Customer Oriented Product Development?

An exploratory study of four Swedish SME's

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Abstract:
The purpose of this study was to investigate the degree of customer orientation in a small sample of Swedish SME's. In-depth interviews were carried out with product developers in four companies from three different product areas. The questions posed concerned the company's overall strategy, ways of managing the external dialogue (i.e. the dialogue between the company and the customer), and ways of managing the internal dialogue (i.e. the dialogue between the product development team members, and between the product development team and the company). The study indicates some ambiguities regarding key issues in customer orientation. All companies claimed to be customer-oriented, however, the meanings of the concept varied slightly – between 'offering the customer what the customer wants' to 'understanding and solving customer problems'. The study also showed that the companies had difficulties defining their customer. While customer-orientation in general seems to imply a consumer-orientation, the customer can also be the middleman or the distributor. The latter was the case in three of the four companies and had clear implications on overall strategy. Also, the direct dialogue between the manufacturer and the end customers, i.e. consumers was rather limited, even though such a dialogue was considered and needed.

Key-words: customer orientation, product development

JEL-code: L 80, M 31

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PREFACE

This study is a joint effort between the Department of Business Administration at the School of Economics and Commercial Law, Göteborg University and the Department of Human Factors Engineering at Chalmers University of Technology, Göteborg.

The study had not been possible to conduct without the companies involved. We would like to express our sincere thanks for their willingness to participate in the study.

Göteborg in April 2001

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TABLE OF CONTENTS

1   INTRODUCTION

Basic marketing theory states that a product undergoes a product life cycle of introduction, growth, maturity, and decline (Kotler 2000). In order to remain on the market, companies need to extend the product life cycle, redesign the product, and/or develop new products (Urban & Hauser 1993).

The common theme in a number of studies on the winners and losers in new product development is customer orientation or customer focus as a fundamental pre-requisite for new product success (e.g. Cooper & Kleinschmidt 1987, 1990, 1995; Griffin & Hauser 1993; Narver & Slater 1990; Rothwell et al. 1974). "Listening to the voice of the customer" and reaching an understanding of customer/user needs are advocated to increase the probability of a profitable product. The degree to which a product satisfies customer or user requirements is considered to be one of the most critical factors for commercial success. In a recent article, Cooper (1999) claimed that new product projects with detailed marketing studies, customer tests, field trials, and test markets may double the success rates and result in as much as 70% higher market shares than those projects with poor marketing actions.

However, there are a number of failures on the market. In the beginning of the 1980's, Booz, Allen and Hamilton (1982) concluded that the failure rate of new products was approximately 30%. Later, Clancy and Shulman (1991) claimed that new consumer packaged goods failed at a rate of 80 per cent. One reason for the fact that consumers neglect to adopt new product innovations may be that companies have misinterpreted – or even ignored to identify – the real needs of the consumers. Actually, Cooper and Kleinschmidt (1987, 1990, 1995) argued that a strong market orientation and customer focus is lacking in many businesses. Companies may claim to be customer-oriented by stressing the importance of customer needs but the question is if this is the case or if the idea of 'the customer in focus' is a cliché only, a talk of the tongue and not a true way of working.

2   CUSTOMER ORIENTED PRODUCT DEVELOPMENT

2.1   A Definition of the Concept

Even though customer orientation is stressed in the marketing literature (in addition to being part of the strategy statements of many companies) there seems to be no unanimous definition of the concept or of related concepts. For instance, user orientation has been described in terms of a

> "*cognitive-emotional concept, i.e. a general positive attitude towards customers*"
>
> (Heinbokel et al. 1996)

Balakrishnan (1996) defined customer-orientation as the degree

> "*to which a firm analyzes its customers' needs and preferences before developing its marketing mix and also the quality of its interactions with its customers as it implements its marketing mix*"
>
> (pp. 258-259).

Nwanko (1995) took a more comprehensive view, incorporating concepts, methods, and managerial aspects. He argued that

> "*an organization's customer-orientation performance will depend on the type of definition it adopts in relation to how it perceives its customers, the nature of sensitivity it shows in creating customer service mentality, the type of measurement technique it utilizes, and the implementation mechanism it applies.*"

In sum, the concept has been described in terms of a <u>philosophical approach</u>, i.e. a state of mind, or as a <u>behavioural approach</u>, i.e. a manifest behaviour of and in companies (Dreher 1994, Narver & Slater 1990).

2.2 The Rationale behind Customer Orientation

The importance of customer needs analysis has increased over time. An overall increased competition on the market is one factor but there are several other trends which may explain the development. For instance, product life cycles are noted to have become shorter (e.g. Urban & Hauser 1993) and markets more mature and saturated with product offerings (e.g. Urban & Hauser 1993). This means that in order to be competitive, manufacturers need to offer products that consumers find superior to other products, of higher value, or as holding unique qualities (Cooper 1999). Producers must also be sensitive to changes on the market and more rapid changes in consumption patterns, demographics and lifestyles must be recognized. Whereas the producer could earlier rely on 'loyal customers', there has been an observed trend towards reduced brand loyalty in the 1980' and 90's. This is likely to become a global phenomenon (Assael 1995).

2.3 Problems and Pre-requisites for Customer Orientation

At the same time as marketing actions is considered more and more important, market information and information retrieval have been documented as one of the major problems in product development work (e.g. Carlsson 1990, Rydebrink et al. 1995). Several reasons can be identified related to extrinsic, as well as intrinsic factors.

- *The distance between the producer and the consumer has widened*, for instance as a consequence of increased globalisation, as well as an increase in the overall infrastructure, for instance in terms of more middlemen.

- *Customer requirements are difficult to access.* Customer/consumer requirements are described as "difficult to uncover" (e.g. Hsia, Davis & Kung 1993). One reason for this situation could be that customer needs are difficult to access as they are seldom fully articulated and may often be subconscious. The Kano model (King 1987) proposes three levels of requirements which have to be considered in the process of identifying customer requirements; basic, performance, and excitement requirements. Only the performance level is easily articulated by the customer/consumer. The basic requirements are the features that the customer/consumer expects from the product without verbalizing them while the excitement requirements are requirements of which the customer/consumer is not aware, for instance problems which can be solved by innovative design solutions of which the customer has no awareness. A similar categorisation has been proposed by Karlsson (1996).

