PORTFOLIOS OF CUSTOMER RELATIONSHIP DEVELOPMENT STATES IN START-UPS

ABSTRACT

The early customers of the start-ups are the first customer portfolio of the start-up. Given that the first customer portfolio is what enables the development of the position in the network, the development of the product and the development of the start-ups strategy it seems likely that an explanation for how the start-up develops is to be found in the customer portfolio. In the present paper we explore patterns of relationship development states in the early customer portfolio of start-ups. In particular we investigate how the patterns are created and how they relate to the intended future of the start-up. Our theoretical framework combines literature on portfolios and relationship states. When applying the theoretical framework to a dataset of 20 transcripts from start-ups we are able to divide all transcripts into four different patterns: Paradise lost, Pearls on a string, Picture perfect and Persuasion. We are also able to organize the four patterns in a 2 by 2 matrix according to the dimensions number of customers in focus and intended future in terms of independence or acquisition. The paper provides implications for portfolio literature, IMP literature and start-ups.

KEYWORDS

Start-up; portfolio; customer; development

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COMPETITIVE PAPER

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INTRODUCTION

Start-ups are important for national economies since they create employment and transfer technology (Storey and Tether, 1998). Start-ups have been studied from several different perspectives. The main perspectives that have been used are the resource based view perspective, the business model perspective and the institutional perspective (Mustar et al., 2006). Other studies have focused on one important resource in particular such as venture capital (e.g. Bertoni et al., 2011) or genetic characteristics such as whether the origin is academic or non-academic (e.g. Colombo and Piva, 2012) that will determine the future development of the start-up. Common for many studies on start-ups is the goal of trying to find success factors and understanding why some start-ups grow and others do not.

In the present study we also try to understand why some start-ups grow and others do not. However, we study the start-ups using the industrial marketing and purchasing (IMP) approach. This approach goes back to the 1970s where researchers in several European countries started to study how buyer-supplier relationships develop over time. Based on extensive empirical studies they developed the Interaction Model. A common understanding from these early studies of business relationships was that business exchange must be seen as complex relationships between buying and supplying organisations, where what is exchanged is created in interaction between the parties (Håkansson, 1982). Furthermore, business relationships are connected to each other, which imply that what is going on in one relationship affects and is affected by what is going on in another relationship (Anderson et al., 1994; Håkanson and Snehota, 1995). Thus, business relationships are embedded into a business network of firms, direct and indirect relationships to suppliers, customers and other partners. This implies that no single firm or business relationship can be understood in isolation, but must be seen as a part of a larger business network (Ford et al, 2003). This means that we view start-ups as forming their network 'from scratch' and as developing their product as well as their strategic direction in interaction with their early customers (c.f. Aaboen et al., 2011). The early customers of the start-ups are the first customer portfolio of the start-up. Given that the first customer portfolio is what enables the development of the position in the network, the development of the product and the development of the start-ups strategy it seems likely that an explanation for how the start-up develops is to be found in the customer portfolio. As a possible explanation we therefore use the following purpose:

The purpose of the present paper is therefore to explore patterns in the early customer portfolio of start-ups.

In the concept early customer portfolio we include a small set of early customer relationships. In order for a relationship to be a customer relationship there has to be an intention from the start-up to develop the relationship into a relationship where the other actor is a buying customer. A few previous studies of start-ups have also taken an interest in the first customer portfolio of the start-up. It has been studied on the individual level of analysis in terms of who the entrepreneur wants to include in his or her network (e.g. Grossman et al., 2012). Phillips et al. (2013) studied the customer relationship portfolio of one entrepreneur and found that this entrepreneur tended to initiate relationships characterized by similarities which in turn made it easier to develop the relationships further. In other words, the portfolio became heterogeneous even though it consisted

of homophilous dyadic relationships. Ozcan and Eisenhardt (2009) focused on high-performing customers' portfolios and argued that they can be created by initiating several relationships simultaneously and visualizing the context of the start-up. Other, more recent previous studies focus on the difference of strength of the relationships within the customer portfolio. In their study of relationship portfolios Sigfusson and Harris (2013) studied the development of portfolio development over time along the dimensions strength of the relationship and degree of embeddedness of the parties in foreign markets. A movement over time towards stronger relationships was found among the start-ups with no domestic market. Kapoor and Lee (2013) connected the choice of coordination (arm's-length vs alliances) to the strategy of the firm and found linkages between the two in their statistical analysis.

Within the IMP approach differences in relationship characteristics refers to differences in relationship development that is often described in terms of relationship stages (Ford, 1980) or relationship states (Batonda and Perry, 2003). In order to explore patterns in the first customer portfolio with a focus on the relationship characteristics that are to be found within the portfolio our first RQ is:

RQ1: How can customer relationship development states create patterns in the first customer portfolio of start-ups?

Answering RQ1 will also make a theoretical contribution. Most of the change processes and dynamics, which have been studied related to the concept of relationships, have taken the long-lasting relationships as the starting point. Surprisingly few studies have focused on the beginnings of relationships, i.e. how do firms initiate new relationships (Aarikka-Stenroos, 2008; Edvardsson et al., 2008). It could be a number of reasons for the lack of research within this topic. Aarikka-Stenroos (2008) argues that initiation is a blurred phase with many involved actors in different episodes, thus it is a difficult phase of the relationship to study. Another reason could be that in the beginning of the "relationship paradigm" it was more important to explain why relationships were long-lasting as opposed to the more traditional view of the market. However, when exploring patterns in the first customer portfolio relationship initiation and early development of relationships are what is likely to be found. However, only exploring the patterns will not necessarily contribute to an understanding of why some start-ups grow and others do not. For start-up companies, the issue of alliance portfolios has been discussed in relation to how the overall set of alliances furthers the start-up company's overall strategy. It has been argued that "a start-up company may benefit from getting an overview of the portfolio, in order to make decisions on where to allocate resources, how to coordinate activities across alliances, as well as how to add alliances to and subtract alliances from the overall portfolio" (Reuer, Ariño and Olk, 2011, p.141). Hence, our second RQ is:

RQ2: How are the portfolios of customer relationship development states related to the intended development of start-ups.

