
How small enterprises manage unexpected customer requests in B2B sales

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Abstract: This article analyses upstream supply chain practices in small enterprises to determine how firms manage unexpected customer requests in business-to-business (B2B) sales situations. A small company's offer often fails to satisfactorily meet a customer's needs in B2B sales situations. In such situations an upstream supply chain network plays an important role in advancing B2B sales negotiations. The selection of a new supplier is crucial if the existing supplier network is not able to respond within an acceptable amount of time. In small firms, well-managed supplier networks can ensure fast delivery. Selecting a new supplier during sales negotiation could be risky; however, potential risks could be mitigated by having a core group of suppliers who can expeditiously fulfil requests.

Keywords: Small sized enterprises; Sales; Customer preferences; New product creation; Supply chain; B2B

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1 Introduction

The speed of new product creation (NPC) has become increasingly important for managing innovations in fast-changing business environments characterised by continual shorter product life cycles and increased competition, resulting from technological advancements and globalisation (Chen et al., 2012). The nature of business itself has been transformed by this fast-paced, highly competitive and increasingly global environment (Kuratko, 2011). Creating new value is essential for growth and profitability in all businesses, and the introduction of new products and services is a critical determinant of organisational performance and survival (Damanpour, 1991).

Regardless of the speed in NPC, it is quite common for B2B customers to unexpectedly introduce product or service features during sales negotiations. The ability to assimilate these preferences and manage the development process is fundamental to a small enterprise's enduring competitiveness and growth. Particularly, in the small enterprise sector, a company should know how to manage an unexpected customer request (UCR) in business-to-business (B2B) sales situations. This need to respond quickly to customer preferences in a changing business environment poses new challenges for small enterprises (Hänninen et al., 2013).

Entrepreneurship plays an important role in most national economies: small- and medium-sized enterprises (SMEs) provide the maximum number of new jobs in the European Union (EU) and form the backbone of the EU economy (Muller et al., 2015). In this study, we use EU definitions of an SME. SMEs are often associated with higher national economic growth (Beck et al., 2005; Ciemleja and Lace, 2011; Robson and Bennett, 2000); however, any company, whether small or large, is a value-creating and value-adding unit. In today's technologically driven world, innovation and product development are increasingly significant. That is, firms find it challenging to develop innovative products faster and more efficiently.

However, the degree of uncertainty, dynamism and complexity varies, to a large extent, depending on the industry in which the small firms operate (Gibcus et al., 2009). According to Gherhes et al. (2016), micro-enterprises are different from larger SMEs because they are entrepreneur-centric and constrained by a tendency to be growth-averse; further, they have underdeveloped personal and business capabilities and inadequate business support. Frank et al. (2012) proposed that responsive and proactive market orientation can positively influence the share of regular customers (repeat buyers), success with new products/services and sales growth of family-owned firms.

In the modern global economy, there is an increasing demand for short time-to-market (i.e. early entrance into the market), reduced time-to-volume (i.e. quick occupation of the market) and decreased time-to-profit (i.e. rapid market return; Ming et al., 2005). One way in which small companies can meet these challenges is through outsourcing science-related research and development rather than conducting it in-house (Simba, 2013), which can be pursued in the later stages of product life cycles and with mature technologies (Shahmarichatghieh et al. 2017). New business demands are often met by reconfiguring products, but it is not usually possible or advisable to develop all possible configurations through traditional methods because of the wide variety and uncertainty of specific customer needs and low marginal utility. In a solution-centric business, new demands appear fairly often, and new methods for fast and controllable product development are essential.

The use of an upstream supplier network could help a company respond quickly to a UCR in sales situations. The supplier's role gains significance if the company's own resources appear to be bottlenecked, which is often the case in small enterprises or micro-businesses. In the present study, we highlight the use of upstream supply chains in UCR situations by analysing the practices of such supply chains in seven small firms, with the help of the following research questions:

- 1: How do small firms select an upstream supplier(s)?
- 2: What are the risks and characteristics of using an upstream supply chain to manage UCRs?

2 Theoretical background

Different types of upstream and downstream channels are used to secure products and services and deliver them to consumers. Consumer goods take less time to develop than B2B goods, although the relative difference between the two decreases as the need for project innovation decreases (Griffin, 2001).

