have discovered an opportunity, in the
one end of the continuum of all possible actions it means plainly that he or she believes a possibility exists to do something as business-as-usual. That is, to copy something that somebody has already done somewhere else.

On the other end of the continuum that ‘possibility’ means that there are possibilities to do something totally differently than made before anywhere or anytime. To define opportunity according to the latter is in line with Shane (2003) who defines opportunity as “a situation in which a person can create a new means-ends framework for recombining resources that the entrepreneur believes will yield a profit” (Shane 2003: 35, underlined word emphasized in italics in original).

For Davidsson and Wiklund (2009) the definition of opportunity includes an external component. This external component is thought of as an element or predecessor for opportunity. Based on this line of thinking the component as such is seen here as the source for new opportunity. This will open up new alternative ways to theorize both the origin of the opportunity and the function of the discovery process.

To follow the logic of Shane (2003) and partly also Davidsson and Wiklund (2009) the role of entrepreneur is thought of as a free actor who is capable of being active and who is also able to build something from scratch. This is in line with Gaglio (1997) and Ardichvili et al. (2003: 106) who state that an “entrepreneurial opportunity does not exist until the individual has developed a blueprint for the exploitation of the idea” (quoted in van der Veen and Wakkee 2002: 11), and “opportunities are made, not found”, respectively

Another perspective to the opportunity discussion is presented by McMullen and Shepherd (2006). They opened up the process by suggesting that, in fact, there might be two separated but intertwined types of opportunities. One is the Third-Person Opportunity at the Attention stage, and the other is the First-Person Opportunity at the Evaluation stage. According to McMullen and Shepherd, the key question to be asked at the Attention stage is: What is happening out there? (See alertness in Gaglio and Katz 2001). Whether, somebody actually asks (or does not ask) a question such as this depends on two issues. Firstly, how much this person knows about what happens in some specific context? That is, whether or not they have enough domain-specific knowledge (McMullen and Shepherd 2006: 140). Secondly, are they motivated enough to start asking that kind of questions? This is about one’s own (deliberate or emerging) strategies on how to focus on utilizing information in pursuing expected outcomes. To conclude the Third-Person Opportunity McMullen and Shepherd argue that:
“Therefore, the acknowledgement of a third-person opportunity arising from the technological change is configural in the sense that people who have the necessary knowledge and motivation will believe that there is third-person opportunity arising from a technological change, but those who do not have the necessary knowledge and motivation will not believe that the technological change represents an opportunity for someone and will no longer attend to it.” (McMullen and Shepherd 2006: 141)

To recognize a third-person opportunity (e.g. a technological change in the form of a specific invention, etc.) will not mean that the recognizer, the entrepreneur, is ready to start the actual entrepreneurial action at the stage of evaluation (McMullen and Shepherd 2006). The main reason for this is because the uncertainty of whether or not the entrepreneur “believes one posses the knowledge and motivation necessary to exploit it” (141). What is needed, according to McMullen and Shepherd, is to learn more on the specific subject (i.e. feasibility assessment) and/or to be encouraged by their social environment (i.e. desirability assessment) in order “to overcome doubt and act” (ibid.).

### 2.4.2 Opportunity as created – not just discovered

It is not to say that opportunities based on these already existing frameworks do not include creativity at all. If an entrepreneur has managed to discover (or create) new means-ends during the entrepreneurial process it seems to be evident that some kind of creativity – at least at the individual level, needs to be utilized. Creativity literature offers a good candidate for understanding this: the personal and everyday creativity (Richards 2007; or more specifically personal creativity in Runco 2005; 2007).

According to Runco (2005), the theory of personal creativity is essentially different than social theories of creativity. Whereas, the more socially oriented theory of creativity emphasizes the role of the audience in evaluating the creativeness of creative action (or product) and accepting it as creative action, etc., the personal creativity relegates this acceptance to minor role. Since “the best labels, it seems to me, are personal creativity and social creativity” (Runco 2005: 302) the differentiation between the (purely) personal process and (productive) social process is possible. Therefore, the personal creative action can be treated as a creative insight as such, but not necessary as a characteristic or a nature of the final product.
“Personal creativity is more clearly compatible with theories that emphasize motivation. Intrinsic motivation in particular is an important part of personal creativity and important in numerous other definitions of talent. I actually prefer the term intentions over motivation. Intentions seem to mesh better with discretion and the pertinent decision making (Runco, 1993, 1996; Runco et al. 1999)” (Runco 2005: 306, parentheses in original)

Another line of thought is presented by Mintzberg (1973) who highlights a part of the entrepreneur’s activities as “spending a significant amount of their time seeking opportunities and implementing changes in the organization” (Mintzberg 1973, quoted in Carton, Hofer, and Meeks 1998: 7). The importance of the combination of both the conceptual opportunity and its exploitation in the real-life situation is highlighted in Kao’s (2000) ideas when he states as follows:

“Because ideas are just conceptual starting points. Having ideas is not good enough! I can sit here and have a perfectly good idea and yet not have it create real value for an organization. At the beginning of the personal computer revolution someone could say, "Hey, I think there'll be this thing called the personal computer and it's going to be important!” -- but it matters tremendously how you actually go about turning that perception of opportunity into something concrete and something real. There are plenty of ideas -- almost too many. I can go into a room and sit down with any corporate group and -- by application of certain techniques and in a matter of minutes or hours -- generate plenty of interesting new ideas. But it doesn't get them anywhere. They're just sitting in a room, and nothing's happening.” (Kao 2000, quotation marks in original)

The prior knowledge on the creation process of the opportunity that emerges before the actual start of a new business venture has been presented in several reviews in the field: Ardichvili et al. (2003), van der Veen and Wakkee (2002; 2004a; 2004b) to mention but two of the most feasible reviews from the perspective of the present study. Furthermore, the idea presented by Ardichvili et al. (2003) is one of the key and creative ideas in the current literature that will push the process of developing entrepreneurship as a scholarly domain in a direction that may challenge the dominant ideas in the field. In fact, it seems to be desirable to think creativity as the power that may propel the field of entrepreneurship to wherever researchers believe the field should go: “Thus, creativity is, by its nature, propulsion” (Stenberg 2006: 95).
According to Stenberg (2006) the propulsion theory assumes that “no fixed a priori way of evaluating amount of creativity on the basis of the type of creativity” (96, underlined word emphasized in italics in original) exists. At the same time, however, they oppose this view by presenting three major categories of the eight types of contribution of creativity: types of creativity that accept current paradigms and attempt to extend them; types of creativity that reject current paradigms and attempt to replace them; type of creativity that synthesizes current paradigms. In these categories both the amount of novelty and quality of work may vary.

In closing, entrepreneurial opportunities, in general, and business opportunities in particular, are ways to profit and loss. In order to make either of these outcomes happen some investments must be made by the person(s) who play the role of entrepreneur. In fact, Venkataraman (2002: 12) claims that “by definition, entrepreneurship requires making investments (time, effort, and money) today without knowing what the distribution of the returns will be tomorrow”. The situation of making decisions whether to invest or not is about risk and uncertainty (Knight 1921). According to Venkataraman (2002: 13), the only way to reduce uncertainty is to cooperate, to conduct collective actions, with other entrepreneurs, resource suppliers, and customers. By acting like this there will be no need to search for information to reduce the risk and clear the uncertainties. In some situations more information will not necessarily enhance the chance to carry on more successfully with the process since “such opportunities involve uncertainties that cannot be reduced by more information gathering or analysis. The only way to deal with such uncertainties is to act on them.” (Venkataraman 2002: 13).

2.4.3 Creative and recursive nature of the entrepreneurial process

Ardichvili et al. (2003) state quite clearly how an entrepreneur may begin the discovery process with “careful investigation of and sensitivity to market needs and as well ability to spot suboptimal deployment of resources” (106). They believe also how the opportunities are made with creativity. This is also expressed in the words of Hills, Shrader, and Lumpkin as follows: “Viewing opportunity recognition as a creative process may help illuminate the important relationship between creativity and entrepreneurship.” (Hills, Shrader, and Lumpkin 1999: 9)

Whilst a continuous debate exists whether or not the models of entrepreneurial process are treated as linear, however, a process model of both
entrepreneurship and creativity are not intended to be step-wise and linear, but rather a model which show various phases of the intertwined and iterative nature of the process (i.e., descriptive rather than prescriptive) (see Warr and O’Neill 2005).

The need for the use of creativity in entrepreneurial process is supported also by Venkataraman (1997) and Sarasvathy et al. (2003). Ideas of Alvarez and Barney, Dunham and Venkataraman, and Sarasvathy et al. accord substantially also with Ardichvili Cardozo, and Ray (2003) who conclude almost unanimously: “While elements of opportunities may be ‘recognize’, opportunities are made, not found.” (106, quotation marks in original).

In fact, to emphasize the importance of entrepreneur’s own activities in the process Ardichvili et al. (ibid.) label the discovery process as the opportunity development process because it clearly involves creativity. This means that the process has to deal with something new at least to an individual (or team) level. Runco (2007) labels this kind of creativity as the personal level creativity. Based on Ardichvili et al. (2003), the entrepreneur falls into a very difficult situation if the entrepreneurial process is understood only as the process of recognition of existing needs in the markets and/or given resources and business models to be used in realizing the developed business activities. The situation remains the same if the opportunity is treated as ready-to-use or based on imitation of existing way of doing business. In addition, they highlight that due to the highly unpredictable and turbulent circumstances the requirements of what it is needed to start a new business are difficult to understand. All this speaks for the development process – and perhaps even for the creation process. Not to mention, how to maintain the business venture as flexible, and sustainable, and profitable as expected in such rapidly changing conditions.

The question of linearity or non-linearity as the nature of the entrepreneurial process is still ambiguously described in the literature it seems – at least implicitly – to hinder rather than promote the discovery process. Many scholars express strongly how their model of entrepreneurial process is non-linear in nature but only a few of them manage to demonstrate how this is realized or modeled. According to Katsikis and Kyrgidou (2009), for example, it seems to be imaginable that the entrepreneurial process is linear when a subject [entrepreneur] starts a process [discovery process] in order to create a desirable object [to start the exploitation process]. On the other hand, it seems also to be comprehensible based, for example, on Hills, Shrader, and Lumpkin (1999) that the discovery process is not a linear but a non-linear process.
The nature of the discovery process and the activities of entrepreneur can be distinguished between these two theories. The discovery approach (e.g. Alvarez 2005b) assumes that entrepreneur – who is able to discover, recognize or anticipate existing opportunities in a certain industry, or market – needs to be a unique individual (or a group of individuals). This is in line with Shane (2000) who argues that, in fact,

“the process of discovery can be driven by recognition of knowledge already possessed rather than by search for knowledge needed (Kirzner 1997).”, [and] “… individual differences may imprint the development of new organizations even before they are founded. This is important because previous research has shown only that new organizations are programmed during firm infancy not before birth (Stinchombe 1965).” (Shane 2000: 465–466)

This is in contrast with the creation approach that assumes the entrepreneur as the creator of the opportunity. This discovery-driven approach to opportunity means that the entrepreneur only “coordinates resources before the value of these outcomes can be known with probability” (Alvarez 2005b: 9; more on outcomes and their probabilities can be seen in Davidsson 2003a, Knight 1921, and Sarasvathy et al. 2003). Alvarez (2005b) is willing to share, however, the idea of the individual entrepreneur as unique by proposing that perhaps “it is the process of exploiting the opportunity what makes these individuals unique?” (9). In fact, she argues directly that the nature of decision-making situation based on discovery approach is characterized as risky rather than real uncertainty (Knight 1921) as it is understood in the creation approach.

In all, opportunities do not exist at all until an entrepreneur conducts a series of non-linear and/or recursive actions in order to exploit the created potential opportunity. Therefore, it is not possible to evaluate ex ante the potentiality of the opportunity, or how feasible it is in the current market in both situations. However, the opportunity based on discovery approach includes inherently basic assumptions of its feasibility since a reasonable amount of information and knowledge is thought to be available to everyone who is skillful enough to perceive its existence. These kinds of assumptions make it possible to try to estimate at a certain level how successful the opportunity exploitation is expected to become. This is of course in contrast with the situation of the new opportunity based on creation approach because in this case the future is assumed as essentially unknowable.
2.4.4 Interplay as the nature of the discovery process

A widely shared understanding exists that the information needed in exploitation process has to be created during the entrepreneurial process, that is, either already in the discovery process, or during the real-life exploitation activities of the exploitation process. In both cases the actual need for the simultaneous presence of both of these processes emphasizes the fact that a keen interplay between the discovery process and exploitation of the opportunity goes on. In the words of Alvarez:

“In such settings, opportunities must be created and refined through a process of hypothesizing what an opportunity might be, trying to exploit this hypothesized opportunity, revising one’s hypothesis, testing this revised hypothesis until, at some point in the future, one’s hypothesis roughly correlates with what turns out to be objective opportunities in an industry, but opportunities that could not have known or anticipated ex ante.” (Alvarez 2005b: 8)

An important question here is as follows: Whether discovery and creation approaches may exist simultaneously, or one theory is in contrast to the other? Alvarez (2005b) argues that, although one certain type of conditions rules out the other kind of conditions, she is, however, also proposing the feasibility to think that the discovery process may start with following the assumptions based on creation approach. But after having experiences in the exploitation process the uncertainty the entrepreneur has perceived will decrease as more information is available about the situation. This is possible because, for example, the entrepreneur learns from the pursuit of the opportunity at hand.

This logic is supported by Zahra (2008: 253) who suggests that both discovery and creation of entrepreneurial opportunities “play important and often complementary roles” and “form a self-regenerating and reinforcing dynamic cycle where discovery promotes future creation and vice versa” – at least in the context of corporate entrepreneurship and established technology firms.

The entrepreneurial process without the exploitation process is incomplete. To follow this logic Davidsson (2006b) emphasizes the need to combine discovery and the exploitation, to serve the emergence and exploitation of the new venture idea. This is in line with Kirzner (1999) whose argument is based on his own and Schumpeter’s insight of the essential elements of entrepreneurship that:
“But this simply means that the seer who can imagine how the world might be improved by a radical innovation, but who lacks the needed boldness and initiative (to shoulder the risks which he would have to assume in order actually to introduce this innovation to reality in a world fraught with uncertainties)—has in fact not yet really discovered an available, attractive opportunity for innovation. If he has not seen that opportunity in so shining a light that it drives him to its implementation in spite of the jeering scepticism of others, and in spite of the possibility of its ultimate failure—then he has not really “seen” that opportunity.” (Kirzner 1999:13)

Davidsson (2005) is one of the few scholars who emphasize the keen interplay between the two sub-processes (the discovery and the exploitation). To build on his ideas the non-linearity and the recursive nature of the whole entrepreneurial process will characterize the nature of both entrepreneurial process, in general, and the discovery process, in particular. In fact, Davidsson (2005; 2006b; see also Sanz-Velasco and Magnusson 2004) shows that the interplay between these two separate processes is very keen. This interplay – which is extremely interesting – may continue potentially (or latently) during the whole entrepreneurial process.

The interplay between these two sub-processes become evident, for example, in a situation when the entrepreneur after discovering opportunity evaluates it as feasible enough for starting its exploitation. Then, alongside the exploitation, the entrepreneur recognizes the existing opportunity is not as viable as was expected. For example, it does not meet the actual needs of the expected key customers, etc. Instead they keep on clawing their way and believing pig-headedly in the opportunity. According to Davidsson (2005), the entrepreneur may turn to the discovery process and start to rethink the initial business model (Morris et al. 2005; Morris, Schindehutte, Richardson, and Allen 2006; see business concept in Davidsson’s (2006b) vocabulary) in order to make another try in the market.

Reasonably, then, perhaps the two most challenging and important issues in Davidsson’s idea on entrepreneurial process and the relationship between these two sub-processes are: firstly, “both receive adequate attention” (Davidsson 2006b: 143); and secondly, both the discovery and exploitation are parallel processes.

Particularly this recursive type of entrepreneurial process in the context of discovery process may express itself in the situation in which the entrepreneur during the exploitation of the current BO familiarize themselves, with the characteristics of the industry and may perceive new sources to be used in
rediscovering, reforming, refining, or even in re-creating the ongoing entrepreneurial process. As an outcome of that process the new business opportunities may be realized, for example, in the form of new spin-offs. Or, the entrepreneur could sell a promising BO to somebody who is willing to go ahead with it (see exploitation through market mechanism in Shane and Venkataraman 2000). In this case the buyer may start their own discovery process. In that situation the new discovery process will start from quite favorable premises (i.e., a more feasible position than the previous starting points.

If the entrepreneur is able to include the newly re-created opportunity in an existing business, it could be labeled as business venturing or corporate entrepreneurship (see a review of corporate entrepreneurship in McFadzean, O’Loughlin, and Shaw 2005; Thornberry 2001). In this case they could be categorized as corporate entrepreneur or intrapreneur. Thus, in a word: the entrepreneur.

Since Davidsson (2006b) leaves the question of the expected length of the exploitation process open it is reasonable to think that the process described above may be usable in the context of firms and organization that already exist and not just in the context of start-ups. Drawing on Davidsson (ibid.) the discovery process appears to be feasible even in the situation in which the entrepreneur - even during the exploitation process – thinks about changing or turning over the current business by re-forming, re-finining, re-creating the initial elements of the current opportunity. Or even creating an opportunity from scratch! In the words of Johnson, Christensen, and Kagermann (2008) this may be stated as follows: You should reinvent your Business Model! Furthermore, Sanz-Velasco and Magnusson (2004, 288) state quite clearly – and at the same time also contrasting to Bhave (1994) and Ardichvili et al. (2003) and their ideas of a linear process – how the “business opportunity development do not only take place before or in the very beginning of the venture, but continue throughout the lifetime of the venture”.

According to this logic the entrepreneur is able to re-build the business venture more suitable for the present (and even the near future) market situations. Drawing on the case of Davidsson (2006b) and Johnson et al. (2008) a feasible process is as follows: The entrepreneur, firstly, has managed to develop an opportunity for the expected business venture, then entered the market and continued to conduct initial business efforts in the market. After some period of time they start to realize the need for revitalizing the existing business with new opportunity.
In the case above the discovery process is usable for that expressed purpose. In the innovation literature, for example, this kind of situation is referred to as ambidextrous (Gibson and Birkinshaw 2004; O’Connor and Rice 2001; Tushman and O’Reilly 1996); the entrepreneur conducts activities both to exploit the existing opportunity and at the same time to explore new possibilities to create either a totally new business opportunity or re-create the ‘old’ to direct the business venture in pursuit of new challenges.

To apply the concept of ambidexterity to entrepreneurship means the situation in which both the discovery process and exploitation process (or as exploration and exploitation in words of innovation literature) are active at the same time. Conceivably, then, to think that they are conducted with different emphasis may be more feasible. In any case, it will be the opposite of that disclosed by Davidsson (above). To read carefully the relationship between the two processes as it is presented in this figure it seems that it is only expressed as serial; conducted as one at the time.

The extended idea of ambidexterity applied to idea of ambidextrous business means something like the possibility to utilize both entrepreneurship and other business competences – as discussed earlier in the study (e.g. Baker et al. 1997) – in the way that supports the definition of the role of entrepreneurship as an element in the business. Thus, the creation of new business may emerge both at the beginning of the entrepreneurial process as well as during the whole life cycle of the process – very much in line (but not quite) with the idea of Davidsson (2006b: 142).

To recapitulate, there are a few examples of literature challenging the traditional insights on both the discovery process itself and the relationship between these two sub-processes (discovery and exploitation). In the former case, the article of Ardichvili et al. (2003) raises the insight of the discovery process being taken onto a new level by emphasizing it more as a creation process in which an initial idea will be developed into a full-blown opportunity. A novel insight such as this makes it possible to think how the role of an initial idea is seen only as a starting point for the discovery process (or the development, or creation process). In this case the entrepreneur is able to creatively develop the initial idea into something which is almost totally unrecognizable, that is, if the outcome is compared to the starting point.

On the other hand, what Davidsson (2006b) presents above will open up a new insight into the question of the relationship between the discovery process and the exploitation process. Whilst, the prior literature appears to present the
discovery process both as a process that emerges only before the exploitation and one that emerges only once during the whole entrepreneurial process, Davidsson’s insight depicts it as a process that is continuously available for the entrepreneur in the exploitation process. According to this kind of thinking the role of the discovery process is seen as one, which is available for entrepreneurs whenever they want to create an initial business opportunity and exploit it. A process such as this is also available whenever they want to re-create the initial business opportunity in order to exploit it in the context of the already existing business organization. Or if they just want to abandon it if it appears to fit in with the situation at hand.

In closing, the insights based on the studies above have both advantages and biases. The prior literature fails to recognize the explicit non-linearity of the discovery process as well as the recursive relationship between the two processes, the discovery and exploitation. Despite the few challenging examples (e.g. Bhave 1994) it has failed to open up the discovery process and reveal the nature of the process. Particularly important is the notion that opportunity may not be the starting point of the process but the outcome of the opportunity development (or creation) process. In this case the only thing that is needed at the beginning of the process is an idea about the still becoming (or emerging) opportunity. During the discovery process this initial idea is to be developed to full-blown business opportunity (Ardichvili et al. 2003). In all, the obvious development in the field of entrepreneurial process the black box still remains closed; in the words of Ardichvili et al.: “We have taken a "first cut" at building a theory of opportunity identification” (Ardichvili et al. 2003: 121, quotation marks in original).

2.4.5 Concluding ideas of opportunity

Chapters and sections of the present report above emphasize the focus on the entrepreneurial process as meaningful because an approach such as this considers the concept of opportunity as the key concept of the process. That is, regardless of the labels used in describing the concept: opportunity (see review in Gartner, Carter, and Hills 2003), or market and profit opportunity (e.g., Kirzner 1997), or entrepreneurial opportunity (e.g., Casson 1982), or business opportunity (e.g., Baron and Ensley 2006; Davidsson 2006a).

For example, Shane and Venkataraman (2000) see a difference between the two mentioned labels: the entrepreneurial opportunity and the profit opportunity. The former refers to opportunity consisting of possibilities to value creation
through the discovery of new means-ends frameworks. Whereas the latter, the profit opportunity refers to possibility “to create value by enhancing the efficiency of producing existing goods, services, and processes” Klein (2008: 179). This is in line with Chell (2007) who describes the recognition of an opportunity as “the ‘creation of something (of value)’” (6, quotation marks and brackets in original). In this section the different labels of opportunity are used interchangeably.

Regardless of whether or not the opportunity is considered as a starting point or outcome of the entrepreneurial process, the important issues researchers need to take into consideration are both the ontological and epistemological assumptions. As it has been stated above, if the entrepreneur takes the exogenous nature of opportunity for granted then it means that they actually believe in the existence of only one possible way to proceed with the process. This means that the entrepreneur’s role is to start to discover the independently existing opportunity existing as ready-to-be-used, and if they manage to find one, then the rest is just about getting on with it.

The entrepreneur may also believe that they have an inherent role in the emergence of the opportunity. This is in contrast with the notion of opportunity as exogenous by its nature. In the case where the entrepreneur has an active role the nature of the discovery process is not anymore about recognizing a ready-to-be-used opportunity – or even discovering some still missing part of the opportunity existing independently from the entrepreneur (Davidsson 2003a; Sarasvathy et al. 2003). In this case it is more about thinking the opportunity as a business opportunity (BO); an outcome of the particular development or creation process. This is in line with Alvarez and Barney (2007a) who argue for the Creation Theory by treating opportunities as the result of the entrepreneurial action – not as productions of the external reality.

Some light can be shed on this by drawing on Dimov (2007a) who argues that “there is now a well-accepted view that entrepreneurial opportunities do not simply ‘jump out’ in a final, ready-made form but emerge in an iterative process of shaping and development” (Dimov 2007a: 561, quotation marks in original; also Ardichvili et al. 2003; Dimov 2007b). For the research on the discovery process this argument calls for a distinct approach to understand how the BO emerges and evolves from the emergence of plain idea into a full-blown business opportunity (see Ardichvili et al. 2003).

Not surprisingly, to examine the aspects of the opportunity more closely the understanding of the ontological and epistemological assumptions behind
different types of business opportunities (BOs) becomes important. This section of the study is largely influenced by the ideas of Davidsson (2003a, 338–339), Gartner, Carter, and Hills (2003), and Sarasvathy et al. (2003), who all promote the same kinds of insights by which scholars in the domain are able to make a theoretically sound statement about the definition of the BO, and the many ways an entrepreneur may gain knowledge from it.

Davidsson (2003a), for example, states that in some cases opportunities may exist out there as more or less independent of particular actors (also Dunham and Venkataraman 2002). However, even this kind of opportunity exists as incomplete and as an uncountable in the form of technological possibilities, knowledge, and unfulfilled human needs backed with purchasing power. This is also in line with Eliasson (1992) and his ideas about quality aspects, for example, in the production of new kinds of wine in the context of experimentally organized economy. Davidsson (2003a), for instance, states quite explicitly that the concept of the venture idea – whether or not it will reflect the preceding opportunity – is, in fact, the creations of individuals’ minds. However, concurrent with Davidsson’s insight above two concepts, opportunity and venture idea², should be distinguished (also Sarasvathy 2008, quoted in Ucbasaran 2008: 224).

The definition of opportunity by Shane and Venkataraman (2000) that defines the opportunity as a subjective recognition process of an objective thing, is according to Schindehutte and Morris (2009) and McMullen and Shepherd (2006), “overly constraining, and reflects two contrasting ontological and epistemological position” (Schindehutte and Morris 2009: 246). To treat opportunities as objective scholars who rely on realism and positivism assume them to be a pre-existing objective reality with an independent nature of actions of the entrepreneurs.

In contrast, the subjectivist approach highlights the emergence nature of the opportunity. Schindehutte and Morris state that this is in line with Sarasvathy (2001) as she appears to extend the definition of opportunity as “always in the making, as entrepreneurs tend to behave as though the opportunity is result of their action rather than a precursor to it” (Schindehutte and Morris 2009: 246). One reason for this ontologically ambiguous situation between these two definitions may be related to the different levels of analysis: the human activities in the process are located into the micro-level, whereas opportunities are located into macro-level.

According to Cowen (2003), the Austrian theories on entrepreneurship have struggled with “how the subjective and objective components of entrepreneurship
fit together” (13). That is, does an opportunity exist objectively out there or is it imagined or created in the making of the entrepreneur. The debate still remains unresolved. The subjective view of Shackle offers, however, a quite extreme approach to entrepreneurial process in the context of creating yet non-existent opportunities. To follow Shackle’s subjective view on entrepreneur in creating new opportunities “almost from nothing” (Shackle 1961; quoted in DeTienne and Chandler 1997: 244; DeTienne, Chandler, and Lyon 2003: 7), it seems to be clear that the subject, the individual entrepreneur, is actually forced to be treated as the primer actor in entrepreneurship (Buchanan and Vanberg 2002. According to the subjective view of Shackle, creation process such as this will happen exclusively in one’s mind due to the imagination, personal knowledge, and aspiration.

The point taken by Shackle is for the entrepreneurs who make choices here and now “the act of choice itself creates a future that does not exist independent of the choice that is made” (Buchanan and Vanberg 2002: 123). Furthermore, this means that “since the future depends on current choice, there is now, strictly speaking, nothing to know” (O’Neill 2000: 23), and “if man knew the future, he would not have to choose and would not act” (von Mises 1998: 1.VI.2) This is to say that, according to Austrian economic theory, two sources of human ignorance influence the human action: the first is the dispersed knowledge (Hayek 1945; Shane 2000) (or the division of knowledge); the second is the “unpredictable future at the time of decision” (O’Neill 2000: 22). Both of these sources of ignorance state that actions of the entrepreneur are important.

In closing, the discussion about opportunities concludes with regarding the nature of the opportunity as important in understanding the entrepreneurial process, in general, and the creation of BOs, in particular. On the one hand, both the rational thinking and discovery approach are good examples of how the dominantly defined entrepreneur sees the environment. These represent the entrepreneur who realizes that “social structures and collective actions are simply the reflections of the accumulation of entrepreneur’s own individual decisions and actions ” (Dunham and Venkataraman 2002: 9).

Entrepreneurs such as these, on the other hand, also realize that the external environment offers some technological, social, economical, etc. possibilities and knowledge in which they could start the process of their own BO, and not just the more or less complete and ready-to-use kind of BOs. The present study, however, believes an entrepreneur such as this feels the environment as external; as something that exists independently of any particular actor. Similarly, the entrepreneur of this type feels the environment as something that offers important
access to the networks and the knowledge created in these networks. The entrepreneur such as this appears to be more like a social atom rather than a creative thinker (or actor) (Dunham and Venkataraman 2002).

2.5 Challenging insights into the opportunity discovery process

“While elements of opportunities may be “recognized,” opportunities are made, not found.” (Ardichvili et al. 2003: 106, quotation marks in original)

“Environmental change is usually thought to be a source of business opportunities.” (McMullen and Shepherd 2006: 139)

In order to go into details to study entrepreneurial process the concept of opportunity is one issue that still appears to be shown as unclear or ambiguous in literature, and therefore, more studies should focus on it (e.g. Alvarez and Barney 2006b; Alvarez and Barney 2007; DeTienne and Chandler 2007). This is not to say that opportunities based on these existing frameworks do not include creativity at all. Since it seems to be evident that an entrepreneur who is able to discover or create new means-ends during the entrepreneurial process is also utilizing some kind of creativity – at least at the individual level. In understanding this more thoroughly the literature on creativity offers a good candidate: the personal and everyday creativity (e.g. Richards 2007); or more specifically on personal creativity (Runco 2007: 92). In this case both the concepts, of entrepreneur and the opportunity are interrelated in the entrepreneurial process. The third part which may be related to the process in the same vein, the environment (the reality), and the further aspects of all three will be discussed in the following sections.

The statement of Ardichvili et al. (2003) in the previous section clearly depicts that the entrepreneurial process is about the careful investigation of existing market needs and opportunity recognition as a creative process. If both the aspects in question are seen through the lenses of discovery and creation theories of Alvarez (2005a; 2005b) and Alvarez and Barney (2006) they may sound confusing. For example, the Discovery Theory assumes that the existing opportunities have to be discovered by some unique individuals who are alert to their existence. The assumption of a unique person accords with the precondition of alertness and prior knowledge as the key characteristics of an entrepreneur in Ardichvili et al. (2003). This unique individual assumption, however, opposes the view of the Creation Theory. Equally, the current literature shows that it is not the
differences in people but in decision-making under uncertain entrepreneurial conditions, which counts.

Despite the evident shortcomings, the present ideas of opportunity development will open up questions concerning the role and nature of different elements of the entrepreneurial process: the entrepreneur; the environment; the opportunity; the process itself, and the outcome of the entrepreneurial process (e.g. Ardichvili et al. 2003; Davidsson 2005; Hills, Lumpkin, and Singh 1997; Shane 2003; Wakkee 2004). After recognizing all the elements of the process an additional question has to be asked: *On what or whom should researchers focus their attentions?* Davidsson (2003a: 336–340; 2005; 2006a, 2006b) is suggesting that the research focus should be more on the opportunity and not solely on certain characteristics and activities of entrepreneur? At the same time he seems to ignore the role of the environment in the entrepreneurial process.

### 2.5.1 Key elements of the discovery process

To recap the current literature on entrepreneurial process it seems evident that the insight already presented in several separate studies that the process starts from the decision to start the process, and is described as the development process from *idea to business firm*. This decision to start is based on the emergence of an initial idea. The process will continue to a phase of Business Opportunity, the outcome of the development process of the initial idea. To build on the work of some earlier scholars (Herron and Sapienza 1992) and more current ones such as Sarasvathy (1997), Rea, Maggiore, and Allegro (1999), Puhakka (2002), van der Veen and Wakkee (2002), Bird and Brush (2003), de Koning (2003), Carrier et al. (2005), Kyrö, Niemi, and Somersalmi (2006), Lumpkin (2007), and Wakkee (2004) the conceptual model of the entrepreneurial process can be revealed as the Conceptual model of the entrepreneurial process (2).
Fig. 2. Conceptual model of the entrepreneurial process.

The model presented above is in line with the review of van der Veen and Wakkee (2002). The overall content of the model is drawn on the widely shared insight in the current literature. An insight such as this acknowledges that the idea for a new business venture precedes the emergence of the actual business opportunity. Together with this, one important question, however, still remains unanswered: What is the business opportunity? Could it be an outcome of the development process from idea to opportunity? Or, could the business opportunity development process be the very process during which the new business opportunity is created by the entrepreneur? The former is more about the development of an existing opportunity and its development of a tentative opportunity (i.e., the idea, to a full-blown opportunity). Whereas the latter is about a specific process during which the opportunity will emerge through the activities of the person who plays the role of entrepreneur. This kind of content is composed of both sources for the creation of the opportunity and the activities of the process.

In closing, Van Der Veen and Wakkee (2002; 2004a; 2004b) show in the conclusion based on the literature review how their conceptual model of entrepreneurial process combines the ideas presented in many previous theories and models. This model displays the key element of the process like entrepreneur, environment, and the process. Similarly, it illustrates the widely shared insight among scholars on entrepreneurship that entrepreneurial process is divided into two sub-processes: discovery and exploitation.

Unfortunately, scholars still label their theoretical concepts and constructs differently and ground these concepts in different ontological base. In many cases they have done this almost without defining the ontological base of their theories, models, or concepts at all. A situation such as this makes it very difficult to
compare one idea to another. Therefore, it is unclear whether or not studies in the previous literature share the same kind of insight of the entrepreneurship, and the entrepreneurial process in particularly.

2.6 Discussion of ontology of the discovery process

The dichotomous ontology with the separation between realism and anti-realism is widely accepted in the literature. This is disclosed nicely in Alvarez and Barney (2007a) who refer the discovery approach to ontological positioning of realism. The creative approach and creative theory of Dunham and Venkataraman (2002) is referred to as subjectivism. To open up more the differences between these two approaches Alvarez and Barney (2007a) highlight the more uncommon one, the creation opportunity as follows:

“The study of creation opportunities is best grounded in what has come to be known as the evolutionary realist perspective (Azevedo, 2002; Campbell, 1960; McKelvey, 1999). In evolutionary realist epistemology, individuals are assumed to socially construct reality as they perceive it. However, the veracity of these socially constructed realities is tested against what from the point of view of an individual is an objective and external, albeit potentially unobservable, reality. Of course, this “objective” reality may be nothing more than the aggregation of other individuals’ socially constructed realities (Azevedo, 1997). But this type of external reality can have the same implications as more objective external realities, i.e., selecting for some socially constructed realities while selecting out others (Campbell, 1960).” (Alvarez and Barney 2007a: 15, quotation marks in original)

What is very interesting in the ideas of both Alvarez and Alvarez and Barney is the idea of evolution of opportunity attributes. If, for example, the “creation process begins to mature, those enacting creation opportunities may actually begin to obtain enough information and experience so that the opportunities they end up exploiting, in the end, look more like discovery opportunities than creation opportunities” (Alvarez and Barney 2007a: 31). Of course, the same evolution process can also happen the other way around; from creation to discovery. In all, “actors [read: entrepreneurs] may find themselves operating in settings where they are simultaneously confronting discovery and creation opportunities” (ibid: 32, brackets added).
The mere differentiation based on ontological premises makes it necessary to think whether there actually are multiple realities instead of a single reality. According to Perry, Riege, and Brown (1998), both the constructivists and critical theorists (the subjectivists) consider that one’s perception is the reality. Therefore, there are as many realities as there are individual perceptions. However, realists and also critical realists consider that “there is only one reality although several perceptions of that reality must be triangulated to obtain a better picture of it” (ibid: 1952). In the present study, this means that the natural reality exists as independently from human perceptions, but the social reality is man-made.

In the prior literature, this problem concerning single vs. multiple reality, or discovery vs. creation will actualize in the case where opportunities with discovery attributes based on single reality will be transformed (somehow) to opportunities with creative attributes. The existence of the creative opportunity is based on assumptions of multiple realities. Alvarez and Barney (2007a) appear to draw on that kind of thinking when they start contemplating “are there types of opportunities beyond discovery and creation?” (ibid: 35). From the point of this study an important question will arise:

Is it possible to think of the opportunity of the Discovery/creation process from another perspective in order to overcome the dominant distinction between the world as existing external to people and the world as created in everybody’s own head?

There are already a few ideas that support this kind of quest. Kirzner thinks that “the distinction between discovery and creation is meaningless, that all opportunities can be understood as variations of discovery (Kirzner, 1997)” (Alvarez and Barney (2007a: 36). Evolutionary realists are contrary to Kirzner since they feel that “the distinction between discovery and creation opportunities is important, but argue that all opportunities are actually creation in nature (Aldrich & Kenworthy, 1999; Azevedo, 2002)” (ibid.). Finally, Alvarez and Barney (2007a) conclude that there are still other philosophers who believe that “both types of opportunities can exist (Kuhn, 1970)” (Alvarez and Barney 2007a: 36).

In the case of both structuration theory (Giddens 1984) and critical realism perspective (Bhaskar 1979; 1997) this dichotomy has tried to be overcome by seeing, on the one hand, the reality as existing (the positivist ontological positioning). But the role of the actor, the entrepreneur, on the other hand, is to accept that existing reality consists of both enablers and constrains to act. This
means that social structures precede activities of people in a way, with the additional possibility to influence the structure and even to change it in more or less degree (the subjectivist epistemological positioning). This is in line with Bhaskar (1979: 31) who states that “in a critical realist approach, society exists prior to human action” (Leca and Naccache 2006: 631). However, human actions are “never determined by a certain structure, they are merely conditioned” (Danermark et al. 2002: 56). Furthermore, the creation perspective is supported also by structuration theory since:

“A structuration view suggests that opportunities are not merely discovered but are created, or instantiated, by entrepreneurial specification, interpretation, and influence. This view implies that the process of discovery is a dynamic interrelated process dependent upon the historically situated and enabled cognitive entrepreneur, the source of opportunities, and the interrelationship between the two.” (Sarason, Dean, and Dillard 2006: 296)

The role of opportunity as it is seen from the perspective above is not utilized in the present study only as external and given as based on many other factors of the economy. On the contrary, there are some – almost – silent signals presented in the literature that perhaps the origin of the opportunity (discovery or creation) is totally irrelevant to the opportunity creation process since all kinds of opportunities may be based on the same ontological positioning. That is, what is also very important is the way in which the opportunity will be exploited on the market and through the various business processes. Alvarez and Barney conclude this as follows:

“The type of opportunity an actor tries to form —discovery or creation—can have a significant impact on the effectiveness of the business practices used to exploit those opportunities. Misread the nature of an opportunity, adopt inappropriate business processes, and efforts to exploit an opportunity can misfire” (Alvarez and Barney 2007a: 4).

Alvarez and Barney’s statement above highlight two possible and major problems in the prior literature. Firstly, the relationship between the discovery process and the exploitation process as described in Davidsson (2006b) remains ambiguously defined in the prior literature. And secondly, the prior literature has focused only on either-or perspective. Thus, the entrepreneurial process has been studied from perspective such as positivism. An approach such as this is contrasted with hermeneutics, or objectivist perspective contrasted with subjectivist (or
interpretivist) perspective (see introduction to the debate within social science in Danermark et al. 2002: 2). Therefore, the prior literature has failed to lead the way to see the BO from the perspective of the single natural reality as well as from the multi-voice social reality. That is, from the critical realism perspective, for instance.

Based on many reviews on the entrepreneurial process presented earlier in the present study one conclusion has emerged: a great variety (even an ambiguity) exists in the ways that different scholars define opportunity – or simply use it merely as taken for granted like fashion in their studies. One major reason for a situation such as this is the fact that research designs and definitions are grounded unclearly and more too often only implicitly into its ontological basis. Scholars who see the entrepreneur as an external actor of their environment, have defined the role of the entrepreneur merely as discoverer of this reality without any particular role in creating or possibility to create something different, something new and novel, or to change the reality with people around them. Therefore, the entrepreneur’s role is just to discover what is already in the reality. This in line with Shane and Venkataraman’s definition of the entrepreneurial process (2000):

“In contrast to previous research, we define the field of entrepreneurship as the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited (Venkataraman, 1997). Consequently, the field involves the study of sources of opportunities; the processes of discovery, evaluation, and exploitation of opportunities; and the set of individuals who discover, evaluate, and exploit them.” (Shane and Venkataraman 2000: 218)

The results of the prior literature show how important it is to study the characteristics of all kinds of types of entrepreneurs (nascent, or serial, or intrapreneurs, etc.) and to understand entrepreneurship and the entrepreneurial process on the macro level or in a global context (Heinonen, Kovalainen, and Pukkinen 2006), as well as in the creation process of new business start-ups (Reynolds 1999; 2000), and as it is showed above also as discovery process in which its outcomes, business opportunities, are based on various sources (Shane and Venkataraman 2000).

Whilst, the results of the first two parts of this research stream area are outstanding, however, less is known about what is happening before the start-up event, i.e. in the discovery process emerging before the actual founding event of the new business venture. Therefore, an alternative approach to understanding
entrepreneurship, particularly from entrepreneurial process point of view, would be based on focusing on the entrepreneurial process and particularly on the actions of the entrepreneur during the new BOC process.

As displayed in the literature the basic elements of entrepreneurial process are well known: the opportunity, the entrepreneur, and the environment. According to the literature on entrepreneurial process the process itself includes two sub-processes, that is, the discovery and exploitation process. Whilst, the discovery process includes several explicitly described phases, however, in the exploitation process the definition is still more unclear.

2.7 Conclusions

The focus of the chapter has been on the current dominant approach of entrepreneurial process and the challenging insights in this context. It would be possible and even more intentionally to promote entrepreneurship in its role of creating new wealth and success for entrepreneurs themselves and also the society as a whole if people in the field of entrepreneurship could understand the discovery process more thoroughly. Thus, it appears to be clear that the prior literature has managed to build theories and model that cover quite nicely the field on entrepreneurship, in general, and the discovery process, in particular. However, one or two problems have still to be resolved. The first is the problem the basic theoretical assumption prior studies are built on (see Dunham and Venkataraman 2002). The second problem is the ambiguously defined relationship between the two core processes, the discovery and exploitation (Davidsson 2006b). Finally, the core nature of the discovery process has remained quite indistinct (see Ardichvili et al. 2003).

In the first case the focus is on the dogmatic either-or approach; either an objectivist approach (the discovery approach – or the recognition and discovery views) or subjectivists approach (the creation approach or the creation view to entrepreneurship). An approach such as this is ruling out other feasible approaches suitable to study the phenomenon: the emergency of opportunity. Feasible candidates for challenging the dominant situation may be, for example, structuration theory (e.g. Sarason, Dean, and Dillard 2006) and the philosophical perspective referred to as the critical realism (e.g. Sayer 2004). Especially, critical realism “offers an alternative both to the spurious scientificity of positivism and to idealism and relativist reaction to positivism” (Sayer 2004: 6). Therefore, it needs to be acknowledged that the concept of opportunity has to be re-interpreted.
since the dominant interpretation does not allow utilizing in full power to study
the process of creating the opportunity.

Finally, the previous sections revealed unambiguously how strongly the
literature on entrepreneurial process, and in particular, the prior literature on the
opportunity discovery process is built on influence of the Austrian School and
rational theories on entrepreneurship. That is to say, theories on the
entrepreneurial process emphasize five core concepts. Firstly, the opportunity is
treated as existing independently and ready-to-be-discovered by a specific
person(s) with a prior knowledge or alertness to perceive unrevealed
inefficiencies in the market (Kirzner 1999; Shane and Venkataraman 2000; also
Ardichvili et al. 2003). Secondly, the entrepreneur’s role as social atom is to
utilize both one’s human and social capital (Dunham and Venkataraman 2002)
independently from the people around and the prior knowledge about the
industries and ways how to serve selected needs in the market (Shane 2000).
Thirdly, the environment is treated as external to the entrepreneur’s process of
discovering new opportunities (e.g. Shane and Venkataraman 2000; Davidsson
2003a). Fourthly, the entrepreneurial process itself is as ambiguous, a true a
black-box by its nature and impossible – and perhaps even unimportant to study
(e.g. Zeithaml and Rice 1987). Finally, the outcome of the opportunity discovery
process is as either new start-up, or abandoned discovery process, or

To think more analytically it seems evident that two broad perspectives on the
discovery process will represent what is stated above. That is, the two
perspectives on the concept of opportunity. Along with the widely shared insight
of Sarasvathy et al. (2003) the opportunity is taken as given because it is the
external environment that actually creates it, and not the entrepreneur. The role of
the entrepreneur is just to recognize, discover, or create the necessary information
to reveal the already existing opportunity. Even in the case of creation the
entrepreneur needs to create information concerning the supply and demand to
meet the opportunity. The other perspective is presented nicely in Alvarez and
Barney (2008) when they show that it is the entrepreneur who directs the process,
and not the environment. It is the role of the entrepreneur to choose either rational
(The Discovery Theory) or creative (The Creation Theory) strategy to carry on in
the process of forming the opportunity.

In closing, the discovery process is presented in the prior literature as merely
a black box, and only a few scholars have tried to open up the process. Several
interesting elements have been excluded from the academic scrutiny. Issues like
business model and business concept, business plan, sources for opportunity, etc. need to be studied more carefully. Also, the relationship between the discovery and exploitation processes is so fascinating an insight, that it needs to be opened up to understand the whole entrepreneurial process and the roles of these two processes in it more thoroughly. In addition, the possible additional processes, which may mediate the transformation of the more conceptual opportunity discovery to quite concrete opportunity exploitation, are interesting elements of the process for future studies.

In all, emerging insights exist in the literature. These insights disclose another perspective both to the entrepreneurial process, in general, and the discovery process, in particular. To draw on the ideas of Alvarez, Barney, Ardichvili, Cardozo, and Ray, Bhave, Davidsson, Dunham and Venkataraman, Sarasvathy, Dew, Velamuri, and Venkataraman, and van der Veen and Wakkee, the current situation in the field opens up a need to focus on the discovery process and its phases. Similarly, to understand the interplay between the two sub-processes of entrepreneurial process has raised increasing attention in the field. Furthermore, the concept of opportunity is seen both as the outcome of the very same process and as input for the next process, the opportunity exploitation process. Equally, nascent or practicing entrepreneurs are expected to be more or less embedded into the technological, social political, etc. environment. Thereby, a call exists for an alternative theoretical perspective (characterized by both-and approach) on the process of creating business opportunities to overcome the either-or situation presented in the dominant literature.
3 Critical Realist Approach to Business Opportunity Creating

3.1 Critical realist research design on opportunity creating

The previous chapters presented the discovery process as a multifaceted phenomenon in which its key elements and their activities (or influences) are both heavily intertwined and complex. In the dominant literature, however, the ontological and epistemological dichotomy seems to have the effect of preventing scholars from understanding the entrepreneurial processes as coherently as expected.

The purpose of this study is to overcome this problem by utilizing an alternative theoretical perspective, namely critical realism (Archer 1998; Bhaskar 1979; 1997; Fleetwood 2005; Sayer 2000). To describe the chosen research approach more thoroughly, the first part of the chapter begins with a discussion of the scientific commitments from the perspective of critical realism, and its characteristics. This part introduces both the specific ontological and epistemological stances of critical realism. After this, the key determinants of critical realism, such as reproduction and transformation, the stratified social reality, mechanisms, causal powers and reproduction will be presented in order to legitimate the use of critical realism instead of using more traditional approaches. The second part of the chapter describes the research design selected for the study. Finally, the chapter will close with a discussion of methodological choices used in the study.

3.2 Critical realist perspective

“Critical realism is a philosophical approach to sciences (Bhaskar, 1978, 1979, 1986) that criticises the study of the social domain as a ‘closed’ system, typical of positivist approaches in the social sciences. At the same time, it opposes the idea that reality can simply be reduced to our interpretation of it, as has been argued in different forms in the past by idealist and conventionalist scholars.” (Castellacci 2006: 861, quotation marks in original)

Critical realism (or the critical realist perspective) is becoming an important approach to study phenomenons in the domain of management, in general. As
Fleetwood and Ackroyd (2004) have said “there is, in fact, a significant intellectual movement now going on in the field of organisation and management studies (O&MS), in which the philosophy of critical realism is being more and more widely appreciated and put to use” (ibid.: 1). Influenced by Easterby-Smith, Thorpe R, and Lowe (1991) Parrish (2007) prefers critical realism to constructivism since several researchers in management “are making increasingly explicit reference to the critical realist basis of their research (e.g. Baum and Rowley 2002; Fleetwood and Ackroyd 2004; Mutch et al. 2006; Van de Ven and Poole 2005)” (82, brackets in original). To provide a middle ground between the established paradigms of positivism and interpretivism (McEvoy and Richards 2006) Easterby-Smith et al. treat critical realism as “bridging between the two extreme viewpoints” (1991: 26).

Furthermore, Parris (2007) compared between constructivism and critical realism, and according to the study, critical realism is a philosophy of science that is founded upon a priori (or necessary) truths about the nature of the world. According to critical realism, it is not about “whether social entities are real but how they are real” (Zembylas 2006: 667). It accepts metaphysical realism over idealism; that is, since the world is socially and conceptually mediated (Fleetwood 2005) it is important to examine critically the concepts used to understand the world. As Harvey (2002) states, it “embraces naturalistic explanations in the social sciences without ignoring, at the same time, the fact men and women, unlike natural entities, actively reproduce their social world” (ibid.: 163).

The ontology of critical realism refers to the reality that is divided into two parts: natural and social. To focus on the social reality, it possible to claim that underlying structures and mechanisms of the socially constructed reality determine social arrangements and our understandings of them. In fact, according to Zembylas (2006: 668) Bhaskar (1978) states clearly that:

“the relationship between science and reality seems problematic only if one either accepts the social character of science, but denies that its object of study is independent of all social activity (the epistemic fallacy), or if one accepts the independence of reality, but denies the social character of science (ontic fallacy)” (Zembylas 2006: 668).

Thus, the key to the critical realist approach is that society exists prior to human action. This means that “actions presuppose existing resources and structures, including shared meanings” (Sayer 2000: 18). While social forms and structures
are seen as necessary conditions of any intentional human act, both social actions and human agency presuppose a social context (Leca and Naccache 2006). A statement such as this is in line with Danermark et al. (2002: 97), who emphasize the intentionality “as a universal condition for all human activity”.

Furthermore, in critical realism the reality is understood as structured and differentiated, that is, as in process and changing, as a totality or whole and as containing human, potentially self-conscious and transformative agency (Bhaskar 2002). Therefore, it defends:

“the separability of ‘agency’ and ‘structure’ on the grounds that it makes it possible to expose restrictions upon agency that would otherwise go undetected; and, relatedly, it enables human beings to make more informed, strategic calculations about how to transform the social world in ways that will eliminate such restrictions” (Willmott 2005: 758, quotation marks in original).

The world perceived through critical realism is not only about “events, states of affairs, experiences, impressions, and discourses, but also of underlying structures, powers, and tendencies that exist, whether or not detected or known through experience and/or discourse” (Patomäki and Wight 2000: 223). This is in line with McEvoy and Richards (2006), who claim that “critical realists maintain that progress is possible because the intransitive dimension of reality (enduring structures and processes) provides a point of reference, against which theories can be tested” (McEvoy and Richards 2006: 69, brackets in original). Also Sayer (2004) argues the same when he states:

“This highlights a key feature of critical realism, its imputation of necessity (natural or real rather than ‘logical’) to objects; i.e. while there are many contingent relations in which an object can stand, that is relationships which are neither necessary nor impossible for its existence as X, there are some which are necessary conditions of its existence as an X.” (Sayer 2004: 10)

Originally, critical realism is a combination of two terms: transcendental realism and critical naturalism. According to Bhaskar (1978) the former, transcendental realism, refers to science seen as “a social activity whose aim is the production of the knowledge of the kinds and ways of acting of independently existing and acting things” (Bhaskar 1978: 24, quoted in Zembylas 2006: 667). The latter, critical naturalism, refers to “the methodological question of whether it is possible to speak of ‘laws of society and of human behavior’ in the same way one talks

The differences between social structures and natural structures can be summed up as follows: Social structures, unlike natural structures, first, “do not exist independently of the activities they govern”; second, they “do not exist independently of the agents’ conceptions of what they are doing in their activity”, and finally, they “may be only relatively enduring (so that the tendencies they ground may not be universal in the sense of space-time invariant)” (Bhaskar 1998: 42) In words of Sayer (2000) social structure can be defined as “a set of internally related elements whose causal powers, when combined, are emergent from those of their constituents.” (ibid: 14). Similarly, Castro has reviewed Danermark et al. (2002, published in Swedish 1997) and states that “first, an understanding of the reality of the objects of knowledge as independent of our consciousness and second, an understanding of our knowledge of these objects as socially and conceptually mediated” (2001: 246).

While critical realists state that an entity in its context “can exists independently of our knowledge of it” (Fleetwood 2004: 29, underlined word emphasized in italics in original), however, it is important to note the actual interaction between human agents (the entrepreneur and the others) and the overall structures of the particular context. This is specifically evident with artefactual, social, and ideal type of entities, which exist even if human beings are omitted (ibid; Sousa 2008). Furthermore, Fleetwood (2005: 203–204) emphasizes that the interaction between some but not all human activities of some but not all human beings, for example, the intending (or fledgling, or becoming) entrepreneurs and the structures in which these agents are embedded is a continuous and cyclical flow over time; “here are no empty spaces where nothing happens, and things do not just begin and end” (Fleetwood 2005: 203).

The overall description on critical realism in social sciences presented here is based on the ideas of Bhaskar. What seems to be important in critical realism is that it distinguishes philosophy of social science (ontology and epistemology) and the methodology of social science. The former asks what is the social world and why do we need to research it. Whereas the latter is interested in why do social phenomena occur the way they do and how do we research them. Thus, the relationship between these two will guide the understanding of what the social world is must be like in order for the social sciences to be possible, for example, to avoid the epistemic fallacy – “the confusion of the relationship between the nature of objects (ontology) and the social knowledge of them (epistemology)
As stated above that while:

“realists are also critical of the ideas of absolute truth and of absolute foundations to knowledge, and they recognize the social and linguistic character of knowledge”,

however,

“they argue that this need not make us flip over into relativism or idealism, or make us doubt the possibility of scientific progress or abandon the Enlightenment project” (Sayer 1993: 321).

According to Bhaskar (1979; 1998), critical realism rejects the positivist account of science and empiricism, positivism, structuralism and hermeneutics as a single perspective to social science. While critical realism is focused on “the philosophy of the social sciences, but it leaves the theoretical and methodological work to each substantive social science” (Yeung 1993: 53), however, it says very little of methodology. This means that each substantive social science (e.g., entrepreneurship) faces the need to set up its own distinctive methodology. Thus, the relationship between ontoly-epistemology and methodology is of two sorts; on the one hand, the former informs research in social science; on the other hand, successfully utilized methodology in the research in social science illuminates the nature of both ontology and epistemology. This can be summarized in words of Yeung as follows: “we need a philosophy to inform our practice and, at the same time, through our practice we would inform our philosophy in dialectical ways” (Yeung 1997: 54).

### 3.2.1 Scientific commitments

Ontology concerns how we understand the relationship between the world and ourselves. To put it more precisely the “term ontology refers to the study or theory of being, not to the being itself” (Fleetwood 2004: 28, underlined words emphasized in italics in original). Ontology refers to questions such as: Does it exist independently from agent (people)? Is it created in our mind? Gioia and Pitre (1990: 585) state that if the answers to these two questions are positive, then the former sub-question refers to objectivist view, and latter to subjectivist view.

Another key part of the scientific commitments, epistemology, on the other hand, concerns the nature of knowledge of the phenomenon in question (ibid.).
That is, “what is knowledge and what are the sources and limits of knowledge” (Eriksson and Kovalainen 2008: 14). A phenomenon can be seen through different conditions described as justified true beliefs. The belief condition means that what I know is what I believe.

According to Kyrö and Kansikas (2005) the ontology and the epistemology are both related to philosophical commitments and paradigms, and together with methodology and research methods they are key concepts in the philosophy of social sciences (Eriksson and Kovalainen 2008: 12). Gioia and Pitre (1990) claim that a paradigm – as it is comprehended in organizational studies – “is a general perspective or way of thinking that reflects fundamental beliefs and assumptions about the nature of organizations (Kuhn, 1970; Lincoln, 1985)” (Gioia and Pitre 1990: 585). According to Burrell and Morgan (1979), the differences in perspectives or assumptions can be organized along two pairs of dimensions: objective–subjective, and regulation–change.

Based on the earlier literature, one of the four basic paradigms, the functionalism, has dominated the organizational science (Burrell and Morgan 1979, cited in Gioia and Pitre 1990). It has made a strong impact also on the entrepreneurship research. The functionalists see the nature of an organization as objective, meaning that the world is out there waiting to become explored and discovered (ibid.). This kind of thinking is based on realism (ontology) and positivism (epistemology).

It will be stated below that an alternative approach, critical realism, is a philosophical approach that acknowledges the social reality as existing independently of human being. This is in line with the perspective of Burrell and Morgan (1979) and the objectivist approach to social science. However, critical realist perspective claims that human beings are voluntaristic and that they are not only constrained or enabled by the social reality but they are also able to modify and change it (see postpositivist or anti-positivist epistemology).

This is to say here that to see human action from the perspective of critical realism, will offer an alternative perspective to study entrepreneurship. It is assumed in the present study that it is possible to transcend the initial situation (or paradigm or intention) if the process enables the person to play the role of entrepreneur and to learn through more or less creative activities conducted in the entrepreneurial process. If the outcomes of the learning processes are expected to be feasible, then they will be exploited as new starting point for the next phase in the entrepreneurial process.
Reproduction and transformation

Bhaskar (1998) has argued for the relations between society and individuals as follows: "people do not create society" (39), because it both pre-exists them and is a necessary condition for their activity. However, this does not mean that society exist independently of human activity. It is to be regarded as "an ensemble of structures, practices and conventions which individuals reproduce or transforms, but which would not exist unless they did so" (ibid.). According to Bhaskar socialization is referred to as the process, in which various skills, competences and habits that are feasible to a given context, for example, are either reproduced or transformed by individuals. Thus, the given society, on the one hand, is a necessary condition for intentional human action, and, on the other hand, these intentional human actions are necessary for its existence.

It is possible to describe the overall process of these continuous actions of human beings in either reproducing or transforming the existing social reality. According to Archer, the starting point in the Transformational Model of Social Action (Archer 1998: 376, quoted in Fleetwood 2004: 41; 2005: 204) is on the earlier cycle of the model. Based on the pre-existing structures and mechanisms (T1 in the TMSA model proposed by Archer 1998), the elements of the social reality with "powers and liabilities capable of generating events" (e.g. Easton 2002: 104), followed by the structural conditions the social interaction will start at the next phase (T2), where "these agents do whatever it is they can do given the nature of these pre-existing structure – i.e. they are constrained and enabled by them" (Fleetwood 2004: 41). According to Fleetwood (2004; 2005), the results of the interaction will present themselves in changes of the pre-existing structures (T3). These changes will be completed by the final phase (T4) where the pre-existing structures will be either "reproduced (i.e. morphostasis occurs) or transformed (i.e. morphogenesis occurs)" (Fleetwood 2004: 41; 2005: 204). After T4 the pre-existing structures and conditions are either confirmed as feasible enough or changed into something totally different. In both of these cases a new cycle may start.

