

# HOW TO MAKE A NEW TECHNOLOGICAL B2B SERVICE A PROFITABLE BUSINESS?

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## Abstract

The study explores customer perceived value in the increasingly important context; new technological B2B service, in particular a mobile advertising service. Despite the widespread interest on value creation, understanding how customers perceive value from novel technological business services is still incomplete. This study makes a contribution by suggesting an empirically grounded framework that illustrates customer perceived value in the emerging industrial context. This enables identifying the elements of value-in-use that customers experience as an outcome of joint value creation with the supplier. Departing from majority of studies value is here categorized to its sources, which enables scrutinizing the concept of customer perceived value in-depth and exploring the different sub-elements together constituting the value of the emerging technological B2B service. The study also identifies important aspects in relation to value co-creation and how it could be enhanced by the actions of the service provider. Thus, this study creates a more profound understanding of the value creation in the timely context and gives important implications for the service providers in developing technological business service a profitable business in the future.

**Keywords:** B2B service, customer perceived value, mobile advertising, technology, value creation

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## INTRODUCTION

The service landscape especially is changing quickly as a result of innovations in technology (Davis *et al.*, 2011). Technological services have become a major topic of interest and a key priority for many business organizations, as they are making considerable investments to take advantage of the new business opportunities offered by emerging technologies like mobile technologies (Matthing *et al.*, 2006; Johns and Perrot, 2008). However, creating commercially viable business service is challenging since technological innovations alone do not guarantee commercial success. Since technological business services are becoming an integral part of business firms' everyday life, understanding value creation in this specific context becomes important. Exploring customer perceived value and its underlying dimensions is a key to acquiring a better understanding of what it takes to make technological services a profitable business.

Recently, the importance of services in B2B context has been emphasized (Ostrom *et al.*, 2010). In relation to this, service-dominant logic (Vargo and Lusch, 2004; 2008) has received growing attention within marketing research. It suggests that the core of marketing has moved from a product-oriented perspective to a resource perspective, where value is co-created between the service provider and the customer. Value creation takes place in an integrated process where both parties are active (Grönroos, 2010) and the focus is on the customers' value creation processes (e.g., Grönroos, 2008, Vargo *et al.*, 2008). Despite the increasing attention on value creation, understanding how customers perceive value from emerging technological business service is still incomplete. Specifically, there is a need for empirical examination of the phenomenon. Studies attempting to categorize value elements in technological B2B services are very scarce although it has been pointed out that this is an important future-oriented context in which more research on value is needed (e.g. Möller, 2006). Although different studies have addressed the issue of value creation and aimed to understand and define the phenomenon, relatively few have focused on finding the actual sources of value or exploring the essence of value perception in-depth.

New technological B2B services provide the context for the present study. The specific service under exploration is a new mobile advertising (m-advertising) service through which retailers send advertisements to their customers' mobile phones. The focus of this study lies in relationship between m-advertising service provider and its business customers, i.e. retailers using the new service in their marketing communications. This particular context was chosen for its quality of being a current example of a field within new, future-oriented and technology-intensive business service. Its value potential is still unclear and will only be fully recognized when the service is brought to market in the future (during this study the m-advertising service was at the application phase of development). The emerging nature of the service makes it possible to examine new aspects in relation to customer perceived value.

The purpose of the study is to explore value creation in the context of new technological B2B services and to build an empirically grounded framework that illustrates customer perceived value in this particular type of context. Furthermore, the study examines value co-creation between the service provider and the customers (retailers) using m-advertising for the first time. The research question is: *What kind of value do customers perceive from a new technological B2B service?* Identifying of which value sub-elements customer perceived value consists, provides important implications both for theory development and managers working in this growingly important business field. Thus, by answering the research question

it is possible to create novel understanding of how to make a new technological B2B service a profitable business.

For studying value co-creation the foundation in this research lies on service and business relationship marketing and management (e.g. Grönroos, 2000; Araujo, 2007; Jacob and Ulaga, 2008) combined with service-dominant logic (Vargo and Lusch, 2004; Frow and Payne, 2011). Following the premises of the value-in-use perspective on value creation, customer's perspective on value co-creation is emphasized (Edvardsson *et al.*, 2005; Grönroos, 2008).

