Innovation Supportive Culture in IT-Organizations - A Comparison of Perceptions between Managers and Employees
Abstract

The organizational ability to innovate and support employee creativity have been touted to be crucial aspects for organizations in order to ensure their continuity and increased competitiveness. In the literature, organizational culture has been identified as a possible solution for supporting organizations’ ability to innovate. Despite the merits of innovation supportive culture, organizational culture has been recognized as an ambiguous concept, which often leaves organizational managers mystified on how culture should be changed in order to gain the expected benefits. Therefore, even if the management’s endeavor is to increase innovation and creativity through culture, the actual embedded culture may not meet this goal. This thesis has contributed to the discussion of innovation supportive culture by identifying aspects of organizational culture and climate, which have been argued in the literature to support organizational innovation and creativity. Based on the identified aspects, a culture perception framework was devised in order to examine the perceptions of the managers and employees regarding innovation supportive culture in their organizations.

Five IT-organizations were asked to participate in the study from which three organizations, Elbit, Solita and Sysart, responded and agreed to participate. Total 8 interviews were conducted for this thesis, which included interviews with a manager from each of the organizations, and interviews with 2 employees per organization except for Elbit where only 1 employee could be interviewed. The data gathering was conducted utilizing semi-structured interview in order to define the scope of the interviews to match with the devised Culture perception framework. The interviews focused on the innovation supportive aspects presented in the Culture perception framework and strived to identify the perceptions of managers and employees regarding innovation supportive culture in their organizations. The conducted research revealed that the perceptions of culture between managers and employees were mostly congruent in all of the case organizations. Higher levels of incongruence was identified in all of the organizations in the aspect of reward emphasis, on which the interviewees’ perceptions were partly contradictory. Based on the results, further research is suggested to identify the reasons behind incongruent perceptions regarding reward emphasis.

Keywords: Climate, congruence, corporate, creativity, culture, innovation, incongruence, leadership, organizational, value
Foreword

This master’s thesis was carried out for the Department of Information Processing Science of Oulu. I would like to thank my supervisor, Postdoctoral researcher Karin Väyrynen of Oulu University, for her relentless positive attitude and patience with my efforts to finish this master’s thesis. I would also like to thank all the organizations and employees who participated in the interviews and made this thesis possible.

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Contents

Abstract ........................................................................................................................................... 2
Foreword ........................................................................................................................................... 3
Contents ........................................................................................................................................... 4
1. Introduction .................................................................................................................................. 5
2. Theoretical Background .............................................................................................................. 7
   2.1 Organizational Culture ............................................................................................................ 7
       2.1.1 Organizational culture defined ....................................................................................... 7
       2.1.2 Values and beliefs, norms and value congruence ............................................................. 7
       2.1.3 Cultural levels .................................................................................................................... 8
       2.1.4 Organizational climate ..................................................................................................... 9
       2.1.5 Corporate culture .............................................................................................................. 10
   2.2 Innovation Supportive Culture ................................................................................................ 12
       2.2.1 Defining innovation ......................................................................................................... 12
       2.2.2 Innovative values and behavior ....................................................................................... 14
       2.2.3 Climate for creativity and innovation ............................................................................. 16
       2.2.4 Leadership and corporate culture for innovation ............................................................ 17
   2.3 Why perceptions differ? ......................................................................................................... 19
   2.4 Innovative culture Summary ................................................................................................ 21
       2.4.1 Matrixes of innovation supportive culture and climate .................................................... 21
       2.4.2 Similarities between culture and climate researches .......................................................... 23
3. Culture Perception Framework ................................................................................................ 25
   3.1 Creating innovative culture – managers’ dilemma ................................................................. 25
   3.2 Culture perception framework explained .............................................................................. 27
4. Research Method ....................................................................................................................... 28
   4.1 Qualitative research .............................................................................................................. 28
   4.2 Data gathering ..................................................................................................................... 29
   4.3 Analyzing the interviews ..................................................................................................... 32
5. Results .......................................................................................................................................... 33
   5.1 Case – Elbit ............................................................................................................................ 33
       5.1.1 Culture ............................................................................................................................. 35
       5.1.2 Climate ............................................................................................................................. 39
       5.1.3 Case findings .................................................................................................................... 39
   5.2 Case – Solita ......................................................................................................................... 42
       5.2.1 Culture ............................................................................................................................. 46
       5.2.2 Climate ............................................................................................................................. 52
       5.2.3 Case findings .................................................................................................................... 52
   5.3 Case – Sysart ......................................................................................................................... 55
       5.3.1 Culture ............................................................................................................................. 59
       5.3.2 Climate ............................................................................................................................. 65
       5.3.3 Case findings .................................................................................................................... 65
6. Discussion ..................................................................................................................................... 69
7. Conclusions and Limitations ..................................................................................................... 72
References ........................................................................................................................................ 74
1. Introduction

This thesis aimed to identify if differences exist within the perception of organization’s management and employees regarding the successfulness of innovation support mechanisms and policies imposed by the organizational management. This study is based on my previous bachelor’s thesis (Laitinen, 2015), which explored and identified aspects of innovation supportive culture by examining existing literature. Continuing from the existing knowledge about the subject, this thesis has focused on providing an empirical report on the perceptions about innovation support mechanisms by comparing the management’s perception in contrast to the employees’.

In the last few decades, globalization of markets and industries has resulted in big changes in the world economy (Wiersema & Bowen, 2008). Due to the increasing level of foreign competition and industry rationalization, organizations are faced with multiple competitive forces contending over the same market share (OECD, 2003). In order to survive in such competitive markets, organizations are required to devise strategies to minimize the risks caused by competition, and to ensure the growth of the organization (Porter, 1979). Innovation has been recognized as a stable source of competitive advantage which also enables organizations to better meet the requirements of the changing business environment (Khazanchi, Lewis, & Boyer, 2007). Thus a common way for organizations to secure their position in the markets is to invest into research and development activities and improved organizational creativity, in order to gain competitive advantage due to new innovations.

Despite the merits and promise of increased competitive advantage, innovations have been recognized to pose ambiguous challenges. Implementing innovations may affect the way in which interaction between occupational and functional boundaries occurs and eventually require changes in the organizational structure and climate. (Baer & Frese, 2003; Black, Carlile & Repenning, 2004.) This has led many attempts to implement innovations to fail due to the incapability of organizations to adapt to the changed patterns of interaction, and thus fail to gain the benefits of the newly introduced technologies (Robey & Boudreau, 1999). Also the need to generate organizational climate which supports open discussion and proposition of new ideas between parties in the implementation process, are often neglected, leading attempts to implement technically driven solutions to failure (Baer & Frese, 2003). In addition, neglecting paradoxical requirements of innovation such as flexibility and control, may lead to serious problems (Lewis, Welsh, Dehler & Green, 2002).

To shape the organizational culture to meet the business goals of the organization, it is crucial to understand from which dimensions the culture derives from and how it can be affected (Cameron & Freeman, 1985). Organizational culture is comprised of ambiguous factors including organizational structure, business environment, personnel, used technologies and even nationalities of the organization (Needle, 2004). The unique nature of organizational culture means that there are no off-the-shelf solutions to shape the culture to match organization’s business goals, but instead a deeper analysis is needed in order to understand the underlying levels of organizational culture, which affect the way organization conducts its daily activities.
In the literature, organizational culture has been proposed as a solution to management of innovations (Khazanchi et al., 2007). Hurley and Hult (1998) claim that organizations whose cultures are supportive to innovation, provided with needed resources, are more likely to generate innovations and gain increased competitive advantage. Jassawalla and Sashittal (2002) propose that culture can provide a comprehensive frame, which can be used to align worker behavior with organizational goals and provide a way to meet the demand of flexibility and control.

It is argued that organizational leaders and senior managers play a crucial role in creating and embedding innovation supportive culture in an organization (Ahmed, 1998; Schein, 2010). The created culture serves to provide values and priorities which guide the actions of the employees, who then direct their behavior and competencies to match with the perceived priorities of the management (Schneider, Gunnarson & Niles-Jolly, 1994). Further, Ahmed (1998) emphasizes that the management is faced with the challenge for making sure that the employees make the right attributions about the enforced values and culture, since miscommunications and misunderstandings can easily cause confusion and disarray.

According to Greenberg and Baron (1997) the corporate vision is delegated most efficiently when presented by the top management of the organization and preferably by people with dynamic and charismatic personalities. Qubein (1999) notes that in order for corporate vision to be effective, it needs to permeate all the levels of organization. However in practice, creating and managing innovation supportive culture, is far from easy. It is emphasized by Schneider, Brief and Guzzo (1996) that creating a culture and climate for creativity requires comprehensive changes in the practices and procedures of an organization in order to be effective. Therefore merely manifesting a new mission statement is not enough for employees to assimilate the wanted culture (Schneider et al., 1996).

In this thesis the following research question will be answered:

RQ: How do the management’s perceptions of the corporate culture, in context of innovation and creativity, match the perceptions of the employees in the organization regarding the existing culture?

In support of this question, the thesis also aimed to answer:

In which aspects the employees' perceptions about the usefulness of management-imposed endeavors to increase innovation, differ from the perceptions of management?

The thesis will also discuss reasons from where the differences root from.

The structure of this thesis is as follows: In Chapter 2, the theoretical background for this thesis is introduced. In Chapter 3, Culture perception framework is devised based on the conducted literature review. In Chapter 4, the selected research method is explained and its benefits are discussed. Results of the conducted interviews are discussed in Chapter 5 based on which discussion is presented in Chapter 6. Chapter 7 draws conclusions from this thesis and discusses the limitations of this study.
2. Theoretical Background

This chapter provides insight on the organizational culture and the aspects of innovation supportive culture by examining existing literature. The examined literature constitutes of scientific publications regarding organizational culture with the focused scope of innovation supportive culture.

2.1 Organizational Culture

In this chapter, organizational culture and its fields are briefly explained. Corporate culture and organizational climate are considered as separate parts of organizational culture. Corporate culture is examined as organizations’ way to enforce specific organizational traits such as flexibility or control in order to change the culture to meet with organizations business goals in contrast to it being synonym to organizational culture.

2.1.1 Organizational culture defined

Organizational culture is a broad and ambiguous subject with a plethora of varying interpretations. Schein (2010) describes culture of a group as a “pattern of shared basic assumptions that a group has learned as it solved its problems of external adaptation and internal integration, that has worked well enough to be considered valid and therefore, to be taught to new members as the correct way to perceive, think, and feel in relation to those problems” (p.17). Needle (2004) views organizational culture to be the sum of multiple different factors such as values, beliefs and principles which result from history and the characteristics specific to the organization. To generalize, organizational culture derives from multiple different factors which effectively shape and differentiate organizations from each other, thus resulting in an organization specific culture.

The reason behind the interest in organizational cultures lies in its effects on organization’s performance. A positive culture can be the source of competitive advantage, whereas negative culture can be a hindrance to the organization. (Sadri & Lees, 2001.) The nature of organizational culture is well summarized by Schein (2010) “Culture is an abstraction, yet the forces that are created in social and organizational situations that derive from culture are powerful. If we don’t understand the operation of these forces, we become victim to them.”(p.3). These findings speak of the importance of organizational culture for the organization’s performance, thus leading many organizations in attempts to change the culture to better match the organizations’ business goals.

2.1.2 Values and beliefs, norms and value congruence

In literature, organizational culture is often examined through values and beliefs, norms and value congruence (Quinn & Rohrbaugh, 1983; Cameron & Freeman, 1985; Khazanchi et al., 2007; Schein, 2010). Values and beliefs are the basic principles, embedded in an organization, which guide the actions and decision making in an organization (Schein, 2010). Organizational values and beliefs cover aspects from
physical behavior to more abstract cognitive values such as aim of continuous improvement and being creative. In business perspective, the values represent what the organization stands for and form the base on which trust and organization’s reputation is built on. (Bruce Mayhew Consulting, 2010.) According to Schein (1983), leaders and founders bring their own values and beliefs to the organization, which are further taught to new organizational members as the right way to think and act. Schein (1983) notes that entrepreneurs, the founders of the organizational idea, are usually biased on certain ways to achieve their business idea, which originates from the previous cultural experiences and personal traits of the leader, thus affecting the adoption of certain organizational values and norms. As values are adopted by members in an organization, they can reduce uncertainty and work as a guideline for individuals, when deciding how to react in various problem situations (Schein, 2010).

In spoken language, organizational norms are often depicted by a sentence “the way we do things around here”, which originates from definition of organizational culture by Deal and Kennedy (1982). Organizational norms can be used to examine the differences in organizations’ work methods, the ways in which workers behave and conduct their daily routines. Behavioral norms arise from interaction between group members and may lead to specific language and terminology, and unspoken rules on how to react in social situations. (Schein, 2010.) Differences in behavioral norms can also occur due to the varying national cultures embedded in the work group. The differing national cultures can cause misunderstandings due to the differences in work methods, social behavior and used terminology (Herbsleb, Paulish & Bass, 2005.) Norms are often taken for granted by the group members as they have been passed and taught to members of the organization through socialization, as the right way to act. Overall, norms can guide, but also constrain behavior in a way that is not aligned with organizational business goals. (Schein, 2010.)

Value congruence is a measure of how coherent the values are between individual and organization (Kristof, 1996). Quinn and Rohrbaugh (1983) identified that perceptions of organization’s values may alter between different hierarchical levels, departments and depending on the geographical locations. It has been found that similar values between workers and the employing organization, will lead to increased worker satisfaction and make it easier for the workers to identify themselves with the organization (Kristof, 1996; Edwards & Cable 2009). Value congruence has also been identified as a source of more cohesive culture, making the expected behavior of workers more consistent. In turn, the consistent values help at aligning goals and have been found to improve performance (Denison, 1990; Gordon & DiTomaso, 1992.)

2.1.3 Cultural levels

Organizational culture is often difficult to analyze due to its subconscious nature and the fact that individuals immersed in the culture often find it hard to express and identify the underlying values and beliefs (Cameron & Freeman, 1985). Schein (1984) explains that getting to understand the values that guide actions of individuals can be difficult as the values lie in the deeper, subconscious level of culture, meaning that in-depth interviews are usually needed. Further deciphering the interviews can be tricky due to the fact that people often rationalize, giving answers which they would prefer to explain their actions, leaving the underlying reasons for their actions in the dark. To provide a framework for examining culture, Schein (1984, 2010) divides organizational culture into three different levels: artifact level, espoused beliefs and values, and underlying assumptions (Figure 1).
Artifact level (Figure 1) is the part of the organizational culture that is visible to outsiders. It includes physical appearances, products of the group, used language, manners and emotional displays, myths and stories about the organization, publically listed values and observable rituals and ceremonies. (Schein, 2010.) Denison (1990) describes the artifact level as the tangible aspect of culture, shared by group members, which include verbal and physical level artifacts. Schein (2010) emphasizes that artifact level is easy to observe but hard to decipher as the artifacts might hold different meanings in different organizational settings. In order to decipher the artifacts the observer must either live in the group long enough to get an understanding of the hidden meanings of the artifacts or examine the espoused beliefs and values that guide the actions of the group.

Espoused beliefs and values (Figure 1) derive from the interaction between group members where the individuals propose their own values and beliefs, their perceived correct way to do things, in order to solve problems. When the proposed solution is accepted and after empirical testing perceived successful by the group members, the values will gradually turn into shared values and eventually into shared assumptions. (Schein, 2010.) Some value domains such as moral and aesthetics cannot be empirically tested, but instead consensus is reached by social validation, where the group members reinforce each other’s values, making them to be taken for granted. These moral rules and operational values, beliefs and norms are further used to guide actions in difficult situations and to teach new organizational members how to behave. (Schein, 2010.)

Underlying assumptions are values and beliefs which are taken for granted by the members of a group due to the repeated success on implementing them. In groups where the basic assumptions are strongly held, other ways of acting are considered unthinkable. The basic assumptions are often unbeatable making them very hard to change and thus changing them will cause anxiety to the group members. Essentially, the underlying assumptions are the ultimate source of visible artifacts and existing values. By understanding the underlying assumptions, dealing and understanding with the surface levels of organizational culture becomes gradually easier. (Schein, 2010.)

2.1.4 Organizational climate

Organizational climate is a term often used as a synonym with organizational culture despite being different concepts, though closely related (Denison, 1996). James, Joyce and Slocum (1988) explain that organizational climate is a property of an individual which refers to how people generally perceive the organization. Baer and Frese (2003) remark that climate can be considered a manifestation of culture and it is related to the
processes which cause the visible, artifact-level outcomes. Schneider, Gunnarson and Niles-Jolly, (1994) describe organizational climate as the atmosphere in an organization which is affected by the practices, procedures and rewards of the organization. According to James, James and Ashe (1990) organizational climate develops as individuals reflect their personal values to their organizational context and environment. Schwartz and Davis (1981) explain that organizational climate is a measure of whether workers’ expectations of what it should be like to work in an organization are met, whereas organizational culture is more interested in the expectations themselves.

The climate develops as the employees observe events in their work environment, allowing them to make conclusions about organizations priorities. This in turn will affect the way workers direct their energies and competencies, aiming to match with the priorities of the organization (Schneider et.al., 1994.) Brown and Leigh (1996) claim that organizational climate may significantly affect the motivation of individuals in achieving work outcomes. Different types of organizational climates are found to exist between organizations and even within functional departments, which affect the ways individuals act and meet organizational goals (Schneider et.al., 1994).

As organizations have multiple priorities and goals, it may be beneficial for organizations to have different climates between different departments (Schneider et.al., 1994). For example, climate for initiative and climate for psychological safety were found to be positively related to successful innovation implementation and return of assets in organizations (Baer & Frese, 2003). Thus investing in climate, specifically aligned to meet business goals of certain department, can be beneficial for the organization. For example in the case of innovation focused organization, Baer and Frese (2003) suggest that before any larger investments in change processes and innovation creation are considered, the organizations should focus on creating climate supportive of initiative and psychological safety, to ensure the success of the change process.

2.1.5 Corporate culture

The terms organizational - and corporate culture are often used interchangeably, describing the culture within an organization (Sadri & Lees, 2001). In this paper, corporate culture is specified to refer to the culture and climate enforced by the management, in order to change organizational culture to be aligned with the organizations business goals and mission statement.

As previously discussed, organizational culture constitutes of multiple varying factors which will greatly affect the way organization conducts its daily actions. Organizational culture does not appear from thin air, but instead it arises from the values brought to the organization by its leaders and workers (Schein, 2010). However, organizational culture is not constant as it changes within time in an evolutionary manner. This may lead to a contradiction between organizational goals and the formed culture, resulting in a dysfunctional culture. (Schein, 2010.) Due to the differences between the culture and the business goals, the efficiency of the organization will be hindered (Balthazard, Cooke & Potter, 2006). According to Schein (2010) the organizations leaders’ main responsibility is to create and manage culture, and it’s the ultimate act of leadership to destroy culture when it is deemed dysfunctional. However to change the culture of an organization, it is crucial to understand from which dimensions the culture derives from and how it can be affected (Cameron & Freeman, 1985).

Qubein (1999) identified multiple key elements associated with creating positive corporate culture. According to Qubein (1999) it is crucial that the corporate culture is
fostered by aligning management and workers behind distinct corporate vision, which reflects the desired goals of the organization. Also the corporate values should be imposed in a way that they do not violate the personal values of the workers, as otherwise individual workers will not be able to embrace them as their own (Qubein, 1999). Greenberg and Baron (1997) remark that corporate visions are delegated most efficiently when proposed by the top leaders of the organization with strong values and dynamic, charismatic personalities. Also to be effective, the corporate vision has to permeate all the levels of the organization (Qubein, 1999). Schneider, Brief and Guzzo (1996) claim that organizational culture cannot be directly manipulated, but instead the organizational climate can be used as a medium to affect the values and beliefs of the workers. Further, corporate vision will not be assimilated by the workers by merely manifesting a new mission statement, proposing new working practices or even changing organizational structure. Instead of directly manipulating the culture, change is needed in the tangible aspects such as everyday working practices, policies, procedures, reward systems and routines, which shape and affect the organizational climate and eventually communicate new values and beliefs. (Schneider et al., 1996.)

As the goals and business domains of the organizations vary, the types of cultures emphasized by the organizations will also differ. A research conducted by Cameron and Quinn (2011) devised an organizational culture assessment instrument (Figure 2) based on competing values framework. Using competing value dimensions such as flexibility and discretion vs. stability and control and internal focus vs. external focus, the framework is able to identify four distinct culture types: clan, adhocracy, market and hierarchy. (Cameron & Quinn, 2011.) Each of the identified culture types exhibit features such as basic assumptions, orientations and values, which comprise the organizational culture. The main characteristics of these four culture types are briefly explained next.

