A Comparison of Firms' Customer Portfolio Analysis Use in Different Business Contexts

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Abstract

Several customer portfolio models have been proposed for relationship and network management tasks in literature. However, there is currently only limited knowledge concerning firms' actual customer portfolio analysis use. It is emphasised that earlier research has had a relatively narrow view to customer portfolio analysis and a new broader definition for studying customer portfolio analysis is adopted. Further it is argued that customer portfolio analysis should be seen as a contextual phenomenon. Hence, this research focuses especially on examining the business context's effect on firm's customer portfolio use. A concept of business context complexity is developed to examine the overall complexity of a firm's exchange context and relationships. The empirical part of the research examines the use of customer portfolio analysis of seven case-firms all acting in different business contexts varying by complexity. Comparisons of central characteristics of firms' customer portfolio analysis use are done contextually. The results support the proposition that customer portfolio analysis is a strongly context dependent issue. Formal, theoretical model like customer portfolio analysis is found to be more used and dominating mostly in low and medium business context complexity situations, whereas individual customer analysis is found to be dominating in more complex business contexts. It is suggested that more research is needed in future about firms' customer portfolio analysis use and especially about its performance.

Keywords: Customer portfolio analysis, business context, environment, relationship management

Introduction

Research gap

The firms' business environments have gone through major changes in recent years. These changes include increasing globalisation, technological complexity and change, industry concentration, and changes in power structures of business to business markets. The increasingly competitive and dynamic business environments pose new challenges for management. Consequently, the management of relationships and even networks has been widely proposed to be a one of the key success factors in current business (e.g. Möller and Halinen 1999). Here the *customer portfolio* level can be seen as a highly important analysis aspect as it is mediating between the management of single relationships and focal firm's broader network. Moreover, customer portfolio analysis has been one of the few suggested tools for management of relationships and networks. Also, some authors have recently argued that there is need to move from strict relationships marketing view focusing to the few closest relationships to a broader managerial view taking into account the firm's whole portfolio of relationships (see Johnson and Selnes 2005).

Currently the academic research on customer portfolio analysis has concentrated strongly on proposing and testing theoretical customer portfolio models (Hartley 1976; Smackey 1977; Canning 1982*;* La Forge and Cravens 1982; Cunningham and Homse 1982; Fiocca 1982; Campbell and Cunningham 1983; Dubinsky 1986; Shapiro, Rangan, and Moriarty, 1987; Krapfel, Salmond, and Spekman 1991; Pels 1992; Yorke and Droussuitis 1994; Storbacka 1997; Turnbull and Zolkiewski 1997; Freytag and Mols 2001; Zolkiewski and Turnbull 2002; Dhar and Glazer 2003; Johnson and Selnes 2004; 2005). The testing of the models indicates that the concept seems to be a valuable concept for firms. However, at the same time some researchers have criticised customer portfolio models heavily because they ignore the interconnectedness of actors, and as they have too simplifying views of reality making the whole concept problematic (Ritter 2000, p. 324–325; Dubois and Pedersen, 2000). Clearly these views provide contradictory knowledge about the customer portfolio analysis and its value for firms acting in business.

We argue that the meaningfulness of testing formal modes in one point of time without the context of application can be questioned. Several reasons exist for this. The testing of theoretical portfolio models cannot provide knowledge about the *actual long-term results and performance* of customer portfolio analysis use in business. As there is almost no deeper going empirical research on the firms' *actual customer portfolio analysis use,* or its performance it can be concluded that an interesting and relevant research gap exists. (exeptions: Leek, Turnbull, and Naudé 2003; Salle, Cova and Pardo 2000; Räsänen, 1999). In short, *it is argued that the emphasis in research should be moved from testing separate theoretical models to studying firms' actual customer portfolio analysis use and its performance.*

Another important notion about customer portfolio analysis is that it has been studied this far without examining the context of its use. We argue that this is an important aspect as there is increasing evidence from research that relationship marketing and even customer portfolio analysis are context-dependent issues (e.g. Halinen and Terho 2004; Möller and Halinen 1999; Brodie, Coviello, Brookes, and Little 1997; Grönroos 1993). Further, as the tailoring of the models is heavily emphasised by some academics (as opposed to general models) it is proposed that this aspect should be accommodated into the research's focus. *Thus, we argue that customer portfolio analysis can only be understood and thus studied as embedded in the external and internal context of its use.*

Further, the current research has had this far a very narrow view to customer portfolio analysis limiting itself only to formal, matrix-form models. By looking the long history of portfolios and firms' actual customer base analysis practices it is argued that a *broader view in studying customer portfolio analysis is needed* (see also Leek, Turnbull, and Naudé 2003; Räsänen 1999). That is to say customer portfolio analysis is seen as a broad phenomenon including wide variety compared to the theoretical matrix-form customer portfolio models.

Research questions

The *purpose* of this research is to create a picture about firms' customer portfolio analysis use in business as a contextual phenomenon. The focus is limited to B-to-B contexts. This purpose is divided to two <u>*research questions*</u>: 1) to explore whether business context affects firms' customer portfolio use. 2) To explore what kinds of customer portfolio analysis are used in different contexts? As there are almost no empirical researches about customer portfolio analysis a qualitative approach has been adopted. On the basis of results a further quantitative research of firms' customer portfolio use and its performance is suggested.

The structure of this paper

The structure of this paper is following: *first* the portfolio analysis is defined and the central characteristics of customer portfolio analysis and its use are discussed on the basis of broad literature analysis. Further a question about the context-dependent nature of customer portfolio analysis is raised up. *Secondly*, the relevant contextual contingency factors proposed to affect firms' customer portfolio analysis use are discussed. More specifically, three alternative views in marketing about the context the firms are acting in are discussed and business context complexity view is suggested to be relevant aspect for studying empirically the possible business contexts effect on firms' customer portfolio analysis use. *Thirdly,* the methods of this research are in focus. This includes also the aspects of choosing the cases and discussion about the quality of the results. *Fourthly* the results of the empirical research are presented. *Finally*, there is discussion about the findings of the study and together with the relevant implications for future research.

Customer Portfolio Analysis

Customer portfolio analysis defined

As stated above, we argue that the theoretical customer portfolio models represent only a narrow area of customer portfolio phenomenon in total. This is because of the proposed models focus only to very formal matrix based analysis methods. Based on the few empirical studies and discussions with managers and consultants it is seen to be improbable that strictly formal, theoretical model like customer portfolio analysis is very commonplace in business. However, there is evidence that firm's do analyse and manage their customer bases systematically (Leek, Turnbull and Naudé 2003; Räsänen 1999) indicating that customer portfolio analysis should be defined in a broader way compared to proposed, formal models. The definition of this research has been formed on the basis of an in-depth literature review based on all central (marketing) portfolio models since Markowitz's (1952) very first portfolio model in the area of equity investments.

This research defines customer portfolio analysis as "*a practice by which a company analyses the structure of its customer base. The aim of the analysis is to help the company to form a balanced customer structure, allocate resources within the customer base, and design strategies for managing customer groups and individual customers*". Though, this specific research delimitates itself to companies that have some formal, conscious customer portfolio analysis management system in use

This broader definition takes into account the very probable variation of the customer portfolio analysis concept in business. Instead of concentrating just theoretical, formal model -like special cases this research aims at researching firms' broader customer portfolio analysis *use* in business. It is argued that this definition reflects well the all the core aspects of customer portfolio analysis.

This definition can be justified by following reasons. First of all the focus of portfolio analysis is on analysing of firms' *all* customers i.e. the whole portfolio of customers. Secondly, this definition does not delimit itself to a certain analysis technique, such as matrixes. Thirdly, the *balance* of customer portfolio is emphasised which can be seen to be central goal in customer portfolio analysis. The portfolio balance is more or less explicitly present in all proposed models. The first models that are based on mathematical optimising have had very strong explicit focus on forming optimal portfolio (of stocks, or products) (e.g. Markowitz 1952; Kahane 1977). Later, this the emphasis moved to explicit portfolio balance rather than strict optimising – an aspect has been present in marketing portfolio models e.g. in Hedley's famous BCG portfolio model (1976; 1977). In relationship portfolio models the balance aspect has not been explicitly present but it can be seen to be implicitly inbuilt in all models. More specifically said the balance is present in form of companies' long term profitability/ effectiveness goals that are inevitably present in all models. It can be argued that forming a balanced portfolio of customers is the overall goal of portfolio analysis. Fourthly, all portfolio models are designed for the difficult question of research allocation. This is an important question as all companies have inevitably restricted resources to allocate between their customers. The resource allocation question is also keenly related to a relationship development aspect. Clearly the relationship development strategies are an important aspect in the presented customer portfolio models (see Zolkiewski and Turnbull 2002, p. 578). Further, the focus of portfolio analysis can vary from specific relationships to group level (e.g. Fiocca 1982). In summary, this definition broadens the area of research from narrow formal matrix models to broader domain of customer portfolio use in business.