In sum, this reproduction or transformation of the society means that:

"if society is always already made, then any concrete human praxis, or, if you like, act of objectivation can only modify it; and the totality of such acts sustain or change it. It is not the product of their activity (any more, I shall argue, than human action is completely determined by it). Society stands to
individuals, then, as something that they never make, but that exists only in virtue of their activity.” (Bhaskar 1998: 36–37)

Fleetwood (2005) concludes clearly that both the reproduction and transformation are activity dependent, and the process is about who does and who does not — what, when and how. However, as Leca and Naccache (2006) emphasize; this is based on critical realism, that structures and the actions of the entrepreneurs and others are separate but related entities. This means that they can neither collapse into each other nor conflate onto each other (Sayer 2000).

As concluded by Castellacci (2006), a strict link occurs between the agents and the structure of society (see socialization in Bhaskar 1998) in such a way that society actually pre-dates individual existence. However, at the same time society is reproduced or transformed by those who act in the society (Archer 1998). This is, while “individuals do not create society” (Castellacci 2006: 867), the active agents of this society are the only ones who are able to reproduce and transform it again and again. According to Boylan and O’Gorman (2006), critical realists give primacy to the ontology because of the transcendental framework.

**The Real, the Actual, and the Empirical**

“... if anything is essential to the scientific process it is [the] movement from a surface phenomenon to its underlying cause ... this is a move available as much to those who study social phenomena as to those who study natural phenomena ... there remains every reason to suppose that economists can yet, and successfully, practice science in the sense of (successful) natural science.” (Lawson, 2003: 24–5, quoted in Willmott 2005: 757)

In contrast to pure empirical realism, which is referred to a world as observable and atomistic objects, events, and regularities with no structure or power (Sayer 2000), critical realism follows Bhaskar’s (1975) seminal insights: “‘the objects of knowledge’ are ‘the structures and mechanisms that generate phenomena’” (Bhaskar, 1975: 25)” (Borsley and Ingham 2002: 2, quotation marks in original). Based on this, two explicit distinctions can be made. First, an essential distinction exists between the world and human experiences of it. Second, the world is stratified; there is an essential distinction between the Real, the Actual, and the Empirical (e.g. Sayer 2000; McEvoy and Richards 2006; Wilson and McCormack 2006). Bhaskar seems to believe that the social reality at the level of the Real and Actual is, in fact, operating at a level that is beyond the understanding of ordinary
people – above and beyond the comprehension of social scientists, too. It is believed here that Bhaskar is suggesting that, on the one hand, structures and mechanisms exist, and, on the other hand, human beings cannot directly see nor have knowledge of them.

Since the concept of social reality is very important issue in critical realism, a short presentation is needed. While a widely shared insight exists about the definition of the Real, and the Actual and the Empirical, the following section draws mainly upon the work of Perry, Riege, and Brown (1998), Sayer (2000), Leca and Naccache (2006) and Wilson and McCormack (2006). According to Sayer (2000: 11), a critical realist talks about two things when referring to the Real: firstly, the Real is whatever exists – natural or social. Secondly, the Real is “the realm of objects, their structures and powers”. Thus, the Real refers to “the mechanisms used to lead to some kind of effect on a social situation” (Wilson and McCormack 2006: 47).

These causal mechanisms (or causal configurations) together with other mechanisms (or configurations) when interlocked and working simultaneously with each other bring about the events and entities at the level of the Real and will be co-determined by these effects experienced at the level of the Empirical (see Sousa 2008). Like (2000) states the Real can be either physical or social with certain structures, causal powers and liabilities (or passive powers) to make change happen. For a researcher utilizing critical realism this will make it possible to “identify both necessity and possibility or potential in the world” (11). That is, to understand the things that must go together, and “what could happen, given the nature of the objects” (ibid.).

The Actual concerns what actually happens if and when the powers mentioned above are activated. In addition, it related to what these powers actually do and what eventuates when they are engaged. Furthermore, it includes events and processes unrelated to the observer having observed them or not. This means that they may exist independently of the experience and perception of an actor. This is in line with Leca and Naccache (2006: 630), who argue that “events can happen, and yet not be transferred into the domain of empirical until human agency has identified correctly those events and transformed them into experience”. Thus, it is very important to note here that while these events may or may not be observed, their actual existence is independent on it (Sayer 2000).

The Empirical consists of experiences and observable events. The domain of Empirical concerns experienced events consisting of sensations, impressions and perceptions of social reality by actors who have an immediate access to these
events (Leca and Naccache 2006). Since the Empirical presumes a perceiver who
experiences something, it makes the Empirical domain subjective, whereas the
Actual is about objective – subject-independent events – which may or may not
produce these experiences (Viskovatoff 2000:3). The Empirical refers to the Real
or the Actual since it is neither necessary nor possible (contingent) to know the
Real or the Actual. It possible, however, to observe structures such as an
organization, for example, and the results of the individual actions (to see what
happens when they act), but some other structures may not be observable at all.
To tackle the question of unobservable entity, the critical realist needs to accept a
causal criterion, since “entities which cannot be observed directly can be known
to exist through the perception of their consequences at the level of actual events
and states of affairs [the empirical]” (Lawson 1997: 31, quoted in Viskovatoff
2000, 6, brackets added; see Lewis 1996).

To sum up, Perry, Riege and Brown (1998) define the relationship between
the three domains (the Real, the Actual and the Empirical) as follows:

“In more detail, the three domains are the real domain, consisting of the
processes that generate events, in which generative mechanisms or causal
powers exist independently with a tendency to produce patterns of observable
events under contingent conditions; the actual domain in which patterns of
events occur, whether they are observed or not; and the empirical domain, in
which experiences may be obtained by direct observation (Tsoukas 1989: p.
553; Outhwaite 1983, p. 322; Bhaskar 1978, p.13).” (Perry, Riege, and Brown
1998: 1952, brackets in original)

The Real contains underlying structures and mechanisms, relations, events and
behavior, and experiences (Carlsson 2003; McEvoy and Richards 2006). For
instance, the generative (or causal) mechanisms exist independently, but they are
also capable of producing patterns of events. In the same vein, relations can
generate behaviors that will be actualized at the Actual. While the Actual is the
domain in which all events and processes occur (or not), however, they are not
necessarily experienced at this level. The domain of the Empirical is the domain
where only some of all possible events and processes are experienced either
directly or indirectly by the actors – in the case of the study these actors may be
called the becoming or indenting entrepreneurs.

To sum up, Bhaskar suggests that there are three domains of social reality, the
Empirical consisting of events which can be observed, the Actual, consisting of
events which occur that we might not be aware of, and the Real, which consists of
structures and mechanisms which produce these events. The process by which the Empirical level experiences will come into their existence can be understood from the perspective of emergence, and as higher-level entities which are not reducible to its parts at the lower-level of reality. It is also acknowledged here that the Empirical is the place, where both entrepreneurs and researchers may experience reality, whereas the events at the level of the Actual usually remain inexperienced. This is, the Actual includes events regardless of whether entrepreneurs (or others) observe them or not (Leca and Naccache 2006). According to Leca and Naccache (ibid.), that is, if the intending entrepreneur identifies an idea for a new business opportunity (read: identifies and transforms events at the Actual level into experience at the Empirical) he or she is able to partake in the process of creating opportunities.

**Mechanism and causal power**

Elder-Vass (2004) claims that event at the Actual occur independently of the experiences in which they are apprehended. Thus, “structures and mechanisms are real and distinct from the patterns of events that they generate” (ibid: 2). Thus, the event itself is real and distinct from the experiences in which it may be apprehended.

By drawing on Bhaskar (1997) it has been initially illustrated in a working paper of Elder-Vass (2009) that it is possible to distinguish between the key concepts of critical realism such as power and mechanism; the former is the ability of a thing to have a certain type of causal effect. These powers may depend on the presence of other powers and liabilities to function, or may be frustrated by the presence of counteracting powers. The latter, the mechanism, refers to the processes that operates within the things that give them their powers.

There are inconsistencies in literature on critical realism with different definitions of both of these concepts, however, Elder-Vass (2009) has stated that “mechanisms are always internal processes, but events are produced by the interacting powers of different things”. In the same vein is has been stated by Sousa (2008) who emphasizes that a causal mechanism (or causal configuration) “exists whenever a few entities (in particular their internal structures and powers) are interrelated and they are as a whole responsible for bringing about certain events, under particular contingencies” (Sousa 2008: 48). This is in line with Danermark et al. (2002) who claim that this event is an outcome of external relations between causal mechanisms and their effects. This event in the domain
of the actual is “a complex compound effect of influences drawn from different mechanisms, where some mechanisms reinforce one another, and others frustrate the manifestations of each other” (56).

Every event – whether actual or empirical – is more or less an outcome of several powers and mechanisms. This means that there are always multiple mechanisms at work in the causation of any given event that result from “the convergence of countless and interconnected powers possessed and exercised by a myriad of entities, under a variety of mutable contingencies” (Sousa 2008: 48).

This is not to say that these powers and mechanisms deny the conditions. It is the very contextualization that is critical for any study using critical realist perspective. That is, “the way the structures’ causal powers will develop, or not, will depend on the contextual conditions” (Leca and Naccache 2006: 631).

Mechanisms or causal powers operate as tendencies (Tsoukas 1994), or “act as transfactually inasmuch as their exercise does not necessarily bring about the events expected to ensue” (Sousa 2008: 47). These tendencies are not given but contingent (Leca and Naccache 2006). This is line with what is mentioned above that these mechanisms or causal powers working as tendencies act in such a way that a certain event (or outcome) will (or will not) emerge. To give an example, Sousa (2008) states that:

“The effects resulting from the exercise of a power cannot be known a priori; nevertheless, scientists are usually able to identify that power’s tendency, i.e., which effects that power tends to bring about (Sayer 1984). Consider, as an example, the power P1 that has a tendency to E1 and E2, i.e., tends to bring about the events E1 and E2. That P1 has a tendency to such events, however, is not tantamount to say it will inevitably generate E1 and E2. A power “(...) does not always bring about certain effects, but it always tends to. Hence, it acts transfactually.” (Fleetwood 2001, p. 212, emphasis in original).” (Sousa 2008: 47–48, quotation marks and parentheses in original)

It is taken as a given by the critical realist that all these structures, mechanisms, and events occur in a particular social context and under more or less external conditions. Therefore it is important to understand the relationship between these elements and their effects in the context in which they exist. This is because mechanisms may either be constraining or enabling the event to be actualized and experienced by the actors.

As it has been shown above by Archer (1998) actors in social interaction can manipulate the pre-existing structures (also Trigg 2001) by reproducing or
transforming them. However, “the accounts of these actors are open to interpretation as well as being limited by the potential for unacknowledged conditions, tacit skills, and unconscious motivation” (Wilson and McCormack 2006: 47–48). This is partly the case because the real world operates as an open system. From this kind of situation it will follow that effects arise due to the interaction between social structures, mechanisms and human agency (Elder-Vass 2010: 4). Due to their complexity, mechanisms have “the potential to make an impact, but the actualisation of the mechanism is dependent upon the variable conditions in which the mechanism [together with other mechanisms] operates” (McEvoy and Richards 2006: 70, brackets added).

Thus, “what happens does not exhaust what could have happened” (Sayer 1984, quoted in Sousa 2008, 49, underlined words emphasized in italics in original). In other words, in an open system such as the social world it is easy to agree with Sousa (ibid.) who states that there seem to be three ways in which a mechanism will generate effects; first and second, the same or different causal mechanism may produce different or same effects, respectively, to be actualized or not at the Actual level, and recognized or experienced at the Empirical level. Finally, these effects – if extant at all at any level of the social reality (the Real, the Actual or the Empirical level) – “are at the very best transitory or spatially restricted” (50).

3.3 Retroduction

As has been mentioned above, critical realism is related to identifying mechanisms and how they work, discovering if these have been activated and under what conditions, examining various tendencies that exist within the system in question and being aware of what the influences of the environment and social behavior may be (Wilson and McCormack 2006). Based on this, the critical realist philosophy of science acknowledges that since social phenomenons are fundamentally meaningful, and since these meanings cannot be measured or counted as easily as it is the case in hard science, for instance, an actual need exists for interpretive research methods (Sayer 2000).

This is not, however, to say that the critical realist thinks of the human mind as being world-independent. By drawing on Kant (1781) who reasoned that “concepts without precepts are empty; perceptions without conceptions are blind” (Vandenberg 2009: 155) it is possible to state here that experiences of
human beings are inevitably conceptually-tainted, and human observations are necessarily theory-laden or conceptually-mediated.

The commitment to this combination of epistemic relativism and ontological realism to study the experienced events at different levels (the Empirical, the Actual and the Real) of the phenomenon will open up new possibilities when compared with a strict objective–subjective approach. While the former (objective) is built on the world view, which highlights the fact that human beings can perceive the world only through their senses, experiences and at certain time and space, the latter emphasizes as strongly as the former how the structures and mechanisms are deeply embedded in social phenomenon as a whole. Wilson and McCormack (2006) draw on Delanty (1997), who argues that "this approach to social science makes a significant contribution towards resolving the dispute between explanation, understanding, and critique – something that critical social science (Habermas, 1987) was also concerned with" (Wilson and McCormack 2006: 48).

Scientific research can be based on various reasoning such as deductive reasoning, or inductive reasoning, or abductive reasoning – even retroduction. To understand the research and its results thoroughly, it is important to explicate how the research design is formed. The deductive reasoning includes conclusions made logically from things already known. That is, it is about going from the general to the particular, or applying a general knowledge to a particular situation. Whereas inductive reasoning can be seen as a process in which the outcome, for example, the general rule (or conclusion) is based on individual ideas (or facts). In this case, it is about going from the particular to the general, or building a general knowledge from particular situations.

Furthermore, there is the question of abduction and retroduction. While some researchers treat these interchangeably (two concepts overarching each other), others claim the opposite. According to the former type of definition scholars such as Patomäki and Wight (2000) and Wendt (1987) state that retroduction in critical realism literature is a way for reasoning to generate theories from robust patterns in research material and previous theories, to elaborate them through the construction of plausible models and to justify them in terms of their explanatory coherence. This means that abductive/retroductive reasoning can be seen as a process in which explanatory hypotheses are formed and evaluated to give the best explanation for a particular situation.

The latter approach to retroduction follows the line of thought of, for example, Chiasson (2001) who claims that "the term "retroduction" would be
reserved as a definition for the entire abductive–deductive–inductive cycle of Peirce's methodic, saving the term "abduction" to mean a distinct type of inference that is separate and distinct from either deduction or induction” (Chiasson 2001, parentheses in original).

Thus, in critical realism some researcher presents the abductive logic together with retroduction, while some other scholars (e.g. Blaikie 1993 and 2000 below) want to differentiate the latter from the former. For example Lisle (2000) describes that both the retroduction and abduction are based on cyclic or spiral processes of reflexivity. This is, the linear logic of the reasoning (or methods) of induction and deduction is looped into a cycle or spiral of action. According to Lisle (2000) the abductive strategy is about asking the subjects for their understanding and meanings of their experiences, to see if the theory is correct.

“The retroductive research strategy involves the building of models in order to explain observed regularities.” (Lisle 2000)

The retroductive strategy of social inquiry according to Lisle (2000) and Chiasson (2001) involves induction, deduction and abduction, as well as building and testing models to explain the phenomenon. According to Lisle, it is possible to make hypotheses from observed experiences about connections, and then to test them by using induction and deduction.

### 3.3.1 Retroduction as research strategy

Sousa (2008) has clearly shown that, from the methodological point of view, retroduction plays a major role in analyzing social and economical phenomenon such as entrepreneurship. In fact, he claims that as a result of these analyses “(i) the structures, powers, and tendencies of the world's entities and the contingencies are described and (ii) and the ensuing events are explained by the appeal to causal mechanisms and configurations allegedly at work, respectively” (Sousa 2008: 64). For critical realists the understanding the phenomenon (the world as labelled by Sousa 2008) is seen as happening via three steps, all of which emphasize the characteristics of the process as being from the world to abstractions and from abstractions to the world.

The idea about steps (Sousa 2008) parallels with the insight proposed by Chiasson (2001). She defines retroduction as an “abductive-deductive-inductive cycle”, first, to bring “new ideas up” from the literature as well from real-life situations “by means of abduction”, then, to use “deduction to explicate and
demonstrate aspects” of these ideas, and finally, to use “induction to evaluate and secure” these ideas. (Chiasson 2001)

It is also reasonable to point out that even when the researcher has taken all three steps it is clear that because the world is characterized as changing continuously and unpredictably it is not certain that he or she can develop a thorough understanding of the phenomenon in question. That is, the researcher “returns to abduction and repeats that cycle as necessary” (Chiasson 2001).

In critical realism it is believed that researchers will be able to identify events (or research findings) that might have escaped the perceptions of the actual actors (e.g. operating entrepreneurs during their every-day actions). This is because of the particular focus on the Actual and Real. The domain of the Actual is the realm of theory building, and “the domain of actual is still the surface of reality (Selboe, 2002)” (Leca and Naccache 2006: 630, brackets in original). In addition, they state that events at the actual level will happen when the causal powers of the objects and structures are activated by the actors such as the entrepreneurs.

In critical realism it is important to penetrate “behind the surface of reality to access the domain of real, identify those structures and causal powers, and the ways they act (Sayer, 1992, 2000; Selboe, 2002)” (Leca and Naccache 2006: 630, brackets in original). This means that researchers must reveal the causal powers at work in the domain of real since it is possible to see only the effects of structures and mechanisms at the level of the real. In fact, the central problem for critical realism is “how to establish the plausibility of the hypothesized structures and causal powers, given that they are not immediately available to experience (Sayer, 1992)” (Leca and Naccache 2006: 634–635, brackets in original).

Thus, retroduction is seen as the key logic that underpins critical realism. In this context is involves moving from the level of observed and lived experience (the Empirical) “to postulate about the underlying structures and mechanisms [the actual and the real] that account for the phenomena involved (Mingers, 2003)” (McEvoy and Richards 2006: 71, brackets added). In addition, it is defined as “a mode of analysis in which events are studied with respect to what may have, must have, or could have caused them” (ibid.). This is in line with Olsen and Morgan (2004: 25, quoted in McEvoy and Richards 2006: 71) who are asking: Why events have happened in the way they did?

Furthermore, while a shared insight exists about the relationship between retroduction and abduction, however, Bhaskar (1983) prefers retroduction to abduction mostly because of biases of social actor’s interpretations of their actions. According to Lisle (2000) Bhaskar claims that:
“It is important to distinguish the meaning of an act (or utterance) from the agent’s intention in performing it. The meaning of an act is a social fact which, to the extent that the act is intentional, is utilized by the actor in the production of his performance. But the reason that the act is performed by the agent is a fact about the person which cannot be read off or deduced from its social meaning (Bhaskar, 1983, p. 292).” (Lisle 2000)

According to Bhaskar (1983) and Lisle (2000) a difference exits between the meaning of entrepreneur’s actions and his or her motives, interests and the values that affect actions. From the perspective of entrepreneurship (seen as, for example, new economic activities in Davidsson 2003a) this means that a serious problem will arise: The right actions are not enough if they are not conducted with right motives. According to Davidsson and his associates, actors’ motivations on entrepreneurial actions in the case of robber entrepreneur/venture or re-distributive venture (Davidsson et al. 2000; Davidsson 2003a) are based solely on selfish values. That is, the actors playing the role of entrepreneur are trying to reach pecuniary profit and personal power for themselves only but not contributing to society. This kind of action is practically in line with the rent seeking approach and the unproductive activities of entrepreneurs proposed by Baumol (1990).

As shown above, it is very commonplace that laymen are unable to perceive the events emerging at the actual level – for example, because of the lack of time to even think all the possible events which have not been actualized at the empirical level - however, for a researcher the situation seems to be different. This is highlighted by Blundel (2007) who state that “the world of human experience and knowledge of events (the empirical domain) is seen as ontologically distinct (i.e. separate and different) from the ‘actual’ domain in which the events occur, irrespective of whether people have observed them” (52, quotation marks in original).

While the layman experiences the empirical level events the researcher is not only able to focus on that level but also both on the actual level and – via abstraction – the real level in order to study and then describe and analyze the structures and generative mechanisms, the possible events, as well as the empirically perceivable events related to phenomenons under scrutiny. As Fleetwood (2004) states along with Tsoukas (1989) the goal of critical realist research is the discovery of these observable or non-observable structures and mechanisms that underlies events and experiences.
Therefore, it is important for phenomenon critical realist researcher to continue from discovering experienced events and their interpretations – seen merely as the starting-point – toward the deeper causal explanations. According to Blundel (2007) who draws on Lawson (1997), Ackroyd and Fleetwood (2000), and Sayer (2000), this means that phenomenon critical realist researcher have to take of characteristics of the social world such as: “the impact of intentionality on human action (i.e. our purposeful pursuit of perceived goals, such as happiness or profit); the emergent nature of social structures, such as marriage or organization, which are both relatively autonomous and inherently meaningful; and the complex relation between agency and structure” (Blundel 2007: 54).

3.3.2 Double hermeneutics

To understand what happens beyond the empirical level it is important for critical realists to “distinguish the real from the actual and the empirical [since the] ‘real’ refers to objects, their structures or natures and their causal powers and liabilities” (Joseph and Roberts 2004: 25, brackets added). These causal powers of social objects (such as entrepreneurial activities) are human activities and therefore social scientists “need to engage in a so-called ‘double hermeneutics’, generating explanatory knowledge about phenomena that are themselves ‘knowing’” (Blundel 2007: 55, quotation marks in original). The double hermeneutics refers to the process of double sense-making (Usher 1996), since in social research both the researcher himself or herself and the people who are participating to the process in question – or to think more broadly – people who belong to the social context in which also the researcher is embedded have the same characteristic of being interpreters or sense-seekers (ibid.).

By drawing on Gadamer (1987) Nørreklit (2006) has stated that double hermeneutics relate keenly to the pre-understanding of the person. On the one hand, this pre-understanding is traditionally located as standing behind the consciousness of the understanding person (Nørreklit 2006: 3). According to this, it works as a framework for interpreting both the events and people in the environment. This kind of use of pre-understanding can be called variously the reflexive hermeneutics, or single loop hermeneutic circle. On the other hand, when the pre-understanding is located in front of the person then it may be used as a tool to shield him or her or to defend one’s position in the process of understanding (ibid.: 4).
The definition of double hermeneutic process includes three parts; outer hermeneutic circle, and two inner hermeneutic circles (Nørreklit 2006: 8). The role of the inner hermeneutic circle is to control the relation between actor and pre-understanding, while the outer hermeneutic circle is the vehicle to come (or be) in interaction between oneself and the other people. The outer circle is not only about observing and interpreting “what is said by the other, but how the other says it, using body language, facial expressions and other signals to interpret the changing involvement of and meaning to the actor thereby enacting trust and openness of the person” (ibid.). Thus, in order to understand why a person reacts the way he does one important question will be as follows: Why does the actor have or use this form of pre-understanding? If it is possible to get behind the empirical level experiences then it will be possible to understand why other people understand or misunderstand the way they do.

3.3.3 Processual research

Conducting a processual research is still a challenging task – more or less in the same vein than it has been presented in the introduction article made by Ropo, Eriksson, and Hunt (1997). They stated more than ten years ago that based on a workshop on processual research and the articles resulting from it and published in a special issues in the Scandinavian Management Journal (1997, Volume 13, Issue 4) “we are still struggling with classical issues, such as subjectivity versus objectivity, nomothetic versus idiographic research, natural science versus social science orientations (cf. Morgan and Smircich, 1980)” (331, brackets in original).

Hinings (1997) concludes five aspects drawn on a literature review as follows: “the connection between processual research and qualitative research; the need for codification of approaches; the complex nature of concepts and fieldwork; the role of time, theoretically and empirically; the extent to which processual research is practitioner friendly” (493; Ropo et al. 1997: 332). To review briefly Hinings’s conclusions on these topics it has to be stated here that, first, the relationship between processual and qualitative versus quantitative research is not about the kind of distinction between these two but rather about “which “tools” will best do the task of answering our analytical questions” (Hinings 1997: 501, quotation marks in original). The main reason for using the case study here as qualitative processual research is because the status of case study is firmly related to processual research (ibid: 495).
Second, the need for codification is related to questions such as “how far codification can go without ‘strangling’ the basis of qualitative research practice” (502, quotation marks in original). While codification, i.e., the explicitness of theory in general, is still quite unusual in social science research (see Pettigrew 1997), on the one hand, it is important to note that codification helps “new and existing researchers know what works and what may not” (Hinings 1997: 502). On the other hand, too much codification (or systematizing) may constrain the utilization of the key elements of qualitative processual research approach by limiting the use of researcher’s tacit knowledge, intuition, and emerging understanding. Thus, according to Hinings, the way processual research approach is utilized in the present study highlights the creative nature of research.

Third, Hinings talks about the complex nature of both the concepts and fieldwork. According to him, the complexity related to concepts deals with dynamic context, incidents, activities, actions, sequences, and time. This means that the definition of concepts can change in the course of research. All these are thought as complex by definition because “the aim is not, usually, a reductionist one of getting a precise definition that is exclusionary in nature” (497). This is in line with Dawson (1997: 400) who states that “unlike studies which seek to construct a single account of change, the co-existence of competing histories and views can be accommodated under processual research”. In addition, from the theoretical point of view these actions, activities, and sequences produce unintended consequences, as well as possibly affecting things differently at different stage (or phase) of the process. Hinings states that “processes unfold over time and such unfolding is subject to considerable variation” (497, underlined words emphasized in italics in original). In the context of fieldwork the main emphasize is on the use of multiple methods in research material generation. Together with the time issue the complex nature of processual research highlights the fact that:

“ideas do not stand still, and if processual research goes on over a lengthy period then the concepts that initially drove the research may be subject to considerable change, not because of an internal interaction with data, but because of an external interaction with ideas in the field” (Hinings 1997: 499–500).

Finally, to study a phenomenon such as change (i.e., in the case of organizational change process, or in the case of entrepreneurial process as it is the case in the
present study) the process becomes central (Hinings 1997). According to Hinings, this kind of study involves qualitative approach, case studies, observations and interviews, longitudinal and in-depth studies. This means that to deal with processes it is about “to focus on the emergent, not the static” (ibid: 500; see Pettigrew 1997: 338).

In all, while the processual research can be seen as problem-solving research (Hinings 1997: 501) it provides a good ground for the retroductive research design presented above. First of all, to focus on clear theoretical starting points like the critical realist perspective and the keen interplay between existing literature on entrepreneurial process related to alternative insights of the roles of different elements in the as well as the practitioner friendliness of the processual research process will benefit this study.

3.4 Research strategy in this study

Due to the developing phase of the critical realism as an evolving scientific philosophy it can offer only a few examples for practical research methodology purposes. Since some scholars (e.g. Sayer 1992; 2000; Danermark et al. 2002) have taken some tentative steps toward a sound methodology their influence is acknowledged as important and will be presented next.

If the complexity of social science world is taken for granted, “the knowledge that realism researchers obtain “is considered real but fallible” (Wallin 1995, p. 80).” (Fleetwood 2004: 29, quotation marks and brackets in original) In the same vein it is acknowledged that the Real in critical realism is defines as: “Something is real if it has an effect or makes a difference” (ibid.).

According to Halkier (2003), it seems to be a fact that the literature describes only scantily how to go about making valid generalizations from the research findings based on qualitative data. She acknowledges, however, that

“there is quite a body of literature describing the different analytical designs and models of inference and their consequences for generalization at an epistemological level of theory of science (e.g., Blaikie, 1993; Danermark et al., 2002; Jensen, 2002; Ragin, 1987; Sayer, 1992)” (Halkier 2003: 115, brackets in original).

On possible solution to this kind of problem is offered by Danermark et al. (2002, cited in Blundel 2007: 55–57. They also emphasize retroduction as a distinctive form of scientific inference in seeking the underlying structures and mechanisms
to produce explanations of events in the social reality. According to Sayer (1992) it is possible that while some mechanisms may be already “familiar from other situations and some other will actually be observable” (ibid, 107), the hitherto unidentified mechanisms need to be hypothesized.

The key characteristic of retroductive inference is that it makes it possible to move from merely the description and abstract analysis of the process of opportunity creating to reconstruction of the basic conditions, that is, the structures, mechanisms, and human actors enabling and/or restricting the emergence of the opportunity. These elements with causal powers may be called as trans factual (meaning: to go beyond the empirical as defined in Danemark et al. 2002: 96), that is, existing as independent of whether or not they have being manifested at the Empirical level of reality at all (see Blundel 2007).

Another way to deal with the critical realist research process suitable for a vehicle for entrepreneurship research has been presented by Leca and Naccache (2006) who have emphasized the adoption of the three steps strategy of retroduction. According to these scholars, the first step is to start with the domain of actual, by observing connections in a single phenomenon as well as between phenomenons; “to identify how such connections occur; to abstract from context-dependent data to capture the not-directly-observable causal powers and structures that generate observable phenomena and events” (Ekström, 1992: 116–117, cited in Leca and Naccache 2006: 635). The second step is to build a hypothetical model which involves structures and causal powers located in the domain of real, and which provides a causal explanation of the phenomena in question. The final step is “to subject the postulated explanation to empirical scrutiny” (Leca and Naccache 2006: 635).

Thus, based on Yin (1994) Meredith (1998) argues that analytical generalization, in a case study, will “provide insight into other factor not typically present in this population [cases], then the generalization may be extended to other situations of / and populations also” (ibid: 450). Due to the extension process the external validity of the case study will be enhanced.

Leca and Naccache (2006) draw on Bhaskar (1979) to state quite explicitly that scholars in critical realism focus on developing a non-fusionist approach to the emerging actor’s actions and the existing structures that are not reducible but in constant interaction. This logic will offer a possibility to know “whether or not things are as described, and what it is that makes them appear as such” (Patomäki and Wight 2000: 218). This is in line with Dobson, Myles, and Jackson (2007) who draw on Wad (2001: 2) by arguing that:
“If we take explanation to be the core purpose of science, critical realism seems to emphasise thinking instead of experiencing, and especially the process of abstraction from the domains of the actual and the empirical world to the transfactual mechanisms of the real world.” (Dobson, Myles, and Jackson 2007: 143)

To draw on Sayer (1992, 237–251), the intensive research design will outperform the extensive research approach for two reasons. First, its research questions focus explicitly on individual entrepreneurs’ activities in order to disclose through their experiences and observations the process of how and why opportunities emerge. Second, by delimiting only a few processes it will be possible to understand the role of environment and the ways how various additional mechanisms, structures as well as human players affect the processes. In addition, the intensive research design makes it feasible to utilize qualitative methods to collect and analyze case data (or material). This is in line with the role of interview data in critical realist perspective; according to Blundel (2007) "an entrepreneur’s account of her experience in starting a new venture only provides a provisional starting-point for explanation (Bhaskar 1979: 80; Whittington 1989: 85–6)” (53). However, together with insight presented in the previous literature these accounts will be important in disclosing relationships between various mechanisms and emerging events. Through a theoretically oriented study such as this it will be possible to provide evidence and support for causal explanation, and to generalize the results to other contexts containing objects with same kinds of features.

To conclude the present section, in the previous chapter Bhaskar (1983) and Lisle (2000) display the important relationship between the meanings of people’s entrepreneurial actions and their motives, interests and values affecting these actions. By following this, a serious problem will arise: the right actions are not enough if they are not conducted with the right motives. A research approach based on critical realism seems to offer new possibilities to study the experienced events and actions of people playing the entrepreneurial role at different levels of social reality. It also seems to be feasible to utilize the perspective of critical realism to understand the importance of the commitment to combination of epistemic relativism and ontological realism since it will open up new possibilities compared to a strict objective–subjective approach.

It has been shown above that retroduction is seen as the key logic that underpins critical realism. In this context we are concerned with moving from the
level of observed and lived experience into deeper reality with mechanisms and causal powers of existing structures and human actors.

While there is only a few studies applying retroduction, this study is influenced by scholars such as Chiasson who reviews Pierce’s ideas on abduction as an aspect of retroduction, Danermark et al. (2002) who describe a research design of sex phases, and finally, by Leca and Naccache (2006). According to Chiasson (2001) retroduction is about bringing a new idea (or hypothesis) up from the region where "all things swim" in the continuum; using deduction to explicate and demonstrate aspects of that idea; and using induction to evaluate and secure that idea”. Furthermore, whereas Chiasson starts her research design with surprising fact that is noticed, Danermark et al. (2002) start with a description of the phenomenon. After this an unfettered exploration of qualities ans relationships (Chiasson 2001) or distinction of components (Danermark et al. 2002) is made. Leca and Naccache (2006) see these two phase of retroduction as one step to identify connections between (or elements in) the phenomenon.

In the next phase Chiasson (2001) highlights abductive reasoning to make guesses to indentify existing but surprising facts in the phenomenons and deductive reasoning to explicate guesses in order to test them. Danerkark et al. (2002) relies on constrasting the existing theoretical frameworks and interpretations in the field to indentify structures, mechanisms, causal powers that make the phenomenon possible. In Leca and Naccache (2006) these two phases are understood as actions to form new hypothethical model with structures and causal powers.

Finally, whereas Leca and Naccache see the rest of the retroductive research strategy as a step to conduct an empirical scrutiny, both in Chiasson (2001) and Danermark et al. (2002) this phase is started with elaboration and estimation of the explanatory power identified in the earlier phases by inductive reasoning. While Danermark et al. focuses on the examination of how transfactual conditions manifest themselves in a specific situation, Chiasson (2001) uses both abduction and deduction to interpret that evaluation. Furthermore, Chiasson emphasizes the nature of retroduction as cyclical (or recursive) activity where the research continues until the hypothesis identified at the beginning of the research process is fully engendered.

This study emphasizes along with Chiasson (2001) and Danermark et al. (2002, cited in Blundel 2007) the retrodution as a distinctive form of scientific inference in seeking the underlying structures and mechanisms to produce explanations of events in the social reality. Like Sayer (1992) states: some
mechanisms may be already “familiar from other situations and some other will actually be observable” (107); the hitherto unidentified mechanisms need to be hypothesized. It is disclosed clearly above that the retductive inference is related to the possibility to move from mere the description and abstract analysis of new business creation process to actual reconstruction of the basic conditions, that is, structures, and mechanisms (Table 1).

Table 1. Research design based on retroduction.

<table>
<thead>
<tr>
<th>Step</th>
<th>Description</th>
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<tbody>
<tr>
<td>I step:</td>
<td>description of the surprising elements of the phenomenon</td>
</tr>
<tr>
<td>II step:</td>
<td>formation of a new theoretical framework</td>
</tr>
<tr>
<td>III step:</td>
<td>empirical scrutiny – the single-case study</td>
</tr>
</tbody>
</table>

In the present study this will be done by exploiting tripartite research process of Leca and Naccache (2006): the first step is to start with the domain of actual, by observing connections in the phenomenon; the second step is to build a hypothetical model which involves structures and causal powers located in the domain of real, and which provides a causal explanation of the phenomenon in question; and finally, the third step is to postulate the theoretical model to empirical scrutiny.

3.5 Discussion of critical realist research on business opportunity creating

The critical realist research process is a feasible approach to study the process of opportunity creating. It is reasonable to highlight that the nature of the research process is twofold because it is “concerned with abstractions and theoretical conceptualization” (Blundel 2007: 57).

It has become evident that critical realism is one feasible perspective to picture the phenomenon of opportunity from a single ontological and epistemological point of view, that is, the critical realism. It acknowledges the reality both as existing (based partly on activities of people of the history and partly as existing structures and mechanisms) as well as emerging. In the latter case the activities of current people become important. However, it is important to acknowledge along with Mutch, Delbridge, and Ventresca (2006) who draw on Sayer (2000) that
“critical realism accepts ‘epistemic relativism’, that is the view that the world can only be known in terms of available descriptions or discourses, but it rejects ‘judgemental relativism’—the view that one cannot judge between different discourses and decide that some accounts are better than others. (2000: 47)” (Sayer 2000: 618, quotation marks in original)

The seven statement of Robson (2002: 32; Carlsson 2005: 97) is exploited as one way to summarize the critical realist perspective on social science (including entrepreneurship among other business disciplines). First, since knowledge is a social and historical product then all knowledge is questionable: all facts are theory-laden. Second, science is about to propose theories in order to explain both the natural and social reality, and to put these theories under scrutiny by rational criteria. Third, these explanations are concerned with the ways mechanisms produce events. This means that structures and mechanisms rather than phenomenon and events are of interest. Fourth, a law presents itself as a characteristic pattern of activity or a tendency of mechanism. Fifth, the social reality is both complex and stratified into three layers. In this case, the basic structures of entities are displayed in the conception of causation. Finally, “explanation is showing how some event has occurred in a particular case. Events are to be explained even when they cannot be predicted.” (Robson 2002: 32).

It is believed here that it is the critical part in the critical realism that will include the option to change the existing social reality into something yet unknown. Thus, it seems to be reasonable to quote Patomäki and Wight that: “Hence the question becomes not whether one should be a realist, but of what kind?” (Patomäki and Wight 2000: 218)

The methodological choices made in this study are expected to be suited well to the task of the study – to understand the entrepreneurial process, and specifically the process of creating business opportunities. The use of critical realism to build research strategy and design on this basis will make it possible to study closely at the empirical level the real-life situations and the events of which the sub-case entrepreneurs have been exposed during the process that has produced the opportunity within which the actual business activities become actual. In addition to this, critical realism offers an explicit basis for understanding why it is so difficult to draw solely on the Empirical level experiences, and in most cases ignore the other two levels of social reality.
While it is acknowledged that the Actual level contains all the possible events and experiences from which the observable events and experiences will (or won’t) be perceived at the Empirical level. However, the events at the Actual level may escape people’s attention in their daily routine. The roles of underlying social, political, technological, economic and so on structures and mechanisms related to the level of the Real are even more difficult to disclose without thorough analysis of research material and its findings. Patomäki and Wight (2000) seem to share this line of thought when say that the world (i.e., social reality) is not simply about events, states of affairs, experiences, impressions and discourses. It is also about structures, powers, and tendencies that exist independent of whether or not they have been detected or known through experience and/or discourse.

The social, political, technical and so on aspects, however, as Easton (2002) emphasizes, do not generate regular patterns of events. These issues will not predict the empirical outcome, but rather possibilities for events to emerge – and to be experienced. In the words of Patomäki and Wight (2000) it can stated that while “for critical realists this underlying reality provides the conditions of possibility for actual events and perceived and/or experienced phenomena” (ibid, 223), however, “although the underlying level may posses certain powers and tendencies, these are not always manifest in experience, or even for that matter realized” (ibid.: 218).

The research design (or strategy) chosen in the study at hand will start with a tentative research task. That is, to understand how opportunities emerge through the creation process, and to promote the theoretical understanding of what happens in the process of entrepreneurship. The tripartite study will follow the process by Danermark et al. (2002; Blundel 2007) and Leca and Naccache (2006), which starts with the identifying the key elements of the process, then forms the theoretical framework. Finally, this framework will be put under scrutiny.

An important question is then whether the chosen methodology is feasible when studying phenomenon such as the entrepreneurial process, in general, and new business activity from the perspective of the process of opportunity creating, in particular. First, it seems to be the case, according to the dominant literature, that the entrepreneurial process is defined as being a more or less linear process with two sub-processes (discovery and exploitation). The outcome of the former forms the basis for the latter. Thus, it is reasonable to claim that the exploitation process is dependent on what is created in the discovery process (or the creation process as it is labeled here).
Hence, if the opportunity creating (i.e., discovery process as proposed by Shane and Venkataraman 2000) could be defined as non-linear, emergent process and with characteristics that are not strictly path-dependent, then this means that the initial idea for the desired (or expected) new business does not dictate the whole process: The abstract and conceptual basis for a future business venture, the business opportunity, emerges through a more or less creative process. In fact, all the outcomes of the various phases of the process of creating business opportunities are considered only as the input for the phase next to it.

In closing, the retroductive research strategy seems to be applicable in understanding what happens in the entrepreneurial process – in the BOC process, particularly.
4 Step one: Elements of the Business Opportunity Creating Process

The conceptual part of the research process is divided in two sections: Step one describes the elements of creating opportunity, while step two outlines the BOC process. The former starts with presenting directly and non-directly observable mechanisms along with causal powers occurring in the phenomenon. The latter is about the theoretical framework of the study, the process of creating business opportunities, the BOC process.

To follow the critical realist perspective, it is assumed here that the more or less non-directly observable mechanisms along with causal powers at the Real level of reality will influence and generate the events and processes related to the phenomenon at the Actual level of reality. Mechanisms such as these include Business / Entrepreneurship as a social structure, the Entrepreneur as human agency and Creativity as social practice (other mechanisms in Sayer 2000).

The entrepreneur, the key player of the entrepreneurial process, then generates events and processes such as ideating, modeling and planning, which are related to the creating of an opportunity simultaneously with causal powers generated by social practices and existing structures. The outcomes of events and processes such as these (the Idea of BO, the Business Model and the Business Plan) will be experienced at the Empirical level of reality. Along with the critical realist perspective, the role of the entrepreneur (who acts in the creating process) is important. Since the present study focuses on a single person, the entrepreneur’s actions are understood as deeply embedded in the social environment. The actual process of creating opportunities will be presented in the following chapter (Ch. 5).

This chapter begins with a discussion about why an alternative approach to opportunity is needed. This will be followed by the introduction of the key concepts business and business opportunity, and their relationship to industry development, industry recipe, ideating, modeling, and planning. The focus then shifts to the role of creativity in the process of creating opportunities. This chapter ends with a discussion about the key elements and their connections in the process.
4.1 Why should there be an alternative approach to creating opportunities?

In this section, an alternative approach to the entrepreneurial process and the creating process particularly will be presented. This approach is gleaned from the more challenging literature on entrepreneurial process as well as from the literature on innovation and creativity. The ideas of Gartner (1985), Bhave (1994), Venkataraman (2002), Venkataraman and Shane (2000), van der Veen and Wakkee (2002; 2004a; 2004b), Shane (2003) and Davidsson (2003; 2005) heavily influenced the work, acting as a starting point for the solutions presented here. The scholars mentioned above share an insight into the main elements of the process: entrepreneur, environment and opportunity. They also agree that the main activities of the entrepreneurial process are as follows: identification or development, preparation and exploitation.

What is important here is that they relate these elements and activities to the whole process. In contrast, the focus here is on the identification (or the development) part of the process, that is, the process of creating the business opportunities (the BOC process) as it will be referred to here. The names of activities (or phases) that these scholars use may be different, but the general meanings are more or less the same.

Unfortunately, the earlier literature fails to explicate the concepts of opportunity and the business opportunity. In fact, even the definition of when the opportunity creating process starts or ends is ambiguously presented in the literature.

As noted above, some researchers argue that entrepreneurial process starts with the identification of an opportunity that is more or less ready-to-be-used in the environment. However, it is assumed in the study, which is based on the many insightful ideas of scholars presented earlier in the report, that in contrast to the opportunity as ready-to-be –used approach, the opportunity is defined here as the outcome of the creating process. Such an insight contrasts sharply with the dominant insight, which highlights opportunity as an input into the development process, for example, to start the process with it.

Thus, before an opportunity emerge it is necessary for the person(s) playing the role of entrepreneur to interact with the social, technological and political environment to identify the various sources to be used as supporting structures and mechanisms. These sources are then treated as the building blocks for the emerging opportunity. The idea presented here – that environment is an important
element of the creating process because of its role as a source for opportunities – is in line with the insights of Gartner (1985), Venkataraman (2002), Sarasvathy (2004), van der Veen and Wakkee (2004a; 2004b). Along with this way of thinking, the various social structures, mechanisms and human activities can be treated as the antecedents of emerging opportunities.

4.2 Business and the BO

From the broader perspective, business is understood here as a social structure. This means that business action is a human activity to create value (e.g. e-business in Amit and Zott 2001). From the narrower perspective, business can be seen as an activity of an individual business venture (or a firm) that provides goods and services to its customers (other people or firms, organizations) who want or need them. It is understood in the present study that based on the critical realism, it is the people (i.e., in the the role of entrepreneur, customer, shareholder, and other stakeholder) who, in both cases, have built the social structure called business as it is at the present time. In the same vein, it is the very same groups of people, living at the moment in the society, who can, of course, change or develop the existing business as it emerges for current actors.

Entrepreneurship is a part of the overall concept (the business, since it is about causing (or creating) change (Pozen 2008; see also Davidsson 2006b) and generating value for the entrepreneur, customers, shareholders, and other stakeholders as well as for the business venture. It requires business and non-business activities, which result only after they are conducted to actually make the change. This means that the entrepreneur (the person who will start to play the role of the entrepreneur) as well as the one who is already in the entrepreneurial process quite often face a situation where decisions about how to proceed have to be made in the absence of the necessary data.

For any business organization one of the prime concerns is “to understand what makes a business organization effective in its environment, and to explore the organizational processes required to enhance this effectiveness” (Håkansson and Snehota 2006: 258). This is also important for the entrepreneurial process because of its teleological nature. The definition of entrepreneurship emphasizes the essential objective of the business opportunity: to generate value. Furthermore, it is the audience (the customers) who will decide whether or not the expected value has been actually created. This parallels the insights of Chiles, Tuggle, McMullen, Bierman, and Greening, who state that:
“Entrepreneurial problem solving thus differs from more general human problem solving in that it involves a transaction with some intended future customer. Entrepreneurs are indeed problem solvers, as radical subjectivists suggest, but they try to solve their problems (desire for wealth, achievement, status, power, etc.) by solving other people’s problems—a fact that is too often ignored (see Dickson 1992).” (2010: 18, parentheses in original)

This study focuses on two phenomena to understand the deep structures influencing (either by promoting or restricting) the ways people pursue objects such as these. The first is the industry; and the second is a group of three particular activities that are recognized as core activities in the process of creating business opportunities. This section proceeds as follows. Firstly, the industry is discussed from two perspectives: industry development and the industry recipe. Secondly, three key activities, ideating, modeling, and planning, are discussed to provide a firm base for the theoretical framework of the process of creating business opportunities.

4.2.1 Industry development

The influence of the industry development phases over the creation of business opportunities is understood here to be a part of the existing social structure, the business, in general. The currently dominating development phase will tell all the actors in the field what is expected to be feasible and what is not. This means that in some specific industry every precise situation defined (in space or time) either restricts certain kinds of opportunities from becoming successfully acknowledged in the market or promotes them.

The development phase is studied here from a general perspective: the life cycle model of industrial evolution proposed by Tether and Storey (1998). This model is followed to assess the development of high technology sectors. Tether and Storey’s model offers tools for analyzing the development phases from two dimensions. The first describes change over time in the number of units (establishments or enterprises); the second focuses more on change in the number of those in employment.

Overall, this model presents data on “the changing contributions of small, medium-sized and micro units to Europe’s high technology sectors during the 1980s” (948). In this framework the evolution of industrial development is depicted as the life cycle mode. In the first phase (Type I: Expansion) – the birth
of an industry – the number of units (firms and employment) increases. In the second phase (Type II: Shake-out), when the industry mature, the number of firms starts to decrease but the growth in employment continues to increase. In the last phase (Type III: Consolidation), the level of employment and the number of firms start to decrease.

Due to the empirical context of the present study, it is assumed here that the ICT sector was in the first phase until the first part of the 1990’s (Tähtinen 2001). Later, in the second part of the 1990s and in the beginning of the second millennium, acquisitions became more common, and the perceived situation moved toward a situation in which bigger firms were preferred to small start-ups. One consequence of this development was that the mode of organizing firms in the sector (the current industry recipe), which was viable in the past, was no longer as feasible as it used to be. In this new situation, decision making about future activities had to be done in the face of real uncertainty. This is in line with Tähtinen (2001), who states that:

[The] “number of companies [in Finnish software industry] has increased through the 1990s, but the new entrants are mostly small (Atk-palveluyritykset 1996, 1998). The number of companies in the software and computing service industry increased in the nineties, although the total number of companies in Finland fell considerably during at the same time.” (36, brackets added).

The development in the ICT sector is assumed to follow the logic predicted by Tether and Storey (1998). Because the present study is focused on the process of creating the BO, a new start-up is seen as typical type of emergency of the BO. In a case such as this, the approach taken by Tether and Storey offers a feasible tool for the purposes of the study. According to the model, the ICT industry as a new industry appears as Type I: Expansion, with an increased number of units. This strongly promotes the emergence of new business start-ups since the emerging industry welcomes every new firm. During its development, the industry changes to the Type II: Shake-out. At the end part of its life-cycle it will change to Type III: Consolidation. Because the number of firms in the industry decreases in Type II and Type III, it is assumed here that the new entrants need to be either more specialized (or even more innovative in terms of technology or business development) or bigger initially in order to evoke a positive response in the industry.
To understand the role of the industry development phase (Tether and Storey 1998) from the point of view of critical realism it is acknowledged here that since the knowledge of the development phases is general in nature, also the phases are seen more as structure rather than other mechanism. Consequently, the present study sees the development phase as pre-conditions in the evolution of the economic condition.

### 4.2.2 Industry recipe

One specific element of the industry development phase needs to be mentioned here: the *industry recipe*. Grinyer and Spender (1979a) draw on Simon (1957), Lindblom (1958) and Normann (1976) when they state that "management’s information is invariably fragmentary, ambiguous, and riddled with uncertainty" (ibid.: 114; see definitions of uncertainty and risk in Knight 1921). This means that since rational decision making in uncertain situations is almost impossible, entrepreneurs may justify both their reasoning and judgment only "*in terms of patterns of beliefs about their situation and its potential*" (Grinyer and Spender 1979a: 115). The current situation in the industry thus dictates what kind of recipe is feasible.

Spender (1989) calls these patterns of beliefs the industry recipe, while others use the names such as *business idea* (the summary of the company’s unique history as it is presented in Normann 1976, cited in Grinyer and Spender 1979a: 116), or *dominant logic* (Prahalad and Bettis 1986). According to Spender (1989) the industry recipe is "*the business-specific world-view of a definable ‘tribe’ of industry experts, and is often visibly articulated into its rituals, rites of professional passage, local jargon and dress*" (7, quotation marks in original). In the same vein, he states that it is useful since "*it offers partial and somewhat ambiguous guidance which can then be adapted to the firm’s particular situation*" (176).

This means that the industry recipe is neither a theory, nor a formula, but an open construct. It resolves the problem of uncertainty, at the group level but not at the individual level. The industry recipe will only guide future actions since it is "*a complete framework, in the sense that it indicates the data necessary to make up a complete description of a situation*" (57). Therefore, understanding of the current situation is possible only if the data – or information, knowledge, or wisdom (Bierly, Kessler, and Christensen 2000: 598) – is widely shared by participants in industry.
However, Spender states clearly that “still a tension [exists] between any recipe, the individual's independent sense of self and his ability to respond creatively to uncertainty” (Spender 1989: 56, brackets added). On the one hand, it seems clear that the established actors (managers and entrepreneurs, for example) operating in or entering into a specific industry are already more or less socialized within the currently dominating recipe. That is, they know how to think, and behave in their businesses and what it takes to be successful.

On the other hand, the case is different from the point of those who are intending entrepreneurs. They may – in the extreme case – remain unfamiliar with almost everything needed to become successful in that particular industry at that particular time and place at least in the beginning of the entrepreneurial process. Potential entrepreneurs can avoid this situation by thoroughly familiarizing themselves with the dominant recipe.

However, the positive effect of being outsider in these cases is the freedom to perceive problems in the industry and find solutions. These outsiders are not restricted to the problems and solutions suggested by the dominant recipe (Laine 2000; Grinyer and Spender 1979b) when they start to consider starting the entrepreneurial process. If they fully understand the dominant industry recipe they may exploit it by creating new business that is expected to be successful. On the negative side these actors may face difficulties if they want to do other than what is proposed by the existing recipe.

According to Matthyssens, Vandenbempt and Berghman (2006), the existing industry recipe is the first step in changing or even breaking it. They state that by utilizing the construct of value innovation (ibid.: 752–754) as a strategic approach it is possible to break through the existing dominant industry recipe. In some cases, a new recipe is accepted as the dominant industry recipe by the key actors in the industry if the former recipe seems to fail to meet the emerging challenges (see Figure 2 in Grinyer and Spender 1979a, 122). If the existing recipe is changed, the content of the elements of the recipe will change too.

However, too often, established actors respond on new candidates in the following way:

“Mistrust and old power games often block any effort from becoming a success. We may conclude that value innovation initiatives are strived for but that mostly internal or external mindsets and procedures block their realization” (Matthyssens et al. 2006: 758)
Spender (1989) argues for the concept of managerial creativity as an escape route from such an unpleasant situation. In line with Spender (1989) Matthyssens et al. (2006) emphasize the role of new knowledge (its creation, exploration and exploitation) within the context of the creation of value.

To place the business (as a social structure) and the industry recipe in the critical realist perspective, and to exploit it according to the perspective of the present study, it is clear that it belongs to the Real level of reality. It is important to note that the access to the industry recipe is restricted to those people who work in that particular industry (Spender 1989). From this perspective, the industry recipe is not widely shared with the society, since it is embedded in rituals, rites, jargon and dress (ibid.). Typically, it is only implicitly perceived – including by the very experts who know it. Furthermore, the industry recipe is considered to be more flexible to change, according to reproductive and transformative actions conducted by the actors in the industry (Archer 1998).

The industry recipe can thus be continually reproduced and transformed insight by the participants, who find new ways to do business. This is despite the fact that even the explicit insights into how we do business here are based on actions produced, accepted and legitimized by past players. According to Fleetwood (2005), “these phenomena pre-date any subsequent human activity and exert a causal influence upon subsequent human activity” (ibid: 204).

4.2.3 Ideating

Ideating as it has been stated above (e.g. Fig. 2) is seen as important and essential for the entrepreneurial process. However, the ideating process has been almost neglected in the literature of entrepreneurship. It is true that idea – defined (at least implicitly) as a business idea or an existing opportunity – is presented abundantly in the literature, but questions such as Where do the good ideas come from? are missing. Thus, literature lacks focus on idea from any other kind of perspective, for example, the Creation Theory (Alvarez and Barney 2008).

The dominant literature on the entrepreneurial process, in general, and on how to start the process, in particular, promotes the perception of opportunity as something that exist–out–there, and as more or less ready-to-be-used as soon as it has been discovered. DeTienne and Chandler (2004) show how three of the four different ways of identifying opportunities (active search, passive search and fortuitous discovery) follow this logic. The fourth, the creation of opportunity, is
in line with the ontological perspective that opportunities are created inside the mind. They conclude that:

“much of the existing literature in entrepreneurship is based on models consistent with these assumptions in which goal setting, environmental scanning, competitive analysis, and strategic planning play an important role (e.g., Baum, Locke & Smith, 2001; McDougall, Covin, Robinson & Herron, 1994; Dess, Lumpkin & Covin, 1997). The concepts of goal satisficing and bounded rationality provide a more realistic search model (March & Simon, 1958), yet, even in models with relaxed assumptions, search is envisioned as a sorting or winnowing through already existing opportunities and human creativity is not theorized to play a major role.” (DeTienne and Chandler 2004: 244)

The dominant traditional view (which is based on neoclassical view) described above, emphasizes the environment as the source of opportunities. From another perspective, the creativity of the individual is seen as the source of opportunities (DeTienne and Chandler 2004). Although each perspective is based on a different ontological approach, they seem to share the idea that since the opportunity is either recognized or discovered (Sarasvathy et al. 2003) in the environment or created through individual action – as a ne combination (Schumpeter 1934) or as in one’s head (Shackle 1961, quoted in Chandler, DeTienne and Lyon 2003) – this new opportunity is still seen as being ready to be used as a starting point – but not the outcome – in the planning process.

Cooper and Edgett (2008: 12) follow the line of thought held by Alvarez and Barney (above) when they think about the product innovation process: “The first place to begin crafting an effective ideation system is by identifying potential sources of ideas.” Cooper and Edgett disclose 18 different sources of new product ideas in business. Some of them (such as a customer visit team, ethnography, lead user analysis) were evaluated as popular and more effective than others (such as an external idea contest and open innovation).

The entrepreneur always welcomes original insights and ideas (Ames and Runco 2005) – particularly if they have realized that new businesses could be built on one or two of them. The perception of the initial idea is clearly displayed by Sarasvathy (1997) and many other scholars such as Bhave (1994) and Davidsson (2003). According to Sarasvathy, the idea of a product or service, technology, innovation or perceived market need is an antecedent of the entrepreneurial process (the pre-firm). While the process probably starts with an
idea, the role of that idea is obscure. In some cases it is treated as the starting point of the entrepreneurial process (the existing opportunity). In other cases, it is seen merely as one of many interesting ideas to be considered when deciding whether or not to start the process. This means that ideating is treated more as source for the entrepreneurial process. This latter approach is exploited in the present study.

Furthermore, Kuratko and Welsch (2001) argue that ideas may be important for entrepreneurship, not only at the beginning of the process but also during the whole process. They see that it is important to continue to take care of that idea through the whole development process: from its conception to its implementation in the exploitation process.

“Although the origin of an idea is important, creative thinking plays a critical role in its development. In other words there is a major difference between speculating about an idea and initiating one that is the product of extended thinking, research, experience and work. More importantly, a prospective entrepreneur must have the desire to take a good idea through the various development states. Thus innovation represents a marriage of the vision to create a good idea and the perseverance and dedication to stick with the concept through its implementation. Successful entrepreneurs are able to blend imaginative, creative thinking with systematic, logical processing abilities; this combination is the key to their success.” (Kuratko and Welsch 2001: 152–153)

While Kuratko and Welsh explicitly emphasize the importance of ideating and re-ideating through the whole entrepreneurial process, they also (at least implicitly) consider the role of formulating new ideas during the exploitation process, in particular. In addition, two distinct approaches to ideating arise: whether to produce a large number of ideas or only a few high-quality ideas. The latter focuses on predicted outcomes whereas the former highlights more the process during which there is more time to choose between feasible – and in many cases more or less surprising – outcomes. In any cases, the process of ideating is not enough because of the tacit nature of the process. There is thus a need to further conceptualize the outcome of this process.
4.2.4 Modeling

“Ventures fail despite the presence of market opportunities, novel business ideas, adequate resources, and talented entrepreneurs. A possible cause is the underlying model driving the business.” (Morris, Schindehutte and Allen 2005: 726)

“New businesses often start from a market vision or from a technological capability. In both cases, the initial idea needs to be exploited through the development of a business model (Chesbrough and Rosenbloom 2002; Hamel 2000).” (Andries and Debackere 2006: 91, parentheses in original)

The term business model (BM) is relatively young in management literature (Osterwalder, Pigneur and Tucci 2005; see Zott and Amit 2007). Therefore, this section begins with short introduction to the earlier literature. The business modeling process of the BO will then be discussed in detail.