- *Companies do not get involved in marketing activities and/or the number of interactions are too few.* An earlier study into Swedish SME[1]'s concludes that a major part of the investigated businesses did not employ any or just the one method for identifying customer requirements (Rydebrink et al. 1995). Customer evaluations in order to verify requirements and product improvements were used

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[1] SME = Small and medium sized enterprises

only by a few. Similar observations have been made in other investigations. One example is Mahahan and Wind (1992) who concluded that market-oriented methods were utilized only to a limited degree by American companies involved in new product development. One reason for the companies not employing methods could be a lack of knowledge within the company of how to carry out an investigation with the purpose of identifying requirements. This assumption is supported by for instance Kaulio et al. (1997) and Cooper (1999).

- *Available methods are inadequate for a product development context.* Currently, design teams rely typically on traditional market research information and quantitative information from marketing research based on surveys, warranty returns, and service calls etc. However, an increased emphasis on this more 'traditional' market research is not considered to lead to better understanding of customer/user needs or a higher probability of product success (e.g. Griffin & Hauser 1993). Product developers require more detailed and in-depth information regarding customer/consumer needs than is provided by the typical marketing study. The type of information retrieved in a traditional marketing study is considered useful in planning business and marketing strategies – i.e. for decisions on a more strategic level – but lack the preciseness and clarity of information necessary for the actual shaping of products – i.e. is unsatisfactory for decisions on an operational level (Griffin & Hauser 1993). Alternative methods and approaches are, e.g., Gemba[2] (Ealy & Soderberg 1990), contextual inquiry (Wixon, Holtzblatt & Knox 1990), customer visits, and empathic design (Barton & Rayport 1997). The common denominator in these methods is to reach an understanding of how and why customers/consumers use products the way they do by studying 'real use'.

- *The company has too much a focus on competitor analysis and benchmarking rather than on the customers.* A competitor orientation, i.e. the ability and will to identify, analyse, and respond to competitor's actions (Narver & Slater 1990) may be important for the commercial performance of innovations. The approach has been recommended to market innovations when demand is not 'too uncertain' and in 'growing markets' (Gatignon & Xuereb, 1997) Other authors claim that product development based on a benchmarking strategy only is not a sufficient means for reaching customer orientation. For instance, Rosenau (1992) claimed that a product specification, which is a combination of the best single features observed in available competitors products, may indeed be a 'trap'. The specification (i.e. the document which is to direct the product development process towards a specified goal) is driven by competition rather than user or consumer needs. It is not derived from any unique market insight and is not likely to result in a product which satisfies yet unrecognised and unfulfilled needs.

- *The producer claims to know the market.* According to Cooper (1999), a negative effect on new product development success is achieved when developers claim to already "know all the answers . . ." and when the desire to market quickly may result in market assessment and market research tasks being omitted.

- *The company withholds a passive or reactive rather than a proactive customer orientation profile.* Product development strategies can be described in terms of reactive or proactive strategies. A reactive strategy is based on dealing with the initiating pressures as they occur whereas a proactive strategy would explicitly allocate resources in order to be first on the market with a product that a competitor would find difficult to achieve (Urban & Hauser 1993). A high customer-oriented profile would, according to Nwankwo (1995), require a proactive approach, i.e. a

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[2] Gemba can be translated as 'being-in-the-real-world.' The Gemba principle demands that a person is on the scene. The underlying assumption is that a person can not fully comprehend a situation by relying on second-hand reports but must experience the situation personally (Ealy & Soderberg 1990).

planned and co-ordinated activity in order to articulate customer/consumer problems rather than a passive attention to the issue and defensive attitudes in responding to complaints.

However, actions directed towards the market are not enough. A study by Souder (1988) concluded that there is evidence that interfunctional communication and co-operation, for instance between R&D and marketing, strongly correlates with overall project success. Based on a review of literature on the integration between R&D and Marketing, Griffin and Hauser (1996) stated that also the analysis of customer needs and requirements benefits from more integration between functions. The same conclusion is made by Ayers, Dahlstrom and Skinner (1997) who claimed that interaction between R&D and marketing personnel in a new product development project increases the likelihood of the success of the project. However, the authors also conclude that different viewpoints are beneficiary in releasing design features that could increase the product's technological sophistication and marketplace value.

Cooper (1999) stressed the importance of 'true cross-functional teams' in order to improve both time to market and product success rates. However, Cooper (1999) also emphasized the importance of having a *process*, defining the key steps and activities to be undertaken, in addition to team *training* in order to develop knowledge on how to undertake the needed market studies, how to build a business case, how to run projects, etc. Also the PRE-concept (described by Kaulio et al. 1996, 1999) takes this more comprehensive approach. The underlying notion of PRE (Product Requirement Engineering) is that customer-orientation is only achieved through a thorough knowledge and understanding of the customers, their present situation, their problems and requirements. In order to reach this understanding, three components are required: *a process of work* describing the activities to be undertaken; *a team which is integrated* to its character and whose members have direct contact with the customer, and *knowledge and use of methods* to support data collection, analysis, and representation of information.

3 PURPOSE AND METHOD

3.1 Purpose

The purpose of the study was to investigate if and how the customer's/the consumer's needs and requirements are considered in the product development process. More specifically, the purpose was to investigate the degree of customer orientation in a small sample of Swedish SME's. The research questions posed focused three areas:

- the company's overall strategy for product development;
- ways of managing the external dialogue (i.e. the dialogue between the company and the customer); and
- ways of managing the internal dialogue (i.e. the dialogue between the product development team members and between development team and the company).

Customer orientation strategy
- Who does the company define as its customer?
- How is customer orientation defined/described? Is customer orientation regarded as a development for customers, by customers or with customers?
- Does the company pursue a pro-active approach as to getting information on customer/consumer satisfaction, or is it a more reactive, passive attitude, responding to complaints etc.?

External dialogue

- What methods are used for identifying customer/consumer needs? How are these methods chosen?
- Who within the product development team is responsible for conducting the customer needs analysis: Is it an 'in-house' event or is it solved by outsourcing?
- How involved are the customers in the product development process? Is the dialogue between the company and the customer/consumer a single event, or a continuous process throughout the product development project?
- Does, and if so, how does the company measure 'customer/consumer satisfaction'? Is customer/consumer satisfactions measured in terms of 'sold units' or by other criteria?