![Competing Values Framework](image)

**Figure 2.** Competing values framework (Cameron & Quinn, 2011, p. 35).

Clan culture (see Figure 2) focuses on creating a friendly workplace where the leaders act like father figures and mentors. According to Cameron and Quinn (2011) clan culture is generally associated with creating and maintaining positive employee attitudes where the organization is held together by loyalty and tradition. They explain that clan cultures usually exhibit characteristics such as high support for team working and employee involvement. Adhocracy (see Figure 2) is described as a dynamic culture
where innovation and adaptability are valued over strict rules. The focus on innovation and orientation towards external environment makes adhocracy a common culture type in domains such as aerospace, software development, think-tank consulting and filmmaking industries, in which creating innovative products and quickly adapting to new opportunities is crucial. (Cameron & Quinn, 2011.) According to Figure 2, hierarchy cultures are internally focused with their goal on maintaining smooth and stable production with easily predictable output. To achieve this goal, hierarchy cultures enforce strict rules and formalized working procedures, which govern how people do their work. (Cameron & Quinn, 2011.) According to Child (1973) cultures with high levels of hierarchy will hinder innovation due to the highly formalized structure and strict rules and regulations, which limit the capacity of organizational members to assume the risks of innovation. Market cultures (see Figure 2) are externally focused with high emphasis on competitiveness and productivity. The main goals in market cultures are to expand market share and increase the profits while attempting to reach market leader position. In market culture it is presumed that clear goals and an aggressive strategy will lead to increased productivity and profitability (Cameron and Quinn, 2011.)

As previously mentioned, different organizations benefit from different cultures. Cameron and Quinn, (2011) emphasize that each organization must determine the cultural type and it’s congruence to match the demands of the environment. According to the competing values framework (Figure 2) it is suggested that cultures which emphasize flexibility and external focus, will increase the innovativeness of the organization (Cameron & Quinn, 2011). In the next chapter, the aspects relating to innovation supportive culture are examined in closer detail.

2.2 Innovation Supportive Culture

This chapter sheds light on the importance of innovations in organizations and clarifies the terminology regarding innovation. The purpose of this chapter is to examine the parts of organizational culture which have been identified to be significant for organizations seeking to improve their ability to innovate.

2.2.1 Defining innovation

Innovation supportive culture has been studied from multiple aspects by multiple authors. To mention a few, the aspects of innovation supportive culture range from values and norms, value congruence, effects of founders and leadership, organizational climate, organizational change to efficiency (Baer & Frese, 2003; Cameron & Freeman, 1985; Denison, 1984; Schein, 1983; Schein, 2010; Schneider et al., 1996)). The multiplicity of research regarding innovation speaks of the importance of the subject but also of its ambiguous nature.

In order to analyze innovative culture, it is crucial to understand what it means for organizations to be innovative and create innovations. The types of innovation are often divided as product and process innovations. Damanpour and Gopalakrishnan (2001) explain product innovation as a development of new goods or services, and managing such innovations enables organizations to match or even lead the demands of the changing markets. Process innovation instead focuses on improving production methods, services or administrative operations. Implementing successful process innovation may lead to increased efficiency and responsiveness of the organization (Damanpour & Gopalakrishnan, 2001).
In the literature, innovation has multiple definitions and it’s often used as a synonym with creativity (Martins, & Terblanche, 2003). However, creativity can be defined as the trait of an individual or a group within an organization, which enhances the creation of new ideas, whereas innovation can be perceived as a trait of an organization to support individual creativity and the ability to implement the new ideas (Amabile, 1988; Martins & Terblanche, 2003; Westwood & Low, 2003). According to Martins and Terblanche (2003) creativity and innovation are two intertwined parts of the creative process – idea generation and implementation. Innovation supportive culture instead can be described as a framework for fostering expectations and being a guideline for worker creativity, experimentation and risk-taking (Jassawalla & Sashittal, 2002). This division of creativity and innovation is shown on Figure 3, adapted from definition of creativity and innovation by Martins and Terblanche, (2003) and definition of innovation supportive culture by Jassawalla and Sashittal, (2002).

![Figure 3. Defining creativity and innovation, adapted from Martins and Terblanche (2003, p. 68) & Jassawalla and Sashittal, (2002).](image)

In Figure 3, innovation supportive culture is depicted as a comprehensive frame supporting both creativity (Jassawalla & Sashittal, 2002) and the implementation of the new ideas – innovation (Amabile, 1988; Martins & Terblanche, 2003). Innovation is often associated with change, however not all changes can be considered innovations since change does not always include new ideas or benefit the organization (West &
Thus Martins (2000) defines innovation as an implementation of new, often problem solving idea or material artifact, which is considered relevant by the unit of adoption, and thus adopting it will bring changes in organization.

The creativity frame (Figure 3) denotes the idea generation process conducted by individuals or groups within an organization which produces ideas for further evaluation to become innovations. To support the creativity, it is important for organizations to foster the idea generation by adopting innovation supportive values and encourage creative behavior (Martins & Terblanche, 2003). The innovation frame (Figure 3) describes the organizations processes for evaluating the proposed improvement ideas and eventually implementing them as new innovations. Individual creativity itself is not sufficient for organizational innovativeness, but instead organizational characteristics play a significant role in accepting and implementing the new ideas (Arad, Hanson & Schneider, 1997). Creating and maintaining innovative climate is suggested to be an important part of successful implementation of innovations (Baer and Frese, 2003), and it has been identified to play significant role at supporting individual creativity (Tesluk et al., 1997, Schneider et al,. 1994). Also the type of leadership and management in the organization plays a big role in conveying the preferred values to the workers (Cameron & Quinn, 2011; Qubein, 1999). It is ultimately the responsibility of the leaders to analyze and manage corporate culture in order to align it with organizational goals and values (Schein, 2010), in this case, ensuring innovation supportive culture.

2.2.2 Innovative values and behavior

It is noted by Claver, Llopis, Garcia and Molina (1998), that “innovative attitude” is the key factor for innovative organizations success. Organizations’ innovative attitude manifests itself in the form of corporate values, mission statements and culture, which can be used to align worker behavior with the organizational goals of innovation (Jassawalla & Sashittal, 2002). According to Lemon and Sahota (2004), innovations are partly the outcome of groups and employees understanding of business opportunities and or possibilities provided by new technologies, leading to more efficient product development. Work environment supportive of expressing new ideas, without harmful consequences to the proposer, and fostering open information sharing amongst workers, is important for organizations seeking to be innovative (Martins & Terblanche, 2003).

Claver et al. (1998) propose that organizations’ ability to accept risks and challenges set forth by new opportunities, is evident to affect the success of innovations. They further explain that in order for innovation supportive culture to be successful, the top management needs to accept risks and the culture must be adopted by all organizational members. Matsuno, Mentzer and Özsomer (2002) identified that flexibility, lack of formality and organic structures point towards proactive strategic orientation, which emphasizes risk taking and innovativeness. According to Jassawalla and Sashittal, (2002) innovative values such as fostering teamwork, promoting creative actions, and fostering initiative and risk-taking, are linked with efficient new-product development. According to Martins and Terblanche (2003) many organizations are faced with the problem of expecting workers to take risks and act creatively, but instead they are rewarded for proven and working solutions, therefore hindering the employees’ motivation for risk taking. Cameron and Quinn (2011) explain that organizations embodied by adhocracy cultures (see Figure 2) support innovation by encouraging and celebrating risk taking, while having emphasis to creativity and experimentation. Similarly Arad et al. (1997) explain that leadership styles encouraging innovation and risk taking have been identified to contribute to organizations’ ability to innovate.
According to Denison (1984), participative decision making has positive effect on organization’s performance in varying situations and further suggest that the effects may be even greater in situations where the business environment changes rapidly. Similarly, research by Hurley and Hult (1998) denote the importance of participative decision making by explaining that when organization’s emphasis is placed on employees’ learning, developing and employees are encouraged to participate in decision making, the innovativeness of the group will increase. Nevertheless, the research by Denison (1984) reveals that participative decision making takes time to pay off, and it is suggested as an investment for the future. Amabile (1988) denotes that innovations are often created by a small group of people rather than from individual insight. She explains that the innovations form as collective effort where the original idea is amplified by the group members’ suggestions. In their research, Jassawalla and Sashittal (2002) identified that highly innovative organizations were attributed with strong emphasis for team working and utilization of cross-functional teams. They explain that innovative organizations aimed to get employees from different departments to work together as early as possible to overcome resistance to change and get many-sided ideas.

Cultures supporting freedom as a core value have been proposed to support creativity and innovation by empowering individuals by providing them autonomy to do their work and participate in decision making (Martins & Terblanche, 2003). Naranjo-Valencia, Jiménez-Jiménez and Sanz-Valle (2011) explain that autonomy and freedom incite creativity, which is the key requirement for pioneering innovations. Similarly to Cameron and Quinn’s competing values framework (see Figure 2), Naranjo-Valencia et al. (2011) identified that organizations embodied by adhocracy cultures promote organizational strategies of innovation, whereas hierarchical cultures are more suitable for follower strategy aimed towards imitation.

In a process innovation setting, Khazanchi et al. (2007) identify paradoxical requirements of both flexibility -and control values to be positively related to innovation. Flexibility values were identified to foster experimentation and empowerment among the workers and thus increase the plant performance. Control values, however, were regarded as a more complex aspect since no clear correlation between performance and control values were identified (Khazanchi et al., 2007). However, Khazanchi et al. (2007) suggest that control values may indirectly increase innovativeness by setting boundaries for innovation, such as stable routines and goals, which facilitate managerial trust and evaluation. Similarly, Naranjo-Valencia et al. (2011) argue that control values may indeed increase organization’s ability to innovate as long as formalization and strict hierarchical values do not become dominant shared values for the employees. Findings by Lewis et al. (2002) support the notion as they identify control values to be positively related to improvisation during product development. They find that predetermined project management style (e.g., milestones and formal reviews) provide necessary framework for supporting brainstorming and experimentation. Similar findings were identified by Quinn and Rohrbaugh (1983) who emphasize the importance of different value profiles which are a cohesive set of values which guide the actions of organizational members. The value profiles are often contradictory, like flexibility and control, which is why successful organizations tend to adopt more than one profile to meet their business goals (Quinn & Kimberly, 1984).

When preferred values are successfully fostered and adopted in the organization, they will eventually turn into behavioral norms that further encourage preferred way of action (Schwartz & Davis, 1981). When normative behavior is established in an organization, it is further taught to newcomers through socialization as a right way to act, thus reducing anxiety within workers (Schein, 2010). In the case of organization focused on innovation, the innovative values can express that creativity and innovation
are part of reaching organizational business goals. Simultaneously organizations can emphasize and create new values supportive of creativity and innovation by changing procedures, policies and activities, thus leading to improved innovative capacity. (Tesluk et al., 1997).

2.2.3 Climate for creativity and innovation

As previously mentioned, organizational climate can be referred as the individuals’ perception of what is valued in the organization (Joyce & Slocum, 1988). According to Schneider et al. (1994) organizations’ daily practices, procedures and reward systems affect the way in which organizational climate develops. They explain that climate is an aggregate of multiple different factors (e.g., practices, procedures, available resources, management style), therefore simply changing one aspect is not enough to change the climate into a preferred state. In this context, the organizational climate is defined as the measure of how individuals perceive the organizational values and goals, and thus reflect and direct their own behavior and competencies based on their perceptions. On the other hand, the way employees direct their competencies, becomes a crucial component at forming climate (Schneider et al., 1994). Tesluk et al. (1997) identify five dimensions of climate for creativity which can be affected by policies and procedures: goal emphasis, means emphasis, reward orientation, task support and socioemotional support.

When workers perceive and identify the organizational goals of innovation and creativity, the goal emphasis of creative organizational climate is said to exist (Tesluk et al., 1997). They further explain that a strong goal emphasis can be important for providing standards to increase employee awareness on which terms they can be evaluated and thus providing a basis for monitoring their own progress. Goal emphasis can be useful for developing self-efficacy expectations amongst the workers’ creative behavior, which is a crucial aspect for creating and maintaining motivation, effort, and tenacity for achieving work outcomes (Bandura, 1986). Means emphasis is described as the way in employees are conveyed with the information and methods on how to do their work creatively. Policies and managerial practices supportive of examining problems from multiple aspects, such as cross-functional teams, with the emphasis on high levels of employee involvement, are recognized to support this dimension. (Tesluk et al., 1997.) According to West (1990) it is crucial that employees recognize that their input of new ideas and change effort is supported and actively encouraged by the management. Tesluk et al. (1997) describe that when organizational policies and practices recognize and highlight the creative efforts of the employees, reward orientation is said to be in place. The reward orientation can encourage employees to act creatively by providing incentives such as financial rewards, promotions and other ways of recognizing their effort (West & Farr, 1990). However, to implement reward orientation, it must be planned carefully since it can affect negatively to the intrinsic motivation of the employees (Tesluk et al., 1997). Amabile (1988) identified that workers tend to be less creative when their main source of motivation is money or recognition and especially in the cases where the work goals are set by others.

Task support is described as the level in which employees perceive that they are being provided with sufficient resources in order to work and act creatively. The resources can range from time, financial support, training to materials, which are necessary for the innovative effort to occur. For example, if the organization’s goal is to create a climate for creativity and innovation, but the task support is inadequate, a mixed signal of the organizations priorities is sent to the employees. (Tesluk et al., 1997.) According to research by Amabile (1988) having the necessary support from organization to reach the
goal of innovation was rated the third most important environmental aspect supporting creativity.

Tesluk et al. (1997) describe that when employees perceive management and organization’s policies and practices to stand for their interests and welfare in such manner that allows experimentation with new ideas, organizational climate with strong socioemotional support can be said to exist. With climate providing socioemotional support, employees are free to discuss and debate with new ideas, through which feelings of trust and freedom develops within employees (West, 1990).

Tesluk et al. (1997) examine organizational climate mainly from the perspective of human resource practices, but they emphasize that other organizational variables can also affect the climate perceptions. According to Kanter (1988) organizational structure and the physical layout of the work environment may also contribute to individual creativity and innovation. Tesluk et al. (1997) conclude that in order to generate strong climate for creativity, it is necessary to design organizational structures, policies, practices and procedures in a way that they are aligned and complementing with each other for supporting the creativity process. Similarly, Schneider et al. (1994) explain that in order for the organization’s innovative vision to come true, the management needs to demonstrate their dedication towards creativity by providing financial and emotional support to the new ideas, products and services.

Climate for initiative and psychological safety were recognized as two particularly important domains of climate for implementing successful process innovations. Climate for initiative refers to the formal and informal practices and procedures in an organization which guide and support proactive, self-starting, and continuous approach to work. In the short run, climate for initiative is often perceived as a negative feature, since it can disrupt routines, and it can be felt threatening by those who are directly affected by it. However, in the long-run, high levels of personal initiative is argued to lead to development of new ideas, more proficient production, improved service processes and increased success at implementing innovations, and eventually into a better performance. (Baer & Frese, 2003.) Psychological safety climate is affected by formal and informal procedures of the organization that support and guide trusting and openness in the interaction within the work environment. Therefore climate of psychological safety constitutes an environment in which employees are free to speak up their minds without the fear of being punished and thus are more likely to come forth with new ideas. (Baer & Frese, 2003.) However, they emphasize the notion that both of the aforementioned climate dimensions are necessary to implement process innovations to their full potential.

2.2.4 Leadership and corporate culture for innovation

According to literature, the aspect of leadership plays a crucial role in the context of forming and managing culture of innovation (Sarros et al., 2008; Schein, 1983; Schein, 2010). Ultimately, it is the leaders who bring their basic assumptions and initial values to the organization, which serve as a basis on which organization’s behavioral norms emerge in the work environment. The basic assumptions and behavioral norms can further be crucial determinants when deciding who gets recruited and promoted in the organization, thus conveying organizational priorities and values to the employees. (Schein, 1983.) Similarly Schneider et al. (1994) explain that the recruitment process and socialization of the employees into the organization can be used to adjust the organizational climate. According to Amabile (1988), the managers should also pay attention to the intrinsic motivation along with the domain skills of the employees being
recruited. She explains that people who are attributed with motivation towards the work domain and tasks, along with the necessary domain knowledge, are more likely to produce creative solutions when compared to more qualified individuals without intrinsic motivation.

According to Jassawalla and Sashittal (2002) the leaders, top management and the physical environment in which employees find themselves, strongly affect the human interaction in an organization. Based on these interactions, the shared view of reality and shared value systems emerge, by which the employees can determine what kind of behavior and organizational objectives are valued. Schneider et al. (1994) explain that when employees of an organization perceive the values conveyed by the working environment, they direct their energies and competencies to match with their perceptions. These perceptions of the individuals constitute the climate of the organization, while innovation supportive climate is touted to be a crucial factor for improving individual creativity and implementation of innovations (Baer & Frese, 2003; Tesluk et al., 1997; Schneider et al., 1994).

As described by Schein (2010), one of the leaders’ main responsibilities is to monitor and change culture if it is deemed inefficient. Therefore leaders are responsible for managing and changing the corporate culture to be aligned with the organization’s business goals. However, changing the culture is not a simple task since leaders often struggle to identify the necessary dimensions that are linked with improved performance. Also the changes in organizational structure is argued to be temporary unless accompanied with changes in culture. (Cameron & Freeman, 1985.) Schein (2010) argues that understanding the underlying assumptions embedded in the culture (see Figure 1) will help the leaders when trying to understand and deal with the surface levels of culture.

Cameron and Quinn (2011) explain that it is important for leaders to understand the dominant culture type(s) (see Figure 2) in their organization and the level of how well they meet the requirements set by the competitive environment. Based on the competing values framework (see Figure 2), adhocracy culture is suggested to be the most prominent culture type for innovation focused organizations. This is due to its emphasis on individuality, risk taking, and its commitment to experimentation and innovation. (Cameron & Quinn, 2011). Greenberg and Baron (1997) suggest that corporate visions are conveyed to employees most efficiently by the top management with strong values and charismatic personalities. Schein (2010) explains that one of the most powerful tools that leaders can use to convey organizational values and beliefs to the employees is to focus on what they systematically pay attention to. This means that the aspects which the leaders reward, acknowledge and comment on, can be as powerful mechanisms as more formal measurements or controls.

Cameron and Quinn (2011) explain that the most valued leadership style depends on the dominant culture type. For example, in adhocracy culture, Cameron and Quinn (2011) identified that the most valued managers are considered to be creative, innovative, risk oriented and focused on the future, in summary, they are considered to be rule breakers. Thus based on their research, Cameron and Quinn (2011) state that the most respected leadership qualities are reflections from the organizations dominant culture types. Also interestingly, Cameron and Quinn (2011) identified that the most successful leaders have the skills to be able to succeed in all of the four major culture types, despite the contradictory requirements of the competitive values framework quadrants.

Despite the apparent superiority of adhocracy culture for supporting innovativeness, organizations rarely embody only one culture type (Cameron & Quinn, 2011). Schneider et al. (1994) explain that organizations often have different climates between
different departments, whereas Schein (2010) notes that different departments may have different sub cultures, which can derive from varying occupational roles. According to research by Nystrom (1990) organizations may however benefit from strategy that separates sub cultures, such as focus on innovation into more specific areas of an organization where it is mostly needed. For example R&D units will benefit from having high levels of support for creativity and innovation, whereas in production, continuous alteration of manufacturing processes may instead serve to diminish the effectiveness of the unit (Nystrom, 1990). Schneider et al. (1996) argue that differing cultures and climates can be equally effective in different organizations, depending on the unique organizational settings, workforce and the industry in which the organization operates. However, they emphasize that how people feel and infer the organizational culture and climate to be, ultimately determines if organization’s cultural aspirations can be sustained within the organization. Therefore it is the executives’ role to understand if the sub cultures are in conflict or in balance, and align them in a way that ensures the long run profitability of the organization. In case where one of the sub cultures becomes too dominant, the organization will not be able to function properly, and eventually cannot survive. (Schein, 2010.)

2.3 Why perceptions differ?

To provide background for the topic of perception, this chapter examines the reasons behind why management’s and employees’ perceptions can be incongruent regarding innovation and culture in general. Opposite to this view, the literature often examines the concept of value congruence, which is a measure of coherence of the values between individuals and their organization (Cameron & Freeman, 1985; Edwards & Cable, 2009; Kristof, 1996). With the scope of this study in mind, incongruent perceptions regarding innovation supportive culture is here defined as the difference between employees and the organizational managers, on how they perceive and feel about the corporate culture, values and climate aimed to support innovation. The possible causes for differences in the perceptions of corporate culture are explained next.

Similar values between employees and organization have been identified to provide organizations with multiple benefits ranging from improved workers satisfaction, better organizational identity and easier predictability of worker behavior (Kristof, 1996; Edwards & Cable 2009). The consistent values have also been argued to improve the performance of the organizations (Denison 1990; Gordon & DiTomaso, 1992). However, cultural paradoxes and multiple sub cultures are common to exist within organization, which can embody conflicting values and emphases (Cameron & Freeman, 1985). Schein (2010) identifies that different sub cultures can exist within organizations and between different departments. Schein explains that sub cultures often result from functional or occupational separation of working units and also from the dispersion of work units between different geographical locations. Schein (2010) explains that the smaller separated sub-units begin to form their own cultures based on their experiences with their respective leaders, which will eventually result in varying subcultures within the organization.

