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# The integration of customer needs in the establishment of an e-business system for internal service

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## Abstract

The key success factor for companies is to develop and deliver services and products that satisfy customer needs and create customer value. When introducing e-businesses as a new channel, it is becoming increasingly important to consider customers, since they will have a higher level of influence on the company through the interactive channel. This paper sets out to describe the process of considering customer needs in an e-business establishment based on the results from a case study where gaps between customer expectations and supplier intentions were explored. The aim is to address the problem of taking customer needs into consideration and to suggest models for value creation of products and services from a customer perspective. Theories of process mapping are used in order to understand how customer needs can be fulfilled in an e-business establishment. Concepts of customer knowledge and customer processes are used to elaborate on the creation of value added products and services.

**Keywords:** customer value, customer needs, process mapping, e-business development

## Introduction

It seems logical and familiar to most organizations that the key success factor for companies is to develop and deliver services and products that satisfy customer needs (Bowersox et al., 1996). However, very often organizations tend to respond reactively to customer needs. Petersen (2000) claims that the shift towards online commerce requires a shift from a product focus to a customer focus, and thus the importance of knowledge about customers will be more crucial than previously. Customer knowledge, however, has always been crucial, yet customer needs are evolutionary and must be continuously updated. Gummesson (2000) has recognized that the establishment of e-businesses has often been implemented from the inside of companies rather than from the (outside) customer perspective. The knowledge about customer needs from traditional businesses has been applied directly into new e-business systems. It can be agreed that the new channel of e-commerce is just another channel complementary to traditional channels (Porter, 2001). However, it is important to gain knowledge about customers' needs in the new online channel rather than adopting customer needs from the traditional channel, since these needs probably differs.

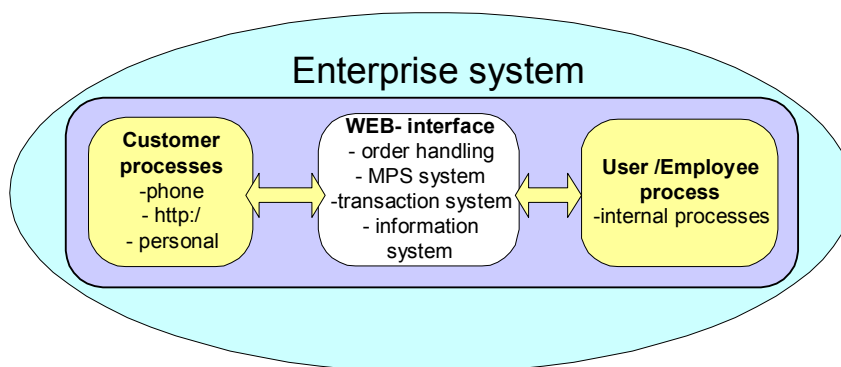
Wikström et al. (1998) argue that it is becoming increasingly important to regard customers as resources of competence to companies, since they will have a higher level of influence on the company business processes in an interactive business. Porter (2001) has established that customers will gain increasing power in the new channel, which means that on-line products and services must demonstrate that they provide real benefits, thus fulfilling the need of the customer. This must lead to more customer-oriented organizations, where the customer has a central role in the business process development (Wikström et al. 1998). The necessity to become more proactive in understanding the need of customers must be stressed in order to add value to customers in an increasingly differentiated and interactive market.

The question of how to take customer needs into consideration when establishing new e-business systems is still unexplored, and is one issue identified in this research. This paper describes the process of considering customer needs in an e-business establishment based on findings from a case study. The business in this study is an independent service company within a multinational corporation. The company has identified their customers as their main focus in the establishment of a web-based system for internal services. One goal has been to provide unambiguous service offerings in order to add value and to gain satisfied customers through ensuring products and services that fulfill their customers'

needs. With this in mind, the intention has been to give the customer a major role in the specification of requirements, and in the establishment of this new channel. The purpose of this study is twofold:

- to identify and map gaps in expectations between the service company employees, i.e. the supplier, and the customers of the service company, and to analyze the effects of these gaps on the process of establishing the web-based system
- to explore the possibilities of value creation to customers through the web-based business system.