According to Morris, Schindehutte, Richardson and Allen (2006), the emergence of the new economy during the past decade has encourage investors question entrepreneurs about their BMs. In line with this, Shafer, Smith and Linder (2005) state how entrepreneurs and executives feel that the BM forms the basis for creating and capturing value for their companies. At the same time they notice that, “surprisingly, 62% had a difficult time describing succinctly how their own company made money (Linder & Cantrell, 2000)” (Shafer et al. 2005:200). This difficulty becomes clear when it is revealed that even scholars in the field use a variety of terms, such as business model, strategy, business concept, revenue model, and economic model. A generally accepted definition of the term business model has not emerged. Thus, the literature on the BM is referred to as “architecture, design, pattern, plan, method, assumption, and statement” (Morris et al. 2005: 726).

Typically, the BM is interpreted at the most rudimentary level as the logic of profit generation, including revenue sources, pricing methodologies, cost structures, margins and expected volumes: “a statement of how a firm will make money and sustain its profit stream over time” (Stewart and Zhao 2000: 290). At the operational level, the BM focuses on internal processes and design of infrastructure to create value. For example, Osterwalder et al. (2005) define the BM as follows:

“A business model is a conceptual tool containing a set of objects, concepts and their relationships with the objective to express the business logic of a
specific firm. Therefore we must consider which concepts and relationships allow a simplified description and representation of what value is provided to customers, how this is done and with which financial consequences.” (Osterwalder et al. 2005: 5)

At the operational level, the entrepreneur makes decision on production or service delivery methods, administrative processes, resource flows, knowledge management and logistical streams: “the design of key interdependent systems that create and sustain a competitive business” (Mayo and Brown 1999, quoted in Morris et al. 2005, 727). Finally, according to Morris et al. (2005), the BM at the strategic level emphasizes “overall direction in the firm’s market positioning, interactions across organizational boundaries, and growth opportunities”. This includes “stakeholder identification, value creation, differentiation, vision, values, and networks and alliances” (ibid: 727).

As stated above, there are a huge number of differences in research studies on the BM, with many components to choose from. The BM should therefore be grounded in a firmer theoretical basis in order to be more feasible for research purposes. However, Amit and Zott (2001) argue that no single theory can fully explain a venture’s potential for creating value:

“Our analysis thus suggests that no single theoretical framework discussed in this paper (i.e., value chain analysis, Schumpeterian innovation, RBV, strategic network theory, transaction cost economics) should be given priority over the others when examining the value creation potential of e-businesses.” (Amit and Zott 2001: 509, parentheses in original)

The definition of the BM proposed by Amit and Zott (2001) focuses on creating value through exploiting business opportunities. The definition comprises three issues: transaction content, including the goods or information being exchanged, and the resources and capabilities required for conducting the exchange; transaction structure, including participants and the order and mechanisms of the exchange; and transaction governance, including how information flows, how resources and goods are controlled, the legal form of the organization and the incentives for transactions.

From the perspective of the present study, it is important to note that the term business modeling – like the term business model – is composed of two parts; the business part and the model (or modeling) part. It is acknowledged here that together they form the outcome of the business modeling process, the BM. The
word *modeling* is used here because it emphasizes the active nature of the process of creating the BM. However, the focus is on the conceptual BM as the outcome of the process. Business modeling is essentially about the creative actions needed to create a BM for the emerging business venture.

Consequently, the former, the concept of business, is understood as *fundamentally concerned with creating value and capturing returns from that value*. This highlights the overall purpose of the entrepreneurial process and the BO: to create value to the entrepreneurs, customers, shareholders and other stakeholders. The latter, the modeling part, is about activities that produce “simply a representation of reality” (Shafer, Smith, and Linder 2005: 202). However, it should be noted here that the concept refers to the actions used to create a new business model rather than business process modeling “*which is the activity of modeling processes* [Aguilar-Savén 2004] *and not business models*” (Osterwalder, Pigneur and Tucci 2005, 7, brackets in original). Furthermore, according to Osterwalder *et al.* (ibid.):

“A review of the business model literature shows that the business model concept is generally understood as a view of the firm's logic for creating and commercializing value, while the business process model is more about how a business case is implemented in processes.” (Osterwalder *et al.* 2005: 7)

Business modeling emphasizes the conceptual nature of the outcome of the BOC process: the BO. It is thus important to understand this in order to promote the actual expected exploitation of this BM in a real-life context. Consequently, the conceptual model needs to be created in the form of a plan.

### 4.2.5 Planning

*Business* Planning is a popular element of the courses in entrepreneurship taught at nearly every American Assembly of Collegiate Schools of Business (AACSB) accredited institutions” (Honig 2004: 258). The procedure is considered feasible because of its basis in the perception of opportunity as something that exists–out–there and is more or less ready-to-be-used immediately after its discovery (DeTienne and Chandler 2004: 244).

To follow the logic of Morris *et al.* (2005: 727) it is possible to argue that the outcome of the planning process, the BP, is related to a number of other managerial concepts. Therefore, they all form the basis for capturing key components of the business planning. Similarly, it is possible to draw on Shane
and Delmar (2004), whose argument is based on the goal-setting theory that “writing business plans before undertaking marketing activities [incl. in BOE process] should enhance the continuation of venture-organizing efforts” (Shane and Delmar (2004: 767, brackets added).

However, many earlier scholars see the importance of the planning process and its outcome, the BP, as ambiguous in the context of creating new business venture. It is quite easy to agree with Shane and Delmar (2004), who argue that “these arguments conflict with the principles of organization theory, which holds that planning before taking action improves the quality of most human action (Ansoff, 1991; Locke and Latham, 1980), and suggest that business planning should facilitate new venture development” (ibid.: 1167, parentheses in original).

Many other scholars argue that “business planning is not very helpful under the certain conditions that surround new venture formation” (Delmar and Shane 2003: 1167). According to these scholars, this is evident because this kind of logic perceives the planning process in the following way. Firstly, it takes “time away from more valuable efforts of firm organizing actions” (ibid.). Secondly, it limits the downside risk for the entrepreneur if mistakes are made during the planning process. In this case, it would be quite costly to fix the plan before its exploitation. Thirdly, the planning process and the resulting BP are seen as intuitive and preferred to business process planning. Finally, it is seen as undermining the value of business planning in an uncertainty and rapidly changing business environment. (Delmar and Shane 2003: 1167)

Castrogiovanni (1996) prefers the pre-start-up planning to business planning. He defines it as follows:

“Pre-startup planning is “the process by which the entrepreneur, in exploiting an opportunity, creates a vision of the future and develops the necessary objectives, resources, and procedures to achieve that vision” (Sexton & Bowman-Upton, 1991, p. 118). This process includes collecting and analyzing data prior to the new business startup, and then using knowledge thus gained to develop a business plan itself (Crimyer, Al-Bazzaz & Yasai-Ardekani, 1986; Ramanujam, Venkatraman & Camillus, 1986; Shuman & Seeger, 1986; Smeltzer, Fann & Nikolaisen, 1988). Pre-startup planning can range from essentially no planning to the development of very comprehensive and detailed, long-term plans (Lindsay & Rue, 1980).” (Castrogiovanni 1996: 803, quotation marks in original)
This gives rise to two very interesting ideas. Firstly, the pre-start planning (in Castrogiovanni) fits nicely alongside the feasibility analysis presented in various books on entrepreneurship (e.g., Gartner and Bellamy 2010). The second is that planning can range from essentially no planning to very comprehensive and detailed, long-term planning. This refers to the insight on which the theoretical framework of the present study is built. In a stable business context, the more the IofBO, BM, and even the BP (the BOC process) that can be exploited, the less planning based on creativity is needed: The actions are based on rational thinking due to the available information and knowledge about the situation. Hence, the main mode of actions is based on the industry recipe, for example.

In a very dynamic business context, the more the BOC process that can be exploited, the greater the number of creative actions that will be needed, but at the same time, less rational planning is feasible because of the lack of information and knowledge about the situation.

Delmar and Shane (2003) also draw on Castrogiovanni (1996) in defining “business planning as those efforts by firm founders to gather information about a business opportunity and to specify how that information will be used to create a new organization to exploit the opportunity” (ibid, 1165). They claim that:

“planning provides three benefits to people engaged in new venture development: (a) planning facilitates faster decision making by identifying missing information without first requiring the commitment of resources; (b) planning provides tools for managing the supply and demand of resources in a manner that avoids time-consuming bottlenecks; and (c) planning identifies action steps to achieve broader goals in a timely manner” (Delmar and Shane 2003: 1167)

It is feasible to think that business planning appears to form an important element of the BOC process. However, it is important to note that the present study utilizes this definition differently. The definitions above appears to understand the business planning process – as well as the whole BOC process – as a mere on-off process rather than one that evolves from specific sources and through more or less creative actions. Hence, the planning process is an emergent process with a creative nature.

In all, ideating, modeling and planning appear to be important elements of process of creating the BO. Each of these activities has a particular role in the process. These are unrelated to whether the basis of the process is recognizing, discovering, or creating. Of course, it is also recognized that the nature of their
role is influenced by the types of the opportunities. For example, if the opportunity follows the line of thought of the current industry recipe then the role of modeling is expected to be almost minimal. This is because the industry recipe is taken as given. However, if the existing industry recipe is no longer feasible, or a new recipe is still emerging, people are forced to model their businesses as they see fit, or in whatever way may be feasible. In many cases, it is about how they utilize their inherent and personal creativity in ideating, modeling, and planning.

4.3 The role of creativity in the process of creating the business opportunities

“Following Locke and many other writers I crudely separate thinking in two parts. One part is decision-making, the logical processing of what are taken as facts. The conclusions are contained in these facts; the thinking is the analytic process that extracts them. The other part of thinking is creative; the application of human judgement in response to uncertainty judgement creates facts from uncertain data.” (Spender 1989: 172)

In the previous chapter, the industry recipe and ideating-modeling-planning were presented to facilitate a manager’s decision-making process in an uncertain situation. This is defined by Spender (1989: 173) as “a condition of information deficiency in which data by themselves neither contain nor determine a conclusion”. While Spender (1989) refers to managers (and management) it is assumed here that the situation will be the same within entrepreneurship also. An uncertain situation such as this forces managers, as well as entrepreneurs, to utilize not only the decision-making but also creativity. While decision-making inherently follows the logic of identifying an existing problem and finding a solution, in the context of creativity it is more about creating a bounded context of certainty from something more or less uncertain. Spender (ibid.) acknowledges the context of certainty as artificial since it is based on facts that are merely believed to be facts. Spender states: “They do not know these things, they are matters of opinion” (ibid: 172).

In the context of creativity, the known information is inadequate. This means that to draw a conclusion the entrepreneur needs to add something that is still unknown during the consideration process. This additional new knowledge may be created, for example, based on the seven sources of innovation (Drucker 1985). Four of the seven sources exist within a firm or industry: unexpected occurrences,
incongruities, process needs, and industry and market changes. They all offer the possibility of using new information to challenge the existing industry recipe. The three other sources of innovation exist outside the firm. They are located in the social and intellectual environment within which the firm is embedded. The three sources are demographic changes, changes in perceptions and new knowledge (Drucker 1985).

Although the seven sources of innovation are important, Drucker unfortunately treats them (at least implicitly) as existing opportunities that may be used as the base on which to start the process of exploiting opportunities. To understand the BOC process more thoroughly it is important to separate the appropriate source for opportunity from ready-to-used kind of opportunity.

An approach such as this is in contrast to that taken by Schumpeter (1934) who argues that innovation is the key to entrepreneurship. He defines an entrepreneur as an innovator who combines existing sources in a new way. Ebner (2004) supports this insight by stating that the Schumpeterian entrepreneur is a paradigm-builder who exercises paradigmatic leadership. This reshapes the dominant routines and procedures for problem-solving and learning, focusing on creation of novelty. The outcomes of these actions can be both technological innovations and organizational innovations.

Literature on creativity shows that it is reasonable to think that there is a close relationship occurs between innovation and entrepreneurship, since a “successful implementation of new programs, new product introduction, or new services depends on a person or a team having a good idea – and developing that idea beyond its initial state” (Amabile, Conti, Coon, Lazenby, and Herron 1996: 1154). This is the same as defining innovation as commercialization of invention, or more precisely as “…the total set of activities leading to the introduction of something new, resulting in strengthening the defendable competitive advantage of a company. (van der Meer 1996)” (van der Meer 2007: 192).

It is reasonable to think that there is a close relationship between innovation and creativity, since “all innovations begins with creative ideas” (Amabile Conti, Coon, Lazenby and Herron 1996: 1154). Also the higher number of creative ideas the better it promotes the development of innovative products and services (see Alves, Marques, Saur and Marques 2007). These innovations refer to new combinations that introduced on the market (Schumpeter 1911/1934 in Becker and Knudsen 2002).

Although, there is a close relationship between entrepreneurship and innovation and innovation and creativity, it is clear that they differ:
entrepreneurship differs from innovation and from creativity. The next four sections discuss these relationships in detail.

4.3.1 Creativity - a process of creating new order

Creativity is important since it makes it possible to understand novelty combined with usefulness. Literature on innovation described creativity as *from ideas to products that will be commercialized*. Furthermore, from the perspective of entrepreneurship the purpose (the teleology) of creativity can be seen as *creating something from ideas that could be labeled as new economic activities with effects on the market*.

The generic process model of creativity put forward by Warr and O’Neill (2005), which is based on the scholarly works of Wallas (1926), Osborn (1963), Amabile (1983), Boden (1994) and Shneiderman (2000) includes three activities (or phases): preparing the problem, evaluating an idea, and generating an idea. These are intertwined in an iterative and non-linear way. In literature of creativity, scholars have developed various alternative models since Wallas (1926).

While creativity has been referred to as a vague, ambiguous and confusing concept (Marakas and Elam 1997), two main approaches can be distinguished in the current literature: origin-oriented and process-oriented (ibid.). The former approach is concerned with the origins of creativity. According to Marakas and Elam (1997: 1137), creativity arises from conflict within an individual, from the removal of conflict and inhibition, or it is limited by genetic endowment but can be measured. The latter sees creativity as a property of the thought process. This means that creativity is the act of associating remote responses with a problem in three ways. Firstly, a new response is created. Secondly, creativity results from a conscious redirection of thought processes; this can be learned. Thirdly, it focuses on the development of information processing models of problem solving and creativity.

Runco (2005; 2007) examines creativity from another perspective: the social and personal creativity. According to Runco (2007), the existing literature can be divided into product, process, place and people. Product such as inventions, publications and works of art can be counted and judged objectively. Process perspective includes both cognitive and social elements, "*which may lead to creative performance*” (2007: 97). Place emphasizes the role of the environment in promoting the creative work. The people category includes eminently creative people and their core characteristics, traits andor tendencies, and treats them as
typical of creative people. This supports the idea that creativity is a product, performance or art work of extraordinary people and that it is acknowledged by an audience (it is socially recognized).

In response to this, Runco argues for the insight that creativity is also about recognizing an individual’s potential through interpretation, discretion and intentionality (2007). He states that “creativity is something we all have, a potential we share as humans, regardless our social tendencies, our socially recognized achievements, and the impressions others may have of us” (2007: 102).

Although personal creativity focuses tightly on self-expression by a self-actualized person, it is also a fact that humans are social creatures with “potentials defined by personal creativity will not be fulfilled nor applied without particular social experiences” (Runco 2007: 102). This means that an individual’s experience within, for example, the family, general and specific education, work and the society as a whole influences the fulfillment of that individual’s potential.

Accordingly, and from the perspective of this study, it is important to follow Runco, who argues that all human beings can intentionally modify their behavior through personal creativity: they can “thereby take control of themselves and to a certain degree their environments and experiences” (Runco 2007: 102). In addition, these intentional behaviors include also the use creative problem solving.

The concept of personal creativity is exploited in this study. This is despite the fact that the current literature on creativity – at least that related to entrepreneurship – seems to neglect the possibility that creativity may be a feasible driver in all phases of the creative process, as well as in the entrepreneurial process, in general, and in the process of creating the BO, in particular.

To clarify the relationship between entrepreneurship and creativity, it is necessary to show how the nature of creativity, in terms of novelty and usefulness, is about bringing order, identifying problems and generating new, and possibly simple and attractive, solutions. Tassoul and Buijs (2007) show how the process of bringing about order includes actions such as dissolving existing ideas, assumptions, beliefs and habits. As a result, it is possible to identify breaking assumptions through divergent thinking. This divergence is characterized by novelty (or even absurdity) and non-judgment “to unfreeze beliefs and assumptions to open up to new inspirations and insights about what one might call ‘Idea or Solution Space’” (Tassoul and Buijs 2007: 18, quotation marks in
original). According to Tassoul and Buijs, such explorative activities are characterized by playfulness (see *homo ludens* and *actualization* in Hjorth 2001), child-like, behavior curiosity, following hunches and by exploring alternatives. This is in line with the view on personal creativity proposed by Runco (2005; 2007), whereby creative potentials can be fulfilled by coping with challenges, self-expression and adjusting to changes to achieve individual goals.

It is believed here that the world around us is also very complex. This complexity means that, for example, the knowledge we all have about the world is actually dispersed (e.g. Hayek 1945). Therefore, it is reasonable to believe that there is abundance of possible or virtual alternatives to existing ideas (Hjorth 2001). This means that if individuals or team are lucky or persistent, a host of new ideas will be discovered.

If the ideas of *purposeful change* and to produce novelty and usefulness are taken-for-granted, there might be one or two challenging studies in literature on innovation that could offer new insights into studies on the entrepreneurial process. Specifically, the creative problem solving (CPS) offers novel insights to study the entrepreneurial process: CPS “is defined as seeking original ways to reach goals when the means to do so are not readily apparent” (Brophy 2000–2001: 439). The traditional two-stage model of CPS includes steps such as problem, ideas and concept in both of these stages (Buijs 1984; Figure 4 in Tassoul and Buijs 2007: 19). These are based on divergent and convergent thinking. Tassoul and Buijs (2007) revised the model recently by adding a new element (or step) – called clustering – to combine the two styles of thinking. This is in line with Brophy (2000–2001), who recognizes an important overlapping between these two styles of thinking; he refers this as *combination thinking*.

### 4.3.2 Creative Problem Solving (CPS) method

According to Runco, the theory of personal creativity “*does rely on assimilative and interpretive processes, and these are involved in everyday adoptions*” (Runco 2005: 308). However, the theory emphasizes that personal creativity can be distinguished from problem solving because “*problem solving is always a kind of reaction*” (Runco 2007, 98).

Runco highlights the distinction between problem solving and creativity in general. In some cases, however, “*this [creativity] could be a kind of problem solving if the person has the need to disclose something, or if the individual is exploring artistically in an attempt to refine technique or best capture a subject.*
Of course, even the self-expression of an artist may be, on some level, an attempt to solve a problem” (99, brackets added). In general, the outcome of those processes is treated as creative, whether or not it is acknowledged by other people.

Several tools (or models) can be used to solve a problem. One commonly used tool is Creative Problem Solving (CPS), which includes phases and activities such as redefining the problem (Osborn 1993, quoted in Tassoul and Buijs 2007). Another method is to use different styles of thinking. In studies on innovation, it is common to use both divergent and convergent thinking (alone or in combination) to move through the innovation process (Brophy 2000–2001; Tassoul and Buijs 2007).

It is important to note the essential difference between divergent and convergent thinking. Divergent thinking is the ability to generate several responses, ideas, options and alternatives in response to an open-ended question, task or challenge (Isaksen, Dorval and Treffinger 1994, quoted in Gardner 1999). This type of thinking is similar to the starting point in effectuation, where the entrepreneur and shareholders/stakeholders can ask questions such as: Who I am? What I know? Whom I know? (Sarasvathy 2001: 253). This could be followed by: What can I do? (Augier and Sarasvathy 2003) Ardichvili et al. (2003) support this kind of thinking by discussion what is possible in the situation where the entrepreneur is starting the opportunity creating process.

The nature of divergent thinking highlights the difference between possible and actual (Hjorth (2001). From the entrepreneurial perspective, the notion concerning what is possible refers to a more creative approach to something that is thought to be feasible, irrespective of whether it has been done before, or whether there are demand, or even of its supply (Sarasvathy et al. 2003). However, if something is perceived as actual (or real), it refers to a less creative approach to what is thought to be feasible in this particular situation, and to some kind of perceived signals of its existence in the perceived reality.

Convergent thinking starts with the results of the divergent thinking process in its basic form. The entrepreneur starts with multiple possible solutions but seeks only the most useful and practical. This is also in line with effectuation:

“The particular effect selected is the function of the level of loss or risk acceptance to the effectuator(s), as well as the degree of control over the future that the effectuator(s) achieves through strategic partnerships along the way” (Sarasvathy 2001a: 253).
This idea has at least partial support from van der Veen and Wakkee (2002; 2004b), who emphasize the importance of the preparation phase in the entrepreneurial process in order to be ready to actually start the new business venture (see also the transition from business state world 1 to world 2 in Gomez and Volery 2000). Furthermore, one very strongly evolving research stream in entrepreneurship, strategic entrepreneurship, focuses on a more traditional perspective according to which the strategic fit and new theories about business model drivers to understand “how firms adapt to environmental changes and exploit opportunities created by uncertainties and discontinuities in the creation of wealth” (Hitt, Ireland, Camp, and Sexton 2001: 480). This is in accord with the view held by van der Meer (2007), who describes the business model as “a ‘cognitive device to convert technical aspects of a product or services into economic value’ and revolves around the central questions of what it takes to transform technology or specific know-how into (commercial) success” (van der Meer 2007: 197, quotation marks and parentheses in original). Van de Ven states that:

“A description of how multiple progressions of events diverge, proceeds in parallel, or converge over time provides a useful vocabulary for making process statements about specific stages or the overall developmental pattern of a developing entity over time” (Van de Ven 1992: 173)

To revise the traditional two-stage CPS model, Tassoul and Buijs (2007) argue for the combination of divergent and convergent thinking within the clustering process. This provides new insights into the entrepreneurial process. It promotes a specific kind of thinking, whereby the whole process starts with divergent thinking. The first stage is to determine what is possible to bring the idea to fruition. The process continues by clustering or combining these more or less novel ideas into new clusters. Such clusters can often surprise even the creator. Once the most interesting or most promising cluster is selected the process proceeds with using convergent thinking. The key idea is to find a solution to question about how to make it happen in the real-life context.

Perhaps the most interesting thing here actually is that the revised model of Tassoul and Buijs (2007, 19–21) presents two ideas. Firstly, it is possible to see divergent–clustering–convergent thinking as feasible in all phases of the BO process (not just at the beginning). Secondly, it is possible to use the revised model of Tassoul and Buijs (2007) to illustrate the process of creating the BO.
Although there are similarities between the two domains (creativity and entrepreneurship) they are not the same. Schumpeter (1934), for example, defines entrepreneurship through innovation and creativity, and sees the entrepreneur as an innovator who uses creative destruction to direct the economy toward disequilibrium. However, the present study sees creativity and entrepreneurship as two distinct domains, each with its own specific subject matters and ontology. It is believed here that such differences would also set them both apart from the perspectives of other fields. Venkataraman gives one example of this when he defines the domain of entrepreneurship as “a scholarly field should seek to understand how opportunities for profit are discovered and exploited, by whom, and with what consequences” (Venkataraman 1998, quoted in Kaufmann and Dant 1998: 10; also McDougall and Oviatt 2000).

4.3.3 Entrepreneurship as economic creativity – productively novel

“If we view successful entrepreneurs as those “individuals who identify opportunities and start new companies to develop them” (Baron, 2000, p. 15), then they will need to be able to do more than simply generate useful new ideas. Likewise, if we view entrepreneurial creativity as “the generation and implementation of novel, appropriate ideas to establish a new venture” (Amabile, 1997, p. 20), then a range of internal and external factors become relevant to the task.” (Ward 2004: 187, parentheses in original)

Along with innovation and entrepreneurship, creativity includes common attributes such as novelty and usefulness (e.g. Johannessen, Olsen, and Lumpkin 2001; Ward 2004). This is in accordance with Florida (2003), who opens up the relationships between entrepreneurship, innovation and creativity in the regional context by arguing that:

“Creativity is multifaceted and multidimensional. I identify three interrelated types of creativity: (1) technological creativity or innovation, (2) economic creativity or entrepreneurship, and (3) artistic and cultural creativity. I argue that these three types of creativity are mutually dependent. In order to generate entrepreneurship (evident in higher rate of new business formation), a region must create conditions that stimulate innovation, arts, and culture. The three types of creativity stimulate and reinforce one another.” (Florida 2003: 40)
Furthermore, Florida sees that if people wish to encourage economic creativity then the society as an entity “must be willing to encourage diversity” (Florida 2003: 41; see also measurement for creativity and diversity in Lee, Florida and Acs 2004: 883–884). Ideas put forward by Florida (2003) and Lee et al. (2004) about the proper measurements of creativity reflect those by Jeanes (2006); they all recognize that creativity – and entrepreneurship as economic creativity – is not just about introducing new products and services to the market; to be treated as creative they need to be worthwhile. Thus, if something is referred to creative, it is not just a novel combination but something that is combined “in a novel but productive way” (Sternberg 2005: 372). This is in line with the teleology of business and entrepreneurship, in general, and business opportunity, in particular: business/entrepreneurship/BO is about the ability to create value. Jeanes argues that to be creative requires the creation of something worthwhile.

“…we need to be open to new ways of thinking, to creative processes we do not recognize and that do not fit with our current assessments and measurements of creative processes and outputs, to have the courage to resist the ‘realization’ of current creative practices in favour of the actualization of the new (previously unknown) ways of thinking. Perhaps through this resistance, through this ‘active’ thinking, through simply ‘working’ we can provoke new experiences and possibilities, and ultimately create something worthwhile.” (Jeanes 2006: 133, quotation marks in original)

Unfortunately, research on creativity is still scarce in entrepreneurship literature (Brazeal and Herbert 1999). Only few scholars have utilized models and theories on creativity in their studies. For example, Wallas (1926, quoted in Hills, Shrader and Lumpkin 1999) and his model of creative process – which has five stages (preparation, incubation, insight, evaluation and evaluation) – is used as a framework by Singh, Hills, and Lumpkin (1999) and Hills, Shrader, and Lumpkin (1999), and Lumpkin, Hills, and Shrader (2004). The more current models on creativity have not been used in studies on the entrepreneurial process (at least as far as this researcher is aware).

Nevertheless, there are ideas and thoughts expressed in literature (on entrepreneurship and creativity) that these two scholarly domains can be combined in a novel and productive ways. The focus here is on a particular thought on which the present study will concentrate, is about the nature of the process that has something in common in all these disciplines. Firstly, the
definition of creativity in terms of novelty and usefulness is widely. For example, Sundararajan and Averill (2007), who study emotional creativity, state that for “response to be considered creative, it must be effective in meeting some challenges, for example, aesthetically in the case of art, commercially in the case of business, theoretically in the case of science, and, we suggest, interpersonally in the case of emotion” (Sundararajan and Averill 2007: 199). In the same vein, Cowen states that “for Kant, the ultimate demarcation of genius comes in terms of how the audience, with its common understanding of the beautiful, is able to regard the product of genius. Without the possibility of audience appreciation, genius cannot be present.” (Cowen 2003: 12).

Newell, Shaw and Simon (1962) and Mumford and Gustafson (1988) have argued even more explicitly that creativity in the creative process focuses on the development of information processing models of problem solving “when one or more of the following conditions are satisfied: (1) the solution is novel and valuable, (2) the thinking is considered unconventional, (3) the initial problem is vague or ill-defined, and (4) the solution process requires high motivation and intensity and generally takes place over a considerable span of time” (Newell et al. and Mumford; Gustafson, both quoted in Marakas and Elam 1997: 1137; see Richards, Kinney, Benet, and Merzel 1988; Tardif and Sternberg 1988).

Furthermore, Sternberg (2005) proposes the propulsion theory to conceptualize creativity from the perspective of information processing. According to the propulsion theory, there are multiple styles of creative thinking: styles that accept current paradigms and attempt to extend them; styles that reject current paradigms and replace them; and styles that combine existing paradigms into a new ones. (Sternberg 2005, 378)

Curran and Burrows (1986) define entrepreneurship as an activity that initiates change through creativity and innovation. In the same vein, Zahra, Sapienza and Davidsson (2006) state that “entrepreneurial companies create, define, discover, and exploit opportunities – frequently well ahead of their rivals (Hamel and Prahalad 1994; Miller 1983; Sathe 2003)” (917). Thus, the relationship between creativity and the entrepreneurial process, which starts from the generation of initial idea, is much more than just another black-box. This is in line with Baron (2008: 332), who draws on Hills et al. (1999): he states that that “creativity, in turn, has been found to be significantly related to opportunity recognition”.

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The relationship between these two domains can be seen clearly in the table below, which displays some key models of creativity process with those models within the entrepreneurial processes that exploit creativity (Table 2).

### Table 2. Creativity process and Entrepreneurial process.

<table>
<thead>
<tr>
<th>Creativity Process</th>
<th>Opportunity discovery/creation Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Wallas (1926): Preparation; Incubation; Illumination (or Insight); Verification</td>
<td>Hills, Shrader, and Lumpkin (1999): Preparation; Incubation; Insight; Evaluation; Elaboration</td>
</tr>
<tr>
<td>Amabile (1983): Problem and task presentation; Preparation; Response generation; Response validation; and outcome</td>
<td>Ardichvili, Cardozo, and Ray (2003): Opportunity Perception / Discovery / Creation; Opportunity Development; Opportunity Evaluation</td>
</tr>
<tr>
<td>Finke, Ward, and Smith (1992): Generative phase; Explorative phase</td>
<td>Lumpkin, Hills, and Shrader (2004): Discovery of potential opportunities (preparation, incubation, insight); Formation opportunities into viable venture (evaluation, elaboration)</td>
</tr>
<tr>
<td>Runco (2005): Personal creativity</td>
<td></td>
</tr>
<tr>
<td>Tassoul and Buijs (2007): Creative Problem Solving (divergent thinking, clustering, convergent thinking)</td>
<td></td>
</tr>
</tbody>
</table>

It is interesting to note that none of the above-mentioned scholars see the business opportunity as process of creativity. In fact, they all seem to consider that only the formation of the idea is creative. Furthermore, they put more emphasis on the one-off type of development, in terms of turning an idea into a full-blown business concept. This approach is clear in Ardichvili, Cardozo and Ray (2003). This assumption can be seen in innovation literature, since it seems to be commonly understood that:

“Creativity is likely to be most evident in the early stages of innovation process or cycles, when those in teams are required to develop or offer ideas in response to a perceived need for innovation. Creative thinking is also likely when they initiate proposals for change and consider their initial implementation.” (West 2002: 358)
In the field of creativity, there is still disagreement about the nature of creativity. However, according to Sternberg (2005), this situation may reflect the fact that creativity takes many forms: goal-oriented and exploratory; domain-specific and universal; unstructured and structured. According to Alves et al. (2007: 27), these multiple definitions can be seen in expressions such as a capacity to generate new and valuable ideas for products, services, processes and procedures (Martins and Terblanche 2003), or the ability to produce work that is both novel and useful (Sternberg 1999).

The definition given by Sternberg (1999) – that creativity is novel and useful – could be very helpful in combining the three domains: creativity, innovation and entrepreneurship. The main reason is that, by definition, they are all associated with purposeful change and creating value. An idea such as this is supported by the many definitions of innovation: primary activity of entrepreneurship (Drucker 1985), renewing and optimizing the generation and delivery of outputs (Tidd, Bessant and Pavitt 2001), entrepreneurship as creative destruction (Schumpeter 1934), Austrian market coordinator (Kirzner 1997), or new economic activity (Davidsson 2003a). They all highlight the relationship between the three domains, but only implicitly disclose how the entrepreneurial process utilizes creativity and innovation. Because the relationship between entrepreneurship and creativity is important, the next section will focus on this.

### 4.3.4 Creativity in the BOC process

There are several situations in which entrepreneurship and creativity are intertwined. That is, there seems to be several opportunities to utilize creativity during the entrepreneurial process (Hills et al. 1999). This raises the question of whether it could be feasible to use creative thinking and problem solving methods not only in finding the initial idea to start the BO process but also in every part and with every action of the entrepreneurial process. Would it be feasible to create the initial idea, discover new ways of thinking how to build new business (based on these more or less creative ideas) and create a personally suitable solution to putting the new but still conceptual construct into action? It should be emphasized that:

“Although the origin of an idea is important, creative thinking plays a critical role in its development. In other words there is a major difference between speculating about an idea and initiating one that is the product of extended
thinking, research, experience and work. More importantly, a prospective entrepreneur must have the desire to take a good idea through the various development states. Thus innovation represents a marriage of the vision to create a good idea and the perseverance and dedication to stick with the concept through its implementation. Successful entrepreneurs [s. 312] are able to blend imaginative, creative thinking with systematic, logical processing abilities; this combination is the key to their success.” (Kuratko & Welsch, 2001, 152–153, quoted in Ames and Runco 2005: 311–312, brackets in original)

The role of creativity in entrepreneurship, in the entrepreneurial process and in process of creating business opportunities is essential. However, this is not to say that everything that is creative is also entrepreneurial. The definition of creativity in entrepreneurship (in general) in this study is influenced partly by Florida (2003), who sees creativity as broader concept, applicable in many different domains. Therefore, in the economic/business/entrepreneurship context, creativity adds some non-rational aspects to the phenomenon. The definition used here is also influenced by several scholars (such as Ames and Runco 2005, Richards 2007 and Runco 2007), who all highlight creativity as a personal and every-day phenomenon. In the contexts of entrepreneurship, this allows the actor in the process to be creative when departing from previous actions or thoughts.

### 4.4 Discussion about key elements and their connections

From the critical realist perspective two elements are important: people who act and structures that both influence the actions and are affected by the actions (Archer 1998). One example of the influence of the existing reality that is utilized here is the business seen as human artifact, and conceptualized as the industry recipe. This industry recipe presents the structure of a business within a particular industry since both the potential actors and the established actors in the BOC process seem to utilize the information about that industry. The entrepreneur’s actions are based on the extent of access to this information, and this access will be affected the entrepreneur’s level of experience. Such experience will also affect the entrepreneur’s judgment of the appropriateness of the guidance.

Since the industry recipe both influences and is influenced by the actions of the actors in the BOC process, if the complexity of the system increases (Jalonen 2007) then the environment will become more dynamic. Alongside this increase
In dynamism is a crucial phase in creating something novel (and something that will be able to meet challenges in the case of business); that is to identify and break existing assumptions. If these ideas for future actions are novel and feasible – at least for the person in question – then personal creativity can be seen as original ways to reach the desired goals. The model of creative problem solving (CPS) proposed by Tassoul and Buijs (2007) will lead to new solutions and insights. As noted above, this CPS model can be applied to the BOC process. Furthermore, personal (or everyday) creativity (Ames and Runco 2005; Richards 2007; Runco 2007) is thought to describe the nature of all actions in BOC process, be they rational, creative or both.

If these are attached to same scientific assumptions, they need to be grounded in both Discovery Theory / rational action and Creation Theory / creative action /Alvarez and Barney 2008 and Dunham and Venkataraman 2002 respectively) rather than only either in the former or the latter. To follow such logic, it will be necessary to refine the dominant definition of opportunity. The external environment should not be treated as a source of ready-to-be-used opportunities (imitative or innovative). On the contrary, the environment needs to be seen more as source of ideas (i.e., as raw material for ideas) that are available for everybody, and on which they are able to make a decision to begin the BOC process. Once the decision to start the process has been made, the person starts to play the role of entrepreneur. In fact, the role of entrepreneur is determined by the relationship to the process. This relationship can active or passive. The latter means that, for example, the BOC process is latently present in the exploitation of the already created BO.

Furthermore, according to what is presented above it will be concluded in the present study that if the opportunity is understood as the outcome of the process of creating opportunities and through the lenses of both personal/every-day creativity and critical realism, then it is possible to argue for a process that is based only on creativity, the BOC process. It is believed here that, based on personal creativity, it is possible to argue for both the less and more creative type of BOC process. Every process includes creativity because of the differences between those involved. Furthermore, it is believed here that if the process follows the currently dominating ways of creating BOs then the process is will be treated as less creative. If it does not then the process will be treated as more creative. Finally, it is also believed in this study that even with the dichotomy presented by Alvarez and Barney (2008) – concerning the transition from rational to creative process, and vice versa (from Discovery Theory to Creation Theory) –
it is possible to include an ontological and epistemological perspective. The critical realist perspective is a good candidate.
5  Step two: Outlining the BOC Process

The second step in the research is to build a hypothetical model of the process of creating business opportunities, the BOC process. The model presented here is a creative combination of elements drawn from the results of the earlier literature on entrepreneurial process. It is clearly acknowledged in the present study that the elements used here as building blocks of the theoretical model are more or less explicitly presented in the literature. The model of the study is based on the critical realist perspective.

It therefore provides a picture of the whole entrepreneurial process with a clear focus on the BOC process. The aim of this chapter is to highlight two things. The first part relates to the mediated access between the entrepreneur and the social, political, technological, economical etc. environment within the process takes place. It is important to state again that the entrepreneur in the BOC process can be a single individual or a group. Therefore, the label entrepreneur will be used to refer to any person or persons in this role. The second part relates the relationship between the two sub-processes of the entrepreneurial process. This study strongly emphasizes the challenging idea of Davidsson (2006b), who refers to the interplay between the BOC process and the BOE process, that is, the exploitation process of the BO. In contrast to what is argued in the previous literature, it is acknowledged here that the interaction between these two processes is ambidextrous and recurring rather than one-off and linear. The former treats both processes, the BOC and the BOE, as existing in parallel, so that during the exploitation of the already created BO, the BOC process can exists and be ready to be used whenever it is needed. In the one-off or linear approach, the BOC process is completed before the BOE process begins. The elements of the BOC process are discussed at the end of the first part.

The second part of the chapter begins with an overview of the theoretical framework of the study. This will be followed by a detailed presentation of the key elements of the BOC process. The creative process – from ideating, to modeling and to planning – is discussed in detail.

5.1 Entrepreneurial process - a socially mediated phenomenon

One of the core assumptions of the present study is that for every entrepreneurial process, explicit or implicit design always exists – whether or not it is perceived by the entrepreneur. It is important to make the design as visible as possible so
that its strengths, limitations and implications can be clearly understood. From the point of view of scientific assumptions, it is important to understand the nature of the entrepreneurial process as thoroughly as possible.

It is widely held that the dominant approach in literature on entrepreneurship is based on the objectivist approach located in realism (Burrell and Morgan 1979; Gioia and Pitre 1990; Guba and Lincoln 1989). Literature on entrepreneurship – and the entrepreneurial process, particularly – is dominated by studies that take the objectivist approach and only a fraction of literature draws on the subjectivist approach to social science (Yeager 1987; see nominalism in Burrell and Morgan 1979; constructivism in Guba and Lincoln 1989). One of the key assumptions of the dominant view is that the environment is seen as external in the entrepreneurial process (e.g. Alvarez 2005a). This applies whether or not the entrepreneur is defined as an individual or team.\footnote{14}

The same literature makes it clear that the actors are embedded in the environment. However, this existing reality can be apprehended only imperfectly by these actors. It is widely accepted that there is a close relation occurs between the actor of the process, environment and the process (Fig. 3). This relationship is so clear that it characterizes the whole entrepreneurial process. It will be argued here that the nature of the entrepreneurial process is teleological because its main purpose is to generate value for all those involved: the entrepreneur, customers, shareholders and other stakeholders. This is similar to what will be said about business being a social structure or mechanism for generating value.

Another issue concerning the relationship between the key actors in the process has been presented quite ambiguously in the previous literature: the origin and nature of the idea on which the becoming business venture will be build. Previously, it has been – and it may still be – a common way to think that since there are opportunities endlessly in the environment, we need just to grab on at least one of them at the time. It is believed here that it is not the entire case, if indeed it is the case at all. This means that it is not only about the existing ideas on which the new business venture could be started. It is also about treating ideas as a foundation for the BOC process. In the latter situation, they are indeed ready–to–be used (as sources for the BOC process) but they are not part of the final outcome of the process (the BO).

One well-known example of ideas as sources is given by Shane (2000), who describes how one particular invention, three-dimensional printing, was transformed into several different business ventures, depending on the process performed by the entrepreneurs in question. According to Shane, “technological
change does not generate obvious entrepreneurial opportunities, which allow anyone to discover any given entrepreneurial opportunity which results from that change” (ibid: 465). In other words, because the business opportunity – interpreted here as the outcome of the process of creating business opportunities, the BOC process, for a new business venture – needs to be made (created) by the people who will play the role of entrepreneur in order to continue with the BOC process.

Figure 3 (Fig. 3) below presents the overall picture of the entrepreneurial process as it is understood in the present study. The suggestion of an alternative theoretical framework is presented in the following sections.

![Fig. 3. Overview of the Entrepreneurial process.](image)

It is recognized that those who operates in the BOC process interact significantly with the environment (see double-headed arrows in Fig. 3. The entrepreneurial process’ effect on these participants is also important. That is, the outcome of the process will be treated as sources for the new business ventures or firms.
Since the BOC process will be presented thoroughly in separate section below (Ch.5.5) only the key elements and their nature will be introduced in this section. It had already been explained that the entrepreneurial process in general – and the BOC process in particular – starts with the entrepreneur’s intentional decision to start the process. Such a decision is based on an idea for a business venture perceived as promising enough to fulfill the purpose of the entrepreneurial process (Fig. 9).

The phenomenon of the BOC process consists in three key elements: the entrepreneur, the environment, and the Business Opportunity (BO; Fig. 4). The first key element is the BO, the outcome of the process. While it is assumed here that the Idea for Business Venture/Firm (IforBV/F) precedes the BOC process. The BOC process includes three sub-processes with sub-outcomes: Business Ideating Process with Idea of the BO (BIP with IofBO), Business Modeling Process with Business Model (BMP with BM), and Business Planning Process with its outcome, the Business Plan (BPP with BP). (see Fig. 8).

Fig. 4. Three key elements of the BOC process.

The second key element, the environment, consists of all the existing structures and mechanisms, and activities of those who, together with the entrepreneur, affect the emergence of the BO. The third key element of BOC process, the
entrepreneur, is defined as a person (or a team) who plays the role of the entrepreneur. This means that the entrepreneur is the essential initiator and creator of the emerging BO. It is thus necessary to utilize one’s own personal background (human and social capital) to initiate and create.

The double-headed arrows in Fig. 3 and Fig. 4 highlight the recursive nature of the interaction between entrepreneur, the BOC process and the environment. However, this opens up a question about whether the strict objectivist approach (Burrell and Morgan 1979) is too restrictive in understanding entrepreneurship as it is defined above. The fact is that such an approach does not include how human activities affect the creation of various inventions or other sources on which new business opportunities could be created. That is, from the perspective of dominant understanding on entrepreneurship, the entrepreneur is seen merely as the discoverer of something that already existed in the environment.

The problems connected to the strict objectivist line of thinking become real in the current need for alternative approaches. The challenge is presented in literature (Alvarez and Barney 2006; Hjorth, Jones and Gartner 2008) by including the concept of creativity in the theory of entrepreneurship in order to limit the influence of the dominant approach, which “appears to actively discourage creativity” (Hjorth, Jones and Gartner 2008: 81; also Gilad 1984). This is in line with the basic scientific assumptions of this study, that is, the critical realist ontology. According to Eriksson and Kovalainen (2003: 15), critical realism “takes reality as material, but acknowledges that people interpret it differently in different times and contexts”.

Fleetwood (2005) asks what is meant by entities exist independently of their identification in the approach of critical realism:

“Critical realists claim that an entity can (which does not mean it does) exist independently of our knowledge of it. … Saying an entity can exist independently of its identification implies that it can exist without someone observing, knowing and constructing it.” (Fleetwood 2005: 198–199, underlined words emphasized in italics in original)

In the citation above, Fleetwood (2005) juxtaposes two terms: knowledge and identification. He refers to the latter, firstly, because identification encompasses knowledge, and secondly, because it refers to a wider range of activities. According to Fleetwood (ibid.), this implies also that in some cases the entity is knowledgeable, but only as tacit knowledge. This means that an actor knows how to perform a task but cannot explain the method. In Fleetwood’s own words:
“they know ‘how’ but they don’t know ‘that’ (see Fleetwood 1995, Ch. 7).” (2005: 199, quotation marks in original).

One point that in Fleetwood makes is extremely interesting. He claims that the critical realist accepts that “there is no (defensible) theory-neutral observation, description, interpretation, theorizing, explanation or whatever. There is, in other words, no unmediated access to the world: access is always mediated.” (Fleetwood 2005: 199, parentheses in original). This is in line with Davidsen (2005), who claims that structures in social reality have real existence as emergent properties irreducible to individuals or individual actions.

The key to understanding the perspective presented by Fleetwood is to grasp the idea that “although many things are real, they are real in different ways or modes” (Fleetwood 2005: 199). He identifies four modes of reality: material, ideal, artefactual and social. These modes include entities that straddle two modes: becoming and shifting. The former means that an entity is always undergoing evolution and change; the latter means that former may express itself by sifting between modes.

In practice, the critical realist perspective presented by Fleetwood shows that the entrepreneur, as well as those operating in some specific context, interprets, makes sense of, understands and acts according to individual beliefs and opinions, social or inter-subjective theories, and perceptions or social norms (see double hermeneutics in Nørreklit 2006).

This critical realist notion can be seen in another and very similar approach (ontologically and epistemologically): the structuration theory presented by Giddens (1984). However, there are several differences between these two approaches. Critical realism sees reality (the natural and social reality, or the environment) more or less as a primer element that both enables and constrains an entrepreneur’s current actions. In contrast, structuration theory emphasizes the role of entrepreneur as a primer actor in the interplay between the actor and the environment. This is in line with Mole and Mole (2008, who state that for “Giddens, structures result from the present actions of agents; for Archer structures are the result of the actions of past agents.” (3). Fleetwood (2005) and Willmott (2005) acknowledge that difference by stating that:

“central to Archer’s approach is August Comte’s insight that the majority of actors are dead. The past actions of humans interacting with past social structures generated phenomena such as the distribution of income, depletion of the ozone layer, libraries full of books, and business organizations. These
phenomena pre-date any subsequent human activity and exert a causal influence upon subsequent human activity. Although Archer refers to this as ‘structural conditioning’, it is distinct from structuralism, where the agent is a cultural dope.” (Fleetwood 2005: 204)

“He [Bhaskar] ‘distinguish(es) sharply between the genesis of human actions, lying in the reasons, intentions and plans of people, on the one hand, and the structures governing the reproduction and transformation of social activities, on the other’ (Bhaskar, 1998b).” (Willmott 2005: 773, brackets added)

According to critical realism, it is necessary to accept that an entrepreneur interacts with the environment as to be thoroughly informed of the yet unknown factors that may enhance individual or group activities. One example such an interaction is the creation of new business opportunities that are expected to benefit either the entrepreneur or anybody in that environment.

5.1.1 Three perspectives on BOC process

The following section presents three perspectives that are thought to facilitate understanding of creation and creativity in BOC process: the perspective of double-hermeneutic interaction, the perspective of creative problem solving (CPS) and the critical realist perspective.

The first is the double hermeneutics perspective on interaction. It explains why it is possible to exploit structures and mechanisms that already exist (i.e., everything the entrepreneur already knows) as well as to gain knowledge and understanding through interaction with the environment (where the entrepreneur and other people with their actions are embedded). Double hermeneutics (outer and inner hermeneutic circles in Nörreklit 2006), highlight the need for openness between the participants who are interacting in the outer circle. Furthermore – and perhaps more importantly – these participants need to be ready to change their ways of thinking, beliefs or even values in order to be able to change the pre-understanding that operates like a gatekeeper between the inner and the outer circles – between the inner and outer world.

The second perspective, the Creative Problem Solving (CPS), makes it possible to change existing structures and mechanisms. To be treated as creative here means that the entrepreneur and the customer must both evaluate all alternative solution. From the CPS perspective the general nature of the BOC process can be seen as a process with only one goal in mind: creating a feasible
BO that is ready to be exploited in the BOE process. At the same time, the CPS perspective needs to be exploited in every sub-process. This emphasizes its crucial role in ideating the IoBBO, modeling the BM, and planning the BP as creatively as feasible in a particular space and time.

Finally, from the critical realist perspective, it is important to note that the entrepreneur’s part in various activities to create BOs for further exploitation is acknowledged here as essential if the entrepreneurial process is to be completed. According to Davidsson (2005), the entrepreneurial process is actually about the interplay between the BOC process and the BOE process. It is also important to understand how the personal and social backgrounds of entrepreneurs and others influence how one is able to act in the BOC process. One example is presented by Sarasvathy (2001), who raises questions relating to: Who the entrepreneur is? What the entrepreneur knows? Whom the entrepreneur knows? However, the critical realist perspective emphasizes that both the natural and the social environment (the reality) is partly independent of the entrepreneur’s actions. However, this same entrepreneur, who is affected by the environment, can change the environment through one’s own actions. The environment’s effect on the actions of the entrepreneur during the BOC process is essential. For example, the events and processes that entrepreneur experiences at the Empirical level of the reality in the form of industry recipe for example, will guide the actions (ideating, modeling and planning) in the process and decision making in relation to the ongoing BOC process and its outcome: the emerging BO.

5.1.2 BOC process from critical realist perspective

As shown earlier, critical realists stratify social reality into three levels: the Real, the Actual, and the Empirical. It is important to note here that it is possible to conclude the actions and events at the Actual level from what is experienced at the Empirical level. However, this is not the case at the Real level (Fig. 5). This is because the mechanisms (such as ideating, modeling and planning) at the latter level are either activated or deactivated, or even activated against each other by other mechanisms.

One example of such mechanisms is the industry recipe, which is seen as a kind of a social structure within the environment. For example, in the context of emerging industry, where conditions are extremely dynamic, it is not feasible to focus too heavily on planning. Although planning focuses on known facts and experience, and on finding workable solution, in a dynamic situation the situation
there will be a lack of existing recipes to guide the participants. Therefore, it is important to concentrate on ideating and modeling and minimal planning before testing the outcome in the real-life situation. In such a situation, it is important to get feedback from the users rather than conduct detailed planning. In contrast, in the context of a stable industry, everyone in the business knows (implicitly rather than explicitly) the ideas that can be exploited. In this case, detailed planning is important, for example, because the operations need to be effective.

An example of how dynamism affects entrepreneurs in conducting their activities can be found in the development of the ICT industry. It is widely acknowledged that the complexity of the business environment – at least in the ICT business – has increased. For instance, after the dot.com bubble burst (in 2001 – 2002), more challenging ways to model business ventures emerged. On the one hand, it became difficult (or even totally impossible) to predict that whether what worked well in the past would work in the current environment. The complex environment together with the future being seen as uncertain (e.g. Knight 1921; Ireland, Hitt and Sirmon 2003; Alvarez 2005a; 2005b) will challenge the currently dominating industry recipes, which are based on the allocative and recognition view on entrepreneurial process. On the other hand, Sallinen (2002) concludes that it has been quite common to reinforce rather than challenge the current industry recipe, at least in the supplier industry in Finland up until 2001.

In the conceptual framework of this study, these general mechanisms (ideating, modeling and planning) are located at the real level because it is understood that the exploitation of creativity and complexity perspectives has a tendency to generate many ways of proceeding in the process (Fig. 5). The novel and feasible nature of creativity (Sternberg 2005) is in line with Davidsson (2006b), who argues for an understanding the ideating, modeling and planning in the BOC process (as it is referred here, or the discovery process in Davidsson 2006b) and sees the BOE process as an essential and equal part of the entrepreneurial process.

It was shown earlier (Sayer 2000) that the events are generated by entrepreneurs (those actively participating in the BOC process) together with existing structures and mechanisms and the conditions (or other mechanisms) at the level of the Real (or the underlying reality in Perry et al. 1998). This means that the Actual level of reality is the first possible level at which events and processes can be experienced. It thus appears that it is possible to perceive only a fraction of all possible events at the Actual level because the influence of some
mechanisms at the level of Real will sometimes work against some other mechanisms. This means that all events and processes generated by various structures, mechanisms and actors at the Real level will not actualize even at the Actual level, and specifically not at the Empirical level. In all, only a few of all possible events and processes may or may not be actualized at the more or less observable reality: the Actual and Empirical level of reality.

Fig. 5. BOC process from critical realist perspective.

It is thus presupposed that only the events at the observable level (mainly the Empirical level) are explicitly experienced by people, including practicing entrepreneurs. However, it is also presupposed that research will make it possible to interpret the underlying structures and mechanisms affecting below the surface of observable reality (mainly the Actual level).
According to the conceptual framework, the processes and events presented at the Actual level of reality (ideating, modeling and planning) are all based on basic assumptions of change, creativity, double hermeneutics and certain social practices. Of course, these processes (ideating, modeling and planning) are related to the concept of business, which is seen here as a social structure. Although business as a concept may be changing constantly, it is believed here that it includes issues and characteristics that are quite stable. It is also believed here that business is about generating change. Kirzner (1999) and Schumpeter (1934) both present arguments on this, but from opposite perspectives and purposes. The former wants to generate change to direct the economy away from disequilibrium toward equilibrium, while the latter wants to generate change to destroy the existing situation (creatively) and replace it with something new.

One example related to change can be seen in the industry recipe: if the currently dominating industry recipe is followed as thoroughly as possible, there will be almost no change. However, if the current industry recipe is reconsidered (or recreated), it could be argued that almost everything has been changed, leading to different approaches to the old and new problems. According to Archer (1998), this means that actions will be based on reproduction rather than transformation. It may be possible to see both opinions are correct, and the situation is characterized by both-and (see Danermark et al. 2002) or more-or-less situation rather than either-or. In the former case it is about oscillating between two ends: reproduction and transformation, or less creative and more creative ways of dealing with the creation of BOs.

In contrast to Archer’s dichotomy between reproductive and transformative actions the conceptual framework of the present study argues for the idea of continuum (not dichotomy). One end of the continuum is in the less creative end: other is in the more creative end. These two ends are labeled in line with Archer’s view: the less creative reproductive action and the more creative transformational action. Because of the critical realist perspective of the ontology of realism (which is exploited as basic assumption in this conceptual framework), it is possible for entrepreneurs to approve of coping existing ways of creating new businesses (and new BOs). However, the anti-positivist epistemology means it is also possible to include all the actions conducted in the social interaction concerning the BOC process as a continuum of more-or-less creative ways to create BOs rather than a simple either-or dichotomy.

Archer’s original dichotomy is transformed here into the value continuum in which every sub-process of the BOC process – Business Ideating Process (BIP),
Business Modeling Process (BMP) and Business Planning Process (BPP) – is built on creativity, with the help of the CPS method. This will be presented in detail in the following section (5.4 and 5.5).

The dashed lines with arrowheads in figure 5 (Fig. 5) indicate the nature of the critical realist approach; it is not only causal powers (that is, structures and mechanisms) that generate events at an Actual level and an Empirical level. According to critical realism, it is also acknowledged that perceived events generated through human activities may (or may not) lead to change in all other elements of the conceptual framework of the study.

These effects will emerge more clearly at the Actual level, because entrepreneurs can learn from their experiences during the process of creating business opportunities and do things differently the next time they are involved in such processes. However, the entrepreneur in the process can do things more creatively (or in a different way to how others do them). If the entrepreneur in this process is successful, and attracts followers, a change may take place, leading to the transformation of the industry recipe. Thus, the way business in the context of a particular industry is understood in the society in general will be changed (see transformation in Archer 1998). Consequently, this new industry recipe will have a wider effect as generative mechanism.

In conclusion, it is thought that, in the conceptual framework of the study, the BOC process is about the phenomenon of new business activity. It is based on the entrepreneur’s activities in the more or less experienced, but still existing, underlying realities. While the various events at the Actual level may remain undisclosed at the Empirical level, theoretical work on research material can uncover many of these events, as well as the activities, at the Actual level. If these interpretations are well defended, they may even direct future activities at the Actual level of reality, owing to changes in social structures and mechanisms.

5.2 Two sub-processes (BOC and BOE)

Since Bhave (1994) the two sub-processes of the entrepreneurial process (the BOC process and the BOE process) are typically understood as interlinked in a way that the latter follows the former. Eckhardt and Shane (2003) state that “while this process may have feedback loops and certainly is not linear, we theorize that it is directional. Opportunities exist prior to their discovery and opportunities are discovered before they are exploited. The opposite direction is not possible because opportunities cannot be exploited before they exist.”
One possible explanation for such a linear assumption may be that they see the entrepreneurial process as one-timer; the process starts with discovering the already existing opportunity, and then it proceeds with exploiting that opportunity.

Davidsson (2008, see also 2003) oppose this, claiming that the intending entrepreneur may perform exploitation-type actions first. Davidsson draws on Bhave (1994) to show that while the entrepreneur may do this while trying to solve a problem. Only afterwards might the entrepreneur perceive the solution also as a business idea. Also, exploitation without discovery is seen as a situation in which “a venture may become successful ‘by mistake’, i.e., generate revenue by other means and from other buyers than the intended ones. That is, the ‘discovered’ opportunity did not exist, but the attempt to exploit it successfully exploited another, existing but non-discovered, set of external conditions (‘opportunity’)” (Footnote 17 in Davidsson 2008: 63, quotation marks and parentheses in original).

According to Samuelsson (2004), however, empirical results support the view that the process is more or less directional. This means that it is possible to start the entrepreneurial process with intention. It is then possible to move toward resource acquisition and boundary creation, which lead to exchange in the market context (Samuelsson 2004).

It is believed here that the difference between Davidsson and Samuelsson is based on different assumptions about the nature of the entrepreneurial process and its antecedences. Even in the most extreme situation (as presented by Davidsson), it is difficult to see how an entrepreneur can suddenly discover that a viable opportunity is to hand. It is thus hard to believe that such a ready–to–be–used opportunity could be exploitable in the real-time market context.

Although it is not unclear whether Samuelsson (2004) emphasizes the creation process as a key characteristic of the BOC process or the entrepreneurial process, he does see the role of intention as important at the beginning of the process. This is in line with Bird and Brush (2003), who argue for personally experienced pushes, such as displacements, or dissatisfaction with a job, or underutilized resources of time and talent to answer the question what initiates or motivates a vision. According to Bird and Bruch, “conscious pulls such as the desirability of a venture to meet personal needs and values (Brockhaus & Horwitz, 1986, Shapero & Sokol, 1982), and emotional or unconscious tensions (Hill & Levenhagen, 1995, Kets de Vries, 1977; Kets de Vries & Miller, 1986)” (14–15, parentheses in original); these are examples of these pushes and pulls.
Along with these are tensions and intentions to venture and values that “flow through to opportunity formation of the entrepreneur(s) and then to specific new organization implementation intention (Bird, 1989; Gollwitzer, 1993, 1999; Krueger, 2000)” (ibid: 15, parentheses in original).