In order to answer our RQs we will present a theoretical framework in Section 2 that consists of portfolio literature and literature on relationships states before the two are combined in a framework for studying patterns of customer relationship development states in the first customer portfolio. To our knowledge the combination of portfolio literature and relationship state literature have not been done and used in this context before. The framework is applied to

empirical data from 20 start-ups and four different patterns emerge. In the four different patterns two strategic dimensions of intended development are identified; many or few customers and growth or acquisition. Based on the patterns we are therefore able to construct a 2x2 matrix that show how the four different patterns relate to the intended development of the start-up along the two strategic dimensions. In the concluding discussion we propose that a start-up company may benefit from obtaining an overview of the present states of the customer relationships in its portfolio, as well as from looking at the intended as well as the actual changes of the states of the customer relationships over time. Furthermore, by systematically analyzing its customer portfolio, a start-up company can trigger discussion as to how many and which resources should be allocated to which relationships in the portfolio, or directed at customer relationships in the pre-relationship state. In particular, since the contents of the relationship states differ, the discussion may comprise considerations as to which of the capabilities of the individuals involved in the start-up are most usefully allocated to which states-of-relationships. Thereby, a start-up company may become better at allocating their very scarce resources to developing and managing the portfolio towards their strategic purposes, whether they concern developing the company as an independent business or being acquired.

THEORETICAL FRAMEWORK

Portfolio models

While portfolio analysis has been most extensively used for investment banking purposes, aimed at balancing and optimizing the investment portfolio, it has also found its use within the management disciplines. Among the most widely known ones is the BCG business portfolio (Hedley, 1977). Based on two dimensions, business growth rate and relative competitive position, the matrix help identify differences among businesses in a corporation regarding their financial characteristics and strategic options for further development. Having identified how the businesses are scattered through the different quadrants in the matrix, corporate managers can assess whether the business portfolio is presently sound or unbalanced, and consider how the portfolio can best be managed and developed. Later on, the concept of portfolio analysis has entered other management disciplines. For example, companies have been suggested to analyze their product portfolio (Day, 1977), service portfolio (Rosemann, 2010), brand portfolio (Aaker, 2009), project portfolio (Archer and Ghasemzadeh, 1999), product innovation portfolio (Cooper, Edgett and Kleinschmidt, 1999), customer portfolio (Woodside, 1996), supplier and supplier relationship portfolio (Olsen and Ellram, 1997; Bensaou, 1999), account portfolio (Fiocca, 1982), customer relationship portfolio (Johnson and Selnes, 2004), R&D partnership portfolios (Frankort, Hagedoorn and Letterie, 2012) and alliance portfolio (Lavie, 2007; Greve et al., 2014; Mohr, Garnsey and Theyel, 2014).

In general, portfolio analysis is based on identifying a number of dimensions or categories into which a set of items can be classified (be they businesses, projects, or customers etc.), preferably with each item only being placed in one category. Based on the classification, the portfolio analysis provides an overview of the distribution of the set of items among the different categories. For some purposes a balanced distribution is preferable, in others there are some categories that should be avoided. In addition to serving the purpose of classification and overview of distribution of the set, portfolio analysis is often used as the point of departure for choosing which strategies to apply for the items in each category, and for allocating resources among items in the different categories.

Relationship portfolios and Portfolio analysis

Acknowledging the importance of relationship and alliances to a company's profitability and strategic development, some attention has been paid to relationship portfolios. According to Ritter, Wilkinson and Johnston (2004) a firm's relationship portfolio consists of the direct relationships in which a company is simultaneously engaged. While portfolio analysis models may focus on relationships or alliances of any type, the majority of relationship portfolio models concentrate on one particular type of counterparts, either supplier relationship portfolios, or customer relationship portfolios. Several models for analysis of customer relationship portfolios have been suggested. For reviews of the models and the suggested dimensions and categories see e.g. Zolkiewski and Turnbull (2002) and Sanchez and Sanchez (2005). While the suggested dimensions differ, many models seem to incorporate some elements related to the *strategic importance* of the relationship for the company – in the *short term* and possibly also in the *longer run*. Consequently it is not surprising that elements related to profitability often figure prominently in customer relationship portfolio, for example costs to serve, benefits, profit contribution, and volume, attractiveness. However, in many models some element of future expectations often figure prominently in customer relationship portfolio models is often also incorporated, for example strategic importance and value.

Managing a customer relationship portfolio

So far, we have mainly discussed the dimensions and categorizations of the customer portfolio models. However, as mentioned earlier, portfolio models do not only aim to assist managers in classifying relationships and scrutinizing the portfolio, they also aim to assist in handling the managerial issues in the company's set of direct relationships. Considering relationships to counterparts of whichever type, Ritter, Wilkinson and Johnston (2004) suggest that the main managerial issues related to customer relationship portfolios as being e.g. allocating resources to different relationships, managing interactions within each relationship, and the management of positive and negative interactions among portfolio relationships, such as the management of supplier relationships and cross-functional relationships to enable the management of interactions with customers.

We can observe similar managerial issues in contributions that center on customer relationship portfolios. For example, Johnson and Selnes (2004) propose that customer relationship portfolio models "facilitate the understanding of how strategic resources, which will ensure the future health of the business, are allocated among customers". Similarly, Ford et al. (2011, p.65) put forward that most customer relationship portfolio models aim to "assist companies in balancing the investment of time, money and resources in each relationship and maximize the return on that investment across the portfolio of relationships". The model by Johnson and Selnes (2004, p.7) may seem to suggest that a firm should "allocate resources to attract customers and move relationships to higher forms of value creation to maximize profits and develop a sustainable competitive advantage". However, Ford et al. (2011) seems to have a more nuanced view on the managerial implications which can be derived from analysis of the customer portfolio by suggesting (p.69) that "the aim of this type of customer categorization is to provoke discussion within the supplier about the existing and desired distribution of a supplier's relationships across the categories, the allocation of resources within and between those categories and the networking that is needed in order to achieve a more optimum distribution". By provoking discussion, without offering explicit directions, Ford et al. (2011) seem in line with the view on portfolio models (and other managerial tools) advocated by researchers subscribing to the

strategy-as-practice perspective. For example, Kaplan and Jarzabkowski (2006) propose that tools are often better seen as means for communication and negotiating meaning, as they provide space for and facilitate dialogue, bring together viewpoints and interests so that decisions can be made. However, portfolio models can also be given a more authoritative role, to enable a search for logic, objectivity, and rationality, tools provide frames, goals, and answers.