The paper contributes to the current understanding by suggesting a framework of customer perceived value in the context of new m-advertising service. It also enriches understanding on value creation by proposing that value can be categorized to its sources, which enables examining the concept of customer perceived value in-depth and exploring the different sub-elements together constituting the value of the technological B2B service. This way a more profound understanding is created and also the essence of the concept is made more explicit. This study also provides important insights for service providers on how to co-create value with their business customers and thus make technological business service viable business in the future. Hence, a broad framework of the customer perceived value is provided including various important aspects that need to be taken into account to be able to create optimal value with the customer.

The paper is organized as follows. First, theoretical section discusses m-advertising as a current example of new technological B2B service and reviews the current value research. Next, the methodological section describes the research approach and a real-life experiment in which 40 companies using a novel m-advertising service were observed and the representatives of 17 of the companies were interviewed on their experience. The findings from the empirical analysis are then presented. Finally, the results are discussed together with the implications for theory and practice.

## **CUSTOMER VALUE OF NEW TECHNOLOGICAL B2B SERVICE**

### **Mobile advertising as a current example of new technological B2B service**

Technological business service is defined in this study as the area of industrial service in which high-technology plays a central role (see e.g. John *et al.*, 1999). In addition, such a service is usually delivered with the support of wireless devices and includes characteristics that are new and constantly developing. The context of new technological B2B services brings forward important aspects that have not been acknowledged in the extant research on value creation. First, these features are related to the special technological character that distinguishes these kinds of services from more traditional versions. Therefore, new technological B2B services are complicated to use and utilize effectively, and they involve complex learning processes (Möller and Svahn, 2006). Due to the complexity and technological nature of the technology-intensive business service, individual companies cannot produce and market such services alone (Möller *et al.*, 2005). Instead, a network of co-operating actors, e.g. technology providers, network operators, application providers, device manufacturers, and content providers is needed to co-operate in service production (see e.g. Kallio 2004, Komulainen *et al.*, 2006). The network producing the service has an impact on the final service offering and the value related to it (see e.g. Möller and Törrönen, 2003) determining features and options included with the final service and how the service

functions. Therefore, understanding that the service is produced in the wider network is important as the network also influences, at least indirectly, the value perceptions of the customer firm. Secondly, the novelty of the services means that either the service provider or its customer may not have much experience of these types of services. Hence, both are unsure how to co-create value efficiently (see Hibbard *et al.*, 2003). Uncertainty related to joint value activities and to actors' capabilities is also an inherent feature in this type of emerging service context (Möller and Svahn, 2006). Thirdly, due to the rapid advances and constant updates in the new technologies, services are continuously being developed and updated with new features (e.g., Curran and Meuter, 2005) which make it challenging to utilize them optimally. Thus, customer perceived value in this kind of emerging context is very different compared to the context where the products or services are already in commercial use.

The specific service explored in this study is m-advertising which is becoming a global phenomenon since mobile phones are an essential vehicle for business and personal communications (Lee *et al.*, 2006). Technological convergence of mobile phones with audio, video, computing, telecommunications and television has made them an effective media for m-advertising (Kim and Jun, 2008). M-advertising has been hyped for a decade but it is only now starting to progress owing to recent technological developments, including smart phones and media tablets (Okazaki and Barwise, 2011). Gartner Inc. (2011) reports that in 2015 mobile advertising budgets are expected to grow to over 4 % of firms' total advertising compared to the 0.5 % in 2010. However, technological innovation alone cannot guarantee commercial success, but the users need to see the value in using the media. The 'old' way of reaching large target groups and relying on ad repetition does not work in m-advertising, which is personal, interactive, and even location-aware in nature (see e.g. Kim and Jun, 2008; Shankar *et al.*, 2010). The special nature of m-advertising creates a need for a change in thinking and in the traditional value creation processes of advertisers.