A common understanding is that a diverse product portfolio can positively influence a company's sales volumes, and product variety is often justified by the need to meet the customers' requirements quickly (Wan et al., 2012). Product variety has emerged as a source of competitive differentiation in response to requests for increasingly customised products and services (Hayes et al., 2005). Customer requirements for flexibility, agility, cost efficiency and product variety lead companies to reconfigure their supply chains and focus more on collaborating with external partners (Salvador et al., 2002).

Reducing the time taken to introduce new products into the marketplace has been a longstanding concern for companies (Blackburn, 1991). Thence, the total share of full-scale NPC-based products is on the decline (Barczak et al., 2009). According to van Hoek et al. (2001), customer responsiveness is crucial for achieving success in today's markets. Williams (2007) argued that the greater the collaboration between suppliers and customers at all levels, the greater the likelihood that an advantage can be gained.

Traditionally, a product is understood to be a tangible manufactured item. Lately, the time taken to bring new products into the marketplace is continuously decreasing, and delays in product introduction lead typically to reduced sales and profits (Hilletofth et al., 2010). Consequently, businesses are looking at different methods and tools to further reduce this time-to-market (Barczak et al., 2009; Langerak and Hultink, 2008; Millson et al., 1992; Zhou and Zhao, 2010). Reductions in lead times can be achieved by altering processes (Cooper, 2014), methods (Karlstrom and Runeson, 2005) and tools (Smith and Reinertsen, 1997). Firms can also arrange their development resources more effectively by finding different ways of operating for different types of product-development projects (Barczak et al., 2009; Cooper, 2014).

Nevertheless, productisation as a 'concept' is not widely covered within academic literature (Harkonen et al., 2015). According to Jaakkola (2011), firms may apply productisation to gain time for customised expert work and accumulate tacit knowledge developed in their organisation. That is, instead of denying standardisation altogether, productisation seeks an optimal balance between customisation and standardisation.

Many experienced businesses have realised that it is beneficial to belong to a network of successful enterprises, although very few of them have achieved this goal (Poirier and Bauer, 2000). Nsimbila and Jurriëns (2012) found that poor relationships between suppliers and SMEs and low quality of products sold by SMEs affect service provision and lead to poor development and growth of SMEs. However, high product prices and low quantity of goods have no direct effect.

The concept that companies have both a demand and a supply chain, each of which requires active management to ensure efficiency, has been widely acknowledged (Canever et al., 2008; Jüttner et al., 2007; Walters, 2008). The supply chain consists of all the supply processes needed to fulfil customer demands (Gibson et al., 2005; Lummus and Vokurka, 1999; Mentzer et al., 2001).

Supply chain management includes an order process and upstream supply chain handling (e.g. Canever et al., 2008; Gibson et al., 2005). A steady, incoming stream of new orders guarantees a steady cash flow and is essential to a company's ability to develop products or offer services. Thus, an upstream supply chain is crucial for managing and balancing highly variable demand (e.g. Giunipero and Eltantawy, 2004; Scannell et al., 2000).

Selecting a supplier has always been considered a key task within purchasing and supply management (Choi and Hartley, 1996; De Boer et al., 2001; Dickson, 1996; Kraljic, 1983; Sarkar and Mohapatra, 2006; Weber et al., 1991). If the final product comprises parts obtained from many different suppliers, the high involvement of suppliers may increase the complexity of managing development projects (Wynstra and Ten Pierick, 2000). Heterogeneous markets with shorter product life cycles increasingly force many companies to simultaneously compete in the three domains of product, process and supply chain (Fixson, 2005). It is therefore imperative to coordinate the product and process design of product families within a supply-chain framework (Jiao et al., 2007).

According to Iskanius et al. (2006), the call for agility to enhance competitiveness has often been associated with the manufacture and supply of innovative products, such as

high-tech industry products characterised by short life cycles as well as volatile and uncertain levels of demand and irregularity in supply. Because new products take time to develop, the earlier the suppliers anticipate changes that customers will value, the better the likely outcome for them (Flint et al., 1997). The elements of an agile supply chain are sensitivity to the customer's needs, virtual integration, process integration and network integration (van Hoek et al., 2001). Supply chain management purposefully integrates these organisations and activities to achieve greater responsiveness to the customer's needs and lower overall costs (see also Handfield and Nichols, 1999; Poirier and Bauer, 2000; Simchi-Levi et al., 2000).