Relationship development states

Studies of what characterizes business relationships and how these relationships may develop over time has been studied for several decades (c.f. Håkansson, 1982). Most of the literature which does exist related to the topic of relationship development and initiation processes have introduced different types of models to describe to evolution of the relationship. These models are often referred to as "stage models" or "states models", where the initiation are in described in the first and/or second phase of the development process (see e.g. Ford, 1980; Dwyer et al. 1987; Wilson, 1995; Batonda and Perry, 2003; Holmen et al., 2005; Arikka-Stenroos, 2008, Edvardsson et al., 2008). The most well-known and cited stage-model is the one presented by Ford in 1980. The model which is based on the IMP approach and takes the point of departure in exchange episodes between a buying and a selling firm. Relationships are built up by these episodes and each episode affects the overall relationship (Ford, 1980). The model has five stages: (1)The pre-relationship stage, (2) The early stage, (3) The development stage, (4) The long-term stage and (5) The final stage. Furthermore, each of the states are characterised based on five important variables: Experience, uncertainty, distance, commitment, and adaptation. Similar stages models have been developed by for example Dwyer et al (1987) and Wilson (1995). For a review see Batonda and Perry (2003). These models have been criticized because they are emphasizing deterministic action. "The principal focus has been that relationship development in inter-firm networks occurs in sequential/incremental and irreversible stage" (Batonda and Perry, 2003, 1459). Other critical issues has been related to that the stages models do not take into account that networks are complex, and that it can be problematic to define the boundaries between stages.

In contrast to the stages models presented above the state models propose that a relationship can move from one state to another in a random fashion. That is, the state models assume that the relationship development process is not necessarily orderly or progressive over time, and actors can move from one state to another in random fashion particularly between the starting point and the end point (Ford & Rosson, 1982). One often cited state model is the one introduced by Batonda and Perry (2003). This model also have the five "classical" phases (similar to the stages model): (1) Searching process, (2) Starting process, (3) Development process, (4) Ongoing maintenance process and (5) Termination process (this last phase is lacking on many of the stages models, but are called the dissolution stage in Dwyer et al (1987)). The new phase or state introduced by Batonda and Perry (2003) is the sixth state called "Dormant process". The dormant processes are when a relationship goes into an inactive state for a shorter or longer period of time. This can happen due to change in business or project completion or failure to meet individual requirements (Batonda and Perry, 2003). A relationship may end up in the dormant state from any of the states (2), (3) and (4), and may exit the dormant phase by going to any of the other states (except state (1)). The identified states can progress in unpredictable ways without a step-by-step sequence, so that some states can be left out or the sequence may be reversed. For an overview of the model see Figure (1). When constructing our framework for analysis we will use the six states model by Batonda and Perry (2003) as one of the points of departure.

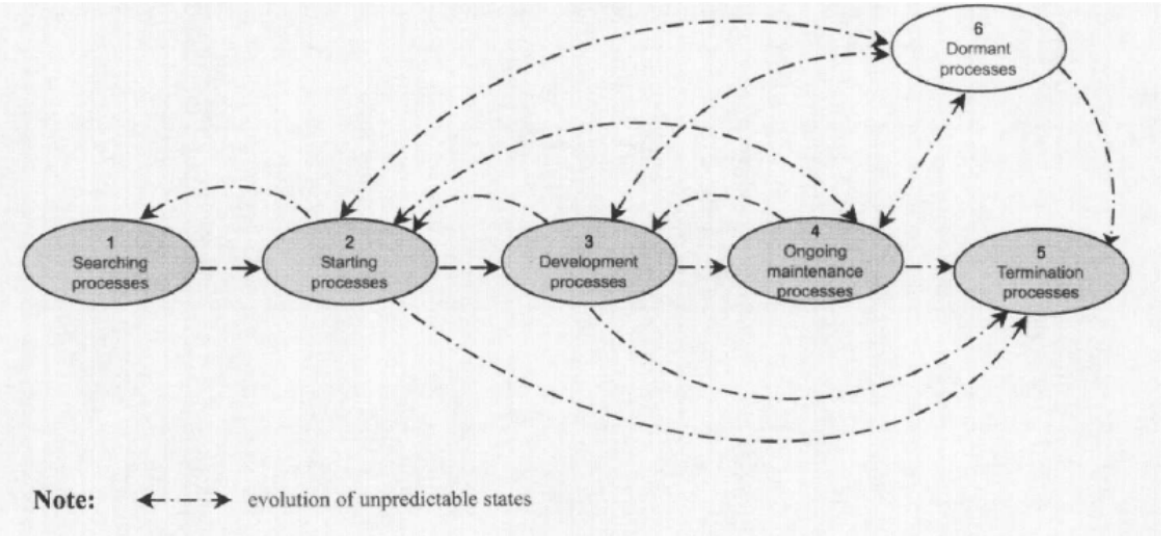

Figure 1: Revised states model of network relationship development processes (Batonda and Perry (2003, p. 1480).

FRAMEWORK FOR ANALYZING PORTFOLIOS OF CUSTOMER RELATIONSHIP STATES IN START-UPS

Based on the assumption that the more long-term the customer relationship, the more profitable the relationship will be for the company, some element of relationship *longevity* is often used as a proxy for the importance and profitability of the relationship. Thus, the investment logic related to relationships implies that costs are assumed to exceed revenues in the early stages/states of the relationship, and that it often takes several years before the revenues will start to exceed the costs, implying that break-even will only be reached in relationships which exist over an extended period of time. Such investment logic has lead companies to focus on "increasing efficiency and effectiveness in maintaining current customers rather than prospecting new customers" (Sanchez and Sanchez, 2005, p.309).