Internal dialogue
- Who is involved in the product development process?
- How does communication work within the company?
- How are the needs analysis and other activities documented and communicated within the development team and within the company?

3.2   The Sample

An exploratory study was carried out focusing on consumer goods. Consumer goods can be classified in terms of (Kotler 2000): *convenience* goods; *shopping* goods; and *specialty* goods.

Initially, the idea was to get in touch with companies representing different consumer habits and degrees of involvement, representing the categories listed above. A total number of seven companies were approached of which four agreed to participate in the study (Table 1). Two of the companies were producers in the furniture/home interiors area, one a producer of food and the fourth company was a company within the IT-market (see Table 2). A small company has less than 49 employees, while a medium sized company has between 50 and 499 employees (Glader och Mårtensson 1980; Proposition 1977/78:40).

Table 1. Planned (x) and actual (y) selection of companies.

Product category	Company size		
	small <49 employees	medium 50-500 employees	large >500
conveniance	x y		x
shopping		y+y	
specialty	x y		x

A common characteristic was that all four companies were independent business units but also part of a larger business organisation. Their respective markets differed in that the main market for company A and B was the Nordic countries, company D targeted an international market while company C focused on a more 'local' market.

Table 2. A summative description of participating companies.

	Company A	Company B	Company C	Company D
product type	shopping goods	shopping goods	convenience goods	specialty goods
product range	large # of product variants	large # of product variants	large # of product variants	one product (as yet)
	established product	established product	established product	new product
market	Nordic market	Nordic market	local market	international market
size of business	medium sized	medium sized	small	small

3.3 Data Collection

Data were collected by personal interviews in Swedish with one or two representatives from each company – one representative from marketing (or corresponding) and one from engineering (or corresponding). The interviews were all semi-structured in character and followed the same, short interview guide (see Appendix A and B). Each interview, which lasted for approximately 1 1/2 to 2 hours, was tape-recorded for later transcript and analysis.

4 RESULTS

4.1 Product Development

4.1.1 Organisational Issues

All four companies belonged to a larger organisation but in companies A, B, and D the business unit was still responsible for new product development. In company C, product development seemed to be a more centralized activity.

Belonging to a larger organisation was considered both a strength and a problem in relation to product development. In one company, it was considered to enhance the exchange of new ideas:

> "[. . .] we can have some exchange. If you belong to an enterprise that does not only operate in Sweden, you get input from other things (ideas, product solutions)."

In another company, belonging to a larger organisation meant an improved economic basis and the opportunity to carry out certain projects which would have been too expensive otherwise. On the other hand, having to adapt to the larger organisations could also imply a loss of 'local' character. In the case of company C, for instance, the larger enterprise had its own brand in addition to the 'local' products marketed by company C. Even though a noticeable trend was that traditional purchase patterns were disappearing (due to people moving, immigration from other countries etc.), being able to offer a local assortment was considered important. The knowledge of these differences was considered to be part of the 'in-house', local knowledge and consequently important to consider in new product development.

4.1.2 The Process

The product development processes in the respective companies could be described as some kind of 'stage gate' or 'toll gate' processes.

A common theme in the descriptions of the development processes was the starting point, described in terms of "an idea" which originated from, e.g., the product development department or from product meetings. A positive response from the product development team/the organisation led to a decision to develop the idea into something more 'concrete'. The new product concept was then assessed. However, the basis for this evaluation seemed to differ somewhat between the companies. In company A, for instance, different bodies within the company was informed about the idea and activities were initiated in order to find out sales figures, price, production aspects, etc., before a final decision was taken by the product board. In company D, a technology assessment was an important input in order to assess the value of the 'business case'.

Overall, observed differences between companies could be described as differences in the *level of formalisation* and the *number of functions* involved. For instance, a development project in company D typically involved more people, more decision points, and more external input than the development of a new product in company C.

> *"We have our meetings where we discuss different things. [. . .] We want our product assortment to be alive, to look different, we need a good mix. These are the thoughts that make up the discussions."*
>
> (company C).

In all companies, internal communication seemed to be regarded as something important in order to reach the overall business goal.

> *"We have created a team that has this as an interest, not as a job but an interest. And we push each other: have you seen this, have you seen that? We spread the information and don't keep it to ourselves."*
>
> (company B)

Integration between different functions (e.g., R&D, design and marketing) in terms of communication and collaboration was established in all companies. However, also in this respect the companies seemed to differ in how systematically and structured the issue was approached. In companies A, B and C, integration seemed to be managed on a more informal basis while company D had taken a more strategic decision to set up a development team by individuals from different departments, including, e.g., industrial designers.

Increased competition and a change in market had meant changes within company B's organisation and the way they set up the development team. They involved also external expertise in order to be more tentative to market trends and consumer life styles etc.

> *"A [. . . designer] can put colour and add to image of the (product). We work a lot with external designers and so on, who has a feeling for this. We know if (the product) fulfils the technical specification and all that while the other things are a competence which the company does not today."*
>
> (company B)

Table 3 summarizes the organisation of the product development process in the four companies.

Table 3. Organisational issues.

	Company A	Company B	Company C	Company D
allocation of product development	*decentralized PD process*	*decentralized PD process*	*centralized PD process*	*decentralized PD process*
integration between departments	*informal*	*informal*	*informal*	*formal*
external experts	*no*	*yes*	*no*	*yes*

4.1.3 New Product Development

All four companies continuously changed their product portfolios, even though some changes may only have been incremental, for instance changes in terms of shape, colour, pattern etc. In addition, all companies spoke about ideas for new products or for new product development as emerging from

- present *trends* on the market;
- by visits to exhibitions (a type of *benchmarking*);
- visits to other countries

but rarely through systematic, exploratory research into the needs of the customer/consumer. The following statements illustrate the above.

> *"If you work with development, you are always open to new ideas. On your trips around Sweden and abroad. You see a product and then you get an idea."*
>
> (company C)

> *"We try to be one step ahead. We try to understand what is going on, what people really buy. Myself, I look to Italy for inspiration. You look at other products . . . too. You look for clothes to get an idea on colours and wallpaper."*
>
> (company A)

> *"This is the case when you deal with product development, and I have been at it for many years. You see something, and then – it's a way of life.*

1 2

You collect images and experiences. Sometimes you see a competitor's product and you think, heck, why didn't I think of that and then maybe you change your own product."