Intentionality plays an important role in starting the entrepreneurial process, in general, and the BOC process, in particular (Fig. 6). The BOC process will be explained more thoroughly below (Ch. 5.5). It is important to note that the process is understood as an ongoing process rather than as either–or process. In other words, if the entrepreneur in the most extreme case (Davidsson 2003a; 2008) feels able to operate without any particular opportunity being discovered intentionally in a feasible and successful business venture, activities such as these are believed to be based on a more or less ongoing BOC process.

This process may be like a reproduced opportunity that is created without further thoughts. In this case, the already exploited BO of another business is copied because it is seen as desirable for the use in the business; or existing customers recognize that the firm can produce something they need, and create demand for it.

This means that in all situations the entrepreneur is forced to either follow the lead (by starting to act on it) or ignore the demand. In the latter situation, the entrepreneur will just move on without making any decisions. If the entrepreneur chooses the former, the demand the entrepreneur faces is merely a good starting point for finding a solution, that is, how to make it actually happen in the real-market context (Fig. 6).
Figure 6 (Fig. 6) depicts the two sub-processes, the BOC process and the BOE process. It describes how the entrepreneurial process starts with the BOC process and moves towards the BOE process once the decision to actualize what is created has been made. The feedback arrows show how it is possible to restart the BOC process while the BOE process goes on. It also shows that there can be an additional process between these two main processes, as presented by Wakkee (2004). However, this Venture/Firm Preparation process is only tentatively presented here since it is outside focus of the research.

5.2.1 Interplay between BOC and BOE processes

Ardichvili et al. (2003), Bhave (1994), Shane and Venkataraman (2000) and Venkataraman (1997) show that the entrepreneurial process includes two sub-process. The latter process is commonly designated as the process of exploiting opportunities: the BOE process (as it is referred to here). However, the former process has been presented with a variety of labels. Both are equally important if the entrepreneurial process is to become actualized (Davidsson 2006b; Gilad 1984). The keen interplay between them, as it is presented in the study at hand and modified mainly from Davidsson (2005; 2006b), clarifies the development of our theoretical understanding of the entrepreneurial process as an entity.

Schumpeter has also emphasized – although more implicitly – this interplay by stating the need to focus on gaining profit from the new combinations the
entrepreneur has created. Interestingly, Schumpeter has reformulated his previous views on the entrepreneur’s role and activities in his 1934 volume (Becker and Knudsen 2004; Swedberg 2007; teVeld 2001) by including one fundamental difference to the definition presented in the 1911 volume. Schumpeter sees entrepreneurship as a function that starts with the entrepreneur creating a new combination in order to change the present situation in some jet unknown ways. The entrepreneurial function ends when the entrepreneur starts to focus on the day-to-day running the business.

Looking at entrepreneurship and the entrepreneur from Schumpeter’s point of view (1934), it seems evident that there is a need to re-reconsider entrepreneurship in the context of business in general and to find answers to at least one significant question: How should we understand the role of entrepreneurship in the business context? Only then can entrepreneurship and the process of creating opportunities be understood more fully.

The approach to entrepreneurship taken here (Fig. 7) sees entrepreneurship as one of several business competences (see Kettunen, Carlsson, Hukka, Hyppänen, Lyytinen, Mehtilä, Rissanen, Suviranta and Mustonen 2003; Lehtinen and Mittilä 2006; Näsi and Neilinö 2006; Seppä 2006). These include management, marketing, finance, accounting and logistic. It is believed here that these competences play different types of roles in the two processes. Entrepreneurship plays the chief role during the creating of business opportunities. Contributions by other business competences (such as management) are less important. This is in line with how Davidsson et al. (2000) present the relationship between entrepreneurship and management in the entrepreneurial process.

To understand the purpose of the entrepreneurial process – the creation of something specific to be exploited in the business context – insights into business are necessary but not sufficient at the beginning of the process. The role of other business competences will increase towards the end of the BOC process. The closer to the actualization the new business opportunity is, the more important these other competences will be.

The role of entrepreneurship decreases during the exploitation of the newly created BO, since the focus moves to actual day-today management. However, the BOC process is latent and as ready-to-be-used if an individual in the organization identifies a realizable but not jet actual (1b in Figure 7) – for the organization or just the individual. If this individual intends to start to work on the idea for a new business venture, the BOC process will start again.
It will be argued here that, of the many business competences, the role of entrepreneurship (defined as creating new business or economic activities) is the chief discipline (or domain) in depicting the basic elements of a new business. This is because only through the BOC process can the entrepreneur carry out the process. This is in line with Veciana (2007), who concludes that every new business venture needs to be conceived before it can be brought into the actual business environment. The importance of the BOC process in the creation of a new business from scratch (see 1a in Fig. 7) or the development of a new business opportunity in an already established business (see 1b in Fig. 7) can thus be clearly seen.

Furthermore, the interplay between two entrepreneurial processes, in the context of a business with two transition points, is presented in Fig. 7 and Fig. 9. The first is the Intention (e.g. Krueger and Kickul 2006a, 2006b; Krueger, Reilly and Carsrud 2000; McMullen and Shepherd 2006). This refers to the intention to start the entrepreneurial process, in general, and the BOC process in particular: Intention to start the BOC. The second is the Decision to actualize the newly created BO, either through an additional process¹⁵ (see 3 in Fig. 7), or directly in the BOE process.

Shane and Venkataraman (2000) also present a second mode of exploitation, which is parallel to the hierarchical mode; that is, to sell the opportunity in the market. These two modes are not so different if the second has already been planned in earlier phases of the BOC process. In all, it seems feasible to think that the outcome of the BOC process, the BO, includes more or less creative solutions that focus on just exploiting this kind of new business opportunity.
5.3 Elements of the BOC process

Since the BOC process is about more or less creative actions, this section will initially focus on creativity. As already mentioned, the earlier literature on creativity includes a great variety of models: from 1908 to current times (Plsek 1996). According to Plsek, the idea that creativity can be described in a model – whether it is flexible or not – is questioned in literature. For example, the process of creative thinking process is seen one that typically extends the boundaries of the fixed steps of any model. It is important to understand that these models are not to be used too rigidly.

Three notions emerge from evaluating the nature of the creative process: purposeful analysis, the generation of imaginative idea and critical evaluation. This approach emphasizes the balance between imagination and analysis. Evaluation implies a purposeful generation of new ideas, under the direct control of the thinker. This is a conceptual process that happens in the head of the individual or within a group. The creative process focuses on action and the implementation of ideas. To sum up, imagination as such is not sufficient, since the idea (the outcome of the creative process) is created for use in a real-life context. This is in line with definitions that emphasize two attributes of creativity: newness (or novelty) and feasibility (usefulness). See, for example, Ames and Runco (2005) and Gilad (1984).

These three characteristics of the creative process are in line with the notions of complexity theories, such as diversity, connectivity, feedback (Jalonen 2007; Mitleton-Kelly 2000; 2003), divergence-to-convergence (Maula 2006) and dissipative and integrative communication (Aula 1999). They also reflect the creative theory that sees the creative problem solving process in terms of divergence-clustering-convergence (Tassoul and Buijs 2007). They all emphasize the need to create new alternative choices, and to evaluate and prepare these choices for use in a real-life context.

The BOC process itself is based on three general elements: ideating, modeling and planning (see social practices in Fig. 5). In the context of Business/Entrepreneurship, these processes are referred to here as the Business Ideating Process (BIP), the Business Modeling Process (BMP) and the Business Planning Process (BPP). The Business Planning and the Business Modeling are widely acknowledged as important elements in the discovery process by scholars such as Honig (2004), who wrote about business planning, and Morris et al. (2005), Osterwalder, Pigneur, and Tucci (2005), who wrote about business model.
However, the BIP is not a commonly presented in literature. In fact, it seems to be more or less explicitly distinguished from the concept of business opportunity, and also from the concept of venture idea put forward by Davidsson (2003a).

Nevertheless, there are scholars who share the idea that business ideating will exist alongside both business modeling and business planning. Bhave (1994), Gilad (1984), Holcombe (1998), Reynolds (2000), Sarasvathy (1997), van der Veen and Wakkee 2002 and Wakkee (2004) quite explicitly present business ideating as one element of the process, even though they refer to it as discovery, recognition or the process of creativity.

These elements – BIP, BMP and BPP (Fig. 8) – combine to form the creative problem solving process (the CPS process described by Tassoul and Buijs 2007). In this study, the from initial idea to actual business venture type of thinking, which characterizes the entrepreneurial process in general, is juxtaposed with three types of activities in the CPS: divergent thinking, convergent thinking and clustering. Figure 8 shows that the CPS process is related to all three subprocesses of the BOC process. An approach such as this thus promotes creativity in every phases of the process, although the emphasis will vary between subprocesses (see Ch. 5.5 for further details).

The CPS process presented in literature on creativity offers novel insights to study entrepreneurial process, owing to its definition: "seeking original ways to reach goals when the means to do so are not readily apparent" (Brophy 2000–2001: 439). Tassoul and Buijs (2007) have revised the original two-stage model, which is based on divergent and convergent thinking, by adding a new element called clustering to integrate these two styles of thinking. This is in line with Brophy (2000–2001), who recognized an important overlap between the two styles, and coined the term combination thinking.
It is important to point out the essential difference between divergent thinking and convergent thinking. The former is the ability to generate responses, ideas, options and alternatives to solve an open-ended question, task or challenge (Isaksen, Dorval, and Treffinger 1994, quoted in Gardner 1999). The starting point of such a process could be a specific life-situation, where the (intending) entrepreneur is at the point where an idea for a new business venture or a firm is seen as worth pursuing. This type of thinking follows the logic of the starting point of the entrepreneurial process discussed above both by Sarasvathy (2001) and Ardichvili et al. (2003).

To sum up, at the general level, Tassoul and Buijs (2007) explain clearly how the combination of divergent/convergent thinking with the clustering process, in the context of CPS, provides new insights into the entrepreneurial process. It is believed here that it is possible to apply the revised model of Tassoul and Buijs (2007) directly to the BOC process.

It is assumed here that every step of their tripartite model (problem statement, idea generation and concept development) will be used in the BOC process.
framework but labeled as Business Ideating Process (BIP as problem statement), Business Modeling Process (BMP as idea generation) and Business Planning Process (BPP as concept development). BIP as problem statement highlights the idea-level solution to creative problem solving: *This is what the becoming BO is about*. BMP as idea generation highlights the conceptual-level solution: *This presents the BO conceptually*. BPP as concept development emphasizes the implementation element of CPS: *This is how the created BO will be implemented*.

The revised model presented by Tassoul and Buijs (2007) extends the general model, indicating that the use of divergent–clustering–convergent thinking is feasible in every single phase of the BOC process (BIP, BMP and BPP) and not just once in the whole process.

5.4 **Overview of the theoretical framework on BOC process**

The theoretical approach taken in the study on the process of creating opportunities, the BOC process, emphasizes the important interaction between various actors in the field: entrepreneurs, customers, public institutions (universities, for example), people who are not intentionally connected to business or other kinds of economic activities (Dimov 2007b: 718–720). This approach highlights the possibility that the actors themselves have certain roles to play in coming up with new inventions, ideas (i.e., everything that can be seen as the different modes of reality, as it mentioned in Fleetwood 2005) or new combinations to be introduced into the markets (Schumpeter 1911/1934).
Because of the choice made in the present study it is possible to follow the notion presented by Davidsson (2003a), who sees the entrepreneurial process as a unit of analysis within the study. If the role of entrepreneur of this approach is compared with the role of entrepreneur in the dominant literature on entrepreneurial process, the difference between the two is evident. In the latter, the key actor (the entrepreneur or firm) is seen as the unit of analysis. The basic assumption here is that, in contrast to the dominant thinking, ideas for new business venture may or may not come to mind. Such ideas can be based on the different sources such as other people, or technological and economical changes. Most of these ideas come and go, almost without a trace, but sometimes the idea is so tempting that the
person in question starts to think it is worth pursuing. If it seems to be, the person will start to play the role of entrepreneur, and will thus face Transition Pont 1 (Fig. 9).

The entrepreneur, who now has a strong intention to act (see Dimov 2007b) on the new (but possibly obscure) idea for the new business venture, may step into the BOC process and begin to work more or less creatively in the iterative process (Fig. 9).

### 5.4.1 Transition point 1

Transition point 1 – intention to start BOC process (Fig. 9) – is a popular topic in literature. Intention is presented as a prerequisite to entrepreneurship, in general, and to the decision to start the process, in particular. See Brännback, Carsrud, Elfving, Kickul, and Krueger (2006), Krueger and Kickul (2006a; 2006b), Krueger, Reilly, and Carsrud (2000), and also in Bhave (1994). They all emphasize the two aspects of entrepreneurial intention: desirability and feasibility.

In contrast to the process defined in this study, the concept of internally stimulated opportunity recognition (Bhave 1994) seems to focus on something that is not yet entrepreneurial (or business-wise). The situation is the same with Görling and Rehn’s (2008) *accidental ventures* (Görling and Rehn 2008) and *user entrepreneurship* (Shah and Tripsas 2007). It seems that these scholars look at the everyday activities of ordinary people, who have not yet realized that they actually have all they need to become up with an idea for a new business venture. Nevertheless, at some point they have to start conducting activities that may lead to the BOC process. Based on the outcome of this process, these entrepreneurs are able to make a decision to actualize the BO and exploit it as business venture. However, these tentative actions (originally described by scholars) are not yet the kind of actions that will lead to the creation of the business venture (also Davidsson 2003b: 14).

In other words, it is argued here that the entrepreneur (the user in the vocabulary of Shah and Tripsas) is still in the situation where the entrepreneur “experiments and creates a novel solution to satisfy their own needs” (ibid, 36) but not the needs of the customers; nor is there an intention to introduce a new combination, or a new product, to the market. Fleetwood (2005: 199) concludes that the BOC process will start when the actions needed to make a difference in the market begin to affect the actual behavior of the entrepreneur as well as on the
behaviors of the future (or existing) customers, shareholders and other stakeholders.

The BOC process is built on three prerequisites. The first is that it is built on the ideas that the feasible solution for the problem seen here as *Sources for New Business Ideas* (Fig. 9; see Sarasvathy 1997). The second is the process itself: creative problem solving process (CPS in Tassoul and Buijs 2007). The third is based on a critical realist (or interpretivist) approach to reality (see the material mode of reality and also the other modes of reality in Fleetwood 2005). Because of these, it is necessary to acknowledge that sources already exist in the environment; such sources are ready-to-be-used in the BOC process (Fig. 9).

A similar approach can be found in Schumpeter (1934), who refers to *sources for the new combinations to be introduced in the market*. Shane (2000) and Shane and Venkataraman (2000) talk about *informational sources of opportunity*: this can be seen, for example, in the case of emerging technology. Nevertheless, it is reasonable to note that while Shane and Venkataraman (ibid.) define opportunity as already existing in the environment and ready to be used, they do not share the premises of the present study. Shane, Venkataraman and Schumpeter highlight the fact that even ideas about virtual and possible business opportunities (see *virtual opportunity* in Hjorth 2001) do not come out of the blue. They appear when people observe their environment. That is, this will concern entities that are as materially real, as well as socially construct entities that are ideally real (Fleetwood 2005). This study state that these ideas for business opportunities will have a chance to emerge, but only with a little help of the Creative Problem Solving (CPS) process developed by Tassoul and Buijs (2007) and the everyday creativity (Richards 2007). This statement is in line with Gilad, who states that opportunities “*are never known in advance*” (1984: 154). This supports the idea that the entrepreneur has to create them.

### 5.4.2 Transition point 2

Once the outcome of the BOC process is seen as feasible, the entrepreneur will face the *Transition point 2* (TrP 2 in Fig. 9). This transition is about making decision to actualize the newly created BO, continuing the process, or simply abandoning the whole process. Transition point 1 focuses on the decision to start BOC process (Ardichvili *et al.* 2003) while Transition point 2 is concerned with the potential new business’s ability to create value for the entrepreneur, customers, shareholders, other stakeholders and the business itself. In a positive
case, the entrepreneur perceives the outcome of BOC process as a first person opportunity, which means that “*one believes one possesses the knowledge and motivation necessary to exploit it*” (McMullen and Shepherd 2006: 141). On the one hand, the business opportunity is seen as fitting into the current situation in the market. On the other hand, the entrepreneur believes that the outcome of the BOC process, the new business opportunity, will produce what it is expected to produce. This indicates that entrepreneur feels that the created BO is feasible enough, and will thus introduce it to the market to gain some profit. At the same time, the entrepreneur feels ready to commit strongly to acting in whatever is necessary to start the business venture. This is in line with Bhave (1994), who describes these actions as *commitment to physical creation* and connects it to the decision to start the BOE process by actualizing the BO (Fig. 9).

Interestingly, a re-reading of the earlier literature reveals an additional process between the BOC and the BOE processes. This could be called the Venture/Firm Preparation process (Fig. 9). The traditional approach to the entrepreneurial process does not explicitly differentiate the various parts of the BOC process. Furthermore, it sees the definition of opportunity as a starting point for the process, and not the outcome. This is contrary to the logic used in the present study, since two things are acknowledged as essential in relation to TrP 2. Firstly, entrepreneurship is treated as one specific domain among many other business domains (or disciplines). As explained earlier, its role varies in the different parts of the process of creating new economic activities. Secondly, the idea of preparation is presented more or less explicitly in the earlier literature but it has been almost forgotten in the current literature. This is despite the fact that, for example, Lichtenstein, Dooley and Lumpkin (2006) include various tasks – such as organizing a start-up team, developing a prototype, hiring employees and making a first sale – in the start-up activities. Furthermore, they state that “*these activities are tactical because they represent specific, directed actions that lead to the goal of organizational creation*” (Lichtenstein et al. 2006: 165).

### 5.4.3 BOE process – to create the actual value for…

As stated earlier in the study, the role of both the BOC and BOE process is perceived as different during the various parts of the entrepreneurial process. Also, the domain itself (the entrepreneurship) has a much bigger role in the BOC process than in the BOE process (see Davidsson et al. 2000). However, it is emphasized here that although entrepreneurship has a minor role in the BOE
process “without exploitation there is no value creation and therefore no entrepreneurship” (ibid.: 3; Davidsson 2006b).

Knowledge gained in this research project show that entrepreneurship is important in the BOE process because it deals with changing, re-creating or re-vitalizing the BO of existing business venture. In contrast to the dominant view of the entrepreneurial process, the BOC process is seen here as emerging not only at the beginning of the process but also during the BOE process. Indeed, the results of the study indicate that they emerge simultaneously (Fig. 7; Fig. 22). Consequently, the new BO (the result of the BOC process) – along with other business competences (such as management, marketing and finance) has a role to play in the day-to-day running of the business.

The use of the BOC process as a strategic tool is in line with ideas that promote entrepreneurship in the form of corporate entrepreneurship (Burgelman 1983), strategic entrepreneurship (e.g. Ireland, Hitt and Sirmon 2003) or as entrepreneurial management, which is defined as a set of opportunity-based management practices in the firm context (Stevenson 1983, quoted in Brown, Davidsson, and Wiklund 2001).

A similar idea is evident also in the context of ambidexterity, which is seen as right on both sides (see Gibson and Birkinshaw 2004). This is consistent with Shane and Venkataraman’s seminal article (2000), in which they explain explicitly what influences the decision to exploit opportunities. However, almost in contrast to the views of the scholars mentioned above, Shane and Venkataraman seem to ignore everything that deals with activities in day-to-day running the business – other than entrepreneurial activities (see below). Perhaps career experience is an exception:

“We explain that the field of entrepreneurship includes research questions about how opportunities for the creation goods and services come into existence, how some people and not others discover and exploit these opportunities, and how different modes of action are used to exploit entrepreneurial opportunities. . . . and we explain that several resources – opportunity cost, financial capital, social ties, career experience, willingness to bear risk, optimism, self-efficacy, internal locus of control, tolerance of ambiguity, and need for achievement – influence the decision to exploit opportunity. Finally, we explain that access to capital, scale economies, learning curves, and complementary assets influence the mode of opportunity exploitation.” (Shane and Venkataraman 2001: 16)
It is not exceptional that these two processes are active at the same time in the business context. In fact, much of the studies on ambidexterity exist in leadership and organization literature as well as in that of innovation literature. For example, Gibson and Birkinshaw (2004) state that:

“A recurring theme in a variety of organizational literatures is that successful organizations in a dynamic environment are ambidextrous—aligned and efficient in their management of today’s business demands, while also adaptive enough to changes in the environment that they will still be around tomorrow (Duncan, 1976; Tushman & O’Reilly, 1996).” (Gibson and Birkinshaw 2004: 209)

According to these authors, there is a continuous need to revitalize, reform, re-create (or even create) the ongoing business, since the environment of every business venture “are always to some degree in conflict (for instance, investment in current versus future projects, differentiation versus low-cost production)” ibid.: 209). Although Gibson and Birkinshaw (2004) draw a clear distinction between structural ambidexterity (Duncan 1979, quoted in ibid: 209) and their own conceptualization, called contextual ambidexterity, both types are useful in the context of entrepreneurship. This is particularly so in the context of corporate entrepreneurship as presented by Burgelman (1983), since they deal with the conflicting demands for alignment and adaptability. This means that there is a need to exploit the existing BO and to explore new BOs in order to re-create the existing business (see March and Simon 1958, quoted in Gibson and Birkinshaw 2004: 210).

5.4.4 Venture / Firm Preparation

One of the earlier presentations of the idea of venture or firm preparation is presented (at least implicitly) by Casson (1982). He emphasizes the importance of judgmental decision-making in coordination the scarce resources at hand before the actual founding of the start-up. Davidsson and the PEG research team (2000) include this kind of coordination in the exploitation process, and not in the discovery process or between these two interrelated processes. However, they also refer to the need for preparation before the founding. They claim that market making might be the missing link between the two main processes that, together with resource acquisition and even with coordination activities, may promote and make it feasible to start the actual business activities.
“The exploitation process deals with resource acquisition and co-ordination of new resources, whereas market making can be regarded as part of both sub-processes (see Sarasvathy 1999a; Shane and Venkataraman 2000).”
(Davidsson and the PEG research team 2000: 2–3)

Davidsson *et al.* (ibid.) see market making as an activity in which the initial idea is dealt with by key would-be customers. An approach such as this parallels the effectuation (Sarasvathy 2001; Sarasvathy and Dew 2004; 2005). According to Davidsson *et al.*, market making describes the feasible ways of successfully introducing the business venture to the market. According to Fleetwood (2005), this is about *how to make a difference*, that is, how to stand out rather than just how to fit in. Currently, Wakkee (2004) is the only scholar to presents explicitly the process called *Preparation*, which she locates it between the BOC process and BOE process. However, in her model, this process is ambiguous, since it includes actions that are treated as elements of the previous process. During this process “the business opportunity is translated in a concrete business concept leading to exchange with the market” (ibid.: 68).

However, focusing on the latter part of the definition of Preparation, Wakkee (2004) extends the market making process put forward by Davidsson *et al.* (2000) and includes activities such as the creation of a new organization (Gartner 1985), the development of a network, the development of products or services and the business planning.

Finally, in the other end of the谱 there are scholars such as Roininen and Ylinenpää (2006), who seem to narrow the definition of preparation into a mere launching process (i.e., introducing the new venture to the market). This interpretation influences the tentative definition of the Venture/Firm Preparation process that isexploited in this study.

In conclusion, in the present study, the definition of the Venture/Firm Preparation process starts with ideas presented by Volery and Gomez (2000). They show how the outcome of the BOC process, the conceptual form of the new business opportunity, created in the Business state of world 1 will be brought into the Business state of world 2 (ibid.), in readiness for the organization creation. Volery and Gomez define this process as transformation from conceptual (but non-existing) into existence. In this, they rely partly on the creative destruction theory of Schumpeter’s (1934), as follows:

“Economic and managerial literature recognizes that the entrepreneurial action is typically characterized by a discontinuity in economic process
(Gartner, Bird & Starr 1992). This action creates a rupture in the existing business state of the world to give birth to a new organization. It is a jump from non-existence to existence, from potential to real without other continuity in the process but the role played by a specific individual – the entrepreneur.” (Volery and Gomez 2000: 4–5)

Although Volery and Gomez (2000) agree with the definition of the opportunity and with many of the activities included into the concept of preparation presented in literature above, they managed to focus on two issues that seem very important from the perspective of this study. Firstly, they identify resources and the resource holders. Secondly, they bring the resources together to enhance both the BOC process and BOE process but also the Venture/Firm Preparation process. Both of these issues highlight the connection between entrepreneur and social environment and how this can help the entrepreneur to acquire the necessary resources in the future (socially real in Fleetwood 2005; the fit in Nadler and Tushman 1979, quoted in Naman and Slevin 1993; Morris et al. 2005).

If the entrepreneur realizes that it is impossible to acquire the resources that are defined as critical (or necessary) to execute the BO in the chosen environment, the entrepreneur can either abandon the newly created BO totally or start Preparation process again. Alternatively, the entrepreneur can start the BMP to re-create the BO or start a totally new BOC process and go along with it. (Fig. 8)

Although the Venture/Firm Preparation process seems to include all the activities that are necessary and possible before the actual founding the new business venture, further studies are needed, with a clear focus on the process to generate feasible evidence on this insight.

5.5 Process of Creating the Business Opportunity (BOC process)

The BOC process starts with intentional actions directed toward creating of the BO. Intentionality means that the entrepreneur is willing to work with the initial idea in order to execute it by yet unknown ways in business context. After passing the Transition Point 1 (Fig. 9) the entrepreneur starts to work with the process of Business Ideating (BIP) in order to understand the initial idea. Then the entrepreneur starts to model the business – Business Modeling Process (BMP) – based on the outcome of the previous process. Finally, the entrepreneur will
generate a plan – Business Planning Process (BPP) – to describe the activities and resources needed to execute the BO.

From the entrepreneur’s perspective it is possible to define the intentional decision to start the BOC process with the BIP. This process is defined here as teleological because the entrepreneur is assumed to be a purposeful actor and adaptive (see Gibson and Birkinshaw 2004; Wakkee 2004) in creating the business venture, and the process to be started “inherently affords creativity as the actors involved in the process have the freedom to enact whatever goals it likes” (Van de Ven and Poole 1995: 516). Furthermore, “it allows for changing the desired end-state (or developmental paths) on the basis of interactions with the environment” (Wakkee 2004: 67).

In addition, because of the creativity nature of the BOC process, every single sub-process (BIP, BMP and BPP) includes elements of the CPS method. This means that the more or less creative result of the BIP is the starting point for the next creative process, the BMP. However, it needs to be noted that the nature of the planning process focuses more on convergent thinking than divergent thinking (see Ch. 5.5.3).

As the key characteristic of the nature of the BOC process is creativity, the process itself is seen as an emerging process characterized as more or less creative actions. Therefore, the outcomes of the BOC process will not be determined by the initial starting point: the Ideas for new Business Venture/Firm (Fig. 9). Thus, the creative nature of the process allows not only escaping the fallacy of path-dependency on the outcomes of the prior processes, but also finding and making creative solutions by exploiting the CPS method (divergent-clustering-convergent actions) in the current problems in every phase of the process. These solutions may be new only to the entrepreneur (personal creativity in Runco 2007, or everyday creativity in Richards 2007) or they can be new to the world (creative destruction in Schumpeter 1934).

To be creative while also being novel and feasible requires keen interaction with all others in the same reality. This interaction is not sufficient if it is based only on what happens inside the head of the key player of the BOC process, the entrepreneur. Therefore, there is a great need for double interaction in the form of double hermeneutics (Nørreklit 2006). This kind of double interaction in the social and political environment promotes the creation of ideas to be exploited during the whole BOC process, not only during the preceding BIP process, as is typically presented in the dominant literature. It also helps the entrepreneur to realize the value of previously invaluable issues and ideas. According to
Nörreklit, this understanding operates like a gatekeeper, letting some ideas through while stopping ideas that do not fit in the previous value or belief systems.

It is important to note that all the entrepreneur’s activities in the BOC process are characterized as more or less creative and interactive in every phase of the BOC process (BIP, BMP and BPP).

### 5.5.1 Ideating of the business opportunity – BIP

The ideating process generates the solution – Idea of Business Opportunity (IofBO) – to help entrepreneur carry on with the BOC process. It starts with the initial idea for the business (Ideas for new Business Venture/Firm; Fig. 9) and its main purpose is to answer to the questions: *What kind of business is the initial idea about?* The answer should include issues that show the business-like nature of the IofBO. A good candidate is the 4Cs (customers, consideration, connection, and commitment) presented by Gartner and Bellamy (2010). According to these authors the first C (Customers) are those people (or firms, or institutions, etc.) who are expected to buy firm’s goods or services. The second C (Consideration) is the value for the customers the goods (or services) are expected to provide. The third C (Connection) is about the ways to identify and reach key customers. Finally, the fourth C, (Commitment) shows the dedication of the entrepreneur to the BO and his or her willingness to implement it. (Gartner and Bellamy 2010: 153) While it is impossible to give answers to all four Cs in all cases, at least one C should be included in order to treat an idea as IofBO.

The Business Ideating Process (BIP) of the expected BO is in line with the CPS method of the revised rodel proposed by Tassoul and Buijs (2007). The process starts with the divergent part of the BIP. This is about creating as many possible and also not–yet–possible solutions to the tentative question above. The questions may include:

- What do I (or we) know already about the initial idea for the potential new business venture?
- What can be done?

It is assumed here when conditions are stable, the number of possible (but not necessary feasible) alternatives is smaller than when conditions are dynamic.
Under the latter, the number is expected to be much larger because of the lack of experiences about what works and does not work in such circumstances.

The clustering part of the BIP is about combining and utilizing (inventorizing according to Tassoul and Buijs 2007) all the possible what if solutions (see Ardichvili et al. 2003) generated in the previous phase. The present study follows Tassoul and Buijs in acknowledging that the clustering part of the BIP is important and perhaps the very source of newness. There are two reasons for this. Firstly, it reveals the usual issues related to the initial idea for the Business Venture/Firm as well as the unexpected issues lying outside the known space of ideas: the hypothetical space (Space 2 in Tassoul and Buijs 2007). Secondly, new and surprising ideas emerge if the known but yet unrelated ideas are put together (i.e., the combinative nature of the clustering). This will open up possibilities to generate novel ideas. Question in the clustering part of the BIP may include:

How could they be combined?

What kinds of combinations interest me (or us)?

In the theoretical framework, it is assumed that clustering is the phase where an initially less creative idea for the new business venture or firm can be transformed to more creative. In fact, Drucker (1985) acknowledges clustering as one of the seven sources of innovation. However, a more creative initial idea could be clustered into a combination of commonly known ideas. These may result such a combination that supporters of the currently dominating industry recipe then treat as the most feasible way to carry on with the process.

The last part of the BIP, the convergent thinking, is about ending the creation of the selected cluster of ideas based on the results of the previous two phases. The entrepreneur’s main task is to create the most feasible idea (out of all possibilities) to carry on with the BOC process. In the convergent part of the BIP, question may include:

In what kind of business I (or we) want be in?

What is the business like from the point of 4Cs?

The key about the BIP is that its outcome allows the entrepreneur to tell others in what sort of business entrepreneur wants to be part of, and what sort of business will be created if the BOC process is completed successfully. The nature of this knowledge is like an elevator-pitch; the business-wise possibility (e.g., a market gap, an unexploited resource, a latent need for something specific in the market
and a way to serve it) to start to work on the specific idea with the person(s) involved and committed to carrying on with the idea. At this point it is not necessary to know the details about how the BO will be exploited. This is especially so if the IofBO is likely to be exploited in a very dynamic business context, where information about what does and does not work (i.e., the industry recipe) is scarce. In the stable context, the BIP and the BMP may overlap because of the strong influence of the dominant industry recipe; the focus is on the BIP because the outcome of the BMP is treated as given.

5.5.2 Modeling the business opportunity – BMP

In this study, the concept of BM (the outcome of business modeling process) proposed by Morris, Schindehutte and Allen (2005), Morris, Schindehutte, Richardson and Allen (2006) and Amit and Zott (2001) is followed, since they offer a feasible way to understand and describe how entrepreneurs model their ideas into conceptually feasible business models. This will be the case despite the fact that Morris et al. (2005) build their model on the conceptual and theoretical roots and the central ideas of field of the business strategy literature and its theoretical traditions.

The BM as it is presented in various articles by Morris and Schindehutte, Allen, and Richardson (2005; 2006) – will be reviewed shortly. The BM consists of three increasingly specific levels of decision-making situations where certain questions need to be answered and decision to be made: foundation, proprietary and rules. According to the authors, the need for three different levels reflects the different managerial purposes of a model. At the foundation level, generic decisions regarding what the business is and is not need to be made to ensure the internal consistency. At the proprietary level, it is important to decide the BM’s purpose to enable development and re-development of unique combinations among issues of the business. The key question is: How value can be created in each of the six decision areas? The rules level provides specific guidance to business operations and to govern execution of decisions made at the other two levels.

Morris et al. (2005) emphasize the six basic decision areas that need to be considered at each level. The six questions are as follows:

How will the firm create value?

For whom will the firm create value?
What is the firm’s internal source of advantage?

How will the firm position itself in the marketplace?

How will the firm make money?

What are the entrepreneur’s time, scope, and size ambitions?

The above-mentioned authors argue that the entrepreneur may identify novel ways to solve out how to solve questions such as these in a specific situation. This means solving the problem of how to create unique combinations at the proprietary level. Solutions based on decisions made at the foundation level are generic, while those made at the proprietary level they are concerned as specific.

The BMP, which is based on the theoretical framework of the study, starts when the entrepreneur is confident that the IofBO (the outcome of the BIP) is feasible as a business, and it can be communicated to those in entrepreneur’s social networks more business-wisely (see 4 Cs proposed by Gartner and Bellamy 2010). During the BMP, the entrepreneur continues to exploit the CPS method to find detailed and appropriate answers to questions such as:

What kind of business is the new (partly expected and partly emerging) business venture going to be?

The application of CPS method to the BMP proceeds as follows. During the divergent phase, the entrepreneur generates knowledge of BMs considered to be interesting and feasible. The following questions may be asked:

What kinds of BMs do people utilize in the industry where the new BO is thought to be exploited?

Could the BMs used in other businesses be applicable here also?

The clustering phase starts with activities such as analyzing the possible (and non-possible) BMs that have been recognized or discovered during the previous phase. Th entrepreneur then clusters these BMs into various combinations. Finally, the entrepreneur puts them in order of preferences. Appropriate questions here include:

What do I (or we) have here?

Could this be combined feasibly with that?

What is the most interesting combination?
The convergent phase is about deciding whether to move on with one (or many) suitable BMs. Since convergent thinking is about feasibility – with reasonable amount of novelty, of course – the specific context in which the BM (or BMs) is supposed to be actualized will become increasingly important. This is important because other mechanisms may either promote or restrict the feasibility of the model. Other mechanisms may act even against the emerging BM, making it impossible to exploit it in a real-life context. One way to avoid this is to focus on the influence of the development phase of a specific industry (or the economy as a whole), and dominant practices in the industry. Consequently, relevant questions may include:

- Which combination is the most feasible as basis for further planning?
- How can the promising BM be selected?

The BMP is about creating a conceptual model of the business venture. That is, using the above-mentioned definition of the BM (the six questions in Morris et al. 2005) and the teleology of entrepreneurship (value creating) the relevant questions may include:

- How will it create value?
- For whom will it create value?
- In what market does it want to operate?
- How will it operate in the chosen market?
- What level of profit (pecuniary profit or otherwise) does it want to make?
- What does all this mean to the entrepreneur?

5.5.3 Planning for the business opportunity exploitation – BPP

For the purposes of the present study, the first part of the definition of the planning process (gathering information from the existing reality and to utilize it as granted in the context of the existing BOs) is excluded (or even excluded) from the definition of the Business Planning Process (BPP) since an approach such as this is too strongly connected to the perspective of reality of the naïve realism. Consequently, to gather existing information from existing BO is insufficient because the aim here is to exploit creativity in the BPP.
Furthermore, and perhaps even more importantly, the main focus of this study is shared with the second part of the definition (the process). The process relates to how to utilize the conceptual knowledge learned during the prior phases of the BOC process in order to actualize the conceptual BO in the real business environment. This is in line with the critical realist perspective, which sees the role of the entrepreneur as an actor who uses existing knowledge and creates new knowledge through actions (see the value continuum between reproductive/less creative and transformative/more creative actions above). It is acknowledged here that in the business context, the process of value creation and the way how the process is planned depend on customer feedback and the ongoing assessment of customer needs. This leads to a question such as:

What kinds of actions need to be conducted to transform conceptual BM into a more concrete and exploitable BP?

The role of BPP, with the BP as its outcome, is understood here as a key element in the BOC process because its implementation starts the next sub-process of the entrepreneurial process, the Business Opportunity Exploitation process (BOE process). It is also believed in the present study that the ideas expressed by Delmar and Shane (2003; Ch. 4.2.5) above are widely shared. There are two reasons for this. Firstly, their ideas support the need to include planning activities in the BOC process (or in the pre-startup process). Such activities include gathering and analyzing information, evaluating tasks, identifying risks and strategy, projecting financial expectations and documenting all these feasible elements as the completed BP.

Secondly, although Delmar and Shane (2003) do not see the Venture/Firm Preparation phase (Fig. 9) as a possible sub-process in the entrepreneurial process, they do believe that activities such as “buying facilities and equipment, seeking external capital, and initiating marketing and promotion (Bhidé, 2000; Carter et al., 1996)” (1165) are well suited for the purpose of the Venture/Firm Preparation. These could easily be carried out in the Venture/Firm Preparation phase if it were located between the two sub-processes of the entrepreneurial process, the BOC process and the BOE process.

“Specifically, we argue that planning helps firm founders to make decisions more quickly than with trial-and-error learning; to manage resource supply and demand in ways that minimize time-consuming bottlenecks; and to turn
abstract goals into concrete operational activities more efficiently.” (Shane and Delmar 2003: 1166)

If the CPS method is seen as a key part of the BPP, the nature of the process is seen differently here than in the traditional view. However, the main focus is the same: to be ready to exploit the newly created BO.

“It is most often not about generating options at random, it is much more a design job and as such it is the work of expert designers, to a large part using expertise to make things work. As Vanosmael and De Bruyn (1990) coined it: it is about ‘Form Creativity’ rather than ‘Vision Creativity’, in other words, how to make something work in a tangible world, and thus in materializing an idea.” (Tassoul and Buijs 2007, 21, parentheses and quotation marks in original)

In theoretical framework of the present study, the tripartite BPP shows how to transform creatively (see Form Creativity above) the conceptual BM into the BP. The outcome of the BPP (the BP) is ready to be exploited in the real-life context during the BOE process. The following explains this tripartite planning process from the perspective of the CPS. Firstly, the BPP is about finding acceptance for the created BM in the society, in a social, political and (particularly) business context. The latter means that the context of specific industry – defined either locally or globally – is very important. Note that when planning the actions necessary to implement the conceptual BM, the emphasis is on business planning rather than strategic planning (Delmar and Shane 2003). The way the CPS is utilized here is in line with Tassoul and Buijs (2007), who refer to the experiential learning cycle. It is about a cyclical process of “reflecting, conceptualizing and elaborating, iteratively developing an idea into a comprehensive materialized design” (ibid.: 21).

Since Delmar and Shane (2003) argue in favor of business planning instead of strategic planning in the context of emerging new business ventures (what they refer to as new firms), then the following is perhaps the most important question to be asked during the BPP process:

What elements of a plan are the most feasible and practical in terms of actualizing the conceptual BM in a real-life context?

The BPP starts with the outcome of the BMP, the BM. In fact, there can be more than one BM to be considered in the following process. The key characteristic of
the expected outcome of the BPP is the form creativity of the BP. As a result, such a plan puts more emphasis on the feasibility of the BP rather than on its novelty. The main reason for this is the focus on creating the *ready-to-be-exploited* BP for the real-life exploitation in the BOE process.

### 5.6 Discussion of BOC process

During the present study, several issues came to light. Perhaps the most critical is the lack of a widely shared definition of entrepreneurial process. In fact, some advanced scholars state informally that it is an overwhelming task to engage it in at all. Others state that one solution would be to exclude the discovery from the definition of entrepreneurship; indeed, they state that the main focus should be on the creating process.

It seems clear that scholars who began their research during the early 1980’s (such as Gartner 1985; 1989) or during the 1990’s (such as Bhave 1994) and some current scholars (such as Shane and Venkataraman 2000, Davidsson 2003a or Ardichvili *et al.* 2003) share a theoretical basis for the scientific discussions in this field.

It is worth mentioning that, in literature, there are only a few feasible models (or theoretical frameworks) that cover the research tasks and research questions that have been the focus of the present study. Those that influenced – positively and negatively – the theoretical base of the study, are as follows. Gartner (1985) presents the key factors of the entrepreneurial process (environment, entrepreneur, process and the opportunity). However, he fails to show the necessary connections between these factors. The role played by Bhave (1994) is very important in terms of the theory of entrepreneurial process, although he is generally undervalued. He explicitly shows the process with two different starting points. It seems that Bhave’s ideas precede the both the discovery process and the exploitation process. The two sub-processes of the entrepreneurial process presented by Venkataraman (1997) and Shane and Venkataraman (2000) opened up the field to a wider audience of scholars of the entrepreneurial process. It is widely acknowledged that these two scholars finally managed to legitimate the definition of the process as including two sub-processes (discovery and exploitation). Recently, the influence of Venkataraman (2002) has increased because of his more explicit focus on *what is happening in the discovery process*.

Perhaps the strongest influences are coming from Davidsson (2003a, 2003b) and Davidsson and PEG research group (2000). Davidsson (2003a; 2003b)
presents a coherent picture of an entrepreneurship theory, or a suggestion of entrepreneurship as scholarly domain (to use Davidsson’s own vocabulary). This is based on Venkataraman’s, Gartner’s ideas, and also Davidsson’s own ideas about what needs to be included in the theory of entrepreneurial process and how it can be utilized. Van der Veen and Wakkee (2002; 2004a; 2004b) and Wakkee (2004) is important since they support the idea of one additional process between the discovery and exploitation: the preparation process. This process is omitted from the present study, although it seems clear that there is a need for further studies in order to understand the transition from discovery to exploitation. The same kind of insight is (at least implicitly) presented in the models presented by Bhave (1994) and Davidsson (2003a).

Based on ideas already presented previously in literature, this study will present the BOC process as the feasible solution for this ambiguous situation. The BOC process itself has its theoretical basis in the CPS (Tassoul and Buijs 2007) and the critical realist perspective (Leca and Naccache 2006). There are significant departure points, such as the Discovery Theory and Creation Theory (Alvarez and Barney 2008) and Rational Action and Creative Action (Dunham and Venkataraman 2002). It should be acknowledged that there are already findings and insights in literature that are more or less ready to be used with emerging ideas, in the context of the BOC process. All this is in line with the idea of sources for the becoming business presented by Schumpeter (1934), who refers to sources for the new combinations to be introduced later in the market. Also, Shane (2000) and Shane and Venkataraman (2000) discuss the informational sources of opportunity, but they do it mainly from the perspective of new technology.

Furthermore, critical realism is acknowledged here as a coherent research perspective in the study entrepreneurship (Blundel 2007; Leca and Naccache 2006; Neergaard and Ulhoi 2007; Perry, Riege, and Brown 1998). Unfortunately, there are few examples to illustrate the research process, from either a critical realist perspective, in general, or a retroductive approach, in particular (Danermark et al. 2002; Leca and Naccache 2006; Sayer 2000).

Furthermore, based on the critical realist perspective, it is important to point out two things. Firstly, it seems that the two elements (the entrepreneur as a role and the environment within which entrepreneur interacts with other people) co-generate BOs in the shared BOC process. Through such co-creating, BOs can sometime emerge at the Empirical level of the Reality; sometimes they do not because the other mechanisms interfere in the BOC process (Ch. 5.1.2). Secondly,
based on the other key characteristic of critical realism, it is also assumed here that if the BO emerges at the Empirical level, it will also modify (or even change) the existing causal powers and mechanisms. Eventually, these modified mechanisms will affect the generation of future BOC processes.

To sum up, the recursive nature of the BOC process needs to be mentioned. Fig. 4 depicts the importance of the BOC process and its outcome, the newly created BO. To highlight the whole process means that the outcome (the BO) is not based on only one activity, such as business planning. Such approach opposes what is assumed here: The BO (the outcome of the BOC process) always include activities focused on Business Ideating Process (BIP), Business Modeling Process (BMP) and Business Planning Process (BPP). This will be the case even if the BO seems to have its basis in the currently dominating industry recipe.

The illustration also shows that the BOC process is non-linear. The creative and recursive nature of the BOC process (see the arrows in Fig. 4) becomes real when the entrepreneur fails to explicate the IofBO, BM or even the BP. It is believed here that still, a reasonable amount of activities is needed in order to understand the BO in a specific situation. Such activities may be based either on the existing industry recipe or on creative thinking. In both cases, these are seen here as more or less creative rather than as either-or creative.

The recursive and creative approach facilitates creativity (in the form of CPS) during the whole BOC process. Even if changes made in BPP are minor, they directly affect the BMP. In the same vein, the BMP needs to be re-opened in order to be re-created. If the changes are major, it is not enough to change the BM by re-opening the BMP; the IofBO needs to be re-created by re-opening the BIP. All this needs to be done to create value for all those who are related to the process and its outcomes, owning to the definition of business – and the entrepreneurial process.
6 Step three: Empirical Case Study

The entrepreneur, the environment, and the Business Opportunity (BO) (Fig. 4) have been seen in the previous chapters as the key concepts in the process of creating business opportunities. The theoretical model of the BOC process (Fig. 9) based on these concepts will be empirically scrutinized in this chapter.

The third step in the research design, the case study, focuses on studying the entrepreneur and his or her experiences in the BOC process. This will be done through three relationships: between the Entrepreneur and the BOC process, the environment and the BOC process, and finally between the environment and the entrepreneur. In addition, the case study will focus on the relationship between the two sub-processes of the entrepreneurial process (the BOC process) and the process of exploiting the BO (the BOE process).

Since the theoretical basis of the former phenomenon, the BOC process, is seen through the lens of critical realism it is evident that the conceptual framework of the study (Fig. 5) will guide the case study process. The framework assumes that while various structures and mechanisms at the Real level of reality are able to generate processes and events they may only happen (or may not happen) at the next level of the stratified social reality, the Actual. Thus, they are not directly observable at this level but only at the Empirical level. In fact, Leca and Naccache state that “we cannot see objects and structure, only the effects of them” (2006: 634). This means that what is perceivable at the level of the Empirical presents a fraction of all possible, both actualized or non-actualized processes and events generated by the causal powers of the social practices, structures, mechanisms, and human agencies. This is in line with Elder-Vass’s interpretation of Bhaskar’s three domains concerning the social reality (2004; 2009).

According to the critical realist perspective, while the elements of the Real level of social reality are taken as given by people living in any context situated in time and space is also acknowledged here that human actors are able to affect the very same context. Thus, they are able to change these same elements.

Furthermore, for the purposes of the present case study the elements of the BOC process (Fig. 4) are defined as follows: Firstly, the Environment is defined as Business/Entrepreneurship (i.e., the pre-existing social structures proposed by Archer in the Transformational Model of Social Action, 1998) that are, on the one hand, created by people of the past (“the past actions of humans interacting with past social structures” in Fleetwood 2005: 204, see the whole quotation above:
165), and on the other hand, structures such as these can be changed by the people operating at present. Furthermore, Business / Entrepreneurship is characterized by change, complexity, and creativity by nature.

In the management literature a phenomenon such as this is aggregated, for example, into the concept of the industry recipe. A concept such as this represents the business-specific world-view of the actors of some particular industry and at some particular time concerning what is feasible in the business (Spender 1989). In many cases the industry recipe is more implicit rather than easy to perceive by everybody. This means that for a person who is not familiar with a particular industry (i.e., an outsider) it is very difficult to understand what actually works and does not work here, whereas an insider may take knowledge such as this as given (or treat it as more or less tacit).

Human agency in terms of all other people – as well as the key player in the process, the entrepreneur – is the second key causal power located at the Real (see Elder-Vass 2010) and it affects as a mechanism for something (or against something) to be actualized (or not) at the Actual. Thus, human agency has the power to change the existing structures and mechanisms and so on at the Real. One specific case of these powers is the other social practices that mediate between the essential structures of the Real and the processes and events of the Actual (see conditions (other mechanisms) in Sayer 2000: 15). From the perspective of the present study social practices such as these are for example public institutions (politics, legislation, technological, economic, social demographic trends, and changing needs and preferences, etc. (e.g. Venkataraman 2002).

Finally, in the context of the process of creating the BO, specifically, social practices are defined as powers influencing three sub-processes at the Actual: BIP, BMP and BPP. In addition to these, the method of creative problem solving (CPS; Tassoul and Buijs 2007) is treated as a practical approach to conduct each of these three sub-processes. Thus, sub-processes such as these, share the nature of the Business; that is, both focus on change and creativity and the teleology of value creation.

It is accepted in the study, that it may be the case that the entrepreneur who is embedded in the process can typically narrate only what he or she is able to observe at the Empirical level. In a case such as this then, the entrepreneur is able to talk about only the outcomes of those processes or events actualized at the Empirical level rather than how a particular process that generated the outcome observed actually started at the Actual. Furthermore, it is also expected that the
outcomes that didn’t managed to become actualized will only be indirectly observed.

All above highlight the role of the researcher as an interpreter. This means that it is the responsibility of the researcher to make theoretically grounded combinations and conclusions based on research material generated during the research process to form – creatively enough – a coherent and detailed understanding of the phenomenon. That is, the phenomenon that includes both the process of creating the business opportunity (BOC process) as well as its relationship with the process of exploiting the business opportunity (BOE process).

6.1 Outlining the case study research strategy

The previous chapter disclosed the scientific basis of the critical realism both from the perspective of ontology and epistemology as well as from the methodology. It has been shown above that the critical realism perspective understands the reality simultaneously as existing independent of the current populace and as a reality that could be either reinforced or changed through the activities of the same group of people. This is the case especially with the social reality, that is, the world in which all human beings are more or less embedded from the first day of their lives. From the epistemological point of view, people are able to discover existing but yet unknown details and to create new and inherently novel knowledge of the reality they are focusing on.

It may be difficult for those actors who have intentions to start to act as entrepreneurs to identify and transform events into experiences since these exist at the level of the Actual and thus are not to be experienced during their day-to-day activities. However, it may be possible for a researcher “to identify events that might have escaped actors’ [laymen] perception, because of their [researcher’s] particular focus and training. Indeed, the domain of actual is the realm of theory building by scholars” (Leca and Naccache 2006: 630, brackets added).

According to Denzin and Lincoln (2005) both the interpretive paradigm and critical paradigm has become more popular in qualitative research. Researchers, who use qualitative research paradigms and perspectives, locate themselves between naïve positivism and post-structuralism (seen as the opposition to the former) (ibid.) and may use research strategies such as case study research strategy. On example of this kind of perspective is critical realism as preopose for
example by Sayer (2004), Fleetwood (2005), and Willmott (2005). Following this logic, the paradigm used in entrepreneurship research can be seen related to the complex interplay between scientific inquiry and its relationship to knowledge creation. This means the interplay between epistemology and ontology; people’s ideas of the world and their existence in it.

When the paradigm is understood as a mediator and a link between the philosophical basis and the actual definitions and methods used to “systemise observation, describing ways of collecting evidence and indicating the type of tools and techniques to be used during data collection” (Cavaye 1996: 227, footnote 1), it can used as a tool in the development of specific methodologies and conceptualizations for entrepreneurship (Kyrö and Kansikas 2005, 134–135). Schildt et al. (2006) have emphasized the importance of the alternative methodological approaches because they may “enrich our understanding of entrepreneurship research and the linkages that exist across various groups of universities, scholars, and theoretical perspectives” (Schildt et al. 2006: 411).

By re-categorizing the attributes of the phenomenon that are observed, described or measured in the case study such as in this research, it is possible to form or create new alternative frameworks (or typologies) for refining and recreating the existing statements and models on entrepreneurial process. This kind of theory-building approach can be seen as similar with the mixed-methods movement proposed by Denzin and Lincoln (2005: 9). In spite of the fact that the mixed-methods movement is presented in a negative light in Denzin and Lincoln because it seems to take qualitative methods out of their natural home (the critical and interpretative framework). One important consequence from this is the division of research into two categories: exploration suitable for qualitative inquiry and confirmation for quantitative research. In the words of Denzin and Lincoln:

“Qualitative research embraces two tensions at the same time. On the one hand, it is drawn to a broad, interpretive, postexperimental, postmodern, feminist, and critical sensibility. On the other hand, it is drawn to more narrowly defined positivist, postpositivist, humanistic, and naturalistic conceptions of human experience and its analysis. Further, these tensions can be combined in the same project bringing both postmodern and naturalistic, or both critical and humanistic, perspectives to bear.” (Denzin and Lincoln 2005: 7)
The critical realist approach “as an antipositivist movement in social sciences closely associated with the works of Roy Bhaskar and Rom Harré (Danermark, Ekström, Jakobsen & Karlsson 2002)” (Denzin and Lincoln 2005: 13) will juxtapose the positivist notion of world of events out there. These events are seen as observable and independent of human consciousness, and with the insight of knowledge in terms of the external world as socially constructed (ibid.) While Denzin and Lincoln, on the one hand, refuse to think that critical realism as it is defined above, and on the other hand, will keep the social science afloat, however, they argue that critical realist believes that “reality is arranged in levels and that scientific work must go beyond statements of regularity to analysis of the mechanisms, processes, and structures that account for the patterns that are observed” (ibid.)

The main focus of this study is to understand through critical realist lenses what happens in the entrepreneurial process: How the entrepreneur forms (or creates) the Business Opportunity (the BO), the basis of the new business venture. The case study approach is thought as feasible research strategy to study the phenomenon. This is in line with Cavaye (1996), who states clearly how a case study (or case research study, or case research as she prefers to call it) “can be carried out taking a positivist or an interpretivist stance, can take a deductive or an inductive approach, can use qualitative and quantitative methods, can investigate one or multiple cases” (ibid: 227). In addition, the case study research is suitable for investigating a predefined phenomenon with aims to contribute “to knowledge by relating findings to generalizable theory” (ibid: 229). Thus, case study seems to be valuable in developing and refining existing concepts and theories for further studies.

Cavaye (1996; also Perry 1998) compares the key characteristics of case research against other research approaches (field studies, action research, application description and ethnography). A pure case research uses case method in order to aim for understanding of context, does not define a priori constructs, allows to focus on topics defined by researcher, having no intent to interference in phenomenon, attempts to contribute to knowledge, relates research findings to generalizable theory and allows interpretation from researcher’s point of view (see Table 1 in Cavaye 1996: 231). The other related strategies fail to reach at least two characteristics.

According to Cavaye (ibid.) field studies fail to aim for understanding the context, but will utilize existing constructs. Action research does not allow researcher to define the topics of the research, but it allows a certain amount of
From the different possible types of case studies (linear analytic, comparative, chronological, theory-building, suspense, and unsequenced (Yin 2003); extensive and intensive (Erikson and Kovalainen 2008) two specific types of case studies are the most feasible for the purposes of this study. First, the intensive case study allows a description of “how the process in question works in a particular case or small number of cases” (Sayer 1992: 243) when based on corroboration. Second, the extensive case study, allows – in theory – the testing and confirmation of the initial model (or theory) chosen for the case study since it “focuses on mapping common patterns, mechanisms and properties in a chosen context for the purpose of developing, elaborating, or testing theory” (Erikson and Kovalainen 2008: 119).

According to Yin (2003) three principles are essential in case studies in general: first, triangulation, second, a database and third, a chain of evidences. The use of triangulation assures that reasons given are collected from many different sources. In this study the use of material produced both in research project such as semi-structured interviews as well as existing material such as media texts and company’s web pages offer good opportunities to examine the phenomenon. The database includes the careful organization of the research material generated during the study. With the help of a strong chain of evidence the readers are able to follow the steps of the analysis of research materials and conclude the findings of the researcher.

While literature on entrepreneurship offers many various ways to define entrepreneurship, however, it possible to form a feasible model based on the earlier literature and to test it in a real-life context. This is the case when we are abductively leading away (Chiasson 2001) from traditional thinking in order to surface unexpected questions. Then, it is necessary to pursue wider – and perhaps more challenging – theoretical basis to build alternative statements of the entrepreneurial process.
6.1.1 Case Study method

Bygrave’s (1989) conclusion that “entrepreneurship is not a smooth, continuous linear process and as such should not be studied using methods that were designed for such processes” (Grant, Gilmore, Carson, Laney, and Pickett 2001: 67) highlights the need for an in-depth understanding of the entrepreneurship and entrepreneurial process that is unlikely to happen by quantitative research (Daft and Weick 1983). When researcher wants to understand a phenomenon that is emerging, tending towards consolidation, or non-linear, complex or any combination of these, then a quantitative, deductive or isolating approach will actually take the study further away from reaching the tasks presented here (see Grant et al. 2001). Hofer and Bygrave (1992) have argued that because the holistic nature of the entrepreneurial process, rich qualitative research material generation such as an interview is more effective than a questionnaire. Eisenhardt and Graebner (2007) also highlight the importance of interviews as the primary source of research material – at least in the context of strategic decision-making.

One research method to meet the challenge presented above is the case study method. It has been presented in the previous literature on social sciences that the case study method has a long history, and the development from early accounts of journeys and from so-called case works (the first generation of case studies) to the second generation of case studies explicitly demonstrates the usefulness of this method16 (Johansson 2003: 6–7). According to Johansson, the main aim of the second type of case studies is to make method as explicit as possible by focusing questions such as: “How are findings validated? How is a case for study selected?” (ibid.: 8).

All four forms of triangulation are seen as important tools for validating the material generated in case studies: research material source triangulation, theory triangulation, investigator triangulation and methodological triangulation (Denzin 1978; Eisenhardt 1989; Johansson 2003; Stuke 1995; Woodside and Wilson 2003). With the versatile use of case study method the researcher is able to bridge “the gap between positivism and hermeneutics as a philosophical foundation of the social sciences” (Johansson 2003: 6–7), and to work between various paradigms (Burrell and Morgan 1979) in a way that is referred to working in “the blurred transition zones” by Gioia and Pitre (1990: 597).

Drawing on Silverman (2005) and Gondo, Amis, and Vardaman (2010) the methodology of the present study is defined broadly as qualitative methodology. Flyvbjerg (2006) favors case study research more explicitly and argues that “the
case study is a necessary and sufficient method for certain important research tasks in the social sciences, and it is a method that holds up well when compared to other methods in the gamut of social science research methodology” (ibid: 241).