In their review of customer portfolio analysis models, Ang and Taylor (2005) identify Storbacka et al. (1994) as being the first ones to inject a dynamic aspect into their model by including a "relationship longevity" dimension to accompany their "customer relationship profitability" dimension. Building on their work, Ang and Taylor (2005) suggest a model with the one dimension being "length of tenure", ranging from low tenure to high tenure. Hence, both of these models seem to be based on the assumption that long-term relationships can be expected to be more profitable, and hence more valuable, than relationships that are established more recently or are more short-term. More explicitly inspired by relationship life cycle models, Johnson and Selnes (2004) distinguish between relationships to customers who are strangers, acquaintances, friends, and partners and suggest that the company's ability to transform strangers into acquaintances, acquaintances into friends, and friends into partners, is central to the company's strategic development and profitability. However, Johnson and Selnes (2004) acknowledge that their "framework and typology suggest that customer relationships progress over time to closer and closer forms of value creation" but also state that "there are individual cases in which the progression of relationships is different". While the model by Johnson and Selnes (2004) quite

explicitly considers aspects of customer relationship dynamics, other portfolio models also rely on some kind of life cycle classification of customer relationships. For example, the model by Campbell and Cunningham (1983) discerns between "tomorrow's customers", "today's special customers", "today's regular customers", and "yesterday's customers". In a similar vein, Ford et al. (2011) distinguish among the following eight categories of customer relationships: "today's profits", "cash cows", "yesterday's profits", "old men", "tomorrows profits", "new technical requirements", "new commercial requirements", and "minor relationships".

While the investment logic may be viewed as the dominant one, it is not necessarily so that all relationships follow this pattern. As pointed out by Gadde and Håkansson (2001, p.177-178), costs and benefits achieved in relationships over time may vary considerably; while some follow the expected pattern of an investment with costs preceding benefits, others follow alternative patterns, for example by benefits being most prominent in the early stages/states and with costs being relatively stable level, or by being characterized by several investment cycles over time. A similar point is made by Ang and Taylor (2005) stating that it is "by no means always the case [..] (that) the organization receives more income and profit [..] as customers go through the relationship life cycle. More generally, Zolkiewski and Turnbull (2002, p.582) questions if it is "viable to transpose product life cycle concepts into a customer life cycle and then use this as a basis for planning?".

In addition to allocation of resources, the portfolio models which are inspired by relationship dynamics and stages/states theory bring to our attention that the type of activities which are in focus in the different stages/states may differ considerably. Consequently, different types of employees may be more (or less) suited to partake in the activities of a certain type. For example, some employees may be more capable of maintaining relationships than starting them, or developing them. More generally, the issue of allocation not only concerns the amount of resources allocated to different relationships but also the type of resource allocated. We may conclude that while some elements of customer relationship longevity and life cycle logic seems to underpin many of the portfolio models, none of them explicitly use the more recent relationship states models for classifying the relationships. Furthermore, while it is assumed, more or less explicitly, in the customer portfolio models that the importance and profitability of a customer relationship varies over time, it is not universally to be assumed that its importance and profitability increases with age.

A common denominator of portfolio models is that they are often illustrated as boxes, with important dimensions on the x- and y-axes, where the different customer relationships are plotted in different parts of the portfolio in order to provide overview for strategic decisions. In the present paper we are combining the portfolio literature with relationship development literature. The model of relationship development suggested by Batonda and Perry (2003) include 6 different relation development states. A preliminary solution to that combination could be to divide the box into 6 areas and plot the customer relationships in them. However, an important part of the relationship state literature is that all 6 states are on the same 'level'; it would not make sense to divide them two by three, and it should be possible to move between states in any order. The relationship development should not need to pass through one 'box' in order to get to another. Consequently, we have decided to illustrate the combination as a wheel divided in 6 fields. We suggest the model illustrated in Figure (2) as a starting point for the analysis. By plotting the customer relationships included in the portfolio within the states of the model, the

model may be used for analyzing the present status of a single relationship, the dynamics of a single relationship, present status of the set of customer relationships, as well as connections across customer relationships. The model may also be used for explaining patterns of customer portfolio development and strategic development of start-up companies, despite or in the absence of their intentions.

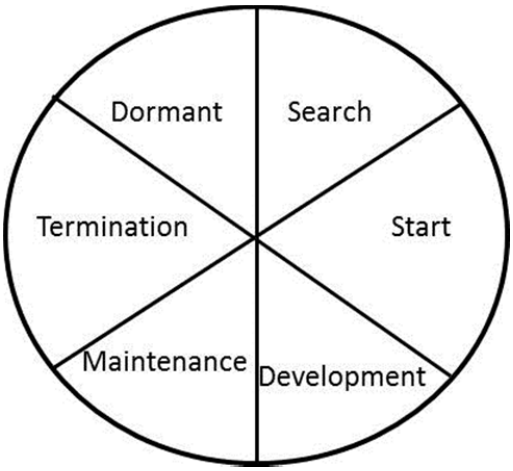

Figure 2: The starting point for exploring patterns in portfolios of customer relationship states.

METHOD

The initiation of this research resembles to what Dubois and Gadde (2002) refer to as systematic combining. During several years of doing interviews with start-ups an idea started to develop and the interviewer often found herself thinking "Aha, it is one of that type of start-ups." while conducting interviews. In discussions with the co-authors it became clear that the 'unconscious' taxonomy must have something to do with portfolios and relationship development states. We therefore set out to explore the literature on portfolios and relationship states and found a way to combine them that enabled discussions where the patterns found during the interviews could be explained in a more explicit way. During the discussions we discussed examples of "typical" firms in the different patterns but in order for the patterns to actually be patterns we wanted to see if it was possible to divide many start-ups according to the patterns.

For the division of start-ups according to patterns we preferred to use a data set based on qualitative data compared to quantitative data since we need to capture the viewpoint of the interviewees (Graebner et al., 2012). The reason for this is that our combination of portfolio literature and relationship states dictates that we also need to find out about customer relationships that are in the search- and start- states of development as well as the dormant state. In these states there is little evidence to be found about the relationships existence other than the interviews. We therefore chose to use the transcripts from the 20 most recently conducted interviews with start-ups in Norway and Sweden. These interviews were made as part of a longitudinal study of network development in start-ups. Some of the start-ups in the data set have also been discussed in-depth in other papers. All start-ups are technology based. We scanned the transcripts to see what relationships that the start-ups had developed so far and what intended futures the start-ups had and we were able to fit them all into one of the four patterns. We are aware of the potential problem of using interviews as data for this type of analysis. There are no guarantees that the interviewee is reporting the correct intended future. In one of the start-ups for

example the pattern that emerged after the first interview showed several customers in different relationship development states. However, during the second interview the interviewee admitted that the start-up at that point had already been in negotiations of being acquired by one of the customers but it was un-official at that point in time and therefore that had not been mentioned during the first interview. Moreover, there could be a bias towards wanting to give the impression of having several customers and being a robust start-up in relation to stakeholders. Before writing the present paper we also fitted in other start-ups in the patterns in order to see if the patterns would also work for start-ups that they had not been developed based on. The entrepreneurs in the three 'additional' start-ups were found in the entrepreneurial milieu where we conduct our research and interviewed informally. The start-ups were at an earlier stage of development compared to the 20 initial start-ups but it was still clear which ones of the four patterns they were starting to form.