(company A)

"You have made a list of the things you want or the things you are missing and what we want to change, and you bring this along when you visit the large exhibitions. This year, it is this exhibition, next year it is the other exhibition that provides a lot of input. And different magazines/journals of course and the competitors. Actually, the starting point is visits to an exhibition and a search for something specific, to see the new trends in colours and material."

(company B).

Also *sales representatives* and *retailers* were sources for new ideas, as well *as in-house staff*. Actually, an in-house idea was the starting point for company D's new product concept. However, company D also used, so called, '*creative workshops'* in order to describe what needs might exist and what problems could be solved by technical solutions.

Another common theme in the discussion on how new product development was initiated was *benchmarking* and *comparisons* with the competitors. For company C, being able to offer the same or a similar product assortment as the competitor was a key issue.

"What happens is always a comparison between different suppliers. You have a store and you want to sell your product. They already have a supplier. They might choose you and then you have to look over your assortment. What did the former supplier offer that you do not?"

(company C)

Customers and end-consumers were rarely involved in the idea generation process, and to a limited extent in concept evaluation. Company A, for instance, carried out *internal evaluations* of product ideas and prototypes, company B used a *retailer panel* to evaluate new concepts while company C used *test launching* through product demonstrations in stores/shops for getting customer feedback on new products. Company D was the only one that had carried out any systematic consumer evaluation of the new product ideas in focus group interviews.

4.2 The Business Environment

Increased market competition on mature markets is regarded as one of the motives behind customer orientation. Company D was highly aware of that they were about to introduce a new product into an already highly competitive market. Companies A, B, and C were all approaching increasing competition. In short, all companies acted on an already highly competitive or an increasingly *competitive market*. Also, all companies acted on what could be considered *mature markets*.

Companies C and D seemed to have reacted by trying to find new and slightly more radical innovations while companies A and B appeared to have had a different approach. Along with changes on the market, several companies within the particular product area had changed business strategy: according to companies A and B towards a low price profile. This was not the case for, e.g., company A. Instead they claimed to have kept their traditional profile:

"If the general market conditions have gone from bad to worse within the building sector, our market share has stayed the same. We have kept our numbers . . . due to marketing and because the basis for this company is the product. If we had not had the right product, we wouldn't be an

alternative. When our competitors started to produce cheaper products, we never did but instead continued with philosophy that what the audience wants they will buy."

(company A)

In addition to increased competition due to the number of producers, company C had also noticed the fact that product life cycles have become shorter on their specific market. According to company C, changing the assortment on a continuous basis was considered a key issue in order to attract the consumer's interest:

"It is extremely important that something happens, all the time, even though the larger products are still part of the assortment. Over the last year, we have had approximately 25 different products. Earlier we did not release a new product in perhaps four to six years. But there has been a lot of things happening on the market recently."

(company C)

4.3 The Customer Dialogue

4.3.1 Who is The Customer?

The definition of 'who the customer is' could be regarded as a key issue in achieving customer orientation.

In company A, B, and C the 'customer' was most often the *middle man*, i.e. the retailer over which the companies had little control. This customer had to believe in the value of the product in order for the companies to be successful. Even though the companies depended on these market channels, being considered as critical 'gates', they also tried to choose market channels with care, i.e. the sales points had to fit with the image of the company. However, a certain ambiguity could be noticed, as noted in the following statement:

"(In order to be able to discuss customer orientation) we have to define the customer. Volvo probably defines the customer as the end customer. We define our customer as the distributor, even though our responsibility stretches beyond that point. Everyone talks about customer orientation but in practice one can always contemplate on the meaning of customer-orientation."

(company A)

"For me, the store is my customer, much more so than the consumer who buys things in the store. As a consumer, you buy what the store offers unless you have a lot of different shops to choose between."

(company C)

However, the recent changes on the market had resulted in, what company B described as, a slight change in their market focus – from regarding large purchasing bodies and/or middle men etc. as customers towards perceiving the end-consumer as the customer.

Defining the customer as the retailer in addition to – or instead of - the end customer influenced the way the dialogue with the customer was run. In companies A and B, end-consumers were rarely involved in evaluating new concepts or specific product designs. Instead in-house staff or the retailers were the sources for information also regarding end customers. In company B, for instance, a panel of retailer representatives were involved in assessing new product ideas.

"Of course we have a dialogue with our customers. We have a panel of retailers, a number of people each year that evaluates our ideas."

(company B)

Also, regarding the store as the main customer had implications on the product and service offered. In company C's case, the focus was no longer on the product only, nor on the overall assortment offered but also the way deliveries could be arranged, service arrangement, etc.

"What I think will happen in the future is that the shops will change their way of purchasing goods. The trend is towards mergers into larger chains. And if you do not become part of a chain, you form groups and make central purchases in order to cut prices. Earlier on, the one shop could have a lot of suppliers which meant that the shop could offer the consumer a large assortment even though the individual producer did not develop any new products. However, nowadays the shops want to reduce the number of suppliers and deliveries in order to reduce administration etc. This means that the one supplier has to develop and enlarge his assortment."

(company C)

4.3.2   Market Segments

Companies A and B focused on, what they described as, "well known" market segments, primarily segmented according to age. For instance, company A's customers were described as middle aged and older households. Other ways for segmenting the customers had been tried but had failed. Company C acknowledged that they did not know exactly who their end customers/consumers were but this was something that will be defined in a future study, initiated by the main organisation. However, for their local assortment they had intentionally targeted a group of consumers that did not search for the cheapest alternative. Company D, being a new company with a new product searches for their customer segment, had identified two different customer groups.

4.3.3   Present methods used

In company A, the dialogue with the consumer, i.e. the end customers, was (at the time of the interview) a *questionnaire* which was distributed after sale and contained questions on the customer's assessment of the delivery and sales service etc. Another important channel for reaching the customer was through the *stores*, where an opportunity for direct contact and, perhaps more importantly, 'individual' marketing was offered.

"If you go out and ask them (the customers) what they want, they really want to be influenced. We started shooting with bigger arrows. We produced a book and we told our customers that they had to visit our sales representatives to get one. You could not just phone to order one. Everything was about getting the customers to the store."