Firms – particularly small ones – that are often dominated by their owner-managers have little in-house or bought-in risk expertise and are less able to influence their environments or act on and react to the risks they perceive (Caldwell et al., 2013). Most supply-chain-related risks occur at the level of the buyer/supplier relationship (Harland et al., 2003; Paulsson, 2004). Tang (2006) argues that managers are insensitive to possible outcomes and tend to focus on critical performance targets, thus affecting the way they manage risk; moreover, they make a sharp distinction between taking risks and gambling. According to Jennings and Beaver (1997) the management process in small firms is unique and cannot be considered to be the same as professional management in larger organisations practised on a reduced scale. Barney (2001) argued that firms need to organize themselves in ways that allow them to exploit their competitive advantage. Based on Lavie (2006), a firm may not need to develop complementary resources internally but should develop mechanisms that ensure appropriation of relational rent when accessing complementary resources of a partner. The authors focus on how small enterprises are able to manage unexpected customer requests in B2B sales. It is common that small firms can overcome typical drawbacks like lack of management attention to a sale.

The methodology adopted in this study is qualitative. Qualitative methods are powerful for capturing context richness and diversity (Hlady-Rispal and Jouison-Laffitte, 2014). They are also useful in understanding participants' points of view and exploring their behaviour, attitudes, needs and aspirations through actions, intentions and interactions (Arshed et al., 2014; Dana and Dumez, 2015).

Building theory from case studies is a research strategy that involves using one or more cases to create theoretical constructs, propositions and/or midrange theory from case-based, empirical evidence (Eisenhardt, 1989; Eisenhardt et al., 2007). Case studies are rich, empirical descriptions of particular instances of a phenomenon that are typically based on a variety of data sources (Yin, 2003). While single case studies can richly describe the existence of a phenomenon (Siggelkow, 2007), multiple case studies typically provide a stronger base for theory building (Yin, 2003). This method is highly suited to a detailed study of a given situation (Dana and Dana, 2005; Dana and Dumez, 2015).

The use of case study methodology is common in supply chain management research (e.g. Bhattacharya et al., 1995; 1996; Goffin et al., 1997; Hines, 1993). The aim of qualitative research, which refers to any type of research that produces findings that are not based on statistical or other means of quantification (Corbin and Strauss, 2007), is to provide an in-depth understanding about the situation at hand (Cooper and Schindler, 2010). Our research process comprised three phases: (1) research design, (2) data collection and case analysis and (3) cross-case analysis and result reporting.

Our case study design is rooted in literature that focuses on productisation and supply chains (e.g. Hänninen et al., 2013; 2014; Härkönen et al., 2015; 2017; Iskanius et al., 2006). In the data collection phase, data were gathered from seven companies in the United States. Semi-structured interviews were conducted in seven heterogeneous companies to obtain a broader perspective on productisation and supply chains. The main themes covered in the interview questionnaire were as follows: (1) what is the structure of an upstream supply chain network, (2) what is the company's approach to choosing a supplier and (3) what risks can be introduced by selecting an upstream supplier in a UCR situation.

Interviews were conducted with CEOs and managers from seven small companies. These case companies selected because they offered rich and informative empirical evidence, and the researchers had good access to these companies. The number of cases was limited to seven to allow for an in-depth understanding with fewer cases. The companies were able to offer comprehensive and relevant study material. Their advanced practices and product development processes were mutually compared. Company-specific topics were not reported.

According to Guest et al. (2006), 12 interviews are needed to ensure saturation of interview data, though basic elements of metadata can be collected even with as few as six

interviews. In this study, we interviewed 11 highly knowledgeable informants who viewed the focal phenomena from diverse perspectives (Table 1). Each interview took maximum two hours and was recorded and transcribed. The interviewed industry experts were carefully selected on the basis of their professional backgrounds and expertise: they held positions related to product development and supply chain management. Questionnaires were sent in advance so that interviewees could review the questions.

For each company, we conducted a within-case analysis and classified cases according to supplier selection and the case companies' supply chain characteristics.