One possible explanation for incongruence in perceptions of culture is identified by Feather (1996) who explains the nature of values to be universal, meaning that every individual, group and different cultures tend to prioritize values in a certain hierarchical order. Likewise, Cha and Edmondson (2006) explain that the nature of values is ambiguous, therefore their meaning is open to multiple different plausible explanations. It is explained that the expansion and misunderstandings of values may dilute the original focus of the organizational priorities (Cha & Edmondson, 2006).
Schein (2010) denotes that different subcultures may also be the result from hierarchical levels within organization in which managers and employees develop their own sub cultures. According to Qubein (1999), management should enforce company values which are aligned with the personal values of the employee, since otherwise the imposed values can cause a value conflict, which can prevent employees from assimilating to the organizational vision. However, the task to align organizational values to match with the employees is easier said than done. Schein (2010) argues that many leaders do not recognize how big impact their assumptions, which they take for granted, will have on to the day-to-day actions of the organization. Further, if the external environment changes, requiring the organization to adapt to the changes, it will be challenging for the leaders to learn new ways to think and act, but even harder to re-educate the employees to act differently from the previously embedded ways of behavior. Cha and Edmondson (2006) emphasize that the leaders, who are often absent from the discussion of organizational values with their employees, may struggle to understand that incongruence in values exists. In such cases, it’s more probable for the leaders to engage in actions, which the employees construe to be against the values that the organization stands for (Cha & Edmondson, 2006). Schein (2010) speaks of the uncertainty of the values imposed by the management as follows, “All frontline supervisors will develop assumptions about human nature and how to manage employees, but whether they develop idealistic assumptions or cynical assumptions will depend more on the industry and actual company experience.” (p. 288). Therefore there is a chance that emphasized culture does not match the intended business goals, and the perceptions between managers and employees regarding the effectiveness of the imposed culture, can be inconsistent.

Values are also identified as crucial components for employees to find meaning in their work. Therefore when employees recognize their important values fulfilled by the organization, they feel happy; or angry when their values are neglected. (Feather, 1996.) Similarly, an example given in Chapter 2.2.3 described an inadequate task support, which can result in mixed signals about the organization’s priorities. Cha & Edmondson (2006) propose that the value expansion and personal interpretations of values may also lead to incongruence, which can further facilitate accusations of leader hypocrisy. When employees perceive that the leaders are not willing to act based on organizational values, hypocrisy accusations arise, which can lead to disenchantment of the leader. Disenchantment can further trigger feelings of anger and disappointment within employees and eventually loss of trust for their leaders. (Cha & Edmondson, 2006.) Amabile (1988) explains that organizational efforts to provide incentives for employees to act according to organizational values, should be planned with care in order to avoid diminishing employees’ intrinsic motivation. It is described that in some cases, employees may allege to support certain values if it is in their favor to so, even if the imposed values do not match their own (Cashman, 1998; McGraw, 2001).

Cha and Edmondson (2006) explain that enforcing psychological safety within organization, can be beneficial for leaders to discover and recover from hypocrisy accusations. It is suggested that organizational efforts to increase communication through formal and informal methods can increase the value congruence in the organization. Also efforts to increase trust, such as clarifying the underlying reasons for decision making and frequently holding open discussions with employees and managers, can increase the value congruence and its positive effects. (Edwards & Cable, 2009.) Baer and Frese (2002) denote that climate for psychological safety is also positively related to the implementation of innovations, since employees feel safe to present differing opinions and ideas, without the fear of being punished.
2.4 Innovative culture Summary

In this chapter, a summary of cultural aspects related to organizations’ increased ability to innovate is provided based on the examined literature. An effort is made to provide a matrixes for aspects of organizational culture and climate, which have been identified to support organizations’ ability to innovate. Despite that the culture and climate aspects are separated, it’s emphasized to keep in mind that the aspects of culture and climate are somewhat interrelated and overlapping (Denison, 1996).

2.4.1 Matrixes of innovation supportive culture and climate

Organizational culture is a highly valued aspect contributing to organizations’ increased performance and it is generally perceived by the organizational managers as one of the most crucial components contributing to organizations’ ability to innovate (Jassawalla & Sashittal, 2003). Despite the acknowledgement of culture’s importance, it remains an amorphous and ambiguous phenomenon, which often leaves managers mystified of the practical implications and requirements of changing culture into desired patterns of behavior and norms (Denison, 1996).

However, the examination of culture is not so straightforward, since the boundary of culture and climate research is often blurred, thus similarities and overlappings are found to exist within both fields of research. Also the terminology used to describe similar subjects, is inconsistent in the literature. (Denison, 1996.) On top of that, the theories of cultural change, are in some cases conflicting. For example, Cameron & Quinn (2011) explain that the competing values framework (see Figure 2) utilizes the aspects of organizational culture rather than examining how employees perceive the existing culture, whereas Schneider et al. (1996) argue that culture itself cannot be manipulated, but instead organizational climate can be used to manipulate culture. Further Schein (2010) argues that the self-description questions used in competing values framework are not comprehensive enough to examine organizational culture. The complexity of the culture and climate is somewhat exacerbated by Denison (1996) who explains that the content of culture studies is nearly impossible to be separated from the researcher’s individual interests, therefore leading to plethora of varying definitions.

Tesluk et al. (1997) argue that in order to achieve culture and climate supportive of creativity, both culture and climate dimensions need to be addressed, or otherwise the change processes will be futile. Despite the differences in research focuses, Denison (1996) concludes that culture and climate research shouldn’t be viewed as separate phenomenon, but instead as different interpretations of the same subject. The following tables (Table 1 & Table 2) present characteristics of organizational culture and climate, which have been identified in the literature to support organizations ability to innovate. The tables are divided into culture and climate specific aspects, but similarly to the notion by Denison (1996), the theories are in some cases found to overlap.

Tables 1 and 2 constitute from three columns: aspect, benefits and explanation and authors. Aspect field presents the term(s) used in literature and the chapter(s) in which the aspect is explained. The aspects are clarified briefly with explanation and benefits field. The authors’ field annexes the authors who have studied the cultural aspect and provided insight of its importance regarding organizational innovation. The explanation field is a general level description of the aspect derived from the examined literature presented in Chapters 2.2 and 2.3. The overlappings between culture and climate researches will be explained next.
<table>
<thead>
<tr>
<th>Aspect</th>
<th>Benefits &amp; Explanation</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Freedom values/ flexibility (2.2.2)</td>
<td>Freedom values can support creativity and innovation by empowering individuals by providing them autonomy to do their work and participate in decision making.</td>
<td>Khazanchi et al. (2007) Martins and Terblanche, (2003) Naranjo-Valencia et al. (2011)</td>
</tr>
<tr>
<td>Control values (2.2.2)</td>
<td>Control values are suggested to be indirectly associated with increased innovativeness by setting necessary boundaries for the innovation process. The boundaries can facilitate managerial trust and ease the evaluation of the outcomes.</td>
<td>Khazanchi et al. (2007) Cameron and Quinn, (2011) Naranjo-Valencia et al. (2011) Lewis et al. (2002)</td>
</tr>
<tr>
<td>Participative decision making (2.2.2 &amp; 2.2.3)</td>
<td>A culture supportive of participative decision making is found to increase the return on investments in organizations. Increases the worker satisfaction and employee commitment to the organization. Participate decision making is also identified as one of the core requisites for supporting innovation.</td>
<td>Arad et al. (1997) Denison (1984) Hurley and Hult, (1998) Martins and Terblanche, (2003)</td>
</tr>
<tr>
<td>Value congruence (2.3)</td>
<td>Similar values between employees and organization are found to increase worker satisfaction and organizational performance. It helps for workers to identify themselves with the organization while making the worker behavior more consistent. Congruence in flexibility values is found to increase process innovativeness.</td>
<td>Edwards and Cable, (2009) Denison, (1990) Kristof, (1996) Khazanchi et al. (2007)</td>
</tr>
</tbody>
</table>
### Table 2 - Climate dimensions supportive of innovation

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Benefits &amp; Explanation</th>
<th>Authors</th>
</tr>
</thead>
<tbody>
<tr>
<td>Climate for psychological safety / Socioemotional support / Trust (2.2.3 &amp; 2.2.4)</td>
<td>A climate which allows open interaction and freedom to express opinions without the fear of being punished or rejected. Failures are not punished but instead learning from mistakes is emphasized</td>
<td>Baer and Frese, (2003) Cha and Edmondson, (2006) Martins and Terblanche, (2003) Tesluk et al. (1997)</td>
</tr>
<tr>
<td>Task support (2.2.3)</td>
<td>The extent to which employees perceive that they are provided with equipment, time and financial support to reach the organizational goals. If the task support is inadequate, employees may feel frustrated and eventually lose trust in the leaders</td>
<td>Tesluk et al. (1997) Cha and Edmondson (2006)</td>
</tr>
<tr>
<td>Goal emphasis (2.2.3 &amp; 2.3)</td>
<td>Goals should be stated clearly and specifically on the mission level, but the methods to reach the wanted outcomes should be flexible for different variations. Clear and transparent goals can prevent leader from falling victim to hypocrisy accusations and disenchantment.</td>
<td>Cha and Edmondson, (2006) Tesluk et al. (1997)</td>
</tr>
<tr>
<td>Reward emphasis (2.2.3)</td>
<td>A reward system can support the intrinsic motivation of employees to reach the wanted goals. Can be used to align employee behavior towards the organizational goals and thus conveying corporate values of innovation and creativity.</td>
<td>Amabile, (1988) Arad et al. (1997) Schein, (2010) Tesluk et al. (1997)</td>
</tr>
<tr>
<td>Means emphasis / socialization (2.2.2 &amp; 2.2.3)</td>
<td>Employees’ perceptions on how the management conveys them with the knowledge and necessary processes, on how to do their work creatively.</td>
<td>Schein, (2010) Tesluk et al. (1997)</td>
</tr>
<tr>
<td>Climate for initiative (2.2.3)</td>
<td>Climate which supports actions starting from the individual interests and supportive of proactive working methods. Supports innovations processes when accompanied with climate for psychological safety</td>
<td>Baer and Frese (2003)</td>
</tr>
<tr>
<td>Employee recruitment (2.2.4)</td>
<td>Innovation and creativity can be affected by recruiting people with necessary domain skills and enthusiastic attitude towards creativity. The recruitment itself can send a message to employees of organization’s priorities, thus affecting the climate. Too homogenous personnel is however argued to reduce innovativeness in organization</td>
<td>Amabile, (1988) Schein (1983, 2010) Schneider et al. (1994)</td>
</tr>
</tbody>
</table>

### 2.4.2 Similarities between culture and climate researches

In culture studies, the examined literature seems to be quite certain of the importance of organization’s ability to accept risks (Table 1) as a necessary prerequisite for increased innovativeness (Arad et al., 1997; Cameron & Quinn, 2011; Jassawalla & Sashittal, 2002; Martins & Terblanche, 2003). On the flip side of the coin, climate researchers emphasize the importance of climate for psychological safety (Table 2), which allows...
employees to present their ideas and take interpersonal risks, without the fear of being punished (Baer & Frese, 2003; Cha & Edmondson, 2006; Martins & Terblanche, 2003; Tesluk et al., 1997). Amabile (1988) explains that corporate cultures supporting cooperative and cross-functional teams with the emphasis on risk taking and creativity and aspiration to learn from mistakes, can greatly benefit the organizations ability to innovate. Both of the research scopes seem to emphasize the importance of the ability to take risks but climate research seems to focus more on the employees and their individual ability to take risks, whereas aspect of culture inspects organization’s deeper culture as an explanatory aspect for the risk taking. Denison (1996) explains that the nature of climate is often described as the surface level features of organization, in contrast to the underlying organizational culture. Further Baer and Frese (2003) regard climate as a manifestation of culture or the outcome of the culture’s artifact level. Therefore the similarity between the notions of risk taking in culture and climate researches is hardly surprising.

Another interesting similarity between the research fields is the aspect of freedom values (Naranjo-Valencia et al., 2011) and climate for initiative (Baer & Frese, 2003). Freedom values are explained to support innovation by empowering individuals allowing them to act proactively and creatively to solve problems (Naranjo-Valencia et al., 2011). Similarly, climate for initiative constitutes from management’s efforts and organizational structures, which encourage and support employee’s motivation to act proactively and self-reliantly (Baer & Frese, 2003). The proactive and self-initiating behavior is explained to increase organizational efficiency and smoothen the implementation of innovations. However, it is emphasized that in order for employees to act initiative climate for psychological safety and managerial trust, is required. (Baer & Frese, 2003.) In contrast to freedom values, control values are also suggested to increase organizations’ ability to innovate by providing boundaries for employees to experiment on. However, too much predictability and conformity between the interaction of employees is found to be negatively related to organizational innovation. (Naranjo-Valencia et al., 2011.)

A resemblance is also present in the subjects of value congruence (see Table 1) (Edwards & Cable, 2009; Kristof, 1996) and processes and emphases constituting the climate dimension supportive of creativity (see Table 2) (Tesluk et al., 1997). Naranjo-Valencia et al. (2011) identified that when employees share values of commitment to innovation and change, it results in positive effects to organization’s ability to innovate. Further, value congruence is argued to be positively related to organizational performance (Gordon & DiTomaso, 1992). In both aspects of value congruence and climate dimensions supporting creativity, communicating and clearly articulating organizational goals and values is said to be an important aspect for embedding organization’s values to the employees. Similarly to the dimensions identified by Tesluk (1997), Schneider et al. (1994) explain that in order for managers’ vision of creativity and innovation to be assimilated by the employees, the management must demonstrate their dedication by providing employees with the necessary resources and emotional support towards the goal of innovation. Schraeder (2009) summarizes that management’s actions speak louder than words, meaning that the manager’s should not make statements which they cannot support with actions. In such cases when employees perceive that organizational procedures and means to achieve the goal of creativity are insufficient, a mixed signal is sent of the organizations priorities (Tesluk et al., 1997). The inadequate support mechanisms can further cause managers to fall victim to hypocrisy attribution, and can be considered as a violation of organization’s values (Cha & Edmondson, 2006).
3. Culture Perception Framework

In this chapter a summary of the challenges for creating innovation supportive culture is explained and Culture perception framework (Fig 4.) is introduced. The framework is used to examine differences between perceptions of managers and employees on the innovation supportive culture in organizations. The framework presents the managements’ efforts to create a corporate culture for innovation, and denotes the aspect of congruence between perceptions of management and employees regarding the usefulness of the emphasized culture.

The framework is put together by utilizing the examined literature review, and more specifically, combining culture and climate researches (see Table 1 & Table 2) with the definition of innovation (see Figure 3) presented in Chapter 2.2.1. Organizational culture is viewed as a comprehensive frame which can be used to align employee behavior towards organization’s goal of innovation (Jassawalla & Sashittal, 2003) while the deeper levels of culture such as values, beliefs and underlying assumptions are fairly constant and hard to change (Schein, 2010). The framework focuses on viewing aspects of innovation from both culture and climate viewpoints, in order to enable formation of comprehensive questions for the interviews.

3.1 Creating innovative culture – managers’ dilemma

According to Jassawalla and Sashittal (2003), organizational leaders often understand the importance of organizational culture as a crucial component of organization’s ability to innovate. Therefore when the goal of organization is to increase innovativeness the management and organizational leaders often pursue to establish an environment and culture in which employees are encouraged to be creative and actively present innovative ideas to improve products and processes. However, as previously explained (see Chapter 2.2.1.), merely supporting employees to be creative is not enough for creating innovative organization but instead organizational characteristics, culture and climate are needed to support evaluation and implementation of the presented ideas.

Organizational leaders often struggle to identify how culture should be changed and managed in practice, in order to achieve organization’s business goals (Denison, 1996). Also innovation supportive culture is often identified to present seemingly paradoxical requirements of both flexibility and control values (see Chapter 2.2.2), thus complicating things further for the organizational leaders. Therefore even if the goal of the organizational leaders is to increase innovation through culture, their inability to understand and change the underlying values, may lead to corporate culture which does not live up to the expected benefits (Jassawalla and Sashittal, 2003).

Similarly Tesluk et al. (1997) explain that culture for creativity exists when management and employees share similar basic beliefs such as importance of risk taking, for example assumption of experimentation when faced with new situations. However, they argue that values and assumptions are obscure, even when they are deeply rooted within the organization. Therefore Tesluk et al. (1997) imply that it is up to the organizational daily activities and practices to convey employees with the knowledge on how to operationalize the underlying beliefs and assumptions, while
communicating goals of the organization and the way how they are reached, supported and rewarded by the organization.

As previously explained in Chapter 2.2.4, there is no single right solution to create culture to support organizations’ business goals but instead different cultures and climates can be equally effective depending on the unique features of the organizations such as the business environment, employees and industry. Schneider et al. (1996) argues that how people in the organization perceive the organizational culture and climate, ultimately determines if organizational aspirations to support its business goals can be achieved.

Therefore, even if the management aims to create organizational culture and climate to support innovation, the leaders and managers are often unaware on the practical implications of innovation and how culture should be changed to reach the goal of innovativeness (Denison, 1996). In such cases the people in the organization may perceive that the implemented corporate culture and climate are in conflict with the desired goal of innovation, therefore diminishing individuals’ ability to act creatively and organization’s incapability to implement the ideas presented by employees.

**Figure 4. Culture perception framework**
3.2 Culture perception framework explained

In the culture perception framework (Fig 4.), management’s efforts to create corporate culture supportive of innovation is depicted to start from the mission statement and strategy, which can be used to embed values and beliefs of the top-management to the employees (Amabile, 1988). As discussed in Chapter 2.2.4, management plays an important role in conveying and creating organizational culture. The management and leaders bring their personal values and ways of doing things, which have worked in the past, into the organization, thus greatly influencing the formation of organizational culture and embedding organizational values. (Schein, 2010.)

Within the corporate culture box (Fig 4.), the aspects from both culture and climate viewpoints are shown in their separate boxes. The corporate culture box denotes that the management and organizational leaders are deliberatively (see Chapter 2.1.5) seeking to increase creativity and innovation in the organization by emphasizing the aspects presented in the culture and organizational climate boxes. The aspects listed in the culture and organizational climate boxes are identified to relate to improved organizational innovation, based on the conducted literature review (see Chapter 2.4.1).

The culture box denotes the deeper level of organizational culture such as organizational values and assumptions. The underlying values and assumptions manifest themselves in organization’s daily practices, routines and policies (see Chapter 2.2.2). The underlying culture is fairly constant and hard to change (see Chapter 2.1.3) since the underlying values and beliefs are often taken for granted by the people in the organization and thus changing them can cause anxiety within employees. (Schein, 2010.) However it should be noted that Schneider et al. (1996) argue that culture cannot be directly manipulated. Instead they suggest climate as a medium which can be used to convey new values and assumptions and therefore changing culture.

The organizational climate box denotes the organizational atmosphere which constitutes from employees’ perceptions on what is valued in the organization (see Chapters 2.1.4 & 2.2.3). The organizational climate can be considered as a manifestation of the underlying organizational culture (Baer & Frese, 2003) and therefore is a reflection of how employees perceive the organizational culture to be. Thus the organizational culture partly determines what kind of climate forms in the organization. By adjusting climate, organizational leaders may, for example, emphasize the importance of bringing up new ideas and rewarding employees when desirable behavior occurs (see Chapter 2.2.3). Another important aspect for innovation supportive climate is psychological safety, meaning that employees feel safe to present new ideas and bring up differing opinions regardless of their hierarchical status. The aspects of innovative climate are explained more thoroughly in Chapters 2.2.3 and 2.2.4.

On the right side of Culture perception framework (Fig 4.), both leaders and employees’ perceptions of the existing culture are converged, depicting that both parties have their separate perceptions of the culture and its effectiveness. These perceptions can be either congruent (shared perception of the implemented culture and its effectiveness), or incongruent (conflict in the perceptions of culture’s effectiveness), therefore affecting the level in which innovation supportive culture is realized within the organization (see Chapter 2.3). It is assumed that if the organization embodies both culture and climate aspects listed in the framework, the organizational culture is found to be highly innovative. However if the employees’ and leaders’ perceptions are too divergent, the organizational culture may not be able to live up to the expected benefits.
4. Research Method

In this chapter, qualitative research method is introduced and the underlying reasons for selecting it as a method of inquiry, is explained. Semi-structured interviews were chosen due to its flexibility and ability to form comprehensive interview questions in order to investigate the ambiguous and broad nature of culture and unique organizational settings. Three small and medium-sized enterprises were selected as the case organizations for the study. Each of the organizations selected were in the IT- domain and were identified beforehand to support innovation to some extent.

4.1 Qualitative research

Qualitative research is described as studying human behavior under the real-world conditions. Qualitative research can be used to find about perspectives of individuals on the meanings of real-life events from the people actually living them, in contrast to the values and preconceptions of the researcher. (Yin, 2010).

There are many ways for conducting research on organizational culture, but from historical perspective, culture has usually been studied using qualitative methods, whereas quantitative methods have been used for studying organizational climate (Denison, 1996). Cameron and Quinn (2011) discuss that the main issue is whether quantitative methods actually measure climate, or the superficial characteristics of an organization, instead of the deeper cultural values. Schein (2010) explains that for researchers interested in organizational culture, quantitative research methods such as surveys and questionnaires present multiple challenges imposing the following risks:

- The selected culture dimensions are not important in the specific organizational setting
- Survey instruments cannot reveal the deeper level of culture such as tacit assumptions
- The difficulty of validating an instrument for researching something as complex as culture is extremely challenging
- The questionnaire cannot reveal the patterning of cultural assumptions into a paradigm
- The respondents cannot reliably answer questions due the tacit nature of assumptions
- The data gathering via questionnaire or survey disturbs the processes of the organization

Despite that qualitative research is faced with many of the same challenges, individual interviews do not limit the dimensions that can be explored. However, qualitative approach presents a challenge that the data gathering and processing is arduous and takes a long time to conduct. Further deciphering the data gathered from multiple individuals with varying perspectives into a coherent whole, can be difficult. (Schein, 2010.)