One customer in this study is an employee of any company within the multinational corporation that orders and consumes goods or services from the service-providing company. The internal service can be defined as products and services needed from the companies and their employees within the multinational corporation, services that are considered to be outside the core business of each company, such as telephone service, housing service, conference service, administration, transportation, catering etc. The research data are collected through a combination of in-depth interviews with customers and employees of the service company in the area of study as represented in Figure 1. In addition, observations and active research participation in the process of development and establishment of the web-based business system have been conducted.



**Figure 1:** *The area of study*

### The case study

The study was undertaken during a period when the new web-based system was developed, introduced and re-launched through an updated release one year after the first introduction.

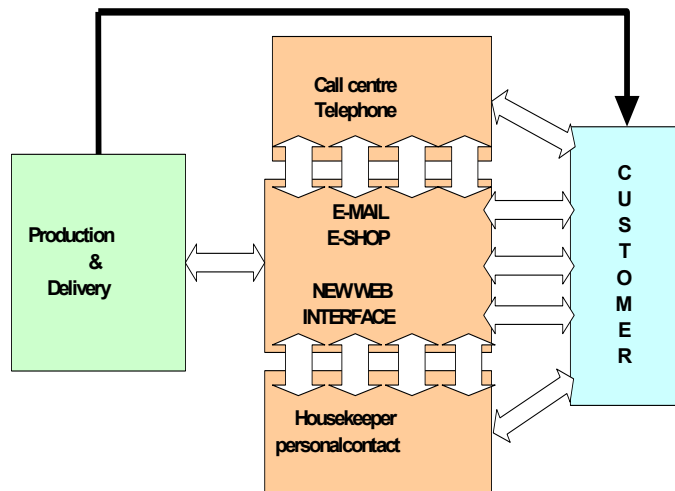
Prior to the start of the development of new web-based customer channel, a SWOT analysis was made. The issues identified in this analysis were:

- good performance in some parts of the functional organization
- positive employees, with expectations on change
- unclear products and product portfolio
- customers don't know what we offer
- customers don't know whom to contact
- we don't know what customers need
- uneven deliveries
- uncertain delivery times
- lack of follow up
- lack of trust among customers.

With these concerns in mind, four targets were established in order to "productify" services and to create a customer-focused rather than a function-focused organization. The targets were to:

- bring the company up the value ladder through clear offerings to customers,
- to work efficiently,
- to create opportunities for employees to develop and increase self-esteem
- to increase the level of customer satisfaction through guaranteeing the quality of products and services they would receive.

Porter (2001) argues that successful e-business initiatives are those that use the Internet as a complement to traditional ways of competing, not those that separate their Internet operations from their established operations. Accordingly the processes from the customer into the organization, in this case, take place through three different channels: telephone, direct personal contacts or through the new e-business system. Whatever channel the customer chooses, the order has to be put into the web-system either by the customer, or by the order handler within the company according to Figure 2.

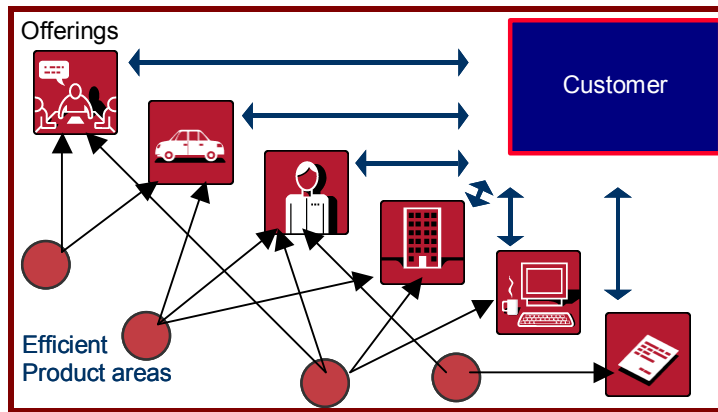


**Figure 2** Information flow (white arrows) and flow of goods and services (black arrow)

It is vital for the service company to obtain customer acceptance in the new channel ;otherwise the service company employees have to take the customer role and enter all orders into the system after the order has been put through another channel. One of the gaps identified in the early phase of the study was that the customers see the system as complex and as something that creates value to the supplier only. In the short-term it is acceptable if the employees handle the work of entering orders into the system; however, a long-term goal for the company is to decrease administrative work and telephone time internally, thus reducing over-head costs. The channel transfer of customers may also give the supplier more time to manage and to build customer relationships, as a result of less time spent on queries and administrative work. The driving force for the customers to transfer into the new channel is found to whether there is an added value created for them from the new channel. Such values mentioned by the customers in the study could be: electronic order confirmations, transparent system where an order can be followed and where each customer can follow up all businesses they have with the supplier, clear product information and the flexibility to order at any point in time, i.e. 24 hours per day and 7days per week.