Characteristics of customer portfolio analysis use

As we have now defined this research's view to customer portfolio analysis we move into a more comprehensive analysis of this concept. On the basis of a thorough literature analysis based on customer portfolio models in literature and other keenly related research it can stated that portfolios are not a homogeneous concept but rather a heterogeneous issue (Hartley 1976; Smackey 1977; Canning 1982; La Forge and Cravens 1982; Cunningham and Homse 1982; Fiocca 1982; Campbell and Cunningham 1983; Dubinsky 1986; Shapiro, Rangan and Moriarty, 1987; Krapfel, Salmond, and Spekman 1991; Pels 1992; Yorke and Droussuitis 1994; Storbacka 1997; Turnbull and Zolkiewski 1997; Räsänen 1999; Salle, Cova, and Pardo 2000; Freytag and Mols 2001; Zolkiewski and Turnbull 2002; Leek, Turnbull, and Naudé, 2003; Dhar and Glazer 2003; Eng 2004; Johnson and Selnes 2004). Next, the central distinguishing characteristics of customer portfolio analysis and its use are discussed. Six main differences are presented.

First of all, one can distinguish between *formal* customer portfolio analysis and *informal* customer portfolio analysis. This is an issue that is seldom present when discussing about customer portfolio analysis in literature because the research has almost fully concentrated to formal analysis i.e. to matrix-form customer portfolio models. However, two atypical *empirical* researches have found that the informal analysis is highly important aspect in firms' practices. Leek, Turnbull, and Naudé (2003) distinguished between formal documented and informal non-documented analysis practices. Similarly, Räsänen (1999) did not find any formal customer portfolio models in use in his research of small technology firms' portfolio analysis but instead discovered that their actual practices were much alike with theoretical models. Thus, the first characteristic is how formalised and documented the actual customer portfolio analysis is.

Secondly, if the proposed customer portfolio models are examined there can be made a distinction in the *focus* of the customer portfolio analysis. Most of the customer portfolio models *group* different customer relationships so that the company is better able to manage the customer base. Alternatively some customer portfolio models provide both customer grouping and *individual* relationship management levels. For example Fiocca's (1982) classic model includes detailed analysis for most important customer relationships. Also, theoretically thinking a firm could do a customer portfolio analysis by analysing individually all its customer relationships according to the definition of this research. Still it must be concluded that the customer portfolio analysis is likely to include customer group level focus – as it concentrates to firms' whole portfolio of customer relationships.

Thirdly, the models can be divided to two groups based on their *nature* (Räsänen 1999). The division to strategic and operational customer portfolio models is based on the aim of the analysis. *Operational* customer portfolio analysis aims at increasing the efficiency of marketing efforts. It may include screening out interesting customer groups for marketing or sales programs (e.g. La Forge and Cravens 1982). On the contrary the *strategic* customer portfolio analysis aims at "directing the company's resources and management of customer relationships for safeguarding the business as a whole" (Räsänen 1999, p. 99) thus having its focus on long-term effectiveness (e.g. Turnbull and Zolkiewski 1997). Again, these aspects are not mutually exclusive but rather they can exist simultaneously.

Fourthly, the *analysis dimensions* of customer portfolio models can vary notably. The theoretical matrix models have had included different amounts of analysis dimensions based on single or multiple analysis criteria i.e. a "composite dimension". Usually the research interested in the customer portfolio analysis has examined the "ready" dimensions used in the proposed models such as difficulty of managing the relationship (e.g. Leek, Turnbull, and Naudé 2003). We take a slightly different approach to examining the possible analysis dimensions and classifies the possible analysis (sub-) dimensions of proposed models to four distinct groups i.e. to *customer value, state and nature of customer relationships*, *buying behaviour related analysis variables, and to fit between focal firm and customer.*

The *customer value* can be approached from many different angles (e.g. Möller and Törrönen 2003, p. 110; Wilson and Jantrania 1997; Walter, Ritter, and Gemünden 2001). Walter, Ritter and Gemünden's (2001) division of customer value to direct and indirect value is a broad conceptualisation, and seen also most suitable here when analysing customer portfolio models. If the theoretical models are examined it can be easily seen that they vary notably in the way they approach customer value – varying from strictly monetary, direct customer value based models (e.g. Storbacka 1997) to models including very broad value definitions i.e. indirect value functions (e.g. Fiocca 1982). *Direct*, *purely economical value* includes volume, profitability, and safeguard functions of a customer, whereas *indirect, non-economical* value includes customer's innovation, scout, reference, and access value.

Another common group of analysis variables included in theoretical models is the *state and nature of customer relationships*. By these analysis variables is referred to all analysis criteria focusing to the characteristics of a relationship between focal firm and customer. More specifically this includes aspects such as perceived relationship strength, perceived potential of the relationship, perceived customer's willingness to develop relationship etc.

Also few proposed models include *customers' buying behaviour related analysis variables.* This group of variables refers to all customers' buying related analysis variables such as difficulty of managing the customer relationship, buying behaviour aspects, and the products customer is buying.

The final possible group of analysis variables used in proposed models is the *fit between focal firm and customer.* Especially Eng (2004) has emphasised the importance of the fit in resources and capabilities between focal firm and customers in his research about the central customer portfolio analysis criteria affecting customer performance.

The <u>*fifth*</u> essential aspects of customer portfolio models are the *implications* of the customer portfolio analysis. Based on literature three possible levels in implications are distinguished in portfolio models. First of all there can be distinguished *operational implications* i.e. implications that aim at increasing the effectiveness of marketing efforts. In practice this group of variables includes e.g. sales programs. Secondly, a more strategic level is the *allocation of focal firm's resources* i.e. the amount of sales time and effort a customer gets. As discussed earlier the resource allocation includes inevitably a relationship development aspect – however the resource allocation focus is largely on the current moment and the relationship development aspect remains much implicit here. Finally, the most strategic and long-term level is the *explicit plans how to develop relationships,* i.e. which customer relationships to develop and into what direction. Zolkiewski and Turnbull (2002, 578) have separated the implications to: do new relationships need to be created, which relationships should be developed, which relationships should be maintained, and are there any relationships that should be broken/ discarded?

The <u>*sixth*</u> and final characteristic that identified in the literature is related to the *way of use* of the customer portfolio models. Roughly two ways of application can be distinguished. Some models are clearly *tool-like* constructs to derive managerial action, while others emphasise that they should be seen only as *help for making decisions*. Naturally, these aspects can be difficult to differentiate in reality – however it should be still noted the strictness of the customer portfolio analysis procedures can vary notably in reality from firm to another.

Customer portfolio analysis – a context dependent phenomenon?

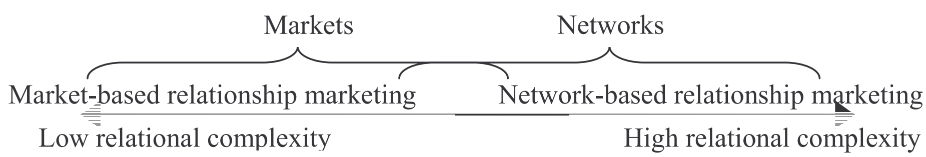
The theoretical, formal customer portfolio models that have been proposed in literature are very often (implicitly) stated to be *general* models to be used be all kind of B-to-B contexts. However, from the above literature analysis one can easily see that even the formal customer portfolio models include notable *heterogeneity*. Further, some researchers emphasise strongly that the *tailoring* of the portfolio analysis to firms' needs is essential for its performance (e.g. Wind and Mahajan 1981, p. 165).

Interestingly, also in the highly related relationships management literature many researches have found great differences in relationship marketing literature indicating that several different kinds of relationship marketing exists simultaneously instead of just one kind of relationship marketing (Möller and Halinen 2000). Further, the relationship marketing often mixes to more transactional marketing (Brodie, et al. 1997; Coviello, et al. 2002). These finding are found to be also dependent on the context where the firms are acting in (Brodie, et al. 1997, p. 401; Möller and Halinen 2000, p. 46; Rao and Perry 2002, p. 606–607).

