Redesigning the service concept for the age of the Internet

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Abstract

Business on the Internet is becoming faceless and dehumanised. This seems to be good news to customers but can prove particularly problematic corporate management, especially for the service business. Traditionally, services are products of human interaction. In the Internet services are objectified and dehumanised, and the creation of value becomes a key issue.

In this paper we will develop a model of service interactions relevant for electronic commerce, specifically the Internet. This new model visualises the multiple flow of interactions present by various players in the Internet. This model will point at the managerial dilemma of dehumanised services, and we show this through real-life examples.

Keywords: Internet, Electronic Commerce, Service Management, Marketing

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Introduction

In 1838 the first electronic media was invented when Samuel F. Morse invented the telegraph. The Internet has, just like the telegraph 160 years ago, had revolutionising consequences for commerce. For years the Internet has been an interactive research platform where scientists have shared and exchanged research findings. It was in 1992 when the Mosaic was developed, the graphical user interface of the World Wide Web, that the Web and the Internet itself was propelled into the wide public consciousness (Sterne, 1995).

Today the Internet has become a marketspace opening up a whole new business arena with profound consequences for business practice and research (Glazer, 1991, Benjamin and Wigand, 1995, Rayport and Sviokla, 1994, 1995, Sterne, 1995, Applegate et al, 1996, Hagel III and Rayport, 1997, Angehrn, 1997, Wigand, 1997, Hoffman and Novak, 1996, 1997, Brännback, 1997a,b). Everybody is rushing to establish an Internet presence and the essential explanation seems to be "it's better to be there than not, but don't ask me why" (Sterne, 1995, 1996, Angehrn, 1997). As pointed out by many authors, few companies seem to have a clear strategy let alone a clear understanding of the opportunities and challenges in this wonderful marketspace. The Internet or the electronic market is a platform for electronic commerce (EC). Therefore, the Internet and EC has to be understood within the context of markets (Rayport and Sviokla, 1994, Sterne, 1995, 1996, Angehrn, 1997, Brännback, 1997, Wigand, 1997), where interactions occur and where understanding the essence of customer-orientation becomes a prerequisite.

Successful management of the marketspace requires a comprehensive understanding of what activities generate customer perceived value. In a very short time a large bulk of literature has emerged which address this issue from a customer perspective. But it takes two to tango. Clearly, there has to be value for companies to establish an Internet presence (IP). The short-term effect appears to be cost efficiency, but what are the long term implications for management when they loose control of customers? Traditional marketing models do not offer guidance here since the models do not apply in the marketspace. The dehumanised feature of the Internet, and not knowing how to compensate for the absence of the human touch can be the downside of speed and limitless access.

In this paper we will deal with services and in particular the dehumanisation that occurs in the Internet. Some argue that the loss of intimacy is not a problem (Marlow, 1997) and point out that the Internet will, on the contrary, become more intimate. From a customer perspective this is probably true, and can in some cases also hold from a producer's viewpoint. Are the service providers, in the traditional sense, capable of creating substitutes for a dehumanised service, that will compensate and even excel? Customer bonding is a major headache for management and the remedy is not a painkiller, but to provide means to establish dehumanised customer loyalty. How is this done? Part of the remedy comes from interaction, i.e. dialogue and another part is about anticipating customer expectations and understanding what customers regard as valuable.

In the next section we will provide some proof of the fact that the Internet is a serious market in terms of its speed of growth, what type of domains and where the growth is very strong. In the third section we will introduce the electronic marketing concept which is an evolution of the traditional marketing concept as presented by Kotler (1967). In the fourth section we will present the traditional service-marketing concept and in the following section we introduce the new service marketing model relevant in the context of electronic commerce. The model shows the modes of interactions, which need to be managed in order to stay competitive in the marketspace. In the sixth section we will illustrate the new service marketing concept with a real-life example, PC-Superstore. PC-Superstore is the largest computer retail store in Finland. This case highlights the issue from a success perspective, where management has understood the importance of customer bonding and how dehumanised bonds are created. In the final section we will conclude and offer issues for future research.

2. The Traffic on the Net

The Internet blew into the consciousness of the wide public around 1993. However, the ancestor to the Internet technology was then already twenty five years old (Sterne, 1995, Marlow, 1997) and the Web was created in 1989 at CERN in Switzerland. In 1992 the graphical user interface Mosaic was developed and this started the landslide spread of the Internet into commercial use (see Tab. 1).

TABLE 1: Growth in number of hosts during 1993-1997 (Source: http://www.nw.com)

Date	Hosts
July 97	19, 540, 000
Jan 97	16, 146, 000
July 96	12, 881,000
Jan 96	9, 472, 000
Jan 95	4, 852, 000
Jan 94	2, 217, 000
Jan 93	1, 313, 000

The Internet is still in its infancy, but with an incredible development pace and with some other interesting features worth pointing at (Tab. 2 and 3). It is not surprising that the biggest marketspace market is in the United States, since the US is the largest consumer market in the world.