(company A)

Overall, market investigations did not seem to be carried out on a strict, regular basis. When such studies were carried out, they were most often carried out by external bodies. In company B, surveys (*telephone inquiries*) and occasional *consumer panels*[3] were used for explorative purposes. Research institutes carried out the surveys while the panels were conducted by the company. The aim of the surveys was to find out consumer attitudes, knowledge of brand names etc. while the panel was used in order to

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[3] Panel is the term used by the interviewee. This should be interpreted as a group interview/a focus interview.

find out product specific problems, for instance when uncertainty existed regarding the product assortment to be offered. However, company B expressed disappointment with the fact that the panels (both with consumers and with retailers) had not been very innovative. The same conclusion was made by company D, in their case based on creative workshops with a specific age group.

> *"We are somewhat disappointed that you hardly ever get any new ideas from the retailer panel. It's more about what is missing, some small detail which becomes a big issue. News, we have to find when we visit exhibitions."*
>
> (company B)

> *"Product development is not driven by retailers etc. What you need is a relation. This (our) company listens to the retailers and the consumers. That is important but you have to watch out so that the present situation is not conserved. They never see anything new but what we are selling at the moment or what is offered by the competitor. But that is already on the market and will not move use forward."*
>
> (company B)

Company C did not carry out any market research on its own. Instead, the main part of market research was conducted on a central level, by the main organisation, and the methods included e.g. *sensory tests*. Company C got in touch with the consumers through the sales points, particularly through different *product demonstrations*.

A recent trend in market research has been towards more qualitative approaches, especially focus group interviews. The experience of the usefulness of these methods varied within the companies. Company B had used focus groups but only sporadically. Company A had tried conducting focus group interviews for gathering new product ideas but had had a negative experience from that.

> *"Nothing (came out of that). It is like walking into a store and then buy what the sales person is wearing."*
>
> (company A)

Company D had, on the other hand, used focus groups as a way of screening consumer problems which could be solved by new technical solutions, and they had also used the interviews to evaluate the new product concept. However, company D acknowledged that the customer could not be expected to provide the company with the technical solution:

> *"If you ask the consumers what they want, they are not going to tell you what will be the hit of the world in three years. They do not understand the possibilities that exist."*
>
> (company D)

Nevertheless, although the company used focus groups, they did not seem to rely on them completely since the method did not allow statements on statistical significance.

> *"You can say that it is good for the team spirit, so you confirm that you are not completely wrong conceptually. Then you have to follow up".*
>
> (company D)

The interviews with the representatives of company D revealed that a direct contact between the developer and the customer was considered beneficial for interpreting data and for reaching an understanding. The explanation was that you get

". . . a different feeling by experiencing it yourself compared to hearing it from someone else. It is very different to hear about a car compared to experiencing it."

(company D)

The developers seemed to agree that their participation in the focus groups had made them more positive to this type of method.

"My reflection regarding this is that there was a pretty good interpretation of these focus groups, I think. Then it was a b-y luck that so many of us participated, so that you could experience it directly".

(company D)

"Text . . . . . you can not explain a feeling with a text, or how people express things".

(company D)

Company D had access to a number of other, secondary sources of information as a consequence of belonging to a larger enterprise. The methods (or rather tools) included international surveys, as well as usability studies, in addition to investigations of trends in different countries. The usability lab and involving consumers had been discussed for assessing the future product's user interface but initially an analysis of competitors' product had provided input, i.e. again a kind of benchmarking strategy. The present methods used by the companies interviewed in their dialogue with customers/consumers are presented in Table 4 below.

4.3.4 Future Development

Both company A and B spoke about changing their strategies for the future. Company B had plans to distribute a questionnaire to recent customers in order to investigate the customers' perception of their product, as well as of service delivery etc. Company A wanted to develop the dialogue with the end user – the consumer – by 'following the use' of a product for a longer period of time.

"We had an idea a couple of years ago, to pick out 20-25 products and follow that product ...[ ] ... maybe follow it for some years onwards. [. . . .] There is a value in finding out if you could have done otherwise. Did the material last? The use pattern? You could choose different families: with children, elderly and look at differences. But you have to find the organisation for that. It is easy to talk about it, but to do it."

(company A)

In company C, the main organisation was going to conduct a market survey in order to find out who the buyer of their product is. Company D did not state any future changes in market activities which could be explained by the fact that they were a new enterprise. Table 4. summarizes the present methods used by the companies interviewed in their dialogue with customers/consumers and future development.

Table 4. Overview of present methods used and future development

Methods	Company A	Company B	Company C	Company D
present <u>customer</u> dialogue	_	*retailer panel*	_	_
present <u>consumer</u> dialogue	*after sales questionnaire*	*market surveys*	*sensory tests feedback from demonstrations in shops*	*focus group interviews*
future development	*long-term follow up on use*	*after sales questionnaire*	*market survey*	*?*

4.4 Defining Customer Orientation

4.4.1 The Character of Customer Orientation

The interviewees were asked to describe what 'customer-orientation' meant to them and in what way they considered themselves to be customer-oriented. The answers show that customer orientation meant different things to the different companies. In company A, *service* and *accessibility* were key issues, illustrated by the following excerpts from the interviews:

> *"Customer orientation is being accessible to the market. That is the issue here. Maybe we are not accessible enough but we are there for the customers who are interested in our product. We are <u>there</u>, we are there, physically. People don't have to travel 100 kilometers to see our products. They have to travel two minutes, five minutes. That is being customer oriented!"*
>
> (company A)

> *"I believe we deliver quickly. That is being customer-oriented, isn't it? And that the delivery fits the expectations of the customer. That is important I think. I think we are customer oriented that way that in 9 of 10 cases, we exceed the customer's expectations."*
>
> (company A)

> *"I don't think that we have reached our customer-orientation goal – to reach the customer quickly enough, to provide the customer with service exactly when they are eager to make a purchase. I don't think we are customer-oriented in the way we behave towards the customer (in the shop). It (customer orientation) is <u>more</u> than the product. Often one becomes so focused on the <u>product</u> when one talks about customer orientation. It is the customer's needs and requirements and it should be green instead of red."*
>
> (company A)

Customer orientation through *customization* was also considered important and achieved by offering a large and flexible assortment. For instance, company B considered customer-orientation being achieved through customizing individual solutions – at the same time as they wanted their profile intact.