It can be argued that the context where the portfolio models are applied can act as a fruitful starting point for analysing firms' customer portfolio analysis use (see also Halinen and Terho 2004). This view can be seen to be in line with contingency theories. The general idea behind contingency theory is that there is no *one* universal best way to manage. Rather the performance or effectiveness of management is contingent upon the organisational environment and its subsystems. Thus the management of an organisation should fit the contingencies a firm is facing (Galbraith 1977, p. 247–248; Wetherbe and Whitehead 1977, p. 20). *Thus it can be argued that it is very improbable that there would be one general best way of doing customer portfolio analysis in business. Rather, it is argued, that different kinds of portfolio analyses suit better, and are thus used in different contexts.*

An interesting question arises: what are the central contingency factors possibly affecting firms' customer portfolio analysis uses? It can be argued that the work of Möller and Halinen (2000) becomes highly relevant when examining the relevant contextual factors affecting customer portfolio analysis use. They distinguish between market and network -based relationship marketing and propose that different types of relationship marketing are needed in more *market-like* and respectively in more *network-like contexts* (see figure 1). A central background thought is that there exists a relationship between *relational complexity* and the characteristics of the *exchange context*. It is argued that this idea is very relevant also in researching customer portfolio analysis as it concentrates on strongly on relationships.

FIGURE 1
Market and network based relationship marketing (Möller & Halinen 2000)



The author proposes that the market-network dimension together with the overall relational complexity is a central background variable affecting customer portfolio analysis. What makes this proposal especially interesting is the division between traditional market-like exchange situations and between more complex (from economics point of view imperfect) exchanges situations. Even though there is strong evidence that B-to-B companies act more or less in the right side of the continuum it is argued that notable differences still exist in B-to-B markets (e.g. Anderson and Narus 1991, p. 97).

Business Context

To sum up, this research is interested in researching the relationship between the complexity of business context and the firms' customer portfolio analysis use. Author proposes that the context of the customer portfolio analysis use strongly affects the firms' analysis practices. Now the focus of this paper turns into examining the relevant contextual contingency factors proposed to affect the firms' customer portfolio analysis. Möller and Halinen's (2000) proposal of more market and network -like contexts will be used as a backbone for this discussion. Their central background thought is that there exists a relationship between *relational complexity* and *exchange context*.

However there exists a methodological problem how to distinguish the complexity of the firm's exchange context. Next, the central prevailing approaches used to examine firms' exchange context are discussed for finding both theoretically and methodologically meaningful way of distinguishing and researching the central contextual contingencies affecting firms' customer portfolio analysis use.

Network view

A natural way to begin is IMP-related research that has a strong emphasis on examining relationships in the networks the firms are embedded in (e.g. Håkansson and Snehota 1995). Though, it has also widely applied dyadic view to explore carefully firms interacting with each others (Håkansson 1982).

The IMP school of thought sees that networks take the place of markets as a coordinating mechanism and takes networks as its starting point. The actors are interconnected with each others and this interconnectedness forms the basis of the functioning of the "markets". Actors are not atomistic but interdependent and seen actively to interact with each others. Further, the actors are connected to other actors also indirectly which makes the networks highly complicated to research. To understand all this complexity the research has inevitably to concentrate analysing only some actors at one point of time or longitudinally. Consequently, the IMP-related research has been strongly interested in analysing some selected (key) relationships rather than the firm's larger relational context.

This is a fact that can be seen even in the studies that have incorporated the somewhat broad concept namely the firm's *network context* in research (e.g. Anderson, Håkansson, and Johansson 1994; Holm, Eriksson, and Johansson 1996; Holm, Johansson and Thilenius 1995). Here the central contextual measure, network context is defined as "the part of the network within an actor's network horizon that is considered relevant" (Anderson, Håkansson, and Johansson 1994, p. 4).

On the contrary to IMP research this research's focus is in the *focal firm's all customer relationships* and in the complexity of the broader exchange context a firm is acting in including wide variety of relationships (rather than the critical, most important relationships). It can be argued that by adopting the network view would cause severe methodological problems for conducting the empirical phase of this study. This is because of the different foci in the level of goals these researches have. The focus in network view is on *understanding relationships* contextually, or even *understanding systems* rather than *distinguishing between different contexts* that the firms are acting in. Hence, it is argued that choosing an alternative way of researching the context the focal firm is acting in is needed for studying the customer portfolio analysis.

If the division of Möller and Halinen (2000) division to more market and network like contexts is examined more closely it can be seen that their main point is to distinguish between more transactional, traditional economics like exchange, and between imperfect, cooperative and interdependent exchange conditions. Here, it should be stressed again that in the B-to-B markets the exchange is usually of more relational nature (e.g. Håkansson 1982). *Still, it is argued that this division can be very useful as notable variation and differences exist between different companies in their overall complexity of their exchange context and customer relationships (Anderson & Narus1991; Day 2000).* Thus, we need to find a way of distinguishing between different business contexts as the IMP network approach does not provide strong tools for *comparing* different business contexts. Next we examine closer another alternative perspective that have been used in marketing to examine the complexity of firm's surroundings i.e. the concept of environment.

Environmental view

There exists much research examining the environment of focal firm and most of the American B-to-B research bases its contextual measures on the concept of environment. It is highly different and even conflicting concept compared to network view traditionally referring to *firm external issues* i.e. to anything that is not part of the firm (Miles 1980, p. 195). The concept of environment is a highly complex as it has been approached from several highly different but even overlapping directions and levels. In order to get an extensive view on environment we will examine the concept on the basis of organisational theory literature that the marketing research is based on. Bourgeous (1980) has done an extensive review of the concept of environment bringing together the main approaches used to research environment He distinguishes three keenly related levels or views to environment in the research.

First of all, different areas of in *objective environment* can be examined and a separation between *general and task environments* can be done. This view can be found also in the network research which uses concepts of macro environment and focal network. The *general* environment reflects macro level issues such as economical, demographic, and socio-cultural conditions. Clearly, the macro-level is not relevant here in this study as it is rather present in firms' domain definition or primary strategy decisions - strategic decisions where and how to do business (Bourgeous 1980, p. 34). Instead, the *task environment* introduced by Dill (1958) is a highly relevant aspect from this research point of view. It includes the customers, suppliers, competitors, and regulatory groups approximating the economists' concept of industry. Moreover, the task environment reflects concrete and objective or "real" aspects of firms' environment. The task environment has usually been portioned into different sectors: *customers, competitors, suppliers, and regulatory groups* (Dill 1958, p. 424). Later Duncan (1972) has added also *technological* component that includes the technological requirements and characteristic relating to production, product, or service that the firm is facing. Further, Achrol Stern, and Reve (1983, p. 57) have further distinguished between primary task environment which is comprised of directly connected actors, and secondary task environment which in turn is comprised of actors that are indirectly connected to focal actor(s).

Secondly, this "objective" environment can be approached from another point of view namely by looking different attributes of environment. Pfeffer and Salancick (1978) distinguish between concentration, munificence, interconnectedness, affecting conflict, and interdependence. Aldrich (1979) has summed up six main dimensions in his classical work: environmental capacity, homogeneity/heterogeneity, stability/instability, concentration/dispersion, consensus /dissensus, and turbulence. Later these dimensions have been further modified in different researches, also in marketing. Achrol and Stern (1988) have used similar sub-dimensions based on these earlier researches that are environmental diversity, dynamism, concentration, capacity, interconnectedness, conflict, interdependence. Several classic researches (e.g. Thompson 1967, p. 69–70; Duncan 1972, p. 314-317; Bourgeous 1980, p. 33–35; see also Miller and Friesen 1982, p. 3; Klein Frazier, and Roth 1990, p. 199–200; Ganesan 1994 p. 5–6; Achrol 1991, p. 78) have however emphasised two dimensions over others i.e. first of all structural elements such as *complexity, heterogeneity, or diversity* of environment. Secondly, there are the change related aspects such as *dynamism, volatility or turbulence* of environment that refer to the frequency *and* unpredictability of change.

Thirdly, the above aspects concentrated to objective environment. However, there can be distinguished also *subjective perceptions of environment*. This view is related to *enactment theory.* Pfeffer and Salancik (1978, 72–73) state that the events of the world around us do not present themselves to us with neat labels and interpretations. Rather, we give meanings to the events - "The human actor does not *react* to an environment he *enacts* it" The enacted environment implies a combination of attention and action – the environment is not just perceived or reacted it is also made or *enacted* (see Lenz and Engledow 1986, p. 332; Brownlie 1994, 713). This aspect becomes especially important from decision-making point of view. It can be argued that decisions in firms are done on the basis of the managers' perceptions as they act as crucial inputs in decision making. This is clear in Weick's (1969) argument that it is only through managerial perceptions that the environment becomes "known" to the organisation. This view is also adopted for this research – subjective perceptions *are reality* taking place in the firm. They can be used to measure context as long as it is explicitly stated that a subjective approach is adopted (Bourgeous 1980, p. 35; Brownlie 1994, p. 714).

