

Deployment of Electronic Commerce Tools in the Business-to-Business Services Context

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ABSTRACT

The aim of this paper is to show how electronic commerce (EC) tools are deployed to manage business-to-business services. The case study reports on usage of various EC tools including the internet, the email, and ERP system to speed up and eliminate some manual administrative work in business-to-business service processes. For managers this paper shows how processes between companies and interfacing processes in a business-to-business service context can be done in a more cost-effective manner. For academics this study provides some ideas for further and consistent empirical research on the impact of EC tools on business services.

INTRODUCTION

It has been suggested in the literature (Vargo and Lusch, 2004) that markets must move away from economics based dominant logic of marketing into a revised logic focused on intangible resources, the co-creation of value, and relationships. In here, we focus on services and the co-creation of value between the service suppliers and the clients and relationships between the suppliers and clients.

The emergence of EC in forms of interconnected computers, the internet and mobile phones has enabled radically new and innovative services to be offered to customers via digital channels. Digital channels have appeared and been adopted very rapidly (see Poon and Joseph 2000; Cho and Park, 2003).

EC have changed the place and characteristics of service setting. In business-to-business setting companies are using novel EC tools such as the extranet to interact within and between organizations digitally (Vlosky et al., 2000). Businesses can use EC tools to re-engineered business processes (Aldin et al., 2004) and those also enable many novel channel and communication solutions (Agnihotri et al., 2002). The basic aim of the paper is to understand, explain and describe how EC based tools can be deployed in the business-to-business service industry. A detailed review of different types of EC tools that can be deployed also in service industry setting is provided by Salo (2006).

First, we present a review of the services literature. Second, we present the methodology section of the paper. A case study elaborates on the use of EC in a business-to-business service organization. Finally, we conclude with a discussion of future research areas for business-to-business services conducted with EC.

BUSINESS-TO-BUSINESS SERVICES

After the invention of the internet companies started to utilize it for various marketing purposes including providing a variety of services ranging from buying airline tickets to monitoring thermal power plants. As practitioners continued to add different kinds of services and products to the information highway academics only pondered the possible consequences of this new phenomenon. Until recently Zeithaml, Parasuraman and Malhotra (2002) and Parasuraman and Zinkhan (2002) among others have provided insights into the changes occurring in the service industry sector. Digital delivery of services has altered some features of service quality as well as made service consumption more convenient to customers (see Ruyter et al., 2001). It should be noted that the internet and mobile phones are just channel additions that need to be managed accordingly.

METHODOLOGY

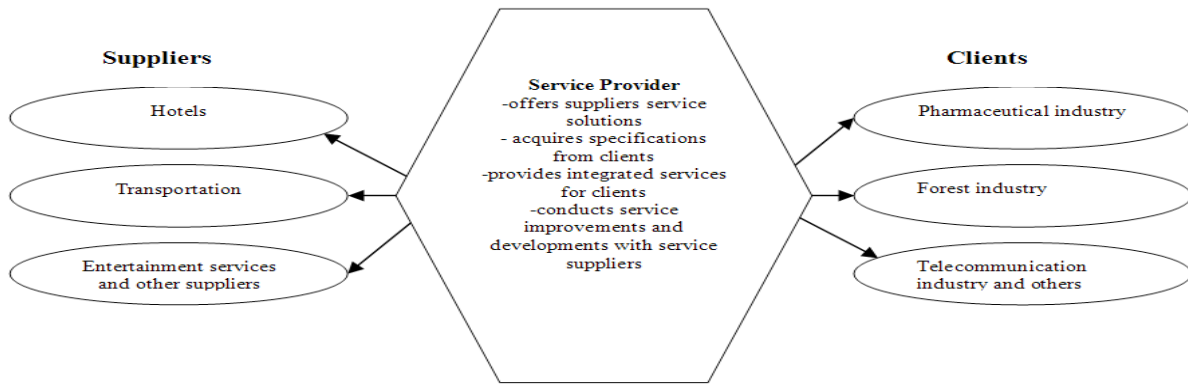
Due to the novel nature of this phenomenon in which the researcher has only little or no control at all over events occurring in a real-life context, a case study is the most appropriate method (Yin, 1994). The case company was selected based on the idea that it should represent the problem of the study. Besides the interview the empirical part of this study consists of various kinds of data. The objective of data collection was to get rich primary data from the studied phenomenon. The semi-structured interview formed the main data source from which the issues were identified and the framework was completed.