Myers and Newman (2007) explain that qualitative research is often divided into structured interviews, unstructured or semi-structured interviews and group interviews.
In this thesis, semi-structured interview was chosen as a data gathering method due to its flexibility and possibility to improvise during the interviews (Myers & Newman, 2007). When considering the subject of organizational culture to be researched, in-depth interviews are required to identify the underlying values and assumptions (Schein, 1984). Myers and Newman (2007) argue that the main benefit of unstructured -or semi-structured interviews is that they allow researcher to dig deeper into the social situation.

Cameron and Quinn (2011) explain that it is impossible to focus on organizational culture as a whole, but rather focus should be placed on certain cultural dimensions. By utilizing semi-structured interview, this thesis could focus on the dimensions of culture and climate, which have been identified in the conducted literature review to support organizational innovation. Semi-structured interviews also enabled the possibility to ask follow-up questions, in order to take a look into the aspects that arose during the interviews, which might not have been identified beforehand.

However, qualitative research method poses multiple challenges for the researcher which need to be addressed. Myers and Newman (2007) explain that in semi-structured interview, the researcher should not over-prepare the interview script or otherwise the interview situation will not be flexible enough and it does not leave room for improvisation. They also argue that the interviewer should balance with keeping the interview on the subject, while avoiding over-steering the interviewee.

4.2 Data gathering

The selected cases were designed to include at least three organizations from the IT-field. An invitation email was sent to 5 organizations from which 3 answered and agreed to participate in the study. The main requirements for the case organizations were that their goals included continuous strive to support and increased innovativeness and employee creativity. The decision of the organizations’ suitability was made by examining organizations’ homepages, and in some cases, discussing with friends working in the case organizations.

Due to the limited resources and time given for the study, three interviews were allocated for each organization and organizations were selected so that they had office in the region of Oulu. This enabled flexible schedule on deciding times and places for the interviews and made it possible for the face-to-face interviews to be conducted. The interviews were designed so that one manager and two employees were interviewed from each organization. From the three organizations, one organization could only provide one employee interview due to time constraints.

The devised data gathering process was two-folded. A list of interview questions for the managers (see Appendix A) was designed beforehand with the aim to cover the aspects of organizational culture and climate. The interview questions were designed not to be too prescriptive thus allowing interviewees to openly discuss cultural aspects. The loose questions also made it possible for the interviewer to pry into interesting subjects which arose throughout the interviews. The interview questions were pilot tested with an acquaintance who had several years of experience on working as a manager in an IT-organization. This made it possible to examine the research questions in action and allowed minor alterations to be made to the preliminary question form.

The interviews with the managers were planned to be held before interviewing the employees. This decision was made in order to be able to specify organization specific aspects of culture and climate, which were deemed essential in the unique organizational context. After the interviews with the organizations’ managers, the lists
of interview questions were revised based on the results (see Appendix C). The revision of the interview questions was used to gather important aspects specific to the interviewed organization. The aspects identified from the interviews with the managers worked as reminders in the interview situations and they could be addressed and discussed with the employees. After revising the questions, interview dates with the employees were decided and conducted accordingly.

The interviews with all of the case organizations were conducted in Finnish and therefore the original interview form was translated (see Appendix B). All of the direct quotations used in this thesis were translated to English. All of the interviews, except for one, were conducted in the offices of the organizations located in Oulu. The one being the exception was held in the home of the employee, since he was working remotely. All of the interviews were conducted face-to-face, therefore allowing to get a glimpse on the surroundings and the work environment in which the organizations conduct their daily activities. The interviews were voice recorded via mobile phone and transcribed afterwards to ease the analysis. The interviewees were promised that the audio recording would not be distributed or used in any way other than to help with the transcription process. After the cases were analyzed, preliminary analyses were sent to each organization in order to validate that no misconceptions had been made in the interpretation and quotations were translated properly. All of the organizations were asked if their names could be published in the paper and all of them agreed.

**Table 3. Interview summary**

<table>
<thead>
<tr>
<th>Organization</th>
<th>title</th>
<th>time in organization</th>
<th>Date of the interview</th>
<th>length(min:sec) / words</th>
</tr>
</thead>
<tbody>
<tr>
<td>Elbit</td>
<td>Technology manager</td>
<td>12 years / current title 2,5 years</td>
<td>4.1.2016</td>
<td>28:31 / 2510</td>
</tr>
<tr>
<td>Elbit</td>
<td>Software developer</td>
<td>1,5 years</td>
<td>8.1.2016</td>
<td>41:46 / 3513</td>
</tr>
<tr>
<td>Solita</td>
<td>Site manager</td>
<td>2-3 years</td>
<td>5.1.2016</td>
<td>30:39 / 3451</td>
</tr>
<tr>
<td>Solita</td>
<td>Project manager</td>
<td>bit over year</td>
<td>7.1.2016</td>
<td>37:39 / 3609</td>
</tr>
<tr>
<td>Solita</td>
<td>Software developer</td>
<td>1 year</td>
<td>13.1.2016</td>
<td>33:51 / 3793</td>
</tr>
<tr>
<td>Sysart</td>
<td>Manager / site overseer</td>
<td>3 years</td>
<td>18.1.2016</td>
<td>37:54 / 3685</td>
</tr>
<tr>
<td>Sysart</td>
<td>Technical lead / varies according to project</td>
<td>4 years</td>
<td>20.1.2016</td>
<td>33:41 / 4114</td>
</tr>
<tr>
<td>Sysart</td>
<td>Software developer</td>
<td>8 months</td>
<td>20.1.2016</td>
<td>36:41 / 4490</td>
</tr>
</tbody>
</table>
The interviews lasted from around 30 to 45 minutes and yielded transcripts ranging from 2500 words to over 4000 words. From the average word count per interview (Table 3) it is possible to interpret that interviews done in later stages of the interviewing process, provided significantly more data than at the start. This can be speculated to be partly the outcome of inexperience of the interviewer and the ability to ask follow up questions. After getting some experience and more self-confidence on interviewing, the interviews became more and more interactive, thus resulting in more vivid discussions.

Also the characteristics of the interviewees played a significant role in the amount of data gathered, since some of the interviewees were much more inclined to openly discuss their opinions, whereas others needed more clarification and follow up questions to steer the discussion. One observation was that managers were more active to bring out their ideas and opinions regarding organizational culture whereas employees required more steering to give answers.
4.3 Analyzing the interviews

The main goal of the analysis was to seek answers to the research question of: “How do the management’s perceptions of the corporate culture, in context of innovation and creativity, match the perceptions of the employees in the organization regarding the existing culture?” In order to do so, the interviews were analyzed by utilizing Culture perception framework devised in Chapter 3, supported with the conducted literature review.

Each of the transcripts were first analyzed and aspects related to the innovation supportive culture and climate were identified. After preliminary analysis, every organization was separately analyzed by comparing manager’s and employees’ perceptions with each other’s. To identify in which aspects the perceptions of managers and employees varied, the findings were divided into culture and climate categories and further into sub categories identified in the Culture perception framework. The main focus was to identify if differences existed between manager’s and employee’s perceptions, but also between the perceptions of the employees in the same organization.

The taxonomy used to determine the level of congruence between managers and employees was that if the manager’s and employees’ perceptions were analyzed to be highly similar in certain aspect, the aspect was interpreted as congruent. If slight differences in the level of innovation support or creativity was identified by either of the employees, the aspect was deemed mostly congruent. In some aspects the perceptions of managers and employees were interpreted as opposite or highly different to each other’s, and therefore the aspect was deemed as incongruent. It should be noted that even if some aspect was deemed not to be supportive of innovation and creativity, the aspect was still interpreted as congruent if the manager’s and employees’ perceptions were similar.

In order to discuss the possible reasons behind the differences in the perceptions of managers and employees, similarities between organizations were also analyzed by comparing the congruencies between different aspects identified in each of the organization.
5. Results

In this chapter, each case study is examined separately. The results are divided into culture and climate aspects based on the Culture perception framework (see Figure 4). At the end of each case, main findings are presented and incongruences are briefly explained.

5.1 Case – Elbit

Elbit is a small IT-house which employs approximately 20 employees. Elbit has its headquarter located in Oulu but it also has an office in Helsinki. Elbit focuses on providing public sector human resources software solutions with its aim to provide innovative HRIS (Human resource information system) applications. Elbit has recently formed a separate innovation department within the organization which aims to evaluate and develop innovations. However the technology manager, who was interviewed, stressed that due to the adolescence of the new department, the innovation support mechanisms might not yet be feasible.

The interviews with Elbit were the first ones to be conducted for this thesis. The interviewees included Oulu’s site technology manager who had 2.5 years of experience in his current position and a software developer with 1.5 years of experience in the organization, therefore having one interview less than with other organizations.

5.1.1 Culture

Mission statement and values

The manager in question introduced himself as a technology leader and was responsible for the management of technologies used in product development. When the interviewee was directly asked about the mission statement and the values used to reach business goals, the manager summarized it with a slogan “Our aim is to create products serving customers and we do it by working honestly and fair. We do not hide anything in our ways of working but instead we try to be open towards customer”. The interviewee also emphasized that there were no hierarchical boundaries in the internal communication and the organization strives for openness in its daily activities. The manager also noted that endeavor is to create enjoyable work environment for employees to work at.

When the same question was asked from the employee, he responded that he had not really given thought to the aspect of values. After giving some thought to the subject, the employee summarized that customer orientation is one of the main values of the organization due to the fact that most of the projects in the organization are initiated by customers. The employee also felt that everyone in Elbit were somewhat close to each other’s and face-to-face communication was the preferred way of communicating within the organization.

To summarize, both manager and the employee felt that customer orientation was important value for the organization. The manager emphasized sincerity to be the main
value within the organization and honesty and clarity when communicating with clients. The employee perceived that the organization is easily approachable and organization aimed to create products with good usability.

**Freedom & Control values / Flexibility**

Both of the interviewees summarized trust to be essential value of Elbit by describing that employees are free to decide on how to solve problems but they also have the responsibility over their decisions. The manager explained that due to the small size of the organization, employees have become experts in certain domains, therefore having responsibility over it, but also freedom to do their work. Both manager and the employee perceived that freedom given to the employees supported innovativeness and employee creativity.

When manager was asked how innovativeness and creativity showed in daily processes, the manager explained that employees are given weekly two hours for self-learning. He explained that employees are free to choose the technologies to study in order to help with their projects. The self-learning was perceived by the manager to support especially in getting new technological improvements. The manager emphasized that currently new innovations had not been discovered through this method, but instead some technical improvements had already been found. The employee perceived that the possibility for self-learning had been really helpful and mentioned that he had used it in the previous project. The employee also mentioned that Elbit uses Pluralsight-webpage for self-learning, and it can be really useful to expand the way of thinking by learning from the professionals in the IT-field. Overall, freedom values were clearly visible in both of the interviews. Both interviewees perceived that employees are provided with autonomy and freedom to do their jobs.

When asked about control over timetables and requirements, it was emphasized by the manager that SCRUM-like mindset was in place in the organization. Daily meetings are held to inform people in the organization of problems and the current statuses of projects. Also a more comprehensive sprint meetings are arranged in every two weeks to find about what each individual had been doing. The manager summarized “projects are monitored, everyone should be on the same page, but in a bureaucracy-free manner”. The employee had similar thoughts regarding the SCRUM, but it was emphasized that it is the developers who are generally asked about the statuses of the projects, and they have the ultimate responsibility. When employee was asked if this was a good way of monitoring projects he suggested that waterfall type of design could be utilized to plan what is included in the projects and then estimate workloads in groups. By doing this, the employee perceived that SCRUM could be used more freely in the implementation.

**Participative decision making, Team working & cross-functional teams**

The manager emphasized that it was expected from employees to communicate upwards in the hierarchy if they encountered situations they could not solve on their own. It was explained that it was common in product development department that problem situations were solved daily together with employees and the manager.

Interesting observation was made that despite low level of hierarchical boundaries identified by both the manager and employee, from the way the employee addressed his co-workers, he seemed to have very high respect towards more experienced employees. The employee noted that “I discuss the ideas with people who are in higher status than me and who have lots of more experience”. It was explained that new ideas can be discussed and evaluated with the supervisors and more experienced co-workers. The
ideas could be discarded if they were not deemed feasible by the co-workers, but if the idea was good and helpful, the co-workers would help to bring up the idea up to the executive committee for processing.

Further, when employee was asked about risk taking and how it was perceived in the organization, he responded that there had been discussion with the managers about distribution of decision making lower in the hierarchy. The employee clarified that taking more responsibility would imply more risk to his work by having to make more decisions. These findings speak of small and open community where ideas are discussed freely with employees and managers. However, relatively little information could be analyzed about team working in organization’s daily work processes.

**Ability to accept risks**

According to the manager, the organization had recently formed separate department for evaluating and developing ideas in pursuit for new innovations. For a relatively small organization this speaks of high dedication towards innovativeness but also presents investments and therefore risks. The manager explained: “*the main focus of innovation department is that new innovation ideas are identified, and it enables innovation within the organization. Also it aims ensure that innovation projects are really processed if suitable prospects are found.*” The manager explained that resources will be put into the innovation department according to the idea being developed.

When employee was asked about risks and how the organization views them, he answered: “*Whenever I take a risk and it fails, the only option I have is to acknowledge that it happened because of me and fix the problem. We have discussed with the managers that I should take more responsibility from now on, which involves risks due to having to make more decisions*.“ Dividing decision making to lower levels of hierarchy can be considered risky but according to Denison (1984), it can be viewed as an investment for the future.

An interesting notion was made by the manager: “*currently we do not risk our business with innovations but we are clearly putting effort to it*”. When manager was asked if it was common to discard the projects if the taken risks had failed, he explained that risks are always examined case-by-case by giving an example that if a long term risky improvement is pursued, it requires commitment to finish what was started. Whereas in smaller risky changes within products, it would often be easier to discard the change if it was deemed unsuccessful.

However it is transparent that the organization is willing to invest time and resources on finding and developing new innovations.

**5.1.2 Climate**

When the manager was asked about the climate that existed in the organization, he described it as honest, casual and open climate. He pointed out that due to the small size of the organization, separate groups were not able to form with their specific climates. He continued by saying: “*The thing that separates us from other organizations, is that effort is really placed on creating a fun place to work at*”. When the employee was asked the same, he described the climate as moderately good but adding that it was the best climate he had encountered in his work career. When the employee was inquired why such a tame word was used to describe the climate, he explained that he was among the youngest of the employees whereas other employees had families and duties brought by it. Therefore it was difficult to arrange casual events outside working hours.
The employee continued that during the working hours the climate was great, but he wished for more leisure activities to be arranged on top of that. When the employee was asked if arranging more leisure activities could support innovativeness and creativity, he responded that, as long as the activities were peaceful and people get to know each other’s better, it would allow new ideas to be brought up.

**Psychological safety / Socioemotional support**

The manager explained that sincerity and open sharing of information was valued in the organization with its aim to keep employees on the same page as the managers. The manager summarized that by saying “We do not have any hierarchical boundaries to talk about things. For example, our financial matters are known by the employees similarly to the leaders”. Similarly, when employee was asked how disagreements are solved within the organization, the employee perceived that so far he could not recall if any had taken place within the organization. However, the employee explained that discussions are often held with the managers to share ideas and solve problems. This was well summarized by the employee: “We do not quarrel about things, but rather we help each other’s to improve”. The employee perceived that there were no hierarchical boundaries to discuss with superiors. The manager also stated that on top of the daily meetings, where problem situations are discussed, employees have the rights to come to talk directly to the managers.

Informal communication was touted by both of the interviewees to be the common way of interaction within the organization. When employee was asked how innovativeness and creativity were visible in the organization’s daily activities, he responded that from time to time, informal discussions take place on how to improve sales or some other field. The employee emphasized that the discussions were not arranged meetings, but instead, they were held for example during lunch breaks. The employee continued that the topics of these discussion were highly informal, as during a single discussion, topics could range from co-workers personal matters to how to improve some business specific feature.

Overall, emphasis on informal and open communication and absence of hierarchical boundaries speak of climate of psychological safety being in place. Thus the climate allows open discussion of new ideas regardless of the status of the proposer.

**Task support**

Not much could be analyzed from the interviews on the extent of task support. When the employee was asked how innovation was supported in the organization, the employee simply mentioned that self-learning via web-service was available for the developers and anything else could be provided in case it was found necessary.

**Goal emphasis**

According to the manager, the question on how to support innovation in the daily activities has been a big challenge for the organization for the last few years. The manager explained that organization has strived to identify new product ideas and entirely new business domains by arranging innovation days where employees are taken away from their daily routines in order to develop something new. According to the manager the innovation days had not been that successful: “Basically new innovations and ideas were found, but we were only able to think within our products, which were basically just improvement ideas for the products”. The manager noted that the innovation day concept itself did not result anything further than prototyping of the new products. It was also explained that the organization had recently formed a separate
department for improving innovativeness, while it was emphasized that the new innovation experiments had just been started.

Another support mechanisms explained by the manager was coding club which was based on voluntary participation. The manager explained that the projects in the coding club aren’t related to the organization’s business domains but instead the participants are free to choose what to develop and work on together. It was explained that the participants aren’t restricted to the organization’s employees but instead it is free for everyone interested to participate. When the manager was asked if the coding club had been popular amongst the employees, he responded that there has been at least few people attend weekly and the club has resulted ideas regarding improving internal processes and operational model of the organization. When the employee was asked of the coding club, he felt that his current personal expertise was not adequate enough to result in new innovations or at least the innovations would be somewhat unnecessary.

When employee was asked on how innovation was supported by the organization, he explained that there has been lots of different ideas how innovation could be supported. The employee mentioned self-learning, the possibility of going to conferences and freedom to do work autonomously. Interestingly, the employee also denoted that the possibility to work remotely was an important aspect for supporting thinking problems from new perspectives.

When employee was asked if innovation day had been useful for supporting creativity, he answered: “Regarding that innovation day, I can’t even remember when we last had one. Maybe in the last autumn?” The employee explained that he could not remember if anything tangible had come out of the innovation day, but he perceived that innovation day had been more beneficial for the people responsible for the development of ideas, namely the innovation department. The employee continued that for the past winter, the innovation department has spent considerable time in order to learn about developing ideas, customer involvement in innovation projects and creation of MVPs (Minimum viable product), therefore the innovation day had been useful for them at getting more information for future innovation experiments.

Both the manager and employee perceived that there has been plans to support innovation by arranging days to get out of office in order to spur individual creativity and internal communication. However, as the employee summarized “The one who runs the innovation department spoke that we should arrange some sauna-evening and try to brainstorm something, but it has still been left as a thought. And this was spoken already in August and now it is January”.

Based on these findings, it would appear that there are many plans for the future to improve innovation and creativity but not all of them have been realized yet. This could be due to the young age of the innovation department and because the methods are still being developed. However, based on the interviews with the employee and manager it could be analyzed that organizational goal of innovation was clearly identified by the employee, therefore goal emphasis of innovation is present.

**Means emphasis**

According to the manager, employees are provided with freedom and autonomy to do their work. The manager also emphasized that the employees are expected to communicate upwards in the hierarchy if they encountered problems they could not solve. Not much could be analyzed on how employees perceive if they are conveyed with the information on how to do their work creatively.
Climate for initiative

The manager explained that the organization encourages employees to bring up new ideas. An example brought up by the manager was the innovation board, which is used to allow employees to put their ideas on. However it was perceived by the manager that the innovation board was not working as well as intended but instead it was expected that innovations could be found from self-learning projects and club-activities. It was highlighted by the manager that the replacement for the previous innovation day was not yet implemented, but the idea was to get people outside of the office into more informal surroundings. The manager perceived this to be a good way to bring up new ideas and emphasis could be placed on prototyping and evaluating the ideas instead of just brainstorming.

When employee was asked about the usefulness of the innovation board, he noted: “It is at least a good way to preserve the ideas. I do not really know if the ideas have been evaluated yet”. Further, the employee was asked if he perceived that organizational leaders communicate and encourage employees to bring up ideas, he explained that the encouragement comes from the basic atmosphere in the organization. “The managers listen if you have something to say, and after listening they give positive feedback. It creates a feeling that if I want to discuss something again or think something out loud, I can go talk to the superiors”. The employee continued that encouragement also shows in development work by saying that if he can’t decide which implementation method would be best for solving certain problems, he can evaluate different ideas with his more experienced co-workers.

The employee also mentioned that there had been plans to conduct quick-pace development projects to test the new innovative ideas. He perceived that it would help to improve the capabilities of the developer group and produce feelings of accomplishment amongst the developers. However, when asked further about these plans, the employee noted: “It is quite the same as with the sauna-evenings, they are still being planned”.