In Tab. 2 we have displayed the largest domains (com., edu., etc.) and we can see that the commercial sector is by far the largest. It is worth noting that this domain represents hosts with various nationalities, as does the educational domain. However, when we look at the country specific domains and the subscriber density per 100 inhabitants we find some peculiarities. Small Scandinavian countries with no more than 5 million inhabitants are topping the ranks, and when the Scandinavian countries together outnumber countries like the UK, Germany and even the US, which based on the size of population are at least ten times bigger, it requires some thought. Australia and the US are very different from Finland, Norway, or Iceland. Or are they perhaps similar in a sense? The logical explanation to these numbers can be spelled out in terms of distance. The small Scandinavian countries are scarcely populated over a fairly large area, and distances are certainly huge in the US and Australia. Moving from one end to the other costs money and time, and the Internet provides access within a few seconds. The Internet opens up numerous degrees of freedom for the consumer who has earlier had little choice but to consult local service providers. Hence a naïve conclusion from a service provider would be to make sure that what ever their business is, will be taken care of by the Internet through mere presence.

TABLE 2: Host distribution (Source: http://www.nw.com)

Domain	Number of Hosts	Number of Domains
Commercial (com)	4 501 039	764 019
Educational (edu)	2 942 714	13 222
Finland (fi)	335 956	4 658
Sweden (se)	284 478	18 326
Norway (no)	209 034	9 940
Denmark (dk)	137 008	26 550
Iceland (is)	14 153	561
Scandinavian countries	980 629	60 035
United States (us)	825 048	16 365
United Kingdom (uk)	878 215	58 204
Germany (de)	875 631	53 863

TABLE 3: Internet subscriber density per every 100 inhabitants (ITU World Telecommunications indicators Database)

Country	Density
Finland	5,52
Iceland	4,32
Norway	3,91
United States	3,80
Australia	2,81
Sweden	2,61

It is already obvious that the Internet is extremely powerful, but the inability to understand the difference between competing in the marketplace versus the marketspace can cause more damage than anticipated. The Internet actually requires a thorough understanding of theory and practice regarding the marketplace, since this insight will help understand and manage the marketspace (Rayport and Sviokla, 1995, Sterne, 1995, 1996, Angehrn, 1997, Brännback, 1997a,b).

3. The electronic marketing concept

Despite the fact that it has been thirty years since Kotler presented the new marketing concept in 1967, the essence of that concept has still not been quite well understood by many in practice. Much of what takes place in the marketplace is still governed by the old concept where profits comes out of sales volume and the starting point is production, rather than meeting customer needs (Fig.1). Several authors (McKenna, 1995, Armstrong and Hagel III, 1996, Wigand, 1997, Hoffman and Novak, 1997) argue for an evolution in the marketing concept in which the firm needs to go beyond traditional means of reaching the target customer. Rayport and Sviokla (1994) are more frank in stating that the traditional marketing-mix is no good in the marketspace.

In Fig. 1, we show the evolution of the marketing concept. Kotler presented the top and the middle arrow, “the” old marketing concept and the “the new marketing concept” already in 1967. The third arrow presents our view of the electronic marketing concept. What is interesting to note, is that already in 1967, the idea of customer needs and customer satisfaction was introduced although the consequences of not understanding this relationship is becoming apparent thirty years later. The same point was further stressed as we turned into the 1990s. Kotler defined (Kotler, 1991) marketing as a managerial and social process, aimed at satisfying the needs and wants of individuals, and a groups through value creating offerings.

When we move into the marketspace satisfying needs is still important, but we have to go one step further. Companies have to satisfy expectations regardless of need. This performance will build the customer bond, the relationship based on loyalty and ultimately translate into customer perceived value. This requires that companies are able to see the world through customer coloured glasses and think like customers (Sterne, 1996). Relationship building requires that companies understand that they communicate with customers rather than to them. You have to show customers that you care through interactive marketing. You have to engage in a dialogue with the customer, not delivering a monologue (Blattberg and Deighton, 1991). You should aim for customisation, rather than mass marketing. This is all possible in the information age with endless possibilities to track customer expectations and needs (Glazer, 1991, Blattberg and Deighton, 1991, Jelassi, 1994, Rayport and Sviokla, 1995, McKenna, 1995, Armstrong and Hagel III, 1996, Hagel III and Rayport, 1997, Hoffman and Novak, 1997).