### Customer value

Innovations in the field of e-commerce and the creation of web-based systems as new customer channels have given suppliers opportunities to add value to their customers' businesses. According to Grönroos (2000), customers buy offerings that render services that are perceived as creating value for them. Accordingly the different products and services provided by the case company have been bundled into six service offerings: meeting services, transport services, HR services, properties, office support and administration services as presented in Figure 3. These offerings are built up by about fifteen offering processes, as for example the office removal process, which belongs to the office support offering.



**Figure 3** Six offerings bundled from the different product areas

A market offering is a set of two elements: its value and its price, where the difference between the value and the price equals the customer's purchase incentive (Naurus et al. 1998). When assessing a value to a product or service the whole life cycle from how the customer acquires the product, uses it and disposes of it after usage, needs to be considered. Grönroos (2000) argues that the perceived value and quality of a service are not determined by the service offering alone: the way the service process is perceived by customers becomes part of that service. Hence the process related elements must be included in a service offering.

Uлага et al. (2001) argue that customer value analysis will become a strategic tool for auditing customer needs and for measuring gaps in the buyers' and suppliers' value perceptions. The use of process mapping in the customer/supplier interface as one tool for gathering and understanding customer needs in order to carry out such value analysis is suggested and used in this study. The idea of putting the customer at the beginning of a demand chain rather than at the end of a supply chain will be used and will support the creation of value for customers.

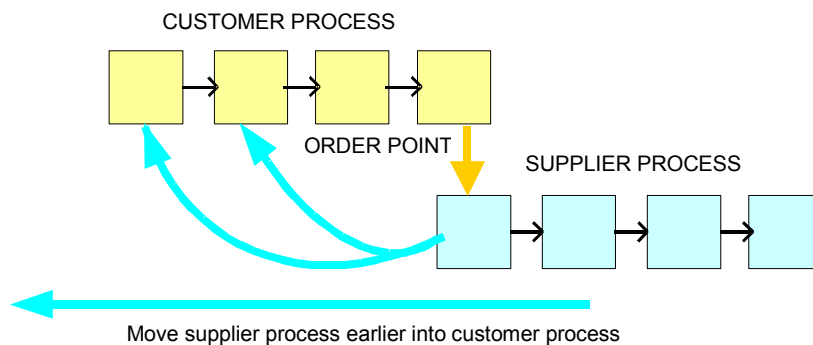
### Customer processes to identify customer needs

Process mapping has been widely used in businesses as a tool to understand internal business processes. Furthermore, Keller et al. have identified that relevant processes must be understood in order to judge whether customer needs, or business objectives, are met. The greatest opportunity for an organization to improve, according to Rummier and Brache (1995), is to map the interfaces between functions all the way to the customer, since this will show how work gets done over functional boundaries, and furthermore, the internal relationship between the organization and its customers. Customers must be included as a part of organizations' processes and systems. Therefore it is interesting to start out the analysis in the customers' process in order to find steps in that process that can be taken over by the supplier in order to create value and also to create new business opportunities for the supplier.

Gummesson, (2000) describes a method of service mapping where the basis is in the customer process rather than as generally in the producer processes. This can be exemplified by the establishment of a customer interface such as the e-business system in this study, which provides a new channel to its customers. It is important to understand the customers' processes in order to create value that creates acceptance among customers in the new channel.

While the service company is actively re-engineering their internal processes, during the study, due to a need identified in the creation of the new business system, the research has its focus on mapping their customers' processes. A customer process can be identified as a collection of tasks or steps that the customer goes through in order to achieve a goal (Champy et al.). The research takes an approach of mapping the customer process, based on input from interviews and observations, in order to study whether the links between the customer process and the internal company process correspond in expectations and timing. By studying the customer process along with the internal business processes of the case company, it can be concluded that the customer process is standing alone in many steps prior to the initial contact with the service provider, and the initial step is almost always at the order point of a product or a service.