FOUR PATTERNS OF RELATIONSHIP STATES IN START-UPS' CUSTOMER PORTFOLIOS

When we analyzed the 20 startups four patterns in the portfolios of customer relationship development states emerged. We found 4 start-ups displaying the first pattern, 9 start-ups displaying the second pattern, 3 start-ups displaying the third pattern and 4 displaying the fourth pattern.

A typical start-up displaying the first pattern: Paradise lost

As the other typical start-ups presented below this is one of the actual start-ups from the study. The start-up is chosen because it has many of the characteristics that are shared with other start-ups displaying the same pattern. These characteristics are also the characteristics that are emphasized in the presentation. The start-up started as an idea when the founders were students at the technical university. The students developed the idea towards becoming a start-up together with professors within the technical area of the intended product. Early in the development the students made a phone call to a multinational corporation located in the same town as the technical university. The multinational corporation found the start-up to be interesting since if a technology shift were to take place within the industry of the multinational corporation the intended product of the start-up would be of interest to the multinational corporation. The multinational corporation provided seed funding, which in turn generated additional funding from the Norwegian governmental instrument for development of enterprises. The relationship with the multinational corporation has become more and more developed. The start-up became part of the supplier development program of the multinational corporation and developed relationships with employees in both technical and business departments. The multinational corporation also became part of the advisory board of the start-up and financed the prototype as well as the prototype testing. The start-up developed few other relationships beside the relationship with the multinational corporation and a couple of private investors and the multinational corporation therefore had several roles that other stakeholders otherwise could have had. Currently, the start-up has developed the product to a rather advanced level but the start-up does not see a market for the product and has therefore decided to put the start-up on hold until the market catches up.

After forming the first major relationship the start-up was not able to move on. The start-up did not form additional customer relationships and was neither able to develop the relationship with the first major customer to the point that the multinational corporation acquired the start-up. In other words, as the Figure (3) below illustrates, typical for the start-ups displaying the first pattern is to have one relationship that is rather well developed and few other relationships. It is

important for these start-ups to either develop additional relationships or develop the one relationship even more in order for it all to not come to nothing.

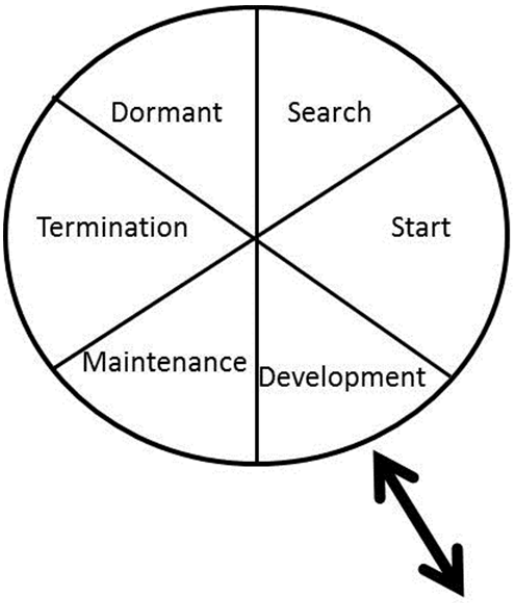

Figure 3: The portfolio of customer relationship states displaying Paradise lost.

A typical start-up displaying the second pattern: Pearls on a string

The idea of the start-up originated at a research institute after a train accident. A researcher figured that the accident could have been dealt with by the train company in a better way and developed a safety solution. The train company then became the first major customer. After this first customer the start-up was able to initiate and develop additional customer relationships with transportation infrastructure companies, ferry companies and aviation companies. After a while the start-up realized that the safety solution is generic and therefore decided to initiate customer relationships within the off shore sector since there are more money in the off shore sector compared to the transportation sector. The first major customer within the off shore sector was a company from the same country as the start-up and other international companies within the off shore sector followed. Currently, the start-up is also initiating customer relationships within the energy sector and the university sector. However, the first major customer relationships within these two sectors are so far less developed compared to the first major customers within transportation and off shore.

A typical characteristic among the start-ups displaying the second pattern is that they interact with one customer and then initiate relationships with similar customers that are interested in a similar product. The start-up then complements the portfolio with a customer within a new sector and then interacts with other customers that are similar to this new customer. This is illustrated in Figure (4) below. The first customers in the first two sectors are in the maintenance state while the first customers in the two new sectors are in the start state. The other customers of the first two sectors are evenly distributed while the other customers in the new sectors are in the search state.

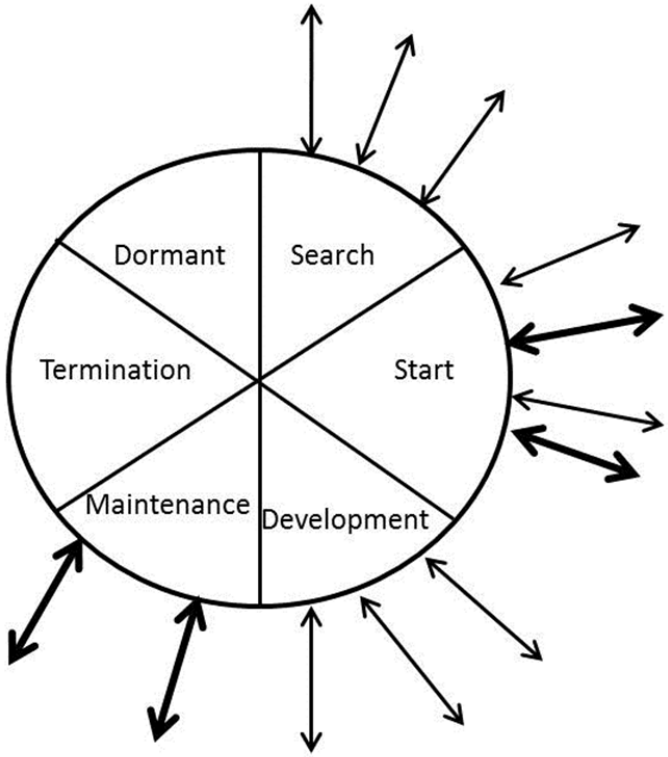

Figure 4: The portfolio of customer relationship states in Pearls on a string.