Based on the interviews, the management aims to support bringing up new ideas with multiple means, but some of the new ideas are not yet implemented. According to the employee, the current climate is open and supportive to discussion of new ideas and therefore a climate of initiative can be seen to exist. It would appear that initiative could still be improved when the planned quick-pace-development and informal development events are put into place.

Reward emphasis

The aspect of reward emphasis was interesting as it provided quite opposite findings with the manager and the employee. When asked about how employees are rewarded for success, the manager replied: “This is something we haven’t really yet thought about”. According to the manager, no specific reward mechanisms were in place and he considered that the current innovation ideas are created during the working hours. It was perceived that in the current state, the success was not necessarily based on individual employee. However the manager emphasized that if the ideas came from coding-club or entirely outside from organization’s business environment, rewarding would be considered case-by-case.

When the employee was asked how organization rewards employees from success, he explained that verbal praises were given by the managers. He explained: “Occasionally, our business unit leader comes to give high-fives of a work well done”. On top of that, the employee also mentioned that seasonal reward is in place for developers to
acknowledge someone of their success. When the employee was asked if these methods of rewarding supported innovation and creativity, he explained that: “having made creative solutions to the projects, and getting thanked for it, creates a feeling that it was the right solution even if originally the implementation had been differently planned”. The employee perceived that positive attitude was the right way to support creativity and could not really name any other means to achieve it.

From these findings, it would seem that from the manager’s perspective, no reward mechanisms specifically designed for innovation were in place. However, according to the employee, the current climate of informal rewards and positive attitude was perceived to support individual creativity and innovation.

**Recruitment**

When the manager was asked what kind of employees were valued in the organization, he emphasized accountability and the ability to work autonomously. He explained that generally the leaders have trust in the employees but the employee should be able to ask for assistance if needed and be open about their doings. He concluded that necessary level of expertise and the ability to take responsibility over their work were the prime attributes of a good employee.

The employee interviewed responded that positive attitude and approachability were the most valued aspects. He explained that the employee should be willing to discuss matters openly and be positive about the work. Also willingness to learn constantly and take responsibility, were important aspects for the employee.

In summary, both of the interviewees’ perceptions reflected the mission statement and underlying values of the organization. Both of the interviewees emphasized openness and reliability to be important aspects for the employee. However, interestingly even if customer orientation was identified by both interviewees to be part of the mission statement, neither brought up the ability to work with customers in the valued aspects of the employee. This could nevertheless be perceived to be included in the positive attitude and openness required from the employee as identified by both of the interviewees.

### 5.1.3 Case findings

**Cultural findings**

The interviews with Elbit revealed that all of the interviewees’ perceptions regarding cultural aspects were either congruent or mostly congruent (see Table 4). Slight incongruences could be seen in the aspect of freedom & control values in which the employee perceived that waterfall type of design could be used to support SCRUM and workloads could be estimated in groups. The employee perceived that this could allow SCRUM to be utilized more freely during the implementation and therefore support creativity further.

According to the manager, organization has put effort to increase organization’s ability to take risks by forming a separate department responsible for processing innovations. The manager also noted that while the organization strives to invent and produce innovations, the business is not put to risk with this endeavor. The interviewed employee was more reticent regarding risk taking in general and noted that occurred risks are opportunities to learn from. The employee also mentioned that there has been
talk of dividing decision making lower in hierarchy, which can be seen indirectly as organization’s effort to increase risk taking.

Table 4 - Culture perception findings Elbit

<table>
<thead>
<tr>
<th>Innovation supportive culture - Elbit</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Aspect</strong></td>
</tr>
</tbody>
</table>
| Mission statement | • Customer orientation identified as one of the main goals of the organization – (M&E)  
• Creating a fun environment to work at – (M)  
• Everyone in the organization is close to each other’s – (E)  
• Face-to-face communication preferred way of interacting – (E) | Congruent |
| Freedom & Control values / Flexibility | • High emphasis on freedom and flexibility for employees to do their work. Supports creativity and innovativeness – (M&E)  
• Employees have high autonomy and responsibility over their work – (M&E)  
• Control over projects is managed with SCRUM - (M&E)  
• Waterfall design could be utilized for supporting SCRUM – (E) | Mostly congruent |
| Participative decision making, Team working & cross-functional teams | • Small and open community where ideas are discussed freely with employees and managers – (M&E)  
• Common for managers and employees to solve problems together – (M) | Congruent |
| Ability to accept risks / risk-taking | • High commitment towards innovation. Separate department established for innovation – (M)  
• Emphasis to learn from mistakes – (E)  
• Business is not put to risk with innovations but effort is placed to increase innovativeness – (M)  
• There has been talk of dividing decision making lower in hierarchy, thus implying more risks – (E) | N/A |

Climate findings

The perceptions of climate aspects were from most part congruent or mostly congruent, apart from the aspect of reward emphasis, in which interviewees’ perceptions were incongruent (see Table 5). Regarding task support and means emphasis, not enough data could be analyzed to determine the congruence of the interviewees’ perceptions.

The goal emphasis was identified to be mostly congruent due to both interviewees identifying organizational goal of innovation and the mechanisms aimed to increase it. However, the perceptions regarding the coding club were incongruent since the manager perceived it to result in new innovations whereas the employee perceived that his personal expertise was not good enough to benefit from it. However, this perception could be opposite if asked from a more experienced co-worker.
Similarly, the perceptions regarding climate for initiative was perceived mostly congruent. Both manager and the employee perceived that employees are encouraged to bring up ideas and organization has put effort into mechanisms such as innovation board to improve this aspect. However, both of the interviewee’s were quite skeptical of the feasibility of the innovation board.

The incongruence could be identified as the manager emphasized that new innovations are likely to emerge through self-learning and coding clubs, whereas employee perceived that coding club is not beneficial with his current expertise. The employee also emphasized that initiative is supported by the general climate in the organization, which allows employees to suggest and openly discuss new innovation ideas.

The aspect of reward emphasis was analyzed to be incongruent due to the divergent opinions regarding its effectiveness on supporting creativity. According to the manager, no specific rewards were in place to support creativity, whereas employee noted that innovation and creativity was supported by informal reward mechanisms. The employee emphasized that positive attitude is the way in which creativity can be supported in the organization.

**Table 5 - Climate perception findings Elbit**

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<th>Innovation supportive climate - Elbit</th>
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<td><strong>Aspect</strong></td>
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<td>Overall climate</td>
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<td>Means emphasis</td>
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5.2 Case – Solita

Solita is a medium sized IT-organization which employs around 400 employees. Solita has its headquarters located in Tampere and it also has offices located in Helsinki and Oulu. Solita provides IT-solutions to public administration and individual organizations, with its aim to provide comprehensive IT solutions for its clients.

The interviews with Solita included site manager of Oulu who had 2-3 years of experience in the organization. The employees interviewed were project manager with little over 1 year experience in the organization (Employee1) and a software developer with over 1 year experience in the organization (Employee2).

5.2.1 Culture

Mission statement and values

In the beginning, all of the interviewees were asked about the organization’s goals and the values emphasized to reach it. It became apparent that all of the interviewees emphasized that the organization aims to work as a guide of digitalization for its customers. The manager summarized it by saying “We believe strongly in the digitalization, where old things turn more and more into digital form and we work as guides for our customers”. Employee1 denoted that sharing information was emphasized within the organization in order for employees to be able to guide customers in their work. Similarly, Employee2 summarized that creating value for the customer is the central task for the organization. He summarized it by saying: “We do not only focus on solving individual tasks but instead we aim to take more comprehensive view. We even go as deep as influencing customer’s work processes and try to influence their value systems”.

When the interviewees’ were asked about values used to reach the goals, the answers were not as homogenous. The manager noted that the organization has clear values and emphasized that the values really hold true in the organization. It was explained by the manager that the values rooted from employees themselves in contrast to the values...
being told from above, which was seen as the right way to do things. The manager summarized that caring was the ultimate value of the organization which included three subsections: caring for oneself, caring for co-workers and caring for customers. Other organizational values expressed by the manager were being able to be casual, bravery to express and try ideas, and passion towards work. It was also noted by Employee1 that it was seen important that a manager was brought from the main office of Tampere to Oulu, in order to bring the existing culture.

Employee1 expressed that even though the values come clearly present in the internal communication, and the values seem obvious to everybody, according to the recently conducted work-satisfaction-survey, nobody was really able to distinguish and name the values. Employee1 explained that it feels apparent that within the organization a climate for caring, learning new, and support for trying new things and teaching them within organization, exists. She concluded that: “Everything roots from the value of caring, which is the most crystallized value within the organization.”

Employee2 emphasized that the organizational values are clearly listed and they include bravery, being able to be casual and caring. He explained that they are internal values which guides how individual employees are treated and how employees are expected to act. It was noted that commitment towards the employees and supporting them is one of the main emphases within the organization, while providing employees with autonomy and trust to do their work. When the Employee2 was asked if he could name the most important value for the organization, he responded it to be caring about the employee.

Despite the minor differences in the identified values, all of the interviewees emphasized digital guidance to be one of the main goals of the organization. On top of that, all of the interviewees summarized that caring is the most essential value from which other values root from. Overall, it would appear that similar perceptions on the goals and values are held by all of the interviewees.

**Freedom & Control values / Flexibility**

The interviews revealed that the organization actively seeks to support freedom and flexibility in its daily activities. The manager explained that at organization level, predetermined processes are avoided and instead individual projects are free to decide what kind of processes are needed. He also stated that when the individual projects have responsibility to create their own processes, they also have the responsibility to keep the projects within given schedules. According to Employee1, the lack of predetermined processes could be seen as both good and a bad thing. It was explained that at best, it allows individual projects to execute and plan processes specifically for the project at hand. However, the lack of prebuilt templates to build on could cause unnecessary work to be spent on creating the basic templates that every project will need. However Employee1 emphasized that this problem has been addressed and some basic templates have already been created for projects to use.

According to Employee2, one of the crucial aspects of the organization is that it is perceived that there is no need for high hierarchy in the organization. He explained that in comparison to his previous workplaces, where permissions needed to be asked, he is now provided with autonomy and responsibility to decide on the ways how to conduct his daily activities and how projects are carried out. It was also emphasized that the organization supports daily work by providing help with technical aspects and any other things if needed. He summarized this by saying: “The position of management has shifted from giving orders from above into supporting productive work”.


The manager explained that the organization provides a possibility for employees to create and join in expert-communities where employees are free to decide on what interests them and improve themselves in that specific field. He continued that the only requirement for the subject of the community is that it has to provide value to the customers. He emphasized that employees are free to join any community regardless of the employee’s personal work projects, thus allowing them to learn new skills in different domains. The expert-communities were perceived by the manager to be really motivating and to improve employees’ skills.

When the interviewees were asked about how the organization monitors that projects finish within deadlines and quality is ensured, the manager explained that active presence and open communication are important. He summarized “I think that knowing the people around you helps you to understand if everything is going within schedule and if everything is going well or not”. He continued that the trust within personnel is important and allows project managers to foresee if employees are having difficulties and maintain open discussion with employees. Employee1 emphasized that agile methods are used in projects. She explained that after every sprint and production cycle, meetings are held to find out what has gone wrong and what could be improved. She noted that the ultimate responsibility for keeping projects within schedules is placed on project managers and organization trusts on individual projects to take care of their requirements. Similarly, Employee2 explained that project managers are ultimately responsible for monitoring that projects keep in schedules. However, Employee2 noted: “Even though our project managers and business units oversees the projects, a mindset is in place that individual employees take care of keeping projects within deadlines as long as they are known”. He continued that simple metrics such as following story-points and feature maps are used for monitoring projects’ advancement.

Considerable amount of freedom and autonomy is placed on individual workers in the organization. People are accounted with freedom and trust to do their work and relatively little formal controls are in place. However, projects are monitored with agile methods and feedback and improvement are discussed in sprint meetings. Overall, freedom values seems to be the dominant characteristic of the organization supported with adequate level of control.

**Participative decision making, Team working & cross-functional teams**

The interviews revealed that the organization clearly supports team working and cross-functional teams by providing employees means to work in groups and necessary premises for groups to work in. The manager explained that the organization aims to support team working by providing separate conference rooms for smaller groups to gather in. It was emphasized by Employee1 that the open office enables constant communication within project and spreads the communication even further since other project groups work in the same space as well.

When Employee2 was asked how innovation and creativity was visible in the daily work, he denoted that “It is almost a cliché that lots of teamwork is done in the IT-field”. He explained that, at least in his project, it was common for people to do their work together and rapidly change places where the group worked at. He continued that pair coding is often used which results in adhoc planning and brainstorming within the group. He summarized that team working and shared responsibility over work clearly supports creative thinking.

Also the possibility to form and join in expert-communities was seen as an enabler for cross-functional teams by the interviewees. It was summarized by manager that “People are free to find each other’s and form expert-community based on their interests”. It
was emphasized that the subject of the community didn’t necessarily have to be related to the current projects of the employee. Employee1 perceived that expert-communities were a good way to dissolve team boundaries. She also viewed that the communities provided possibility for employees to expand their way of solving problems and helps the organization when relocating workers in new projects.

Employee2 had similar thoughts regarding the expert-communities by noting that it is really beneficial that people can discuss matters with others interested in the same subjects, regardless of their current projects. However, it was explained by Employee2 that he wished for more interaction between different projects in the organization. He noted that leaders actively support cross-project interaction, but it was perceived not to happen all that often, but it is steadily increasing. He perceived that due the young age of the office and short time working in group, might be the reason that people are not yet familiar with each other’s. He continued that as soon as people get to know each other’s better, it will be easier to interact and discuss matters with cross-functional teams. Employee2 concluded that every social event, which are arranged quite often in the organization, directly improve the interaction between people in different projects.

It seems that organization has acknowledged the importance of team working and cross-functional teams. However, it was explained by Employee2 that cross-functional interaction is not yet that common. The open office premises were seen by interviewees to allow open interaction between teams but due to the young age of the social unit, the interaction is still developing.

**Ability to accept risks**

The ability to accept risks comes clearly present in the values of the organization. According to the manager and Employee2, bravery is one of the main values in the organization. The manager described it as follows: “We need to bravely bring up new ideas. For example, if a person has got an idea through hobby, and the idea is entirely different from others, we encourage to bring it forth and even try it with our customers. It also means that we can fail, as long as we learn from our mistakes”.

Employee2 noted that people in the organization are not afraid to talk about failures and there are lots of posts in the intranet which describe and open the occurred failure situations. Employee2 felt that people are encouraged to talk about failures and perceived it as the best possible information to be shared with others so they can avoid making the same mistakes. Similarly, Employee1 emphasized that retrospects are used to learn from mistakes and encourage employees to the practices which have gone well.

Employee1 emphasized that projects aim to foresee risks beforehand and inform customers about them so they can be avoided and projects can be held in schedule. Employee1 emphasized that people are free to decide how the projects are implemented as long as the project’s status is within schedule. Similarly Employee2 explained that evaluating risks is a continuous process and if risks are deemed too high, reactions will be taken to avoid them. Employee2 gave an example that in one of his previous projects, risks were seen to rise too high so the project group decided to change the underlying technology entirely. The new technology was beforehand considered more risky than the original, but the risk paid off as the original technology was found out to be incompatible with the project.

When employee2 was asked how he perceived risk taking in the organization, he responded that people are encouraged to take risks. He noted: “We do not quite start from scratch when making decisions about new technologies, but instead we prototype
the feasibility of the solution in smaller parts. Often we experiment with single module in a controlled test environment and expand the usage if it is deemed feasible”.

It would appear that considerable amount of freedom is given to the project groups and individuals on deciding how projects should be implemented. Risks are evaluated continuously and organization supports at trying new approaches and ideas. Failure is seen as a possibility to learn from mistakes and people are not afraid to talk about mistakes, but instead, people are encouraged to share the reasons and stories behind the failures.

5.2.2 Climate

The climate was described by the manager to be friendly and everyone was perceived to be close to each other’s. He continued that people within the organization enjoy being together and it is easy to work in the organization.

According to Employee1, the feeling in the organization was that everyone encourages each other’s to do their work well. She summarized “We want to create a great products for our customers and we are excited about it. We want to be able to be proud of what we do and we want the customer to be satisfied with the result”. It was also emphasized by the Employee1 that the high enthusiasm towards work has a drawback that sometimes it can turn into stress. However, it was noted that the value of caring also shows in this aspect and co-workers will observe such situations and tell people to loosen up their work pace. Employee1 summarized that the climate that has emerged in the organization really is innovation supportive.

Similarly, Employee2 explained that the climate within organization is casual and enthusiastic. He noted that even though the project he works at is sometimes stressing, the general climate has remained relatively relaxed.

Psychological safety

All of the interviewees perceived that there were no boundaries for employees to discuss matters with their superiors. The manager noted that the organization has put effort into creating a culture where feedback is given in a more continuous manner. He explained that the organization has arranged two campaigns in the last autumn in which people were rewarded with candy when giving feedback to each other’s. The manager noted that the other campaign was held specifically for receiving negative feedback from co-workers.

Similarly, Employee2 noted that feedback campaigns have aimed to support employees to give as much feedback as possible to each other’s, but also upwards in the hierarchy. Employee1 mentioned feedback campaigns multiple times throughout the interview. She emphasized their importance and explained to have gotten plenty of feedback. She clarified that sometimes when the feedback was negative, she improved the pace of working and then also received positive feedback from that as well.

However, when the manager was asked if feedback campaigns could be seen to have changed the culture, he expressed that: “Especially, when the campaigns start, the enthusiasm is high and level of feedback rises. However the feedback culture has not yet become fully embodied in the daily work”. He perceived that it is good practice to arrange these campaigns approximately three times a year and currently the level of feedback given is steadily increasing.
When Employee1 was asked how the informal rewards affected the climate in the organization, she responded “Everyone in the organization are allowed be themselves and act the way they feel natural to them. We are such a colorful bunch”. She also noted that due to the young age of the office in Oulu, the culture is still forming and everyone who is recruited, will bring their own unique part to the culture. She noted that new employees do not have to adapt to strict culture where the following applies: “We have always done things this way, you can’t do it like that”. She concluded that in older offices and firms, the situation could be different and things would maybe require more intense debate over subjects.

Employee2 felt that differing opinions between people are generally discussed openly and the situations are not hushed. He perceived that even very difficult situations have been possible to be addressed objectively. However, he noted that he personally haven’t really witnessed any serious conflict situation within the organization. The manager explained that one of the important tasks for managers is to talk to people and ensure that everything is going well and people enjoy themselves in their work.

Overall, the organization has clearly put effort into making climate for open and continuous feedback where no hierarchical barriers exist. Informal discussions are held with managers and employees to see that everyone is doing well. The active caring for the employees can be perceived to reduce the chance for conflict situations to arise.

**Task support**

When asked how innovativeness and creativity were visible in daily activities of the organization, manager responded: “*Even if the person does not realize it, programmer’s whole work is based on creativity*”. He continued that the organization aims to support every day’s creativity by providing little things such as enough whiteboards and casual conference rooms for groups and individuals to work at. Similarly, employee2 perceived that it was important that enough rooms were provided for groups to gather during the work days. He noted that the freely accessible conference rooms made it possible to ask co-workers to gather in one of them, away from disturbing other people in the office.

The manager also explained that employees are provided the possibility to work remotely. He noted that when employees are faced with a difficult task, many prefer to stay at home trying to solve the problem. He emphasized that the organization aims to be flexible in such situations. The manager summarized: “*The working conditions need to match the needs of the employee every day and the needs are not the same daily*”.

When Employee1 was asked how she perceived the office and physical arrangements, she noted that the open office itself improved the communication within projects. She continued that open office also extended the communication to other project teams working in the same space. However, Employee1 noted that the interior decorations were pretty dull and therefore did not boost creativity. When probed further what she would change, she responded that the overly white paint on the walls could be changed and more plants could be brought to the office to cheer up the interior. However, both Employee1 and Employee2 concluded that the office space was temporary and is soon moving into new premises where the interior design will be different.

When manager was asked how the organization aims to support innovation, he explained that constant strive exists for improving employees’ working conditions thus focus is not solely placed on innovation. He explained that Oulu’s office is small and focused on software developers and therefore creativity is most easily supported by
improving working conditions. He gave an example that, if more user experience personnel will be brought to the office, creativity will need to be addressed even more.

Employee2 summarized that getting necessary resources was no problem. He concluded: “If something was needed, it was instantly acquired. Equipment costs are after all cheap compared to the personnel”. However, a single suggestion for improvement was mentioned by Employee2, who explained that there was no person responsible for technical support in the office of Oulu, which has caused frustration occasionally.

It was perceived that the organization provides necessary resources for employees to do their daily work. High emphasis is placed from managerial side to support the wellbeing of the employees and constant improvements are made for the working conditions. Current premises were perceived a little dull and therefore not inspiring creativity. However, the office is soon moving into new space, therefore making it possible to improve this aspect.

**Goal emphasis**

As explained by the manager, the organization does not solely focus on improving innovativeness but rather daily creativity is improved by supporting working conditions. The expert communities were seen by the manager to support employee creativity and enable people to freely follow their interests. The manager also mentioned that informal coding competition events are arranged by the organization, in which people gather in the office to spend time together. It was perceived that these coding events improve the expertise of the employees while allowing them to try different ideas. Interestingly, these coding events were not mentioned by either of the employees.