Schematically, the processes of the customer and the service provider can be visualized as in Figure 4.



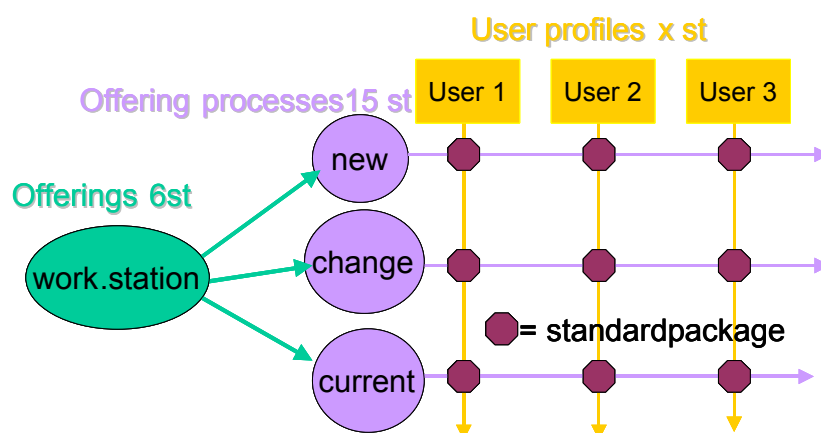
**Figure 4: Link of supplier processes to customer processes**

Prior to the point of order, the customer makes an inventory of the need for certain products or services in its organization. As one example this would be one step that the supplier could be involved in or even take over. This will result in twofold benefits. In the first place, the service provider, the supplier, will take over some work from the customer that is considered non-value-adding in the customer's business since it does not belong to the core business of the customer. Secondly the supplier will learn to know its customers better.

### Value creation through user group-specific product packages

It is crucial according to Champy (2001) that an organization understands how customers use its products and services; furthermore, segmentation of customers and product positioning should relate to customer needs and include factors that influence the customer purchasing process (Rowley 1997). Thus, the process that shows how the customer uses the product or service is important in order to understand how product or service offerings should be designed.

When studying the early steps of the customer process in this study, the inventory of need made early in the customers' process show that certain categories of customers (users) have certain specific needs. Champy (2001) argues that existing products and services can give more value to customers if the processes around that product or service are developed. If applied to the company in this case, the supplier should be able to add value to its customer through mapping the different user groups and, from these maps, being able to extract the need of that specific group. Based on that need, specific "value packages", i.e. bundlings of products into standard packages, should be developed. Such value packages are customized to fit the specified user, according to the nodes in the matrix in Figure 5.



**Figure 5 Link of user group processes to the internal offering processes**

The model suggests an expansion of the offering thinking into a combination of offerings with the processes of different pre-identified user groups. This model allows for customization of packed products that fit the need of the different user groups, while at the same time opening an opportunity for standardization of the products included in these specific packages marketed in each node of the

matrix. The web-system is the channel and tool for marketing, and for information about these user-specified packages that are developed in order to meet the need of a certain user group.

## Conclusion

This study shows that setting out from customers' processes and linking them into the supplier processes may give a supplier the opportunity to get to know its customers better and also to take over some non-value-adding activities from their customers in order to increase customer value in their offering processes. Furthermore, the enhanced customer knowledge will help the supplier develop a web-system that fulfils its customers' needs.

The web-system should be used as a complementary channel, to give the customer an option of channel selection. However, through creating added value in the new channel through user-specific offerings and extended product information, the transfer of customers from the traditional channels into the new interactive channel will be supported. Nine months after the introduction of the web-system in this specific case, 40% of the incoming orders are entered in the new web-channel as a result of a natural channel transfer.

Another advantage of increased customer knowledge through customer process understanding is that the company can segment and adapt its product portfolio to different user groups identified. A web-system as presented in this case can be used to present standard solutions to the different user profiles, which will help the customers to purchase products customized to their profile while at the same time giving the supplier the opportunity to standardize certain "standard packages" of products and services.

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