USAGE OF EC TOOLS IN B2B CONTEXT

The company studied is a relatively large Finnish service industry company providing mainly B2B customers with a wide range of entertainment and catering services, including transportation and accommodation. The Service Provider has faced rapid growth since its establishment in 2000. The Service Provider has been successful in offering various services to its clients. Clients are usually large pharmaceutical companies developing different types of medicines, forest industry companies providing paper and wood based solutions to end-customers and telecommunication industry clients such as mobile phone manufacturers and developers. The Service Provider has over 100 established business relationships with its clients. Service suppliers are hotels, transportation services providers, and entertainment service providers. Currently, the Service Provider has close relationships with a large number of service suppliers and even more loosely structured connections with other service suppliers. These suppliers provide the means for the Service Provider to solve their client's problems. For example, many large pharmaceutical companies need an excellent location and entertainment services to present new solutions to medical doctors; businesses in the forest industry need ways to reward excellent work conducted by their employees, for example by having an unofficial get together or party. The growth in demand partly stems from the fact that the CEO has personally created and maintained many of the relationships with clients and suppliers. The company has a special role in the value-chain as it facilitates transactions with help of its competence in collecting a wide array of services into one commodity offering as presented in Figure 1.

Figure 1 shows in detail the central role of the Service Provider between its large clients and relatively small service suppliers. Locally, suppliers are large but on a global scale, and when compared to the Service Provider's clients, the suppliers are relatively small. The Service Provider combines multiple business organizations that offer different kinds of services ranging from hotel services to fly fishing activities into an integrated service which is targeted to their clients. Since the Service Provider offers routine services and some tailored services to its clients it is heavily dependent on the collaborative supplier network. This co-operation is possible because before the establishment of the Service Provider company the CEO operated a catering firm and collaborative networks of organizations emerged in early 1996. She was conducting business with many organizations and simultaneously created a wide personal contact base. The collaborative network at that time consisted of the Service Providers' future clients but also future collaborative network suppliers. The relationships and partnerships developed during that time were important for the rise of the Service Provider company.

Figure 1. Central role of the service provider



Besides offering routine services to clients the Service Provider also develops new services in interaction with its suppliers. Basically the Service Provider develops services based on each client's specifications. In practice, the new service development is conducted together with several service suppliers in joint meetings. After a new service concept is developed it is offered to many customers. For example, a small theatrical play performed in a restaurant or pub context is one of the newly developed service concepts. The co-creation of services would not be possible if the Service Provider was not acting as a middle man between the service suppliers and clients.

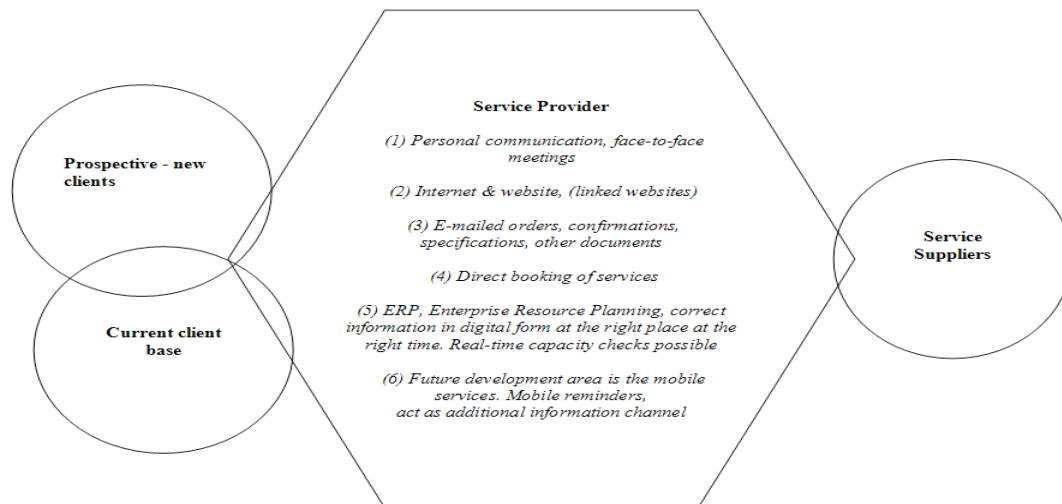
In addition to developing new service concepts, the Service Provider and service suppliers have established several means to communicate digitally. According to the CEO, 90 percent of sales come from B2B clients and 70 percent of sales are initiated with the help of EC tools such as e-mail or the internet. The CEO explained that older customers contact the Service Provider directly by e-mail while the internet is a very attractive channel for new customer acquisition. Moreover, digital interaction is used in routine communications and to handle administrative issues. Clients of the Service Provider can also interact digitally with the company. Companies can order hotel rooms and book tables in restaurants in advance digitally. This frees the time of salespeople and their assistants for other more productive work. The room and table reservation system was developed by a local software house. The newest digital addition is a real time ERP system that enables both the clients and suppliers to interact digitally with each other. It