A typical start-up displaying the third pattern: Picture perfect

The start-up develops software based on the previous experience of the founder who is a student at a technical university. The software enables a limited function that can complement, and needs to be integrated with, accounting software. Initially the start-up called potential customers and went to visit the potential customers in order to persuade them to try out the software as a complement to their current accounting software at their company. After having found 4-5 customers this way the start-up realized that finding customers this way was very resource intensive. The start-up therefore instead started to post adverts on Google where people that were interested in trying out the software could sign up by e-mail. Then they received a link where they could start using the software. 70 new users were quickly recruited this way. The start-up does not know who these users are other than the information that they provide themselves. The start-up tries to make note of what industrial sector they belong to and which country they are from. Both the initial customers and the accounting software companies that the start-up has met a trade fairs have given the start-up the impression that it will be difficult for the start-up to integrate the software with accounting software already used by their customers. The start-up therefore focuses on developing the functionality of the software, using the feedback from the new users as well as the initial customers.

A typical characteristic for start-ups displaying the third pattern is the focus on many relationships with users or customers as illustrated in Figure (5) below. These relationships are usually in one of the early development states and nicely distributed to cover a wide range of geographical areas, industrial sectors or parts of the value chain. In the example discussed above the start-up kept track of both the industrial sector and the geographical location of all their users

even if they interacted very little with them. Among the other start-ups displaying the third pattern there are also start-ups that have developed their relationships towards regular deliveries of products but still have the very outspoken strategy of finding one customer in each country and finding ways of being able to have as many customers as possible in a cost-efficient manner. Some of the start-ups had identified the corporation that they wanted to be acquired by and had interacted to with them at some point so that they could be considered a Dormant relationship while others only were aware of the company's existence or had a general idea of what type of company that was likely to be willing to acquire them.

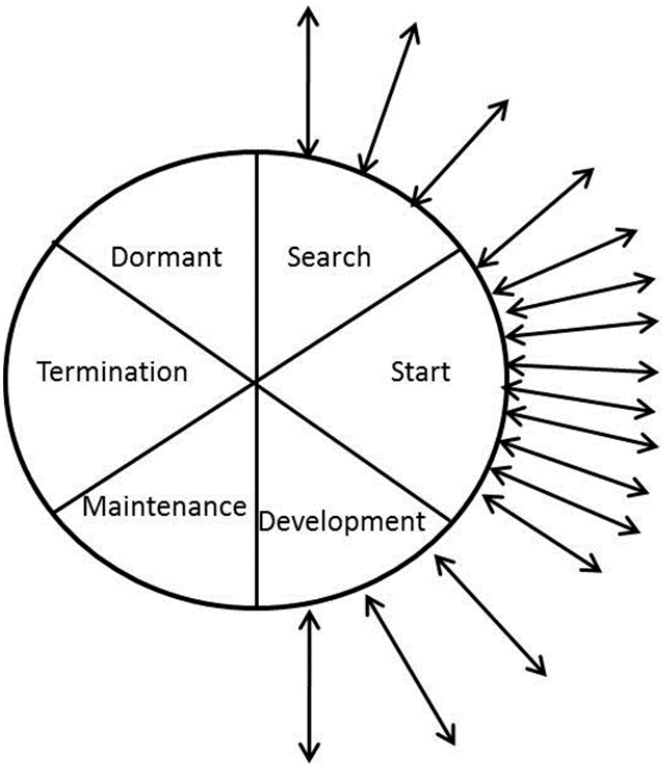

Figure 5: The portfolio of customer relationship states in Picture perfect.

A typical start-up in displaying the fourth pattern: Persuasion

Among the start-ups that we have studied, none of them started out displaying the fourth pattern but instead moved there when the suitable corporation to be acquired by was identified among the start-ups' relationships. The start-up that we use as example develops software and was based on research from a technical university. The company that was later acquiring the start-up was the first paying customer of the start-up. In the interaction between the start-up and the company an application of the software was developed. The idea was that when the application was developed it could be sold to additional customer with only small modifications. The start-up subsequently initiated additional relationships similar to the relationship with the first buying customer in order to develop other applications of the software that could be sold to other customers after small modifications. At this point the portfolio resembled more to the Pearls on a string, even though the demonstrated ability to cover a wide variety of different sectors with the software could be seen as Picture perfect. However, the situation differed from the Picture perfect since the relationships were more developed and the applications were very different so there was no

apparent potential buyer that would need all the applications of the start-up to be integrated in its own software. The reason that the situation later could be seen as the Persuasion was that the relationship with the first customer was much more developed and the interaction much more intensive compared to the other customers that the start-up developed an application in interaction with. The first customer acquired everything except the applications that it had not been part of developing. After the acquisition the start-up has continued to develop new products that can be used together with the original application that was developed in interaction with the first customer. Even though the start-up is now part of the first customer the start-up still has several of the first customer's competitors as customers.

A typical characteristic for start-ups displaying Persuasion is to have a customer relationship that is much more developed and where the interaction is much more intensive compared to the other relationships as illustrated in Figure (6) below. The start-up that we used as example started to display Persuasion after having displayed Pearls on a string. Another software developing start-up that was displaying the Persuasion in contrast had previously displayed the Picture perfect. The start-up knew that it wanted to be acquired by a major software company since it would not be able to sell its software solution to all computers in the world on its own. In order to attract the attention of the major software companies the start-up developed one software solution for each of the four major customer segments of major software companies. As soon as one of the major software companies started to interact with the start-up through the network all efforts were directed towards that relationship. The products that were less interesting for that particular software company was cancelled and the other products were adjusted to fit the portfolio of the major software company.