Hence, it is understood here that the case study research strategy offers a good opportunity to gain knowledge about what happens in entrepreneurial process, in general, and the process of creating the business opportunities, in particular.

**Intensive or extensive case study**

The available case study method usable for this study are either the intensive case study mode or the extensive case study mode as they are presented by Eisenhardt (1989), Dyer and Wilkins (1991) and Eriksson and Kovalainen (2008). To select between these two options two issues is to connect them to the goals of the research and to the result generalization. The intensive case study’s main goal is to interpret and to understand the uniqueness of the selected cases, whereas the extensive case study focuses on comparing one case with another and finding explanations (Eriksson and Kovalainen 2008).

From the perspective of the generalization, there are reasons to prefer the extensive case study mode to intensive case study mode because the former offers better possibilities for generalization of theoretical ideas, concepts and patterns (ibid.) that emerge from the data. This means that the extensive case study promotes the refining (or modifying) of previous theories on entrepreneurial process. The intensive case study model, on the other hand, focuses more on the individual cases.

According to Eriksson and Kovalainen (2008) there are several differences in how to use cases in intensive and extensive case study design. Perhaps the most important feature of extensive case study research is that “...themes, issues and questions to be studied are more or less predefined in some way. They can be planned deductions of prior research or based on the pre-given theoretical interest of the researcher.” (ibid: 123, bold in original).

The main reason to favor the extensive design is because it focuses clearly on “mapping common patterns and properties among cases” (Eriksson and Kovalainen 2008: 118; Woodside and Wilson 2003). This kind of objective is in line with research through critical realism and its purposes to understand underlying mechanisms and structures in generating events at the Actual level.
This is opposite to the design of the intensive case study, which is directed more at “finding out as much as possible [at the Empirical level] on one or a few cases” (Kovalainen 2008: 118, brackets added). Furthermore, the extensive case study design supports the aim of the present study with a clear focus on the process of creating the business opportunity, whereas the intensive mode seems to focus on either individual (or team) entrepreneur or the new start-up firms.

If the purpose is to make the study as theoretically grounded as possible, this favors the extensive case study design since it either promotes the testing and extending of the prior theory (Johnston, Leach, and Liu 1999) or the initial forming of a new alternative theoretical framework (or theory) (Eisenhardt 1989, Woodside and Wilson 2003). Furthermore, it is important from the perspective of critical realism that it acknowledges the existing reality and a keen relationship between the different levels of reality, through which the extended or alternative theories are understood and explained. This highlights the key role of the interplay between the empirical world and the theory.

To match the empirical world and a theory of it is to go “back and forth between framework, data sources, and analysis” (Dubois and Gadde 2002: 556). This needs to be done in ways, which do not force the research results to fit in the framework. In those cases where the pre-structured framework needs to be challenged, a deep understanding about the phenomenon is needed.

Hence, direction and redirection of the study is an important feature in achieving a matching fit between the case and the theoretical framework – the world and the theory. A procedure such as this can be used as a guiding tool for research material generation for finding the match since “most data collecting activities are directed towards the search for specific data in line with the current framework. These activities need to be complemented by efforts aiming at discovery. This may result in redirection of the study” (ibid.).

A typical interpretation of the case study is “to describe cases studies as linear process” (Dubois and Gadde 2002: 555). While the common conceptualization of the case study process is thought of as a number of planned and subsequently conducted phases, it is possible to follow Dubois and Gadde and say that “the researcher, by constantly going ‘back and forth’ from one type of research activity to another and between empirical observations and theory, is able to expand his understanding of both theory and empirical phenomena” (555, quotation marks in original).

If this back and forth approach is acknowledged as feasible in carryin out the case study, then the key question will be: Is it better to start with a tightly
structured theoretical framework or to go into the field with virtually no preconceptions? According to Lee and Lings (2008) there are pros and cons to both approaches. The start with the pre-structured case (Saxl and Robinson 1987; Miles 1990; Miles and Huberman 1994) the case is focused from scratch more thoroughly on the predefined theoretical framework and research problems. This will result as a clear expectance of how it will be scheduled to generate the research materials and to analyze them. On the other hand, it is possible to fail to see new insights inductively, if the researcher is too lax in their duties. This is in line with Dubois and Gadde when they argue:

“The main objective of any research is to confront theory with the empirical world. What we argue above is that in systematic combining this confrontation is more or less continuous throughout the research process. How this process develops is directed by another confrontation — between the evolving framework and the evolving case.” (Dubois and Gadde 2002: 555)

While the longitudinal research design is treated very desirable method to generate research material, however, it is practically unwieldy for the purpose of the present study. This is because the process of creating the business opportunity is a difficult to be perceived by outsiders at the time of the start of the process. That is, it is difficult to find people who will (or are able to) explicate at the very beginning of the process that they actually have a thought about some kind of idea that might be useable in this or that kind of business (i.e., the Idea for New Business Venture/Firm). This is in line with Weick who states that “reality that people can know what they are doing only after they have done it” (Weick 1995: 24).

It is also held here that it is difficult to find people who have realized that they have intentions to start the entrepreneurial process, but not yet realized it. Even the first truly entrepreneurial part of the process, the Business Ideating Process (BIP) (Fig. 8) will happen mainly in close relation between the entrepreneur and the people close to him or her. Therefore, it is a difficult situation for a researcher to get access to that kind of knowledge. The situation will be easier as the process goes on to recognize people who starts the modeling and planning processes: This is te case, because in many cases the entrepreneur will need (or is willing to ask for) some advice or new information to carry on in the process.
After the entrepreneur has been recognized as a good respondent for the longitudinal case study, it is possible to ask this intending entrepreneur to start gathering research material by writing diaries or process logbook (Wakkee 2004). This arrangement, however, would require a considerable level of commitment by the entrepreneurs. In addition, a moderate emotional involvement (Huber and Power (1985) will increase the accuracy of the report given by the informant. Nevertheless, the risk of drop-outs during the process is likely to be high.

**Single-case or multiple-case study**

The first discussion, which needs to be made, will be the choice between intensive and extensive case study design, and then on single–or–multiple question. The choice between single-case and multiple-case study strategies is based on the focus of the present study: the process of creating Business Opportunities. While it is be possible to focus on multiple cases (i.e., the processes of creating business opportunities in various industries), however, to choose a single-case study approach and the BOC process in one industry as the case of the study, is believed as the most feasible in this situation. To prefer the single-case study approach to the multiple-case study approach is supported here because of the available access to accurate informants, the sub-case entrepreneurs, whose processes have emerged over a long period of time; from the 1980’s to the time of the research material generation predominantly in the year 2004. In fact, two of the respondents, the Sub-case Entrepreneurs, started their processes only a few months before the research material generation.

Hence, the decision to prefer single-case study modes to multiple-case study modes is feasible, because of the possibility to combine the intensive with the extensive case study designs. This means that a combination such as this allows the use of several sub-cases together with the main focus on the unit of analysis, the BOC process. A single-case study design is supported by Gondo, Amis, and Vardaman (2009), who present the case within a case approach as a special facet of the case study: “Dividing a single case into a subset of smaller cases provides the opportunity to identify both similarities and differences across the subcases. What is gained from this form of analysis often serves as the foundation for the theoretical generalizations that are difficult to ascertain when examining only a single case” (135).
6.1.2 Defining and Bounding the Context

This study concentrates on the entrepreneurial process in the Information and Communication Technology cluster (ICT). While the whole ICT cluster includes many different industries such as the telecommunication industry and the information technology industry (Sallinen 2002), the main focus of the present study is on one specific segment within the cluster: the software industry. The importance of this industry both for local economy and national economy is great because it is “expected to grow into one of the key industrial segments in the country” (30; Nukari and Forsell 1999).

The Finnish software industry is a relatively young industry, and ICT companies are very small in size during the start-up phase. In fact, in many cases they are still small after a few years of existence. Another characteristic of the ICT cluster in Finland is that its companies focus on providing technological solutions to business-to-business (B2B) markets rather than consumer markets. In many cases they operate as a software subcontractor, who builds software in one-to-one relationships with its client. Since these firms deal with only a few clients with whom they have keen relations, it is easy to understand why their staff members work physically in the client’s organization – more or less as hourly paid temporary staff.

Sallinen (2002) describes the typical software firm’s development path from resource provider (often called a project-firm) towards a firm with its own products or projects managed independently in one’s own premises. The final form of software firm, according to Sallinen, is the system house which “does not have one typical way of operating but can hire out human resources, manage its own subprojects or produce software modules/products independently as required” (ibid.: 89–90).

More atypically, some ICT firms may start their business directly as producing and selling their own products to the end-customers. In these cases, the firm operates not as the typical firm (as Sallinen presents it) but as any other vertically integrated producer-sellers business ventures in the markets. This means that they are using their resources to produce in-house some end-products to be sold to their customers afterwards.

It has been acknowledged here that only a few studies have focused on start-up modes in the software industry and beyond. However, the findings proposed by Sallinen (2002) offer a departing point to think along with MatthysSENS, VandENbempt, and Berghman (2006) that these may represent also the collective
mindset of software industry of how to think *what would be the proper way to start a business in this specific industry.* In this case, it is about how people in the industry think about *what works in here and what does not* (see the dominant logic or the industry recipe proposed by Grinyer and Spender 1979a, Spender 1989 and Berghman 2006).

Despite the fact that the literature presented above by Sallinen neglects almost completely the concept of the business opportunity and its emergency, however, it can be referred to processes preceding the start-up phase. This concerns the process starting from the entrepreneur’s intention to create the new business in order to make an impact in the market. To look at this kind of situation through the numbers of the firms and employment, in general, the lifecycle model proposed by Tether and Storey (1998) states that based on the historical data at early state the number of units (new firms and employment in high technology sectors) had been increasing in European countries during the 1980s (Tether and Storey 1998: 951). It is reasonable to think that the development of the ICT industry follows the same path: during the 1980s, new ventures were founded and with increasing employment figures. The need for new actors in the field was recognized and the emergence of start-ups supported.

To apply the lifecycle model to the ICT industry in Finland it seems that after 2001 (after the ICT bubble burst) the number of new firms started to fall. The number of new software product firms from 2000 to 2006 grew from 900 to only 1000. At the same time employment figures, however, increased. Based on the survey of Finnish Software Product Business (SPB) of Rönkkö, Eloranta, Mustaniemi, Mutanen, and Kontio (2007, 14) the number of personnel at the industry level increased from 8,000 in 1999 to ca. 13,000 in 2006.

While the overall picture of employment figures is quite clear, to follow the lifecycle model proposed by Tether and Storey (1998: 951), some speculative can be found. Based on the very slow growth of the number of personnel between 2003 and 2004 (from 12,000 to 12,340, respectively) the software product business seems to have evolved from the *early state* when both the number of units and employment increase to the *next stage* when the number of units starts to decline while employment continues to rise or even when both the number of units and employment decline.

In this study, the definition of the research context is influenced by Rönkkö *et al.* (2007: 4) who state that it is difficult to “explicitly define the boundaries of the industry: rather, we contacted a large set of firms in the focal and adjacent
industries, and measured the amount of software product business done in these firms”. Hence, the empirical research context is as follows:

The empirical research context of the study is the ICT business venture built to sell software and/or products, and services.

Unit of analysis

According to Yin (1994) the unit of analysis is the actual source of information (i.e., individual person, documents, artifacts and so on) through which the evidence will be generated in close interaction between the persons and the researcher. Hence, the unit of analysis as an observable issue can be many things: a system; a process; a group of people; a set of policies and so on. Since the research task of this study focuses on understanding the process of creating business opportunities then the creating process is defined as the single unit of analysis of the study.

It is very common in entrepreneurship to consider the entrepreneur, or firm as the main unit of analysis (Davidsson, Low, and Wright 2001). This is in line with Höglund, Lundgren, and Songsong (1999) who confirm that after reviewing 130 articles in entrepreneurship from 1988 to 1998, first, the unit of analysis is far from being uniform and the dominant unit of analysis is the firm (ibid, 2). Second, their review gives evidence on the notion that both the focus and the unit of analysis has changed during that timeframe from studying entrepreneurial activities at the macro-level to more micro-level issues – such as the firm and the entrepreneur (see also how the level of analysis is changed in Davidsson and Wiklund 2001).

Despite the fact that the previous literature emphasizes the firm as main unit of analysis in entrepreneurship studies, Davidsson and Wiklund (2001) and Davidsson (2003a) have presented another approach to think about the unit of the analysis in entrepreneurship when they state that “One important aspect that this question highlights is the need for studies that apply the "venture idea" itself as the unit of analysis (Davidsson & Wiklund, 2001). This is a possibility rarely used or even considered by researchers in other fields.” (Davidsson 2003a: 345, quotation marks in original; see also Shane and Venkataraman 2001). For the present study their ideas are very influential even though Davidsson (2003a) is a bit vague, since he seems to conflate two separate issues from time to time; namely the unit of analysis and the level of analysis. Nevertheless, more
important is that Davidsson highlights questions of the needs to study new emerging economic activities, the venture ideas, and the process through which they evolve:

“I argue for more studies that use the venture idea and the activity that evolve around it as the unit of analysis. Such studies would capture new business initiatives at an early stage and follow them over time, through whatever changes in human champions and organizational contexts that might occur.” (Davidsson 2003a: 359)

However, in the more current literature the focus on both the opportunity and the entrepreneurial process, in general, has become all the more shared among scholars in the field of entrepreneurship. While it is quite clear that this kind of situation will enhance the satisfaction with the tasks of the study, however, some difficulties are still expected to emerge, since the roles in the research process, i.e., the role of the actual researcher and the individual entrepreneur, are quite ambiguously defined.

To solve the problem between the researcher and entrepreneur, the present study is influenced by Grant et al. (2001), who present an idea of a collaborative approach of the research team to allow the useful closeness between an academic, consultant, and entrepreneur in order to build understanding of the process in question. Grant et al. (ibid.) raise one explicit question to highlight the significance of the situation: How then can academic researcher hope to gain understanding and knowledge of entrepreneurs and SMEs?

The answer they suggest is that during the research process all participants in the research process, academics and entrepreneurs - also consultants in this case – may contribute to research process. That is, the academics will provide a broad multi-dimensional perspective in terms of theory and conceptualization, and rigorous research using academic principles and knowledge based on prior research in the field, and the ability to understand what is important.

Finally, Parrish (2007) highlights the distinction between two kinds of units of analysis as they are presented by Ragin (1987): observational and explanatory units of analysis. The observational unit in the present study includes activities throughout the discovery process since they refer to “the unit used in data collection and data analyzing” (Ragin 1987: 9). The explanatory unit, on the other hand, is focused more on the actual discovery process, its element and mechanisms. However, it is clear that this study focuses mainly on the
exploitation of the explanatory unit of analysis because the analysis itself will more interpretive by nature.

**Sub-case Selection**

The case represents the topic of the study (Yin 1994), and the researcher is interested in this phenomenon. In this study the focus is on the broad but unanswered question of how people actually recognize, discover, or create new business opportunities for the intending business ventures. Since the emergence of a business opportunity in the current literature is regarded as a process (Bhave 1994; Davidsson 2003a; Sarasvathy *et al.* 2003; Shane and Venkataraman 2000; Wakkee 2004), the case of this study is similarly thought to be a process. This means that this study does not focus on the business venture itself but the creating process as such and how it is detailed in the chapters above (Ch. 4; Ch. 5).

Hence, the case of this single-case study is the BOC process. This process will be studied in the context of the ICT industry in Finland. Along with the primary case, seven sub-cases have been chosen to get a more detailed picture of the process. The boundaries of the case and the sub-cases together with the selection criteria are described in the section below.

**Bounding the case and sub-cases**

To identify the boundaries to delimit both the case and the sub-cases is feasible due to the fact that it both guides the relevant research material generation process and prevents the irrelevant. Those persons who filled the role of entrepreneur at the beginning of the process of creating BOS and who were still committed to the business venture at the time of research material generation were asked to participate in the research process.

Thus, the case is a phenomenon that begins with the intention (Katz and Gartner 1988) or conception (Reynolds and Miller 1992; Fig. 9) of the person who plays the role of the entrepreneur to start the process to creating a new business opportunity, and ends with the decision to start to actualize the created opportunity. The case of nature is treated as the outcome of a dynamic process of emergence.

To capture the nature of the creating process, a retrospective approach to generate research material through seven sub-cases is chosen because, according to Blaikie (2000: 230), it makes it possible to *"take the present as a base and seek*
information about recent history”. This is in line with Lindman Port, Engdahl, and Frazier who state “that the retrospective reports are in agreement with the longitudinal data further supports the supposition that symptom increases have occurred and are continuing to occur.” (2001: 1477). Parrish has shown in his thesis that several scholars “Hite (2005), Ropo and Hunt (1995), Larson (1992), and Burgelman (1983) for example, demonstrate the usefulness of this approach for generating theories of organizations and entrepreneurship.” (2007: 94). Furthermore, Huber and Power (1985) state that “although no single means of obtaining data is appropriate for all strategic management studies, the use of retrospective reports can often provide information not available from other sources” (171). Thus, from the point of view of whether or not to use the retrospective perspective to generate research materials to study the creating of business opportunities it is the access to informants that accounts.

Selection criteria

Before the selection of feasible sub-cases needed for the study, it is reasonable to understand what is the case here? According to Miles and Huberman (1994) and Perren and Ram (2004) some definition and/or boundaries need to be chosen before the actual selection to happen. Since the focus of this study is on how opportunities emerge, this part of the entrepreneurial process is the case. That is, the case is first bounded by the scope of the elements of the creating process of BOs (Ch. 4). Second, it is also bounded by the lifespan of the entrepreneurial process; this includes both the creating of a BO and its exploitation. Together with the use of retrospective research materials this means that it is possible to make the case selection based on the previous theory.

By keeping in mind what is written above in order to find a feasible number of operating business ventures, one feasible solution of the sub-case selection problem that has been utilized here is to browse the websites of a well-known provider of operating environments for high-tech companies. The company’s (known as company X) website included three lists consisting of 236 firms in total (Table 3).
Table 3. Sub-case selection (Source: Company X’s web site 1.6.2004).

<table>
<thead>
<tr>
<th>Company</th>
<th>All</th>
<th>ICT firms</th>
<th>Posting</th>
</tr>
</thead>
<tbody>
<tr>
<td>Location A</td>
<td>172</td>
<td>31</td>
<td>16</td>
</tr>
<tr>
<td>Location B</td>
<td>51</td>
<td>6</td>
<td>3</td>
</tr>
<tr>
<td>Location C</td>
<td>13</td>
<td>2</td>
<td>1</td>
</tr>
<tr>
<td>Total</td>
<td>236</td>
<td>39</td>
<td>20</td>
</tr>
</tbody>
</table>

Some of these firms are independent firms owned by the founder or a team of founders, and some others are subsidiary companies of larger companies, or not originally from Region X. To get access to firms and their founder entrepreneur(s) three selection criteria were chosen. The firm was non-eligible if it was not founded in the particular region in the focus of this study (Table 4). Second, if the firm was already established elsewhere and only a small part of the company remained in the region the firm was selected out. Finally, if a firm was founded elsewhere but later founded a subsidiary in the region, this firm was also selected out.

Table 4. Selection out criteria.

<table>
<thead>
<tr>
<th>Selection out criteria</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not from Region X</td>
</tr>
<tr>
<td>Established elsewhere</td>
</tr>
<tr>
<td>Subsidiary</td>
</tr>
</tbody>
</table>

The criterion-based selection method is chosen because it permits a selection of sub-cases that suits a predefined profile. The main purpose of the criteria is to select a homogeneous collection of entrepreneurial processes to promote the theoretical generalization of the study results based on the literal replication (Barringer and Greening 1998; Yin 1994). For this study the selected sub-cases had to have three commonly shared characteristics as follows: an actively operating firm; operating in the ICT Industry (broadly defined); located in the same regional area.

The criterion of operating as a firm was necessitated by the fact that it was very difficult to get access to any other kind of processes than those that had either started or still running. This became evident in one potential sub-case where an entrepreneur did not want to participate in the study because the ICT firm had failed only a few years after it started. One other issue is how to get feasible information from the key actors in the process, the sub-case entrepreneur.
Therefore, the selection focuses on only those sub-cases in which the founder is still working in the business and able to relate his or her own interpretation of what has happened in the past. In practice this will mean that both sub-processes of the entrepreneurial process in question have commenced before the research material generation.

Criterion 1: All sub-cases at the time of selection must be sufficiently mature to be commenced during the exploitation process, but sufficiently young that the key founder (or founders) is (are) still able to participate in the study.

Second, in accordance with the belief that the researcher of this study will gain from his personal experiences in the ICT field, it is assumed here that to understand the context from inside-out will enhance the conduct of the study.

Criterion 2: All sub-cases at the time of selection must be classified as an ICT firm.

Finally, the research strategy to be utilized here is based on extensive case study strategies with literal replication. This means that it is assumed here that all the entrepreneurial processes will emerge similarly. This criterion will meet here by binding the cases in the same spatial area.

Criterion 3: All sub-cases at the time of selection must be located in the same spatial area.

In general, the sub-case selection process proceeds as follows. First, 39 ICT firms (all of them are software firms) founded and owned by a founder entrepreneur or a founder team are selected. Then, after selecting every second firm out of the total 39 a request for interview was sent to twenty of these entrepreneurs in order to participate in the research process. Finally, after contacting the entrepreneurs by phone a research contract with seven of those entrepreneurs who were able to participate in the research were made. Seven entrepreneurial processes (Table 6) in total were selected to be studied from the perspective of the initial theoretical framework.

In addition, one ICT business expert was interviewed. This expert has a wide experience in the field as a former researcher, manager, and as an entrepreneur. More specifically, the respondent is a person who has a quite lengthy national and international level of experience in the ICT industry since the early 1980s, and was working as CEO in an ICT firm at the time of the interview. The results from his interview are regarded as an important source of research materials, because
his experiences enhance the researcher’s own initial perceptions of and reflections on the development of the ICT industry, not only in Finland but also globally.

In addition to what is stated above, the sub-case selection method promotes a way to delimit the effect of various other mechanisms (Sayer 2000) in affecting the phenomenon in question. This is thought to make it feasible to examine the influence of both the development phases of the ICT industry and the industry recipe in the context of the chosen case.

6.1.3 Research material generation

As presented above, it is feasible to exploit the pre-structured case method here because, according to Miles and Huberman (1994), “assuming that the researcher has established an explicit conceptual framework, a rather precise set of research questions, and a clearly defined sampling plan, the prestructured case begins with a case outline developed before any data are collected” (Miles and Huberman 1994: 84).

Whereas the usual method focuses on generating an outline based on thorough fieldwork and its analysis, the pre-structured case (as it is labeled in Miles) “begins by developing a graphic conceptual framework for the study, along with a set of research questions” (1990: 43, underlined words emphasized in italics in original). According to Miles, due to a keen relationship both the framework and research questions influence each other, i.e., they go through several iterations before the researcher feels that he or she is able to start the research process.

In the presented study the initial theoretical framework was mainly based on insights of Davidsson (2003a), Davidsson et al. (2000), Sarasvathy 1997; 2001), and Shane and Venkataraman (2000; 2001) on the entrepreneurial process and the research questions to be asked to understand the process. During this time the theoretical nature of the research on entrepreneurial processes emphasized the idea of a nexus of opportunity, the person with certain kinds of human and social capitals (HC and SC, respectively) and the process. For example, according to Davidsson et al., the Opportunity Discovery process consists of three phases (or activities): initial discovery, opportunity refinement, and market making. While it is not necessary to open up these phases here, it needs to be said that the kind of general idea concerning the process treats the opportunity as external and independent of the entrepreneur. Nevertheless, it was thought that it was the most
advanced approach to the entrepreneurial process at that time, i.e., at the beginning of the research process.

After the researcher of this study had managed to identify a feasible set of entrepreneurs who promised to participate in the study, a sub-case was outlined with ideas on how the research process could be conducted (Miles 1990: 44). Furthermore, the initial and abbreviated outline of the content of the research report was made in a way that seems to be acceptable for the purposes of the study. In the original mode, the pre-structured case method contains iteration after conclusions are made or report is written. According to Miles (1994), the iteration may continue “until data collection, and the fully-analyzed case, are complete” (45). In this study, however, the main iteration had happened in the beginning of the research process. After the first round of interviews and initial coding, it became clear that the initial conceptual framework focused too strongly on aspects such as the human and social capital rather than on aspects that are more directly focused on the (recognition/discovery/creation) process itself and its various phases and activities. This resulted in the re-creation of the interview themes to focus on the opportunity and its emergency (Appendix 3).

However, after the second round of generating and coding the research materials, i.e., interviews, secondary materials, reading of new studies and re-reading the old ones, it has become evident that more far-reaching changes than simply the modification of interview themes needs to be made before any progress can be expected. Although the initial theoretical framework was drawn from advanced studies as mentioned above, however, it seems to fit only poorly with understanding of what happens in the process of creating business opportunities. Therefore, a new theoretical framework has had to be developed based on re-reading the existing studies both those studies published in the field of entrepreneurship as well as in other fields. More on that development process and the final theoretical framework of the study can be seen in the following chapters (Ch. 4; Ch. 5).

Longitudinal or retrospective research material generation

According to Eriksson and Kovalainen (2008), a case study researcher may collect the empirical research material from either a single source, e.g. from the retrospective interviews as it is the case here, or a combination of different kinds of sources (also Eisenhardt and Graebner 2007). The combination of various sources includes data such as documents, archives, media and digital texts,
diaries, artifacts existing independently of the present study, and data produced intentionally for the particular research study. However, “in business research, in-depth interviews are often used as the primary source of empirical data” (Eriksson and Kovalainen 2008: 125; see also Blundel 2007: 53). This is in line with Sayer (1992) who has argued for interactive interviews with individual actors in their causal contexts. Furthermore, Lee and Lings (2008) have argued that interviews are ideally suited for the exploration of detailed individual experiences in depth, but acknowledge that to recruit interviewees can be difficult since, for example, issues that will be dealt during the interview may provoke anxiety or embarrassment due to their sensitive nature.

In general, qualitative interviews can be divided into three categories: structured and standardized interviews; guided and semi-structured interviews; and unstructured, informal, open and narrative interviews (Eriksson and Kovalainen 2008). The second type of qualitative interview, the guided and semi-structured interview, is chosen for the method of this study because it includes both the naturalist and realist type of interview method and the constructionist type of interview method (Silverman 2001), which are all needed since the aim is to generate empirical material based on sub-case entrepreneur’s experiences in order to understand what happens within the process of creating BOs, and how entrepreneur experiences the process.

The primary reason for the use of interviews is twofold: pragmatic and paradigmatic. First, the interview method as opposed to questionnaires seems to be feasible for this kind of explorative study, in order to gain insight into the process and experiences of ICT entrepreneurs in creating their business ventures. Second, to draw on the nature of epistemology of the critical realist perspective, it is evident that it treats the interview more as a conversation with specific rules and themes rather than a process of asking predefined questions.

Although the actions of a researcher is of great concern to the outcome of the interviews, Woodside and Wilson (2003) also highlight the fact that the capability of an informant to give answers to direct questions as such is more or less uncertain. According to the authors (ibid.), “acquiring a deep understanding of industrial marketing-buying processes from conscious responses to direct questions from one respondent using single questionnaire must be supplemented by using alternative data collection methods” (Woodside and Wilson 2003: 497). In order to solve this kind of problem in the present study is to conduct interviews by highlighting three issues of interpretation: “focusing on what they perceive; framing what they perceive; interpreting what they have done including how they
In this way, then, a normative demand exists on behalf of longitudinal data collection method in the previous literature (Davidsson 2005: 35–54; Chandler and Lyon, 2001). The need to study on-going processes emerges clearly in the question of whether to use longitudinal methods or retrospective methods. In many cases this is an artificial distinction (Voss, Tsikriktsis, and Frohlich 2002). It is almost commonplace that in every case study it is necessary to collect at least some archival (historical) material.

A good alternative for longitudinal data collection is the think-aloud protocol (Sarasvathy 2001). According to Sarasvathy, the idea behind this method is, first, to develop detailed problems within the domain of expertise under study, and second to ask entrepreneurs to think aloud continuously as they solve the problems. Their narratives will be reordered on tape, and the tapes transcribed and analyzed. While this kind of data represents the actual process under study in detail, however, the same problem of recruiting people will remain. In fact, it is almost impossible to recruit novice entrepreneurs or people who have not yet started the process, because nobody knows who they are. Nevertheless, while in Sarasvathy’s original study the entrepreneurs were highly successful expert entrepreneurs, the think-aloud method was replicated among novice managers and corporate managers; the results have been consistent with the results of the original study. Thus, the main problem seems to be: how to recognize people who are thinking starting the entrepreneurial process?

On the other hand, observation is the other main method in qualitative research such as the case study. While it may be impossible to have access to people who have not yet started their entrepreneurial processes – and particularly the processes of creating business opportunities - it is possible to think that if those entrepreneurs have been in contact with incubation organizations it would be possible to recognize and then observe their processes in time. For two reasons this has not been possible here: first, it seems that incubation organizations focus quite bluntly on planning the business. This means that it is believed there that the opportunity is as ready-to-be-exploited in the market, and it needs only a thorough planning to actualize it. The second reason for excluding the observation method was the lack of access to those organizations.

A third alternative approach for a longitudinal research design such as the data collection method is to adopt retrospective research material generation. The
The use of a retrospective interview technique (Dickson, Rainey, and Hargie 2003) is a method that employs in-depth semi-structured interviews. For example, Dickson et al. (2003: 40) asked participants to recall the history of their working period in the firm and changes they had experienced during that time. To follow that kind of procedure it is possible to use retrospective material to study the process of creating business opportunities of an individual ICT entrepreneur in spite the fact that many of events were experienced before the actual interview process is conducted.

Eisenhardt and Graebner (2007) have highlighted that there are at least two feasible methods to limit the bias of retrospective sensemaking, for example. First, "a key approach is using numerous and highly knowledgeable informants who view the focal phenomena from diverse perspectives. . . . . It is unlikely that these varied informants [sic.] will engage in convergent retrospective sensemaking and/or impression management" (28). The way that this kind of individual level bias of retrospective interpretation is tackled here, is made by generating research materials together with several entrepreneurs. These entrepreneurs and their processes are treated as sub-cases of the main component of the single-case study, the BOC process in ICT industry in Finland.

Second, they suggest that by combining the retrospective methods with real-time research material generation it is possible to gain from both sides simultaneously: Both the retrospective interviews of several respondents – the sub-case entrepreneurs and one industry expert – and the longitudinal research material generation and observations “help to mitigate retrospective sensemaking and impression management” (Eisenhardt and Graebner 2007: 28). In this study, two of the seven sub-cases had been interviewed at the beginning of the exploitation process, and followed thereafter as follows: the first of the two sub-case entrepreneurs was re-interviewed after one year. In the case of the second sub-case entrepreneur, her process was followed by browsing her firm’s web pages and personal conversations.

Thus, the use of retrospective interviews made it possible to incorporate the temporal component into the study (Chandler and Lyon, 2001). As result, it is stated here that, traditionally, the research materials have been generated in this kind of design at one point in time, but in ways that events and histories of firms are reconstructed. However, to be able to follow a process that continues on at the present, it is possible to treat the nature of materials as being more longitudinal.

While retrospective reports are commonly used in strategic management literature as “accounts of facts, beliefs, activities, and motives related to prior
events” (Huber and Power 1985: 171), however, four primary reasons can be explicating as to why informants provide inaccurate or biased data. According to Huber and Power, these can be if respondents seem to be motivated to do so, if they have certain perceptual and cognitive limitations, they simply make errors, or they lack the information needed concerning the process or event. Finally, if informants simply face situations where the interviewer has framed the interview questions or themes in ways, which make it difficult for them to understand the questions, inaccurate data can arise in this way.

To reduce the possible inaccuracy of the research material based on retrospective interviews Huber and Power (1985) have offered guidelines for improving the accuracy of the generation of research material. These guidelines clearly show the importance of selecting the most knowledgeable persons as key respondents. In this study these person are in every sub-cases the one who has played the role of the entrepreneur during the BOC process. Secondly, the level of the emotional involvement of the informants, in particular ly, needs to be recognized since “paradoxically the perception and responses of emotionally involved people are more likely to be distorted (cf. O’Reilly, 1987; Huber, 1992)” (Huber and Power: 175, parentheses in original). It is recognized here that many of the sub-case entrepreneurs seem to be highly involved in the narrative that is told many times before the interview. However, due to the critical realist assumptions concerning the effect of the stratified reality, particularly the Actual (e.g. in Wilson and McCormack 2006; Blundel 2007), the responses of informants can be treated both as they were true, and at the same time as subjective descriptions about how the processes and events have been perceived but not necessary as what has actually happened.

Finally, according to Huber and Power (1985), the way the interviewer, the researcher, is able to frame his questions and all the dialogue with the sub-case entrepreneur motivates the informant to cooperate with the researcher. To follow the guidelines of Huber and Power, the anonymity and confidentiality of responses are ensured as completely as possible. Another way used here to enhance the motivation of every single sub-case entrepreneur to cooperate with the research has been the timing of the interviews; the place and time has been chosen by the sub-case entrepreneur. In addition, to enhance the cooperation during the interview the researcher has used probing questions like do you mean that …, or could you tell me more about … and so on.

In closing, the retrospective research material using with this kind of thinking is seen in the present study as usable for several reasons. Firstly, the aim in the
research is to reveal a rarely explored phenomenon (e.g. Eisenhardt 1989) and capture a contextual analysis of a limited number of conditions and their interrelations (e.g. Heirman 2004). Therefore, it is feasible to obtain the qualitative and contextual primary data from the entrepreneur’s own narratives as thickly as possible. From a critical realist perspective, however, it is important to follow Bhaskar (1979) and Blundel (2007) in claiming that what entrepreneurs are saying about their experiences in the processes of creating the business opportunity will be a provisional starting-point for explanation as is stated by Blundel (2007: 53). This means that it is the primary challenge for the researcher to try to understand what happens beneath both the empirical and actual level of reality. The interview method chosen to conduct during the primary data collection might also be termed retrospective interviews (Dickson et al. 2003).

**Primary and secondary material generation**

Although, many sources such as existing documents or digital texts might be useful as sources of the research materials for the present case study, the primary data, i.e., “empirical data collected by researcher himself by interviewing and observing and by asking the participants to write” (Eriksson and Kovalainen 2008: 77), required for the study has been generated from interviews of founder entrepreneurs and from one additional ICT industry expert. In addition, materials generated from the web-pages of the cooperating firms and other digital or printed texts concerning the sub-cases in question are considered as secondary data – “already existing empirical data that exist somewhere already – as naturally occurring materials because they exist irrespective of the researcher’s actions and intentions” (ibid.: 77).

The main method of the generation of research material is through qualitative (or in-depth) interviews of the ICT entrepreneur (i.e., the sub-cases). To prefer the generation research material to the collection of data means that the interviews are conducted in a way which emphasizes “the interaction of the researcher with the respondent, context, data sources, and situation act together with the researcher’s own perceptions to co-create the actual corpus of data” (Lee and Lings 2008: 213). That is, the research materials are dependent upon the research process due to the interactionist nature of the research process.

In order to generate research materials for the study eleven semi-structured interviews were conducted by the researcher of the present study. While it is very common to think of the research data-collection phase as a process of collecting
the planned data from the selected interviewees, in the case of the present study this is not the case because, despite all the preparation, the researcher was unsure about what exactly needs to be known prior to the actual generation of the sub-case materials. Therefore, the role of the researcher is to collaborate with the interviewees to intervene and generate rather than collect the data, the research material as it is here termed. This collaboration actualized in the form of asking clarification, concretization, examples and so on to ensure that what the interviewee actually said was about the same as he or she wanted to express. This is in line with who argues that “the development of knowledge through interviews is a relational event that takes place by mutual exploration, as each explores the other’s understanding, and through the other, explores his or her own” (Lee and Lings 2008: 220) (see Nørreklit 2006). All this collaborative interplay between the single interviewee and the researcher was directed building a feeling of trust and commitment to the research process. Furthermore, the research material generation phase continuing during the whole study process characterizes the nature of the researcher’s own understanding and interpretation.

The founder entrepreneurs and one industry expert with many years as researcher, manager and entrepreneur in the ICT sector (Table 5) form the main source for the primary data of the present case study. The duration of an interview varied from less than one hour to more than two hours. Two of seven informants (sub-case E and sub-case G) were interviewed more than once. Each interview was tape-recorded. The interviews were followed by a predesigned protocol. The case study protocol is seen here as a feasible tool for directing the empirical research process, and at the way it may enable “subsequent researchers to arrive at the same insights if they conduct the study along the same steps again (Denzin and Lincoln, 1994)” (Gibbert, Ruigrok, and Wicki 2008: 1468). The Case study protocol – a report that specifies how the entire case study has been conducted – is produced to document and clarify the procedures utilized in the present study as follows. The researcher of this study interviewed one entrepreneur with whom he has personal level contacts after the formation of the initial insight of the general entrepreneurial process.

The purpose of this first interview (termed a pre-interview of the entrepreneur of sub-case E) was to help to build more grounded insights into the real life situation of an ICT entrepreneur in the region. The insight based on this interview together with the researcher’s own working experiences in an ICT firm enhanced the empirical and theoretical understanding about what it is to be a person who is in the process of outlining new business venture in ICT sector in this particular
While, the discussion topics (or interview themes) were slightly refined after first the three interviews (2. interview with sub-case E; 1. interview with sub-case F and G) based on the more accurate insights on the new business opportunity creation process: however, the general ideas remained the same. The interview protocol followed a predefined set of research topics:

Background information of the sub-case entrepreneurs (education, work experiences, interests, etc.)

Activities in a temporal and spatial context related to situation before the actual business activities (here the BOC process)

Activities after the firm founding

These topics were repeated during the interview in order to make room for iterative and circular discussion, and ongoing clarification and verification of information. In general, the interview process generated the first-person narration of the emergence of the specific processes and events in creating of business venture. Special care were taken to conduct the interview in a manner that promoted the entrepreneur’s feeling that he or she was able to express their own personal views (e.g. O’Donnell and Cummins 1999; Grant, Gilmore, Carson, Laney, and Pickett 2001). In addition, interviews were conducted during normal working hours at the entrepreneur’s own facilities in order to make them feel relaxed.

Table 5. Case study research material generation.

<table>
<thead>
<tr>
<th>Sub-cases</th>
<th>Interview Duration (min)</th>
<th>Date</th>
<th>Location</th>
<th>Interview referred</th>
<th>Firm’s Web pages</th>
<th>Other data</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>1</td>
<td>62</td>
<td>10.8.2004</td>
<td>Firm</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>B</td>
<td>1</td>
<td>90</td>
<td>8.8.2004</td>
<td>Firm</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>C</td>
<td>1</td>
<td>88</td>
<td>17.8.2004</td>
<td>Firm</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>D</td>
<td>1</td>
<td>73</td>
<td>4.8.2004</td>
<td>Firm</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>E</td>
<td>1. 140</td>
<td>11.2.2004</td>
<td>Firm</td>
<td></td>
<td>-</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2. 60</td>
<td>19.2.2004</td>
<td>Firm</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td></td>
<td>3. 90</td>
<td>10.9.2004</td>
<td>Firm</td>
<td></td>
<td>-</td>
<td>-</td>
</tr>
<tr>
<td>F</td>
<td>1</td>
<td>87</td>
<td>29.6.2004</td>
<td>Firm</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td>G</td>
<td>1</td>
<td>120</td>
<td>30.6.2004</td>
<td>Firm</td>
<td>x</td>
<td>x</td>
</tr>
<tr>
<td></td>
<td>2</td>
<td>48</td>
<td>28.6.2005</td>
<td>Firm</td>
<td>x</td>
<td>-</td>
</tr>
<tr>
<td>Expert</td>
<td>1</td>
<td>48</td>
<td>26.7.2005</td>
<td>Firm</td>
<td>-</td>
<td></td>
</tr>
</tbody>
</table>
To begin with the research material generation, the first group of selected entrepreneurs (sub-case E, Case F, and sub-case G) was interviewed based on the initial case study protocol. Then, the rest of the selected sub-case entrepreneurs (sub-case A, sub-case B, sub-case C, and sub-case D) were interviewed based on the refined protocol. The main focus of both of these two interview protocols was on the entrepreneurial process and how entrepreneur experienced the process. The only major difference between these two protocols is that the former focuses more clearly on human and social capital of the sub-case entrepreneur in the process, whereas the latter focuses more directly on two sub-processes (the discovery and exploitation process) as they are presented in Davidsson (2003).

Finally, three additional interviews were conducted for collecting the necessary additional research material from two sub-case entrepreneurs (sub-case E and sub-case G) and one industry expert. In addition to being prepared to conduct the interviews with the entrepreneurs, additional information, as one form of secondary data, was collected from the firm’s web pages of each individual firm. In addition, other literal sources were also used in order to get as broad a picture as possible of the entrepreneur and his or her firm.

In closing, the research material generation is based on what the sub-case entrepreneurs talked about their experiences from the process of creating an business opportunity. The period of time between the interviews of the experiences in focus of the study varied from many years to only a few months. To solve the problem concerning the need for longitudinal research material generation the use of retrospective interviews (Dickson et al. 2003) were exploited to focus on particular experiences that have happened before the interviews (Bhidé 1999, 19).

### 6.1.4 Research material analysis

In the case study project it is common knowledge to start the analysis of the research materials almost as soon as possible – many times already directly after the first interview and carry on during the research process (e.g. Van Maanen 1988, cited in Eisenhardt 1989: 539). In the same vein, Lee and Lings (2008) state that “the first step in analysis occurs even before the collection of the data is started, in the pre-planning process involving a theoretical appreciation; which questions to ask, how to ask them and the like” (236). Furthermore, according to Eisenhardt, it is important to reflect one’s experiences and feelings from the beginning of research material generating process as well as to ask continuously
questions such as “What am I learning?”, and “How does this case differ from the last?” (Eisenhardt 1989: 529)

To think first of the nature of the research material based on retrospective interviews, the following assumption is made here due to one of the basic assumptions of the critical realist perspective, the stratified reality (the Empirical, the Actual, and the Real). While it is treated here as a give that the sub-case entrepreneur has experienced and is also able to narrate these experiences, the narration, however, is based on observable events and processes at the Empirical level of reality (see Blundel 2007; Joseph and Roberts 2004). This means that in this study the entrepreneur’s narration is not treated as evidence of what really happened but more as representation of what he or she believes to be true. This is in line with Weick (1995) who has followed Frost and Morgan (1983) in stating that “when people make sense of things, they read into things the meanings they wish to see; they vest objects, utterance, actions and so forth with subjective meaning which helps make their world intelligible to themselves” (p. 207)” (14).

This is not to say that narration is unimportant – on the contrary. It is used for supporting the analytical interpretations made by the researcher. Therefore, it will be the researcher’s responsibility to draw conclusions of the Actual level processes and events and the causal powers of structures and mechanisms affecting at the Real level from their narrations indirectly.

To achieve the goal presented above, one needs to acknowledge that, according to Miles and Huberman (1994: 299), “data analysis includes selecting, condensing, and transforming data; displaying these data in an organized way; and drawing and verifying conclusions from the condensed, displayed data” in order to understand the connections between different issues in the research material. Thus, the research material analysis method exploited here is taimed, firstly, at reducing the research materials from transcription of interviews (the primary data) and from the secondary research materials (i.e., the secondary data in Eriksson and Kovalainen, 2008). The purpose of this reduction is to set down the content of its core ideas (i.e., to the categories based on the theoretical model created in the second step of the present study). While the coding process is not the core activity in the pre-structured case method as it is, for example, in the study based on grounded theories, however, because it is exploited here, the reduction of research materials are treated as being important also in the present study in order to get more thorough insights of what is happening in the opportunity creating process. The main emphasis is on the second and third phase
of the analysis, that is, on displaying the research materials in quotes and other visual displays, and in concluding based on the results of the analysis.

**Coding**

To code interview transcripts is “*the very core of the analysis approach*” (Lee and Lings 2008: 243), “*coding is analysis*” (Miles and Huberman 1994: 56) since it concerns differentiating and combining research material and the reflections made on that information. Lee and Lings define the code as a label of a piece of text of the transcript. It could be a single word, a whole paragraph, or the transcript as a whole as long as it captures “*the meaning of that unit of text – not just the words*” (244). From the different types of codes, i.e., a descriptive, interpretive, pattern in Miles and Huberman (1994), and an organizational one in Lee and Lings (2008), the main type of code used here is the interpretive code, but partly also the pattern codes, as the patterns starts to become clearer. In general, the coding process began with “*a provisional “start list”*” (Miles and Huberman 1994: 58, quotation marks in original) based on the initial conceptual framework and research questions to describe the research material with codes determined by the interview protocol and the theoretical framework of the study: the personal background, activities before the startup, and activities after the startup (Appendix 4).

To start with that kind of a broad set of codes (or master codes) was to give rise to the possibility of being open to possible surprises which do not fit in the initial framework. The start list of codes was exploited in the first set of research material generation. After reflecting the fit of those interviews to meet the research aim the list were modified to focus more specifically on the discovery process as it is presented by Shane and Venkataraman (2000) (Appendix 3). Finally, the start list was modified the second time after all interviews were conducted and the main secondary research materials were generated. That modification was based on the modified theoretical framework of the study.

At this point the material of those categories was coded more specifically to sub-codes drawn from the modified theoretical framework. The coding process mainly followed the approaches suggested by Lofland (1971) and by Bogdan and Biklen (1992) (both are cited by Miles and Huberman 1994: 61): setting (or context) as information on surroundings that allows it to put the study in a larger context; perspectives as to how things are done in the situation of the interviewee in question; acts and activities in a situation that is either brief or major by
duration; processes and events as specific activities in sequences of events; and meanings as how interviewees define or direct their actions.

Due to the exploitation of the pre-structured case method, it has been possible to conduct a preliminary coding immediately after the transcription of the recorded interviews. Miles and Huberman (1994) have argued that it is even possible to start with “the raw field notes [that] are coded without being transformed into write-ups” (84, brackets added), and continue with the research material display process and drawing conclusions. In addition, it is noted above that it is possible to go back into the research process if the existing research material fails to support the displays of the results and drawing of conclusions. In this research the iteration resulted firstly in developing new interview themes, and secondly in developing a new theoretical framework for the study. Due to the new outline based on the new theoretical framework the processes of coding, displaying and concluding had to be conducted once again.

In this study the coding based on setting/context and perspectives displays itself in categorizing the process of creating BOs based on its starting date (i.e., when the entrepreneur decided to start the process). This data together with the understanding of the industry development phase and the current industry recipe defines the normal way as it is understood in the field, of acting in creating the BO. Coding based on acts and activities in the processes and events present themselves in the understanding in which interviewees sensed the actual ideating, modeling and planning process. Further to this additional categories and subcategories were created when the new information fitted into existing categories but was more specific in nature. An example of additional categories is the second round ideating, modeling and planning process of the existing BO.

Based on the conceptual framework of this study (Fig. 5) it is assumed here that if the entrepreneur talks about ideas related to the business opportunity, or idea, or similar (IofBO, Ch. 5.5.1), or about how the future business is expected to operate (BM, Ch. 5.5.2), or how the entrepreneur plans the future business actions (BP, Ch. 5.5.3) then these topics are at least indirectly related to the ideating, modeling and planning process. This is the case whether or not they actually use these labels during their narrations. In the same vein, if the case entrepreneur describes the ways he or she has conducted (or thought about) these activities then it will be possible to presume, for example, how these activities differ from the industry recipe dominating at that time (Ch. 4.2.1; Ch. 4.2.2). That is, if the actions differ a lot from the industry recipe then they are pre-supposed as being more creative than business-wise. It is believed here, however, that in any case –
even in the most reproductive cases – these activities (while seen as less business-wise creative) are, however, still assumed are creative from the perspective of personal creativity (Runco 2007).

The additional interview of the ICT expert became very important in analyzing more thoroughly the information from those three sub-cases that were founded already during the eighties or early nineties (from 1980 to 1995). Where possible, the interview materials and the additional information obtained from the documents, web pages, etc., the secondary database, was triangulated in order to promote the highest level of understanding.

In all sub-cases, the main task of the researcher is to utilize his own understanding in a manner of double–hermeneutics (Nørreklit 2006) to form new insights based on the personal communication with sub-case entrepreneurs (the outer hermeneutic circle), and researcher’s own thinking (the inner hermeneutic circle). The understanding in Nørreklit’s thinking (ibid.) involves all three circles – two of these are the inner and outer circle of researcher and one is the inner circle of the entrepreneur – however, without the communication enabled by the pre-understanding of all contributors this understanding will fail to emerge. One way to tackle this problem is to keep the interview process as open as possible in order to promote entrepreneurs’ own impressions of the BOC process.

Material displays

Displaying the results of the research material analysis is a “central pillar of qualitative analysis” (Lee and Lings 2008: 247). Various forms of displays, such as quotes, diagrams, models, time lines and so on with both within-case and cross-case matrixes, are used to deepen the reader’s understanding of the situation. According to Lee and Lings, it is important that “the data should drive the display, don’t try to force the data to fit a display which you really like” (249).

From the two types of modes of displays, this description is preferred to explanation in the present study since it suits “making complicated things understandable by reducing them to their component parts” (Bernard 1988, cited in Miles and Huberman 1994; 90). This is not to say that the aim here is to believe in the strict reduction of the phenomenon into bits and pieces and rules kind of laws: It is to display to understand the process of creating the BO, first, as a whole, and second, as an emerging process constrained and promoted by certain structures, mechanisms and practices.
Carney (1990, cited in Miles and Huberman 1994: 92) has presented the three levels of the analytical abstraction: summarizing and packing the data; repackaging and aggregating the data, and developing and testing propositions to construct an explanatory framework. From these levels the main level exploited here is repacking and aggregating research materials to make the results of the analysis available to be seen as easily as possible. This is carried out by searching for relationships between the results and the theoretical concepts of the theoretical framework of the study, and by finding intervening concepts rather than variables and the like, since “the important thing to keep in mind is that we are talking about variables, concepts, not necessarily specific acts or behaviors” (Miles and Huberman 1004: 258, underlined word emphasized in italics in original, emphasis added).

**Drawing conclusions**

To draw conclusions is to act based on thinking about what the results actually mean, i.e., without over-interpreting those results but letting them speak for itself. This means that by drawing conclusions (or creating the text or telling a story) it is important to “pick out key points and patterns, and ultimately build a convincing evidence-based argument as to what you are trying to say” (Lee and Lings 2008: 252). This can be done by looking for patterns (i.e., mechanisms and structures, and social practices, as is proposed by critical realists) to understand their effects on the processes where they do and do not hold. This is in line with Lee and Lings who state that:

“while coding has taken you right down into data, try to raise your level of abstraction to one which takes in all of the data. Think in terms of general concepts or variables and their relationships, not always individual people or cases” (Lee and Lings 2008: 253).

To display the influence of existing structures and mechanisms based on the critical realist perspective the main method for concluding exploited here is the use of the intervening of concepts. This method will promote the understanding of how the outcome of the BOC process is part of an inter-related network of several other concepts (Fig. 13).
Summary

As outlined above, the generation and analysis of research materials are inseparable activities: It is time to start the analysis and its interpretation while the generation is going on. This kind of keen relationship between the generation and analysis of the research materials “can lead to new questions for other interviews, as well as to interpretations that will be introduced to the same or other interviewees” (Steyaert 1995: 222). Nevertheless, in the case of the pre-structured case method the role of coding is a little less important than in other cases. That is, the pre-structured case is built on strong insight of the phenomenon and on a conceptual framework believed to be feasible for the purposes of this study.

However, this is not to say that the researchers should not try to benefit from a more analytical and more organized approach to research materials. One way to utilize this approach is through building a case record, or database for all the material generated during the research process either thematically, or chronologically, or otherwise (Eriksson and Kovalainen 2008; Yin 2003). In addition, “the vast amounts of data prior to collection will save the researcher much time and frustration later” (Dooley 2002: 341). Thus, feasible planning actions prior to the actual phase of analysis by utilizing this kind of organizing of database or record may help to set categories for sorting and managing the research materials.

6.2 Evaluation of the research strategy

Many scholars (Hammersley and Atkinson 1995; Maxwell 1996; Becker 1996, cited in Lloyd-Jones 2003) have defined qualitative research design as being “interactive, dynamic, and emergent character in which the aims, strategies, data, analysis, and validity are woven together in the process of the study” (Lloyd-Jones 2003: 33). In line with this, it is to see the role of the qualitative researcher as the key instrument in the design process. In this kind of process, the qualitative researcher continually deploys reflexivity and evaluative skills both to data analysis and to all the decisions to be made concerning the direction of the proceeding in the study process.

Furthermore, the reality of qualitative study is said to be based on insights of participation to the research process of both the researcher and the other research participants of the study, i.e., the sub-case entrepreneurs. In addition, from other perspective, it has been said that the validity in qualitative research concerns
“determining the degree to which researchers’ claims about knowledge corresponded to the reality (or research participants’ construction of reality) being studied” (Cho and Trent 2006, 319).

It is also believed here that to believe in “one-to-one correspondence between what has actually happened and the reconstructed texts” (Cho and Trent 2006: 333) has only a little to do with the report’s validity. According to those scholars, Maxell (1996: 88) has put it as follows:

“Many proposal writers make the mistake of talking about validity only in general, theoretical terms presenting abstract strategies such as bracketing, member checks, and triangulation that will supposedly protect their studies from invalidity ... [these terms and techniques are] magical charms that are intended to drive away evil.” (Cho and Trent 2006: 333, brackets in original)

Furthermore, according to Bhaskar (1979), it can be claimed that due to their characteristics the human sciences must confront the problem of phenomenon that only manifest themselves in open systems. This means that “criteria for the rational appraisal and development of theories in the social sciences, which are denied (in principle) decisive test situations, cannot be predictive and so must be exclusively explanatory. (Bhaskar, 1979, p. 27).” (Dobson, Myles, and Jackson 2007: 140, emphasis in original).

From the perspective of retroductive research strategy this can be summarized as follows:

“In order to explain observable phenomenon, and the regularities that obtain between them, scientists must attempt to discover appropriate structures and mechanisms. Since these structures and mechanisms will typically be unavailable to observation, we first construct a model of them. The model is such that were it to represent correctly these structures and mechanisms, the phenomena would then be causally explained.” (Blaikie 2007: 83)

In closing, the basic assumptions of this study will manifest themselves in the broad arena where every person (i.e., every entrepreneur) is in constant interaction between other actors in the field. In addition to this, the clear possibility exists that these actors have a certain role in producing new inventions, ideas and whatever that could be seen as the different modes of reality (Fleetwood 2005), and even some novel combinations to be introduced (Schumpeter 1934). Equally, in a qualitative inquiry (such as utilized in this study), reality gets into
something, which reflects the insights of the researcher and research subjects, the entrepreneur.

### 6.2.1 Reliability and validity of the research

According to Maxwell (1991) the reliability and validity of qualitative research is based on how well the phenomenon is understood and how well it is suitable for reaching the aims of the study. For example, Stenbacka states that “the concept of reliability is even misleading in qualitative research” (2001: 552, quoted in Golafshani 2003: 601) and thus irrelevant in qualitative research.

This is also the view of Lincoln and Cuba (1985) when they extend the traditional reliability-validity issue by claiming that more feasible criteria would be credibility, transferability, dependability, and confirmability (or neutrality).

Following the logic of Lincoln and Cuba (1985) and Denzin and Lincoln (2005) credibility of the results of the study depends on two things: what interviewees and what other research subjects reveal about their experiences. This is specifically important in studies based on the retrospective method in generating research material due to the recall bias, that is, the effect of the respondent’s memory on what the entrepreneur reports, and what he or she thinks as undesirable in the interview situation. The second issue is that on which the researcher chooses to focus (or not) on the study.

To look more thoroughly at the recall bias, it is clear that this is the classic form of information bias (Grimes and Schulz 2002). Since the recall of information (or experiences) depends on the more or less imperfect and unreliable memory (Koriat 1993) it is also evident that after one year people are able to recall only eighty percent of the critical details of a recognized event, and after five years a half of these events are irretrievable (Bradburn, Rips, and Shevell 1987). Thus, it seems that “the longer the interval, the higher the probability of incorrect recalls” (Margett, Vorster, and Venter 2003, cited in Hassan 2006: 2), and “events that are especially recent or vivid are easier to recall from memory, so people tend to overestimate the actual frequency of such events” (Forbes 2005: 623). One common solution to this kind of bias is the use of longitudinal data collection method. Another approach to the recall problem is the retrospective interview technique of Dickson, Rainey, and Hargie (2003) presented below.

Lincoln and Cuba (1985) highlight two other issues that have affected the reliability and validity of the research: the commitment of researcher, and the knowledge of the field. If the researcher manages to communicate this
commitment successfully it is possible to build trust between researcher and research subjects. In the same vein, to know the field to be studied indicates the trust building; the better the researcher knows the daily routines and theoretical issues, the easier it will be to build trust.

In this study it is thought that the background of the researcher is feasible to study entrepreneurship, and the BOC process, for several reasons. First, the personal background of the researcher comes from a family where his parents have been acting as entrepreneurs in fields of service business both separately and together as self-employment types of entrepreneurship. Second, he has commenced the process to start new independent business venture two times; with a team of experts in the same field, and dependently within the corporate entrepreneurship context. Furthermore, he has worked several years in the entrepreneurship education project and managed to graduate during that time. Thus, he has familiarized himself with literature on entrepreneurship written in Finnish, and after graduation in other languages as well. In addition, before the start of this study project he already knew one sub-case entrepreneur professionally since he worked with him earlier. Finally, the researcher has work experience as an expert in a specific field in the ICT business.

Thus, this documented pre-understanding (i.e., the first-hand and second-hand pre-understanding in Stenbacka 2001; see Nörreklit 2006), promotes the quality aspects of the study. In addition, it is believed here that the background of the researcher will enhance the management of clear communication with the sub-case entrepreneurs.

Furthermore, credibility of results was promoted by designing the research material generation as comprehensive as possible in order to utilize the method of data triangulation (Denzin and Lincoln 2005: 20). The main source of the research material is the semi-structured interviews of seven entrepreneurs. All interviews were recorded and transcribed. The transcription process was somewhat painful as the tapes were almost inaudible in several places. However, after working hard on using both analogue and digital technology, the researcher managed to increase the quality of recordings. Finally, the initially inaudible parts of sub-case materials were reduced to the minimum.