In strategic management research especially the concept of *uncertainty* is highly central issue. The uncertainty refers to the degree to which an individual or organisation cannot anticipate or accurately predict the environment (Pfeffer and Salancik 1978, p. 67; see also Ashill and Jobber 1999, p. 523).In fact, the way above discussed dimensions or attributes of environment are *perceived* is widely seen to represent the *dimensions of uncertainty* in literature. These subjective sub-dimensions of uncertainty have been also commonly used in business and marketing studies (e.g. Paswan, Dant, and Lumpkin 1998; Achrol and Stern 1988). (Homburg, Workman, and Krohmer 1999, p. 4). Clearly, the environment uncertainty is keenly connected to the decision-making. It can be argued that the context of an organisation is enacted trough the inter-organisational activities and linkages, or dependencies they constitute. Boundaries are then not just defined by formal organisational structure it represents. They are mediated through social and psychological qualities that participants bring to any interaction. Thus, the idea of enacted environment emphasises that also firm *internal context* to become an important variable in environment. (Brownlie 1994, p. 710–714).

If the environmental literature is analysed it can be seen that it provides "tools" for *comparing* the general complexity of different exchange context where firms are acting in which is clearly a strength from contingency explanation point of view. However, there are several weaknesses in the environmental view. *First* of all, this (objective) view is largely based on the assumptions of the classical economics and consequently ignorers to a great extent the interdependent, and cooperative relationships between different actors. Instead the actors are seen often as opportunistic. Consequently it has been emphasised here that the interdependence from other actors is seen often as threat rather than an opportunity for doing business. *Secondly*, the traditional definition for environment has been “anything not part of the organisation itself” (Miles 1980, p. 195). Behind this thought can be found reasoning that there exists a clear boundary between the firm-internal and the objective firm-external environment. However, enactment theory, resource-dependency theory, and in IMP–related research have criticised strongly this view and they have all given strong evidence that the boundary between the firm and its surrounding environment is often diffused. Thirdly, the concept of external environment can be seen implicitly *to be “given”, something out there, that a firm cannot affect* in this perspective. (Anderson, Håkansson and Johansson 1994, p. 1–4; Brownlie 1994.)

Clearly, these are all issues that can be seen conflicting against basic assumptions of the relationship marketing and the business-to-business marketing literature which has found different actors to be interacting and affecting each others heavily (e.g. Håkansson 1982). Hence it can be concluded that both network view and environment have restrictions in analysing the context from this research point of view. To sum up the network view has its focus much on understanding some focal relationships and exchange, but is weaker in providing help for researching general differences (or complexity) in the firms’ exchange context. In contrast to this, the environmental view could provide tools for comparing the complexity of firms exchange context but has many limitations as it does not pay attention to the importance of interaction, interdependence and relationships in business.

The Focus of This Research - Business Context Complexity

An alternative way of approaching the overall complexity of firms’ exchange context can be however used. The idea of *context* rather than environment can be used to denote this domain of interaction and interdependency actors are embedded in (see Brownlie 1994, p. 710). Thus, the concept *business context complexity* is adopted into this research. The context complexity refers to the overall complexity of focal firm’s customer relationships and factors keenly affecting this complexity. It should be noted that this view does not analyse the focal firm’s *interconnectedness* to third parties i.e. the indirect relationships but rather concentrates to the *quality of focal actor’s direct relationships to other parties*. By adopting this view we can concentrate analysing the *overall complexity* of the context a company is acting in. The business context complexity is clearly consisting of several dimensions like the concept of uncertainty.

Hence, it is argued that a good picture of overall business context complexity can be achieved by approaching it by carefully selected main variables. These variables can be divided to factors *leading* as well as *reflecting* business context complexity. The selected central constituents of complexity are based on eclectic view composed of IMP, American relationship and network literature (e.g. Håkansson 1982; Campbell 1985; Anderson and Narus, 1991; Möller and Wilson 1989, 1995; Halinen 1997). We approach the business context complexity from managerial perceptions point of view as these views form also the basis for companies’ customer portfolio analysis.

First of all the central factors *leading* to business context complexity are discussed. The characteristics of the <u>task of exchange</u> are closely related to what kind of interaction is needed between actors (Möller 1995, 25–26). It can be found in the research that clearly the *complexity* and *uniqueness* of the task of exchange affects the exchange. If the task of exchange is relatively simple, standardised, or unimportant for the parties involved in exchange there is no need for intensive interaction. Then again, if the task of exchange is more complex, unique, knowledge intensive or of high importance to seller and buyer also more intensive interaction is generally needed (Campbell 1985, p. 268; Metcalf and Frear 1993). The elements of interaction can be further divided to *exchange, cooperation, and adaptations* processes (e.g. Halinen 1997).

Further, we argue that the business context complexity not to be only “company external” issue but actively affected by <u>*focal firm*</u>. This aspect is obviously supported also by the enactment theory. However, especially important aspect affecting customer relationships is seen to be the focal firm’s value added or cost superiority *strategy* (Day 1990, p. 167; Tuominen, Rajala and Möller 2000, p. 140–141). Cost superiority strategy is keenly related to the economics of scale where establishing very close relationships may not be sensible as developing deep relationships is highly resource demanding. Instead the company’s focus is most likely in acting in a cost-efficient way. In contrast the value added strategy is related to intense interaction and stronger relationships between parties (see Johnson and Selnes 2004). Here, the value is co-created in long term relationships between the actors (e.g. Forsström 2005).

The larger, indirectly connected *context* affects also the overall complexity of focal firm's relationships. This aspect is close to the task environment characteristics. The "*environmental factors"* i.e. broader indirectly connected context is seen to influence the nature of exchange *through organisational actions* (Möller and Wilson 1989, p. 27). Thus, for example industry type and customer concentration affect customers' general *willingness to develop relationships*. Further, in *dynamic* conditions relationships tend to become emphasised from *seller point of view* to reduce uncertainty. It has also been proposed in literature that in high technological change, and dynamic business conditions would be favoured by cooperative, network-like structures (Achrol 1991, p. 78).

Secondly, two actual factors *reflecting* business context complexity are distinguished. The first issue is the nature of focal firm's portfolio of customer relationships. More specifically, by this refers to the *number and overall complexity of focal firm's customer relationship.* As the contextual complexity grows also the *complexity* of focal firms' relationships tends to grow. This is because of the close interaction, adaptation and cooperation shape the relationships more close. It can be argued also that there is a connection between relational complexity and the number of relationships. This is because of relationship development is highly resource taking and a firm can develop only certain degree of close relationships. A firm having a very broad customer base is likely to have more transactional customer relationships compared to a firm concentrating to exchange with more restricted number of customers.

The second aspect reflecting the business context complexity is the *interdependency of actors*. In extreme market-like situation there would be large *number* of fully transactional relationships. It should be emphasised again that this is not case in reality but rather the exchange is almost always more or less relational in its nature – especially in B-to-B contexts. Still, it is argued that some notable differences exist. The more complex the relationships are, and the more there are adaptations, relationship specific investments, and social exchange between exchanges parties the more *interdependent* the parties become too. Thus the switching of partner is more difficult, and there are few alternatives to the existing relationships in more complex exchange context. In contrast, when the business context complexity is lower several alternatives exist and the switching of partner is relatively easy.

To sum up, this research examines firms' business context complexity by focusing to central dimensions based on literature. The concept of business context complexity aims to distinguish the complexity of focal firm's customer relationships and exchange context. It is argued that by examining proposed key-dimensions we are able to distinguish and compare different firm contexts. It should be noticed that this study's focus in approaching contextual complexity is especially from *customer relationship* point of view.

Research Methods and Selection of the Cases in the Study

Research methods

As the knowledge about firms' customer portfolio analysis remains highly limited and even fragmented a qualitative research strategy has been adopted. The empirical phase of this research consists of seven interviews with carefully chosen firms. The conducted interviews were semi-structured and done with company managers responsible for the customer management in the focal company or business unit.

The interviews were based on the broad literature analysis about customer portfolio models and the other closely related research. Also discussions with academics were done to deepen the pre-understanding about the subject. More specifically the interviews dealt with background, aims, contents, application, perceived problems, and other experiences about the firms' current customer portfolio analysis use. The interviews lasted about 1,5 hours and the discussions were tried to keep as broad as possible in order to get as much information as possible about the firms' customer portfolio analysis use.

The themes of the interviews were based on the literature in order to be better able to do the comparisons between case-firms and to get the results more structured. However the study can be seen to include also explorative side as the interviews were tried to be kept flexible in their nature.

Interestingly, the concept of "customer portfolio analysis" was a rather problematic issue when doing the interviews. This is because of only few firms used this concept or were even conscious about it. In the interview it became clear that all selected firms had put much effort on their customer portfolio analysis but they used other terms of their practises such as value segmentation, customer base analysis, sub-segmentation, value-matrix analysis, or customer analysis etc.