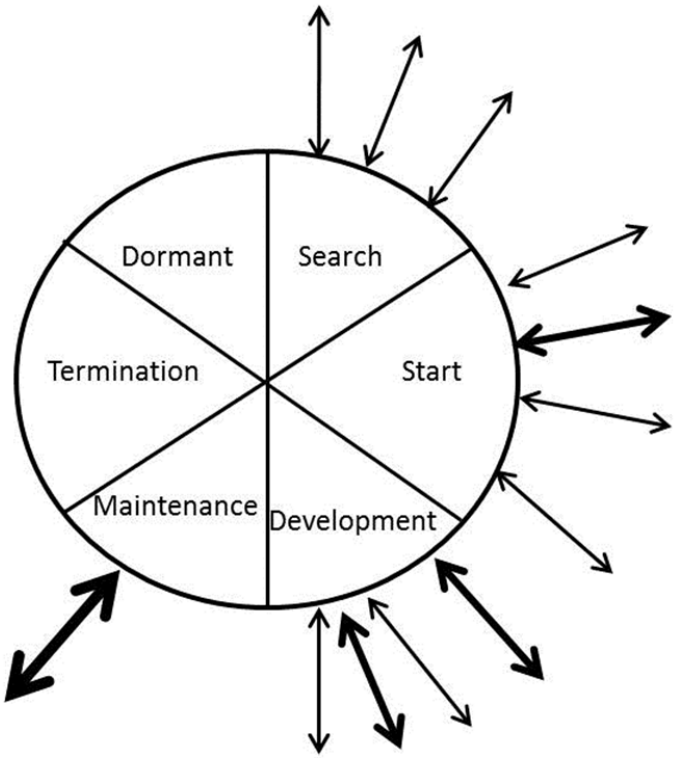

Figure 6: The portfolio of customer relationship states in Persuasion.

ANALYSIS OF THE FOUR CUSTOMER RELATIONSHIP STATE PATTERNS

In contrast to studies analyzing the portfolio of customer relationships from the perspective of the entrepreneur (e.g. Grossman et al., 2012; Phillips et al., 2013) the present paper focus on the patterns of customer relationships states in early customer portfolios. As previous studies (e.g. Ozcan and Eisenhardt, 2009; Kapoor and Lee, 2013) have also done, we believe that the patterns are connected to strategy and the visualized future. Both Persuasion and Picture Perfect seem to be geared towards acquisition even though they do it in different ways. While Persuasion are visualizing one or very few potential buyers of the start-up and focus all activities towards adjusting to that potential buyer the Picture Perfect pattern tries to demonstrate value towards a larger set of potential buyers. The difference in terms of number of customer relationships in focus also exist between Paradise lost and Pearls on a string even though these patterns do not seem to be primarily geared towards acquisition but towards finding customers for their products. Similarly to Sigfusson and Harris (2013) we have organized our patterns in a two by two matrix (see Figure 7) in order to discuss developments between the patterns.

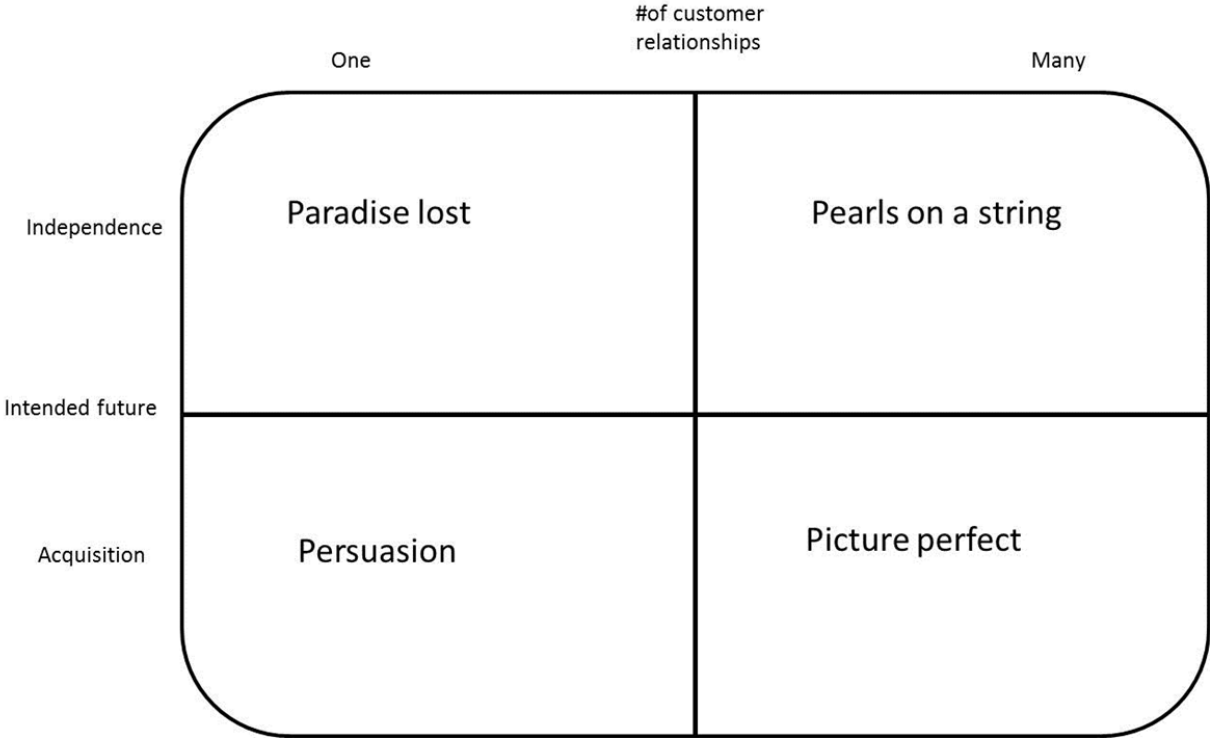

Figure 7: Matrix showing the intended future as a function of patterns in portfolios of customer relationship states in start-ups.