Similarly to the manager, both of the employees viewed expert-communities to support creativity and innovativeness to some extent. When Employee1 was asked how she perceived expert-communities to support creativity in practice, she emphasized that the main idea is to extend expertise of employees and allows viewing alternative solutions on how to solve things. She continued that this also allows employees to learn things outside from their current projects and therefore not limit their expertise to their current projects. Similar notion was made regarding expert-communities by Employee2: “It’s really great that our leaders have actively supported it financially and made it possible, that people are free to choose how they want to improve themselves. It allows people to get together and discuss with others interested in the same subject. It feels really fruitful”. Employee2 also noted that expert-communities are filled with people who experiment with different technologies because of their hobbies and interests and share their experiences. Employee2 perceived this to be helpful when adapting new technical solutions in practical work.

On top of the expert-communities, Employee1 mentioned information sharing seminars, which are arranged often in the organization. She explained that people are encouraged to participate and hold them often in order to learn more and thus be able to guide customers even better. Employee1 emphasized that information sharing seminars and expert-communities are both based on freedom of choice, and therefore perceived them to support employee creativity.

Employee2 noted that even though the organization has grown into the size of employing 400 employees, the level of bureaucracy has not increased in the organization. He noted: “The leaders seem to be very committed to live with constant change and improving our operation model in a continuous manner”. He continued that ongoing improvement is also an important value in the background.
In summary, both employees perceived that the organization aims to creativity by providing chances for employees to join in expert-communities to expand their expertise. It was also perceived by employees that continuous improvement of work models and constant learning was emphasized by the organization. However, very little information was visible in the interviews on how new ideas were processed in the organization, and if any organizational support mechanisms were in place to develop the ideas into innovations. It would appear that both employees perceived creativity and out of the box thinking to be supported by the organization’s climate.

**Means emphasis**

Interestingly, as described the manager, the organization tends to avoid predetermined processes and leaves the decision to its individual projects to make. This was perceived by Employee1 to allow projects to autonomously customize the processes to fit the unique needs of the project and improve the working models as was seen fit. Similarly Employee2 touted that considerable amount of freedom was provided in making decision over technologies and used tools. It was also emphasized by Employee2 that almost all of the employees work directly with customers and he perceived that most of the innovations come from the interaction with them.

When Employee1 was asked how she encouraged employees to act creatively in her projects, she expressed that setting goals was important. Employee1 noted that retrospect is an important tool that is used to find out what needs to be avoided in the future and what kind of behavior will be encouraged. She also explained that discussions are held twice a year about what the employees wanted to do in the project, and in which direction they wanted to develop their career. She noted: “As a project manager, it is good to know how people want to improve themselves. I personally would like to keep the same employees in my project for hundred years, but that would kill the motivation”.

Both of the employees perceived that autonomy and freedom provided for decision making supports creativity and innovation. Based on findings by Tesluk et al. (1997), since emphasis of group working and cross-functional teams were identified by all of the interviewees, it could be assumed that employees are conveyed with knowledge on how to do their work creatively. However, the perception of means emphasis, was not clearly visible by analyzing the interviews.

**Climate for initiative**

Regarding the climate for initiative, the bravery value emphasized by the manager and Employee2 implies a climate where people are encouraged to actively bring up new ideas. The manager explained that exceptional ideas, brought up by people, were encouraged to be tried in the field and concluded that the organization has had really good experiences about doing so.

When manager was asked what kind of employee are valued in the organization, he noted that the intrinsic motivation to solve problems is an important aspect of employee. He continued that when such employee is faced with a problem, he/she will cherish the opportunity and actively search for way to solve it. Similarly, when Employee2 was asked the same, he noted that it is quite central that people are willing to get out of their comfort zone to try new things.

A notion made by Employee1 when asked a about what kind of behavior is rewarded also speaks for climate of initiative being in place “We want to be guides for our customer, so we do not leave our customers to struggle alone with their problems, but instead we aim at suggesting solutions proactively before the problem situations even
arise”. Employee1 continued that this kind of behavior is what is usually rewarded in the organization and how employees are encouraged to act.

Also expert-communities are based on freedom of choice and proactive behavior and employees are encouraged to create their own communities based on their interests. The possibility to follow one’s interests itself is initiated by the employee and as explained by the manager, the organization simply provides a framework and support to enable such behavior. Employee2 emphasized that people in the expert-communities are genuinely interested in the subjects and they try different technologies on their free time and share their experiences. It was explained by Employee2 that this really helps at adapting the technologies in practice.

It would appear that the organization supports employees to bring up new, sometimes uncommon ideas, and try them in practice. Employee initiative is expected and such behavior is rewarded. Employees are provided with freedom to follow their interests and actively try new approaches for solving problems. It would seem that climate for initiative is in place and recognized by employees.

**Reward emphasis**

When asked about how employees are rewarded for success, it was explained by interviewees that multiple different informal reward mechanisms are in place. The manager explained that colleague-thanks mechanisms is in place in the organization where employees can acknowledge co-workers by buying gifts to each other’s. The manager explained that the only requirements for doing so is to write a narrative of the situation and post it in the intranet with an explanation and picture of the reward. Manager perceived that not having to ask superiors for permission to do so, is a good practice.

Another informal reward mechanisms mentioned by manager was a Champaign bottle that circled in the organization. He explained that the person who receives it can reward a co-worker with new bottle in the next week. It was emphasized that there does not have be a specific reason for rewarding someone, but instead the person is free to make their own choice on who to reward and based on what reasoning. The manager emphasized that such little recognitions have quite a big impact on the climate. However, this reward mechanism was not mentioned by either of the employees.

Employee1 emphasized that actions that are aligned with the values of the organization are usually rewarded. She gave an example that proactive problem solving is one behavior which is usually rewarded. Employee1 also mentioned that there is a big variety of different types of rewards where organization acknowledges employees in certain organizational ceremonies or for example, rewarding all of the personnel with Christmas presents.

Employee1 emphasized that many of the rewards are highly informal and she gave an example: “Since none of the Oulu’s site employees were officially rewarded in the last pre-Christmas-party, Oulu’s site manager rewarded one of the employees with a self-made present.” Employee1 also noted that criterion for the manager’s reward was the employee’s willingness to help others and being voluntary to do things. Employee1 perceived that the reward mechanisms support employee creativity and innovativeness. Employee2 perceived that getting recognition for sticking one’s neck out is really important for the community, but does not necessarily support innovation. Along the same lines, the manager summarized that rewards are usually given when people are willing to “put all in” or putting a little extra effort into things while showing their skills.
Employee2 perceived that there are multiple informal ways for rewarding employee success in work, and they are rarely financial. He noted that colleague-thanks is the only formal reward mechanism in place. When Employee2 was asked if the reward mechanisms supported innovation, he responded: “I think what really counts is that the work is pragmatic and support is given in daily practice. I do not see that individual recognitions or rewards really supporting innovation, but rather the support and freedom given in daily work”.

Interestingly, both of the interviewed employees mentioned the feedback culture when asked about rewards. Employee1 noted that in all levels of the organization constant feedback is given. Employee2 perceived that the management has really put effort into getting employees to give each other’s as much feedback as possible and it shows in daily practice. It was perceived by Employee2 that the emphasis on feedback culture is one of the organization’s advantages.

In summary, all of the interviewees described multiple reward mechanisms that are implemented in the organization. Most of the reward mechanisms identified were described as informal and the rewards were mostly given from employee to one another. The rewardable actions were perceived by interviewees to emphasize sticking one’s neck out and helping others. No clear distinction about creativity and innovation being rewarded could be identified from the interviews. However, the overall climate of recognition and rewarding seems to be strongly embodied in the organization.

**Recruitment**

When interviewees were asked what qualities were important for an employee in the organization, the interviewees seemed to strongly emphasize the organization’s values. The manager described that passion towards work and intrinsic motivation was something that he personally valued highly on an employee. He explained that it is the attitude that matters most and summarized the aspect to be enthusiasm towards solving problems. The manager explained: “When a person has something that drives him/her and he/she is willing to do something that improves oneself, it brings motivation and improves the person a lot”.

When Employee1 was asked of the important qualities of an employee, she summarized that positive attitude, willingness to communicate with each other’s and sharing of personal expertise were important. She concluded that the desire to help one another and the ability to cooperate and ultimately make the customers happy were crucial.

Employee2 emphasized that the employee must get along with people. He noted that being able to adapt into different situations and the ability to think from different points of view is important for the employee. It was also explained that the general expertise in the organization is really high and therefore good domain skills are required. It was emphasized that due to the customer oriented work, the employee must also be able to work with customers and think from their point of view. It was concluded that bravery to get out of the personal comfort-zone was quite centric for an employee in the organization.

All of the interviewees’ perceptions of important qualities of an employee seemed to reflect the mission statement and organization’s values. Both of the employees emphasized the ability to work with customers, which is not surprising since the digital guidance was explained to be organization’s goal. According to the manager, passion
and enthusiasm were important qualities for an employee, which are clearly linked to the identified organizational values.

5.2.3 Case findings

Cultural findings

In the interviews with Solita, all the aspects of innovation supportive culture were analyzed as congruent apart from diverging perception regarding cross-functional teams (see Table 6). During the interviews, it became quite apparent that the organization had put emphasis into conveying its value system and business goals to its employees. The organization’s emphasis on culture was visible as all of the interviewees described the culture in a similarly and the named values were closely related.

All of the interviewees described that group working is emphasized and it is a common work practice in the organization. It was explained by all of the interviewees that necessary resources and support is provided for employees to work in groups. However, according to Employee2, the utilization of cross-functional teams was still quite scarce despite of the management’s efforts to increase it. He explained that the young age of the social unit of Oulu could be the reason why utilization of cross-functional teams was not that common yet.

Table 6 - Culture perception findings Solita

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<tr>
<th>Innovation supportive culture - Solita</th>
<th>Findings (manager = M, Employee1 = E1, Employee2 = E2)</th>
<th>Perception congruence</th>
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</table>
| **Mission statement**               | • Digital guidance for organizations customers identified as the main organizational goal - (M, E1 & E2)  
• Caring is the main value of the organization – (M, E1 & E2)  
• Commitment and support towards employees is one of the main emphases within the organization – (M, E1 & E2)  
• Sharing information and expertise with co-workers is emphasized – (E1) | Congruent |
| **Freedom & Control values / Flexibility** | • Employees are provided with autonomy and trust to do their work – (M, E1 & E2)  
• Predetermined processes are avoided and instead individual projects are free to decide what kind of processes are needed – (M, E1 & E2)  
• Freedom to follow one’s interests through expert communities – (M, E1 & E2)  
• Management’s role shifted towards support instead of giving orders - (E2)  
• Active presence and open communication used to monitor projects. – M  
• Agile methods are used to monitor projects – (M, E1 & E2)  
• Project managers have the ultimate responsibility over projects but individual employees have shared responsibility to keep projects in schedule (E1 & E2) | Congruent |
### Climate findings

The climate perceptions revealed more varying results since on top of congruent and mostly congruent aspects, slight incongruence could also be identified regarding the reward emphasis (see Table 7). Not enough information could be analyzed of the congruency of means emphasis.

In the climate of psychological safety, all of the interviewees identified feedback culture as one of the organization’s strong points. The perceptions between employees and manager could be analyzed as mostly congruent since both of the employees explained that constant feedback is given and received. In contrast to the employees’ perceptions, the manager noted that feedback culture has not been fully embodied in the organization but instead each feedback campaign temporarily raises the activity.

In task support, the perceptions between the interviewees were mostly congruent regarding the support and resources given by the organization aiming to increase innovation and creativity. According to the manager, organization has aimed to support innovation by improving the working conditions of its employees by providing necessary resources and premises. However, minor differences were visible, since Employee1 explained that the interior decoration was bit dull and therefore not supportive of creativity. She perceived that creativity could be further increased by cheering up the organization’s premises by painting the walls and adding plants. Regarding the sufficiency of resources, Employee2 explained generally the resources are sufficient and resources are acquired if needed. However he noted that the lack of dedicated person responsible for technical support has caused occasional frustration.

The reward emphasis was the most differing aspect regarding its effectiveness on supporting innovation and creativity. All of the interviewees identified that multiple reward mechanisms are in place and most of them are informal. However, differences could be analyzed in the employee’s perceptions since Employee1 identified reward mechanisms to support creativity and innovation, whereas Employee2 perceived that daily support and pragmaticalness of work are more important aspects for creativity.

<table>
<thead>
<tr>
<th>Participative decision making, Team working &amp; cross-functional teams</th>
<th>Mostly congruent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Group working and pair coding is common working method. Supports employee creativity – (E2)</td>
<td></td>
</tr>
<tr>
<td>Organization supports and encourages team working by providing necessary premises and resources – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td>Active support from management for cross-functional teams but not fully realized in practice – (E2)</td>
<td></td>
</tr>
<tr>
<td>Expert-communities are a good way to dissolve team boundaries – (E1)</td>
<td></td>
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</tbody>
</table>

<table>
<thead>
<tr>
<th>Ability to accept risks / risk-taking</th>
<th>Congruent</th>
</tr>
</thead>
<tbody>
<tr>
<td>Bravery is one of the main values in the organization – (M &amp; E2)</td>
<td></td>
</tr>
<tr>
<td>Risks are evaluated continuously – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td>Organization supports at trying new approaches and ideas – (M &amp; E2)</td>
<td></td>
</tr>
<tr>
<td>Failure is seen as a possibility to learn from mistakes and people are not afraid to talk about mistakes, but instead, people are encouraged to share the reasons and stories behind the failures – (M, E1 &amp; E2)</td>
<td></td>
</tr>
</tbody>
</table>
### Table 7 - Climate perception findings Solita

#### Innovation supportive climate - Solita

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Findings (manager = M, Employee1 = E1, Employee2 = E2)</th>
<th>Perception congruence</th>
</tr>
</thead>
<tbody>
<tr>
<td>Overall climate</td>
<td>• People are proud of their work (E1)</td>
<td>Congruent</td>
</tr>
<tr>
<td></td>
<td>• Enthusiastic climate (E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Casual and friendly place to work at (M)</td>
<td></td>
</tr>
<tr>
<td>Psychological safety / Socioemotional support</td>
<td>• Organization puts high emphasis on feedback – (M, E1 &amp; E2)</td>
<td>Mostly congruent</td>
</tr>
<tr>
<td></td>
<td>• Feedback culture not yet fully embodied in the daily work – (M)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• No hierarchical boundaries between employees and managers – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• People are allowed to be themselves and diversity is cherished – (E1)</td>
<td></td>
</tr>
<tr>
<td>Task support</td>
<td>• Open office supports creativity by expanding interaction between projects – (E1)</td>
<td>Mostly congruent</td>
</tr>
<tr>
<td></td>
<td>• Organization provides necessary resources and premises to support creativity – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Office interior perceived a bit dull therefore not increasing creativity - (E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Lack of person dedicated to IT support has caused frustration occasionally – (E2)</td>
<td></td>
</tr>
<tr>
<td>Goal emphasis</td>
<td>• Employee creativity is improved by supporting working conditions – (M)</td>
<td>Congruent</td>
</tr>
<tr>
<td></td>
<td>• Expert communities perceived to support creativity by allowing to view problems from alternative perspectives – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employees are encouraged to participate in information sharing seminars to expand their expertise – (E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Organization committed to living with constant change and improving working models – (E2)</td>
<td></td>
</tr>
<tr>
<td>Means emphasis</td>
<td>• Organization emphasizes freedom and autonomy - (M, E1 &amp; E2)</td>
<td>N/A</td>
</tr>
<tr>
<td></td>
<td>• Employees encouraged to follow their interests and improve their expertise in that field - (E1)</td>
<td></td>
</tr>
<tr>
<td>Climate for initiative</td>
<td>• Employees are encouraged to actively bring up new ideas – (M &amp; E2)</td>
<td>Congruent</td>
</tr>
<tr>
<td></td>
<td>• Employees are willing to get out of their comfort zone to try new things – (E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employees are encouraged to proactively solve problems - (E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employees are able and expected to join and start expert communities - (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Employees are genuinely interested in technologies and share their insights with each other’s – (E2)</td>
<td></td>
</tr>
</tbody>
</table>
5.3 Case – Sysart

Sysart is a small IT house in Finland which employs approximately 40 employees. The organization has its headquarters located in Helsinki but also has an office in Oulu. Sysart aims to provide its customers customized products and helps them to digitalize their business. According to the interviewed manager, the organization’s culture has been in transition for the last year and expected that the changes are yet to be fully embodied in the organization.

The interviews conducted with the organization included Oulu’s site product development manager with approximately 3 years in the current position. The employees interviewed included an employee currently working as a technical lead with 4 years in the organization (Employee1) and a software developer with little less than a year in the organization (Employee2).

5.3.1 Culture

Mission statement and values

When asked about organizational goals and emphasized values, all of the interviewee’s described creating value for the customers as one of the main goals of the organization. It was described by the manager that the organization aims to provide its customers new and better services through digitalization. Similarly, Employee1 identified that the main goal of the organization is to provide value for its customers. Employee1 noted: “It is necessary to understand what the customers want and what they actually need. The aim is to get comprehensive view by digging deeper into the situation and from there to start developing”. Employee2 seemed a bit unsure on how to answer the question, but he summarized that the organizational goal is to expand the clientele by doing more business with enterprises rather than with individuals.
When the interviewees were asked about which organizational values were emphasized to reach the aforementioned goals, both similarities and differences were visible. The manager noted that emphasis is placed on being agile and flexible, while pursuing to establish partnership with the clients. He explained that collaboration is used to identify and implement solutions based on how the customers want to improve their services for their clients. The manager also noted that from internal point of view, the organization aims to create a good and motivating work environment for employees to work at. When the manager was further asked how this endeavor was visible in practice, he responded that it is transmitted through climate in which employees are provided challenging and interesting tasks, which helps them to constantly learn new things.

Employee1 emphasized that customer orientation is one important value for the organization. It was explained by Employee1 that the organization is committed to the customers and the organization is flexible with the changes and demands required by them. It was further noted that the organization responds to the demands in a quick manner, so instead of weeks, the changes can be often executed within days.

Employee2 explained that he personally has not been much in contact with the customers due to his project. It was noted by Employee2 that customer orientation is quite important value for the organization, as for example in his project, all the feature demands come from the customers. Employee2 also stated: “From what I have understood, the executive team has put effort into making the organization more open, where all the decisions are made together”. When asked further if this was visible in the organization, he responded that it is still quite fresh idea but changes could already be seen for example in the form of the new wage-system, which is being planned with all of the personnel.

Overall the interviews identified that providing value for the customers seems to be a central value in the organization. Emphasis is placed on being agile and flexible where collaboration is emphasized when doing business with the customers. Employee2 had a bit trouble at naming the values emphasized by the organization, but this could be due to the relatively short time in the organization. A statement by the manager arguably supports this view “We do not have clear values written in the office walls, but instead we strive for that the values get assimilated by working here”.

**Freedom & Control values / Flexibility**

When asked about values emphasized by the organization, the manager denoted that the organization has strived to divide decision making into lower levels of hierarchy. He summarized: "The basic principle is to bring the decision making as low in hierarchy as necessary, so there is no bureaucracy or hierarchical setups, but instead the decisions are made where they are possible to be made". However, the manager noted that this endeavor has started in the office of Helsinki, whereas in Oulu, the changes are yet to be embodied. He emphasized that the way of acting is gradually changing into this direction. Similarly, Employee1 stated that the organization has a low level of hierarchy: “I do not even feel like I have a manager in my work”. He continued that the manager looks after multiple projects and sees after what needs to be done. Then open discussions are held about who is responsible for what, and who is best suitable to do the task. Employee2 noted that there is lots of informal communication in the organization about different topics such as wages, recruiting and similar subjects. However, he noted that the communication is handled mainly through Slack-service, while relatively little face-to-face communication is held with the executive committee.

When asked how the organization supports innovation, Employee1 emphasized that employees are provided with freedom to do their work. He noted that along with the
freedom, the employees are also responsible for the feasibility of their solutions. He noted: “There has yet to be time when I have been prohibited of doing things my way, which is quite interesting”. The manager noted that employees are provided freedom to do their work and project teams are free to decide on their own schedules and processes. He summarized that the work environment and freedom is visible in way that it doesn’t dictate how work should be done.

When the interviewees were asked about how organization keeps projects within schedules and how quality was ensured, the perceptions varied between different projects. The manager explained that in the customer projects, it is common for him to monitor the progress with the project managers almost every day. If problem situations would arise, they would be solved together. He emphasized that in these projects, no formal reporting practices were in use. Employee1 emphasized that in the customer projects he works at, the requirements could change in daily basis, and therefore making a strict schedule is nearly impossible and eventually pointless. He noted that the organization has headed in the direction that no strict schedules are designed, but instead constant modifications are made on what features are delivered and in which timetable and deadlines.