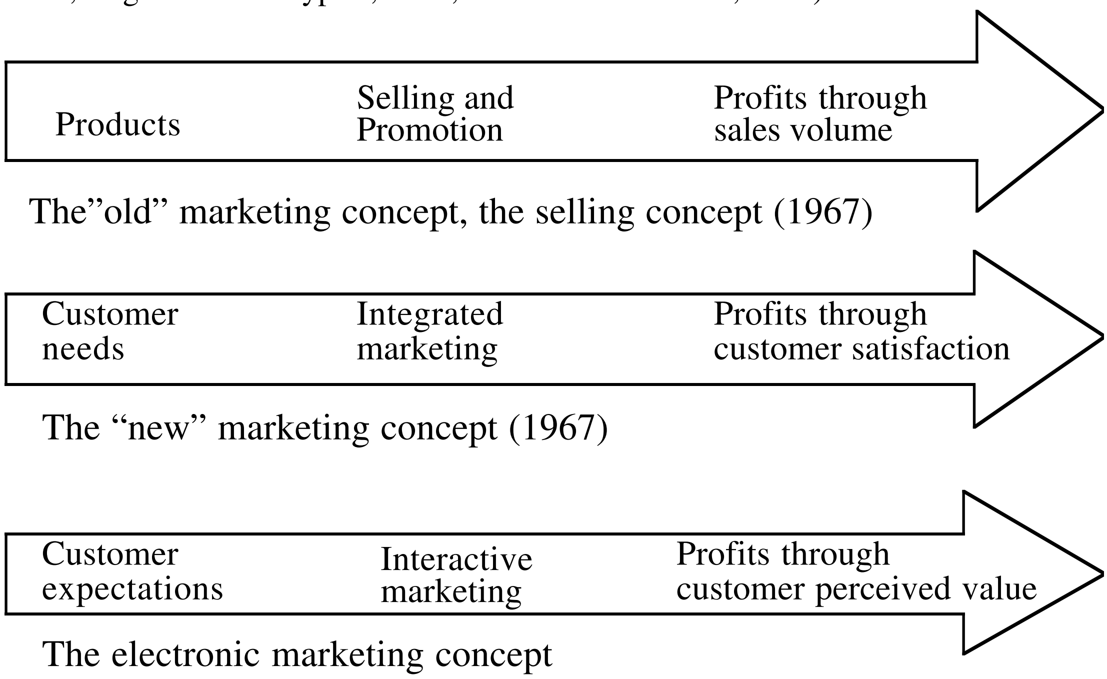

FIGURE 1: The evolution of the marketing concept

In Finland, many companies are just now discovering the customer, a consequence of deregulation of markets and the joining of the European Union. Prior to joining the European Union the Finnish market was fairly well protected from free market competition. Cynically phrased one was safe if one managed by the old marketing concept. Today companies have found themselves in a situation where they have to care about, be conscious of, and pay attention to customers needs and their expectations. The issue may not seem so spectacular but against the fact that Finland has one of the highest Internet subscriber densities, means that the Finnish customer is already in the marketspace, and companies have to follow if they wish to serve these customers. It is a quantum leap both conceptually and practically. The companies have to become highly sensitised to customer needs and expectations. It is our perception that customer-orientation is still in the state of lip service and there is still a long walk ahead.

More problems arise when they have to become customer-oriented both in the marketplace and the marketspace at the same time. The fact the speed has become such an important factor only adds to the problems. Speed - be it how fast companies adopt to the new market order, how fast a company can respond to customer requests, or how fast competitors react and get ahead (Sterne, 1996) - is a key variable. Market- and customer–orientation in the 21st century is, according to Hoffman and Novak (1997) about managing business performance characterised by intense competition, unstable market conditions and technological uncertainty, and this is likely to be the reality for years to come.

Customer value

What is value for customers? As Kotler (1997) point out customers are value-maximisers, and when choosing service provided on the Internet it clearly has to be a question of value-maximising. Customers are looking for more value than provided on the marketplace. The customer will buy from where it perceives to get the highest customer delivered value.

Customer delivered value is by Kotler (1997, p. 38) defined as: "..the difference between total customer value and total customer cost." Total customer value is defined as the bundle of benefits customer expects from a given product or service, and total customer cost is the bundle of costs customers expect to pay for evaluating, obtaining and using the same product or service. Customer satisfaction is the measurement of how well companies understands and manages the elements perceived as valuable by the customer. Customer satisfaction is the feeling of pleasure or disappointment when comparing perceived performance and expectations. In the Internet reality the feelings of satisfaction and dissatisfaction become tremendously magnified. Customer satisfaction is subject to a very high inflation rate and disappointment may take the consequence of a lost customer (Sterne, 1996).

What happens when costs do not seem to be the important variable, but access, speed, response, guaranteed delivery, trust, and loyalty (Rayport and Sviokla, 1995, Angehrn, 1997, Brännback 1997a)? The key word is here expect, which relates back to the electronic marketing concept shown in Fig.1. What do companies really know about these expectations that yield customer perceived value?

Customer perceived value, can as pointed out by Rayport and Sviokla (1995) be determined in a myriad of ways. Understanding the anatomy of customer loyalty has become paramount. We know something about what contributes to positive value perception (Sterne, 1996). Delivery tomorrow is already late, customer no longer take no for an answer. The Internet is a shopping mall open 24-hours a day, seven days a week. Asking if customers need this is the wrong question - they expect it. Hence laws on opening hours is outdated legislation. Communication is different, it is not about broadcasting - one-to-many - it is multiple senders communicating with multiple receivers on the one hand (Hoffman and Novak, 1997), and about tailoring the offering based on sophisticated database marketing on the other (Blattberg and Deighton, 1991). Above all it is written, and people tend to react differently to written messages than spoken ones (Sterne, 1996). Written messages are legitimate, they state a true intent. Hence promises have to be kept.