Selection of the cases

The research is based on a theoretical sample consisting of seven carefully chosen firms that reflect the whole continuum of business context complexity (see Eisenhardt 1989, p. 537). The firms were selected on the basis of discussions with academics and consultants to ensure that the case companies would have a conscious customer portfolio analysis system in use. All selected firms represent *large companies* that had a put effort on designing a *conscious, formal customer portfolio analysis system*. The sizes of selected firms were relatively large as it is probable that smaller firms do not have formal portfolio analysis systems in use as widely as larger companies. Further, the focus is on *business unit level* because large companies may comprise of a variety of business context complexity.

The chosen business units can be seen to represent the whole continuum of business context complexity in B-to-B markets. This can be seen in the table 1 where case-firms', or business units' business context complexity is analysed on the basis of the *central dimensions of business context complexity* discussed above. As there are no ready measures for this concept the firms were analysed on the basis of subjective evaluation based on the interviews i.e. on the basis of managers' perceptions about the different exchange, customer and industry related characteristics. The central dimensions of complexity were rated from very low (1) to very high (7). The companies are divided to three groups on the basis of ratings: to *low (companies: A, B, C)*, *medium (D, E),* and *high business context complexity firms (F, G)*.

TABLE 1
The selection of cases – the complexity of business units' business context

Business context complexity - indicators:	**low**			**(medium)**			**high**
Industry / firm code	Energy A	Insur. B	Post/log C	Paper_D	Paper_E	ICT F	ICT G
Customer relationships: Amount	<10000	<10000	<10000	>5000	>5000	>500	>100
Customer relationships: general complexity	2	2	3	4	4	5	7
Interdependency: general interdepend. of actors	2	3	3	4	4	6	7
Task of exchange: complexity	2	3	3	4	4	6	7
Task of exchange: uniqueness	1	2	3	4	4	6	7
Interaction: intesity of exchange	1	1	3	5	5	6	7
Interaction: genral level of cooperation	2	3	3	5	5	6	7
Interaction: genral level of adaptations	2	2	3	5	5	7	7
Focal firm: cost superiority / value added strategy	cost	cost	cost/val	value	value	value	value
Environment: cust. willingnenss to develop relations	2	3	3	4	5	6	7
Environment: dynamism of	2	2	3	4	4	6	6

Quality of the results

Naturally, this procedure of choosing the case-companies to this research is subjective – thus in order increase the validity of the interpretations of the business context complexity all the interviewed managers were asked to comment the above ratings of case-firm's business context complexity evaluated on the basis of interviews (presented in table 1). The received comments clearly supported the rating done and the division of the case-firms to three differing groups of business context complexity (i.e. low, medium, high).

By using this theoretical sample we aim at analytical generalisation where the results are generalised to theoretical propositions instead of populations or universes (Yin 2003, p. 37). Thus, here we aim at generalising the particular results of this comparative case to broader theory about customer portfolio analysis. As the chosen case-companies' business units represent a very wide range of business context complexity situations they can be considered also to reflect well the *general* differences in customer portfolio analysis use in different business contexts differing by complexity. Further, the empirical results of the empirical research are systematically supported by theory.

In order to increase the validity of the results of this study the interviewees commented also the results of the empirical phase concerning their customer portfolio analysis use. Hence, all the presented results of this study have been commented and approved by the interviewees. It can be concluded that the results should represent a valid picture of the general differences in the conscious customer portfolio analysis use in different contexts. It should be noted that the results of this research must be strictly restricted to large companies' formal and conscious customer portfolio analysis systems and they must be seen to reflect very general level differences. In other words, this research cannot provide a picture about e.g. SME's portfolio practices, or very informal customer portfolio analysis practices.

An additional quantitative research for studying customer portfolio analysis and its performance in different contexts is suggested on the basis of this research. Hence, a research aiming at statistical generalisation will be a natural next step after this research. Especially the performance of firms' customer portfolio analysis use would be of great interest.

Results

The purpose of this research was to get a broad picture about firms' customer portfolio analysis use as a contextual issue. Moreover this purpose was divided to two research questions: first of all *does* the firm's business context affect customer portfolio analysis use, and secondly to study *how* does it effect on the analysis practices. Next the central results of the research are discussed. Because of this research focuses especially to context's effect on firms portfolio analysis use the importance of *comparisons* become emphasised. Thus the central findings are presented in tables which make comparisons easier. The tables are organised on the basis of the main characteristics of customer portfolio analysis distinguished in the theory. Finally, the perceived problems in firms' customer portfolio practices are discussed. When discussing about firm specific findings the letter code of a firm (from A to G) is used to clarify the analysis.

First, the *form of analysis* in the firms' portfolio analysis is discussed. The table 2 presents a summary of the dominant formal and informal analysis aspects the case-firms were having.

TABLE 2
The form of customer portfolio analysis in different business context complexity situations

business context complexity	low			(medium)			high
1) Form of analysis:	A (energy)	B (insuran.)	C (post/log)	D (Paper)	E (Paper)	F (ICT)	G (ICT)
Formal documented	DB	DB! (SE)	DB!, MX (SE)	DB, SE	DB,MX, SE	(DB) SE, IN	(DB), SE, IN
Informal non-documented	sales!	sales	meet./disc.	meet./disc.	meet./disc.	meet./disc.	meet./disc.

All case-firms based their *formal, documented* customer portfolio analysis and customer classification to ratings based on *databases (DB, see table 2)*. However the importance of databases was clearly emphasised in lower business context complexity situations. Here the databases made it possible to analyse and gather information of the very large number of customers and the databases were perceived even as highly strategic tools (B, C). When the contextual complexity grows the relative importance of databases decreased. Here the *systematic subjective evaluation (SE)* became emphasised alongside the objective, database-based practices (D,E,F,G). *Very interestingly, only three companies used theoretical customer portfolio model -like matrixes (MX) in analysing their customers.* All these companies acted in low and medium complexity contexts (B, C, E). It should be noted here that the case-firms represented large firms with needed resources and conscious effort on designing customer portfolio analysis system. This indicates that the theoretical mode –like customer portfolio analysis is probably relatively rare in business. In high business context complexity situations systematic, documented *individual customer analysis (IN)* and customer specific plans were the main customer base analysis methods used to analyse and monitor customer base (F,G). Even though these two firms had database systems their role was more to support doing qualitative customer specific analysis. Also, all companies had additionally key customer programs for their most important customers.

A very interesting aspect in analysis is the *informal, non-documented* side of customer portfolio analysis. This aspect has been ignored in most of the earlier research testing and also criticising portfolio models. In lower context complexity situations the role of salespeople in dealing with customers was stated to intertwine to customer portfolio analysis decisions when they implement the portfolio analysis in their daily operation (A, B). When the business context complexity grows informal *meetings* and *discussions (meet./disc.)* with operational sales personnel and management became an integral part of the customer portfolio analysis and its decisions – especially when discussing about medium and large accounts (D,E,F,G). In interviews it became clear that the implantation of customer portfolio analysis cannot be separated from the managerial level of analysis if one wants to understand firms' actual customer portfolio analysis use more deeply.

The *second* characteristic namely the *level of focus* in analysis is keenly connected to the form of analysis (see table 3).

TABLE 3
The focus of customer portfolio analysis in different business context complexity situations

business context complexity	low			(medium)			high
2) Focus of analysis:	A (energy)	B (insuran.)	C (post/log)	D (Paper)	E (Paper)	F (ICT)	G (ICT)
single/ group	group (ind)	group (ind.)	group (ind.)	group/ind.	group/ind.	ind. (group)	ind. (group)

Customer portfolio analysis deals naturally with the management of a firms' whole customer base. However, the actual analysis can be done on group level or in individual level. As stated above all case-firms had some kind of group-level analysis system in use related to the classification of customers. Especially, in lower complexity situations (B,C) the customer grouping was perceived to be a strategic issue making possible the efficient and focused management of large customer base. Clearly if a company has a strict cost-focus in its business the management of customer base will be different than in value adding-strategy situations. As the contextual complexity grows the importance of subjective, customer specific analysis becomes more important and it was used widely alongside the group-level customer classifications (D,E). The firms' acting in the most complex business contexts (E,F) did not even perceive the "customer portfolio" level relevant but stressed instead that each customer must be analysed and managed individually. This is because most of the customer relationships were perceived very intensive and complex in their nature. Also the focal firm and its customers were perceived to be mutually very interdependent from each others as both parties had done wide relationships specific adaptations making their management difficult to do without having deeply going qualitative emphasis taking into account the history of the relationship.

Thirdly, we distinguished between *operational and strategic nature* in firms' customer portfolio analysis (see table 4).

TABLE 4
The nature of customer portfolio analysis in different business context complexity situations

business context complexity	low			(medium)			high
3) Nature of analysis:	A (energy)	B (insuran.)	C (post/log)	D (Paper)	E (Paper)	F (ICT)	G (ICT)
Operational / strategic	strat.	strat.	oper. / strat.	strat.	strat.	strat.	strat.