### **Value creation in the service context**

Current research on services and value creation emphasize the active roles of both parties in value creation (Kowalkowski, 2011; Macdonald *et al.*, 2011). The focus has shifted from the earlier product-oriented value-in-exchange to value-in-use, i.e. onto customers' value creation processes (e.g., Grönroos, 2008; Vargo *et al.*, 2008). Grönroos and Ravald (2011) suggest that the service provider's role in value co-creation is to be a value facilitator, so to offer value propositions to the customer, who is the actual value creator. Along this service business logic (e.g. Grönroos, 2008), the service provider supports the customer's processes with an extended offering including goods components and different kinds of service activities which enable the customer to create optimal value.

Co-creating value and understanding how customers perceive value in the context of business services (Jacob and Ulaga, 2008; Komulainen, 2010) proposes remarkable challenges in terms of management, mostly due to the specific nature of these kinds of services. Novelty and related uncertainty as well as complexity and constantly developing features of the service make joint value creation unpredictable and susceptible to alterations. For example, the customer's value perceptions may change at different stages of service development, i.e. before, during and after service use (see e.g., Green *et al.*, 1996; Parasuraman, 1997). Therefore, it is vital for successful service development that the service provider is constantly aware the changing value perceptions of the customer. In this study value co-creation is seen as the significant phenomenon but the focus is on customer's perspective and value perceptions since they are vital for understanding how value co-creation takes place and how

the service provider could enhance it in the future. Therefore, this study adopts the value-in-use perspective, with customers and their value perception being the center of interest.

The definition of value adopted in this study is probably the most commonly shared view on customer perceived value: it is a subjective perception of the trade-off between multiple benefits and sacrifices (or give and get components), relative to the net value of an alternative (or competition) (e.g. Ulaga, 2003; Walter *et al.*, 2001; Zeithaml, 1988). Accordingly, this study analyzes the net value consisting of the trade-off between two basic value elements: the benefits and the sacrifices (e.g. Kothandaraman and Wilson 2001; Menon *et al.*, 2005; Walter *et al.*, 2001). Furthermore, value elements are divided into sub-elements that reveal the sources of benefits and sacrifices. This choice enables a deeper understanding of the essence of customers' value perceptions and enables scrutinizing the critical individual elements that are needed in making new technological B2B service a viable business.

Although benefits and sacrifices are the basic elements of customer perceived value, the existing categories mainly focus on benefits. Interaction and network research has addressed the role of sacrifices at the relationship level by identifying different types of costs, e.g. relationship handling costs and relationship-specific investments (Walter *et al.*, 2001). Moreover, adaptations are seen as one form of sacrifices. They refer to all changes in the company's resource deployment made for the exchange partner, and those can occur in the technical, commercial, financial and social arenas (Walter and Ritter, 2003; Håkansson, 1982). Related to this, Blankenburg Holm *et al.* (1999) point out that in a relationship that creates value for both parties it is important that both partners make short-term sacrifices to realize long-term benefits.

As being a subjectively perceived, the dimensions of value and emphasis put on them alters from customer to customer. However, different classifications have been presented that are of use in order to understand value dimensions and the principles of value creation. Existing research proposes various diverse categorisations of value, e.g. value criteria (Lapierre, 1997), value functions (Walter *et al.*, 2001), value drivers (Ulaga, 2003), value dimensions (Pura, 2005), and aspects of value (Anderson and Narus, 2004). However, there is a lack of studies focusing on the value elements in customer's value perceptions of a new technological B2B service. For example, within B2B services value has been categorised by Lapierre (1997, 2000) and by Liu *et al.* (2005). In addition, within consumer services, Pura (2005) has studied value in location-based mobile services, and Heinonen (2004) in technology-based self-services. However, these studies seem to categorize net value, instead of benefits and sacrifices, to its sources.

The present study departs from the majority view of categorizing customer perceived value. The basic value elements are divided into sub-elements that reveal the sources of benefits and sacrifices. These sub-elements are identified, since their combination is essential in value perception. Due to the abductive nature of this study, the sources of benefits and sacrifices are let to rise from the empirical data. This enables creating an authentic and truthful understanding of the essence of customers' value perceptions. These sub-elements are next empirically explored but first the research method and the specific empirical setting are shortly discussed.