Customer perceived value is particularly important for services. The traditional service includes physical interaction between a customer and a service provider. It includes communication, both verbal and non-verbal. When services are offered on the Internet it offers a lot of benefits for the customers but a huge challenge for the service provider. The customer now performs part of the job earlier performed by an employee and the rest is technology taking care of, which has given cost savings for the provider. However, with this gain the human touch has been lost. We know there is a very important non-verbal part of the communication process, which is no longer available. This part of the communication process is hard to spell out in words especially if the sender is not very skilled in typing! Such a lack in skills may only increase the experience of frustration. Furthermore, the service provider can not pick up a sign of satisfaction in terms of facial gratitude (sometimes sufficient encouragement), and this is sometimes the only sign in cultures where one is not accustomed to express gratitude in spoken words and still less in written ones (e.g. Finland). Now companies have to anticipate expectations. Companies have to start to systematically collect information that can enable projection of current and future expectations (Blattberg and Deighton, 1991). Most Web-sites offer feedback facilities, but have they allocated resources to process this feedback? How many have understood that customers offer valuable information about their expectation in complaints?

4. The traditional service concept

In traditional service marketing, a service is the result of three types of interaction, that all require marketing activities (Grönroos, 1984). We have called these interaction 1, 2, and 3 (Fig.2). The most important one, interaction 1 represents the physical contact between the customer and the employee. This interaction is managed through interactive marketing processes (see also, Fig. 1). Interaction 2 is managed through internal marketing activities, and interaction 3 is controlled by external marketing activities. Where the four P's (product, price, place, and promotion) constitute the marketing-mix in product marketing, Zeithaml and Bitner (1996) add an additional three P's to the service marketing-mix. These are people, physical evidence, and process. However, there are more differences between services and goods.

Goods and services are different in nature, which results in different managerial challenges. These are:

Intangibility - services cannot be inventoried, patented or readily displayed or communicated, and pricing is difficult,
Heterogeneity - service delivery and customer satisfaction depend on employee satisfaction, quality depends on many uncontrollable factors, and there is no certainty that the service delivered matches what was planned and promoted,
Simultaneous production and consumption - customers participate and affect the transaction, customers affect each other, employees affect the service outcome, mass production is difficult, and
Perishability - it is difficult to synchronise supply and demand with services, and services cannot be returned or resold.

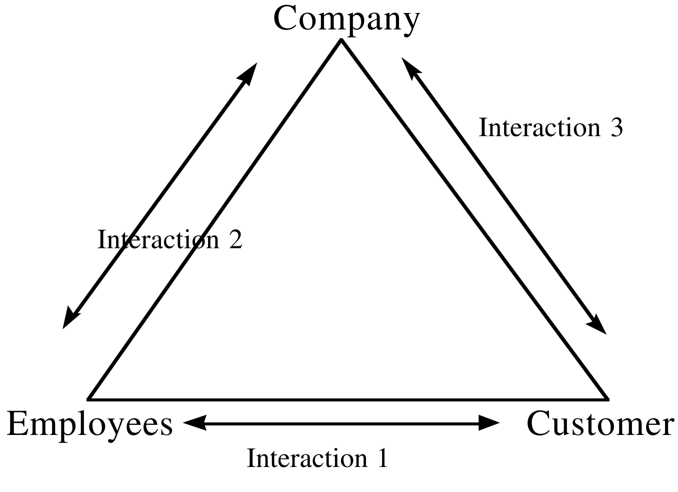

FIGURE 2: The service marketing triangle (adapted from Grönroos, 1984)

When we move into the marketspace we instantly realise that the four features that distinguish services from goods have to be considered differently, from a managerial, employee, and customer perspective, because the traditional flow of interactions is not sufficient. Moreover, it becomes increasingly important that the interactions between the three players are well synchronised. Any inconsistency may result in the loss of customers, and it is hard to control inconsistencies because of the lack of physical contact that otherwise would reveal such. When discrepancies become known to the service producer it may already be to late. Direct complaints from a customer to employee may be withheld from management due to fear or lack of commitment. Service quality, which is determined by how well these interactions are managed, becomes a key issue. Managing the three P's added in the service marketing-mix, becomes vital, but physical evidence or proof becomes even more important in the context of EC. Proof becomes a basis for customer perceived value.

5. The "new" service concept

In the marketspace the traditional model of interactions is not sufficient, because it does not include all the active players. Moreover, the four features that distinguish services from goods do not readily apply as such in the Internet context (Tab. 4). In the electronic context customisation becomes increasingly difficult, as the production and consumption is no longer a two party activity. The problem with customisation reflects further on to the issue of service heterogeneity. Now that the physical contact is no longer there feedback communication over e-mail is a serious activity. Failing to respond fast means too busy, lack of resources, ignoring customers, i.e. not showing care. The response has to be fast. The following day is good, same day is even better, two days later is poor, and longer than that is too late.

Intangibility is no longer a problem as the Web-site can become an important tangible element in brand building and brand management (Rayport and Sviokla, 1995, Sterne, 1996). Perishability is still a valid feature even for services offered in the Internet.

TABLE 4: Distinct features of traditional services and electronic services

FEATURE	TRADITIONAL SERVICE	ELECTRONIC SERVICE
Intangibility	cannot be stored, displayed or communicated	can be displayed, stored and communicated
Heterogeneity	delivery depend on employee satisfaction	the role of the employee has been transformed to customer
Simultaneous production and consumption	mass production is difficult, customers and employees affect the outcome	mass production is easy, tailoring is possible, the outcome is not dependent on customer/employee interaction.
Perishability	difficult to synchronise supply and demand	easier to synchronise through sophisticated customer databases

It is not only the four features that have changed in the Internet. The basic model of service marketing is much more complex. We have developed a model with seven modes of interaction that all have an impact on the service marketing process (Fig.3). The traditional service-marketing concept included three basic interactions (Fig. 2). Let us describe these seven modes of interaction.