The operational portfolio analysis was stated to aim at increasing the effectiveness and efficiency of marketing and sales efforts whereas the *strategic nature* customer portfolio analysis aims at directing the company's resources and management of customer relationships for safeguarding the business as a whole. Customer portfolio analysis in the low business context complexity situations was clearly emphasising the efficiency in dealing with customers (A,B,C). However, it must be noticed that the cost-efficient management of customers is highly strategic issues for these companies' business. Only, firm C had a special focus on searching interesting customer groups for focusing marketing campaigns by using customer portfolio analysis i.e. operational focus. Medium business context complexity firms (C,D) had clearly a strategic emphasis in analysis as they focused for analysing and developing specific customer relationships from long-term viewpoint still taking into account widely the efficiency issues. Finally, the firms in highest business context complexity (G,F) did not perceive the portfolio-level analysis, or classifications important. However, their individual customer analysis and management can be seen to reflect a strategic nature customer portfolio analysis – the main issue became clearly what relationships to develop and how.

Fourthly, a highly interesting question is the *analysis variables* used in companies portfolio analysis in different business contexts varying by complexity (see table 5).

TABLE 5
The used analysis dimension of customer portfolio analysis in different business context complexity situations

business context complexity	low			(medium)			high
4)Analysis dimenesions used:	A (energ	B (insuran.)	C (post/log)	D (Paper)	E (Paper)	F (ICT)	G (ICT)
Value	vol.	vol, prof,pot.	vol, pot.	vol.	vol, prof, pot, indir.	vol,pot, indir.	vol, indir.
State and nature of relationships	-	-	-	WD	strenght, WD	strenght	strength, WD
Resource & capabablity fit	-	-	-	fit included	fit included	fit included	fit included
Buying behaviour related	prod.	needs	prod., needs	needs, BB	prod., BB	needs	needs

Economic, *direct value* (volume, profitability, safeguard value) was a very central analysis variable in all case companies. It forms clearly the basis for analysing customers in *all business contexts*. In lower business context direct value related *cross-selling and up-selling* information (especially B and C) was considered highly important in examining customer value and potential. In the line with literature when the complexity grows i.e. the relationships get generally more complex and cooperative also the *indirect value* became more important aspect in analysing customers (firms E,F,G; see also Walter et al. 2001, p. 372–373). Because of the firms' analysis is much informal and even customer specific in highest business context complexity situations the indirect value components are present as one group *(indir.)* in the table 2.

Equally, the *state and nature of customer relationships* become an issue when the contextual complexity grows. Clearly, the customer relationship strength (strength), and customer's willingness to cooperate and develop relationship further (WD) became important aspects in case-companies customer portfolio analysis in medium and high business complexity situations (D,E,F,G). Interestingly this was an important part in analysing customer potential in higher business context complexity situations. This is natural as the relationships are mostly of long-term nature here, and thus require substantial investments. Also the *fit* aspect, i.e. how focal firms strengths and customer's requirements match, was present in medium and high complexity contexts (D,E,F,G). Especially, the perceived fit in the goals between the focal firm and customer was strongly present.

Interestingly, many of case-firms in this research stressed *buying behaviour* (or segmentation) related aspects in analysis such as products bought (A,C,E), customer needs (B,C,D,F,G), and buying behaviour aspects (D,E) (BB in table) in their customer portfolio practises which are given only very limited attention in academic literature. Interestingly, it can be argued that by including buying behaviour related aspects and customer needs to their customer portfolio analysis the firms can broaden their focus from efficiency and resource allocation focus to also meeting better customer needs i.e. to better service and value added towards customers.

Fifthly, the *implications* of firms' customer portfolio analysis were found to have three different possible levels: operational implications, resource allocation, and relationship development level (see table 6).

TABLE 6
The implications used in customer portfolio analysis in different business context complexity situations

business context complexity	low			(medium)			high
5) Implications:	A (energy)	B (insuran.)	C (post/log)	D (Paper)	E (Paper)	F (ICT)	G (ICT)
Implicaitons included in analysis	OF, RA	OF, RA, RD	OF,RA,RD,	OF, RA, RD	OF, RA, RD	RA, RD	RA, RD

The *operational implication* such as marketing programs was not found to be very central group of implications in customer portfolio analysis (firm C). Most common aspect was clearly the efficient *resource allocation (RA)* that was present in all firms' customer portfolio analysis. This includes the aspect of how much a customer gets attentions and sales resources. A keenly related issue to this is the *offering* i.e. tailoring of products and services for certain customers which is presented as an independent variable also in the table 6. *(OF)*. Offering was a highly central aspect in low and medium complexity contexts (B,C,D,E). The explicit *relationship development (RD)* aspect i.e. which customer relationships to develop and into what direction was obviously a central aspect in most firms' customer portfolio analysis. However, relationship development got clearly different forms and emphasis relating to the business context. In low context complexity the relationship development aspect was mostly present in finding and developing relationships that could increase sales, or profitability (B, C). The level of analysis was in customer groups and based on databases. In contrast to this from medium to high complexity contexts the more long-term aspects of exchange and relationships became central in relationship development (D,E,F,G). The focus was more in evaluating the overall potential and mutual orientation in future in these relationships. Thus it can be concluded that the implications are generally efficiency related in lower complexity and become more long–term, and individual relationship oriented when business context gets more complex.

Sixthly, the customer portfolio analysis can be seen differing also in its *way of application* (see table 7).

TABLE 7
The dominating way of application of customer portfolio analysis in different business context complexity situations

business context complexity	low			(medium)			high
6) Way of application:	A (energy)	B (insuran.)	C (post/log)	D (Paper)	E (Paper)	F (ICT)	G (ICT)
Tool-like use / managerial help	tool	tool	tool (help)	help (tool)	help (tool)	just support	just support

The results suggest that customer portfolio analysis practices are used more tool-like to derive operational action in lower business complexity contexts. This makes the efficient management of large customer base possible (A,B,C). In medium complexity environments the use of customer portfolio analysis becomes more flexible. Still it has tool-like nature – in other words it acts as a basis for systematic management of individual customer relationships (D,E). Compared to simpler contexts it is more flexible in its nature as the subjective, qualitative elements are strongly present. In highest business context complexity situations (E,F) the portfolio analysis was found to be rather just a support for managing individual customer relationships and doing customer specific plans.

Before moving to conclusion of this research the perceived problems of case companies are discussed shortly (see table 8).

TABLE 8

The perceived problems in case firms customer portfolio analysis use

business context complexity	low			(medium)			high
7) Problems in portfolio analys	A (energy)	B (insuran.)	C (post/log)	D (Paper)	E (Paper)	F (ICT)	G (ICT)
Problems related to analysis	Tech,	Impl,	tech, Impl	Tech	Impl,		

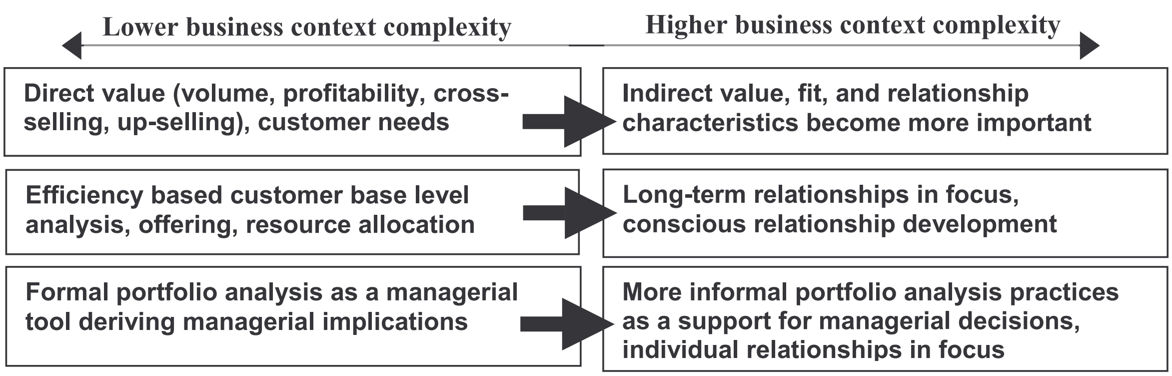
There were some problems associated to the case companies' customer portfolio analysis use that came up frequently in the interviews. First of all, there were several problems that were technical in nature. This included the problems getting right accounting information such as profitability (A, C, D), existence of faulty and old information in the databases (A), and existence of several databases that were not connected (A, D). Also, it was found to be problematic to classify and analyse large customers acting in several different industries and buying multiple product categories (A, D, E).