helps with communication and streamlines the decision making process as well as driving down extra costs related to booking services. The Service Provider is also creating loyal client electronic mailing lists to develop even more trustful service relationships. The CEO is also very interested in developing mobile services especially for B2C customers and adds that without the internet it would be almost impossible to operate so effectively. The future challenge is to develop a coherent computer based service system that serves B2B and B2C customers equally. Figure 2 depicts the eminent role of EC tools in the service network created by the Service Provider.

CONCLUSION

We have illustrated how a service industry company serving business clients and providing service development to its service suppliers used different types of EC tools to improve the value gained by both clients and suppliers. Based on the case study it can be proposed that the digital infrastructure development is an antecedent for successfully digital service delivery. In addition, the selection of proper EC tools to be used in service development and delivery are the second step while pilot testing serves as third phase of the EC tool adoption in service setting. After successful adoption of an EC tool further service re-engineering and automation as well as digitization possibilities are analyzed and planned. For managers this paper has provided several interesting insights into the EC tool adoption in business-to-business service setting. The paper discussed sequential adoption of EC

Figure 2. Role of the EC tools in the interaction between the actors



tools and also highlighted the pertinent role of social communication especially in a new service development setting. These future contributions could be done with the help of longitudinal case studies or surveys. It should be noted by the managers that the amount of EC tools used to deliver service is dependent on customer acceptance (see Ruyter et al., 2001). Thus, under what conditions and in what service settings deployment of EC tools is useful might be an interesting future study area (see Cho and Park, 2003).

REFERENCES

- Agnihotri, S., Sivasubramaniam, and Simons, D. (2002) "Leveraging technology to improve field service", *International Journal of Service Industry Management*, Vol 13 No 1, pp. 47-68.
- Aldin, N., Brehmer, P-O. and Johansson, A. (2004) "Business development with electronic commerce: refinement and repositioning", *Business Process Management Journal*, Vol 10 No 1, pp. 44-62.
- Cho, S-E. and Park, K. (2003) "Characteristics of product/service process and customer needs of geographical accessibility in electronic commerce", *International Journal of Service Industry Management*, Vol 14 No 5, pp. 520-538.
- Parasuraman A. and Zinkhan G.M. (2002) "Marketing to and Serving Customers Through the Internet: An Overview and Research Agenda", *Journal of the Academy of Marketing Science*, Vol 30 No 4, pp. 286-295.
- Poon, S. and Joseph, M. (2000), "Product characteristics and Internet commerce benefit among small businesses", *Journal of Product & Brand Management*, Vol 9 No 1, pp. 21-34.
- Ruyter, K., Wetzels, M. and Kleijnen, M. (2001) "Customer adoption of e-service: an experimental study", *International Journal of Service Industry Management*, Vol 12 No 2, pp. 182-207.
- Salo, J. (2006). "Business relationships redesign with electronic commerce tools: An empirical investigation", *Business Process Management Journal*, (In press).
- Vargo, S.L. and Lusch, R.F. (2004) "Evolving to a New Dominant Logic for Marketing", *Journal of Marketing*, Vol 68 No 1, pp. 1-17.**
- Vlosky, R.P., Fontenot, R. and Blalock, L. (2000) "Extranets: impacts on business practices and relationships", *Journal of Business & Industrial Marketing*, Vol 15 No 6, pp. 438-457.
- Yin, R. (1994), *Case Study Research. Designs and methods*, Sage Publications, Thousands Oaks California.
- Zeithaml, V., Parasuraman A. and Malhotra, A. (2002) "Service Quality Delivery Through Web Sites: A Critical Review of Extant Knowledge", *Journal of the Academy of Marketing Science*, Vol 30 No 4, pp. 362-375.

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