Interaction 1

The primary interaction is between employee and customer. However this contact has within the context of EC become electronic where the physical contact has been drastically reduced if not totally eliminated. For example, banking service in terms of paying bills or buying stocks on-line on the stock exchange takes place without the interference of an employee. If this connection is functioning the customer is likely to be extremely satisfied and perceive a service quality increase.

However, if it does not function, and the customer has to contact the bank over the telephone or actually go to the bank we have a very awkward situation. The customer contacting the bank in this situation spells 100% problems. The interaction is not likely to be a positive one, which ultimately will affect the service delivery process and the perceived quality. Much more problems will arise if the employee does not himself/herself have access to the Internet service- the world of the customer. In Fig. 3 we have depicted this interaction as a two-way contact but added a dotted arrow from the customer to the employee. This describes the fact that the customer may contact the employee over e-mail requesting something or providing feedback. In many cases this function is not working properly (Sterne, 1996). With the dotted arrow we want to further stress the necessity to engage in a dialogue with the customer (Blattberg and Deighton, 1991).

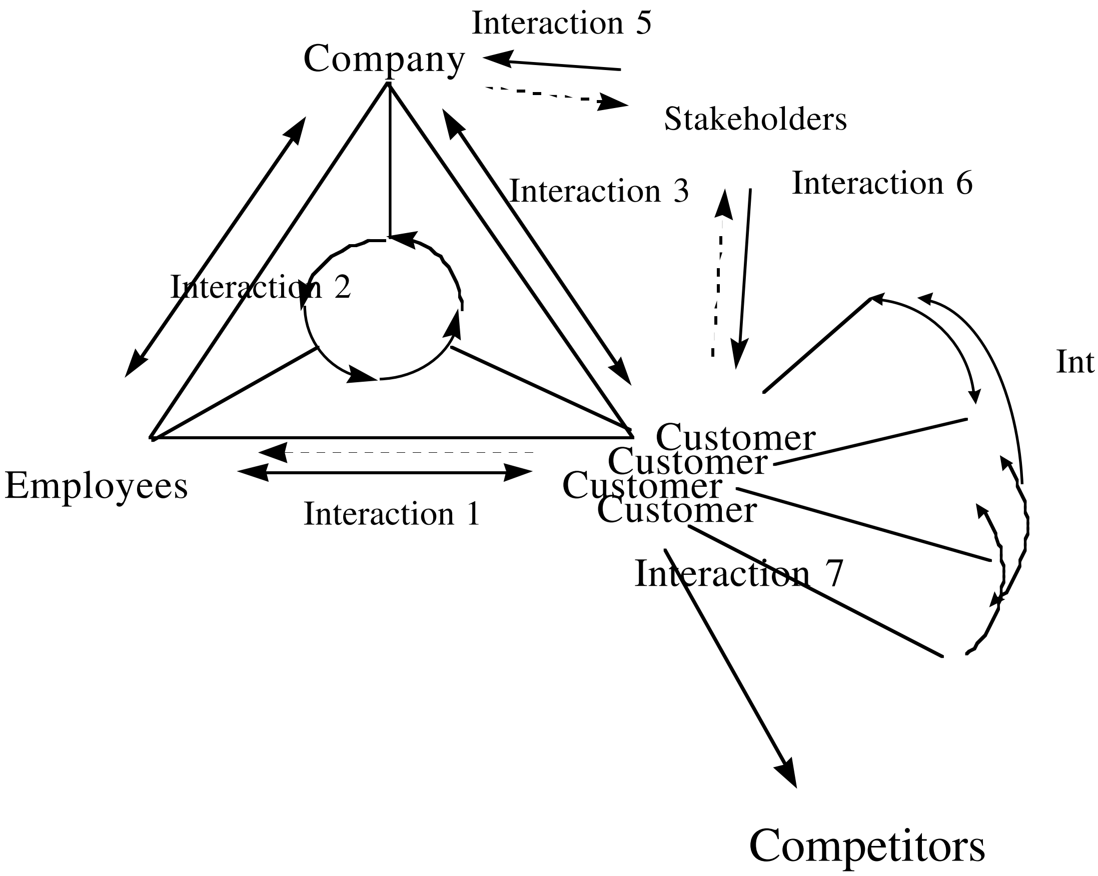

FIGURE 3: The electronic service model

Interaction 2

This is the traditional internal marketing function where management and employees interact. In our opinion this interaction has become increasingly important. In order for employees to guarantee service quality they have to be very well informed about the service offerings available to the customers. This is where the company synchronises its supply to match with the content of interaction 3. This contributes to increased motivation and eventually also to the perceived service quality of the customers. A corporate Intranet wherein customers have limited access to could prove useful. The Intranet is depicted as the small circle inside the triangle. However, this is also a security aspect and needs to be handled with caution.