Secondly, several firms mentioned the problem of implementation. Almost all firm expressed that they had moved from product and volume orientation to relationship orientation in the recent years. Relating to this aspect the interviewees stated that there were problems in implementing this new way of thinking to operational sales level (B, C, E). It was also perceived that customer portfolio analysis and relationship focus needs the strong support of the top management in order to be successful (C, E). Interestingly, firm E stressed the need to move beyond technical side of the analysis, and G found that they should orientate more to active in proactive way i.e. aim at creating new solutions for customers problems without customers' initiative causing also challenges to their ways of analysing the customers

As a summary it can be said that in the lower business context complexity situations the firms' had more formal, data-base based customer portfolio analysis practises in use. They were emphasising much the efficiency in managing the large portfolio of customers. They aimed largely to efficient resource allocation and developing relationships that had much direct economic potential (e.g. cross-selling, up-selling). Some of the case-firms' acting in the lower business context complexity even emphasised that the efficiency based portfolio analysis was of strategic value for them (figure 2)

FIGURE 2

Summary of the results



In contrast to lower complexity situations the customer portfolio analysis was much more informal in its nature in the higher context complexity situations as the relationships were fewer and more complex in their nature. Again, the economic, direct value formed the basis of the customer portfolio analysis but the long-term goals and importance of relationships were more emphasised. Also indirect value and customer's willingness to develop relationship became more important issues in analysing relationship potential as the relationships were generally very interdependent and needed more adaptations from both parties. The analysis level moved from the customer base and customer grouping level to analysing individual customer relationships. Further, the analysis practices were more a support for making individual decisions rather than a formal tool (figure 2).

Conclusion and implication for future research

Customer portfolio analysis is a highly topical issue in current business. However, there is currently only limited and fragmented knowledge concerning firms' actual customer portfolio analysis use. This research has concentrated on examining firms' customer portfolio analysis use empirically. The focus has been on the business context's effect on firms' customer portfolio analysis use. Here, the concept of business context complexity was presented to reflect the general differences in firms' exchange context and relationships. The concept comprises of both firm internal and external factors and is approached by analysing its central dimensions especially from customer relationships' point of view. It is suggested that in the future the concept business context complexity can be further developed to a measure that can be used in quantitative research.

Several important conclusions can be drawn from the empirical results of this research. First of all, the results indicate that customer portfolio analysis is much broader issue than the formal theoretical models have suggested in literature. Secondly, the firms' customer portfolio analysis use is an issue including wide range of heterogeneity between firms. The results support the proposition that firms' customer portfolio analysis use is a strongly context-dependent issue.

More specifically, according to the results of this research the formal customer portfolio models presented in literature seem to be more emphasised and useful in low and medium business context complexity situations. This is because of the firms acting in the less complex business contexts have most often a large customer base consisting of different customer relationships which need to be managed in cost-efficient way. When the contextual complexity grows and the relationships between customers and focal company become more complicated and interdependent the individual aspects of analysis becomes more important. Also the non-documented, informal side of the analysis becomes emphasised in more complex business contexts. Interestingly, the results indicate that the customer portfolio level is not very relevant in the highest business context complexity situations. Instead, in very complex business contexts the importance of analysing and managing the whole customer base on the basis of individual relationship was found to be important. Moreover the central characteristics of firm's customer portfolio analysis (i.e. form of analysis, its focus, nature, analysis dimensions used, implications, and way of application) were found to vary much in different business contexts.

Also, it can be argued that the customer portfolio analysis' problem of ignoring the interconnectedness of actors that is criticised often in literature may not be as problematic as the earlier theoretical research has proposed. This is because of the firms' customer portfolio analysis is clearly not used alone "in vacuum" as a separate strict tool. Rather it has an important informal side; it is used together with other managerial tools, and interpreted by managers. Further, the customer portfolio analysis is connected to the complexity of the business context. Thus the firms' analysis practices are adjusted to the central contingencies of their context. For example in very low business context complexity the interconnectedness may be of smaller importance for the firm than the cost-efficient management of the customer base. In contrast to this in high context complexity situations where interconnectedness is a central aspect for managing customer relationships the individual focus of analysis can better answer to real world complexities such as the issue of interconnectedness.

It is suggested that more research is needed in future about firms' customer portfolio analysis use. Especially the performance of customer portfolio analysis is clearly of great interest and highly relevant from managerial point of view.

References

Achrol, Ravi and Stern, Louis (1988) "Environmental Determinants of Decision-making Uncertainty in Marketing Channels," *Journal of Marketing Research.* 25(1), 35–50.

---- (1991) "Evolution of the Marketing Organization: New form for Turbulent Environments," *Journal of Marketing.* 55(3), 77–93.

----, Stern, Torger, and Reve, Louis (1983) "The Environment of Marketing Channel Dyads: A Framework for Comparative Analysis," *Journal of Marketing.* 47(4), 55–67.

Aldrich, Howard (1979) *Organizations and Environments*. Englewoods Cliffs, NJ, Prentice-Hall.

Anderson, J. C. and Narus, J. A. (1991) "Partnering as a focused marketing strateg," *California Management Review.* 33 (3), 95–113.

Anderson, J. C., Håkansson, H. and Johanson, J. (1994) "Dyadic Business Relationships Within a Business Network Context," *Journal of Marketing.* 58(4), 1–15.

Ashill, Nicholas and Jobber, David (1999) "The Impact of Environmental Uncertainty Perceptions, Decision-maker Characteristics and Work Environment Characteristics on the Perceived Usefulness of Marketing Information Systems (MkIs): A Conceptual Framework," *Journal of Marketing Management.* 15, 519–540.

Bourgeous III, L (1980) "Strategy and Environment: A Conceptual Integration," *Academy of Management Review.* 5(5), 25–39.

Brodie, Roderick, Coviello, Nicole, Brookes, Richards and Little, Victoria (1997) "Towards a Paradigm Shif in Marketing? An Examination of Current Marketing Practices," *Journal of Marketing Management.* 13(5), 383–406.

Brownlie, Douglas (1994) "Organising for Environmental Scanning: Orthodoxies and Reformations," *Journal of Marketing Management.* 10, 703–723.

Campbell, N. and Cunningham, M (1983) "Customer analysis for strategy development in industrial markets," *Strategic Management Journal.* 4(4), 369–380.

Campbell, N (1985) "An Interaction Approach to Organizational Buying Behaviour," *Journal of Business Research*, 13(1), 35–48.

Canning, Gordon (1982) "Do a Value Analysis of Your Customer Base" *Industrial Marketing Management*, 11(2), 89–93.

Coviello E. Nicole, Brodie J. Roderick, Danaher J. Peter and Johnston J. Wesley (2002) How Firms Relate to Their Markets: An Empirical Examination of Contemporary Marketing Practices," *Journal of Marketing.* 66(3), 1–15.

Cunningham, M. and Homse, E. (1982) "An interaction approach to marketing strategy," In: *International Marketing and Purchasing of Industrial Goods*, H. Håkansson eds. John Wiley & Sons, Chichester, 328–345.

Day, G. (1990) *Market Driven Strategy Processes for Creating Value*. The Free Press, New York.

Dhar, Ravi and Glazer, Rashi (2003) "Hedging Customers," *Harvard Business Review*, 81(5) 86–92.

Dill, William (1958) "Environment as an Influence on Managerial Autonomy". *Administrative Science Quarterly.* 2(4), 409–443.

Dubinsky, A. (1986) Customer portfolio analysis. In: *Advances in Business Marketing: a research annual,* G. Arch eds. JAI Press: Greenwich, 113–139.

Dubois, A. and Pedersen, A. (2002) “Why relationships do not fit into purchasing portfolio models - a comparison between the portfolio and industrial network approaches,” *European Journal of Purchasing & Supply Management,* 8(1), 35–42.

Duncan, Robert (1972) “Characteristics of organisational Environments and Perceived Environmental Uncertainty,” *Administrative Science Quarterly.* 17(3), 313–327.

Eisenhardt, K. M. (1989) “Building theories from Case Study Research,” *Academy of Management Review.* 13(4), 532–550.

Eng, T-Y. (2004) “Does customer portfolio analysis relate to customer performance? An empirical analysis of alternative strategic perspective.,” *Journal of Business and Industrial Marketing.* 19(1), 49–67.

Fiocca, R. (1982) “Account portfolio analysis for strategy development. *Industrial Marketing Management*,” 11(1), 53–62.

Forsström, Birgitta (2005) *Value Co-Creation in Industrial Buyer-Seller Partnerships – Creating and Exploiting Interdependencies*. Åbo: Åbo Akademi Univeristy Press.

Freytag, Per V. and Mols, Niels P. (2001), “Customer Portfolios and Segmentation,” In *Portfolio Planning in a Relationship Perspective,* Per Freytag eds. Forlaget Thomson, Köbenhavn, 93–129.