Table 1. Company characteristics

<i>Case</i>	<i>Year founded</i>	<i>Number of employees</i>	<i>Number of interviews</i>	<i>Interviewee's role</i>	<i>Industry classification*</i>
A	2003	15	2	CEO, product development manager	Information service and computer consultancy
B	1995	30	1	CEO	Information service, computer consultancy, and manufacture of electronics
C	1971	37	1	CEO	Manufacture of communication equipment and electronic components and boards
D	2009	11	2	CEO, sales/marketing president	Information service, computer consultancy, and specialised wholesale
E	2009	18	2	CEO, marketing director	Information service and manufacture of goods
F	1999	25	1	CEO	Telecommunication and information services and manufacture of electronics
G	2009	7	2	CEO, biotech consultant	Biotechnology research and experimental development

*Statistics Finland, Standard Industrial Classification (TOL) 2008 based on European Union's classification of the sector according to the General Industrial Classification of Economic Activities, EU NACE Rev. 2 (Eurostat, 2008).

3 Case companies' use of upstream supplier networks

Company A did not need a new supplier; instead, it needed different cloud service suppliers. This is because the customer desired instant access to the cloud: the customer wanted all systems to work across continents.

Company B mainly used a preferred vendor network. Typically, a query would be sent to vendors when the company received a UCR. One interviewee said, 'A good example is an instance in which a customer needs a certain fleet management solution from us in two months, but there is a 90-day lead time on one of the components for that solution. We don't typically have a lot of leverage with the suppliers, because we're not typically dealing in the tens of thousands of units – we're typically dealing in the tens of hundreds of units...I don't have a magic answer. It's just we attempt to work with our existing vendors, and if they can't comply, we attempt to source alternative vendors. And if we can't find them, we communicate that to the customer'. Thus, in case of a UCR, the supply vendor has to be integrated immediately.

In company C, suppliers were involved in early pre-sales discussions to ensure consolidation of all relevant information. This included potential vendors, that is, vendors who could offer the desired product as well as modifications of a standard product to match the customer's needs. In general, the company's approach to choosing a new supplier was based on predetermined criteria: a vendor had to have the requisite personnel and technology to make the product. In a UCR situation, the biggest risk was not delivering the

request on time, because the company typically made such commitments based on the vendor. One interviewee said, 'Telling the customer that the product is late because the vendor is late is a common story that people use, but it is not a story anybody wants to hear'.

Company D worked on multiple technologies; therefore, the vendor had to be somewhat flexible to accommodate the client's needs and requests. The stage at which supplier involvement was deemed necessary depended on when the supplier was identified. When at least a few suppliers could provide a needed service, finding a supplier with the right fit became easier. If only one vendor seemed to be the right fit, the company would immediately discuss whether the supplier could change their strategies to match those of company D. Selection criteria included the vendor's profile, length of business operations, extent of funding, financial backing, past clientele, market saturation and match with the target clients' markets. One interviewee stated, 'The company had an integrated supplier with whom we spent a long time from the contract negotiation phase to the integration, including everything. And when their entire inventory was assimilated into our system and our client started using the inventory, we found out that the inventory was not legitimate. It was servicing businesses that had no idea that they were working with this third-party supplier'.

Company E required immediate supplier involvement. However, changing suppliers without compromising quality was typically very difficult for them, unless the new required item was an inline product (something the supplier already has). One interviewee said, 'I think that, as a company, we're always looking for new vendors if they can get you a better product for a lower price at the same quality and reliability of distribution of that product'. The company wanted to maintain its quality while changing suppliers. Moreover, they acknowledged that selecting a new vendor was always challenging, with the most vital issue being money. An interviewee stated, 'You can have a whole bunch of product, ship it to a vendor to have it produced, and that vendor can go out of business, lock their doors with your stuff inside; it never gets produced, and the customer never receives it. So we look like the bad guys to the customers'.

Company F's selection of a new supplier involved a fairly formal procurement process following ISO 9000 procedures. The most crucial concern when adding a new vendor was whether the process increased their risk level (as selecting a new vendor does not reduce risks).

Company G did not have many choices available in the marketplace. There were even fewer choices when selecting a supplier, because of the suppliers' specialisations. This meant, for example, that one supplier was targeted to produce a ligand for human beings, while another supplier produced it for mice. Thus, there was generally just one choice available in the marketplace. From a management point of view, this made their supply chain easy to manage.