Along with the of sub-case entrepreneurs’ interviews one particular interview of an expert in the ICT industry was conducted in order to enhance the experiential knowledge of what has happened in the industry in 1980s and early 90s. Furthermore, research materials were also collected from other sources such as from companies’ web pages and newspaper and magazine articles.
According to Yeung (1997: 63), the over-reliance on research materials generated from the sub-case entrepreneur needs to be considered as follows. Firstly, all social actors, researchers and researched, may be trapped in false consciousness (e.g. the recall bias above), and therefore they may be unable to explain truly and to account fully for their action. Particularly this recall bias (or reporting bias) is commonly related to the retrospective interview technique (RIT), however, Dickson, Rainey, and Hargie (2003: 40–42) have shown that:

"RIT is a methodology that employs in-depth semistructured interviews to investigate aspects of relational communication amongst colleagues, factors causing change, and related key turning points, over the duration of their period of employment in the organization (Bullis and Bach, 1989).” (Dickson et al. 2003: 40, parentheses in original)

Their results show that by plotting these changes graphically for example, recall can be made easier, and that RIT is adept “at exposing not only discrete discontinuities in relationships over time, but also the rates of such changes” (ibid.: 42). However, it was also found that “it proved time-consuming and particularly prone to all the vagaries of recall, especially over potentially lengthy periods of time and quite often with emotion-laden material” (ibid.).

Thus, there are many advantages and disadvantages in the retrospective interview technique. It seems that it may distort the information by guiding the interviewee to follow the categories, which a researcher has already generated. At the same time, however, it is feasible in discovering “essential factors which hindered or promoted inter-group relations inside work, but included networking outside work as a result of shared residential location, sporting activities and socializing patterns” (41). Furthermore, it is the fact that interviewee can narrate the events and processes very smoothly even when they did not actually happen in the manner they have related to the interviewer. In fact, the “greater use of longitudinal measures has been recommended as a means of overcoming problems resulting from "perceived" relational development (Sias and Cahill, 1998)” (ibid., parentheses in original). On the other hand, the in-depth nature of RIT provides a feasible tool for gleaning information about the actual events leading to change which may not possible with other methods. In addition, the information of these kinds of events or processes can be explored at length.

From the beginning of the generation of the research material through the semi-structured interviews method the results of the study of Dickson et al. (2003) were acknowledged and applied in the interview sessions. The main
method to **plotting changes graphically** was to draw the timeline concerning the process in question. To decrease the influence of the **guiding effect of the researcher-generated categories** the researcher was intentionally avoiding the use of his own concepts for as long as possible. However, when something had to be checked, or to understand correctly the meaning of the concepts used by interviewee, the researcher used the common labels to make sure the definition of the concept was correct.

According to Yeung (1997: 63), to consider the over-reliance on research materials, it is necessary to acknowledge that since the philosophical basis of the present study is on critical realism the information on structural context and contingency is understood as ambiguous and unobtainable directly from the experiences of the sub-case entrepreneurs. Finally, since these mechanisms need to be abstracted from the data rather than merely “’read-off’ straight from the data” (Yeung 1997: 63, quotation marks in original) the idiosyncratic role of researcher is emphasized.

The situation such as this will emphasize the role of researcher to use his or her own analytical thinking to generate a broader and deeper picture on generating mechanisms and structures at the real level and not just at the empirical level of reality.

The research data analyzed initially by using Nvivo8 software may have watered down the credibility of results of the analysis since it was conducted only by the researcher himself without any other person. However, because the categorization of the research material is based on the elements already present in literature on the entrepreneurial process, it is thought to reflect commonly shared insights in the field. Thus, it is important to note that this study presents the process in a totally different way because due to the critical realism dimension. The next tool of Lincoln and Cuba (1985) to study reliability and validity in a qualitative research study is transferability (or ecological validity in ibid.). While the use of reliability is to be questioned in the context of qualitative research, perhaps the most important issues to promote the transferability of research data – as well and richly as possible – is to enhance the capability of readers to conclude how feasible, and practical they are in concluding results.

While Yin (1989) states that only the analytical generalization is relevant in qualitative research since “analytical understanding is made possible as a result of the study by lifting the empirical material to a general level” (Stenbacka 2001: 552), according to Lincoln and Cuba (1985), if the results are going to be utilized
in (or applied to) the same kind of context as the original, it is easier if it is done this way rather than in a totally different kind of context.

When a qualitative case study is to be evaluated, it is important to deal with the dependability; “which closely corresponds to the notion of “reliability” in quantitative research” (Golafshani 2003: 601, quotation marks in original). According to Lincoln and Cuba (1985) the researcher’s role in the study as designer of the study, literature reviews, the analysis, results, and research reports highlights the fact that you see what you know and the questions you ask influence the answers you will get.

Thus, dependability discloses clearly the emerging ways of thinking about the entrepreneurial process and what is to be expected there in my own research project. Therefore it reasonable to emphasize what Stenbacka (2001: 553) has stated: “The most basic insight is that the researcher is always part of the study”. It is believed here that the same kind of phenomenon is revealed in the ways in which entrepreneurs tell their stories. On the one hand, those entrepreneurs who started the early 1980s have told the story many times. The good news here is that they have reflected it thoroughly over the years. But the bad news is the need to be consistent with the story every time the entrepreneur is narrating it. This kind of situation will make it very difficult to modify the initial story, even if the entrepreneur has learned something that gives an alternative interpretation of what has actually happened and why it happened.

On the other hand, it seems to be clearly displayed that both the entrepreneur and the researcher is using only the vocabulary they are accustomed. Since entrepreneurs in the sub-case of the present study are neither accustomed to think entrepreneurship as a process nor the BO as an outcome of a creative process it is the responsibility of the researcher to interpret their narrations as thoroughly as possible – based on their own vocabulary, of course. That is, to interpret their narrations from the process perspective. This procedure is in line with the critical realist perspective that emphasizes the role of interpretative researcher in understanding mechanisms and structures at deeper levels of the reality, the actual and the real, and not only the emipirical (see Dobson et al. 2007, 143; Leca and Naccache 2006, 635; Mutch et al. 2006, 618; Patomäki and Wight 2000, 218). In all, one way to enhance dependability is to try to ground the solutions and interpretations as explicitly as possible (see Bjerke 2007).

Finally, the criterion for conformability is difficult to include to the present study mainly since the focus on critical realism is the researcher’s own role in several ways. First of all, since it is believed here that “no one-to-one
correspondence between what has actually happened and the reconstructed text” (Cho and Trent 2006: 333) occurs, therefore merely the use of certain procedures (e.g. member checking\textsuperscript{18}, triangulation and so on) as such will not guarantee the validity of the study. Second, since the role of researcher is to search for mechanisms and underlying structures of the BOC process which operate at level of the real and which generate events to be experienced by the sub-case entrepreneurs, then the concept of confirmability (Guba and Lincoln 1985) is problematic in the sense that there will be difficulties applying it in the research based on critical realism and the researcher’s own experiences as a key part thereof. Third, the role of researcher is emphasized since these mechanisms need to be abstracted from the data rather than straight from the data.

In closing, according to Maxwell (1991) the reliability of a qualitative research consists in the understanding of the phenomenon in question, and it should be evaluated in relation to the purpose and the circumstances of the study. Criteria such as credibility, transferability, dependability and confirmability are presented in the prior literature as the key evaluation criteria for the qualitative research (e.g. Lincoln and Guba 1985; Stake 1995).

6.3 Discussion

The use of case study research strategy and methodology is informed by the idea that researchers should be well prepared to understand what (or why) something happens in the research context. According to Barkley (2006: 10–11), “North (2005) argues that individuals filter information through a belief structure shaped from experiences, and “biased” interpretations may result from researchers’ pre-conceived ideas of environments and relationships”. To reduce these kinds of biases, two strategies were followed: first, to conduct pilot interviews before the research material generation, and second, to exploit the experiences of researcher himself in the research context.

The case study methodology utilized in the study also includes some problems. One is the question of the research material: is it accurate enough? Another problem may be found in the relation between the BOC process and the empirical scrutiny included in the overall research strategy of retroduction as well as in the specific research strategy of case studies. While, for example, Danermark et al. (2002) do not include any kind of empirical testing of the insight emerged (or created) during the retroductive research process, however, the model of Leca and Naccache (2006) includes this to the process. Thus, the retroductive
research strategy utilized in the present study is also in line with the seminal writings of Peirce as they have interpreted in Chiasson (2001).

It is acknowledged in the present study that the key aims of the study are, to build on existing knowledge as much as possible, and to combine this knowledge into an alternative theoretical framework. This framework includes all the insight explicitly or implicitly presented in this context, and would suit well in the critical realist perspective. While, on the one hand, the tentative framework of the process of creating business opportunities is grounded in the existing literature, and, on the other hand, it includes insights that are different than what is presented in the dominant literature on entrepreneurial process, many of these new ideas are new only in the context of the entrepreneurship. In fact, it seems to be evident that the critical realism and creativity presented earlier in the other field of social sciences may provide as a possibility (some might call this opportunity but this is not the author’s view) to re-create the theoretical approach to think how people (or entrepreneurs) create new business opportunities?

In closing, the case study methodology, despite all its weaknesses, fits well with the study of the creating process as it is defined above – with the biases discussed above and those yet to be recognized. Critical realism, on the one hand, seems to focus on the stratified reality with the three levels, and on the other hand, on the role of individuals and groups of individuals in exploiting the existing reality and at the same time being able to change it. In the same vein, the activities of the people in the role of entrepreneur play the significant role in generating the phenomenon studied here. This means that the process of creating business opportunities is seen here through the perceived experiences of entrepreneurs in the process, and through the research findings presented in the literature.

6.4 Empirical case study

The empirical part of the study, labeled Step three: Case study, is the final part of the tripartite research strategy. Before this step two prior steps in this retroductive research strategy already are reported; Step one: Elements of the Business Opportunity Creating Process (Ch. 4) and Step two: Outlining the BOC process (Ch. 5).

This section is about reporting the case study and its key findings. Both the single-case study design and the tripartite retroductive research strategy are chosen to study the following research question (RQ): How does the entrepreneur
experience the creation of the BO? The main research question is divided into three sub-research questions as follows: The first, S-RQ 1, is asked to understand how does the entrepreneur experience his or her actions in the BOC process? The second, S-RQ 2, asks what is the role of the environment in the creation of the BO? Finally, the third sub-research question, S-RQ 3, asks what is the relationship between the two sub-processes of entrepreneurship?

The strategy of the case study has its theoretical basis in critical realism and retroductive research strategy. The theoretical frameworks for the case study were built in step two. The case study is conducted from the perspective of the theoretical framework created for the study (Ch. 5.1.2). This framework follows the critical realist perspective in highlighting the roles of structures and mechanisms and individuals as entrepreneur in generating the BOC process and the role of the researcher in interpreting the experiences of the entrepreneurs in the BOC process.

This section starts with presenting the seven sub-cases. Sub-case descriptions such as these, on the one hand, focus on the history of the person interpreted as relevant to the BOC process before it has actually started. On the other hand, they disclose the personal or professional conditions of the BOC process in each sub-case. Then the findings based on the analysis of the research materials for S-RQ 1, S-RQ 2, and S-RQ 3, will be presented and discussed. Finally, a discussion of the sub-cases study is presented.

6.5 Sub-case descriptions

The descriptions offer a glimpse into the lives of the sub-case entrepreneurs, their backgrounds and the processes they experienced in creating their business ventures. The sub-case selection consists of seven sub-cases based on selection criteria presented in the section above. The sub-cases are labeled from A through G to obviate the identification of both the individual entrepreneur and the firm. Information that could enhance any identification is omitted from the descriptions.

Sub-Case A

Entrepreneur A reached the start-up phase in 1984. At that time he worked at university and on projects in a different field with the sub-case firm. The business experiences he had were scarce, and gained mainly through founding another type
of firm to the sub-case firm. At the time of the start-up phase of the sub-case firm the earlier firm was non-active, but not abandoned.

Entrepreneur A had a strong intention to start something, and he was searching actively for an idea to start a business. His own education and skills were in the field of electronics, and he assumed that in a co-operation between his business and personal friends, the identified opportunity seemed feasible enough to start to do business in a business area which was, in fact, yet quite unknown to everyone in the team.

Information for the opportunity was acquired from public sources – newspapers and public debates. In addition, the information about changes in the society and industry in question seemed to be sources of new opportunities, because the specific knowledge he already had. Although the new business was new in Finland, but not at the global level, there seemed to be an opportunity to be the first – or at least one of the early starters – to offer products and services for other organizations in building up the new industry.

While the development phase of the specific industry in which entrepreneur A started to work was still emerging – in general, the market actually did not exist yet – and the situation in which entrepreneur A started his business venture was characterized as a first-mover, however, he started the business with a focus on an existing part of it: the equipment production. After a few years the focus changed toward the core processes to serve the chosen field.

Sub-Case B

The entrepreneur in sub-case B was at the start-up phase in 1985 while he was still working in another company. He started an internal development project with the main objective to develop a new software-based tool for the company’s own purpose. Although his educational background was telecommunications before 1985 his work was to a great extent in other areas such as software development, display technologies, etc.

Because the opportunity was initially identified by entrepreneur B as an internal development project for an established firm, it helped entrepreneur B to be able to bridge knowledge from several sources; knowledge of experts from different fields of knowledge both inside the firm and outside the firm. Entrepreneur B was, in fact, actively searching for new ways to discover both the problems and the answers to the project. He then reviewed the current products
and displays available on the market for meeting the needs of the users in the firm as well in the emerging market for those new products.

Due to the positive responses of other players in the field, the developed software with new display technology became the first products in the new business venture. After a few years the initial business area was sold out to operating management (as MBO) and entrepreneur B turned the business around toward his own interest and experiences in the field of telecommunication.

Sub-Case C

Entrepreneur C’s educational background was in electricity and he was interested in personal computers and software. Based on his know-how in the field of PCs he started to earn extra money by making small additional programs for computer exporters. Entrepreneur C started his business initially in 1985, but since the actual business activities based on the initial ideas never started, the actual business activities started in 1991 after leaving a big company where he had worked for several years in management and development positions.

While working as a team manager in the company he looked for partners to start a business. Entrepreneur C managed to found a firm with two friends from the same company, but the business never started to operate mainly due to personal reasons of the founders and the fact that their own professional prospects in the current company were very promising.

Over the years entrepreneur C worked as a manager and learned what kinds of needs there were in the market and how to respond to those needs. While he was occupied with regular working activities at work he created also new tools for the company. However, because those tools were not at the core of the company’s strategy, opportunities to carry on with these inventions seemed to be scarce in the company context. Over the years in the company entrepreneur C had been able to acquire new knowledge in technology, business skills, and expertise and insight about the mobile market. At the beginning of 1990’s he believed strongly that some day (and hopefully as soon as possible) he will single-handedly – if necessary – re-start the business founded earlier.

Because entrepreneur C had excellent know-how and a good reputation in the field, and his professional and business networks were wide, he felt that he knew what was going on in the market and the technology. He believed the new technology will open up the field rapidly and with good products it could be a good time to start a business. There were also changes in the industry; certain
departments in the company were being reorganized and moved from one place to another, and people were advised to follow the jobs. Because some people found this kind of situation unpleasant there were good people available and entrepreneur C thought that it was his time to start.

Sub-Case D

Entrepreneur D was in the start-up phase in 2000 when he was still studying at university. His professor asked whether he and some other students could build a team and utilize their skills by selling project work to firms on the market. The professor’s advice was to think about making this on the account of their own firm – and at the same time stay as a part-time member of the staff of the department. Due to his good education in the field, entrepreneur D and his co-entrepreneurs thought: Why not. At the beginning of the process their work experiences were based on university projects both at the university and in cooperation with firms outside the university. However, neither entrepreneur D nor his associates had any particular experience of commercializing ideas or skills in business. In addition, entrepreneur D’s networks were mainly based on personal contacts in academic circles.

In 2000, the expectations in the field started to lower, and larger companies were more careful starting new and large ventures or projects of their own. Thus, entrepreneur D’s new firm had difficulties getting follow-up projects, and selling own prototypes in the market. One solution to this situation was that entrepreneur D searched for new information and support by joining an incubation organization and one of the commercialization programs conducted in the field.

Sub-Case E

Entrepreneur E’s path is quite exceptional compared to the ideal model in the literature; it all started in the early 1990s as development project-based economic activities in the non-profit academic context, then continued as a development project for new business in a commercial company, and finally as a start-up phase of a management–buy–out (MBO) type of business venture in 2001, while he was working in a large company in the field.

The educational background of entrepreneur E is not in information or communication technology, but in humanities. However, during the time as a member of staff both at the university and in the company he was able to acquire
specific education and experience in business skills, product development, management, etc. He had wide industry related experiences and connections to many formal and informal organizations and leading actors in the field at the time of founding of the firm. Entrepreneur E had experience also in team building and management.

The development phase of the specific industry in which entrepreneur E worked was maturing; the firms offering their services in the field started to divide into two larger groups: on one hand, a group of small firms stagnating in their start-up phase, and on the other hand, a group of larger and growing firms that were able to perform well. Because of the MBO nature of entrepreneur E’s start-up it was possible to continue in the process he had created in recent years.

On the one hand it can be argued that the opportunity entrepreneur E had defined over the years was based on the identified needs of the everyday work of students and teachers at the university. After realizing that it was also a possible to make business in this context, it is also reasonable to argue that the main sources of E’s business were both the identified emerging needs and the technological and commercial aspects that made the action feasible.

**Sub-Case F**

Entrepreneur F was in the start-up phase in 2004, when she made a contract with an incubation organization to develop her business plan in order to be able to found her new business. Her educational background is in information processing science, psychology and digital media. Due to her working in many firms in the field, entrepreneur F has large professional networks with middle-ranking employees, not so much with entrepreneurs, or top managers, of larger firms. During her working days, F identified several more or less vague business ideas, that were not feasible, or attractive enough to continue with development, but when her personal situation made it possible to think more openly about options, and together with one course at university, the idea of forming a business started to emerge.

Since the second half of the 1990’s, the integration of different kinds of software was growing, and the need to manage this integration became an issue in larger firms, particularly. At the same time, the ICT firms started to focus more on their core functions, and this process opened new possibilities for small firms, or even solo entrepreneurs, to offer services based on specific skills and knowledge.
The main sources of the business opportunities were based on observations from everyday life: the continual wondering about why is this so complicated. Based on these observations and her own professional experience, entrepreneur F was convinced that it could be possible to found a business on this and start to offer her services in the market. One year after the interview, entrepreneur F has changed her business model. Instead of continuing to offer skill-based services she has started to build and offer software-based products that will support the customer in organizing his or her activities.

**Sub-Case G**

Entrepreneur G was in the start-up phase in 2003, and had several years work experience as a CEO in the field. His educational background is based on engineering in automation and business administration studied both in Finland and abroad. In addition he had completed courses for CEOs. Entrepreneur G’s work experience si based on both employee level as well as on the management level in larger firms in the field.

At the time of the study entrepreneur G was working as an employee in a larger firm, and his own start-up was non-active. This situation was mainly due to unexpected changes in the human resources; G failed to convince the co-founders of the possibilities of the business opportunity, and those people refused to join the start-up.

The main sources of the business opportunities for entrepreneur G were based on work experience in the field, and general and specific newspapers and journals. Only a few months after the interview, entrepreneur G decided to abandon the start-up, and managed to sell it to his current employer. Because he also managed to continue as a manager in that firm, he hopes to be able to develop his know-how in areas that need to be improved if he wants to build up a new start-up in the near future.

### 6.5.1 Discussion of the characteristics of the sub-case entrepreneurs

All the sub-case entrepreneurs in the study have managed to go through their BOC process. This means that they have all created a BO and faced the decision of whether to actualize it in the BOE process in the real-life market situation. Furthermore, they have all experienced the process from start to end – from
transition point one to transition point two – as it is defined in the theoretical framework of the study (see Fig. 9).

The short descriptions above show how great the variation is among the case entrepreneurs. They range from highly recognized professionals in their own field to newcomers, students, who have just entered the field. Furthermore, six out of seven sub-case entrepreneurs are male, and one sub-case entrepreneur is female.

The variation concerning the starting year is huge; the earliest process started in the early 1980s, whereas the latest process started only a few months before generating the research material.

Table 6. Characteristics of the sub-case entrepreneurs.

<table>
<thead>
<tr>
<th>Process started</th>
<th>Informant</th>
<th>Gender</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sub-case A</td>
<td>1982</td>
<td>entrepreneur</td>
</tr>
<tr>
<td>Sub-case B</td>
<td>-</td>
<td>entrepreneur</td>
</tr>
<tr>
<td>Sub-case C</td>
<td>1985</td>
<td>entrepreneur</td>
</tr>
<tr>
<td>Sub-case D</td>
<td>2000 - 2002</td>
<td>entrepreneur</td>
</tr>
<tr>
<td>Sub-case E</td>
<td></td>
<td>entrepreneur</td>
</tr>
<tr>
<td>Sub-case F</td>
<td>2004</td>
<td>entrepreneur</td>
</tr>
<tr>
<td>Sub-case G</td>
<td>2004</td>
<td>entrepreneur</td>
</tr>
</tbody>
</table>

It was discovered after the sub-case selection that these seven sub-cases form three distinctive groups based on the starting year of the BOC process. Based on this temporal characteristic the first group of entrepreneurs (i.e., sub-case A, B, and C) spoke explicitly of how they started their process during the first half of the 1980s. The second group of entrepreneurs started their processes around the burst of the ICT bubble (i.e., sub-cases D and E). The two sub-cases that started only a few months before generating the research material (i.e., sub-case F and G, the group three) stated quite accurately that their process started in 2004. This will be exploited later to study the role of the industry development phase and the industry recipe in the BOC process.

6.6 Entrepreneurs and the BOC process

The discovery process that is presented in the prior literature on the entrepreneurial process includes the idea that the discovered BO will become more or less developed or refined from this initial phase into a full-blown BO. More specifically, it is assumed that the initial opportunity as such equals the vision (as a sketch of a future venture) of the business venture. Later in the
entrepreneurial process a business venture is to be founded on this opportunity. This means that through refining or developing the initial picture of the future business venture into a conceptual model of the BO, the vision becomes more real. In all, in the case where the need for developing is evident, for example, in a very dynamic situation with a limited prior information about how to run the business venture, the more the entrepreneur develops the perceived opportunity the more distinctive and more down-to-earth it will become and vice versa. In the opposite case, where a lot of information is available, the development seems to happen immediately.

The BOC process contrasts with this (see overview in Fig. 3). To understand the key characteristics of the BOC process it is important to note one specific difference compared to what is presented in the previous literature. The prior literature presents the opportunity as based on existing supply or demand, or both as ready to be recognized, or discovered in the external reality. The BOC process is built on a different assumption. This assumption is based on an insight that it is not solely about whether opportunities exist to be discovered or not. Instead, it is believed here that it is about a twofold situation. On the one hand, the reality existing as external to entrepreneurs is full of various sources for BOs. It is important to note that these sources as such cannot be treated as more or less ready–to–be–used opportunities but only as a source – as a good starting point for the BOC process. This means that in every case the BO is thought as the outcome of the creating process, the BOC process, (or the identification process as proposed by Ardichvili et al. 2003) rather than an input for the conceptual development process of the business venture.

On the other hand, it is also believed here that since all people live as embedded in the social and natural reality they are also able to perceive various sources to create more or less idiosyncratic and creative ideas for new business ventures or even business firms (or start-ups). However, only those ideas are treated as inputs for the BOC process that evolve with the person’s intention to focus on creating a business-wise idea with identified elements (e.g. 4 Cs in Gartner and Bellamy 2010) concerning the key insights concerning how the Business as a social structure is understood in a specific society. That is, an input of the BOC process is the more or less vague initial idea with clear business-wise focus that is to be transformed into the form of a business opportunity. Thus, only in the case, where the entrepreneur is willing to intentionally actualize their idea as a business venture or firm by starting the BOC process in order to create a BO, will there be an opportunity to act entrepreneurially. In fact, it is believed here
that people start to play the role of entrepreneur (i.e., start to act entrepreneurially) at the same time when he or she makes decision to start the BOC process.

To answer the research question of how does the entrepreneur experience his or her actions in the BOC process the analysis starts by categorizing the research material first into two categories: before and after the start of the entrepreneurial process. The former phase is characterized as the entrepreneur’s background (i.e., education, work experience, etc.). This situation is described in figure 9 (Fig. 9) as ideas for new business venture / firm followed with transition point 1, the intention to start the BOC process.

6.6.1 Influence of entrepreneur’s background

It has already been shown in the previous section that the entrepreneur’s background (i.e., prior work experience) influences his or her decisions about how to start the BOC process. In the literature two distinctive approaches are introduced to categorize the modes people are using to start the BOC process. One is to start independently to pursue one’s own goals and intentions. The other is to start the process while one is working as an employee to pursue the goals of the organization. In the business context the former mode is called the entrepreneur (or the independent entrepreneur) and the latter the corporate entrepreneur (Burgelman 1983; Reynolds et al. 2004).

To make a clear distinction between these two modes of starting the BOC process, the method by Reynolds et al. (2004) is utilized in order to distinguish between independent and corporate entrepreneur. This is done by asking as follows:

“Are you, alone or with others, now trying to start a new business?” or “Are you, alone or with others, now starting a new business or new venture for your employer? An effort that is part of your job assignment?” (Reynolds et al. 2004, 268)

If the answer to the former question is affirmative it means that the person acts as an independent entrepreneur (IE). If the answer to the latter question is affirmative then the person responding is called a corporate entrepreneur (CE). The focus of the present study is on the former (IE) who have started the BOC process either alone or with others.

The analysis of the research material in the following section is based on the interview themes concerning the entrepreneur’s background characterized as
parents or kinfolks experience as IEs, and as one’s own prior experiences as independent entrepreneur (IE) or corporate entrepreneur (CE) (Table 7).

Table 7. Characteristics of the entrepreneurs of the sub-case.

<table>
<thead>
<tr>
<th>Entrepreneur in the Sub-case</th>
<th>IE or CE</th>
<th>Prior work position</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>IE</td>
<td>Researcher in the same field</td>
</tr>
<tr>
<td>B</td>
<td>CE</td>
<td>Manager in the same field</td>
</tr>
<tr>
<td>C</td>
<td>IE/CE</td>
<td>Manager in the same field</td>
</tr>
<tr>
<td>D</td>
<td>IE</td>
<td>Student in the same field</td>
</tr>
<tr>
<td>E</td>
<td>CE</td>
<td>Manager in the same field</td>
</tr>
<tr>
<td>F</td>
<td>IE</td>
<td>Employee in the field</td>
</tr>
<tr>
<td>G</td>
<td>IE</td>
<td>Manager in the same field</td>
</tr>
</tbody>
</table>

According to the results of the analysis a great variety emerges among entrepreneurs: the sub-case entrepreneur in sub-case B and E and in some sense in sub-case C started their entrepreneurial process as the “induced strategic behavior” or “autonomous strategic behavior” of a corporate entrepreneur (CE) (Burgelman 1983: 65). The entrepreneurs in sub-cases A, D, F and G started as independent entrepreneurs (IE) (e.g. Reynolds, Carter, Gartner, and Greene 2004).

To start with the entrepreneur in sub-case A, the entrepreneurial process in question is not the first process he had been involved in (Table 8). Entrepreneur A started a firm with another person, though that firm was not very active. However, it has stayed alive and operates currently in a different industry than initially. Entrepreneur A started the process as one member of a team of three. They all performed the role of independent entrepreneur. The interviewed entrepreneur himself had no prior experience in doing business in the selected industry. Nevertheless, based on his theoretical knowledge and research experiences, which made the activity feasible in the emerging market, he knew how the required equipment worked. One member of the team had prior experience as an entrepreneur and he was close enough to the industry they were entering to know how to make the business work more or less as business as usual.

In addition, during the years in the entrepreneurial process the entrepreneur in sub-case A re-developed the initial BO of the business venture several times.

“We saw it [the business] only as technology. As something you only had to understand.” (Entrepreneur in sub-case A, 1:34, brackets added)

“We renewed our skin so to speak.” (Entrepreneur in sub-case A, 1:2)
Table 8. Entrepreneur A’s background influencing entrepreneurial process.

<table>
<thead>
<tr>
<th>Sub-case entrepreneur</th>
<th>As independent entrepreneur</th>
<th>As corporate entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Starting as team entrepreneur, then re-developing the initial venture several times during the life-cycle of the company</td>
<td></td>
</tr>
</tbody>
</table>

Both entrepreneurs in sub-cases D and G planned to start a business venture based on a team of IEs. The team in sub-case D consisted of peer students studying in the same area, whereas the team in sub-case G was expected to be formed on the basis of professionally highly advanced friends and workmates in the same industry. In sub-case D, the new organization was successful and the team managed to go through the BOC process and start the new business venture (Table 9). Perhaps due to his background as a student, the entrepreneur in sub-case D emphasizes the importance of prior experiences in business before starting new business activities successfully:

“Nobody can just walk inside the technology park, rent space, and say “I am going to start a successful business with this concept” if one hasn't seen from the sidelines how the business is run.” (Entrepreneur in sub-case D, 4:6, quotation marks in original)

Table 9. Entrepreneur D’s background influencing entrepreneurial process.

<table>
<thead>
<tr>
<th>Sub-case entrepreneur</th>
<th>As independent entrepreneur</th>
<th>As corporate entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>D</td>
<td>Starting as team entrepreneur, then refining the company with joint venturing with competitors</td>
<td></td>
</tr>
</tbody>
</table>

In sub-case of G, the teaming failed and entrepreneur G was forced to start the firm single-handed (Table 10). His plan was to continue building a core team. Eventually, he made a decision, however, to sell the firm to a growing company in the field and carried on as an employee in that company.

The background situation of entrepreneur D differed from that of entrepreneur G. Entrepreneur G had an international education and work experience in the same field as both top manager and also entrepreneurial CEO of an operating business in the industry, whereas the entrepreneur D (and the other team members) was still studying at university. Thus, the entrepreneur in sub-case
G was already in the beginning of the process more or less as an insider of the ICT industry and he had a clear idea of how to be an entrepreneur in that field.

“Yes. That is the way it goes; a smaller firm with one or two people can't get to direct contacts with bigger clients. One has to sell to a smaller client and start working in the second tier level. Live there and sort of fiddle around with things. I can't see that as a real source for growth.” (Entrepreneur in sub-case G, 7: 228)

Table 10. Entrepreneur G's background influencing entrepreneurial process.

<table>
<thead>
<tr>
<th>Sub-case entrepreneur</th>
<th>As independent entrepreneur</th>
<th>As corporate entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>G</td>
<td>Starting as independent and solo entrepreneur, then, continuing as employee after selling the company</td>
<td></td>
</tr>
</tbody>
</table>

The situation for the entrepreneur in sub-case F is somehow between these two previous sub-cases (Table 11): at the time of starting the entrepreneurial process she was still studying at university, but her work experience was based on working in many firms in the same region. Furthermore, her wish was to locate her own new business venture in the same region.

”...I've been working here in several different companies – the way business is conducted here is very familiar to me.” (Entrepreneur in sub-case F, 6:29)

Table 11. Entrepreneur F's background influencing entrepreneurial process.

<table>
<thead>
<tr>
<th>Sub-case entrepreneur</th>
<th>As independent entrepreneur</th>
<th>As corporate entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>F</td>
<td>Starting as individual entrepreneur then, refining the company with new businesses</td>
<td></td>
</tr>
</tbody>
</table>

To look more closely at the entrepreneur in sub-case B, it seems that the approach he utilizes is called induced strategic behavior, since he starts as a developer and project manager by planning and executing a strategic software project for his employer to enhance one particular part of the company’s business (Table 12). According to Burgelman (1983), induced strategic behavior means that a corporate entrepreneur of this kind uses “the categories provided by the current
concepts of strategy to identify opportunities in the “enactable environment” (Weick, 1979)” (Burgelman 1983: 64–65, quotation marks and parentheses in original).

“However, it all started when I began developing a data system [for a family business] with successful results.” (Entrepreneur in sub-case B, 2:2, brackets added)

Table 12. Entrepreneur B’s background influencing entrepreneurial process.

<table>
<thead>
<tr>
<th>Sub-case entrepreneur</th>
<th>As independent entrepreneur</th>
<th>As corporate entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>B</td>
<td></td>
<td>Starting as corporate entrepreneur of a strategic development project, then spin-offing from the parent company, then spin-offing the former business and continuing with second business opportunity</td>
</tr>
</tbody>
</table>

The actions of the entrepreneur in sub-case E in the beginning of the BOC process were different compared to sub-case A: The actions of E were based on his individual visions and autonomous desires and intentions to develop his own work conditions and procedures without any significant influence of corporate strategy (Table 13). Even though, the organization promoted the execution of the development project.

“...I had experimented with different approaches in my own work and I had a vision about the kind of technology that could be used as a starting point for these types of solutions. On the other hand, my role in the organization was to bring, how can I put it, content and guidance.” (Entrepreneur in sub-case E, 5:4)
Table 13. Entrepreneur E’s background influencing entrepreneurial process

<table>
<thead>
<tr>
<th>Sub-case entrepreneur</th>
<th>As independent entrepreneur</th>
<th>As corporate entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>E</td>
<td></td>
<td>Starting as corporate entrepreneur of an individual development project in a academic non-profit context, then continuing as corporate entrepreneur of a strategic development project of for-profit company, then spin-offing from the parent company</td>
</tr>
</tbody>
</table>

The common character in both sub-cases B and E was that both entrepreneurs had the opportunities to work independently. By following their own minds they were able to manage their work as they thought best.

“... my place [at my employer's company] was to take care of the process of computerizing the company.” (Entrepreneur in sub-case B, 2:41, brackets added)

In addition, both entrepreneurs had similar backgrounds since either one parent or a close relative acted as an entrepreneur during the beginning of the process or had been acting before the process. In sub-case of entrepreneur B, his father had been an entrepreneur, whereas in the sub-case of entrepreneur E, both his mother and father had acted as entrepreneurs both together and separately.

"I have a kind of family heritage in this.” (Entrepreneur in sub-case B, 2:2)

“However, my mother was a seamstress … and she employed herself to a large degree. ... My parents had two businesses. One was a bookstore and one was a petrol station.” (Entrepreneur in sub-case E, 5:248)

Along with sub-case entrepreneur E, the process of the entrepreneur in sub-case C differs from the ideal entrepreneurial process – at least how it is described in the dominating literature (Table 14). While entrepreneur E started initially as an autonomous corporate entrepreneur based on autonomous strategic behavior (Burgelman 1983: 65), the entrepreneur in sub-case C started his process as an IE, and disbanded his first IE process. The disbanding means “the cessation of efforts to develop the new venture” (Delmar and Shane 2003: 1165). Despite the fact that entrepreneur C had decided to start a business of his own, while working as an
employee in a for-profit company he presented his inventions to the company. Since the response of the employer to his ideas was negative, he eventually stopped working as an autonomous CE. At the same time the decision to re-start the previous IE process became more driven.

"Yes, we did talk about it once, but we felt that producing measuring equipment doesn't really belong [is not in company's core business] ... It was a very marginal sector and different in a way that didn't interest them at all. I did a few of so called "in house tools" just for the fact that they were ... better suited for own needs and price wise they were ... they were cheaper even if you made them yourself from scratch. We did talk about it and I tried back in the end of the 80's to sell the idea, but it was clear that it was such a marginal thing that they weren't interested at all.” (Entrepreneur in sub-case C: 3: 24, brackets added)

Table 14. Entrepreneur C’s background influencing entrepreneurial process.

<table>
<thead>
<tr>
<th>Sub-case entrepreneur</th>
<th>As independent entrepreneur</th>
<th>As corporate entrepreneur</th>
</tr>
</thead>
<tbody>
<tr>
<td>C</td>
<td>Starting as team entrepreneur but not actualizing the venture</td>
<td>then developing new tools as corporate entrepreneur of a individual development project</td>
</tr>
<tr>
<td></td>
<td></td>
<td>then re-starting the existing company to actualize the results of the development project</td>
</tr>
</tbody>
</table>

In closing, it seems to be evident that, first of all, drawing on the results of the analysis of these seven sub-cases each entrepreneur selected either the corporate entrepreneur approach (CE) or the independent entrepreneur approach (IE) irrespective of the background of the entrepreneur: that is, whether or not they were working as highly advanced professionals in high positions or as novices in the same field or industry within which the new business venture is expected to operate. The situation such as this is in line with the results of Cooper, Woo, and Dunkelberg (1989) and Shane (2000), who found that entrepreneurs are more likely to discover and exploit opportunities when they have relevant knowledge and experience from previous work experience.
6.6.2 Discussion of entrepreneurs’ backgrounds and the BOC process

The results of the analysis will tell nothing about how people in general would make their choices on this question. This is the case because the research materials of the present study are generated mainly through retrospective interviews of seven entrepreneurs. Therefore, the best that can be narrated here is the scholarly interpretation of the researcher on how people’s background is utilized in the BOC process in the organizational context or outside it. This means also that it is the researcher’s interpretation supported by the narrated experience of the sub-case entrepreneurs that will play a central role on this issue.

Four sub-case entrepreneurs of the seven of the selected (sub-cases A, D, F, and G) started as the process initially as an independent business (labeled as independent entrepreneur, IE, by Reynolds 2000) (Table 15). Independent entrepreneur means that the process focuses on entrepreneur’s own purposes. In this case the initial context of their entrepreneurial process is unrelated to the current position of the entrepreneur; it may or may not affect the process at the beginning of the process. Furthermore, two entrepreneurs of the seven (sub-cases B and E) started their processes as corporate entrepreneur (CE; Burgelman 1983; labeled also as nascent intrapreneur, NI, by Reynolds 2000). This means that the entrepreneurial actions may be initially thought as an explicit part of one’s current job – or the purpose of these actions is parallel to the strategy of the existing business venture.
Table 15. Entrepreneurs' backgrounds at starting the BOC process.

<table>
<thead>
<tr>
<th>Entrepreneur in the sub-case</th>
<th>Prior work position</th>
<th>As independent entrepreneur (IE) or corporate entrepreneur (CE)</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Researcher in the same field</td>
<td>starting as team entrepreneur (IE) redeveloping the initial venture several times during the life-cycle of the company as a CE</td>
</tr>
<tr>
<td>B</td>
<td>Manager in the same industry</td>
<td>starting as a CE of a strategic development project spin-offing from the parent company (IE)</td>
</tr>
<tr>
<td>C</td>
<td>Manager in the same industry</td>
<td>starting as team entrepreneur but not actualizing the venture (IE) developing new tools as a CE of an individual development project re-starting the existing company to actualize the results of the development project (IE)</td>
</tr>
<tr>
<td>D:</td>
<td>Student in the same field</td>
<td>starting as team entrepreneur (IE) refining the company with joint venturing with competitors (CE)</td>
</tr>
<tr>
<td>E</td>
<td>Manager in the same industry</td>
<td>starting as a CE of an individual development project in a non-profit context continuing as a CE of a strategic development project of for-profit company spin-offing from the parent company (IE)</td>
</tr>
<tr>
<td>F</td>
<td>Employee in the same industry</td>
<td>starting as an IE re-finining the company with additional businesses (CE)</td>
</tr>
<tr>
<td>G</td>
<td>Manager in the same industry</td>
<td>starting as an IE continuing as employee after selling the company</td>
</tr>
</tbody>
</table>

In the case of entrepreneur in the sub-case C, it is difficult to categorize exactly between the two, IE or CE. Sub-case entrepreneur C started the process as IE but ceased carrying on the process for several years and continued as a manager. However, it is difficult to categorize him as CE either; he did not start to create a new BO neither based on the existing corporate strategy of the employer nor outside the corporate strategy (induced strategiv hehavior and autonomous strategic behavior, respectively, proposed by Burgelman 1983). In fact, he re-started the discontinued process in order to exploit in the context of previously founded business venture something he discovered while working as a manager.

The summary of influence of background of the sub-case entrepreneurs clearly shows that the background do influence the BOC process. From a plenty of possible fields on which to start a business venture in all sub-cases the entrepreneur chose the one on which he or she already had worked as an
employee. This is in line with the results of the prior studies (Shane 2000), who explains entrepreneurs’ actions in discovering opportunities based on their prior experiences and education in a certain domain (or discipline, such as architecture, medicine, art and so on) and “related to the information they already possess” (448). Furthermore, based on the results of this study, the entrepreneur’s prior work position as an employee (particularly at the manager level) in the same field where he or she expected to start the new business venture, for example, increases, evidently, entrepreneur’s options to start either as IE or CE. Those sub-case entrepreneurs who were occupied as non-working in the same industry (sub-cases A and D) were facing only one option, the role of an independent entrepreneur (IE).

From another perspective, to take up sub-cases E and G and to compare them against each other, the results show that it seems evident that what makes a difference between these two is the way how the organization in which they operated as employer (or student) promoted their pro-active actions. In the sub-case E the [intending] entrepreneur was able to utilize the equipments of the organization in a way that could not be possible at all in other kind of context. In the case of sub-case D the entrepreneur had to experience the business activities outside the university. The only thing that the parent organization provided was to show the first customer but without any actual support or guidance to help him deal with the demand business-wise.

Furthermore, the influence of the background on the process shows how the sub-case entrepreneurs B, C, and E, specifically, started to exploit some specific skills they have developed independently in order to solve problems (or find other solutions to solve problems) at work. These skills and knowledge they start to exploit were outside the normal scope of their regular duties as employees.

While it is possible to differentiate between the two modes of starting the process (CE and IE), however, it is believed here that the BOC process is the same, in general, in both of these processes: It is about business ideating, business modeling and business planning in order to create the BO of a future business venture that will be exploited either in the context of an established firm or in a startup that is to be founded in the [near] future. The possibility to start as the CE seems to give an advantage for these people who are considering whether or not to start the BOC process or not.
6.6.3 How entrepreneurs experienced the BOC process (S-RQ 1)

As stated above the sub-case entrepreneur is able to talk about his or her own experiences in the process. This means that if he or she talks about IforBO, or BM, or BP, then these topics are assumed to be – at least indirectly – related to Business Ideating Process and Business Modeling Process, and Business Planning Process (BIP, BMP, and BPP in Fig. 8). Every of the three process will be dealt with the creative problem solving method (CPS). In addition, the BOC process is understood here as an entity, that is, to create the BO each of the three sub-process needs to be exploited more or less thoroughly. How thoroughly the entrepreneur has to conduct each of these process depends, on the one hand, on the situation in every single sub-case, and on the other hand, on the nature of the starting point of the BOC process and the starting points of each of the three sub-processes.

In the case of the Business Ideating Process (BIP) it is about the level of creativity of the IforBV that accounts how much it is feasible to spend time in ideating. Though, it is mentioned already above that much ideating and even modeling can be taken as granted in the case of very stable environment since it is feasible – in most cases – to rely on ideas and models that are already tested as feasible. The currently dominating industry recipe explains what is believed to work in the specific field today. Thus, the industry recipe in a stable situation is well known due to the public information available also for those people who are not working in the industry.

Though, it is believed here that if the sub-case entrepreneur talks only very little about the business-wise elements, it means that the entrepreneur follows more thoroughly the currently dominating industry recipe. Therefore, it is interpreted here that in that kind of situation both the BO, as the outcome of the BOC process, in general, and the three sub-processes, in particular, are treated as less creative.

As the opposite of that kind of less creative outcome can be seen in the case where the sub-case entrepreneur is talking the three sub-processes and their outcomes of the BOC process business-wisely. In that case it is interpreted that what the entrepreneur is talking is treated here as more creative. Hence, in a very dynamic situation the need for novel and feasible solutions highlights the exploitation of the CPS method in its full power.

In this section the three sub-processes (BIP, BMP and BPP) will be studied one at the time. At the end of each sub-process section, interpretations will be
made. This section ends with a discussion concerning the actions of sub-case entrepreneurs in the BOC process. The description of the analysis of the research material to be used in every sub-process is provided in the next sections, respectively.

**Business Ideating Process, BIP**

The research material is understood as conceptualizing a mental image (Ames and Runco 2005) in the Business Ideating Process (BIP). This conceptualizing process can be defined into a threefold category by drawing on three questions. The first category is based on questions such as *what do I (or we) know of the initial idea for a new business, and what could be done from the perspective of business?* To draw on this kind of question, it is possible to understand how sub-case entrepreneur is aware of the explicit issues of the Business as a social structure, in general. While the first part of the question is concerned as a starting point of the BIP, that is the situation from where the divergent thinging starts to produce alternative solutions to solve the problem: *In what business I/we are in?* The last part of the question above (i.e. *what could be done*) highlights the divergent nature of CPS procedure that will be utilized here.

The second category (if formed by asking questions such as: *How could they be combined? Are they interesting, personally?*) focuses on unexpected ideas of what kinds of more or less feasible combinations there will emerge during the clustering part of the CPS process. Finally, since the convergent part of the CPS process is about directing the overall focus on feasibility aspect of the emerging IofBO, it is important that the people in charge ask question such as: *Is there a business in which I/we want to be in?* This question is influenced by McMullen and Shepherd (2006), who use the *first person opportunity label* to describe this kind of phenomenon. Furthermore, it may be feasible to ask questions such as: *Is the IofBO interesting enough to be accepted among stakeholders* (Sarasvathy 2001; 2008), and, *Will it be implementable?*

To follow this kind of logic to analyze, the research material was carried out as follows (Table 16): firstly, research materials were divided into two groups. The activities of the sub-case entrepreneur were focused either on clearly more business-wise actions or on less business-wise activities. Three sub-case entrepreneurs resulted in the former category at this phase of analysis, and four sub-case entrepreneurs in the latter.
The three sub-case entrepreneurs in the more business-wise category were quite similar, whereas the four sub-case entrepreneurs in the latter category, the less business-wise category, were divided into two sub-categories. The way the two sub-case entrepreneurs in the first sub-category saw the issue of business can be described as *business is not an issue*: for them the main thing was the technology that accounts – not the business. The other two sub-case entrepreneurs in the second sub-category was focused more on the business-wise issues such as to recognize the key customer and how to serve its existing demands with the technology at hand.

Those sub-categories of the less business-wise category were labeled as follows: the first sub-category is the one of the two sub-categories of the less business-like category, and it is labeled as the *business as mere business* describing more or less ambivalent approach to business. The second sub-category is labeled as the *business based on customer’s demand* because it is connected more on business-wise thinking. While the entrepreneur narrated about the business-like issues only implicitly (or indirectly), it clearly recognizes the key customers and the focus on solving the existing problems related to them.

The first of the two main categories, the more business-like category, was labeled as the *business as solving business problems*. It contains quite explicitly the business-like perspective. In this kind of category the business venture creating is seen as a combination of the more or less creatively created BO as well as its exploitation in the BOE process.

### Table 16. Categories in the Business Ideation Process (BIP).

<table>
<thead>
<tr>
<th>Main categories</th>
<th>Su-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>More business-wise</td>
<td><em>business as solving business problems</em></td>
</tr>
<tr>
<td>Less business-wise</td>
<td><em>business as mere business</em></td>
</tr>
<tr>
<td></td>
<td><em>business based on demand</em></td>
</tr>
</tbody>
</table>

The actions in the BOC process, related to the sub-category: business as mere business, seem to be focusing either on the product to be produced, or the technical skills learned by education. Entrepreneur of sub-cases A and D states as follows:

“We were on boat thinking about what we should do. It was probably [person X] that was the one to say the idea out loud that this [industry] is going [change] ... We decided to go for that market ... We only saw the thing as technology. (Entrepreneur in sub-case A, 1:26, brackets added)
"You just wanted to do something - different. ... One of the professors said to us to form a company and take advantage of the things that you've learned.”
(Entrepreneur in sub-case D, 4:2)

In both of the sub-cases above (i.e., A and D) the sub-case entrepreneur fails almost totally to talk about business. It is assumed here that one explanation for this may be that, on the one hand, the background of both entrepreneurs is in technology; it is the technology they know and talk about. On the other hand, another explanation for this may demonstrate the widely shared knowledge that no factual reason exists to talk about business before it is actually started.

The sub-category: business based on customer’s demand contains two sub-case entrepreneurs: the entrepreneur B and C. The sub-case entrepreneurs in this category share the implicit approach to business with the previous sub-category since they do not talk about doing business. However, they do talk about business-wise issues such as the customers and their demand. This is similar to Gartner and Bellamy (2010), who talk about 4Cs as basic elements of business (customer, commitment, connection and consideration).

In addition, sub-case entrepreneur related to sub-category: business based on customer’s demand talk about how to build the products or services feasible enough to meet those needs. Thus, similarly to the first sub-category and the sub-case entrepreneurs A and D, they also seem to solve the demand by trying to supply feasible products or skills to the market.

While entrepreneurs of this category recognize one of the key elements of business ventures, the product, and while they see the nature of the product as essential to become successful, however, they fail to talk explicitly about the idea from the perspective of business.

“I started to study existing systems and we decided, after an exact process, to go for this minicomputer based system. Three months later I realized that this thing is too laborous, this just isn't good enough. After that we cancelled the deal. ... We made it to match the needs, so that the needs of the deal were exactly met.”(Entrepreneur in sub-case B, 2:41)

"I can do this and even something better” (Entrepreneur in sub-case C, 3:22)

Finally, the third sub-category: business as solving business problem clearly emphasizes the business-wise perspective in forthcoming activities. This means that if this sub-category is compared, on the one hand, to the first sub-category, it
seems to be more about how to deal with a broad range of business-wise issues rather than mere product. On the other hand, if it is compared to the second sub-category (business based on demand) then it seems to be even more directly focused on the future business venture from business point of view by trying to solve business problems of other firms rather than mere figuring out how to solve the more obvious problems of the customer, that is, how they may be more effective by using new tools and so on.

"I always start from the point of view of solving a problem. There is a certain problem and we need to find a solution for it. That's how it started.”
(Entrepreneur in sub-case E, 5:252)

"I noticed that how the corporate world, after following a large company, does these things. Even it doesn't have everything finely tuned and defined... Or maybe they did have things set, but things didn't go as planned, as they say. You would think that things could be done better and in a different way.
(Entrepreneur in sub-case F, 6:47)

"You thought about the idea that you wouldn't sell just software. You'd sell a little bit of software, but also a little bit of hardware to the software developer and even to the end client. One would find a better client base than with just this notion that you design software and make money with it, which is actually quite difficult in reality. The idea was to have more substance to the idea than just plain software. This came about from all the conversations that I'd heard.”
(Entrepreneur in sub-case G, 7:93)

In closing, the BIP and its outcome, the IofBO, clearly discloses itself only in some of the cases that were studied in the present study (Table 17). According to the analysis above, it seems that the sub-case entrepreneurs do not relate the BIP to essential part of the business creating. In fact, it seems to be the case that it is quite common to ignore the BOC process more or less completely unimportant to be talked about, and focus on the actual process of doing business (i.e., how the BO is exploited in the real-life situation).

One reason for this kind of situation could be the lack of more thorough understanding of the entrepreneurial process. Since the same situation seems to be with the earlier literature on the process, it is reasonable to think that the case is more or less the same with researchers. On the other hand, this kind of situation
refers to wider issue in entrepreneurship. That is, the critical question of *about what are we talking when we believe we talk about entrepreneurship*.

**Table 17. Summary: Business Ideating Process (BIP).**

<table>
<thead>
<tr>
<th>Sub-case</th>
<th>Business Ideating Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>Business as mere business</td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>The subject was seen only as technology.</td>
</tr>
<tr>
<td>D</td>
<td>Just wanted to do something.</td>
</tr>
<tr>
<td>Business based on customer’s demand</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>We did it answer clear needs. Exactly the needs that this company had.</td>
</tr>
<tr>
<td>C</td>
<td>I can do this and even something better.</td>
</tr>
<tr>
<td>Business as solving business problem</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>I always start from how to solve a problem.</td>
</tr>
<tr>
<td>F</td>
<td>I noticed that how the corporate world, after following a large company, does these things. You would think that these things could be done...</td>
</tr>
<tr>
<td>G</td>
<td>You thought about the idea that you wouldn’t sell just software. You’d sell a little bit of software, but also a little bit of hardware to the software developer and even to the end client.</td>
</tr>
</tbody>
</table>

In all, the analysis of the research material shows that creativity in the BIP remains as more or less hidden. In fact, only the entrepreneurs in the third category seem to recognize this element explicitly. Furthermore, it has been quite common way to say that *if only I had a good idea for a business... then I’d be rich!* (Mah 2009) to mean that this *good idea for a business or a business idea* actually is representing the big picture of the future business and the rest of the entrepreneurial process is about actualizing this initial idea.

In contrast to this kind of thinking, the theoretical model of the present study shows that those who argue for business idea are in fact talking about the phase before the transition point 1 (Fig. 9), the idea for new business venture or firm (IforV/F). This means that if persons have intention to start the BOC process with a explicit focus on business rather than product, and start to play the role of the entrepreneur, they are able to create a more or less creative idea of the BO and carry on in the BOC process. Thus, based on the assumption made here, the BIP is an essential part of business-wise thinking the process of creating conceptual BOs.
Whereas the characteristics of the overall nature of the previous step is more about novelty than feasibility, the next step, the Business Modeling Process (BMP), emphasizes both of these characteristics of the creativity in general. That is, the business modeling is characterized here as creating novel ways to run feasible business. However, it is reasonable to note that all this will happen at the conceptual level only.

The core in the analysis of how BMP is presented in narratives of sub-case entrepreneurs is based on the six issues (or questions) displayed by Morris et al. (2005) as follows: How and for whom the firm will create value?; What is its internal source of advantage, and position in the market?; How will it make money?; and finally, How the entrepreneur feels about all these issues?

To start the analysis by keeping the six questions proposed by Morris et al. (2005) in mind, the divergent part of the CPS process is related to questions such as: What kinds of BMs there are both in the industry in focus and other in other kind of businesses? Based on the findings in the divergent phase, then it is possible to continue with clustering in order to form new and more or less surprising clusters of possible BMs. Feasible question in here could be such as: What I (or we) have found, and how they could be combined? Finally, during the convergence process it is possible to focus on questions such as: How to select the most promising BMs that could as feasible as possible for further use in the BOC process?

The interpretive analysis of the research material started in the same way than the previous analysis by dividing the ways the sub-case entrepreneurs talked about their BM into two categories: the less business-wise category and the more business-wise category. Since the all four sub-case entrepreneurs in the former category were interpreted by the researcher as talking their business models mere as business as mere business (or as usual) or business based on customers’ demand (or as given) without any second thought, there was no need to carry on the to form sub-categories for that group. The situation in the latter category was the same but from other reasons: the three sub-case entrepreneurs disclosed explicitly the importance to make decisions between several choices concerning how to carry on in modeling the business rather than taking only a one obvious choice as granted. (Table 18)
Table 18. Categories in the Business Modeling Process (BMP).

<table>
<thead>
<tr>
<th>Research material</th>
<th>Main categories</th>
<th>Su-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>More business-wise</td>
<td>business as choices</td>
</tr>
<tr>
<td></td>
<td>Less business-wise</td>
<td>business as given</td>
</tr>
</tbody>
</table>

The researcher labeled those two categories as follows: the first category is labeled as Business as given. The four sub-case entrepreneurs categorized in that category seem to take question of feasible and personally suitable BM as irrelevant either because it is the common knowledge that shows how new business should be formed or because there is already one person in the team who has experience on this. Thus, this category emphasizes the lack of narratives out of this issue.

“We didn't understand things like [the lack of business competence]. We only saw the thing as technology. Something that you just need to get into and ...” (Entrepreneur in sub-case A, 1:34, brackets added)

”... we really should, now that we have formed this business, think what we as owners want from it.” (Entrepreneur in sub-case B, 2:7)

”This whole things was financed by the fellows doing project assignments for the client that in turn gave us funds to develop our own gadgets.” (Entrepreneur in sub-case C, 3:50)

”It was the plan that we decided to follow and started doing software subcontracting.” (Entrepreneur in sub-case D, 4:2)

It seems to be evident that sub-case entrepreneurs A and D do not talk about possible BMs and how they made choices between them to be evaluated and selected the most suitable for the purposes of their future business ventures. While the sub-case entrepreneur C had both an advanced work experiences and educational background from formal education as well from in-house education, however, according to the interpretation of the research material, he seems to fail to explicate how he actually selected the BM for his business venture. In all, one feasible interpretation would that all sub-case entrepreneurs in this category utilizes at least subconsciously the common way to deal with this kind of question, that is, the current industry recipe.

More specifically, it needs to be noted here that since the sub-case entrepreneur A faced this situation during the early 1980’s, it seems that due to the
fact that while he did not have experiences in business and despite the fact that the industry itself was still emerging, he relied on partner’s hands-on business experiences — although it was gained from other industry. While sub-case entrepreneurs B and C both possessed multifaceted experiences in the industry, however, they also selected the currently dominant way to model the business. It has remained unclear in the study whether or not they thought other possibilities at all, or whether they evaluated the current industry recipe as the most feasible for themselves. That is, as the BM that would be the most feasible for both one’s own purposes as well as for the firm’s purposes. In fact, whereas sub-case entrepreneur B utilized the project work form that were normally used in existing firm’s internal development projects, the sub-case entrepreneur C utilized the project work mode when he organized the work with customer firms. Finally, since sub-case entrepreneur D and his team members were all students at the time it is possible that they reproduced the project work method from their studies conducted either in the university context or in the firm context.

Furthermore, the three sub-case entrepreneurs in the more business-wise category, labeled here as the Business as choice, seem to foresee the future business as a tool for something feasible (i.e., as business-wisely). In the case of sub-case entrepreneur E, the BM is revealed more explicitly. He describes many of the elements of BM (Morris et al. 2005), presents possible combinations that could be feasible for him and for the future business venture, and one or two reasons why this particular model were selected eventually.

In the similar vein, the sub-case entrepreneur G disclosed the BM for his future business venture. He actually seems to recognize the current ways of doing business both in this specific industry and in the region as well. In addition, he was willing to re-create the current industry recipe in the way that seems to be more creative combination of various BMs rather than mere a reproductive copy of the dominant industry recipe.

While the sub-case entrepreneur F partly fails to present many of the elements of the BM, she manages to disclose her approach to the BOC process. She emphasized the clear connection between the business-wise nature of her future business venture and the needs (or demands) of customers rather than just thinking how to solve the perceived customer problems with better products or services than it is the case at the very moment. Thus, her approach is quite similar to the sub-case entrepreneur B’s, but she manages to talk more business-wisely about it.
“Well, it had a lot of things and big risks. It had plenty of things going on. One in particular was [the plan of the current business firm] the one that we decided to put in action. It [the plan] could not be put in place without employees or capital. There were options and ... our employees decided to take the risk. It was in a way a risk for them as well.” (Entrepreneur in sub-case E, 5:71, brackets added)

“[According to the Business Plan] the decision was that basic funding would be handled traditionally, like in [the name of the Region], through subcontracting. At the same time we would work on the business model and search funding for it.” (Entrepreneur in sub-case G, 7:137, brackets added)

"I would prefer to have things in a way that you have your own company, clear product and the client tells what their needs and wishes are. Then we negotiate and see what it is and how can it be achieved.” (Entrepreneur in sub-case F, 6:109)

Table 19. Summary: Business Modeling Process (BMP).