## **RESEARCH METHOD**

Due to the emerging, complex and context-dependent nature of the research phenomenon, a case study design and qualitative methods were chosen for this study. Case study is particularly useful in new situations where only little is known about the phenomenon and it provides unique means of developing theory by utilizing in-depth insights of empirical phenomena (Dubois and Gadde, 2002; Eisenhardt, 1989). The research strategy of the study follows an abductive approach (Peirce, 1957; Dubois and Gadde, 2002) and new understanding of the phenomenon is created as a result of continuous interplay between theory and empirical observations.

The empirical setting organized to acquire data is a qualitative real-life experiment. It was organized by the research project (referred to as service provider) with a general aim to gain understanding of the usage of different developing technological services that are not yet in commercial use. This kind of empirical research setting represents a unique way to conduct qualitative research and organizing such a setting provides a novel and multifaceted research platform that is very rewarding since it enables obtaining rich and versatile research results. It is briefly introduced next.

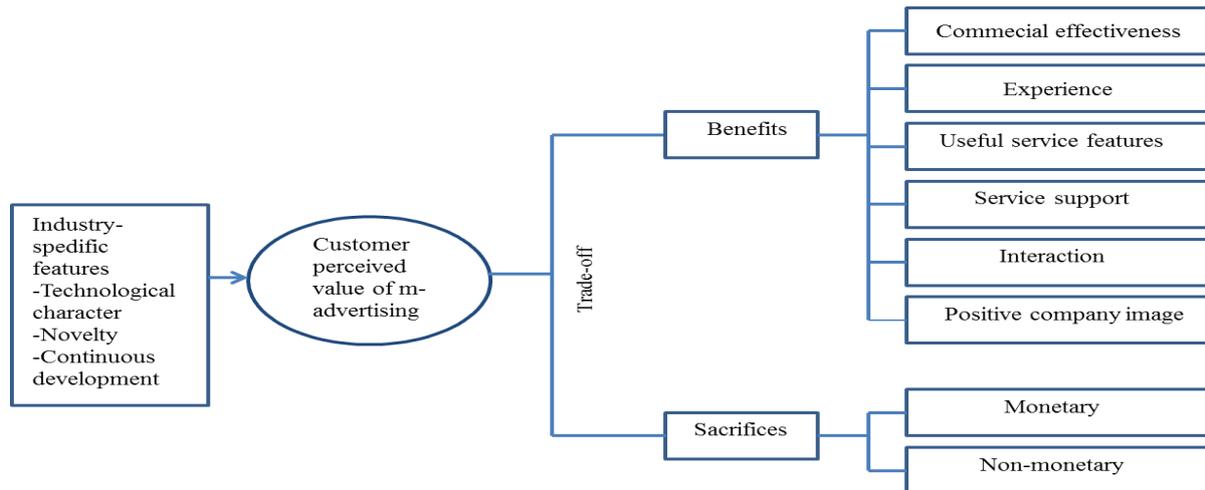
The examination of value creation in m-advertising took place within an experiment where a research project organized an m-advertising service system and recruited volunteer retailers to test it as m-advertisers. In this study the service provider refers to the research project and retailers are its business customers. A total of 40 retailers tried the service during the experiment. The research project also recruited 556 end-consumers to receive the m-ads and collected their personal information according to which m-ads could be targeted. M-advertising system was a web-based tool in which the m-advertisers could design and implement their m-ads and to define the targeting criteria according to which the m-ads were sent to certain target group at a certain time. A field office was set up by the research project and it guided the retailers in the use of the system, i.e. designing, implementing, targeting, and sending m-ads. The retailers had a choice of designing the m-ads by themselves, using an advertising agency, or outsourcing the work to the project. In the latter case, the retailers simply delivered their advertising material to the project and defined the sending and targeting criteria for the m-ads and the project personnel took care of the rest. The duration of the actual field trial was 7 weeks but the m-advertising service system was operational for almost 5 months altogether and some m-advertisers took advantage of the whole period.