4.1 Supplier's role and responsibilities

To define each supplier's responsibility, we use the spectrum of responsibility classified into white, grey and black boxes from the software (SW) testing literature. The white box indicates that a supplier should have full knowledge of the product or services to be created. Grey box suggests that the supplier has limited knowledge of NPC but is well versed with the fundamental aspects of the feature under development. The black box denotes that a supplier does not have any knowledge of the internal working of a product feature.

Company A used service providers; that is, the company required suppliers to only have training and a valid license. For this original equipment manufacturer (OEM), the supplier built, sold and serviced the product; that is, company A was not involved at all. However, recently, some collaboration between the suppliers and company has been initiated.

In company B, most suppliers were component manufacturers. This company rarely required contract manufacturers. In some cases, OEMs were used, and they engaged closely with company B during the customisation of their products. Therefore, the supplier's maximum responsibility extended to the white box level (i.e. the generic product).

Company C used component manufacturers and bought what they had to offer. They acquired components through distributors and everything else was bought by the company. In other words, mechanical parts, shelves, cases, and hardware came from vendors because these parts were custom-made for the company. This company also used contract

manufacturers to build printed circuit boards. Therefore, the supplier's responsibilities varied from the white to grey box level, depending on what the company offered the customer.

In company D, which relied on service providers to create server capability, the role of a supplier was slightly different. Company D had only one supply chain layer for cloud service provision, and two suppliers catered to the company's needs. Therefore, the supplier's responsibility was either at the white or grey box level.

Company E relied on manufacturers of garment components and did not use distributors as they distributed their own products. This company used multiple contract manufacturers. Its OEM was engaged in garment printing and embroidery and made all applications to the garment. Some of the supplier's responsibilities were at the grey box level, but most were at the black-box level.

In company F, the component manufacturers consisted of amplifier and filter suppliers who obtained inexpensive parts from distributors. Company F had two major contract manufacturers. Company G used distributors to buy the necessary components and used only one supply chain layer from which it bought a particular ligand, whether an antibody or a small molecule. Supplier responsibility was not relevant in the cases of companies F and G. A summary of companies' upstream supply chain characteristics is presented in Table 2.

Table 2. Summary of supplier roles

<i>Case</i>	<i>Level(s)</i>	<i>Supplier role(s)</i>
A	1	Other
B	2	Component manufacturer, contract manufacturer, and OEM
C	2	Component manufacturer, distributor, and contract manufacturer
D	1	Other
E	2	Component manufacturer, contract manufacturer, and OEM
F	2	Component manufacturer, distributor, and contract manufacturer
G	1	Distributor

4.2 Supply chain agility

Company A used cloud upstream vendors, and they were able to respond quite well to a UCR.

With company B, suppliers were typically less able and less motivated than the company to respond to a UCR. This behaviour may be attributable to the company size: usually, company B sourced from companies larger than itself.

With C, an upstream supplier's involvement was needed during an early pre-sales discussion to make a selection. The company's selection was based on answers to the following questions: in general, who are the possible vendors who can offer the product/service, and who can make necessary modifications of standard products?

Vendors had to accommodate company D's needs and requests. This led to some changes in the upstream supply chain and the vendor's ability to fulfil the customer's need. This could have adversely affected the vendor's response.

In case E, the question was not how well, but how willingly suppliers were to respond. The company's upstream supply chain comprised a large group of supplier/vendors. Their willingness to respond depended on the size of the opportunity and what they stood to lose by not taking advantage of the response time. Generally, a supplier's response was needed almost instantly.

With F, a supplier's ability to respond was situational. The simplest way to clarify this would have been to ask the vendor for an earlier delivery time. This company eventually realised that it needed the suppliers' involvement for large orders. This could range from making a phone call to the supplier to requesting them for updated price list and lead times.

Supplier involvement was also needed in case G, and it did not have to be integrated into the company's system. A summary of the response speed of upstream supply chains is presented in Table 3.