> *"We are quite customer oriented in the way that the customers get what they want. In principle, they get what they want as we have such a large assortment. It is seldom that a customer walks in here and cannot get what he wants."*
>
> (company B)

> *"We are becoming more and more customer-oriented. We have to be able to provide solutions to specific wishes."*
>
> (company C)

The main theme in the description of customer orientation by companies A, B and C was offering '*what the customer wants*'.

> *"Customer oriented is what our consumers and customers say (when we say customer we have to consider two categories) they want! The most important for our target group is not whether the product costs x, y or z. The most important thing is that one wants it a certain way!"*
>
> (company C)

At the same time, company A declared that the customers do not always know what they want. Actually, part of the company's stated business idea was to offer experience and knowledge, helping the customer to find a satisfactory design.

Knowledge <u>about</u> the customer, that is not only knowledge about what customers purchase but also knowledge about their everyday life was considered a key issue, and an issue which emerged more and more as the interviews proceeded.

> *"What is customer-orientation? I think it is knowing the customers needs, that is what it is all about. You have to know the customers today. That is the key. The social condition, at work, during leisure time, etc."*
>
> (company B).

> *" We find out if they (the consumers) are happy with the delivery and the service, and how old they are, and all that. But we don't follow the product. In order to become really customer oriented, one has to follow the product. I think that is a key issue. That we follow the product and its use for maybe 10 years and find out how it functions in its real use environment. "*
>
> (company A)

Company D stressed the importance of knowing who the customer is and reaching an *understanding of the customers more underlying needs*. They spoke less about the product itself and more about offering different solutions to identified problems. Value and benefit were key words used.

> *"Customer orientation . . . it is to be conscious about who is the customer, and to know which benefits, the additional value the solution provides for that person or organisation. . . . You must <u>know</u> who your customer is or who is going to buy our product in the end – and if it is used. Only then you could know if it is of any benefit!"*
>
> (company D)

> *"I think it is about going out talking to your customer, regardless of whether he is a private person or a company and ask the question."*
>
> (company D)

4.4.2   Benchmarking Customer Orientation

A 'projective technique' was used as an attempt to find out more about what the companies considered to be customer-oriented. The replies demonstrated a large variety in what companies considered as being customer-oriented companies. A common theme was, however, that customer orientation was not related the product or product development but to <u>othe</u>r issues, for instance service. In addition, the companies argued a clear link between being successful in sales numbers and being customer-oriented.

> *"I wonder if there is anyone that has a customer-oriented <u>product</u>. Maybe in the clothing business. There must be a reason why they succeed. Take 'Peak Performance', they have a good business because they have adapted (their product) according to what the customers want. Of course one has to consider them successful and a customer-oriented company."*
>
> (company A)

> *"Are 'X' customer-oriented? Well, what I said was that they have been successful but, somehow it must be that if the customers buy the product and they succeed in the stores, they must be good at developing the products that the consumers want. Someone must want it (the product), the customer or the end-consumer."*
>
> (company C)

Companies that were perceived as customer oriented were, for instance:

• Volvo – *"Volvo, I think they are number one. You see that in their advertising."*

• Unilever – *" A very undifferentiated product, which they are trying to get additional value from, laundry powder must be the same in the packages, but people buy different kinds, not so much technology in laundry powder."*

• Sony – *"created new things and customer values and managed to stay in business by moving all the time."*

• McDonald's – *"McDonald's is another good example. It is the service industry that is in the majority. McDonald's is the most customer-oriented company I know."*

• Air companies – *"Some flight businesses provide fantastic service, comfortable service. If something happens, they are there to help out. Those are the ones I think are the most customer-oriented."*

• Petrol stations/companies – *"I think the petrol stations have been quite good at this. Statoil for instance, they have adapted their opening hours, and the staff are clean and neat. And they have a clear profile." and "Both Shell and Statoil are good. They have taken advantage of the situation that you get a lot of products sold in your petrol station where people go for petrol. You receive a lot of advertising material. They have a lot of communication with their customers."*

• IKEA – *" They have Family. A lot is about caring and getting so close to the customer as possible. In the USA, they have gone much further here where marketing is concerned. There they know people's birthdays etc."*

Companies which were <u>not</u> considered customer oriented were:

- Digital – *"16-18 months between their best and worse result, they did not see where the world was going and held on to their existing product."*

- ITERA – *"People producing this product had worked in the car industry and had never made a bicycle before, they did not have a market focus."*

- Macintosh – *" . . . held on to hardware too much which resulted in that software was taken over by MicroSoft."*

- the car industry – *"The car industry (they are not customer-oriented) . . . no g-t. You only have to look at a Volvo salesman to see that that is not a salesman. They require six months before they can deliver a car. That is frightening. They are the worst."*

- travel agencies – *"Travel agencies are good at catching people but bad at fulfilling the promises."*

- monopoly businesses – *"The monopolies are breaking up. They have big problems with the postal service, etc. They do not know that they are claiming it in their messages to the customers. A lot of things have happened in the banking service. These are classical examples of bad branches."*

5 DISCUSSION AND CONCLUSION

This study covered three research themes; the overall strategy of the companies, the external dialogue, and the internal dialogue. A cross-company comparison is presented in Table 5. Based on an analysis of the results, the four companies can be divided into two groups; Companies A, B, and C form the one group and company D the other.

Table 5. A cross-company picture

	Company A	Company B	Company C	Company D
PD approach	*reactive approach*	*reactive approach*	*primarily reactive approach*	*proactive approach*
Development focus	*object=product*	*object=product*	*object=product*	*need/problem*
Definition of customer	*retailer and consumer*	*retailer*	*retailer*	*consumer*
Degree of <u>consumer</u> involvement in PD process	*low-moderate*	*low*	*low*	*moderate*
Integration between functions	*informal*	*informal*	*informal*	*formal*

5.1 Strategy

5.1.1 Proactive vs. Reactive

A reactive strategy deals with the initiating pressures as they occur whereas a proactive strategy would explicitly allocate resources in order to be first on the market (Urban & Hauser 1993).