Galbraith, Jay (1977) *Organisational design,* Addison-Wesley Publishing, Reading, Massachusetts.

Ganesan, Shankar (1994) “Determinants of Long-Term Orientation in Buyer-Seller Relationships,” *Journal of Marketing.* (58)2, 1–19.

Grönroos, Christian (1993) “From Marketing Mix to Relationship Markting: Towards a Paradigm Shift in Marketing,” *Management Decision*. 39(2), 4–20

Halinen, A. (1997) *Relationship Marketing in Professional Services*. Routledge advances in management and business studies. Routlegde, London.

Halinen, A. and Terho, H. (2004) “New Perspectives on Customer Portfolio Analysis,” *Proceedings of the 33rd EMAC Conference,* Murcia, Spain, May 18–21, 2004, 1–7.

Hartley, Robert (1976) “Use of Customer Analysis for Better Market Penetration,” *Industrial Marketing Management*. 11(3), 183–194.

Hedley, Barry (1976) “A Fundamental Approach to Strategy Development,” *Long Range Planning.* 9(6), 2–11.

Hedley, Barry (1977) Strategy and the “Business Portfolio” *Long Range Planning,”* 10(1), 9–15.

Holm, U., Eriksson, K., and Johansson, J. (1996) “Business Networks and Cooperation in International Business Relationships,” *Journal* of *International Studies* 27(5), 1033–1053.

Holm, U., Johansson, J. and Thilenius, P. (1995) “Headquarters’ knowledge of Subsidiary Network Contexts in the Multinational Corporation,” *International Studies of Management & Organisation.* 25 (1) 2, 97–119.

Homburg, Christian, Krohmer, Harley and Workman, John (1999) “Strategic Consensus and performance: The Role of Strategy Type and Market-Related Dynamism,” *Strategic Management Journal.* 20(4), 339–357.

Håkansson, Håkan (1982) eds. *International Marketing and Purchasing of Industrial Goods*. John Wiley & Sons, New York.

Håkansson, Håkan and Snehota, Ivan (1995) Analysing Business Relationships. *In: Developing Relationships in Business Networks.* Håkan Håkansson eds. London, Routledge, 24–49.

Jonhson, M. and Selnes, F. (2005) "Diversifying Your Customer Portfolio. *MIT Sloan Management Review.* 46(3), 10–14.

Jonhson, M. and Selnes, F. (2004) "Customer Portfolio Management: Towards a Dynamic Theory of Exchange Relationships," *Journal of Marketing*, 68(1), 1–17.

Kahane, Yehuda (1977) "Determination of the Product Mix and the Business Policy of an Insurance Company – a Portfolio Approach" *Management Science*," 23(10), 1060–1069.

Krapfel, R. E. Jr., Salmond, D., and Spekman, R. (1991) "A Strategic Approach to managing Buyer-Seller Relationships," *European Journal of marketing.* 25(9), 22–37.

Klein, Saul, Frazier, Gary and Roth, Victor (1990) "A Transaction Cost Analysis Model of Channel Integration in International Markets," *Journal of Marketing Research.* 27(2), 196–208.

LaForge, Raymond – Cravens, David W. (1982) "Steps in selling effort deployment," *Industrial Marketing Management*. 11(3), 183–194.

Leek, S., Turnbull, P. and Naudé, P. (2002) "Managing business to business relationships: an emerging mode"l. *Journal of Customer Behaviour,* 1(3), 357–375.

Lenz, R. and Engledow, Jack (1986) "Environmental analysis: The applicability of Current Theory," *Strategic Management Journal* 7(4), 329-346.

Markowitz, H. (1952) "Portfolio Selection," *The Journal of Finance.* 7(1), 71–91.

Metcalf, Lynn and Frear, Carl (1993) "The Role of Perceived Product Importance in Organizational Buyer-Seller Relationships," *Journal of Business-to-Business* Marketing 1(3) 63–85.

Miles, R. (1980) *Macro Organizational Behaviour*. Goodyear Publishing Company Inc. Santa Monica, California.

Miller, Danny and Friesen, Peter (1982) "Innovation in Conservative and Entrepreneurial Firms: Two Models of Strategic Momentum," *Strategic Management Journal.* 3(1), 1–25.

Möller, K. and Halinen A. (2000) "Relationship marketing theory: Its roots and direction," *Journal of Marketing Management*. 16(1), 29–54.

---- and ---- (1999) "Business Relationships and Networks: Managerial challenge of Network Era," *Industrial Marketing Management*, 28(5), 413–427.

---- and Törrönen, P. (2003) "Business Supplier's Value Creation Potential A Capability-based analysis," *Industrial Marketing Management*," 2(2), 109–119.

---- and Wilson, D. (1989) *Interaction perspective in business marketing: an exploratory contingency framework*. Helsinki School of Economics, Working papers, F–233: Helsinki.

---- and ---- (1995) "Business relationships – and interaction perspective" In: *Business Marketing – An interaction and network perspective,* K. Möller eds. Kluwer academic publishers, Massachusetts 23–52.

Paswan, Audesh, Dant, Rajiv and Lumpkin, James (1998) "An Empirical Investigation of the linkages among Relationalism, Environmental Uncertainty, and Bureaucratization," *Journal of Business Research*, 43, 125–140.

Pels, Jaqueline (1991) "Identification and management of key clients," *European Journal of Marketing.* 26(5), 5–21.

Pfeffer, J. and Salancik, G. (1978) *The External Control of Organisations.* Harper & Row Publishers, New York.

Rao, Sallo and Perry, Chad (2002) "Thinking About Relationship Marketing: Where Are We Now?," *Journal of Business and Industrial Marketing*. 17(7), 598–614.

Ritter, T. (2000) "A framework for analyzing interconnectedness of relationships," *Industrial Marketing Management*, 29(4), 317–326.

Räsänen, H. (1999) *Developing Intimate Relationships: The Effect of Knowledge-Intensity on management of Customer Relationship Portfolios in Profitable High-Technology Firms*. Tampereen teknillinen korkeakoulu: julkaisuja 245. TTKK Monistamo, Tampere.

Salle, Cova and Pardo (2000) Porfolio of Supplier–Customer Relationships. In: *Getting Better at Sensemaking,* A. Woodside eds., Stamford, Connecticut: Jai Press inc.. 419–442.

Shapiro, B., Rangan, K., Moriarty, R. and Ross, E. (1987) "Manage customers for profits (not just sales)," *Harvard Business Review.* 65(5), 101–108.

Smackey, Bruce (1977) A Profit Emphasis for Improving Sales Force Productivity. *Industrial Marketing Management*, 6, 135–140.

Storbacka, Kaj (1997) "Segmentation Based on Customer Profitability – Retrospective Analysis of Retail Bank Customer Bases," *Journal of Marketing Management.* 13(5), 479–492.

Thompson, James (1967) *Organizations in action,* Mc Graw-Hill New York.

Tuominen, Matti, Rajala, Arto and Möller, Kristian (2000) "Intraorganisational Relationships and Operational Performance," *Journal of Strategic Management.* 8, 139–160.

Turnbull, P. and Zolkiewski, J. (1997) Profitability in customer portfolio planning. In: *Understanding Business Markets: Interaction, Relationships and Networks 2nd edition*, David Ford eds. London: The Dryen Press. 305–325.

Walter, A., Ritter, T., and Gemünden, H. G. (2001) "Value Creation in buyer-seller relationships: theoretical considerations and empirical results from a supplier's perspective," *Industrial Marketing Management*, 30(4), 365–377.

Weick, Karl (1969) *The social psychology of organizing*. Addison-Wesley: Reading.

Wetherbe, Jim and Whitehead, Carlton (1977) "A contingency view of Managing the Data Processing Organisation" *MIS Quarterly*, 1(1), 19–25.

Wilson, D. and Jantrania, S. (1997) "Understanding the Value of a Relationship" In: *Understanding Business Markets: Interaction, Relationships and Networks. Second Edition,* David Ford eds. London: The Dryen Press, 288–304.

Wind, Y. and Mahajan, V. (1981) "Designing Product and Business portfolios," *Harvard Business Review,* 59(1), 155–165.

Yin, R. K. (2003) *Case study research. Design and Methods, (3rd ed.).* Sage Publications: Thousand Oaks, CA.

Yorke, D. and Droussiotis, G. (1994) "The use of customer portfolio theory: An empirical survey," *Journal of Business & Industrial Marketing.* 9(3), 6–18.

Zolkiewski, J. and Turnbull, P. (2002) "Do relationship portfolios and networks provide the key to successful relationship management?," *Journal of Business and Industrial Marketing.* 17(7), 575–597.