Interaction 3

This interaction represents the external service marketing activities, i.e. personal selling efforts, advertising, image building, brand management, etc. Here it has always been important that the promises given by management have to correspond with the performance of the employee. It is a well known fact in brand management that there is normally a huge gap between company intentions and the perceptions of these intentions (Aaker, 1991, 1996, Zeithaml and Bittner, 1996). Not understanding customer expectations can come from inadequate marketing research activities, lack of upward communication (interaction 2), and failing to realise that services are about building relationships and not about transactions. Relationships are as important to new customers as well as old ones. Relationships contribute to loyalty.

Zeithaml and Bittner (1996) point at four different gaps, which influence perceptions of service quality. These gaps are provided through (i) a lack of understanding how customer expectations are formed or what they are, (ii) failing to establish customer-driven standards to address key priorities, (iii) failure to align customer-driven standards and service performance, and (iv) a mismatch between actual performance and promises. Managing these gaps and understanding how they can be narrowed is essential also in the Internet.

The way the company communicates with customers in the Internet is different. The spoken language is now first and foremost written. Non-verbal communication is excluded. Instead of the traditional one-to-many mode we have a many-to-many mode of communications (Hoffman and Novak, 1997), where the customer can provide content to the medium (interaction 2).

Interaction 4

This interaction portrays the customer-to-customers interaction which takes place in the context of EC. In tradition service marketing context customers have of course, also communicated with one another. However, in the Internet the speed of communication and the scope and scale of reach is tremendous compared with regular word-of-mouth communication (Sterne, 1995). In the Internet there is an unusually high tendency to share information, knowledge, and experiences within newsgroups or different communities (Sterne, 1995, 1996, Armstrong and Hagel III, 1996). The message content can be both positive and negative. Hoffman and Novak, 1997 point out that the electronic medium can transform the consumer’s identity thus providing a relative anonymity which provides a dangerous tool for negative word-of-mouth communication, with fatal outcomes for brand and company images building efforts performed over interaction 2 and 3.

The consumer in the Internet is a very active player who is kept there by the thrills of activity (Sterne, 1995). It is worth for management to understand in particular this. Once a company has established a Web presence with the sincere intention to increase the quality of its service performance it has also led the customer into a world where one exists through navigation and the fascinations of this activity (Hoffman and Novak, 1996). There is nothing stopping the consumer from searching for even better alternative service providers. In fact, many extremely efficient search engines are available and it is all there at the tip of mouse clicks. Paradoxically, in providing better service quality for the customer, the company has really put the consumer up on the prairie and invited the dogs for dinner, instead of protecting the consumer in every possible way and certainly preventing them from engaging in interaction 7.

Interaction 5 and 6

This interaction mode relates back to the idea of many-to-many communication mode. This time it is an outsider, one or several stakeholders who will interact with the customers but may also interact with the company. This can typically be a channel intermediate, e.g. a vendor. It can be messages that come from newsgroups, other mailing lists, etc. with a content that may be in conflict with the company's activities. This interaction mode can of course also be positive in the form of additional links to other Web sites at the homepage of the company's. It can come in the form of so called banner ads at the company's homepage. The banner ads are advertising slots for stakeholders who pay for their presence. This way the company provides the platform for the stakeholder who pays for the right to appear there. Costs that otherwise may be covered by customers.

Interaction 7

This interaction is where the strength of the customer bond is really put at a test. Once the customer has become fascinated by the marketspace, the customer will start exploring other possibilities. Of course, this also happens in the marketplace, but it is rare that customers who are satisfied with personal service will change to another provider, unless the employee changes employer. This is particularly the case in business-to-business marketing where personal contacts play a key role in establishing lasting customer relationships.

There are of course ways of avoiding this, i.e. to become personal on the Internet. Personal greetings can be automated by so called cookies which will track the customer (Sterne, 1996) and personally greet the customer each time the customer logs on.

In the next section we will illustrate the service concept with a real-life case.

6. PC-Superstore - an illustrative example

PC-SuperStore Ltd (PCSS) is the largest computer retailer in Finland with five stores in four major cities in Finland, and one in Estonia. In 1996 the turnover was FIM 286 million (approx. USD 55 million). The company is a retail store selling physical products but offers a variety of services along with the products. The way they do this is the reason why they prove an excellent illustrator of the electronic service concept. PCSS established their Internet presence in four phases and the fourth phase is the current one. In describing these phases we will show how they simultaneously came to develop their service concept in a way which conforms to the electronic service model presented above. In the text we will indicate the different modes of interactions shown in Fig.3.

Phase One

In 1994 PCSS realised the vast potential the Internet held and established a Web presence. This meant a homepage with information about the company and the products it sells. This was clearly nothing more than broadcasting and involved no interaction what so ever. To our minds this represents interaction 1 and 3. For this the traditional service concept would be sufficient. However, PCSS were faced with a number of decisions immediately. The most urgent one was to decide which products they should display on their homepage?

PCSS carry 3500 different items and had until 1994 maintained the product information manually. When they decided to establish an Internet presence they had to decide whether to integrate the web page with their Unix-based operational system or not. It made sense to integrate the two since the operational system already had all information about products and prices. Hence the whole process would be automated (interaction 2).

