

Chapter 1.2

E-Services: Characteristics, Scope and Conceptual Strengths

Ada Scupola

Roskilde University, Denmark

Anders Henten

CMI, Aalborg University - Copenhagen, Denmark

Hanne Westh Nicolajsen

Aalborg University - Copenhagen, Denmark

ABSTRACT

The concept of e-services has gained increasing use lately. There is, however, no general agreement as to the precise meaning and scope of the term. The research purpose of the present article is, therefore, to discuss the e-service concept, its strengths and scope, and thereby contribute to the general understanding and definition of the term. Furthermore, the article aims at examining one of the primary conditions for the development of e-services, namely the codification of knowledge in connection with knowledge intensive services.

INTRODUCTION

During especially the past two to three decades, services have increasingly come to the fore in social sciences. Consequently, discussions on

the concept of services have erupted time and again - from Hill (1977) to Chesbrough and Spohrer (2006). More recently, after the advent of e-commerce and e-business (e.g. Barua et al., 2001; Kalakota & Whinston, 1996), researchers and academics alike are starting discussing the concept of e-services. However, a clear definition and full understanding of e-services and the e-service concept and paradigm is lacking (e.g. Scupola, 2008). This article, which is conceptual in nature, has the major purpose of contributing to the literature on e-services by characterizing the e-service concept - its strengths and scope - and by examining one of the primary conditions for the development of e-services, namely the codification of knowledge in connection with knowledge intensive services. The main research question is: How can we characterize the e-service concept and what are the conditions for its further development? The goal of the article

is achieved by shedding light on the e-service concept as convergence of services and goods and, in addition, by discussing the conditions relating to the codification of knowledge for the development of e-services. The reason why the knowledge codification issue is important for the development of e-services is that knowledge codification is a requirement for some services, such as knowledge services, to be easily produced and distributed over online networks.

The article is structured as follows. The first section is the introduction, which mainly presents the purpose of the article. The second section provides an overview of the distinguishing features of goods, e-services and services, thus laying the foundation for the understanding of the e-service concept. A literature review of e-service definitions, characteristics and e-service research approaches are then provided in the third section. The following section discusses then knowledge codification and its importance for e-service development. Finally the concluding section provides concluding remarks and challenges for further research.

E-SERVICES AS CONVERGENCE OF SERVICES AND GOODS

In contrast to goods, which can be separated from the immediate producers and sold on an anonymous market, services are delivered by their immediate producers and are not anonymous (Henten, 1994). Consumers will know who the immediate producers are (or will at least have the possibility to do so). It is often said that services are produced and consumed simultaneously and, therefore, require face-to-face contact between the producers and the consumers in the production/ consumption phase (Rust, 2001; Hill, 1977). This may not always hold entirely true, but the consumption will at least start right after the end of production – as in the case of repair work. The basic definition of services has nothing inherently

to do with whether it is material or immaterial. The repair work of a plumber, for instance, is material in nature, but is a service. Indeed, information and communication technologies (ICTs) affect all kinds of goods and services with respect to their transaction on the market (e-business) (e.g. Penttinen et al., 2008). However, in the case of data, information and knowledge services (informational services), it is the product itself which is affected (e.g. Gullkvist, 2008). With ICTs, it is possible to enter data, information and knowledge (to the extent it can be codified) on digital media and use communication networks for transportation (e.g. Ahonen et al., 2008). This means that data, information or knowledge services increasingly can be separated from the immediate producers and sold on anonymous markets. They become goods in a sense. Formerly, paper was the primary physical media for turning informational services into goods. Presently, electronic media increasingly dominate (e.g. Ihlström Eriksson et al., 2008).

At the same time, for some categories of goods, producers seek to customize their products to meet the individual demands of customers (Sundbo, 1997). One of the most heralded examples is Dell and their use of Internet to receive information from customers regarding their specific computer configuration choices (Dell, 2000). Furthermore, a wide variety of services surrounding the goods, e.g. after sales services and information services, are developed in order to provide a better customer experience and a more personalized/customized environment (e.g. Pine and Gilmore, 1999). Nevertheless, most goods will remain mass-produced and maintain their anonymous character.

Software is increasingly sold as a service via electronic networks (Tiwana and Balasubramaniam, 2001). This applies to custom-made software solutions for business enterprises and it applies to mass-produced software transferred on networks. In the case of custom-made software, we are already dealing with a service according to the above definition of services. In the case of mass-produced software, we are concerned with

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