The manager also emphasized that project leaders are expected to be active in bringing up problem situations and ask for help if the projects seem to go off schedule. He also noted that team meetings are held in every two weeks, which was perceived as a tool for information sharing. Employee2 explained that SCRUM is utilized in generating the schedules in his project. He noted that design meetings are held once in two weeks in which bigger features are examined and how they should be developed. The manager and Employee2 also noted that some projects use JIRA for monitoring their progress. Employee2 explained that the manager is not directly involved in the project meetings regarding his current project, but the project manager reports the status to the supervisor. When Employee2 was pried if this reporting was informal, he noted that there are some formal reports that the project manager is responsible to deliver up to the CEO. When Employee2 was asked if this was a good practice, he responded: “This might be more of a subject for the leaders to discuss, but I think reporting is mandatory”. He explained that projects can’t be carried out blindly and it is important to know how much effort and money has been spent on the project to determine if it is profitable.

Freedom and flexibility in the daily work was visible in all of the interviews. Low level of hierarchy and organization’s pursuit to lower the hierarchy even more, was also identified by the employees. The projects were explained to be monitored continuously by the superior and project managers where problem situations were solved together. Reporting practices varied depending on the type of projects, in which customer projects would appear to be quite flexible and informal.

**Participative decision making, Team working & cross-functional teams**

According to the manager, high emphasis is placed on participative decision making by the organization. The manager noted that project teams are provided with autonomy to make their decisions and organize their own projects. In the end of the interview, the manager noted that participative decision making is also utilized when brainstorming new products or business concepts. He continued that the organization has recently hired a new marketing person who is partly responsible for the marketing, but still most of the improvement ideas come from the whole group rather than a single person. However, the manager noted that the search for improvement ideas is not constant, but
it has risen through executive committee’s effort to find new business prospects for the future.

Employee2 explained that in his daily work, ideas and opinions are openly shared and discussed with co-workers in order to determine the best way to solve daily tasks. He continued that in daily SCRUM-meetings, the project manager knows in which domains employees excel and therefore respects and takes all their opinions into account. Employee2 emphasized that the organization has pursued to generate a culture in which everyone is encouraged to speak up their minds and everyone’s opinions matter. However, Employee2 concluded that the amount of ideas and opinions is much dependent on the individual, thus talkative people get more benefit out of it.

Cross-functional teams can also be seen in the interaction between the organization and its customers. The manager gave an example that with organization’s customer, welfare service of Espoo, the organization has managed to establish partnership relationship. He summarized: “We collaborate together with the customer on how services can be improved and how new services could be brought. In this case, the common view on client and customer has shifted towards partnership”. Similarly, Employee1 mentioned that he is directly in collaboration with the client by attending their project meetings and sometimes spending time in the customer’s premises. Employee1 emphasized that open discussion are held with the customer on how things should be developed and improved. It was explained that in case of problems, the customers take contact with him directly.

In the end of the interview with Employee2, he noted that relatively little cross-project interaction happens within the organization and perceived that having more of it could be beneficial for creativity. Employee2 continued that similar tasks are being done also in other projects and there has been talk about sharing ideas between the projects. He stated: “I think we do the same project in multiple different projects, just a bit differently”. When Employee2 was asked if more emphasis on information sharing between projects could be beneficial, he noted that group learning days could be arranged especially for the user interface development. However, he concluded that there has been plans for arranging such day for the user interface in the following days.

All in all, the organization aims to divide decision making to lower levels in hierarchy, which was clearly visible in the interviews with the manager and Employee2. All of the personnel are free and encouraged to suggest and bring their ideas regarding ways to improve the products and business. However this was not seen as a continuous process but rather a reflection of the executive committee’s pursue to identify future prospects.

Cross-functional teams were visible in the collaboration with customers where customers were integrated in the design and development process. However, from internal point of view, more emphasis to support cross-functional teams was seen to be needed by Employee2 and the manager in order to support creativity and information sharing. Relatively little information could be analyzed about team working in general, but project teams were perceived to be highly autonomous and free to decide how to solve their own tasks.

**Ability to accept risks**

The manager emphasized that when defining and developing new features, employees in the organization are encouraged to think and propose solutions from different perspectives.
When asked about how mistakes and problem situations are handled in the organization, all of the interviewees emphasized that mistakes are always learning situations. Employee1 noted that if the mistake is really worth examining, the whole organization is brought in to hear about it. He continued that the same practice is utilized from time to time with positive situations as well. Employee2 summarized that mistake situations are calmly analyzed to identify what had gone wrong and how the mistakes could be avoided in the future. The manager emphasized that at first, the acute crisis is dealt with and after that examined what went wrong and what could be learned.

5.3.2 Climate

In all of the interviews, tight schedule and hurry was apparent. When the manager was asked what kind of climate exists in the organization, he started describing the climate as follows: “There is much to do and lots of hurry. We could even use more employees”. When asked further, how the hurry affects the climate in the organization, the manager perceived that due to the hurry, aspects related to innovation and improvements, are easily left unaccounted. However, the manager noted that the hurry has been addressed and there has been open discussion with the projects regarding it.

Employee2 described the organizational climate as a good and open climate where no aggression is present, unlike in his previous work places. It was perceived that hurry has had little effect in his project and he noted that the climate has not turned aggressive as a result. He continued to describe the climate as open, where people can freely discuss matters with their superiors.

Interestingly, Employee1 noted that there is no single climate that could be said to encompass the whole organization. Instead, Employee1 described that multiple different climates exist between projects and groups, where the nature of the projects determine the climate. Employee1 perceived that in customer projects, the hurry is present in daily work, whereas in product development, the schedules are not as tight and the work seems more relaxed. On top of that, Employee1 described that the organization has employees in Espoo and scattered around Oulu in customers’ premises. Therefore people do not see what goes on in different places and it is really hard name a single overarching climate.

Psychological safety / Socioemotional support

All of the interviewee’s perceived that there is no boundary to talk to managers. The manager viewed that superiors are easily approachable for the employees. Employee1 noted that the manager sits right next to the employees and there are no boundaries to discuss matters with him.

Employee1 emphasized that the overall hierarchical structure in the organization is very low and the organization strives to lower the hierarchy even more. He pointed out: “As we aim to lower the hierarchy even more, the term manager may soon become quite obscure on what it means”. He continued that the manager’s role might change into more supportive function and work might become more like interaction with equal peers. However, Employee1 noted that support is also given by all of the personnel in the organization, thus the manager’s work might need to change into something completely different.

Employee2 perceived that the values of managers and employees are very similar. When asked what he meant by that, he noted that all of the employees are regarded as equals regardless of the status of the employee. It was also perceived that the climate
supports open communication in way that employees can discuss matters openly with superiors. Employee2 summarized this by following: “There is no boundary to go to talk with the manager and you do not have to fear what you say to them”. Employee2 explained that the open communication becomes visible for example in performance appraisal in which the employees are free to speak up their mind and even give critique on subjects.

When Employee2 was asked about how innovativeness and creativity were visible in daily work, he noted that open discussion are held within his project about how daily problems should be solved. He emphasized that everyone gets to speak out, and no-one’s opinions are ignored.

Overall, the organization seems to embody low level of hierarchy where employees are regarded as equals despite of their hierarchical status. Open communication was mentioned by all of the interviewees and managers were seen to be easily approachable. To conclude, a climate with psychological safety and socioemotional support seems to exist.

**Task support**

Employee2 described that he is provided with constant feedback from his mentor if mistakes are made in programming. He noted that often this feedback is quite strict and direct but also constructive, thus helping him to learn from his mistakes.

It was also emphasized by Employee2 that lack of resources is visible in almost all of the projects and the management has been informed about it. Similar notion was given by the manager who denoted that open discussions have been held about the subject. Due to the hurry in the organization, the manager perceived that efforts to increase creativity and innovativeness are easily left neglected.

However, relatively little information could be analyzed in the interviews about the level of task support in the organization in other fields of task support such as training and equipment available. The manager expressed that continuous improvement and modifications are made on how work is conducted in the organization.

**Goal emphasis**

It was explained by the manager that the organization has strived to support creativity and innovation by putting effort into creation of user interface concepts. He explained that the organization has recently hired an employee in the office of Helsinki whose responsibilities include creating concepts and user interface design. Further, the manager explained that when making offers with the customers, the organization has strived to provide a working demo along with the concepts. He summarized: “We have noticed that creating a dynamic demo stirs more thoughts in our group rather than making drafts on flip chart. Instead, the demo is working concept and based on that, we can brainstorm and innovate”.

When Employee2 was asked about how he perceived demos to support creativity and innovation, he noted that the demo-environments do not improve creativity and innovativeness in his work. He continued that the demo environments are customized to the specific client, but instead, test environments are more visibly creative supportive in his daily work by allowing to think alternative solutions and reasons for bugs. When asked further about the demos, Employee2 emphasized that they might spur lots of thoughts and ideas for the employees more directly associated with the customers. He
summarized that demos enable people to get more ideas from the customers on how things could work, but the demos do not really improve creativity in his work.

When Employee1 was asked how he perceived organization to support innovation, he noted that there has been effort to change employees’ approach when new features or products are asked by customers. He explained that instead of instantly trying to decide on how the problem should be solved, the problem would be viewed more openly. He explained: “It is much better approach when the final solution is left open. The original proposer might have strong opinions about how things should be solved, but it is very likely that better solutions are found from elsewhere as long as people are not convinced that there is only one predetermined way to solve it”.

It was also explained by the manager that employees are provided the possibility to spend one day a month for self-learning, which does not necessarily have to be directly linked with the current projects of the employee. It was noted by the manager that this enables employees to have time for innovation. However, the manager emphasized that the self-learning days are left unused by the product development team for some reason.

When the employees were asked how they perceived the possibility for having a self-learning day, both of the employees noted that they had never had one. Employee1 perceived that the self-learning days do not really improve creativity or innovativeness, but rather helps people to learn new things while broadening their expertise. However, he continued that innovation requires background knowledge and therefore the self-learning days might help to provide necessary knowledge, and therefore be beneficial for innovation indirectly. Employee1 emphasized that people in Oulu’s office do not spend self-learning days and it is a big problem. When Employee2 was asked if he perceived self-learning days to support innovation and creativity, he noted: “Definitely! When people are allowed to work freely, that is when new ideas emerge. Especially if the work is done in groups”.

The manager also denoted that similarly to the self-learning days, the organization has arranged improvement days where people gather as a group to program something informal together. However, the manager noted that there has not been any improvement days in the last half year at Oulu’s office. When the manager was asked if he perceived these improvement days to be supportive of innovation and creativity, he responded: “Yes absolutely! We should probably arrange more of these from now on. However as we aim to steer our organizational culture towards more active and self-governing direction, the management does not intentionally arrange these events, but instead, we hope that activity rises from teams and the ideas come from there”.

When employees were asked of the improvement days, both of them perceived that it would be useful way to generate ideas and brainstorm something new. However, similarly to the manager’s view, Employee1 noted that there has only been 2-3 improvement days in the last couple years. Employee2 perceived that the improvement days are specifically designed to support creativity and innovativeness within the organization. When Employee2 was further pried if he perceived them useful to reach the objective of innovativeness, he summarized it quite metaphorically: “It is probably one of the best ways to support it. By doing so, there are many cooks making the same soup therefore resulting in a new culinary soup”. He explained that new ideas are easily generated when working in groups on a freely selected subject.

Similarly, when manager was asked how innovativeness and creativity could be further improved by the organization, he explained that events could be arranged for brainstorming new ideas in groups. He noted that currently people are left too often to
struggle with their problems in smaller groups and it could be beneficial to broaden the scope of the employees involved in solving problems.

Some differences in the perception of goal emphasis were visible in the interviews. According to the manager, organization aims to support innovation and creativity by providing employees with the possibility to arrange self-learning and improvement days where employees can experiment and innovate with technologies unrelated to their projects. However, all of the interviewees emphasized that these events are rarely arranged. Both of the employees’ views on the effectiveness of the improvement days were congruent with the manager as they perceived it to be a good way to brainstorm new ideas. Similarly to the perception of the manager, the organizations goal to support innovation seems to be bit hindered by the hurry and lack of workers. Also the culture of actively arranging events to support creativity and innovativeness, has not been fully embedded in the organization.

Means emphasis

In the interviews, the way in which employees were conveyed with the knowledge and processes on how to do their work creatively, was not directly addressed. The manager emphasized that the organizational endeavor is to transmit organizational values to the employees through daily activities rather than by listed values. The manager described that employees are encouraged to think outside the box, and the management strives to couch, support employees and bring up examples on how success can be achieved.

According to the employees interviewed, individual employees are provided with considerable amount of freedom to decide how to solve daily tasks. When Employee1 was asked how organization supports creativity and innovation, he emphasized that individual employees are provided with freedom to decide on how they conduct their work. Similarly, Employee2 noted that the organization supports employee creativity by allowing employees to be sincere and creative, thus new ideas are not tackled right away.

In summary, freedom provided to the employees was identified by all of the interviewees to be important aspect how organization supports employee creativity. The management aims to support and encourage employees to bring up new ideas, although this aspect was not mentioned by either of the employees. Overall, very little information could be analyzed in the interviews how employees are conveyed with knowledge and information how to do their work creatively.

Climate for initiative

According to the manager, high initiative was expected from the employees of the organization. The manager described that the organization has strived towards self-governing project teams in which decision making is divided as low in hierarchy as possible. Similarly, the manager described that in problem situations, project leaders are expected to actively inform and ask the managers for help. The manager also emphasized that the management does not wittingly arrange self-learning days, but instead employees are expected to propose and start them.

Despite management’s expectation of employee initiative regarding self-learning days, it was perceived by all of the interviewees that these days are rarely arranged. The manager noted: “From reason or another, these self-learning days are not held by people in the product development. Of course, the hurry is one reason and somehow the culture has not been embedded in the organization. But the possibility is there”. When Employee1 was asked if he knew about the possibility of self-learning days, he noted: “/
know it well, but have never had one”. He continued that his tasks have been so interesting and versatile, that he has not really felt the need to start learning something completely different.

Regarding the self-learning day, Employee2 explained: “I have never had these self-learning days because they have been like ‘hush hush’. We have had so much hurry that they have been left in the background”. Employee2 continued that the self-learning days have been forgotten from the Oulu’s team, but he denoted that they are somewhat actively held in the office of Helsinki. Employee2 perceived that there has not been enough information in team meetings about how the self-learning days are arranged in practice. However, Employee2 continued by saying: “Although, it seems that these self-learning days have not been so important to me either, since I have never even asked if I could arrange such a day”.

Both of the employees perceived that the responsibility for arranging self-learning days was up to each individual rather than the management alone, therefore being congruent with the manager’s view. Employee1 perceived that one reason why the self-learning days have not been arranged is that people do not have ideas on which they could be based on. When asked further if some support mechanism could be arranged to generate ideas, Employee1 responded: “It might be helpful, or we could simply arrange events around some topics in which people could participate”. When asked if hurry has affected this aspect, Employee1 explained that it has played its part since it sometimes feels like there isn’t enough time to think about new ideas.

Overall, aligned with the manager’s perception, Employee2 touted that democratic decision making is supported by the organization, where everyone can express their opinions and ideas. Interestingly, the occasional hurry was identified by all of the interviewees and it was mentioned in all of the interviews as one of the possible reasons why self-learning days were not arranged. Even though all of the interviewees perceived that individual employees are responsible and expected to propose and arrange self-learning days, hurry was seen to prevent such actions due to lack of time.

Overall, it would appear that the management’s efforts to create a climate where employees proactively bring up new ideas is partly implemented. It was emphasized by the manager and Employee2 that discussions are actively held in Slack but lack of resources and hurry was perceived to diminish the employee’s ability to arrange and suggest topics for self-learning days.

**Reward emphasis**

When interviewees were asked about how organization rewards employees from success, the answers were quite incongruent between the interviewees.

According to the manager, common ways for the organization to reward employees from success were to announce the situation to the whole organization through Slack. The manager also explained that when bigger milestones were reached, celebrations with cake and bubbly drinks were sometimes arranged. When the manager was asked if the celebrations were common within the organization, he responded: “They are not common and they might be arranged a bit too rarely”. The manager continued that rewarding was visible in daily work as people within project teams internally reward and acknowledge each other’s.

When manager was pried if more informal reward mechanisms could be placed, he responded that there could be more, and that he knew that not enough rewards are
given. He explained that there has been reward mechanisms to reward employees with movie tickets but not recently. When asked if the current system were supportive to creativity and innovativeness, the manager noted: “Not really, it could use some improvement”.

Employee1 noted that no bonus systems were in place in the organization and therefore no monetary reward mechanisms existed. He continued to explain that no other reward mechanisms existed either. Employee1 was further asked if it could be beneficial for employee creativity and motivation to adopt some reward mechanisms, to which he responded: “I think all the reward mechanisms distort the work as the basic assumption should be that things are accomplished successfully. If some kind of behavior is rewarded, people start focusing on that aspect and all the other things start going worse. For example, if rewards are given for projects to finish in schedule, people do their work carelessly and in worse quality, just to finish in time. The reward mechanisms simply do not work”. Employee1 also perceived that informal rewards such as recognition does not really help with creativity.

Opposite perception regarding reward mechanisms was given by Employee2 who explained that in his daily work, rewards come mainly in the form of good feedback and praises. He also noted: “Currently no bonus systems are in place but will have to wait for the newly designed wage system to take place”. He explained further that the new wage system could motivate employees to broaden their expertise and increase the motivation to interact with customers.

When Employee2 was asked if the reward mechanisms could be improved, he noted that to motivate employees, small monetary rewards could be utilized when projects are finished. However, when pried if this could deteriorate the quality, Employee2 noted that it could result in carelessness when trying to match the busy schedule. When further asked if some nonmonetary rewards could be utilized on top of the financial rewards, Employee1 summarized: “I think that verbal feedback is the thing. If I get the feeling that I haven’t got enough done and I am feeling down and the manager comes to tell me the opposite, it really lifts the spirits and brings the creativity and motivation to the work”. He concluded that currently enough verbal rewards are given and it should not be added, as it would otherwise lose its meaning.

Overall, the perceptions regarding reward mechanisms were highly incongruent. According to the manager and Employee1 not many reward mechanisms were in place, while the perceptions of their necessity was also differing between the interviewees. In contrast to Employee1’s perception, both manager and Employee2 perceived that some other reward mechanisms could be utilized to motivate employees and increase creativity. Also the manager’s view regarding the sufficiency of the current reward mechanisms differed when compared to the perception of Employee2, who touted that creativity is supported by praise and positive feedback.

It would appear that informal rewards are given in the form of recognition and praise, while this aspect is not necessarily identified as a reward mechanisms by the management. Interestingly, contrasting opinions were given by the employees interviewed regarding the importance of this aspect for supporting creativity and motivation.

**Recruitment**

When interviewees were asked of the important qualities of the employees in the organization, the perceptions were quite similar. The manager explained that the
employees must be able to take initiative and be active in their work. He continued that the employee must actively and independently search for solutions to problems while having passion towards work. It was also emphasized by the manager that due to the highly customer oriented work, the employee must be able to work in teams and with the customers.

Employee1 explained that important aspects of an employee include enthusiasm towards work, learning and getting things done. He continued that the employee must be able to bravely start trying and experimenting with things and ultimately getting things done. Similarly, Employee2 explained that a good employee must be able to be relaxed and casual while still getting things done. He also explained that the employee must be able to cooperate with co-workers. He summarized that being casual, being able to work in teams and getting things done are the main qualities expected from an employee.

Overall, similar perceptions of the qualities of an employee were given by all of the interviewees. The manager’s perception reflected the customer orientation which was identified as one of the organization’s main goals by all of the interviewees. Employee’s perceptions reflected the organization’s aim of autonomous project teams where people are expected to be able to take initiative in their work and get things done.

5.3.3 Case findings

Cultural Findings

The interviews with Sysart revealed that the perceptions of cultural aspects were congruent or mostly congruent between employees and the manager (see Table 8).

In the mission statement, all of the interviewees emphasized customer orientation to some degree while the terminology used to describe it was slightly different. The manager and Employee1 identified flexibility and customer orientation as the main values of the organization, while Employee2 had a bit struggle to name organizations values. As explained by the manager, the organization does not have clearly listed values, but instead, the values are expected to be transmitted to the employees through daily activities. The relatively short time Employee2 had been in the organization and the notion by the manager, can partly explain why Employee2 had trouble identifying organizational values.