The data for this study was gathered through thematic interviews, personal observations and notes and e-mails with the retailers during the experiment. The interview data forms the main source of data and it consists of altogether 17 interviews with retailers who participated in testing new m-advertising service. The interviewees were the persons who had been responsible for the firms' m-advertising. The interviews were tape-recorded and transcribed verbatim resulting in 171 pages of transcriptions. In addition, recruitment of the retailers, initial training of them and solving their day-to-day problems during the experiment allowed the researcher the possibility to observe and discuss with the retailers, make notes and to gradually develop an understanding of the phenomenon. The verbatim interview transcripts formed the main raw data of the analysis and the other source material was used to complement the understanding of the research phenomenon. The unit of analysis was the value perceptions of m-advertisers trying the new m-advertising service. The original word-by-word interview data were imported to the QSR N'Vivo software which facilitated the storing and organization of the text as well as coding, searching and retrieving text segments and stimulated the researcher's interaction with the data (see Dembkowski and Hanmer-

Lloyd, 1995). Based on the careful analysis of the coded data, the empirically grounded framework was built.

## FINDINGS

Following the definition of value introduced in the theoretical part of this study, the sources of benefits and sacrifices (i.e. sub-elements) are categorized, since their combination is essential in customer's value perception (see Figure 1). These are next discussed in detail. First, benefits referring to the utility the customer perceives from using the service and cooperating with the service provider are presented. After that the sacrifices are presented.



**Figure 1. Customer perceived value elements of a new mobile advertising service**

The interviews indicate that the *commercial effectiveness* was one of the most important benefit retailers pointed out in relation to m-advertising. It refers to the increase in sales or profit that resulted from sending m-ads to potential customers. In other words, the number of customers who see the m-ads, acknowledge the retailer, enter the shop and make a purchase as a result. This is probably the single most important thing retailers had in mind while testing the new m-advertising service. In general, retailers did not report great commercial success from their m-advertising campaigns and said that they did not notice much change in cash flow. However, there were some retailers who were very satisfied with this aspect and mentioned that they actually had new customers and noted the commercial effectiveness of using the m-advertising service:

*“It surpassed all expectations concerning what we invested in this and what we got from it. This was a wonderful thing, even a stunning thing. During this short test period we got new customers, which was more than we expected [...] There were many advantages and this surpassed our expectations at all levels. So I’m more than satisfied.”* Gift and interior decoration

Secondly, getting *experience* of the new advertising medium was seen as another significant benefit of testing m-advertising. The retailers felt it both interesting and useful to be able to test the whole new service and to get to know how it works and its characteristics. Also the future dimension was involved in this sub-element – as the retailers felt that by getting to know what m-advertising currently was and how it worked at the time of testing, they could also get a sense of what it could become in the future. Getting to know how m-advertising really works and gaining first-hand experience made it easier to accept it and understand its usefulness as the following quotation reveals:

*“Learning comes with it. It is nice to do something new and a bit different and learn new things. Hopefully we can also utilize this experience later in our business.”* Advertising agency

Thirdly, *useful service features* refer to the group of service-related features that the retailers perceived as important and useful. In other words, service features are those characteristics that are specific to the m-advertising service and are closely related to the service itself and its usage, and are therefore discussed as one group of benefit sub-elements. The ability to tailor a message based on the personal information of the receivers of the m-advertising was emphasized in the interviews, since this enabled the firm to reach the specific group of customers it was interested in. In addition, personalizing the m-ads according to the information gathered from the recipient let the retailers send messages that were seen as more personal and therefore also more attractive and effective. These features were seen as providing an opportunity to develop more effective advertising campaigns and thus increase the sales. M-advertising also enabled the retailers to specify the time the messages were sent. This gave the retailer a whole new range of options to plan their advertising and improve its efficiency as the following quotation reveals:

*“It was a positive point that we could make a campaign very fast and target it extremely accurately. Because there is a possibility to collect information about the receivers and what they are interested in and these kinds of things, we can target it really well to the right people. And the speed, that is important. You can build a one-day campaign if you want. That is brilliant.”* Health food

Some retailers highlighted the fact the m-advertising engenders a capability to follow and measure the effectiveness of certain m-ads. If the retailer knew who had received the message they could easily find out if the message had attracted the customer, which in turn would permit them to create more attractive and effective m-ads in the future. In addition, technical functionality and ease of use were also reported as helpful features of the service.