Phase Two

Soon after the launch it became evident that PCSS needed to upgrade their system and introduce a product ordering facility. However, payment over the Internet was the next obstacle. Until the fall 1997 credit card payment, in Finland, over the Internet has not been legal. That is, in case of the credit card number getting into the wrong hands the risk was all on the customer's. Starting to manually bill people was not seen as a very good solution. However, PCSS was determined to solve the problem in a way which would increase convenience for the customer, and consequently also for the company itself. PCSS contacted the Merita bank, which is the largest bank in Finland and a pioneer in providing banking service over through the Internet. The result was a possibility to buy on-line from PCSS and pay on-line through the bank. The first electronic commerce store in Finland was born. PCSS still offered 3500 items for sale, and it was decided that only a small part would be available over the Internet at first. For the first two months only twenty products were offered for sale over the Internet after which it all 3500 items were made available.

The Merita bank can be viewed as a stakeholder in a broad sense as their facility came to offer a clear value to the services of PCSS. Customers by interacting with PCSS (interaction 1) on-line, where simultaneously interacting with the bank on-line (interaction 6), which in turn was interacting with the company (interaction 5) and the employee who confirmed the payment was also involved.

Within a few months the system registered 3000 users per day were 25% of these were searching for contacts and 75% were actively searching for product information. PCSS understood that the Web page by itself would not attract too much attention, so "the quiz of the month" was included. The prizes offered were very attractive with a total value of FIM 6000. Companies selling their products through PCSS in exchange for free advertising space in their ads offered the prizes.

The human resources needed to maintain this system were minimal - one person was able to process orders and information. All web-related work was performed in-house.

Phase Three

In March 1997 PCSS entered into the third phase, which was to integrate the Internet presence into the company's strategy. This required major upgrades in the logistics, customer service, and communications (e.g. graphical interface) processes. As a consequence logistics was completely automated - orders, invoicing, and confirmation of payment. This system, which is indicated as the smaller circle within the triangle in Fig. 3, was designed and planned to suit the needs of the customers and the company. An outside vendor supplied the logistics system. Since the customer would be a primary user of this system - when placing orders and receiving invoices and confirmation of payment. PCSS was particularly concerned with the user interface. The intention was to design an interface, which should be based on the way customers search and find products. Consequently PCSS established additional e-mail facilities on their Web page to allow for more customer contacts. Previously there had only been the webmaster@pcss.fi - address available, which was sufficient in phase one and two. However, with it was becoming increasingly difficult for PCSS to see the forest and the trees. The company felt it necessary to categorise customers already at the feedback point thus enabling PCSS to respond more efficiently to customer needs. Five feedback categories were established:

1. **"Ask-for-product-information":** This site receives approximately 250 inquiries per month. Apart from direct information about some products the customers also ask for tailored solutions for some specific need. Hence this site monitors present customer needs, and directly serves to guide PCSS in their efforts to enhance need satisfaction. Here PCSS gets in contact with customers who do not know what specific product they want or need.
2. **"Ask-for-product-availability":** This site receives close to 500 inquiries per month. Here the customer already knows what he/she wants. PCSS carries 3500 items but that does not mean that all are readily available in stock and depending on the current level of demand some items may be out of stock. This site has proven important for PCSS as they learn from customers which products they should always have in stock and this minimises the risk of loosing a customer when PCSS is immediately able to get back to the customer with precise information of when the item is available.
3. **"Send-comments-about-our-Web-page":** This site is the garbage can in the sense that here PCSS receives all sorts of comments of which most is really trash. Fortunately, one might say, very little trash comes in, only 20 messages per month. The other two e-mail sites take care of the important issues.
4. **"Send-us-comments-directly-to-our-stores":** Give the fact that PCSS is also a physical store they are eager to find out how the customer perceived this mode of service, and suggestions for improvement are welcome. Through this site PCSS wants to give customers the opportunity to express their disappointments and PCSS also hopes to turn the coin and make the customer come back. PCSS is aware of the fact that customers - at least in Finland - do not readily express their dissatisfaction face-to-face and e-mail offers another solution. The fact that this site registers no more than 10 messages per month is a clear indication that PCSS does more things right than wrong.
5. **"Send-offers-to-our-purchasing-division":** This site is intended for foreign suppliers, which means that the contacts are different in nature and only account for about ten contacts per month.

With phase three PCSS wanted to create a communication platform where PCSS would be able to communicate with their customers and collect important information from them. However, PCSS realised that customers rarely tell them if they are doing fine. For this PCSS added a monthly poll which was connected to the monthly quiz established already in the second phase. This survey asked the customers, for example, (i) to rate the Web page, (ii) which computer magazine they read, and (iii) what kind of Internet connection they were using (slow or fast modem, ISDN, LAN). The customer could enter answers to these questions or decide not to. However, two questions required an answer: "how should we improve our Internet site?" and "what products would you like us to sell?". Presently there are about 3500 responses per month, which means that the customers are quite willing to participate in jointly improving PCSS service.

Phase Four

In the fall 1997 phase four was launched, where the main focus is creating customer communities and further enhance customer service through tighter bonding. The role of the community is to acquire insight into what type of interaction occurs between customers - interaction 4. One key element is to grant the suppliers (stakeholders) access to the heart of the PCSS Web system -interaction 5 and 6, as there are mutual benefits to gain.