The analysis shows that companies A and B (and to the main part also C) could be characterized as having a *reactive* approach to product development. For instance, initiation of product development was triggered by trends, benchmarking and external events. Company D, on the other hand, showed a more *proactive* approach in that they systematically had begun to search for new problems to be solved by technical solutions and also involved customers in a systematic evaluation of new product concepts. In addition, the development in companies A, B and C could be characterized as primarily product care and incremental innovations whereas company D has a more radical innovation.

One explanation behind company D's approach could be that it is a technology-based company, i.e. technical research and development provide the basis for product innovations. Another contributing factor could be that the company is operating on a highly competitive, international market characterized by a continuous launching of new products. It should also be recognized that company D belongs to a large organisation, a situation which may imply an access to knowledge and resources that could be difficult for the smaller enterprise to set aside. Even though companies A, B, and C all belong to larger organisations, these 'large' organisations are still 'small' in comparison.

A proactive product development strategy is necessary in order to introduce a new product on an existing or new market (Urban and Hauser 1993, p. 25). However, developing a high market share on existing markets with the existing product is, according to Urban and Hauser (1993, p. 24) not necessarily based on innovation but instead on selling and promotion. In this situation, product development should be used to defend existing products by reacting to competitive and environmental pressures. Companies A, B, and C have been operating on a fairly stable market with, so far, limited competition, a situation which has not required a more proactive approach. However, the situation is changing and the interviews show that the companies are adapting their product development process to the external pressure in terms of a changing and more competitive, mature market. According to Nwankwo (1995), a high customer-oriented profile requires a more proactive approach in terms of planned and co-ordinated activities in order to identify problems to be solved rather than a passive attention to and responding to complaints.

5.1.2 Defining Key Concepts

All four companies claimed to be 'customer oriented' but the meaning of the concept varied. Company A, B, and C described customer orientation in a similar way – in terms of offering the customer 'what the customer wants'. This could be achieved, for instance, by offering a large assortment. The degree of customer orientation was also perceived as possible to measure in terms of sales, i.e. if the product sells, the company has to be customer-oriented. Company D spoke about 'understanding the customer' and 'solving problems' by offering new technical solutions, arguing that being customer oriented requires the company to look beyond sales statistics and to find strategies for reaching a more in-depth understanding of the consumer.

A key issue in customer-oriented product development must be to define who the customer is. Company D declared that their customer was the end-consumer, company C defined the customer as the retailer, while companies A and B had a more ambiguous definition in that the customer could be other businesses, the retailers, as well as the end-consumers. Companies A, B, and C were all dependent upon the 'middleman' for distributing their goods with the consequences that the retailers were able to formulate requirements on the producers and the products. For instance, company C had had to adapt their products and services to the shops' requirements for a specific assortment, price range, delivery schedules, and stock piling. Also, in companies A and B, the retailer was the one who was involved in the evaluation of new product ideas. Hence, how the customer is defined had a clear impact on the product development process and the methods used.

However, even though the definition of the customer have implications on the development process and the way in which the dialogue with the customer is run, it is somewhat surprising that this topic is not explicitly dealt with within the literature. Often customer orientation seems to imply 'consumer orientation', i.e. the customer is the end-consumer. At other times the customer could be the middleman or the retailer, i.e. incorporating a business-to-business relation. Without defining who the customer is, the focus for the customer-oriented product development process becomes blurred.

5.2   The External Dialogue

According to literature (Cooper 1999, Kaulio et al. 1996, 1997, 1999, Ulrich & Eppinger 1995), efficient management of customer requirements requires a process, i.e. a systematic and continuous process rather than an occasional, ad hoc event. However, it is important that this process formalizes the activities to be undertaken in order reach the understanding of the customers and their requirements. In fact, the experiences from changing the product development process in some Swedish SME;s (Kaulio et al. 1996, 1997) showed that establishing a formal 'pre'-process in the early stages of product development was a pre-requisite for the process to become visible and

legitimate and for the allocation of necessary resources. Without the formal approach, the concept of customer-orientation may easily remain a philosophical approach rather than becoming manifest in the behaviour of and in companies. The producer–customer interaction can and should take place throughout the entire product development process (Cooper 1999, Kaulio et al. 1996, 1997, 1999), i.e. starting with a thorough needs analysis and idea generation, continuing through to concept evaluation and evaluation of prototypes, to launching and consumption/use, maintenance, and disposal.

The study showed that, in general, the methods used for eliciting customer requirements were limited, that customer investigations were not carried out a regular basis, i.e. as part of each individual product development project, and that the direct dialogue between the manufacturer and the end-customer – the consumer – was limited even though several comments indicated that a direct contact would be positive in addition to being needed. Furthermore, the study showed that the customers (and even more so the consumers) were rarely involved in the idea generation process. Systematic evaluations of new product concepts took place primarily after product launch and/or after purchase. Examples are the product demonstrations carried out by company C in the stores and the questionnaire distributed by company A after the sale.

Even though different methods had been used by the four companies, the use of methods was somewhat traditional in that the methods were all well-established methods, such as surveys, panels, and demonstrations. This fact might indicate a certain scepticism towards new and/or more qualitative approaches. Nevertheless, company D indicated that methods, such as focus groups which provides a direct contact between producer and customer, was valuable for interpreting and understanding the outcome. This observation is accordance with new and more contextual approaches documented in product development literature. Examples are the ideas behind , e.g. Gemba (Ealy & Soderberg 1990), contextual inquiries (Wixon et al. 1990), and empathic design (Barton & Rayport 1997). Also the PRE-concept (Kaulio et al. 1996, 1997, 1999) is based on the assumption that an understanding of the consumer's requirements for product development can only be achieved by understanding the relation between the consumer and the product in different situationS (purchase, use, maintenance, and disposal). It was interesting to notice that one of the companies had considered such a newer approach for understanding their customers.

Two companies had used focus group interviews but both expressed a slight disappointment with the results. They had found that the participants had not been able to formulate their requirements for a future product or suggest new and innovative solutions. This implies an expectation of the customers being able to express what they wanted in product specific terms, i.e. to be able to make the sometimes implicit explicit. These expectations may also be a consequence of the companies understanding of customer orientation in terms of the customers specifying what they want rather than providing solutions based on customer-producer dialogue. While the former approach would result in questions related to the product and its attributes=the object, the latter approach would result in questions dealing with the customer's present situation in order to identify problems to be solved.