Table 3. Upstream supplier’s responsibility and ability to provide a sufficiently agile response

<i>Case</i>	<i>Responsibility</i>	<i>Ability to provide an agile response</i>
A	White box	Yes
B	White box	No
C	White box and grey box	Yes
D	White box and grey box	Yes
E	Grey box and black box	Variable
F	None	Variable
G	None	N/A

4 Managing the UCR

Selection of an upstream supplier is not a routine business practice in the case of an UCR; hence, the selection criteria for suppliers need to be very clear and easy to use. Suppliers have to be of a certain size and capable of producing the product according to the company’s needs. That is, a supplier’s production ability must match the company’s ability to offer a new product or service. Moreover, as several different kinds of suppliers are available, the company needs to consider all aspects – from relationships and referrals to the supplier’s production capabilities.

In order to do good business, companies should constantly look for new supplier opportunities. Before selecting new vendors, it is important to confirm that they are able to deliver an overall better product for a lower price (higher margins) at the same quality, which ensures reliability of the product’s distribution. Better reliability allows the company to serve more customers. As a respondent remarked in the interview, ‘If someone comes in and says, “Look, we can get you everything cheaper, faster and better”, then yes, we’re interested’. An upstream supplier selection process for UCR is presented in Table 4.

Table 4. Upstream supply chain selection process in UCR situations

<i>Supplier selection stages</i> <i>(Boer et al., 2001)</i>	<i>Recommended questions for assessing supplier fit</i>
Developing selection criteria	What is the reported reliability (i.e. who are they?) and availability (e.g. who has the best inventory)? Which supplier produces the best product? Does the supplier have the right workforce? Do their markets match the clients’ markets?
Identifying approved suppliers	Does the supplier allow easy integration of their tools and ensure quality of the product and speed of delivery? Does fitness for use of the product and not the price factor determine their offer? Do they have the required technology to make the product? Does the supplier comply on operating time, evaluation and metrics?
Making the final selection	What kind of clients does the supplier have and what is their market saturation? What is their credibility? Does the supplier have previous references and financial references (e.g. is it well-funded)?

The selection of an upstream supplier during the UCR process could introduce some risks; it takes considerable long to verify and evaluate an upstream supplier candidate. The main challenge is the lack of available time when a UCR arises. To reduce the risks in selecting a supplier, it is necessary to demand that they accommodate the UCR while adhering to industry standards.

Appropriate supplier involvement is challenging especially in the case of immediacy. The ability to respond to a customer’s request for a new product will often require customisation capabilities. An outstanding motivator for determining how to solve an upstream supply chain mismatch is competition. In most cases, a small business may not be able to manufacture a product by itself, and the company may have almost zero leverage with regard to the supplier. Therefore, it is essential that the company and vendor/supplier

share a common interest. This is more important when an upstream supplier is larger than the company it is supplying. If there are any conflicting interests, the company may not be able to take on the business.

Important issues specific to UCR are the upstream supply chain's flexibility and the capability for product customisation. Both features are necessary because more often than not, products are unique and depend on the customer's new requirement. A supply chain network's ability to support customisation can also benefit the company.

The key issues in an upstream supply chain are the ability to respond quickly, with proven delivery capability and product quality. The UCR process requires that the upstream supply chain can deliver very quickly with excellent product quality right from the beginning. This is because timing is crucial, and a second opportunity is extremely rare. A company must have faith in the promises and professional skills of the upstream supply chain vendors, which requires confidence in business relationships. A summary of upstream supply chain risks and characteristics in UCR situation is presented in Table 5.

Table 5. Upstream supply chain risks and characteristics in UCR

<i>Risks</i>	<i>Facilitative characteristics</i>
Upstream supplier selection	Use of preferred vendor network
Expediency in supplier's involvement	Common interest in doing business
Customisation capabilities	Flexibility and customisation support
Support for a core product	Possibility of integrating design tools
Use of foreign suppliers	Ability to respond rapidly to a request
Suppliers' response time and schedule performance	Proven delivery capability and product quality
Suppliers' interest to do business	Mutual trust and confidence in business relationships
Suppliers' reliability and product performance and quality	Smooth product data sharing and distribution

5 Discussion and conclusion

Dana and Dana (2005) argue that since entrepreneurs are influenced by culture, it is useful to use a case study where the important aspects of environment are analysed and understood. Moreover, although entrepreneurship research has been dominated by quantitative approaches, there is growing body of qualitative research that provides deep insights into the entrepreneur and the entrepreneurial environment (Dana and Dana, 2005; Drakopoulou-Dodd et al., 2014; Hindle, 2004). As a result, the empirical data from a case study inquiry may help researchers and policy makers better understand entrepreneurship in the context of its environment (Dana and Dana, 2005). This case study contributes to the research domain of small business by applying the development-as-practice approach to the study of practices implemented by the company's executives.