In the matrix the four patterns are placed according to the number of customer relationships that are in focus and whether the intended future is to remain independent or to become acquired. As indicated in the empirical material it is possible to change from one pattern to another. When the first customer is found most start-ups display a pattern that resembles Paradise lost. In the interaction with the first customer the start-up may or may not learn whether or not this customer is a potential buyer for the product or the firm and the start-up may or may not be successful in

initiating additional customer relationships. This will determine the move, or lack of move, in the matrix. However, it may also be possible that the start-up learn enough in interaction with potential customers in the search or start states to choose another pattern than the Paradise lost from the start even though no such start-ups were found among the twenty analyzed for the present paper. After this initial development, events such as changes in the relationships, the product-relationship link and connections between the relationships, may cause the start-up to reconsider the number of customer relationships to focus on and the intended future. It is important to remember that it is still the patterns of relationship development states in the customer portfolios that are in focus. A move in the matrix thereby includes several changes in the activities in the customer relationship portfolio and there may be some resource constrains that also determines the direction of the move. For example, the start-up may not have enough resources to develop several customers to a developed state or the maintenance state as needed in the Pearls on a string pattern. If the necessary resources cannot be found the start-up may be forced to move towards another pattern.

CONCLUSION

In the present paper we initially posed the question how relationship development states create patterns in the first customer portfolio of start-ups. We combined portfolio literature with literature on relationship states and we identified four different patterns; Paradise lost, Pearls on a string, Picture perfect and Persuasion. In the first pattern, Paradise lost, the start-up has found its first customer. In Pearls on a string the start-up develop several customer relationships to the maintenance state and also have several other customer relationships in the other states. In the Picture perfect pattern the start-up mostly keep the customer relationships in the early development states and rather focus on having many customer relationships in many geographical areas and many industrial sectors in order to demonstrate value to potential buyers of the start-up. In the Persuasion pattern all efforts are directed towards adjusting to one, or very few, potential buyers of the start-up. All other customer relationships are then overshadowed by the efforts in adjusting in interaction with this potential buyer who may or may not also be a customer of the start-ups product. We also asked the question of how customer relationship states relate to the intended development of start-ups. As shown in the matrix in Figure (7) there seems to be patterns focused on both continued independence of the start-up and acquisition, where the customer development state portfolios focused on acquisition were organized to fit the needs of potential buyers while the other two focused on robustness in connection to incomes.

Theoretical implications

While the use of portfolio analysis for analyzing business relationships is not new, the use of portfolio analysis for analyzing relationships states is. Hence, combining the respective concepts of relationships states and relationship portfolio represents a novel contribution to IMP literature. Furthermore, the format of the portfolio model we suggest for analyzing relationship states diverges from the conventional portfolio analysis models in having neither a matrix nor a cubic format, in line with relationship states models.

When portfolio analysis is used for overviewing the set of relationship states at a single point in time, it gives prominence to structural elements across relationships. As such, it gives rise to discussion of how the set of relationship states will enable the company to develop, and survive, in the (near) future. In particular, for start-up companies, it can assist the company in realizing the

need for having relationships in, or move them to, relationship states which provide the start-up with sufficient profits. Furthermore, it may assist the company in contemplating whether the type and number of relationships in early states of development, and which therefore may not generate income (yet), is sufficient for developing and preserving the company, and how resources could beneficially be allocated across relationships. However, while focusing on structural elements, the dynamics of the relationships being analyzed will come to the fore, since the units being analyzed as well as the categorization alternatives available are relationship states. States models assume that relationships are inherently fleeting and that they do not automatically move across stages in a predetermined, "natural" pattern. Furthermore, the relationship dynamics will depend on the actions of both of the involved parties, comprising efforts towards maintaining a relationship in a particular state, as well as efforts at moving a relationship to a desired state. Hence, the suggested model highlights the need for a company to actively work to influence its relationship moving towards, or remaining in, a particular, desired state.

If the model is used explicitly to discuss the dynamics of a single relationship, by examining past and/or potential future relationship development paths, processual aspects will take center stage. However, if paths of several relationships in the company's portfolio are discussed, structural elements will meld into the deliberations. Hence, we suggest that the combining of a dynamic element (relationship states) with a structural format (relationship portfolio) may enable researchers (as well as company representatives) to concomitantly consider structural and processual aspects of relationships.

Secondly, by suggesting a model to support analysis of relationship state portfolios, we second the IMP researchers who suggest that the conceiving of analytical tools, which can be used by practicing managers, is an important task for IMP researchers in the future.

Finally, the model may be used for all companies, irrespective of their age and state of development. Nevertheless, we argue that it is particularly relevant for start-up companies, for explaining as well influencing their development. Previous research has shown that early relationships play a significant role for the start-up company and heavily influences its development. Furthermore, building relationships often requires a lot of efforts and resources, and given the often stressed scarcity of resources available to a start-up company, it is of particular importance to consider start-up companies' portfolios of relationship states at different points in time, the manners in which start-up companies move (or not) their relationships across stages, as well as the start-up companies' intentions, actions and resources available for moving relationships to states which generate income or otherwise are in line with the various intended future developments of the start-up companies.

Practical implications

The matrix may be used in three ways. In the first way the matrix is used to map which patterns a portfolio of start-ups display. In the second way a start-up manager can use the patterns and the matrix to see towards what future the start-up is heading given its current portfolio of customer relationship development states. In the third way the patterns and matrix can be used to determine what customer relationships that need to be initiated and developed in order to reach an intended future. In essence, an awareness of the current pattern of a start-up and/or the intended future of a start-up may make it easier for the start-up to reach its intended future in a way that uses fewer resources. For actors specializing in evaluating the potential of start-ups the patterns may also

shift some of the focus from the founding team and the product when determining the potential future of the start-up. Compared to classical portfolio models (e.g. Hedley, 1977) there may be several ways to determine how sound the portfolio of the start-up is. The Pearls on a string pattern resembles most to what would be regarded as a sound portfolio in the BCG matrix since there are both customer relationships that generate incomes and customer relationships that could easily be developed into becoming income generating since they are already developed to some degree and they are similar to the relationships that are already more developed. However, depending on the potential of the product and the market it may be that a Picture perfect or Persuasion portfolio are more sound portfolios in order to reach large incomes. The important issue, when determining the soundness, is rather that there is a fit between the portfolio of customer relationship development states and the intended future.

Future studies

The present paper has a conceptual focus, based on empirical data from 20 start-ups, in order to derive the suggested patterns in portfolios of customer relationship development states. In order to make the patterns more robust we suggest that future studies should test the patterns on larger numbers of early customer portfolios in a systematic way. Furthermore, we suggest that future studies should develop the practical applicability of the four patterns and the matrix towards a tool that enable discussions regarding strategic decision making in start-ups.

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