Fourthly, *service support* refers to the supporting activities from the service provider to individual retailers. In other words, how the service provider helped, assisted and enabled the retailers’ usage of the new kind of service. It includes, for example, technical support and backup, adequate briefing and instructions from the service provider concerning the use of the m-advertising service. Generally, the personal assistance and the instructions offered by the service provider were appreciated. For some retailers the personal support was extremely important in helping them get started with the service. For some it was enough to know that in the case of any problems they could have technical assistance from the service provider. In general, the retailers were pleased to know that they could contact the service provider with any questions and that technical support was continuously available.

*“Information was very fluent since we got numerous e-mails and phone calls and that kind of stuff. And somebody even came to show us here on-the-spot how to use the mobile tool.”* Leather goods

As the fifth sub-element, *interaction* refers to the communication, co-operation and interaction between the retailer and the service provider. It encompasses how the interplay between the parties was handled and how the connection between them worked. The main difference compared to service support is that service support is more technically oriented and includes the evaluation of the sufficiency of the technical aspects, whereas interaction refers to the co-operation and the relationship between the two actors. It was reported in the interviews that the flow of information from the service provider to the retailer had worked very well. This involved for example the weekly/monthly reports concerning the current

issues of the field experiment and the project in general (e.g. how many m-ads were sent, published research reports, feedback). It also refers to the contacts between the retailer and the service provider, i.e. how easy and fast it was to get information from the service provider and how the service provider reacted to contact from the retailer. Retailers were very pleased that the service provider was proactive in contacting them – enquiring as to their progress and whether they needed anything. This created a feeling that the service provider actually cared for them and wanted to create close relationship with them. Retailers also appreciated the communication being two-way, in that they felt comfortable with contacting the service provider with any questions or comments.

*“The interaction between us and the service provider was great. Clearly the project had paid attention to it and it worked well. Because it often happens that the entrepreneur is busy and might let it slide like ‘We have these other duties and have no time for m-advertising’. But then somebody came from the project and said ‘Good afternoon, I came here to see how you are doing!’ and you remembered that you need to update those m-advertisements.”* Gift and interior decoration

Finally, *positive company image* refers here to the image the firm obtained from using the new m-advertising service. It is the mental picture of the ambitious firm that is willing to continuously develop and to try new things to satisfy its customers more than its competitors. Retailers emphasized that it was essential that the field experiment were publicized in the media – the local newspapers and even national television. They felt that it was good for their image to participate in the testing of the new service that gained a lot of public attention.

*“We got the communicational and high-tech value from this by telling our customers that we are using this (m-advertising) [...] So, I think that it is very positive thing to our company image and in every way that we were involved. To get the publicity. It has been nicely reported in the newspapers what is going on here. So it is very positive to us, surely.”* Travel agency

As contrast to benefits, sacrifices refer to those investments the retailers made during the field experiment when they used m-advertising, for example in planning the campaign or designing and implementing the m-ads. They are placed into two categories that reveal the sources of sacrifices: monetary and non-monetary factors. Firstly, the *non-monetary aspects* consisted of the time used, the learning required and effort made to use the service. Generally the retailers perceived time as the main sacrifice as the quotation below illustrates:

*“Well, making the first m-advertisements took a while. To get it into the right size and shape so it looked good in the final version. But once we had done it... If we think about time I guess it took altogether like two or three hours from me and Ulla to make one m-advertisement from the planning to final version.”* Telecommunication devices

They also felt that after learning to use the service the time required to make new m-ads decreased significantly. Effort here refers to all investments or use of the firm’s resources. Time, learning and effort are very closely related to each other and actually represent different sides of the non-monetary investments the retailers reported they had made in m-advertising.