Thus, this research enhances our understanding of how an upstream supply chain is used to support B2B sales in UCR situations. All case companies have used (and continue to use) upstream supply chains when a current product or service portfolio has failed to fulfil their customers' requirements. UCR seeks to enhance customer value in B2B sales. A well-managed upstream supply-chain network is critical for addressing an UCR. The challenges associated with satisfying a UCR are high when selecting an upstream supplier during sales negotiations; however, this can be mitigated by careful research when choosing suppliers.

For a small business to be successful, the company and the supplier/vendor must share a common interest. The role of the sales organisation assumes importance when a UCR requires an upstream supply chain. Ideally, the integration of an upstream supply chain (whether a new or existing vendor) should occur during a customer requirement analysis. All information related to the supply chain vendor and their capability needs to be available before a final product decision can be made. Selection is easier if a supply vendor is well known in advance (see e.g. Verrolot et al., 2017; 2018). A new vendor is a clear risk factor and should be selected only after careful evaluation, which may not be possible in event of a UCR.

The multiplicity of roles expected of the owner-manager as the principal stakeholder often causes dissonance which enhances the probability of poor decision-making and inappropriate action (Jennings and Beaver, 1997). The present findings suggest that a well-

managed upstream supply chain network is an important facilitator in UCR situations in small businesses.

However, it is possible that the interviews could be sufficient for a researcher to truly gain a holistic understanding of the entrepreneurial process (Dana and Dana, 2005). When small businesses lack the required resources, using third-party vendors or suppliers is a good solution. Managers are advised to explicitly delegate decisions to suppliers, for example, by issuing parts approval lists and encouraging communication and problem solving amongst suppliers, and to exercise caution in applying the intervention strategy (Johnsen, 2011). The requirements of an upstream supply chain need to be clarified during this process, and the final decision in selecting a particular upstream supplier for the product increment is perhaps the most critical stage in handling the UCR. Manufacturers perceive a need to control the product development process across several supply network tiers through intervention in supplier selection and communication, but these actions are likely to 'tie the hands of the suppliers' (Johnsen, 2011).

7.1 Managerial implications

Even though the aim of managing a UCR situation in B2B sales may be simple ('just close the deal'), the present findings suggest that it comprises a multi-part, communication-intensive, and (consequently) fast-paced productisation process that may be challenging to integrate into small firm operations. Corporate decision making is the key to develop company practices for managing UCRs. In order to understand the nature of the UCR situation in the context of managing unexpected product increments, it is necessary to first understand the background of corporate governance and its impact on decision making.

The main goal of intra-firm cooperation between sales and development is to correct prevent the unnecessary growth of product or service variety. Even within the aim of responding faster and better to customers' preferences, the key objective is to control product variety and operational performance. To quickly and successfully address a UCR, close and smooth collaboration between the customer, sales, development on the one hand and the upstream supply chain supplier on the other hand is required. This is more easily achieved if the tools and design methods used by a vendor can be easily integrated into a firm's own methods. The underlying question to be answered is this: what are the unexpected customer preferences in practice, and how can the situation be resolved without compromising other companies' on-going activities?

Offering fast responses to customers' needs requires better information processing and tools and systems that support sales negotiations. From a sales point of view, this is challenging, because in a UCR situation, a sales configuration tool cannot be used. Given the nature of UCR, established supplier network resources are recommended.

7.2 Limitations and future research

This study has focused on small businesses' use of an upstream supply chain when UCRs arise in B2B sales situations. Some limitations of this study can stimulate further research: first, a limited number of companies were interviewed, and a deeper analysis is needed to extensively investigate the use of upstream supply chains in UCR situations.

Secondly, since our study focused on small companies, the next step would be to examine the uncertainties and characteristics associated with large companies and their supply chains. Third, it can be interesting to examine how new companies can utilise and take advantage of upstream supply chains in UCR situations to boost early growth.

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