All of the interviewees identified team working was supported by the organization through its efforts to provide project teams with autonomy and freedom to conduct their work. Emphasis on cross-functional teams could also be identified indirectly from the interviews with the manager and Employee1 who explained that the aim is to integrate the customers in the design and development processes. Slight incongruence could be analyzed as Employee2 noted that similar tasks are being conducted in several projects and it could be beneficial to arrange learning-days between the project groups. Although it should be noted that the manager had quite similar view as he explained that more cross-functional information sharing could be utilized to improve employee creativity.
## Table 8 – Culture perception findings Sysart

### Innovation supportive culture - Sysart

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Findings (manager = M, Employee1 = E1, Employee2 = E2)</th>
<th>Perception congruence</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Mission statement</strong></td>
<td>• Organization aims to provide its customers new and better services through digitalization – (M)</td>
<td>Mostly congruent</td>
</tr>
<tr>
<td></td>
<td>• Values are not listed but the aim is to convey them through work – (M)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Providing value to the customer is central. customer wants vs customer needs – (E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Customer orientation is important value of the organization – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Aim to create a good and motivating work environment for employees to work at – (M)</td>
<td></td>
</tr>
<tr>
<td><strong>Freedom &amp; Control values / Flexibility</strong></td>
<td>• Employees are provided with freedom to do their work (M, E1, E2)</td>
<td>Congruent</td>
</tr>
<tr>
<td></td>
<td>• Organization embodies low hierarchy and aims to divide decision making – (M &amp; E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Informal communication and flexible division of tasks within projects – (E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• The way projects are controlled depends on the type of the project. Monitoring customer projects is quite informal and flexible – (M &amp; E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• SCRUM &amp; JIRA utilized as tools to generate tasks and schedules – (M &amp; E2)</td>
<td></td>
</tr>
<tr>
<td><strong>Participative decision making, Team working &amp; cross-functional teams</strong></td>
<td>• Highly autonomous project teams (M, E1 &amp; E2)</td>
<td>Mostly congruent</td>
</tr>
<tr>
<td></td>
<td>• Customer integrated in the design and development process (M &amp; E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>• Cross-project interaction happens quite scarcely and creativity could be supported by improving information sharing between projects – (E2)</td>
<td></td>
</tr>
<tr>
<td><strong>Ability to accept risks / risk-taking</strong></td>
<td>• Mistakes perceived as opportunity to learn – (M, E &amp; E2)</td>
<td>Congruent</td>
</tr>
</tbody>
</table>

### Climate findings

The perceptions regarding the aspects of organizational climate (see Table 9) revealed interesting findings in multiple aspects while the congruence of task support and means emphasis could not be analyzed due to insufficient amount of data gathered.

All of the interviewees agreed that hurry was visible in the organization’s climate and it was mentioned as one of the main reasons why many of the mechanisms aimed to support innovation and creativity had been left in the background. Quite incongruent notion was given by Employee1, who explained that no overarching climate could be
said to exist within the organization, but instead, different projects and groups had their separate climates.

The goal emphasis was analyzed as mostly congruent due to interviewees having quite similar perceptions of its effectiveness on creativity and innovation. All of the interviewees emphasized that improvement days should be arranged more often and they could improve employee creativity. However, incongruences could also be seen between manager’s and employees’ perceptions regarding the demos and self-learning.

In contrast to the manager’s view, Employee2 viewed that demos did not improve creativity in his work, but could be beneficial for the employees with more interaction with the customers. Self-learning was perceived by the manager and Employee2 to support innovation, whereas Employee1 did not see it clearly linked. Employee2 explained that self-learning can be useful for getting necessary background information required for innovating but was not by itself innovation supportive.

Reward emphasis was analyzed as incongruent due to divergent perceptions between interviewees regarding the reward mechanisms and their importance for creativity and innovation. The manager explained that project teams reward each other’s internally and informal events are arranged when bigger milestones are reached. The manager perceived that not enough reward mechanisms were in place in the organization and more should be added. Employee1 perceived that no reward mechanisms existed in the organization. Interestingly, Employee1 perceived that reward mechanisms, in general, do not work as a concept since they distort the focus on what the employees pay attention to. In contrast to the manager’s and Employee1’s view, Employee2 perceived that innovation and creativity was supported by the organization with informal reward mechanisms such as recognition and praise. Employee2 also noted that employees could be motivated further with monetary rewards on top of the informal mechanisms.

Table 9 - Climate perception findings Sysart

<table>
<thead>
<tr>
<th>Aspect</th>
<th>Findings (manager = M, Employee1 = E1, Employee2 = E2)</th>
<th>Perception congruence</th>
</tr>
</thead>
</table>
| Overall climate               | • Occasional hurry identified as an aspect of climate – (M, E1 & E2)  
• No single overarching climate can be said to exist – (E1)  
• Open climate where no aggression is present – (E2)              | Slightly incongruent  |
| Psychological safety /       | • Low hierarchy and no boundaries to talk with superiors – (M, E1 & E2)  
• Open and informal communication between employees and managers – (M, E1 & E2)     | Congruent             |
| Socioemotional support       |                                                                                                                      |                       |
| Task support                  | • Lack of employees in some projects – (M & E2)  
• Innovation and creativity easily disregarded because of hurry – (M)                                         | N/A                   |
<table>
<thead>
<tr>
<th></th>
<th>Demos created on top of concepts perceived to support creativity and innovation – (M)</th>
<th>Mostly congruent</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Demo’s do not support creativity in own work, but can be beneficial for people interacting with the customers – (E2)</td>
<td></td>
</tr>
<tr>
<td>Goal emphasis</td>
<td>Mixed results of the importance of self-learning days regarding creativity. – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Self-learning days left unused by the product development team in Oulu – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Improvement days (self-learning in groups) was perceived to support creativity and innovation. However they were seldom arranged – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Freedom and autonomy provided for employees in doing their tasks – (M, E1 &amp; E2)</td>
<td>N/A</td>
</tr>
<tr>
<td>Means emphasis</td>
<td>Employees supported to think outside of the box while good working practices are encouraged and brought up – (M)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Employees’ ability to suggest and initiate creativity supportive actions is diminished by lack of resources and hurry – (M, E1 &amp; E2)</td>
<td>Mostly congruent</td>
</tr>
<tr>
<td></td>
<td>Congruent perceptions between interviewees regarding employees’ ability to suggest and start self-learning days – (M, E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Not enough information is shared how self-learning days can be arranged in practice – (E2)</td>
<td></td>
</tr>
<tr>
<td>Climate for initiative</td>
<td>People don’t have ideas on which the self-learning days could be arranged. Some support mechanisms could be helpful to generate ideas – (E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Project teams internally acknowledge each other’s – (M)</td>
<td>Incongruent</td>
</tr>
<tr>
<td>Reward emphasis</td>
<td>Not enough rewards are given. – (M)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>No reward mechanisms are in place – (E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Reward mechanisms simply don’t work – (E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Informal reward mechanisms such as praise and positive feedback support employee creativity and innovation – (E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Some financial rewards could be used to motivate employees further – (E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Rewards from finishing projects in schedule could diminish overall quality – (E1 &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Ability to work with customers – (M)</td>
<td>Congruent</td>
</tr>
<tr>
<td>Employee recruitment</td>
<td>Ability to work in teams – (M &amp; E2)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Enthusiasm towards work and ability to learn – (E1)</td>
<td></td>
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<tr>
<td></td>
<td>Bravery to experiment and getting things done – (E1)</td>
<td></td>
</tr>
<tr>
<td></td>
<td>Relaxed attitude while still getting things done – (E2)</td>
<td></td>
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</tbody>
</table>
6. Discussion

This thesis has aimed to answer the research question of: How do the management’s perceptions of the corporate culture, in context of innovation and creativity, match the perceptions of the employees in the organization regarding the existing culture? This thesis also aimed to clarify and identify in which aspects the perceptions were congruent or incongruent. Finally, the underlying reasons why incongruence in certain aspects existed, is discussed.

To answer the aforementioned research questions, a qualitative case study approach was selected in order to identify and examine the perceptions of both managers and employees in IT-organizations. Based on the conducted literature review, a culture perception framework was devised, based on which the interviews with the organizations were conducted.

The main research question provided interesting insights regarding the perceptions of the managers and employees. Despite that some incongruences were analyzed to exist within every case organization, the main finding was that the perceptions of managers and employees were mainly congruent. A possible explanation for this finding is that all of the organizations included in the study embodied low levels of hierarchy and a climate in which open discussion was emphasized. Therefore the finding is aligned with the literature, as open discussion and trust are claimed to increase value congruence (Edwards & Cable, 2009).

According to Schein (2010), different sub cultures within organizations often result from separation of functional or occupational working units or the geographical distribution of working units in different locations. However, in the selected cases, all of the employees in the organizations worked in the same office as their managers and close collaboration with the manager was emphasized to be common in daily practices. The offices in which the interviews were conducted were quite small and the social units included approximately 20 employees per organization. This could be another reason to explain that the perceptions between the managers and employees were close to each other’s. If the same research had been conducted by interviewing employees in offices located in a different regions than the manager’s, the results might have been more incongruent due to the geographical distribution and the amount of collaboration done between the interviewed parties.

Another interesting notion to support the congruent perceptions was identified in Solita, where the manager emphasized that organization’s values root from the employees rather than being dictated from higher in the hierarchy. The manager in Solita perceived that this was the right way to create values, and in their organization, the values held true. Supportive to this view, Qubein (1999) explained that in order for employees to assimilate and adapt the organizational vision and values, the management should emphasize values which are aligned with the personal values of the employee.

Despite that the perceptions between managers and employees were mostly congruent, the views on aspects related to creativity and innovation were not always positive. In the case of Elbit, it was explained that the organization has had multiple plans to improve employee creativity by arranging events and adding new mechanisms aimed to improve creativity and innovation. However, both of the interviewees in Elbit had congruent
perceptions that many of these improvement mechanisms had so far been left unimplemented. Similarly in case of Sysart, hurry was perceived by all of the interviewees to hinder mechanisms aimed to improve creativity and innovation. An example was given in Sysart that self-learning days were quite common practice in their headquarters in Helsinki while in Oulu, it was perceived by the interviewees that the self-learning days were rarely held by the product development team.

The case organizations seemed to embody low levels of hierarchy and a culture where employee freedom and trust was valued. In all of the organization no hierarchical boundaries were identified between managers and employees since all of the employees felt that it was easy to discuss matters with their managers. Agile methods were utilized in every organization where the individual project teams had considerable amount of freedom to select and customize their processes. Control over projects and timetables were monitored mainly through SCRUM-meetings and open communication. Similarly to the notions by Khazanchi et al. (2007) and Naranjo-Valencia et al. (2011), all of the organizations seemed to have freedom as their main shared values, while adequate control values could also be identified.

The supportive research question of: “In which aspects the employees’ perceptions about the usefulness of management-imposed endeavors to increase innovation, differ from the perceptions of management?” revealed that apart from the slight incongruences within most of the innovation supportive aspects, reward emphasis was analyzed to be the most incongruent aspect in every organization. The perceptions varied in the view on effectiveness of the reward mechanisms and the necessity of such mechanisms. Variation between the importance of the rewards and the type of preferred rewards was also analyzed to exist between employees themselves. In Elbit, the manager explained that no reward mechanisms to support creativity and innovation were in place in organization. However, in contrast to manager’s perception, the employee perceived that informal rewards of recognition and acknowledgement are common in the organization. The employee explained that positive attitude is the method organization uses to reward employees and encourages to creativity. Therefore the manager’s and employees’ perceptions were almost opposite to each other’s.

In Solita, the perceptions of reward emphasis were slightly incongruent due to employees’ perceptions being contradictory. All of the interviewees identified that Solita has multiple different reward mechanisms which are from most part informal. However, one of the employees perceived that rewards did not increase creativity, but instead, support in the daily work was seen more important aspect. However, the other employee perceived that creativity and innovativeness are supported by the reward mechanisms in the organization. The manager did not directly state if creativity and innovation were affected by the rewards, but it could be analyzed that the reward mechanisms aimed to improve the working conditions of the employees, which on the other hand were perceived by the manager to increase employee creativity.

In Sysart, the perceptions regarding reward mechanisms were analyzed as incongruent since all of the interviewees’ perceptions were contradictory. According to the manager, not enough rewards were given in the organization and more should be added. One of the employees explained that no reward mechanisms existed in the organization while emphasizing that reward mechanism should not be added. Interestingly the employee explained that rewards in general distort the work as employees start to focus on the rewarded behavior thus reducing the quality of work in other aspects. On the contrary to this point of view, the other employee perceived that Sysart rewards employees with positive feedback and praises. The employee also perceived that small financial rewards could motivate employees even further while emphasizing that verbal rewards really lift the employee motivation and creativity.
The incongruences within the perceptions regarding reward emphasis were quite surprising since the interviewees’ perceptions varied greatly. Tesluk et al. (1997) argued that rewards must be planned with care as otherwise it can damage the intrinsic motivation of the employee. This seemed to be the case in Sysart, where one of the employees perceived that reward mechanisms will shift the focus of employees towards getting the rewards instead of doing their work properly. Also quite contradicting notion was that the other employee perceived that monetary rewards could be utilized to motivate employees, whereas Amabile (1988) argued that employees tend to be less creative when motivated by money.

The reasons behind the incongruence in reward emphasis may be partly explained by mixed terminology, as informal rewards might not been identified as rewards by the management, as it would appear in the cases of Elbit and Sysart. Although similar reward mechanisms was identified by interviewees in Solita, perceptions regarding their effectiveness were incongruent. From these findings, more comprehensive research is suggested to focus on reward mechanisms, as based on this thesis, the underlying reasons for the incongruence can only be speculated.

Analyzing the interviews proved to be tricky due to the varying terminology used by the employees and managers, when describing the organizational culture. Also, according to Schein (1984), interviewees often give answers that they would prefer to explain their actions thus leaving the underlying reasons for their actions untold. Also the ambiguous nature of values was visible while doing the interviews. In the interviews with Elbit and Sysart, the employees with relatively short experience in their organizations struggled to identify and name organizational values. In case of Sysart, the manager noted that the organization did not have clear written values in their office walls, but instead, the values were expected to be conveyed to the employee by working in the organization. Therefore the interviewed employee with a little less than a year experience in the organization, might not yet have fully assimilated the organizational values. In case of Elbit, the employee explained that he had not really given thought to the aspect of organizational values used to reach organizational goals. One explanation to this could be similar to view by Cameron and Freeman (1985) who explained that values are often difficult to identify by the people deeply immersed in the culture.

An interesting finding was discovered in Solita, where one of the employees explained that based on recently conducted work satisfaction survey, people within the organization could not name values. However, based on the interviews conducted for this thesis, organizational values were clearly visible in all of the interviews in Solita. This could be due to the fact identified by Schein (2010) that surveys and other quantitative methods struggle to identify tacit assumptions held by the employees.

Similarly to the notion explained in Chapter 2.2.1, concepts of innovation and creativity were difficult to be separated, since the interviewees often seemed to speak of the terms as synonyms. Apart from Elbit, the interviews with Solita and Sysart seemed to emphasize employee creativity over organization’s ability to implement and produce innovations. This can be assumed to be partly explained by Elbit’s newly formed innovation department, which was explained to be designed specifically to improve the organizational ability to try and develop new ideas into innovations.

An interesting observation was made during the analysis as all of the organizations seemed to aim at creating a friendly work place where team working was valued. Also managers in the interviewed organizations could be seen as mentors and supporters, which would imply clan culture in the organizations (see Figure 2). However, all of the organizations also exhibited features of Adhocracy culture with their focus to try new solutions and quickly adapting to changing environment.
7. Conclusions and Limitations

This thesis has aimed to answer the research question of: *How do the management’s perceptions of the corporate culture, in context of innovation and creativity, match the perceptions of the employees in the organization regarding the existing culture?* This thesis has also aimed to identify: *In which aspects the employees’ perceptions about the usefulness of management-imposed endeavors to increase innovation, differ from the perceptions of management?* Finally the thesis discussed the underlying reasons behind the perceptions of the managers and employees.

To answer the research questions, a literature review was conducted to identify aspects from both culture and climate literatures in order to get comprehensive view on aspects related to organizational innovation and creativity. In addition to the culture perspective, possible reasons for incongruent perceptions and management’s role in creating organizational culture was examined. Based on the conducted literature review, Culture perception framework (see Figure 4) was devised, which aimed to summarize management’s effort to create and embed organizational culture supportive of innovation while comparing the perceptions of employees and managers. Based on the devised framework, interview questions (see Appendix C) were prepared to cover all the aspects identified in the framework.

Qualitative research method was selected for this thesis due to the subjective nature of organizational culture and the ability to explore multiple unknown dimensions of culture in comparison to quantitative methods. Semi structured interview was chosen to narrow the scope of the questions to match with the devised Culture perception framework, while leaving room for improvisation and follow-up questions. The organizations selected for the study were chosen in the IT-field and based on their goal of creating work environment supportive of innovation and creativity.

The interviews conducted with the organizations revealed that the perceptions of the managers and employees regarding the aspects of innovation supportive culture were from most part congruent. All of the organizations seemed to embody freedom values along with low levels hierarchy accompanied with socioemotional support. Despite that the perceptions were mostly congruent, many improvement suggestions and defects regarding the culture and climate could be identified from both managers and employees interviews. In climate aspects, reward emphasis was identified to be the most incongruent aspect of organizational culture. Interviewees’ perceptions differed on the importance of the reward mechanisms for supporting creativity and innovation and the sufficiency of the reward mechanisms implemented.

This thesis was faced with limitation of having to conduct all of the interviews in the region of Oulu, due to available resources for conducting this thesis. Further, all of the interviews with every organization were conducted in the same office, and therefore the answers might have been more homogenous compared to a situation where interviews would have been conducted in multiple offices. Also due to the large concept of organizational culture, the aspects of innovation supportive culture identified in Chapter 2.4.1 could not be examined as accurately as would have been preferred.

This thesis has served as an explorative research and has provided multiple topics for further research. Based on the conducted literature review and analysis of the
interviews, further research is suggested to explore the reasons behind the finding of incongruent perceptions on reward emphasis. Further research is also suggested to examine the interplay of clan culture and adhocracy as all of the organizations interviewed seemed to embody traits from both of the mentioned culture types. This research could provide information for creating culture in which team working is emphasized while the organization is able to adapt into changing environment. Lastly, a research is suggested to examine perceptions of employees and managers working in different offices within the same organization. This could enable more realistic view on how organizational culture is conveyed throughout the organization.
References


Qubein, N. (1999). Action Takers: Do employees work with you or for you?. Executive Excellence, 16, 4-4.


West, M.A., & Farr, J.L. (1990), “Innovation at work”, in West, M.A. and Farr, J.L. (Eds), Innovation and Creativity at Work: Psychological and Organizational Strategies,


1. Introductions, inquiry of job title and time in the organization. Explanation of the goal of the interview

2. How would you describe the mission statement of your organization? - (Goal emphasis & Corporate values)


4. How would you describe the atmosphere or climate in your organization? - (Climate in general)

5. How are innovation and creativity visible in daily practice? (Task support, values)

6. Are there any programs or plans specifically aligned to improve the innovativeness of employees? - (Corporate culture for innovation, Support mechanisms, task-support)

7. How is it ensured that tasks get done within deadlines and standards? (Control values)

8. When and how employees are rewarded or acknowledged? (Reward emphasis)

9. In case of disagreement, how are they handled? (Socio-emotional support, Freedom values, participative decision making)

10. What attributes in individuals are considered important in you organization? (Recruiting)

11. Thanks for the interview, Is there anything else you would like to add?
Research questions for managers (Finnish) - Appendix B

1. Tervehtiminen, kysy työnimike ja aika firmassa. Lyhyt selitys firman toiminnasta. Selitys tavoitteesta

2. Firman tavoite ja tärkeimmät arvot?
   a. Miten arvot näkyvät päivittäisessä toiminnassa?
   b. (Ryhmätyö, Riskinotto ja yhteinen päätöksenteko?)

3. Kuinka arvomaailma välittyy työntekijöille?

4. Kuinka kuvailisit ilmapiiriä joka vallitsee organisaatiossa?

5. Miten luovuus ja innovatiivisuus näkyy päivittäisessä toiminnassa?

6. Onko johdolla suunnitelmia ja pyrkimyksiä erityisesti parantaa yksilön luovutta ja firman innovatiivisuutta?
   a. (Aloitteellisuus, vapaus)
   b. (tarvittavat resurssit: välineet, raha, aika)
   c. (koulutus)

7. Tapoja joilla organisaatio varmistaa että aikataulut ja vaatimukset täyttyvät? (control)

8. Miten firma palkitsee tai huomioi työntekijöitä onnistumisista?
   a. (Mikä luokitellaan onnistumiseksi?)

9. Miten reagoidaan riskin epäonnistuessa tai erimielisyysissä käytännön asioissa?

10. Tärkeimmät ominaisuudet työntekijössä?

11. Kiitos haastattelusta. Jäikö jotain mietityttämää tai parannettavaa?
Research questions for employees - Appendix C

1. Tervehtiminen, kysy työnimike ja aika firmassa. Lyhyt selitys firman toiminnasta. Selitys
2. Firman tavoite ja tärkeimmät arvot?
3. Miten arvot näkyvät päivittäisessä työssä?
4. Kuinka kuvailsit ilmapiiriä joka vallitsee organisaatiossa?
5. Miten luovuus ja innovatiivisuus tulee päivittäisessä työssä?
6. Miten mielestäsä organisaationne tukee Luovuutta ja innovatiivisuutta?
7. Miten johto kannustaa uusien ideoiden tuomista esille? (Lisätty kysymys ensimmäisen haastattelun perusteella)
8. Tapoja joilla organisaatio varmistaa että aikataulut ja vaatimukset täyttyvät?
9. Miten organisaatio huomioi työntekijöitä onnistumisista?
10. Miten reagoidaan riskin epäonnistuessa tai erimielisyyksissä käytännön asioissa?
11. Tärkeimmät ominaisuudet työntekijässä?
12. Kiitos haastattelusta. Jäikö jotain mietityttämään tai onko mielestäsi jotain parannettavaa kulttuurissa?