<table>
<thead>
<tr>
<th>Sub-case</th>
<th>Business Modeling Process</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Business as given</strong></td>
<td></td>
</tr>
<tr>
<td>A</td>
<td>‘business as usual’, one partner had functioned as an entrepreneur</td>
</tr>
<tr>
<td>B</td>
<td>what we as owners wanted from this business</td>
</tr>
<tr>
<td>C</td>
<td>project work brings the funds to develop the own product</td>
</tr>
<tr>
<td>D</td>
<td>We started doing software subcontracting</td>
</tr>
<tr>
<td><strong>Business as choice</strong></td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>There were options and ... our employees decided to take the risk.</td>
</tr>
<tr>
<td>F</td>
<td>I would prefer to have things in a way that you have your own company, clear product and the client tells what their needs and wishes are. Then we negotiate and see what it is and how can it be achieved.</td>
</tr>
<tr>
<td>G</td>
<td>[According to the Business Plan] the decision was that basic funding would be handled traditionally, like in [the name of the region], through subcontracting. At the same time we would work on the business model and search funding for it.</td>
</tr>
</tbody>
</table>

In all, the concept of the BM is presented here as a quite vague phenomenon (Table 19). If it is true that all business has the BM – implicit or explicit then the selection concerning the BM that is utilized will take place also implicitly or explicitly. The less business-wise category labeled as business as usual, presents the former mode to talk about the BM. The mode such as this is (more or less) implicitly based on the currently dominating industry recipe: It follows the notion
according to which *this is the feasible way to do business here*. Whereas the latter, the more business-wise category labeled as business as choice, is the mode to talk about more creatively modeled BMs that are though as the most feasible for the specific conditions of future businesses.

It is important to understand that even the mode to talk about the BM or to model it by copying the existing BMs can never be the same as the actual industry recipe. That is, the industry recipe is always only a conceptual model of reality that varies constantly both spatially and timely. This is also in line with the personal and everyday creativity perspective utilized here, since what people understand as an industry recipe is based their personal interpretation of the perceived information from existing reality.

To sum up, it is interesting to realize that all three sub-case entrepreneurs, who are located in the business as choice category started the BOC process after 2001. One explanation for this may be due to the short period of time between the actual event and the interview. It is very likely that these three sub-case entrepreneurs either actually recall the process more thoroughly or they have been too busy to think it through as a *good narrative*.

**Business Planning Process, BPP**

The third element of BOC process, the business planning process (BPP) with its outcome the BP, is seen from CPS perspective more as form creativity rather than vision creativity. This means that it is important to create novel and feasible ways to plan the business in ways that it will be possible to pass the transition point 2, that is, to start actualizing the conceptual BO (Fig. 9).

The nature of the outcome of the planning process, the nature of the BP, is focused more on feasibility rather than novelty (see the form creativity above). This means that the planning process will be about combining the elements created previously in the BOC process (the IofBO and the BM) with creative ways to develop a more concrete form of a business venture to find acceptance among various groups of shareholders and stakeholders. That is, to plan the implementation of the BP in the context of BOE process.

The overall question to be asked during the every levels of thinking of the BPP (divergent thinking, clustering and convergent thinking) will be as follows: *What would be the most feasible and doable way of actualizing this conceptual BM in the real-life context?*
The analysis of the research material started with dividing it initially into two categories in the same way than it was done in the two previous sections, the BIP and BMP. The first category is the less business-like category and the second is the more business-like category. Based on the previous analysis the first category includes the talks on their planning process of six sub-case entrepreneurs in total. The latter category includes only one sub-case entrepreneur’s insights of his planning process.

To look closer at the first category it appears that this group of sub-case entrepreneurs is too heterogeneous to be treated as one category. While the ways how all those six entrepreneurs talked about their planning processes was quite slight, however, after thinking through more thoroughly, it became evident to divide the category into not in sub two sub-categories but two separate categories. The main reason for this kind of solution was to interpret the role of experience on which the three sub-case entrepreneurs built their narrations as the key differentiation between these six entrepreneurs.

Three categories in the planning process are disclosed from the research material analysis as follows. The first category, the Business as given, is about forming the business venture based on the currently dominating way of running the business in the industry (i.e., according to the currently dominant industry recipe). The second category, the Business by experience, is built on the result of the analysis that revealed how former managers with their advanced experiences in the same industry (or very close to it as in the sub-case B) talked on the BPP of their business. Finally, the third category, the Business by planning, emphasizes explicit efforts on forming the becoming business by thinking it trough many alternative options. (Table 20)

Table 20. Categories in the Business Planning Process (BPP).

<table>
<thead>
<tr>
<th>Main categories</th>
<th>Su-categories</th>
</tr>
</thead>
<tbody>
<tr>
<td>Research material</td>
<td></td>
</tr>
<tr>
<td>More business-wise</td>
<td>business planning</td>
</tr>
<tr>
<td>Less business-wise</td>
<td>business by experience</td>
</tr>
<tr>
<td></td>
<td>business as given</td>
</tr>
</tbody>
</table>

The sub-category: Business as given contains three sub-case entrepreneurs (sub-case A, D and F). More precisely, the sub-case entrepreneur A is located in this sub-category because he had plenty of experiences with academic projects but not with business projects, and as stated already above, one of his co-entrepreneurs operated as entrepreneur in another industry. Based on that it is easy to understand
why they chose the current industry recipe – and without any further discussing about it. The situation is about the same with the sub-case entrepreneur F but with two exceptions. The first exception is that she utilized the services of an incubation organization, which directed quite thoroughly her actions to planning the business according to the formal BP procedure. In addition, her work experience on the same industry was quite advanced. Therefore she had hands-on understanding about what works and what does not.

“…we didn't really have any business competence... Everything was learned by doing.” (Entrepreneur in sub-case A, 1:32)

“I took an entrepreneurship course just by myself. The one that will give you tools to build your own company.” (Entrepreneur in sub-case F, 6:248)

The third entrepreneur in the sub-category, the Business as given, is entrepreneur D, who had no previous business experiences in the field – in fact everyone in the founding team lacked such knowledge. Although he knew what it takes to be entrepreneur due to his background, the individual experiences he had were only based on student works with ICT businesses. It seems that for entrepreneur D the business is just business. In addition, because the nature of case was knowledge intensive, it appeared that what was needed was simply to start trying.

“No, we founded everything almost immediately after we had collected the group of people. It only took a month. Signed the papers... did things and didn't really think about it too much.” (Entrepreneur in sub-case D, 4:57)

The second sub-category, the Business by experience, contains also three sub-case entrepreneurs (sub-case entrepreneurs B, C and G). These sub-case entrepreneurs shared characteristics such as follows: They all had an advanced work experience in the industry; they all had experience of how to run a project work – also business-wisely; and finally, they all had experience on managing the business organization (either in the form of a business unit or development project). Thus, it is clear that they appear to know the business – at least how it has been done until the moment of they started the initial BOC process; that is, they seem to know the current industry recipe, and were thus able to change it if needed.

The results of the research material analysis revealed that sub-case entrepreneur B did not managed to explicate reasons to talk on the business planning process since it seems to be clear to him that there was, first of all, the perceived need in the market – starting with the internal customer, and later the
other actors in the field – a good feasible product, and finally, hands on experience of starting business. Hence, there was no actual reasons to think about how to form the future business. In line with sub-case B the next case, the sub-case entrepreneur C had also an advanced knowledge on the key business competences such as marketing, finance, management and so on. However, he does not present any particular narrative about the BPP. In both sub-cases, the outcome of the more or less implicit business planning process that is disclosed in the research materials clearly shows that the BPP included (at least implicit) planning activities.

Finally, entrepreneur in the sub-case G seems to follow the same path than sub-case entrepreneur C – but only more than ten years later – and with the same result: no explicit talk about the business planning process. Sub-case entrepreneur G focused more on the experience he had as an entrepreneurial CEO, and a manager.

"We did it to match the need that the company had... I did what they ... so there was a demand for what I did. ... They put it to use and we decided to found a company and go sell the finished product to other, because the rest [competitors] came to see it with envy and told "damn, you have good system". I started thinking that why won't we sell this to others. That's how it started... I was then a young man into technology and didn't really think in any philosophical way. I just thought that I am going to do these products and services and that will either bring in enough money or not. The aim was to have more income than costs." (Entrepreneur in sub-case B, 2:41)

"To me and in our case the thing was that we had well enough competence and good product combined with the skill to do it and some knowledge about the market. I guess a lot of these are a question of chance; that things just come together at that particular time. ... [Understanding the business] was really important. (Entrepreneur in sub-case C, 3:101, brackets added)

"... during three years you only needed to find one [great idea???] and that usually hatched those smaller ideas. And from these you will find that real winner and start doing that then." (Entrepreneur in sub-case G, 7:125)

The third category, the Business by planning, contains only one sub-case entrepreneur, the sub-case entrepreneur E. While he shared many of the characteristics with other sub-case entrepreneurs in the two other categories such
as advanced work experiences both as an academic and a business manager, he clearly differed from the others since he talked explicitly about the different aspects of the BP based on what is described already in the BM. This narrative includes issues such as the nature of the business venture, the role of board in decision making in finance, growth, etc. and selling, business strategy and finally, how the nature of expert organization affects the business operations.

"... in our business plan it has been written that we provide services. You need to recognize that. We are a company that provides services that offer first and foremost services on the platforms it has created or it can also provide other technical solution than its own.” (Entrepreneur in sub-case E, 5:21)

Table 21. Summary: Business Planning Process (BPP).

<table>
<thead>
<tr>
<th>Sub-case</th>
<th>Business Planning Process</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>Business as given</td>
</tr>
<tr>
<td></td>
<td>according to income financing</td>
</tr>
<tr>
<td>D</td>
<td>Business as given</td>
</tr>
<tr>
<td></td>
<td>we founded everything almost immediately after we had collected the group of people</td>
</tr>
<tr>
<td>F</td>
<td>Business as given</td>
</tr>
<tr>
<td></td>
<td>I took an entrepreneurship course just by myself. The one that gives you tools to build your own company</td>
</tr>
<tr>
<td>B</td>
<td>Business by experience</td>
</tr>
<tr>
<td></td>
<td>first customers put it to use and we decided to found a company and go sell the finished product to other</td>
</tr>
<tr>
<td>C</td>
<td>Business by experience</td>
</tr>
<tr>
<td></td>
<td>To me and in our case the thing was that we had good enough competence and good product combined with the skill to do it. Some knowledge of the market</td>
</tr>
<tr>
<td>G</td>
<td>Business by planning</td>
</tr>
<tr>
<td></td>
<td>development strategy: during three years you only needed to find one great idea</td>
</tr>
<tr>
<td>E</td>
<td>Business by planning</td>
</tr>
<tr>
<td></td>
<td>in our business plan it has been written that we provide services. You need to recognize that. We are a company that provides services that offer first and foremost services on the platforms it has created or it can also provide other technical solution than its own</td>
</tr>
</tbody>
</table>

In all, results of the research material analysis give evidence of interpretation that it is quite rarely among the sub-case entrepreneurs to talk explicitly about business planning, that is, its contents, and how do they perceive those various aspects (Table 21). Thus, it seems to be a common way to ignore the issue of business almost totally. Among the seven sub-case entrepreneurs only one entrepreneur seems to recognize the possibility to creatively focus more on business-wise issues rather than product issues or technology in general.
6.6.4 Discussion of the entrepreneurs’ actions in the BOC process

If we put all those seven sub-cases in a single picture it reveals three distinctive groups of paths through the first round of the BOC process. In the first group the BOC processes analyzed here are labeled as Less Creative – Business-wise (Fig. 10). This initially includes four sub-case entrepreneurs who all followed the same kinds of processes throughout the BOC process. After a closer look at the BIP level two slightly different modes of ideating processes were interpreted by the researcher. The sub-case entrepreneurs A and D in the first group treated the BIP of the future BO as a non-issue, and referred technology as the main issue, not the business: Business is just business as everyone already knows without a second thought.

In the second sub-group of the less creative mode, Business based on demand, the sub-case entrepreneurs B and C clearly recognized existing customers and their demand for either better products or specific services to meet those demands as a starting point for their BIP. The dotted arrow pointing to the grey box in the middle shows that it is possible to think that how the two sub-case entrepreneurs in this sub-group formed their idea of the BO may also be labeled as More or Less Creative – Business-wise. That is, according to the interpretive analysis of the research materials, they did not follow without questioning the current industry recipe (i.e., the way people in the specific field think how to do business, as given like the earlier group did).

In the BMP, all sub-case entrepreneurs (A, B, C, and D) followed the same line, the Less Creative – Business-wise, to model the outcome of the process in a conceptually feasible form, the BM. Again, after second thoughts, the researcher interpreted the process as it was introduced by sub-case entrepreneur B that it may be labeled as a Business as given but perhaps more creatively conducted than the three other sub-case entrepreneurs in the group. The dotted arrow shows the alternative mode of that case.

Finally, in sub-cases A and D, the BPP followed a clearly less-creative kind of path, since the analysis of their narration revealed that those two case entrepreneurs were clearly influenced by the current way of doing business in the ICT industry, and in their specific area of that industry.

In slight contrast sub-case entrepreneurs B and C exploited their prior knowledge and conducted their process more as in Business by experience mode. And again, this mode of planning the BO may be labeled as more or less creative
when the process is interpreted from the perspective of how much it seems to differ from the current industry recipe.

The second group of BOC processes results from analysing the narrations of the two sub-case entrepreneurs F and G. The BIP of those sub-case entrepreneurs is interpreted as *More Creative – Business-wise* by nature, since it clearly recognizes the current industry recipe, but at the same time tries to find alternative solutions to the problems those entrepreneurs faced while forming the BOs. The mode of creating the BO is labeled as *Business as solving business problems*. In the same vein is conducted the modeling process. That mode of modeling emphasizes what is modeled by choice instead of by necessity or as taken for granted, that is, as influenced strongly by the current industry recipe. Finally, the planning process differentiates those two sub-cases – it is interpreted here that sub-case entrepreneur F discloses in her narration only those kinds of modes of planning which are as feasible as possible, but only according to the current industry recipe. One explanation for that kind of situation is that she conducted the planning process under the guidance of an incubation organization. Sub-case entrepreneur G conducted the planning process slightly differently by exploiting his advanced work experience as a top manager with entrepreneurial characteristics. In fact, his actions in the planning process may be interpreted as more or less creative – business-wise.
The third group of case entrepreneurs’ experience in the BOC process in the present study includes only one entrepreneur, sub-case entrepreneur E. He is the only one who exploited experience during the whole BOC process, that is, the ideating, modeling and planning process, the same mode, the More Creative – Business-wise. This highlights the decision sub-case entrepreneur E made very early in the process; he started to build his board of directors almost from the very beginning of the process by bringing business-wise experienced people onto the board. At the same time he exploited his own work experience to apply his ideas of how to do business in the specific field rather than follow the known recipe-like ways to do business.
In closing, it is clear that the BOC process can follow various paths from starting the BIP to making the decision to actualize the BO created in this process, the BOC process. However, the outcome of the BOC process, the BO, is only one step that is treated here as necessary, but not sufficient to guarantee the business venture exploiting the BO on the real-life market is successful. There are always other mechanisms, structures and forces, which affect the success of every single start-up. The role of the BO is to make sure that the business venture is ideated, modeled, and planned in a way that fulfils its potential. This is in line with the ideas proposed by Alvarez and Barney, when they emphasize the fact that categorically more creative – business-wise (creativity) do not outperform less creative – business-wise (rationality), but a novel and feasible mix between those two considered from the perspective of the environment seems to be one way to success.

6.7 Role of the environment in the creating the BO (S-RQ 2)

According to critical realism, “the way the structures’ causal powers [or mechanism in Sayer 2000: 15] will develop, or not, will depend on the contextual conditions” (Leca and Naccache 2006: 631, brackets added). This means that to understand the BOC process from the critical realist perspective the structure and its causal powers need to be seen as necessary in forming the basis for the BOC process conducted by the entrepreneur. What is needed is to consider, on the one hand, the effect of structures on the BOC process, and on the other hand, the effect of other mechanisms on the process. It is believed here – along with the critical realist perspective – that these mechanisms along with certain structures will either hinder or promote the emergence of effects and events related to the process of creating the BO (Fig. 5).

Therefore, to follow the basic characteristics of the critical realist perspective the structure included in the analysis is understood here as three industrial development phases (Expansion, Shake-Out, and Consolidation in Tether and Storey 1998, 949) dominating at the time of the beginning of the BOC process. According to Tether and Storey, also a fourth phase exists that does not fit in their model. But still, they claim that:

“Type IV industries arise when industries contract in terms of their employment but expand in terms of the number of units active in the industry. Type IV industries, which are found in the bottom right quarter of the graph,
do not appear to comply with the life cycle model of industrial evolution discussed earlier, but, as will be shown, their existence in the high technology manufacturing sectors of Europe is quite common.” (ibid. 950)

Furthermore, the effect of other mechanisms is studied here by focusing on the use of the dominant industry recipe and its influences at the time of the actions of sub-case entrepreneurs in the BOC process. The effect of industry recipe is evaluated by analyzing how the sub-case entrepreneur explicates it in his or her narration. It is interpreted here that, firstly, if the sub-case entrepreneur fails to express at all how the business is going to be formed – or how it has been formed in the past, then it is assumed that the entrepreneur follows the current industry recipe implicitly. Secondly, if sub-case entrepreneur mentions ideas – yet similar to the industry recipe – then it will be assumed here that they follow the currently dominant industry recipe. The whole BOC process in both of these sub-cases is also assumed here to be less creative. Finally, when the sub-case entrepreneur is talking explicitly how he or she is going to carry on in ways that differ from the currently dominant industry recipe, the BOC process conducted is also assumed here to be more creative.

In this case studying the role of the environment defined from only two perspectives: the development phase of the industry, and the industry recipe. The life-cycle model of industrial evolution by Tether and Storey (1998) is more or less “a model of a closed system” (969). However, the activities of the current actors in the field, that is, intending entrepreneurs, established entrepreneurs, managers, CEOs, owners and so on, have opportunities to open up and change this closed system either incrementally or radically. It is acknowledged here that there may be other factors than these two to affect the BOC process, but at the moment they are left for future studies to be dealt with.

6.7.1 Effect of the industry development phase on the BOC process

As mentioned above, the life-cycle model of industrial evolution by Tether and Storey (1998) describes three development phases (Type I: Expansion; Type II: Shake-Out; and Type III: Consolidation) by drawing on increasing or decreasing numbers of net employment and firms during the industrial life-cycle.

While the date of beginning the BOC process varies among the sub-case entrepreneurs from early 1980s to 2004, it is obvious that the development phases vary too. Figure 11 (Fig. 11) shows that new firms were welcomed during the
Expansion and first part of 1990s. According to Tether and Storey, for example, general pattern of the development can be seen in two specific parts of the ICT sector, computer and technical services. In the UK, between 1985 and 1994 “for example, the number of computer service jobs increased by about 100,000” (ibid: 955).

In the technical service industry, the universal trend was similar. This means that the net number of firms operating in the industry increased heavily. The net employment, the other dimension of Tether and Storey’s model, increased in all countries studied, but decreased in Finland. According to Tether and Storey, the development phase of technical service was Type IV in Finland whereas in other countries in their data it was Type I (1998: 955).

Type IV means that the net number of firms increases, but the net number of employers in the field decreases. While, on the one hand, this phase is not presented in the life-cycle model by Tether and Storey, and according to them, on the other hand, it seems to exist quite commonly in the high-techn manufacturing sectors of Europe. The key focus here is more on the employment rate rather than the number of new firms entering the industry. Thus, the Type IV phase of development is important to mention but it is not a primary aim to understand its role in the BOC process.

In line with the perspective of critical realism it is reasonable to think of the role of industry development as a structure, that is, as given to people in society. However, it is shown above that people (e.g. entrepreneurs) are able to change this structure if they first manage to change their own actions (or behaviors). In addition, if those actions will be supported by other people then they influenced their actions. Eventually, if the new ways to act in the industry are accepted widely the dominant industry recipe will be changed.

For sub-case entrepreneurs A and B, the general situation was, on the one hand, promising, but on the other hand, also ambiguous. For entrepreneur A, the promising part was that the industry was emerging from scratch in Finland. This kind of industry development phase seems to offer good prospects for entering for almost any firms who are able to offer new products or services based on the technology needed in the emerging market. Nevertheless, the second part raised questions such as: What is really going on? What is actually needed in the market? For sub-case entrepreneur A the BOC process was based on the idea which seems to result from this situation: to combine the emerging need, the increasing integration of systems, with a new technology. However, sub-case
entrepreneur A changed this focus towards more integrated services rather than more advanced products as will be showed later in the report.

“We started as a system integrator and we built almost everyone of those commercial [businesses in a certain branch] in Finland.” (Entrepreneur in sub-case A: 1:2, brackets added)

The development phase of the ICT industry in the sub-case of entrepreneur B is similar to the situation in which sub-case entrepreneur A started his process. Initially, the internal development process of sub-case B, which started in the mode of corporate entrepreneurship to create something new for an existing business, was to solve the internal development problem at the beginning of the process. From that perspective it was more about what to buy as a customer rather than what to sell as a business firm. However, the process changed towards a more business-wise purpose. At the end of the internal development project sub-case entrepreneur B made a decision to spin off and start an independent business venture. As with sub-case entrepreneur A, the market was also emerging. This kind of emerging situation was even more obvious for sub-case entrepreneur B than entrepreneur A; there were already real customers who were interested in buying better and more user-friendly products than just any product that does the job.

“We did it to match the need that the company had” (Entrepreneur in case B, 2: 41)

”… the rest [competitors] came to see it with envy and said ‘damn, you have good system’. I started thinking why not sell this to others.” (Entrepreneur in the sub-case B, 2:45, quotation marks in original, brackets added)

Sub-case entrepreneur A and B were entering an emerging market (Type I in Tether and Storey 1998), where the exploitation of new technology was the key rather than new ways of doing business. To put this even more explicitly, it may be stated here that the question of how to do business was not the accurate at all. Actually, it was about services and products based on new skills, knowledge and technology needed in those emerging markets.

For sub-case entrepreneur C, the BOC process is seen as double-barreled; the first part occurred in the middle of the 1980s when he started the process with some friends. According to entrepreneur C, the aim was to resign from the firm of the current employer, and:
“...that we're going to go entrepreneurial. It all then went like - we were all with families so the other two guys pulled out. Families weren't all too convinced about the project. So it kinda went away. I also had a similar thing that [in the firm of the current employer] I had a good career ahead of me and I had support - good income and all... (Entrepreneur in sub-case C, 3:6)

"The demand is more for the bigger things that one person just can't do by himself.” (Entrepreneur in sub-case C, 3:6)

Similar to former cases, sub-case entrepreneur C also faced a market that was welcoming every new firm who could offer adequate skills, knowledge and technology to customers (see Type I: Expansion in Tether and Storey 1998). However, sub-case entrepreneur C decided to suspend the process for the time being and to continue as an employee. Since he intended to continue the process later if possible he did not abandon the firm they had founded together, but paid out the other founders.

At the beginning of 1990s, the company in which entrepreneur C worked as manager made some organizational modifications (see the gray area between Type I and Type II in Fig. 11; also Type IV above). Skilled people in the company were asked to think about re-location to another city. Some of those people were against this idea and started to look for another options. That process opened the window of opportunity for entrepreneur C to re-open the BOC process.

"He [a known expert from the same company] got into contact and said that 'you've been looking for a crew and now might be right opportunity'. I didn't know anything about it. It was their thing. I immediately grabbed it.” (Entrepreneur in sub-case C, 3:22, quotation marks in original, brackets added)

Entrepreneur C faced a situation where skillful employees and potential partners were willing to remain in their current home town. Thus, they were available as a potential co-entrepreneur or employee. Yet, mainly because of (or even regardless of) the ambiguous situation in the Finnish economy at the beginning of the 1990s, sub-case entrepreneur C and his colleagues believed this was good for their own purposes to utilize their advanced skills, knowledge, and contacts in the context of a new business venture.
“A lot of people said to me that ‘are you crazy to start something during a time like this’. Leave [the leading firm in the business] and go along with 'things like that’.” (Entrepreneur in sub-case C, 3: 22, brackets added)

Finally, due to the decision to utilize the dominant BM, the project firm, it was very important to sub-case entrepreneur C to maintain his good relationships with the former employer company.

“I quickly managed to ... I managed to negotiate longer payment schedules and fast revenue streams.” (Entrepreneur in sub-case C, 3:36)

At the very end of the second millennium, the entrepreneur in sub-case D faced a very turbulent ICT industry that was already turning toward the dot-com crash. Since the end of the 1990s the trend seems to be that the small software firm, for example, faced a situation where the firm’s own human resources were not enough to get a project work contract. This was because customers wanted to make contracts covering the larger part of the development project with one single firm to reduce its own managers’ working hours (see the gray zone between Shake-Out and Consolidation in Fig. 11). Sub-case entrepreneur D responded to this changing situation – the need for bigger groups of employers per project – by building an alliance with three other firms. Due to this kind of arrangement the new alliance firm was in fact:

“the first project probably came about as a hint through it. It was a fairly small project. After that... well... by building networks locally, through people who knew people. [They were] mostly smaller projects. Now we decided to do like... well... one and half years ago we formed a firm called [name of the firm], where [D's firm] had then quarter of ownership, and now third. ... And well, through that we quadrupled our contact and marketing surface. That has really been the... biggest 'move' we've done with how we have gained access to customers.” (Entrepreneur in sub-case D, 4: 12, brackets added)

The sub-case of entrepreneur E is a little bit different compared to these other sub-cases studied here. His BOC process contains many phases in many various circumstances. The initial starting point occurred in the early part of the 1990s. The process started more or less as a personal work development process; the only development phase that may have any influence on this process was the technological development, not the industrial development phase. In fact, the
situation remained the same also in the next phase where he started to operate in the form of a non-profit strategic business unit of an educational institution. In the third phase, in 2000, this changed to a for-profit business. At this time the specific area of ICT where entrepreneur E operated was in the Shake-out phase; earlier dominant products seemed to be fighting a losing battle against new more holistic solutions – such as the one offered by the entrepreneur in sub-case E. Finally, along with the MBO situation, the current development phase in the field started to look like Type III: Consolidation. In this kind of situation, firms that focus on how to make business as sustainable and profitable will be among the winners in the market.

"[Of the main product / solution of the firm]… in our business plan it has been written that we provide services. You need to recognise that. We are a service company that offers first and foremost services on the platforms it has created or it can also provide technical solutions other than its own.”
(Entrepreneur in sub-case E, 5:21, brackets added)

Finally, both sub-case entrepreneur F and G, faced the same kind of development phase in the ICT industry – Type III, Consolidation. This means that on the one hand, while the net number of ICT firms stays more or less stable (or increases only very slowly) at the same time existing firms are outsourcing their operations. That is, decreasing their numbers of employees. On the other hand, this process seems to open up new possibilities for entrepreneurs like sub-case entrepreneur F to start the BOC process to offer her own niche services based on specific skills and knowhow. However, because entrepreneur G happened to fail to form a relevant group of co-entrepreneurs or staff members to create a BO with relevant growth prospects, this kind of situation will only lead to the not very promising decision to locate the firm to third, fourth, etc. tier of sub-contractors, i.e., as a sub-contractor of a contractor’s sub-contractor’ sub-contractor.

"I have, on the other hand, taken a part this... this testing business is inside these companies. Their activities are not exactly this, but also something else. I have taken this particular area and made it independent. (Entrepreneur in sub-case F, 6:122)

"It is changing a little bit at least. The field has stabilised where at least the big buyers... Newcomers find it hard to get into it and the buyers have, as time has passed, found those partners that they mainly use. If surprising needs
arise then others will be considered. In that respect it is a bit... it is more or less like cooperation where the subcontracting chain shows that it is actually worth something. (Entrepreneur in sub-case G, 7:206)

"Yes! It was that the [firm X] could show the clients that they were a bigger firm and they resources to offer. Because many clients already have subcontractors they don't want these small 5 person businesses in to create a hassle when these 5 people cannot really provide anything. It is only if these small companies have specialized knowledge, a very narrow sector. You can't even see growth in it. However, if you want that client trusts that if they shout 'we need three more men and all the time' that you can provide it and it doesn't immediately mean that you are doubling the size of your company.” (Entrepreneur in sub-case G, 7:212, brackets added)

In all, the industrial development phases of the ICT industry seem to have a notable effect on the BOC processes of the entrepreneurs in the present study. As mentioned above, from the critical realist perspective the structure is taken as given – it exists independently, and even without the people in question noticing. Furthermore, while the structure of the industry is seen as quite stable at one point in time, it is still changeable. This characteristic of change becomes evident if entrepreneurs in the ICT field – or any field – create a new solution for old, emerging or newly created problems, and then the industry itself will also change.
along with these evolutionary or revolutionary modifications and destructions. One way to look at this process is in terms of the industry recipe.

6.7.2 Effect of the industry recipe on the BOC process

The concept of the industry recipe is defined in the literature as a business-specific world-view that offers partial – but at the same quite ambiguous – guidance to be adapted to the current situation. The industry recipe (or business idea in the vocabulary of Normann 1976, or dominant [business] logic in the vocabulary of Prahalad and Bettis 1986) is an open concept that will fail to resolve actual problems at the individual level – in a specific situation. This means that, according to Spender (1989), it only contains the data that only the actors in the particular industry understand as necessary for obtaining the big picture of what is needed to accurately understand one’s specific situation.

It is thought in the present study that the actions of current actors who are influenced by the industry recipe will base their actions on two issues. Firstly their actions will be based on the phase of development of an industry, and this is seen more as result of the former (and legitimized) activities of people of the past. Secondly, their actions are based on the actions of current followers of the dominating industry recipe.

Since it very difficult to actually see the currently dominant industry recipe – due to the implicit nature of the recipe, and how it is embedded in current and specific actions – interpretation is accepted here as a method for making it as perceivable as possible. This means that while the industry recipe is unperceivable as such its presence will be evaluated by gathering more or less strong implicit (or indirect) evidence of it.

Therefore, it is assumed here that if sub-case entrepreneurs do not talk about how to do business in their specific field of ICT industry within which they have chosen to do business, then they are influenced by the current dominant industry recipe. At the same time such an approach is interpreted here as a less creative activity. That kind of activity is called reproduction by Archer (1998). This view is contrary to the sub-case in which the entrepreneur is talking about the way to do business in one’s own words and includes ideas that are more or less different compared to the dominant industry recipe. These kinds of activities conducted within the BOC process are assumed to be more creative actions or transformations (ibid.). Furthermore, it needs to be mentioned that this more or
less creative evaluation criteria is based on the concepts of everyday creativity in Richards (2007) and personal creativity in Runco (2007).

The role of the industry recipe is studied here as follows. The first thing is to treat the outcome of the BOC process as the BO. Then this outcome will be analyzed in two phases: the phase of the original BO, and the phase of the recreated BO, if the latter has actually happened. It is assumed in the present study that the BOC process may be exploited not just once in the entrepreneurial process, but as many times as the entrepreneurs want to exploit it. This is not to say that it will be feasible to come to work every morning with a new BO since certain kind of routines are necessary for organizations to work and be productive. However, as stated above, the concept of ambidexterity – to work simultaneously with both the BOC process and the BOE process – will help to understand the point taken here.

To begin with the entrepreneur in sub-case A, it is evident based on what is stated above (section 6.6.3) that his first BO is built on the dominant industry recipe at that time. The only issue treated as important enough to think about during the BOC process was technology, and not business. Thus, the way to build a business venture is taken more or less as given: there was actually nothing special to be thought or talked about.

"... [co-founder’s hands-on experience of running the business in another industry] comes pretty close, because... even if it was like [about contracting in another industry] this contracting there were many things that you needed to think about..." (Entrepreneur in sub-case A, 1:30, brackets added)

"We didn't understand things like [the lack of business competence]. We only saw the thing as technology. Something that you just need to get into and ..." (Entrepreneur in sub-case A, 1:34, brackets added)

In sub-case A both the IofBO and the BM, at least, were only implicitly thought through; it was merely based on what the every businessman knows about product business. However, in the second phase notable parts of the existing BO needed to be re-created because the focus of the firm turned more to a service mode instead of the original product mode.

"It has meant that we've made this a software company. We really didn't have knowledge of software back then." (Entrepreneur in sub-case A, 1:44)
"... on top of that we have this software product we this big part that consists of services. ...You make a commitment for a long period of time, many years. It is at least a five year, even a 10 year, mental commitment from the client as well that takes this thing forward together. There are other things in play than just technology.” (Entrepreneur in sub-case A, 1:75)

Similar to the entrepreneur in sub-case A, the entrepreneur in sub-case B talks very little about the basic characteristics of his original BO. Though, this BO was initially created for the development of operations in an established firm in the context of CE. However, it is also important to understand this part of the BOC process, since at this stage many of the elements of the BOC process were in place already – the internal customers, the value offered to those customers, how to make money from the utilization of the new business venture and so on. At the end of the CE – based development project, sub-case entrepreneur B realized that:

“I started to think – why aren't we selling this to others.” (Entrepreneur in sub-case B, 2:45)

Thus, according to the scarce narrations by entrepreneur B on this issue, it can be interpreted here that the way the business was built in the first phase followed the dominant industry recipe implicitly. That is, it reproduced existing business ventures operating in the business. Then, during the exploitation of the original BO sub-case entrepreneur B wanted to expand its scope by looking for new possibilities where it could also be utilized.

"I started to search for that type of work [to be able to utilise one's own education and expertise] and through it I started discussing with [a leading firm in the industry]. [The name of the firm] wanted to first order software and electronics from us, but it started to grow from there. Eventually [the original BO] was left completely out and it continued its life as spin-off." (Entrepreneur in sub-case B, 2:48, brackets added)

In the second phase the situation was detailed more business-wisely, that is. The nature of the new BO was thought through more specifically. Firstly, at the time in the late 1990s, the dominant industry recipe was more advanced compared to the situation in the late 1980s (e.g. Sallinen 2002): however, the entrepreneur in sub-case B realized the need for something different compared to the dominant recipe and the development phase of the industry.
“There it is... we were previously this pure 'contract R&D house' or technology partner. Now we're more focused in being a 'testing house' and [at the same time] we are also a sort of 'automation house'. That way we can offer much more than just development. We have testing that is an integral part of product development and production - even a part of 'after-sales' or maintenance. On top of that, we have product specific automation. Whenever we develop a product and whenever a product is changed at the product line you will always a need for something specific for its automation and we have that. So, we've taken a bigger piece of that chain. These business models, sectors and organisations live and get shuffled all the time. (Entrepreneur in sub-case B, 2:27, brackets added)

In the sub-case of entrepreneur C, the dominant industry recipe at the time of the first BOC process remained unclear in the research material. This is perhaps because entrepreneur C did not regard it as connected to the second BOC process. How the initial start-up was suspended, but not abandoned, is depicted below (Ch. 6.8). The second BOC process followed the dominant industry recipe (i.e., to start as a project firm and eventually change towards producing their own products by Sallinen 2002). However, in this case this was done in a way that was creatively applied in the specific situation. As an experienced manager and with a few experience also as an entrepreneur, sub-case entrepreneur C realized that to escape the company's valley of death something had to be done to get money in as soon as possible. So, entrepreneur C started to build a win-win situation between both the former employer and other customers of his own business to get the payment schedules as positive as possible. His former position and reputation as a very competent and reliable manager in the previous firm was the key here.

"I didn't really have anything other than... let's say that I didn't have any entrepreneurial history and of course no capital or other experience. My solution to it was quite simple: I started to look for business partners that would in a way be responsible. They would own a part of the company and we would work on things together. (Entrepreneur in sub-case C, 3:6)

"I managed to negotiate, on top of that, with the client that they would speed up their payments as much as possible... I had really good relationships. They would put all the invoices on top of the queue. (Entrepreneur in sub-case C, 3:36)
The entrepreneur in sub-case D built his original BO on is depicted below (section 6.8) basis of industry recipe: a project firm with a vision of possible products in the future.

“...we got the group together and thought about what we would take forward from all the ideas and thoughts that everybody had. ...There wasn't any clear plan as such... if you think about it. It was, however, the plan that we took and we started doing software subcontracting.” (Entrepreneur in sub-case D, 4:2)

While being a very small firm with no more than ten people in total either as co-founder or staff member, sub-case entrepreneur D realized that they were not able to contract with customers to take part in bigger and more profitable projects. In the first part of the first century of the second millennium the industry recipe had changed in favor of bigger projects and fewer contractors in one development project than earlier. It is interpreted here that when sub-case entrepreneur D realized that the firm had no actual opportunities to grow fast enough to tackle this problem, something unconventional had to be formulated. The solution by entrepreneur C was creative: a joint venture with three other very small firms like his. This means that by combining their human resources all four firms were able to both remain independent and play in the field with larger competitors.

“...We put in it about four 10 people companies that joined their project based businesses. Well, through it we sort of quadrupled our contact and marketing surfaces.” (Entrepreneur in sub-case D, 4:12)

The second sub-case that starts as a CE is the BOC process of entrepreneur E. The original BO was created as a CE for favor entrepreneur’s own professional purposes while working in a public educational institution. From the perspective of the present study – to define favor entrepreneurial process as directed towards a new business venture or to creating new value for the customers – this phase is merely about nothing more than the idea for a new business venture or firm (i.e., the idea for the business venture, IforBV, the everyday situation preceding the actual start of the BOC process). In many other cases this initial idea for business had remained a hobby or abandoned before any further activities.

The second phase occurred when sub-case entrepreneur E managed to exploit his more or less vague BO in the context of the educational institute in the mode of an in-house non-profit business venture. This means that he changed the former personal level activity to a non-profit service to be offered to all interested
in using it. At this point it is possible to evaluate the characteristics of the BO on a more business-wise basis in terms of how much it is based on dominant industry recipe.

After operating for a few years as non-profit service provider in a public institution, entrepreneur E saw that the BO created for the institution would not be sustainable or successful enough to secure a proper development of the service. He managed to arrange a deal with a for-profit firm who bought it and hired the development crew to continue the process. This third phase was about re-creating the non-profit business as a for-profit corporate business unit with its own customer base, and of course, it needed to stay profitable. While the general industry recipe of the ICT industry may have evolved toward Type III: Consolidation, the field where entrepreneur E was operating was more immature. It is suggested here that this field of the ICT industry was still in the Type II: Shake-Out phase, since there were many new and some old firms in the market. It also became evident that they did not all operated business-wise, but more based on the founder’s enthusiasm for the technology – in the same way it has been disclosed by Sallinen (2002) in the software business earlier.

“...the development of this sector is extremely expensive and the costs are very much in personnel. About 70% of our costs go on personnel. That would've required a spin-off through which we would've looked for risk capital. Looking for risk capital means in practice, and I can say this with hindsight, that those who applied for risk capital in 2000 are now in deep trouble, because these speculators have targets that the growth in this sector has not been able to answer.” (Entrepreneur in sub-case E, 5:10)

Furthermore, the research material concerning the fourth phase will disclose most vividly the re-creating the BO created in the previous phase. Based on his advanced experience on different levels and the context in the business in the same industry, the entrepreneur in sub-case E was able to explicate quite obviously different elements of the business venture he and his co-entrepreneurs were creating more creatively in the form of a management–buy–out (MBO).

“Well, the opportunity presented itself in a way that there might be a chance to have a say in how the business is developed. ...There was a chance to get into bigger things where outside funding would have been available and you could've found a company that would've probably been bigger and started out from a slightly different perspective. ... Now we've kind of found the way of
doing business that guarantees that we can do the things that we are supposed to be doing 100 percent.” (Entrepreneur in sub-case E, 5:16)

Since the entrepreneur in sub-case F faced the BOC process just once during the research material generation period it is easier than in previous sub-cases to interpret how creative the BOC process and its outcome, the BO, has been. That is, how keenly she has followed the industry recipe, or has the process been reproductive or transformative by nature? While she realized quite creatively that a new niche is opening and she has skills and experience on that field, however, the research material is scarce on this, and it is quite difficult to give enough evidence that could support interpretations made here. Therefore, it seems that the situation is similar to the other sub-cases where the main focus is mainly on what the business venture does? rather than how it does it?

“In the [big companies] they have this thing for integration. They integrate a lot of different software together and try to somehow keep the thing in control. That doesn't really have to do with this usability since this is more inside the system, but that was how the idea got formed. How these things could be done and how could we make software that people would actually ... that they would actually use them.” (Entrepreneur in sub-case F, 6:49, brackets added)

Nevertheless, during the passing years it has became quite clear how sub-case entrepreneur F has re-created the initial BO. Instead of continuing as a project work firm by selling the entrepreneur’s expertise in a very narrow, yet very important field of the ICT industry, she has re-created the BO in a way that includes new products and product families offered to new and quite unconventional customer groups.

Finally, the entrepreneur in sub-case G deliberately talks about the importance of creating business that is explicitly different than what the industry recipe is suggesting.

“You thought about the idea that you wouldn't sell just software. You'd sell a little bit of software, but also a little bit of hardware to the software developer and even to the end client. One would find a better client base than with just this notion that you design software and make money with it, which is actually quite difficult in reality. The idea was to have more substance to the idea than just plain software.” (Entrepreneur in sub-case G, 7:93)
Sub-case entrepreneur G seems to know the industry recipe and – most importantly – also *how to act differently*. This means that he seems to know how to even break the rules of the recipe of that time. Drawing on this it is interpreted here that in this case it might be quite a creative decision to abandon the BO created earlier and sell it to a firm with growth expectation in the region. In this kind of situation it is possible to let the BO live as extension (or a part) of the new firm’s existing BO instead of dying slowly under unfortunate conditions.

"It is that a smaller company couldn't have made contact with bigger clients with one or two people, but one would've needed to sell to smaller clients and then get into the second tier. Live there by doing this and that. I don't really see it as a place to grow. (Entrepreneur in sub-case G, 7:228)

"So, if you're planning on starting, you need right away four or five people that want to become entrepreneurs and then you join forces and form a company. It is pretty useless to try to persuade anybody. It is a different situation if you have a financier, funding and a product idea... then things are different. If, however, the situation is where it is up to you and you are coming there, you need to employ yourself if need be. Not that... you need to be an entrepreneur. Others can't do it. That is entrepreneurship. You need to have the want and the motivation. If you have the motivation then why not do it.” (Entrepreneur in sub-case G, 7:296)

Table 22 below summarizes the key characteristics of the BOC process and its outcomes in the cases presented in the present study. While in many cases the re-creating the BO, the utilization of the BOC process for the second, or third time, emerged several times in table, 23 only one re-creating phase is mentioned as an example.

<table>
<thead>
<tr>
<th>Sub-case</th>
<th>CE</th>
<th>IE</th>
<th>Original BO</th>
<th>IE</th>
<th>Re-created BO</th>
</tr>
</thead>
<tbody>
<tr>
<td>A</td>
<td>X</td>
<td>less creative</td>
<td>X</td>
<td>more creative (2. round)</td>
<td></td>
</tr>
<tr>
<td>B</td>
<td>X</td>
<td>less creative</td>
<td>X</td>
<td>more creative (3. round)</td>
<td></td>
</tr>
<tr>
<td>C</td>
<td>X</td>
<td>more creative</td>
<td>X</td>
<td>more creative (2. round)</td>
<td></td>
</tr>
<tr>
<td>D</td>
<td>X</td>
<td>less creative</td>
<td>X</td>
<td>more creative (2. round)</td>
<td></td>
</tr>
<tr>
<td>E</td>
<td>X</td>
<td>more creative</td>
<td>X</td>
<td>more creative (4. round)</td>
<td></td>
</tr>
<tr>
<td>F</td>
<td>X</td>
<td>less creative</td>
<td>X</td>
<td>more creative (2. round)</td>
<td></td>
</tr>
<tr>
<td>G</td>
<td>X</td>
<td>more creative</td>
<td>X</td>
<td>more creative? (2. round)</td>
<td></td>
</tr>
</tbody>
</table>
In all, the role of the environment seems to clearly affect the BOC process. On the one hand, this is because entrepreneurs utilize the dominant industry recipe quite directly during their specific BOC processes. On the other hand, a deep understanding of the current industry recipe helps them to creatively modify and change as they see fit for themselves and the markets.

It is shown in table 21 (Table 22; see also Fig. 10) how the transformation from less creative actions toward more creative actions happens while entrepreneurs keep working in the field. This highlights the role of knowing the industry recipe more thoroughly in understanding how, for example, competitors run their businesses and how to challenge these ways by creating something more or less unorthodox – but at the same time creative: in other words, novel and feasible approaches to business.

6.7.3 Entrepreneurs’ effect on the environment

The basic assumption of critical realism is that structure affects the activities conducted in some particular environment. In the case of the present study, and to understand the relationship between the entrepreneur and the social and natural environment, the structure equals the development phase of the ICT industry and its representation, the industry recipe. In the same vein, the entrepreneur is seen here as a person while playing that role in the entrepreneurial process.

The other basic assumption in critical realism is that it acknowledges the entrepreneur – the person behind the role, is able to change the social structures he or she is facing while working in business contexts. To put that kind of assumption together with the interactive nature of the creation of new knowledge from the world, and to exploited this in the world, the question of whether or not the entrepreneur actually affects the industry recipe, will become more complicated.

To consider the nature of interaction in the human relationship through double-hermeneutic lenses (Nørreklit 2006) it is clear that to be able to affect some existing structure there will be a need for at least two participants who interact with each other to create a shared understanding of some specific issue (e.g., a new way to do business in a specific area of the ICT industry). In addition, as Spender (1989; section 4.2) defines the industry recipe, it is not enough that only those two create something feasible, but that there has to be a tribe of industrial experts who will find out that what is proposed really works and
support that new way of doing business. Then, one can say that the recipe has changed.

In closing, a single entrepreneur (as a role) or person by himself or herself cannot directly change the industry recipe. However, together with other people, it is possible. But only if some of them are willing to play the role of the initiator at one time and the role of the follower at another time. The effect is then co-created rather than created by a single person. To apply Fleetwood’s notion of socially mediated reality (2005), one can state that the effect on the environment is a result of a socially mediated process where everybody is needed as initiators, or as followers, or opponents who prefer their own ideas to the one preferred by the initiators.

6.7.4 Discussion of the role of the environment in the BOC process

The earlier literature on the entrepreneurial process highlights the nexus between the entrepreneur and the opportunity (Shane 2003). If the nexus phenomenon is considered from the perspective of the present study, the process perspective, it seems to be the case that the nexus exists also between the BOC process conducted by the entrepreneur and the environment (Fig. 12). This means that, on the one hand, the BOC process needs an independently existing reality with endless amounts of various sources (social structures and mechanisms, ideas, things or processes, concrete examples, etc.) for everybody to think – what can I do with this and that single-handedly or with other people to get an idea (or to create an idea) for a possible new business venture / firm (Fig. 9). On the other hand, this emphasizes the role of the key actor in the BOC process, the entrepreneur, because nothing will happen if nobody exists with an intention to start the process. That is, it is the role of the entrepreneur to show what could be done business-wise and also how it should be done to make that kind of an idea actualized in a certain time and space specific condition.
To look at the role of the environment from the nexus perspective displayed in Figure 12, the function of the role of the environment (i.e. the social reality, but also the natural reality) seems to emerge as twofold. Firstly, it is to form a repository for sources to be exploited as the basis for the entrepreneurial process conducted by the entrepreneur; that is, the person(s) who will play that role if the BOC process actually begins in a certain space and time. The second function is to either promote or restrict the possibilities of the entrepreneur to actually do the job. That is, the former highlights the need to be prepared for having access to those sources through his or her human and social capital (i.e., education and work experience, and personal and professional relationships). The latter is about understanding when it is feasible to start both the BOC process as well the actual business activities, the BOE process: to understand when the window of opportunity is open.

Furthermore, according to the theoretical framework of the study, no present way to do business is completely reproducible as such. In every case a need exists for more or less creative actions to either reproduce or transform (Archer 1998) the emerging BO. This means that even existing firms and their ways of doing business – according to the current industry recipe – can be treated as sources for the entrepreneur’s creative activities in creating the business in the future.

Thus, based on the logic above it seems to be evident that the entrepreneur – the person(s) who is willing to play the role of the entrepreneur in a process of creating value to the entrepreneur, customers, shareholders, and other stakeholders in a new emerging business venture as a newcomer in the field – will be more dependent of the sources in the social and natural environment than the
entrepreneur who has experience of the entrepreneurial process already. That is, the latter can exploit his or her existing knowledge corridor (Ronstadt 1988) to produce BOs as needed.

While that kind of difference between newcomers and experienced entrepreneurs seems to be evident in conditions in which new BOs are related to each other more as reproductive by nature than as transformative. However the case might be different in conditions where nobody has prior knowledge about what this is about or where the business is in those kinds of cases. In those kinds of conditions the newcomers seem to have a better starting point, since they have less to out-learn than the more experienced entrepreneurs.

A glimpse of that kind of process based on new kind of thinking is revealed in the case of sub-case entrepreneur D who resolved the big problem he faced – how to become a bigger player without any money – by re-creating the existing BO of his firm. The key aspect of this re-created BO was cooperation in the form of an alliance between a few other small firms in the field. According to the interpretation made by the researcher, sub-case entrepreneur D did not hold onto the typical role of the entrepreneur as the alpha male of the organization who single-handedly does the job but as a leader who understand that cooperative action as a creative way to get things done.

To look at the nexus between the entrepreneur and the social and natural environment (Fig. 13) more closely, it seems clear that, on the one hand, the current phase of the development of a specific industry influences the BOC process (i.e., BIP, BMP, and BPP) through the industry recipe (IR), and finally the outcome of the BOC process, the BO. On the other hand, the exploitation of the BO during the BOE process influences both the IR and the development phase; if how the BO is exploited in the economic, political, technological, etc. situation is a success then it may change the IR. This means that people in the specific industry and people entering the field start to prefer that kind of approach as a feasible way to run the business. In the same vein, if the BO and its exploitation based on invention or innovation, then the BOE, treated as a success – business-wise, may also influence the development of the industry.

Perhaps the most important role that both the development phase and the BOE process play emerges in influencing the sources from which the entrepreneur creates his or her ideas for the possible new business venture (IforBV). This idea may or may not consist of business-wise elements; however, in any cases it forms the basis for the BOC process. In the former case it is the influence of the development phase through the industry recipe, that is, the
dominant way to run the business in a specific spatial and temporal context. In the latter case, the BO shows people the various ways to do business whether or not they are thinking to start the entrepreneurial process. In some cases the idea seems so interesting that those people make an intentional choice to start the process.

In closing, it is important to note that, on the one hand, it is acknowledged here that the entrepreneur is of importance in creating BOs and inventions, influencing the emergence and modification of industry recipes which are all related supportively to those people who will start the BOC process. This means that the relationship between the entrepreneur and the environment, the reality, is keen. However, on the other hand, it seems to be the environment that accounts even more. From the critical realist perspective there are many other mechanisms and social practices which either restrict or support the BOC process. That is, mechanisms such as changes in legislations and other forms of policies, tastes in the market, the development phase of a specific technology, and how people see their role in doing business, etc. affect the BOC process – and later the BOE process – despite the fact that there might be feasible inventions and business models available and ready-to-exploited in the form of a new business venture. Thus (and unfortunately), the possibility exists that the environment outperforms the entrepreneur’s opportunity to start the BOC process.
6.8 Relationship between the BOC and BOE process (S-RQ 3)

One way to study whether the entrepreneurial process is an *one-off event* which happens only once in the entrepreneurial process, or an event which can be repeated always when needed, is to picture the interplay between the two sub-processes which form the entrepreneurial process. To follow the reading in the previous literature, it has been taken as given that if the entrepreneurial process is defined explicitly as containing these two processes, then on the one hand, the first process is assumed to include the development of the initial idea into a full-blown opportunity (Ardichvili *et al.* 2003). This kind of outcome is then treated as ready to be actualized in the following sub-process, in the exploitation process. In addition, it is also mentioned in the previous literature how these two independent but highly related processes interact between each other in a way that can be defined as path dependent, or as a one-way-path. This means that the initial idea (often treated as the opportunity) will be the input for the development process. Since the exploitation of the full-blown opportunity has started it is understood as an independent process in the chosen market.

On the other hand, in the present study the entrepreneurial process is seen such that the role of the BOC process is to create the BO more or less creatively from the initial idea firstly to IofBO, then to BM and finally to BP. This means that only after the BOC process can the created BO be ready to be exploited in the BOE process. It is important to note at this point that because the role of the preparation process is assumed here (only initially) to act as a mediator between these two processes it is excluded from this part of the study (see Fig. 7; Fig. 9).

To analyze the research materials drawn from the seven sub-cases the interplay between the two sub-processes of the entrepreneurial process, the BOC and BOE process was pictured as follows: a key finding is that all sub-cases can be placed in two categories. Firstly, sub-cases F and G present the traditional way to act in the entrepreneurial process, that is, from BOC to BOE. In the case of sub-case entrepreneur F, the exploitation of the initial BO continues (Fig. 14). Although after the end of the research material generation in 2005 it is disclosed that the entrepreneur F has also faced the re-creating the initial BO after four to five years of doing business.
Fig. 14. Sub-case F: Interplay between the discovery and exploitation process.

After the official founding of the firm sub-case entrepreneur G realized that working single-handedly would not offer sufficiently interesting opportunities to proceed with the current BO. Thus, he changed his plans, and abandoned the BO by selling the newly founded firm. Perhaps the main reason for this kind of solution can be find already in the BOC process. As hinted in figure 15 (Fig. 15) below, the entrepreneur in sub-case G had to dramatically change his initial BO since he recognized that those professionals who participated in the BOC process refused to follow him to the actualization of the BOE process. Based on his experiences in the field he realized quickly that with a one-man-firm the expectations he wanted to gain through the initial BO for the future business venture would never be fulfilled.

"One noticed ... that it is quite hard to leave when you are a one man business ... you needed to work during working hours ... as a subcontractor and CEO and you saw that you don't have enough time and energy for it. It is such a huge task to accomplish ... but it would require a year or a year and a half of hard work to finish the task and that it would provide ... I don't have the energy anymore to follow through with that... and there especially was that time that they don't order anymore from smaller companies. So, I thought that there are other business sectors than ICT – and it works. Then I got a great chance when talking to a friend and he knew about a [company X] that was looking to expand here. So, I thought why not, if they are going to buy the firm, I could start to work for them.” (Entrepreneur in sub-case G, 7:304, brackets added)
Secondly, a more problematic category can be found if the focus is on sub-cases A, B, C, D, and E. This category can be defined into two sub-categories: Sub-category 1 includes sub-cases A and D, and sub-category 2 includes sub-cases B, C, and E. To start with sub-category 1 it displays that both sub-case A (Fig. 16) and sub-case D (Fig. 17) challenge the traditional way to see the interplay between the two sub-processes of the entrepreneurial process since they show clearly how entrepreneurs in both sub-cases utilized BOC process once more in order to develop the initial BO in a way which could form a basis for more feasible and promising ways to run the business. The main difference between the entrepreneurs’ actions in sub-cases A and D is as follows: The entrepreneur in sub-case A developed a new BM for the firm by changing the core resource base of mere product integrator toward software system provider business (see Sallinen 2002).

"It was also driven by advances at technology. Already, in the beginning of the 90's it was clear to us that analogue equipment wouldn't be used for very long anymore . . . Everything is going to go digital." (Entrepreneur in sub-case A, 1:38)

"It was more in the beginning of the 90's, you see, in the beginning of the 90's there was a very deep depression and we, as well as ... the market, [industry] dried up to a large degree. Then we saw this software side of things, so now we are working with software that we are selling to these large [industrial] corporations. That is what we started focusing on then. We renewed our skin so to speak.” (Entrepreneur in sub-case A, 1:2, brackets added)
The entrepreneur in sub-case D chose another way to solve problems that he and the firm faced. The solution was to proactively confront with the important challenge for a small firm at that time: How to gain a role in the market? How the firm will become more legitimate? Since development in the project business mode was toward bigger contracts that require larger groups of employees working in the same project his solution was to change the BO of the firm so that close cooperation between three other firms in the project business became an important element of the re-created BO.

"It was a merger of about four different 10 person companies that unified their project based businesses. And well, that is how we sort of quadrupled our contacts and markets. That has been kinda the ... biggest ‘move’ to achieve the customer front-line.” (Entrepreneur in sub-case D, 4:12)
Finally, sub-category 2 contains sub-case entrepreneurs B, C, and E. These sub-cases are the most challenging cases from the point of the traditional perspective. This is because the two entrepreneurs in sub-case B and E, of the three entrepreneurs in total, started their BOC process with the CE approach. This mode to start was transformed later in the entrepreneurial process into the IE approach.

To start with the third one, sub-case entrepreneur C started the BOC process in the mid 1980s, but suspended it for several years. During these years he continued to work as a manager to gain more experience in the field in order to be better prepared to re-generate his existing business venture. At the beginning of the 1990s, he discovered that the *window of opportunity* might be interesting enough and he re-created a new BO for the suspended business venture. This new BO was again partly re-created during the first months after the re-start to make sure that the BO actually can be treated as most feasible in the context of the evolving industry.

"The demand is more towards larger things, things that one firm cannot do alone.” (Entrepreneur in sub-case C, 3:6)

![Fig. 18. Sub-case C: Interplay between the discovery and exploitation process.](image-url)

From the perspective of what is stated already above, the actions of sub-case entrepreneur B is of interest. After creating the initial BO based on the CE approach he started the business venture as a business unit of the existing company. Then he started an independent spin-off based on the initial BO after some time.

After working a few years, due to his education and work experience, entrepreneur B discovered that there were increasing needs for new technology,
and so he re-created the initial BO and brought in new skills and knowledge. Sub-case entrepreneur B also perceived that the old skills for running the firm based on the initial business opportunity need to be replaced by new ones. While these old skills were not seen as lacking value from the point of view of the newly re-created BO, they were seen as valuable by the current managers who wanted to buy the particular part of the business from the owners. After the transaction, entrepreneur B regenerated the existing business venture, the former spin-off, and carried on with this company and its new BO.

“In this... in the past we were a pure contract R&D house or technology partner. Now we're more focused in being a 'testing house' and [at the same time] we are also a sort of 'automation house'. . . . So, we've taken a bigger piece of that chain. These business models, sectors and organisations live and get shuffled all the time. (Entrepreneur in sub-case B, 2:27, brackets added)

![Fig. 19. Sub-case B: Interplay between the discovery and exploitation process.](image)

Finally, the entrepreneur in sub-case E also utilized both the CE approach and IE approach in a way that is quite unique in this study. After developing substance issues at the service unit phase, he focused on developing the business issues. Finally, after the MBO he used the possibility to re-develop the tested business opportunity to the next level, that is, due to a clear understanding of both the substance issues and the business logic needed for building viable business venture. Sub-case E shows clearly that it is very important to know the substance, as well as the business logic, but the most important thing is to know how to combine those two to make a business out of them.
In all, the interplay between the two main processes of entrepreneurship, the BOC process and the BOE process, is actively utilized – while merely implicitly in most sub-cases from the entrepreneurship point of view – during the entrepreneurial process except in sub-cases F and G. In fact, it might be possible to think that even in sub-case G the decision to abandon the current BO by selling the whole business may be based on re-thinking through the key elements of the existing BO.