For example, IBM, Compaq or Canon can maintain their own product specific information. This guarantees that the product information is correct as it is certainly in the interest of the supplier to have correct and relevant information available. This was earlier done manually, including several intermediate steps. Now the supplier completes an electronic form available on the Web and the information is immediately available to the customers - interaction 5 and 6.

Moreover, the suppliers have access to the stock levels of their products, allowing the supplier to check on stock at specific PCSS stores avoiding “not-available” sales (interaction 5). Through this facility the suppliers can check on PCSS, but it also works the other way. Suppose PCSS has some items in stock, which do not seem to move over the counter. PCSS can then contact the supplier and suggest that the supplier reconsiders the price or monitors the equivalent information of the competitors’. The supplier can thus monitor their competitors’ product information thus avoiding that customers “in secret” interact with competitors (interaction 7). The supplier does not have access to the stock levels of the competitors.

The communities under construction will enable suppliers and customers to meet on the “spacepremise” of PCSS. At first, it will involve mainly technical issues, but very common ones. For example, most of us have found ourselves in the situation where we have manufacturer XX computer; YY printer and ZZ software and these do not get along although they are supposed to. Suppliers will in this situation claim that their part works. Previously PCSS has managed to solve the problem, but none of the suppliers have learnt about the problem or the solution. Hence PCSS is creating a forum where customers can ask for help. The answer(s) can then come from another customer (interaction 4), from PCSS (interaction 1), or from a supplier (interaction 6 and 5). The community can allow the suppliers to provide “proactive” support, i.e. in case they know of some possible problems, the suppliers can provide information in advance in a frequently asked question (FAQ) facility.

PCSS has, in phase four, established a valued customer club, and much in the same way as airlines have their frequent flyer clubs - the SuperClub. This club offers 30 special price items and access to this requires log-in password acquired when signing up. The SuperClub gathers specific information about their customers. Apart from name and address, customers are categorised based on whether they are private consumers, from a small and medium sized enterprises or large firms. The customer database created this way will be used for database marketing. With database marketing, PCSS intends to establish a more personal way to contact the customer, e.g. “Dear Mikko, we have just received a new upgrade to your system, here is the recent product information, please do not hesitate in contacting us for more information and hope to see you visit our store in Turku”.

Lessons learnt

When a Web presence is designed and implemented correctly it should be fairly easy to maintain and the focus should be on customer service. In the case of PCSS the focus has constantly been on providing improved service over the Internet and thus offering additional value to the customer. Before the Internet presence PCSS customers had to physically visit the store, now PCSS can offer the same service over the Internet. The customer does not have to visit the store but can chose to do so. By offering service over the Internet PCSS can reach more customer, and they can become quite personal with them by tending to the communication taking place. PCSS believes that it is better to establish an Internet presence gradually and to invite the customer into the development process, as the four phases show. What is correctly can always be discussed but PCSS believes it translates into the following:

- forget the “webmaster-does-it-all” approach categorise your customers already at the feedback level,

- integrate the Internet presence as part of the company's normal operations,
- assign responsibilities within the organisation, e.g. the marketing department is responsible for the marketing information also on the Internet,
- appoint one co-ordinator for each department,
- integrate the Internet presence with the operational system as soon as it is possible, and
- never forget the customer and see an individual in each customer.
- PCSS established their Internet presence gradually moving from mere broadcasting to transaction and it has proved very successful. This corresponds with the framework for designing mature Internet business strategies presented by Angehrn (1997).

The Internet presence has been developed from customer needs and expectations, allowing customers to provide feedback and the system has been enhanced based on this feedback. PCSS believes that they have a good understanding of what the customer regards as valuable and the constantly rising profitability is a result of PCSS ability to respond to this (Fig. 1).

7. Conclusions

The Internet has developed with tremendous pace and is currently changing business practice in virtually every thinkable way. Traditional marketing frameworks are no longer sufficient. The old marketing concept was replaced already in 1967 by the new. Yet the key insights from the new marketing concept are in many companies only now being discovered. However, the meaning of the new marketing concept is changing and it is being upgraded into the electronic marketing concept. Customer needs satisfaction used to be the basis for customer-oriented performance. Today companies who want to do business in the Internet have to go beyond customer needs. They have to start from expectations and the profits will be generated out of customer perceived value. Creating customer value is therefore the key issue.

How is value created within services when services have become objectified and dehumanised on the Internet? The traditional service-marketing concept is not sufficient because it does not include the modes of interaction taking place when providing service on the Internet. For this we have developed the electronic service concept which includes seven modes of interaction, many of which can be active at the same time. We show how this electronic service concept works with an illustrative example. In this example the case company PCSS have developed their Internet presence from the customer perspective, yet with a sincere managerial intent of creating long-term customer relations. Instead of loosing control of the customer, because the human interaction has been automated PCSS has decided to become personal on the Net by providing customer focused value adding services.

It is essential that we draw on marketing knowledge - and enhance it where necessary - and knowledge of information systems in order to enhance the possibilities of managing business and customers in the marketspace at a profit. Many of the available frameworks and theories need to be adjusted to better fit the electronic context. In order to create new it has, however, become a prerequisite to understand the essence of the existing insights.

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