Finally, when discussing the *monetary factors* it is important to notice that the use of the service was free of charge since the service was only at the application stage. Therefore, the retailers did not need to make any direct monetary investments when they were testing m-advertising. However, some retailers also invested money in m-advertising by hiring an advertising agency to design and implement the m-ads. Some were too busy to take care of

m-advertising by themselves and therefore outsourced the task to an agency, while some were also actively involved in the planning with their advertising agency.

*“Well, it took us a lot of time and cigarettes to plan it (m-advertising) plus few thousand euros for the advertising agency. In that sense we used too much resource compared to what we got from it.”* Co-operative

In relation to the amount of sacrifices made during the field experiment, some of the retailers were satisfied and felt that it was worth it. On the other hand, some were disappointed with the service provider since they felt that they had invested too much (in the form of time, learning, effort and/or money) in relation to their return. Finally, some were disappointed with themselves because they thought they had not invested sufficient resources in the unique opportunity to test a new kind of service.

## DISCUSSION AND CONCLUSIONS

This study has extended the knowledge on value creation to the context of new technological B2B services. It makes a contribution by suggesting an empirically grounded framework (see Figure 1) that illustrates how customers perceive value in the emerging industrial context, specifically in m-advertising. This enables identifying the elements of value-in-use that customers experience as an outcome of joint value creation with the supplier. In other words, the present study offers a categorization of customer perceived value sub-elements consisting of six sources of benefits: commercial effectiveness, experience, useful service features, service support, interaction and positive company image, and two sources of sacrifices: monetary and non-monetary sacrifices. Hence, this study contributes to the existing research by identifying that customer perceived value consists of sub-elements within both benefits and sacrifices instead of categorizing value directly to its sources (e.g. Heinonen, 2004; Liu *et al.*, 2005, Pura, 2005).

This study also creates more in-depth understanding of the value the customer perceives when using a new technological business service for the first time. Furthermore, focusing on an emerging technological business service at the application phase of its development, and so when it is not yet commercially available, emphasizes the value potential of the new service. This gives important implications for the service providers in developing the service towards commercial success, as discussed below. Also in relation to the novelty of the service, the empirical exploration revealed different types of non-monetary sacrifices (time, effort, and learning) that play an essential role in customer perceived value. Existing studies have mainly focused on benefits (e.g. Ulaga, 2003; Simpson *et al.*, 2001) but we suggest that taking different types of sacrifices into account is highly important aspect in value creation. Without making any sacrifices e.g. in the form of learning to use the new kind of service, it becomes very difficult to perceive any value from the service the customer has no previous experience of.

Although this study focuses on customer's perspective it also identifies important aspects in relation to value co-creation and even more importantly, how it could be enhanced by the actions of the service provider. Next, the implications for managers are discussed. It is imperative that the service provider has an in-depth understanding of both value perceptions of its customers as well as value co-creation possibilities with them. The empirical data reveals that the customers highly appreciate service provider's efforts to create close and trustful relationship with them by providing service support and actively interacting with the

customer. Data also indicates that the customers as well are willing to develop their relationship with service provider towards a more cooperative and mutual one. Thus, interaction and service support form a basis for closer cooperation, and further to joint value creation between the parties. Therefore, service provider should pay attention to and invest in these aspects. In relation to this, many customers seemed to be very interested in giving the service provider a lot of responsibility of m-advertising (e.g. by giving their advertising material to the service provider to create actual m-ads or otherwise supporting them in planning and implementing the m-advertising campaigns). This way the service provider's role in the customer's business grows and cooperation takes new forms which indicate the growing importance of value co-creation. Nevertheless, the findings reveal that there is still a need for deeper cooperation between the parties. Thus, the service provider should try find out new ways to help the customer and to create new forms of cooperation. It should also get more acquainted with its customer's value creating processes, and vice versa. This way the parties can adapt their processes to each other, their cooperation strengthens and the service provider can more effectively operate in the interface between the customer and the end customer (i.e. consumers receiving the m-ads).

