

Comments to the paper IT Artefacts in IT Services

Owen Eriksson

Dalarna University
781 88 Borlänge
Sweden
{oyer@du.se}

1 Introduction

I have been invited to be the discussant of the paper “IT Artefacts in IT Services” by Petteri Kaitovaara and Markku I. Nurminen. I have understood that my role as a discussant is to analyse the paper in a critical way, and to formulate questions in order to stimulate a scientific dialogue related to the topic of the paper.

The topic of the paper is, as I have understood it, to define and understand services based on IT artefacts. The paper is based on a characterisation of the service concept as it is presented in service marketing research, and the perspective of the IT artefact concept is based on the core functionality it provides, i.e. information processing, data storage (data bases), and communication (networking).

In the paper the IT artefact is viewed as a constituent part of IT services and based on this view three categories of services are identified:

- Core IT services
- Peripheral IT services
- Exploitive Services

I will discuss the paper based on how the service and IT artefact concepts are presented in the paper and these service categories. I will conclude my comments with a short summary.

2 The service and IT artefact concepts

2.1 The service concept

The authors base their view on IT services on the service concept as it is presented in service marketing research where services are characterised like this:

- services are processes consisting of activities or a series of activities rather than things;
- services are at least to some extent produced and consumed simultaneously and the service encounter between the service provider and customer is stressed;
- the customer participates in the service production process at least to some extent;
- the core of any service is tied to the benefit it offers to the customers.

According to my opinion is the service concept described as *situated interaction* in service marketing theory. My questions to the authors are:

- 1) Do you agree that services are described as *situated interaction* (action) in marketing service theory ?
- 2) Why is not the *situated interaction* perspective stressed in the paper ?
- 3) If the definition of the IT service concept is based on marketing service theory do we not have to consider and discuss the service concept from a *situated interaction perspective* ?

2.2 The IT artefact concept

The authors claim that the concept “IT artefact” can be seen as a modern term that has replaced and reconceptualised the traditional phrase “information system” The authors claim that IT artefacts provide three basic functions: information processing, data storage (data bases) and communication (networking) which also constitute the Core IT services (see section 3.1 below).

My question to the authors is:

1) Is it really adequate to consider the IT artefact in this quite technical sense if we want to analyse its role in a service context. Would not a social action view of the IT artefact be more appropriate, where the IT artefact can be seen as providing services by performing actions in a social interaction context ?

2.3 The IT artefact as a part of the service

The aim of the paper is to try to reach a deeper understanding of the meaning of software systems as services. The authors do that by studying two aspects of services:

- Identify the supplier and customer of the service; and
- Determine the contents of the service by identifying the added value to the customer.

My questions to the authors are:

- 1) Although these two aspects are important, is it really enough to focus on these two aspects if we want to reach a deeper understanding of the IT service concept ? Is it not essential that we stress the role of the IT artefact as social action systems as well ?
- 2) The authors claim that IT services always have to be regarded as an inherent constituent of business context activities. I agree that IT many services should be regarded as a part of a “business activity context”. However I would like to use the more general concept “social interaction context” because many IT services will be used to perform activities that we do not normally think of as business activities, e.g. services provided for private consumption.

3 Three Categories of IT services

3.1 Core IT Services

The authors claim that the core IT services consists of the processing, storing and transmission of data.

- 1) The question is if this is a too technical way of looking at the core IT services. If we base our view of IT services on service marketing theory and an action oriented view of IS would not the core services of the IT artefact be to perform actions which is of benefit for the customer ?
- 2) The authors write “One particular characteristic for the core IT services is that they almost exclusively are self services. The user of the system is also the operator”. I agree with the authors that one of the interesting things about IT services is that many of them, but not all, are self services. However I think that it is worth to emphasise that the user is not the only operator or (actor) when the self service is produced. The system must also be considered as an actor, where the IT artefact can act both on assignment of the customer and the service provider.

3.2 Peripheral IT services

Peripheral IT services are described as “The adequate equipment, different levels of software and network connections....as well as the operating and development personnel ...”.

- 1) The term infrastructure is used to describe a part of these peripheral IT services. The problem is the way the authors use the term infrastructure. According to my understanding of the concept *infrastructure* is that it often is used in relation to the service concept, i.e. the infrastructure constitutes a basic prerequisite and resource for the development and the delivery of services. I agree that services can be a part of the infrastructure of other services, but is it not a bit confusing only to talk about the term infrastructure under the headline of Peripheral IT services? For example the infrastructure in the context of IT services consists of both technical equipment, public databases, distribution channels, and standards. According to my opinion is the infrastructure concept very important in the context of IT services and should therefore be discussed as a distinct concept of its own.
- 2) The authors divides the “Peripheral IT services” into enabling and enhancing services. Enabling services is e.g. systems development and enhancing services is e.g. implementation and consulting. According to the authors the activities consists of developing the system and to implement it in the users business context. My comment to this is that the system development process will change in many ways in the context of IT services. In many cases we do not install the IT services the way we install a traditional system. An IT service has to be provided to customers when they need it and they do not, in many cases, want to be involved in the development and implementation process. The just want to use the service and get the benefits of this use.

3.3 Exploitive services

Exploitive services are described like this “There has to be processes and/or services that collect the benefit we refer them as exploitive context-related services”. I agree with the authors that the IT services often are a part of other services. However the core IT services are not always a part of a mission or business idea of an organisation as the authors suggest.

4 Summary

The paper is very interesting because the concept of IT service is becoming more and more important in the information systems area. It is also beneficial that the authors describe what they mean by Core IT Services and try to relate these services to what they call peripheral IT services and exploitive services. The authors also discuss the automation aspect of IT services which is essential in the context of IT services and makes it possible to create self-services run by customers.

However I have some main remarks to the way the authors describe the concept of IT services.

- 1) I think that a social interaction perspective of both the service concept and the IT artefact is essential if we want to understand the concept of IT services, and I don’t think that this perspective is stressed in the paper.
- 2) The concept of infrastructure is essential if we talk about IT services because IT services are heavily dependent of an infrastructure in order to be developed and delivered, and I do not think that the concept of infrastructure only should be described as a part of the peripheral services.
- 3) Systems development and consulting is described as peripheral services, and these activities are described in quite a traditional way. My opinion is that the concept of IT services will change the way we work when we develop and implement IT. It is also a question whether the companies that traditionally provide systems development and consulting services really are the ones who are best suited to develop and provide core IT-services, because providing traditional consulting services to companies is another business than providing core IT services.