The disappointment could be a consequence of that the methods have not been explored to its full potential, for example, by not probing sufficiently and not allowing the participants to fully elaborate their answers. However, another reason for not fully elaborated external dialogue could be that the available methods are not sufficient for understanding the complexity involved in consumer behaviour. New innovative thinking is required for development of methods in order to advance this field of study. Also, it was noticed that the companies were not using a combination of methods for understanding the same phenomenon. Such an approach should be encouraged in order to obtain a more comprehensive understanding. Denzin (1978) has previously advocated such an approach.

5.3   The Internal Dialogue

According to management literature, customer-orientation will benefit from interfunctionality, in particular between research and development and marketing (e.g. Griffin and Hauser 1996). Based on the interviews, all companies seemed to integrate engineers and marketers in the product development process. It seemed as if this integration was rather informal in character. It is possible that the sizes of the companies could be a reason for that no further formalization had taken place or was necessary. On the other hand, company D had more formally defined a product development team consisting of individuals from different departments. Overall, the internal dialogue was not sufficiently explored in the interviews.

5.4   Future Research

The companies investigated in this exploratory study have had a limited external dialogue with their customers and the end-consumers. This brings out the question whether this is a general phenomenon or whether it concerns these companies in particular. If it is a general phenomenon, is the situation applicable to certain sizes of companies, branches and products? Is it applicable to newly launched products or older products, on new markets or on mature markets? Is the reason because the companies have operated on markets lacking external threats and competition? Future studies need to consider a variety of companies in order to get a more comprehensive understanding of customer orientation in product development.

Another reason for the limited dialogue between producer and customers could be that the companies perceive that they already possess sufficient knowledge about the customer. If so, how reliable and updated are their perceptions? Furthermore, is the external dialogue limited because the companies are not aware of the methods available for eliciting customer requirements or do they lack experience of using such methods. Or is it in fact so that the methods available are insufficient for answering the questions posed? In the future, it would also be interesting to evaluate the consequences of a dialogue based on new media such as the Internet.

Based on the results from this study, it would be interesting to find out how other companies define 'customer orientation', more specifically, companies that explicitly declare that they are 'customer oriented'.   Do companies interpret customer orientation as an approach where the customer is to specify what he or she wants rather than an approach where the purpose is to identify problems to be solved by new technical solutions. In order words, what expectations do companies have regarding the customers role in product development? Is customer orientation a development <u>for</u>, <u>with</u> or <u>by</u> customers?

The efficient internal dialogue is an important feature for accomplishing customer oriented product development. The study reported here has only been able to touch upon the matter. In order to get a more comprehensive and in-depth understanding of the process, it would probably be necessary to follow an actual product development project over time. This would involve a number of repeated visits to the respective companies investigated and interviews with different actors involved in product development, such as engineers, marketers, and designers.

A comprehensive understanding of customer orientation in product development requires not only the producer's perspective on customers' involvement, but also the customers' views. It would therefore also be of interest to examine whether the customers, and more specifically end-consumers, feel that they can influence the development of new products. Do customers overall want to be involved? The involvement of the customer at the different stages in the product development also needs to be examined and discussed. Can, and how can, customers be involved in, e.g. needs analysis?   Finally, is customer involvement always positive or can this involvement result in a negative development of products?

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INTERVJUGUIDE

Beskriv företaget?
> Produkter? Volymer? Kunder?

Beskriv er PU-process så som den typiskt ser ut idag?
> Stafett- eller parallellstrategier?
> Har ni dokumenterat processen på ngt. sätt? ISO-certififierade?
> Metoder för kunddialog?
> Samarbete mellan olika avdelningar?

Beskriv ett specifikt utvecklingsprojekt, t.ex. det <u>senaste</u> PU-projektet?
> Vilka ingick i projektet?
> Hur kom ni fram till att utveckla just denna produkt?
> Blev det lyckat/misslyckat? Vad ledde till slutresultatet?
> Gjorde ni några kundundersökningar inför just detta projekt?
>> Vilka kundundersökningar? Omfattning?
>> Vilka gjorde undersökningen? (marknad? konsulter?)
>> Vad var det ni försökte ta reda på?
>>> (Resonerade man i termer av krav? behov? värden?)
>>> Fick ni reda på det ni ville?
>>> Hur tog ni hänsyn till den information ni hämtade in?
>>> Var det ngt. ni inte kunde ta hänsyn till?
> Gjorde ni någon utvärdering av de idéer ni hade? (mot försäljare, mot kunder, mot andra?)
>> Använder ni ngn. form av RF/stimuli?

Är det ngt. ni skulle vilja göra annorlunda nästa gång?

Om du skulle beskriva ett 'kundorienterat' företaget, hur skulle du beskriva det? Ett företag som <u>inte</u> är kundorienterat?
> Vad är då kundorientering för dig – egentligen?
>> Vad fordras för att man skall kunna vara kundorienterad?
>>> Resurser? Metodkunnande? Annan kompetens?

Upplever ni att ert företag har förändrats under de senaste 5 åren?
> Varför? Varför inte?

Framtiden?

INTERVIEW GUIDE

Describe the company
 Products? Volumes? Customers?

Describe your Product Development process as it typically looks today
 Waterfall or parallell strategies?
 Have you documented the process in some way? Do you have ISO-certificate?
 Methods for customer dialogue?
 Co-operation between different departments?

Describe a specific product development project, for example, the latest Product Development project.?
 Who participated in the project?
 How did you get the idea to develop this product?
 Was it successful/not sucessful? What led to the end result?
 Did you do any customer studies before this project??
  What type of studies?
  Who did the studies (market department? consultants?)
  What did you try to find out?
   (Did you discuss in terms of requirements, needs, values?)
    Did you find out what you wanted?
    How did you consider the information you collected?
    Was it something you did not consider?
 Did you do any evaluation of the ideas you had (towards salespersons, customers, others?)
  Do you use any form of product representation in order to
  stimulate the dialogue?

Is there anything you would like to do different another time?

If you were to describe a 'customer oriented' company, how would you describe it? And what about A company which is <u>not</u> customer oriented?
 What does customer orientation actually mean for you?
  What is expected from a company in order to be customer-oriented?
   Resources? Knowledge of methods? Other competence?

Do you feel that your company has changed the last 5 years?
 Why? Why not?

The future?