It would be highly beneficial if the service provider would get the customers more effectively involved in co-creating value in new service development. In other words, it needs to encourage and motivate the customers to participate in developing and improving the practices and functionalities of the new technological B2B service as well as the service provider's work methods, materials and know-how. This would strengthen the relationship between the service provider and its customer and increase the value perceived by both parties. In relation to this, taking the other party's views and wishes systematically into account in future planning would be another concrete action towards increased value co-creation and thus higher perceived value. Hence, both parties should be actively involved to take full advantage of the opportunities provided new technological B2B services.

Moreover, it is important for the service providers to emphasize that in new service context the first customers have to understand that they will need to make some sacrifices in order to learn to use the service, as that will be vital to deriving any value from it. Correspondingly, service providers need to make the value of the emerging technological business service explicit for the customers, in order to motivate them to make the needed investments in the form of time, effort and learning. In other words, they need to show the customers the specific benefits of the service use, such as the opportunity to gain experience of a novel future-oriented service which enables them get to know future business opportunities before their competitors, which in turn may create a significant competitive advantage.

Since technological services and m-advertising in particular have special features compared to established, traditional B2B services, it is important that service provider makes sure that also customers acknowledge that. For example, the commercial effectiveness of the service might not be at a very high level in the beginning, if the service is new or even at the application level of development. Therefore, the service provider should emphasize the other elements that create value for the customers. Specifically in m-advertising service, customers must be made aware that the essence of m-advertising lies in personalized interaction and tailored messages, not in reaching mass audiences. In addition, finding new target groups and creating more effective m-advertising campaigns becomes possible if the retailer monitors the response to its m-advertising campaigns, and investigates the types of consumers reacting to its m-ads. The service providers need to make sure that customers are aware of all the special

aspects and utilize these features effectively, since this enables the customer to perceive higher value from the service.

Service support is also very important in the case of new technological service since most of the customers do not have the adequate skills or know how to utilize it effectively. The amount of service support needed may vary significantly depending on the customer's technical resources, knowhow and learning capacity. Service providers need to find the best solution to serving the different types of customers according to their specific needs, i.e. to provide sufficient amount of training and technical back-up to the customer so that they are able to use the service and utilize its special features. However, it also means that a trade-off is needed between the amount of resources invested in serving the customers and the choice of the target customer base. In relation to this, close and two-way interaction between the service provider and its customer is essential to facilitate the efficient use of the new kind of service. M-advertising also enhances customer's public image as a modern and future-oriented company, which may attract certain customers. Therefore, service providers need to spread information on the unique opportunities offered by m-advertising and increase the general public's interest in it.

Finally, in relation to the dynamic nature of the emerging technological business service, it is important to understand that it is not sufficient to focus merely on the current perceptions of value, but that the value potential of the service is essential too. Therefore, service providers need to concentrate on determining the aspects that are critical for the future success of the service and aim to fulfill those expectations.

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## APPENDIX

### Interview data

<b>Line of business</b>	<b>Duration</b>	<b>Interviewee(s) position</b>
Co-operative; groceries, clothing, a hotel, restaurants	45 min	Communications Manager
Mobile applications	45 min	Manager
Art museum	35 min	Press Officer and Assistant
Advertising agency	30 min	Assistant
Leather goods	30 min	Shop Manager
Videos	15 min	Shop Manager
Mobile phones	30 min	Shop Manager
Health food	30 min	Shop Manager
Travel agency	25 min	Customer Service Manager
Shoes	40 min	Shop Manager
Furniture	30 min	Owner
Music store	25 min	IT-support
Oriental Restaurant	30 min	Owner
Telecommunication devices	40 min	Office Manager
Clothing I	25 min	Advertising Manager
Clothing II	30 min	Administrative Manager
Gifts and interior decoration	60 min	Owners (two persons)
<b>Total</b>	<b>8 h 5 min</b>	<b>19 interviewees</b>