While, this kind of interplay may be understood as the strategic development of the existing firm; here it is thought that if the focus is directly on re-creating both the IoB and BM – perhaps even on new ways to plan the existing BO – then it is about utilizing the BOC process for this kind of purpose. Thus, in this case the role of the BOC process in the interplay will be an essential element of the entrepreneurial process.

### 6.9 Discussions of the case study findings

"Bring ideas in, “Mark Van Doren said, “and entertain them royally, for one of them may be king.” (Caroselli 1998: 115, quotation marks in original)

On the one hand, this study might share what van Doren (above) means when he says that it is not obvious to recognize who will become king when a group of babies is met for the first time. On the other hand, however, it is against the key idea of this study to agree with what he is saying literally. This sentence by van Doren means that the king has to be at least a member of the royal family, and therefore van Doren’s saying is understood to claim that it is possible from the perspective of the BOC process to recognize a BO already when the initial idea is
perceived by the (intending) entrepreneur. Therefore, Van Doren’s idea is modified here as follows:

Bring ideas in, and entertain them royally, for YOU may make one of them BECOME a king.

From the BOC process perspective, it is about the intentional and creative activities of an entrepreneur to make some initial business-wise idea (or vision, or insight) become a BO. From the perspective of creativity this new BO will be novel and feasible. That is, novel at least for the entrepreneur himself or herself, and feasible enough to be in line with the entrepreneur’s expectations – and more.

In addition, from the BOC perspective no particular phase or part of the process as such will determine the nature of the outcome, the BO. To call the BOC process as creative process, all that is needed is to act more or less creatively at least in one phase (BIP, BMP and BPP) of the BOC process. Based on personal or everyday creativity, to act creatively means that at least the person believes that this act is novel and feasible.

Since the combination of entrepreneurship and creativity is not uncommon in the literature on entrepreneurship, it is highlighted here that creativity and its applications, such as in creative problem-solving, can be utilized even more deeply than just at the beginning of the entrepreneurial process. This can be seen clearly in the podcast by Seelig (2009), in which she talks about insights in creative thinking and the entrepreneurial mindset together with applied problem-solving and the lessons of failure. While it is also shared by the author of the present study that creativity combined with ideas such as the bigger the problem the bigger the opportunity or you may fail to succeed are all very useful in creating ideas for a new business venture: however, it is also explicitly disclosed here how feasible the CPS method is along the whole process.

In this section, it has been shown that many issues influence the BO as an outcome of the creation process: entrepreneur’s background (human, social, etc. capitals); the entrepreneurial process; the BOC process (BIP, BMP, and BPP); different social structures and mechanisms affecting the entrepreneur’s actions – and that are affected by entrepreneurs.

The analysis of the research question and sub-research questions starts with displaying that it is possible to think that, firstly, if the reality is thought of from the perspective of critical realism then it will be clear that not everything is about the entrepreneur’s own imagination (as it is claimed by extreme subjectivists).
However, the fact that reality exists independently of the human being (as it is claimed by realists) will be not taken as given. The creative combination of realist ontology with (social) constructivist epistemology seems to offer new insights for understanding the entrepreneurial process, in general, and the creation of new BO, in particular.

Secondly, to highlight the business-like elements of the BOC process, the present study will give at least preliminary support for both the role of the idea for a new business venture and the BOC process. This process begins with ideating the previous idea to meet the business perspective criteria, then it proceeds to modeling the highly conceptual IoTBO into the form of a more focused BM, and finally, it starts to turn the focused but still more rather than less conceptual BM by planning a formulating a concrete and implementable BP. The creative approach to the process in every phase makes it possible to find novel and feasible solutions. This kind of process results in the actual business venture that may (or may not) be totally different to what is expected based on the initial idea for a new and in many case only very imaginary business.

Thirdly, if the logic above is followed then it will be possible to define the start of the BOC process. The starting point can be defined based on the time when – from the perspective of business – the decision to start the more or less creative ideating process of this initial idea is made.

Thus, it is assumed here that it is as business–as–usual to have an idea about business. Therefore, it is assumed that these ideas for business are actually not about business at all but something else such as desire to build a product (or service), or act creatively in order to do something differently – without any relation to business.

Finally, along with critical realism this study acknowledges the role of social structures (here as the development phases of the ICT industry, and the industry recipe of the ICT industry since the early 1980s) affecting entrepreneurial activities in the context of the BOC process. It is important to notice that while, on the one hand, the industry development phases are seen as stable structure and taken as given by the entrepreneurs, on the other hand, the industry recipe is seen as a more current phenomenon, and as affecting the evolution of the industry development phase.

The case study reveals that based on the interpretation of the industry development phase dominating at the time the entrepreneur starts his or her BOC process it seems to influence quite strongly on the process. In the case of those sub-case entrepreneurs who were new-comers in the field; that is, without any
deep knowledge of the industry recipe, they seem to perceive the dominating development phases both as enabling them to see possible sources for the future idea for business and as restricting them from seeing only the obvious possibilities – visible to everyman. Of course, the personal background of the entrepreneur (as human and social capital) seems to play a role here; people with different backgrounds will create different ideas – as demonstrated by Shane (2000) in the case of starting various kinds of business on one single innovation.

Secondly, there were sub-cases where the entrepreneur’s implicit knowledge of the industry recipe played an important role in two ways. On the one hand, the deep understanding of what happens and why it happens in the business gave the entrepreneur a chance to work closely with the first-movers, and exploit the almost certain ways to start doing business in that particular branch of industry. On the other hand, this deep understanding of the situation opens up a chance to create something new to overcome the obvious weaknesses of the dominant industry recipe. If these new solutions emerge as successful, and will be followed by other players in the field, then this new way of doing business modifies not only the industry recipe, but also the dominant phase of development in that industry. This means that if entrepreneurs know what works successfully, some of them will turn to scaling the idea for growth. In this way, these entrepreneurs will influence the industry to move from Expansion to Shake-Out.

If the results of the present study are compared to the dominant literature then an alternative point of view will be opened to understand the role of the BOC process in the context of the entrepreneurial process. The basic assumption of the BOC process is that the BO is an outcome of a creative process. This is in contrast to what is presented in earlier literature, where the BO is treated as a starting point of the recognition (or discovery, or creation) process.

Further, it is believed here that the essential nature of the opportunity as it is defined in the dominant literature is partly in line with insights about the ideas for new business venture / firm and sources for new business ideas. Firstly, the latter elements (i.e. sources) can be seen as existing in reality independently, and in some cases some individual (or a group of individuals) may either recognize or discover them. These elements can be referred to as structures and mechanisms which generate events and processes to be actualized at the Actual level of reality, according to the critical realist perspective.

Since it is also believed here that in the case of the former element (i.e. ideas), on the one hand, every individual lives in a society. This means that everyone is embedded in some social environment that influences his or her
actions. On the other hand, he or she has the actual possibility to affect the society by his or her own actions.

To follow both of these logics, people in general are able to create something new based on their own thinking and on what is already created by somebody for whatever (other) purposes. This is to say that they are together with other individuals able to both transform and reproduce reality as they wish - almost. This kind of situation is parallel with, for example, innovation seen as an innovation network. The innovation network is a web of either people, or institutions, or companies who participate to help solve problems or come up with new ideas. In this case it is “all about diversity. It's about getting to everybody who might be able to bring an innovative idea to the table” (Knowledge@Wharton 2009).

These new ideas may (or may not) be used as a starting point for the BOC process, but when they are used in that role, they might be more or less business-wise. For example, if they are based on preproduction of an existing way of doing business, they are understood as less creative – but not as non-creative because the personal and everyday creativity assumption.

Furthermore, the definition of opportunity (the BO as preferred in the present study) is partly different than what is displayed in the literature. This seems to be the fact even if it is compared with the study by Ardichvili et al. (2003) in which they talk about the identification of business opportunity. On the one hand, Ardichvili et al. define the process and the business opportunity as its outcome by saying that “the need or resource "recognized" or "perceived" cannot become a viable business without this "development." (ibid.: 106; quotation marks in original). In addition, they emphasize the business-wise nature of the development process. However, they remain ambiguous in explicating the starting point of the process. Together with that ambiguous situation and the either-or approach – either rational or creative, e.g. in Alvarez and Barney 2008) – it seems to force them to accept the opportunity as follows: “Identifying and selecting the right opportunities for new businesses are among the most important abilities of a successful entrepreneur” (ibid.: 106). To follow that logic it is feasible to think that the development process is also mere disclosing of hidden elements of the identified opportunity rather than creating the element needed for the BO to be utilized successfully in reality – on the chosen market.

On the other hand, however, if identifying and selecting the right opportunities for new business is interpreted differently it might mean that Ardichvili et al. (2003) are, in fact, talking about the same situation presented in
In closing, based on all the above, the results of the analysis of the third sub-research question reveal that in all sub-cases there is a keen interplay between the two main sub-processes, the BOC process and the BOE process. Since the additional process of venture / firm preparation is thought of here only as potential, it is not analyzed in this study. The interplay between those two processes, the BOC and BOE process, is evident in the sub-case of established firms (sub-cases A, B, C, D, and E). While the first thought was that there was no such interplay in sub-cases F and G; the picture became clearer after several rounds of interpretation and analysis of secondary research materials in the sub-case of the entrepreneur F (i.e., information from the web pages of case F), and an additional interview in the case of sub-case entrepreneur G. The interplay also existed in these sub-cases. According to the results in sub-case F, the re-creating an existing BO was about expanding the BM to include selling products along with the initial BM. In sub-case G, the second re-creating the existing BO was about making a complete turnaround by creating a new BM in order to sell the firm with the option to work as a manager for some time for the buying company.

In all, the results of the empirical case study disclose the fact that people who are deep in what they are doing seem, on the one hand, to be able to talk about their experiences quite well. On the other hand, they only use those words dominating their world. In the context of management (including also the topic of the present study: the BOC process) the dominant vocabulary seems to be based on rational thinking (see Alvarez and Barney e.g. 2008; Dunham and Venkataraman 2002; Sarasvathy 2008) rather than creative thinking. The latter is thought still as an alternative approach to understanding what is happening in the field. If this assumption holds then it is important to open up new insights and generate new vocabularies in order to promote the entrepreneurs’ ability (and everyone’s ability as well, who show that they are interested in the entrepreneurial process) to talk about their own experiences, for example, in the context of the process of creating the business opportunities that will emerge once, twice or more times during the entrepreneurial process.
7 Conclusions

In this chapter, the main findings and outcomes of the study on the process of creating process business opportunities, the BOC process, will be discussed. The discussion is divided into four parts: the summary of the study, theoretical contributions, managerial implications, and limitations and some suggestions for future research.

7.1 Summary of the study

The need for new business ventures has increased over the years. These new enterprises have been treated as key factors in the development of both national and regional economies. While the role of new startups in producing new wealth has also been questioned, and the entrepreneurial process has aroused a lot of interest in the current literature on entrepreneurship, the process that produces the new business ventures has remained unclear. One reason to this kind of situation is that the focus of the dominant literature has only been on the other sub-process of the entrepreneurial process, the business opportunity exploitation process (the BOE process). Hence, the process of creating business opportunity, the BOC process, has remained less studied in the earlier literature.

The aim of the present study has been to explore the process of creating business opportunities, the BOC process, as a process that generates the basic conceptual form to be actualized in the BOE process. Thus, the business opportunity, the BO, is treated here as the outcome rather than the starting point, of the BOC process. In addition, the BO as well as the whole BOC process is focused on generating new value for the entrepreneur, customers, shareholders, and other stakeholders in the future business venture.

Furthermore, the present research has focused on exploring the relationship between these two processes, the BOC and BOE process, to understand the nature of the BOC process as an important part of the entrepreneurial process. The following research question (RQ) and sub-research questions (S-RQ) are exploited to study this phenomenon:

RQ: How does the entrepreneur experience the creation of the BO?

S-RQ 1: How does the entrepreneur experience his or her actions in the BOC process?
S-RQ 2: What is the role of the environment in the creation of the BO?

S-RQ 3: What kind of relationship exists between the two sub-processes of the entrepreneurial process?

The retroductive research strategy together with the critical realist perspective has been chosen for the study to make it possible to move from mere description and abstract analysis of the process of opportunity creating to understanding what makes a BO possible and how the process of creating a BO happens. That is, to understand the basic conditions for the BOC process: the structures, mechanisms, and human actors enabling and/or restricting the emergence of the opportunity. Research design such as this adopts a three steps strategy of retroduction: the first step is to start with the domain of the Actual, by observing connections between phenomenons both at the level of the Actual and the Empirical. The second step is to build a hypothetical model which involves structures and causal powers located in the domain of the Real, and affecting processes and events at the Actual and the Empirical velev of reality. The final step is “to subject the postulated explanation to empirical scrutiny” (Leca and Naccache 2006: 635; see Chiasson 2001).

The approach to research exploited in the third step is the qualitative single-case study. The single-case perspective in studying the BOC process is chosen because it enriches the quality of the research materials generated due to the clear focus on the entrepreneurial process itself. In fact, to generate research materials from seven sub-cases was beneficial for the study since it revealed several surprises that, as far as the researcher is aware, have not been described in the earlier literature. This is the role of the development phase of the ICT industry in the BOC process is one example of this.

The single-case study includes seven sub-cases representing the experiences of ICT entrepreneurs on the BO creating process. The earliest processes were experienced in the early 1980s, whereas the latest only few months before the research material generation in the middle of 2004. All sub-cases were analyzed in light of an initial theoretical framework built on the tentative review of entrepreneurial process literature. Since the critical realist perspective was chosen as the basic scientific approach to the phenomenon – the entrepreneurial process, in general, and the BOC process, in particular – the tripartite research strategy based on retroduction (as a combination of deductive, inductive and abductive logic) was also applied in the case study. That is, there was a keen interplay
between the conceptual and the empirical parts of the research to create new knowledge in this context.

In closing, an important relationship exists between the meanings of people’s entrepreneurial actions and their motives, interests and values affecting those actions. By following this logic this means that a serious problem will arise: the right actions are not enough if they are not conducted with the right motives. A research approach based on critical realism seems to offer new possibilities to study the experienced events and actions of people playing the entrepreneurial role at different levels of the reality. It also seems to be feasible to utilize the perspective of critical realism to understand the importance of the commitment to combine epistemic relativism and ontological realism since it will open up new possibilities compared to a strict objective–subjective approach. The following section discusses firstly the theoretical conclusions, then provides managerial implications, and finally presents the limitation as well as avenues for future research.

7.2 Theoretical conclusions

On the theoretical level the present study focuses on formatting the BOC process. This study contributes to the literature on the entrepreneurial process by presenting the framework of the overall entrepreneurial process to solve the theoretical problems concerning the dominant philosophical assumptions of the process presented in the previous models. Secondly, this study applies the critical realist perspective in studying the process of creating business opportunities, the BOC process. Thirdly, the present study contributes more specifically to the literature on the BOC process by formatting a coherent theoretical framework explaining the process in a way which makes it possible to study both the rational and creative processes from the same theoretical perspective, that of critical realism. Finally, the present study supports the initial insight that a keen interplay occurs between the business opportunity creating (BOC) process and the business opportunity exploitation (BOE) process, and the BOC process is exploited several times to re-create the existing BO during the BOE process.

Overall, this study owes a great deal to the scholars of the previous literature, and if forced to mention only one study, it will be the study by Ardichvili, Cardozo and Ray (2003). Their role in the development is seen here as essential because of the challenging approach they have contributed to opening up the entrepreneurial process at a time when then dominant insights were stagnated and
reproduced the mere rational approach to the process. Unfortunately, as also interpreted here, they did not go far enough – to the basic assumptions of the origin of business opportunity. However, they managed to legitimize – initially – the existence and potential of other kinds of approaches.

Nevertheless, this academic journey of enhancing our understanding of the business opportunity (the BO) presented in this report is only the beginning – as it always will be with new and alternative insights – and the same humble attitude as is expressed in their Conclusion: “We have taken a “first cut” at building a theory of opportunity identification ...” (ibid.: 121, quotation marks in original) is also adopted here.

7.2.1 Overview of the entrepreneurial process

The theoretical framework of the present study (Fig. 21) turns the process of creating BOs the other way around by assuming that the BO is the outcome of the BOC process rather than its starting point. Based on the philosophical assumptions of critical realism (i.e., a combination of realist ontology and interpretivist epistemology; see Ch. 3), it acknowledges the essential and recursive interaction between the reality and the human actors to make two things possible. Firstly, it is possible to perceive issues like socially generated knowledge, artifacts and materials existing in the reality independently. This means that they exist whether they are perceived by individuals or not. Furthermore, it makes it possible to create new knowledge and modify – or even change – the reality in which those human actions are working.

Based on the critical realist perspective this theoretical framework acknowledges that there are sources for ideas for new business ventures existing in the perceivable reality rather than ready-to-be-used opportunities. Typically, these kinds of opportunities are treated in the dominant literature as opportunities on which entrepreneurs are able to start to build (read: to plan) new business ventures.

In contrast to this kind of thinking it is understood here that there is nothing entrepreneurial – yet – in building (or creating) ideas for new business ventures as such because events (or processes) such as these are business-as-usual in the everyday activities of all human beings. The actual starting point of the entrepreneurial process will be when the entrepreneur starts a process directed intentionally toward a new business venture (or firm). After this the creation of the BO will start. As stated above, this is in line with Ardichvili et al. (2003). This
is the case despite the fact that they are quite ambiguous about the theoretical basis on which such a claim may rest in stating that opportunities are made.

Thus, to follow the logic above it will be evident that to start an entrepreneurial process the entrepreneur may acknowledge that, firstly, the social, material, spiritual etc. environment in which entrepreneur is embedded contains elements generated by people other than him or her. These other human beings may be those who are still living or already dead, and who have built certain social structures such as businesses, technologies and so on. This is in line with the ontology of critical realism which acknowledges the social and natural reality as
existing independently, but also as changeable due to the activities of human beings.

Secondly, the entrepreneur may also acknowledge that he or she is able to combine more or less creatively these existing elements by exploiting his or her creativity – seen here as everyday creativity (Richards 2007), and various creative methods such as CPS (Tassoul and Buijs 2007) to generate novel and feasible ideas for making them happen – if they are felt desirable enough for further deeds.

The BOC process as it is presented here is still a very tentative part of the whole framework of the entrepreneurial process (Fig. 21). It is studied here from the beginning of the process to the outcome of the process in order to understand what actually happens in the process of creating BOs. All the way a keen focus exists on elements such as human activities and processes, and social structures, which all affect the process, and vice versa.

7.2.2 Theoretical assumptions of the entrepreneurial process

The key contribution of the present study is to present a theoretical framework for understanding the entrepreneurial process as a creative combination of both existing knowledge of the process and an alternative way of thinking over the process based on critical realism (Fig. 21). This kind of insight into the entrepreneurial process will open up yet unexplored avenues for further theoretical research as well as for educational purposes. That is, to follow Tsang and Kwan (1999: 763) it is also believed here that “in particular, management theorists’ activities may change the beliefs of practitioners and, thus undermine the stability of the phenomena investigated by them (Numagami, 1998)”.

This study will enhance the theoretical understanding of how the entrepreneur gets started on the process of creating business opportunities (the BOC process). Those processes with their outcomes will result in the decision to actualize the outcome of the BOC process, the business opportunity (the BO).

In this study the entrepreneurial process as such is understood as a teleological process that has only one goal; to create a new business venture. Despite the fact that the entrepreneurial process, in general, is teleological, the BOC process is teleological only in the sense that it also focuses from the start on creating the BO. More importantly, the BOC process does not assume that the outcome of the BIP (or BMP) directs the following sub-process, the BMP (or the BPP). All those sub-processes are creative by nature because they exploit the
creative problem solving (CPS) method starting from divergent thinking, continuing to clustering activities, and ending with convergent thinking in every sub-process.

The primary goal of the entrepreneurial process, focusing on the creation of the new business venture (or of the new economic activity in the vocabulary of Davidsson 2003a), is in the creation of economic value for the entrepreneur, the business venture, and the society as a whole. This kind of purpose is pursued in the present framework by turning around the dominant insight of the opportunity as the starting point in the process. This means that, instead, from the point of creativity, a novel and feasible way is to start to look for the BO as the outcome of the creative process, the BOC process.

In addition, while questions such as who is the entrepreneur, or does the background of an entrepreneur dictate the course of the entrepreneurial process may be either right or wrong (cf. the former in Gartner 1989; cf. the latter in Shane 2000), the role of the entrepreneur is essential. This means that the individual(s), the person(s), is treated as the prime actor playing the role of the entrepreneur in the BOC process.

In other words it is in line with the theoretical framework of the present study to assume that the person who initially perceives various ideas for new business ventures actually may or may not start in the BOC process in the role of an (intending) entrepreneur. In the first case he or she seems to have some advantage in terms of background (i.e., human and social capital, or personal accesses to specific information, skills, or other kinds of resources). An extreme example of this situation is the business venture based on a spin-off from an established firm that continues in the same industry with the parent company. In this case the (intending) entrepreneur is familiar with the current industry recipe, for instance, as well as many of the potential customers and their purchasing capabilities (Sallinen 2002). In such a case, the (intending) entrepreneur may copy the idea for a new business venture from another person who does not recognize the potential for continuing with it toward creating a more or less novel and feasible BO.

Nevertheless, in both of these cases the idea is just an idea – as if who is the entrepreneur is a wrong question – since the business opportunity needs to be created more or less creatively in the BOC process through the actions of the (intending) entrepreneur, or the (intending) entrepreneur with other people who have an interest either in further developing or re-creating the initial idea, or the
idea for the expected business opportunity (IofBO), or the business model (BM), or the business plan (BP).

What happens in the entrepreneurial process after the BOC process is excluded from the present study due to the research focus; however, it is important to understand how the decision to actualize / to start the newly created BO directly in the real business context actually happens. Therefore, this will be one stream for future studies.

In all, the theoretical framework created for the study will initially enhance the theoretical understanding of the roles of the overall entrepreneurial process, the concept of business opportunity (BO), and the background of the entrepreneur in influencing entrepreneur’s decisions to start the BOC process and the nature of the process. This is to say that when entrepreneurs realize that there is no need to find a good business idea to start the BOC process, they start with more or less simple ideas and create the BO by starting from these ideas. In that kind of situation the entrepreneurs may be more eager to start creating more or less possible solutions for perceived and imagined problems.

7.2.3 Critical realism and the BOC process

The theoretical perspective for understanding and explaining the phenomenon of the creation of the business opportunity from a single ontological and epistemological point of view is crucial for the success of the study. The scientific perspective chosen for the study, the critical realist perspective, seems to be feasible for doing the job. This kind of perspective acknowledges that reality exists and is emerging at the same time: that is, reality is based partly on activities of people of the history and partly as existing structures and mechanisms reproduced or transformed by the current actors of the society. The retroductive research strategy and the case study research strategy are well suited for a process research like the present study.

To use critical realism as a knowledge claim and to build research strategy on retroduction as a mode of inference will make it possible to study the processes of sub-case entrepreneurs in the real-life situations closely. The events and processes exposed at the empirical level have produced the BO through the intentional activities of the people playing the role of the entrepreneur. The actual business activities during the BOE process are based on these processes and events. In addition to this, critical realism offers an explicit basis for understanding why it is
so difficult to draw solely on empirical level experiences, and in most cases ignore the other two levels of reality.

The tripartite retroductive research strategy chosen in the study starts by bringing new ideas up from interpreting alternatively the existing literature from the perspective of critical realism, and then the process continues by identifying key elements of the process of creating the BOs. This is followed by creating the theoretical framework. The final part is to put the created framework under scrutiny. The use of a case study research strategy and methodology is informed by the idea that the researcher should be well prepared to understand what (or why) something happens in the research context. However, the case study methodology utilized in the study also includes some problems. One is the question of the research material: Is it accurate enough? Another problem may be founding in the relationship between the BOC process and the empirical scrutiny included in the overall research strategy of retroduction as well as in the specific research strategy of the case study.

In closing, it has become evident that critical realism together with the case study methodology, despite all the weaknesses, suit to study of the creation process as defined above. Critical realism on the one hand seems to focus on the stratified reality with the three levels and their content, and on the other hand, on the role of individuals and groups of individuals and how they exploit the existing reality and at the same time change it. In the same vein, the activities of people in the role of entrepreneur play an important role in generating the phenomena studied here. This means that the process of creating opportunities is seen here through the perceived experiences of entrepreneurs in the process, and through the research findings presented in the literature.

7.2.4 The process of creating business opportunities (the BOC process)

The BOC process, the process of creating business opportunities, is built on the basis of an alternative approach to the opportunity. This theoretical framework of how the process emerges is in contrast to what has been presented since the early 1980’s in entrepreneurial literature. These early models seem to share key elements of the process with the theoretical framework of this study such as the key elements of the process; for example, elements related to the entrepreneur as a person, the environment, the process and the BO as an outcome of the process. However, more than often these early models fail to open up what actually
happens in the process and what kind of underlying elements are related to the process.

In the present study it is seen as essential answer to these unresolved questions by including three sub-processes in the BOC process: firstly, the BIP with its outcome at the idea-level but also the more or less business-wise presentation of the idea of the business opportunity (the IofBO); secondly, the BMP with a business model (BM); and finally, the BPP with a concrete business plan (BP). It is assumed here that between the intentional start of the BOC process and the decision to actualize the outcome of the process all these three processes and their outcomes are necessary in order to successfully proceed further with the result, the BO, in the entrepreneurial process.

The results of the analysis of the research materials show that the entrepreneur’s background, in general, and the experience of the field, specifically, clearly affects the nature of the initial ideas to start the BOC process. It seems that those sub-case entrepreneurs who have experiences in the field are also more open to more thorough and business-wise processes; that is, after they realize (or believe) that they actually have something to start the BOC process with. Whereas those sub-case entrepreneurs who have only a few experiences in the field – or are even inexperienced – seem to act according the common knowledge of the development phase of the industry in question. These results can be understood by the amount or quality of the industry recipe; if the entrepreneur has been working, or is still working in the same industry in which he or she wants to locate the new business then two options may emerge. Firstly, the entrepreneur may choose to follow the current industry recipe since he or she either knows it thoroughly or has a strong feeling about its success in the current space-time situation. Secondly, the entrepreneur is able to transform (or just slightly modify) this situation in order to make it fit to the current circumstances.

In addition, the results of the case study provide initial evidence of the feasibility of the BOC process in understanding how BOs are created; there is, however, a lot of variation between the different processes. It is believed here that most of the variation can be understood in terms of the nature of the BOC process. One of the basic assumptions of the BOC process is to see the tripartite process as follows. Firstly, The BOC process is a process within which all these sub-processes (i.e., the BIP, BMP, and BPP) are included. Secondly, all the actions to be conducted in those different sub-processes are weighed as more or less creative based on how much they are built on existing knowledge, for example, of the current industry recipe. For instance, if the initial idea for the new
business is more reproductive than transformative; that is, less creative than more
creative, respectively, then the focus of the BOC process may be on planning
activities. In cases such as this the Business Planning Process (BPP) is possible
because the entrepreneur in question has strong trust in the feasibility of the
current ways of operating in business in the chosen industry. This trust can be
based on available information about the actual operation of existing business
ventures and of the markets.

The results of the relationship between the BOC process and the BOE process
promote both the need to see the BO as an outcome of the BOC process rather
than a starting point of whatever process – recognition, discovery, creation,
identification or development to name but a few. To think of the BOC process as
existing throughout the entrepreneurial process, and as a process referring to as
creation and re-creation of the initial BO or the existing BO the role of the BOC
process is essential for both the new business venture creating a new business
venture and re-creating established business ventures.

Thus, the second key contribution of the present study is related to the
question: How is the BO created? This study promotes the feasibility of another
approach to the entrepreneurial process, since it provides evidence that supports
the use of the critical realist perspective in the context of the BOC process
framework. While the first cut point of view is taken as given, however, it is
believed here that the even in this very preliminary form the theoretical
framework of the BOC process will open up possibilities for research into the
creation of business opportunities.

### 7.2.5 The BOC process – ideating, modeling and planning the BO

More precisely, since the theoretical framework of the study is built on the
assumption that the BO is a key outcome of the BOC process (Table 2.Fig. 8)
rather than the starting point of the process, then the nature of the BOC process
itself has to be process-vise. This is not to say that the process has to be linear: in
some cases it may be linear (i.e. starting from ideating and moving through
modeling to planning), but in some other cases it may start from planning, or
modeling. This means, however, that firstly, as section 5.5 above presents, the
BOC process includes processes and their outcomes as follows: The Business
Ideating Process and an idea of the expected business opportunity (BIP and
IofBO, respectively), the Business Modeling Process with a business model
(BMP and BM, respectively), and the Business Planning Process and its outcome:
the business plan (BPP and BP, respectively). All these processes and outcomes form an essential combination that needs to be thought through more or less thoroughly before moving to the next phase of the entrepreneurial process, the Transition point 2 (Fig. 21).

Secondly, and perhaps most importantly, since the activities of the BOC process are based on the creative problem solving method (CPS) (divergent thinking \(\Rightarrow\) clustering \(\Rightarrow\) convergent thinking in Section 4.1) the outcome of the previous phase of the process form the new starting point for the following CPS based activities. Therefore, it is not the original idea for the expected business venture on which the decision was based to start the entrepreneurial process in the first place. Due to the CPS method even a less creative (i.e. more or less reproductive idea) may be transformed to be utilized in a more creative BM – and vice versa.

7.2.6 Business opportunity (the BO)

*What is the BO? Is it the starting point of the development process from opportunity to new business venture, or is it an outcome of the process during which the entrepreneur creates the new BO?*

To start the discussion of the BO looking back towards the previous literature, it is reasonable to refer to what Ardichvili *et al.* (2003) say about it: “Entrepreneurs identify business opportunities to create and deliver value for stakeholders in prospective ventures. While elements of opportunities may be “recognized,” opportunities are made, not found.” (ibid.: 106). The first part of the citation emphasizes the role of business opportunity in the creation of new value for the people who are committed to the process and the society in which the new business venture will operate in the future. In addition, it presents firstly the identification process and the role of this outcome. The identification process is seen as the creation process and the opportunity as its outcome. If the outcome, the identified opportunity, is thought as feasible enough and the decision to actualize the newly created BO is made the whole entrepreneurial process will move ahead to the next phase, the BOE process. The second part of the citation highlights the twofold structure of the business opportunity. While the first part focuses on elements, which precede independently of the BO and are seen as an entity as such, the second part focuses on the intentional actions of the entrepreneur.
These issues presented above are also important for the insights of the present study. In particular, it is the idea that there are some preceding elements of opportunity existing independently of the individual on which he or she creates the actual BO. This poses the question of the feasible ontological stance of the business opportunity. Furthermore, it is the idea that there needs to be some elements of creative activities to actually make the opportunity instead of finding it. This poses questions about the feasible epistemological stance of process of creating business opportunities.

If these two different logics are followed side by side then neither a pure rational approach nor pure creative approach will be suitable for use as the theoretical basis for understanding the phenomenon. The solution supported here is the critical realist perspective for resolving this ontological and epistemological problem. To sum up the basic ideas of critical realism, we need to state how it allows the existence of preceding elements – labeled here as sources for new business ideas – and the creative activities of the entrepreneur who is able to create ideas for new business ventures in the context of a new start-up firm or an established firm.

The critical realist perspective offers a coherent way for dealing with both existing sources of the BO and the intentional, emergent and creative activities of the entrepreneur whose more or less creative actions in the BOC process will result in the actual BO. This is in line with Mingers (2004) and Mutch, Delbridge, and Ventresca (2006), who argue in favour of a critical realism that accepts both ontological realism and epistemic relativism, however, they also argue for rejecting judgmental relativism. The latter is supported by Danermark et al. as quoted in Castro (2002) when he states that

“[thus] critical realism assumes the socio-historical, hermeneutical and fallible character of all knowledge, without asserting for that matter that all knowledge is equally fallible. The purpose of science is and can only be to bring the (intransitive) objects of study under closer, better, truth-like (transitive) descriptions. Therefore, judgmental relativism is utterly rejected as the ultimate ‘inward collapse’ of radical relativism, which thus deprives itself of the possibility of driving a scientific argument.” (246).

This means that it is not only way to think of the BO as existing more or less ready to be exploited later in various forms of business ventures. Based on critical realism it is also possible to think that every actor is able to change the social
reality through his or her own actions. In the same vein, every actor is also able to see the existing environment as a continuously reproduced or transformed store of sources for BOs.

While the conceptual framework created in the present study locates the outcome of the BOC process, the BO, at the Empirical level, and while, this level contains the experiences perceivable for the entrepreneurs, it is uncommon to hear them talk about the BO. In fact, it seems to be the case that a concept such as the BO is nonexistent in the vocabularies of the sub-case entrepreneurs, in general.

Fortunately, the academic context offers researcher possibilities to use his or her time and efforts much more than what is feasible for entrepreneurs to study and understand the process from deeper perspectives. This means, that researcher are able to perceive not only the event and processes at the Empirical level but also the events and the processes existing at the Actual level. Secondly, the academic approach to the phenomenon makes it possible to identify the tendencies of the structures and mechanisms of the Real level that affect these Actual level events.

Furthermore, it is more common to talk about quite vague business ideas, or venture ideas rather than about more or less explicitly defined concept such as the BO. Therefore, to encourage entrepreneurs to think the process of how the BO is created more specifically, or in detail, then perhaps they need to be educated on this kind of issue. This situation refers to the innovate/educate situation presented by DeTienne and Chandler (2007) which “begins with an individual(s) who creatively develops a new product and then educates potential customers [customers here as students, becoming and operating entrepreneurs] about the benefits the product [the BOC process] provides” (369, brackets added).

7.2.7 Interplay between the BOC and the BOE processes

The final theoretical contribution to literature on entrepreneurial process concerns the interplay between the two sub-processes, the BOC process and the BOE process (Table 2.Fig. 7). While the interplay between these two sub-processes presented here is based on Davidsson’s idea (2006b) and is in line with it, it manages to extend his insight by connecting it to the theoretical framework of the present study as an essential characteristic of the entrepreneurial process. This is to say that the BOC process is available through the whole entrepreneurial process – not just at the beginning of the process. Thus, the BOC process is both the opening process to create new BO for the intending business venture and an
ambidextrous process that is at least latently available for re-creating the existing BO or even to create a new BO rather than an one-time event.

To focus on the question of the interplay between these two sub-processes is grounded to the role of the BO. It is important to note here that neither the rational approach nor the creative approach to the entrepreneurial process explicate the possibility presented by Davidsson (2005; 2006b) that the BOC process exists not only once, but twice or more times during the BOE process. This is shown in the figure 22 (Fig. 22) that the entrepreneurial process is extended via a keen interplay between those two sub-processes. In the presentation, the BOC process is disclosed in detail, whereas the BOE process is understood more as a combination of other disciplines on business such as management, marketing, logistics, finance and so on, and in this way it is outside the scope of the study.

Fig. 22. Entrepreneurial Process – the interplay between the BOC and the BOE process.

The interplay between those two sub-processes allows two possibilities to emerge during the entrepreneurial process. The first is the most obvious: to re-create the existing BO. That is, if it is realized in the firm that it is not feasible anymore to carry on as-usual but it is necessary to make changes, it is possible to start with the existing BO and use it as a source for the BOC process. After the outcome of the BOC process is created, it can be implemented in the business venture
context. In this case the original BO may exist parallel to the re-created BO, or it is replaced with the new BO.

The second possibility is more suitable for more creative BO because those kinds of firms have to create the ways to doof doing business as they go on; that is, to create the industry recipe along with the feasible BO. In this kind of situation the re-creation of the BO seems to be almost continuous as long the business environment starts to become more stable.

In both of those cases above, it is important to understand the BOC process and its sub-outcomes thoroughly in order to make changes in one or in all parts of the process. The entrepreneur must realize that even a small change concerning the Idea of the BO (IofBO) may result in major changes in both the modeling and the planning processes. Similarly, even the major changes in the planning process do not require changes at all in the other two processes if – and only if – the basic assumptions are not changed, the BM based on the IofBO has remained the same.

To summarize the key points of the study report is that it recognizes the key role of the more or less proactive entrepreneur (as presented already in the prior literature) as a very important element of the entrepreneurial process, in general, and of the BOC process, in particular. In addition, due to the activities of the entrepreneur, new business opportunities will emerge either as a new business opportunity for a new business venture or as a partly or totally re-created BO in the context of an established business venture.

7.3 Managerial implications

This study provides insights to enhance theoretical understandings of the entrepreneurial process, in general, and the BOC process, in particular. In fact, to see this from the perspective of the entrepreneur (the person(s) willing to play the role of the entrepreneur) two managerial implications become evident. Firstly, the critical realist perspective with the realist ontology and interpretivist epistemology will release the entrepreneur from the heavy burden of identifying ready-to-be-used opportunities at the outset of planning to start the entrepreneurial process. This case will be evident in the situation of very novel ideas. The study shows that if the idea for new business venture is perceived as desirable enough, the entrepreneur may or may not start the entrepreneurial process and create or re-create the BO to be exploited later in the entrepreneurial process. Therefore, it is important to promote the entrepreneur’s intention to start by providing support systems and guidance in making the hard part, the feasibility
analyses in the end of the BOC process. All this is needed to be able to even think whether to make the decision to actualize the created BO or not.

Secondly, the presented BOC process will be useful to formulate essential mechanisms and structure on which the entrepreneurs may work while creating or re-creating BOs. The results of the present study support the insight that the BOC process is feasible during the whole entrepreneurial process. Hence, the theoretical framework presented here will extend the theoretical understanding of the process of BO creation, and direct the decisions to select both the content of the courses and the activities needed to be learned.

In all, this study suggests that everyone who is interested in entrepreneurship and is willing to start the entrepreneurial process will be able to start the process. This is because the work to be done to create a feasible BO happens during the BOC process, but not before it as it is assumed more or less implicitly in the dominant literature.

7.4 Limitations of the study and avenues for the future research

The present study argues for a deep understanding of the entrepreneurial process as an entity as well as of the creation of new business opportunity (BO). Since the BOC process (as labeled in the study, and seen here as one of the essential sub-process of the entrepreneurial process) is about an intending entrepreneur (or a serial/portfolio entrepreneur, or individual/team entrepreneur, or individual/corporate entrepreneur and so on) executing actions and outcomes to generate a new BO, this study starts with the prior literature to see how it understands the process in question. While it has become evident that the phenomenon is presented ambiguously in this literature, an alternative and challenging theoretical framework is created to understand the process from another perspective.

The alternative approach to entrepreneurial process presented here is based on the critical realist perspective. This perspective emphasizes the importance of causal powers and generative mechanisms of objects, as well as abstraction as a useful tool to reclaim (i.e. to understand) reality. To solve key questions like "how can these things' be abstracted? What is the starting-point of abstraction in the first place? How exactly should a realist conduct (or 'operationalize' in positivist terms) a piece of critical research?" (Yeung 1997: 56), qualitative methods such as interviews are chosen to generate research data. Because critical realism recognizes the stratified reality (the real, the Actual and the Empirical), it is
evident that these abstract causal mechanisms fail to valorize the process directly “without any need for empirical research into the contingency of the concrete” (Yeung 1997: 57).

In terms of possible limitations of the present study, it will be reasonable to recall that “the primary measure of the ‘goodness’ of a theory is in its explanatory power” (Dobson et al. 2007: 140). This means that, according to Sayer (2000), the achievement of the best we can do at the time, that is, “practically adequate” explanations will be the focus within critical realism, since it sees knowledge as existing in a “historically specific, symbolically mediated and expressed, practice-dependent form” (ibid.). Thus, the importance of context in critical realist research will display the first, and perhaps the most important limitation of the study.

In this study the context and its role in the BOC process is studied mainly through one issue only: the industry recipe. While the results of the study show how the industry recipe directs (indirectly or directly) both the nature of ideas for the expected business venture and the BOC process (i.e. in the context of less novel but more existing BOs), at the same time the study design fails to reveal other possible mechanisms and structures in the industry as well as in society (i.e. the wider context) that may affect the activities and outcomes of the process.

In addition, the nature of critical realism is still very ambiguous – some treats it as philosophy, whereas some others as a method. The stance of present study in this question is influenced by Yeung (1997), who claims that “critical realism is a philosophy in search of a method” (51) in social science. Furthermore, since the selection of methods in conducting empirical research needs a sound philosophy, it is evident that critical realism still “needs such an appropriate combination of methods to conduct concrete research” (Yeung 1997: 70). Thus, due to the tentative development phase of the use of critical realism as a philosophy and retroductive research strategy as a feasible method, it will be evident that more research will be needed to generate reliable strategies for research on entrepreneurial process.

The third issue worth mentioning here is the need for longitudinal design. It is widely argued that it should be utilized in studies of the entrepreneurial process. However, at the beginning of the entrepreneurial process, it is very difficult to start to generate research material, since it is assumed here that the Idea for the new Business Venture or Firm (IforBV), particularly, will be formed inherently in the head of the entrepreneur and thought as almost untraceable.
The situation will be easier in the latter sub-processes of the BOC process, that is, during the business ideating and modeling process (BIP and BMP, respectively), the entrepreneur will be more explicitly in interaction with the environment for obtaining the necessary access to knowledge not yet available, support or guidance for carrying on in the process. In the final sub-process, the business planning process (BPP), the longitudinal design for research material gathering is quite obvious because entrepreneur who have started this part of the BOC process in many cases have already contacted various organizations who give or sell services for intending entrepreneurs. But still the longitudinal research design necessitates several rounds of research material generation over a period of maybe several years. This arrangement would have required a considerable level of commitment from the entrepreneurs. In addition, the risk of drop-outs during the later years is likely to be high.

Furthermore, to consider recall issues, the situation is quite ambiguous: if the research design does not utilize diaries or process logbooks as a feasible but very time-consuming tools for gathering material, but uses the same than in both the GEM and PSED studies; that is, structured interviews once every four months, for example, then the entrepreneur in question has to recall what has happened during the days or weeks or months prior to the interview. At the same time the entrepreneur knows the result of the previous actions and also evaluates them for the further actions either as important or as avoidable.

Finally, to highlight the avenues for future research then three possibilities emerge. The first avenue relates to the question of critical realism when studying the mechanisms that drive the process of business opportunity creation. This stream of research is interesting because (as it is shown already above) the abstraction of both underlying mechanisms and structures is essential issue of research drawn from critical realism. Secondly, more research is needed to better understand how the mechanisms other than industry recipe relate to the BOC process and the BOE process. Finally, a more thorough understanding is also needed to apply the BOC process in order to create clear managerial implications, for example through studies of entrepreneurship in higher educational institutions.
References


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Appendix 1 Interview themes and the Research Focus in the Phase I-III

Interview themes and Research Focus in Phase I

Part I
Existing HC / Social Capital
How the business venture emerged?
SC of action group; of others

Part II
What seems to affect both idea refinement and market making?
HC as specific knowledge, access to specific resources (customer needs; skills, finance, etc.)

![Research Focus in Phase I](image)

Fig. 23. Research focus in Phase I.
Interview themes and Research Focus in Phase II

Entrepreneur’s Background before entrepreneurial process
HC:
General HC; Specific HC (education and experience) concerning business competence
Work experiences: prior experience on entrepreneurial process (novice or habitual)
SC:
Parents as entrepreneur? Support? Role models?
Experiences with Support organizations, or networks?

Business Opportunity
Discovery process
Experience on new business idea identification and exploitation
Activities of searching new knowledge for initial business idea
Idea refinement; market making activities
Exploitation process
Activities at the moment

Fig. 24. Research focus in Phase II.
Fig. 25. Research Focus in Phase III.
Appendix 2 Provisional start list of codes

Tables 22–24

Table 23. Provisional start list of codes in the phase I.

<table>
<thead>
<tr>
<th>Phase I: Descriptive label</th>
<th>Codes</th>
<th>Role in the research</th>
</tr>
</thead>
<tbody>
<tr>
<td>Entrepreneur’s background</td>
<td>E-BG</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s Human Capital (HC)</td>
<td>E-HC</td>
<td>What kind of role the human capital as the prior knowledge has in the process of discovery?</td>
</tr>
<tr>
<td>Entrepreneur’s general HC</td>
<td>E-gHC</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s specific HC</td>
<td>E-sHC</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s Social Capital (SC)</td>
<td>E-SC</td>
<td>By whom the new venture idea has been discovered in the firm?</td>
</tr>
<tr>
<td>Entrepreneur’s personal SC</td>
<td>E-pSC</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s work-related SC</td>
<td>E-w-r-SC</td>
<td></td>
</tr>
<tr>
<td>Business Venture (BV) emergence</td>
<td>BVE</td>
<td></td>
</tr>
<tr>
<td>Initial idea for the BV</td>
<td>BVE-IforBV</td>
<td></td>
</tr>
<tr>
<td>Idea refinement</td>
<td>BVE-Ire</td>
<td>How entrepreneurs have reached the information for discovering the new VI?</td>
</tr>
<tr>
<td>Market making</td>
<td>BVE-Mm</td>
<td>new VI?</td>
</tr>
<tr>
<td>Resource acquisition</td>
<td>BVE-RA</td>
<td></td>
</tr>
<tr>
<td>Industry Development phase at the beginning of the entrepreneurial process</td>
<td>IDP</td>
<td>Background information</td>
</tr>
</tbody>
</table>
Table 24. Provisional start list of codes in the phase II.

<table>
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<tr>
<th>Phase II: Descriptive label</th>
<th>Codes</th>
<th>Role in the research</th>
</tr>
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<tr>
<td>Entrepreneur’s background</td>
<td>E-BG</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s Human Capital (HC)</td>
<td>E-HC</td>
<td>What kind of role the human capital as the prior knowledge and know-how of the entrepreneur has in the process of discovery and exploitation?</td>
</tr>
<tr>
<td>Entrepreneur’s general HC</td>
<td>E-gHC</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s specific HC</td>
<td>E-sHC</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s Social Capital (SC)</td>
<td>E-SC</td>
<td>What kind of role the entrepreneur’s social capital has in discovering and exploiting a new venture idea (the VI)?</td>
</tr>
<tr>
<td>Entrepreneur’s personal SC</td>
<td>E-pSC</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s work-related SC</td>
<td>E-Wr-SC</td>
<td>What kind of role the human capital as the prior knowledge and know-how of the entrepreneur has in the process of discovery and exploitation?</td>
</tr>
<tr>
<td>Entrepreneur’s prior work experience on</td>
<td>E-pWE-EP</td>
<td></td>
</tr>
<tr>
<td>Entrepreneurial process</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s parents as entrepreneurs</td>
<td>E-PasE</td>
<td></td>
</tr>
<tr>
<td>Support or Role Models</td>
<td>E-S,RM</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s experience with Support</td>
<td>E-SO</td>
<td></td>
</tr>
<tr>
<td>Organizations</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Business Opportunity</td>
<td>BO</td>
<td>What kind of entrepreneurial processes are emerging in the context of the ICT sector and what are the common phases, activities and tasks in the process?</td>
</tr>
<tr>
<td>Discovery Process</td>
<td>BO-DPr</td>
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</tr>
<tr>
<td>Entrepreneur’s experience on business</td>
<td>BO-Bild</td>
<td></td>
</tr>
<tr>
<td>idea (BI) identification</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s experience on business</td>
<td>BO-Blexpl</td>
<td></td>
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<tr>
<td>idea (BI) exploitation</td>
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<td></td>
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<tr>
<td>Activities of searching new knowledge for</td>
<td>BO-SK-BI</td>
<td></td>
</tr>
<tr>
<td>initial BI</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Idea refinement</td>
<td>BO-Ire</td>
<td></td>
</tr>
<tr>
<td>Market Making</td>
<td>BO-Mn</td>
<td></td>
</tr>
<tr>
<td>Exploitation Process</td>
<td>BO-EXPLPr</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s activities at the moment</td>
<td>BO-AToday</td>
<td></td>
</tr>
<tr>
<td>Industry Development phase and</td>
<td>IDP-IR</td>
<td>How the of ICT sector, as a whole, influences the new opportunity discovered by the entrepreneur, and the mode of exploiting the new business concept based on this discovered opportunity?</td>
</tr>
<tr>
<td>Industry recipe at the beginning of the</td>
<td></td>
<td>What kind of the role the information and knowledge of an ICT entrepreneur has in the entrepreneurial process in ICT sector?</td>
</tr>
<tr>
<td>BOC process</td>
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<tr>
<td>Phase III: Descriptive label</td>
<td>Codes</td>
<td>Role in the research</td>
</tr>
<tr>
<td>-------------------------------------------------------------------------------------------</td>
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</tr>
<tr>
<td>Entrepreneur’s background</td>
<td>E-BG</td>
<td>Background information</td>
</tr>
<tr>
<td>Entrepreneur’s Human Capital (HC)</td>
<td>E-HC</td>
<td>How does the entrepreneur experience his or her actions in the BOC process?</td>
</tr>
<tr>
<td>Entrepreneur’s specific HC</td>
<td>E-sHC</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s work-related SC</td>
<td>E-W-r-SC</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s prior work experience on Entrepreneurial process</td>
<td>E-pWE-EPr</td>
<td>experience his or her actions in the BOC process?</td>
</tr>
<tr>
<td>Entrepreneur’s parents as entrepreneurs</td>
<td>E-PasE</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s experience on personal Support or Role Models</td>
<td>E-S.RM</td>
<td></td>
</tr>
<tr>
<td>Entrepreneur’s experience with Support Organizations</td>
<td>E-SO</td>
<td></td>
</tr>
<tr>
<td>Creation process of the Business Opportunity (BOC)</td>
<td>BOC</td>
<td></td>
</tr>
<tr>
<td>Idea for new Business Venture</td>
<td>BOC-IforBV</td>
<td>How does the entrepreneur experience his or her actions in the BOC process?</td>
</tr>
<tr>
<td>Entrepreneur’s experience on the field</td>
<td>BOC-F-EXP</td>
<td></td>
</tr>
<tr>
<td>Business Ideating Process (BIP)</td>
<td>BOC-IPr</td>
<td></td>
</tr>
<tr>
<td>Business Modeling Process (BMP)</td>
<td>BOC-MPr</td>
<td></td>
</tr>
<tr>
<td>Business Planning Process (BPP)</td>
<td>BOC-BPr</td>
<td>What kind of relationship between different elements and actions and outcomes of the process she describes?</td>
</tr>
<tr>
<td>Creativity of the ideating, modeling , or planning process</td>
<td>Cr-I-M-P-Pr</td>
<td>How similar or non-similar compared to Industry recipe the process is?</td>
</tr>
<tr>
<td>Interplay between BOC and BOE</td>
<td>BOC-BOE</td>
<td>What kind of relationship exists between the two sub-processes of entrepreneurial process?</td>
</tr>
<tr>
<td>Role of Environment</td>
<td></td>
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<tr>
<td>Industry Recipe (IR)</td>
<td>IR</td>
<td>What is the role of the environment in the creation of the BO?</td>
</tr>
<tr>
<td>Industry Development phase at the beginning of the BOC process</td>
<td>IR-IDP</td>
<td>BO?</td>
</tr>
</tbody>
</table>
Endnotes

1 The label of ‘business venture’ is chosen for highlighting the business-like nature of the phenomenon at hand. This is because the concept of ‘venture’ is understood here as follows: “A venture is a project or activity which is new, exiting, and difficult because it involves the risk of failure ... his latest writing venture ... a Russian-American joint venture.” (Singlair 1997: 1860)

2 Of course it is reasonable to point out that the data of their review on which Short et al. (2009) base their conclusion that “little agreement exist about the definition and nature of opportunities” (ibid.: 2) is gathered from main journals such as Journal of Business Venturing, Entrepreneurship: Theory and Practice, Strategic Entrepreneurship, Journal of Management Studies, Academy of Management Review, Academy of Management Journal, Journal of Management, Management Science, Organization Science, Organization Studies, and Strategic Management Journal.

3 Hallinger and Hech (1996: 11) define the ‘black box’ as hidden process by which administrators achieve an impact. This means that if a process is called ‘black box’ it is invisible to observers (also Lawrence 1997, cited in Pentland 1999: 718). All what can be seen is that something is put in the process and after a while an outcome will emerge. If applied to discovery process the black box it means after an idea is put into the box and then the opportunity is ready to be exploited in the exploitation process. According to Klein (1198) in economics textbooks the concept of firm (seen as production function or possibility) is seen as ‘black box’ in transforming inputs into outputs. To open the black box means to identify and understand all the major elements, mechanisms and powers affecting in the process.


5 The label of Business Opportunity Creation is a little bit problematic because, firstly, the dominant definition of (business) opportunity emphasizes the dichotomy between two notions: ‘opportunity as existing independently in reality’ and ‘as a creation of actor(s)’ (e.g. Alvarez and Barney 2007; also Short et al. 2009). This dichotomy is based on dominant assumptions of the congruence between ontological and epistemological stance, i.e. the reality either exists (realism) independently from human knowledge of it or reality is not existing as such but socially created in the interaction with other people (social constructivism). Secondly, since the BOC process is actually focused on generating new economic activities (typically) in the context of business firm, and is a conceptual form of the becoming new business venture by nature, it would be possible to see it under the label ‘business concept creation’ also. This possibility is partially supported by Bhave (1994) who in fact labels the outcome of discovery process as Business Concept; the final stage of the externally stimulated opportunity recognition. However, according to this kind of thinking the label ‘business plan creation’ would be as feasible. To conclude, the study at hand will be influenced by the traditional labeling utilized in the literature on entrepreneurial process (opportunity recognition/discovery/creation and exploitation), and name the process as follows: the Business Opportunity Creation (BOC) process; the Business Opportunity (BO) as the outcome of process.
See Schackle (in Batstone and Pheby 1996) who treats entrepreneurship as decision making of a dynamic entrepreneur. Due to the stress for creativity and spontaneity of the dynamic decision making actions in the economic rationality (or reality) cannot be explained any more solely in terms of past events and fixed preferences: “We can choose only among imaginations and fictions. Imagined actions and policies can have only imagined consequences, and it follows that we can choose only an action whose consequences we cannot directly know; since we cannot be eyewitness of them.” (Shackle 1970: 106) In addition, since Shackle prefers “unknowledge” to knowledge to characterize the inevitable uncertainty as important effect of time on individual actions he thus points out “the focal, creative event where knowledge, thought, feeling and imagination are fused into action” (Shackle 1962: 105). This means that ‘equilibrium’ and ‘reason’ in Shackle’s thinking are seen sole as one of the elements of decision making in the face of uncertainty, and it is the ‘very faculty’ of imagination which makes us enterprising.

According to Chiasson (2001) “Latin roots indicate that "retroduction" refers, not only to the apprehension of a "surprising fact," and an ensuing hunch, but also that the hunch, once formed, is deliberately and recursively taken "backward" for analysis and adjustment (requiring deduction and induction), before it is engendered into a hypothesis worthy of extensive testing.”

According to Shane (2003: 40) “means-ends framework is a way of thinking about the relationship between actions and outcomes”.

Unfortunately, Davidsson’s (2003a) definition of venture idea seems to be quite unclear: on the one hand, he seems to want to replace the concept of opportunity by venture idea (ibid, 336–240). On the other hand, he talks about them as two separate but preceding concepts. While Davidsson (ibid.) defines venture ideas as specific but changeable, and as more or less elaborated entities to act upon, however, perhaps more reading is needed for understanding his thinking more thoroughly.

While the review of the literature on entrepreneurial process is based on initial literature review not reported in the present study, it is in the possession of the researcher, and can be asked for examination from the author. The main finding from the review is that there is a huge variation in the definitions of the entrepreneurial process, the discovery process (as an overall label), the opportunity, and the role of the entrepreneurs and environment in the process. The studies selected to be utilized in the present study are evaluated as the most feasible. At the same time these reviewed studies represent the two key streams of the research on entrepreneurial process: either the characteristics of the external environment direct the process (e.g., the three approaches to opportunity – recognition, discovery, or creation – in Sarasvathy et al. 2003) or the decisions of the entrepreneur direct the process (e.g., the Discovery Theory – Creation Theory in Alvarez and Barney 2008
Wilson and McCormack (2006) draw upon Delanty (1997) and Bhaskar (1978) to suggest a combination of three principles of critical realism within a philosophy of social science: the causal explanations are achievable; the social reality is largely an interpretative reality by social actors; and finally, social actors critically evaluate their social reality. According to these scholars, social reality is the constructions of social actors within that reality. In addition, they also think that causal mechanisms that generate events which may or may not be reflected within the experience of the social actor need to be taken into account.

Amit and Zott (2001: 516) draw on the integration of literature on entrepreneurship and strategic management (treated later as ‘strategic entrepreneurship) and state that “the development of the value-drivers model, which includes four factors that enhance the value creation potential of e-business: efficiency, complementarities, lock-in, and novelty”.

“Where do we find rationality when the environment does not independently influence outcomes or even rules of the game (Weick, 1979), the future is truly unpredictable (Knight, 1921), and the decision maker is unsure of his/her own preferences (March, 1982)?” (Sarasvathy 2003: 206)

The role of teams and the theoretical basis of the concept ‘entrepreneurial teams’ is presented more thoroughly in recent article of Harper (2008).


According to Massarik (1981) cited by Steyaert (1995: 214), ten different dimensions of the relationship between interviewee and interviewer are as follows: “acceptance-hostility; trust-distrust; mutuality-inequality; psychological closeness-distance; emphasis on total or material sector of ‘life world’-emphasis on clearly defined reply, emphasis on shared concerns-emphasis on interviewer’s or interviewee’s concerns, one to the exclusions of the other; interview content and process determined primarily by interviewee, with facilitation by interviewer-interview content and process determined exclusively by interviewer, with possible inference by interviewee; unbounded time allocation-tightly bounded time allocation; balanced concern with both content and process-exclusive concern with process, or exclusive concern with content; intertwined spontaneous interviewer-interviewee response-rigid role separation between interviewer and interviewee.”

Creswell and Miller (2000) state that ‘member checking’ is about “taking data and interpretations back to the participants so that can confirm the credibility of the information and narrative account” (127). Furthermore, it is seen as “the most crucial technique for establishing credibility” (p. 314) in a study by Lincoln and Cuba (1985, quoted in Creswell and Miller 2000: 127). Creswell and Miller present an alternative to this procedure: partly, a way to conduct this is to ask participant to view transcriptions and comment their accuracy.
According to Ardichvili, Cardozo, and Ray (2003: 112), "this ‘‘corridor of constraints’’ is actually screening criteria to isolate inappropriate prospective opportunities".
33. Leppäniemi, Matzi (2008) Mobile marketing communications in consumer markets
42. Bagaeva, Alexandra (2010) The quality of published accounting information in Russia
47. Ristola, Annu (2010) Insights into consumers' emerging interest in mobile services

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