SERVICE DESIGN DESCRIPTORS: A STEP TOWARD RIGOROUS DISCOURSE

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ABSTRACT
Although Service Design has been practised and taught, during a recent study, we were surprised to find no established terminology that is Service Design specific. There is certainly some equivalence in Service Management, but we hesitate to use them uncritically. As Krippendorf (1995) has pointed out, the design field lacks its own discourse and as a result, it is prone to being colonized by other fields. We believe it is through developing specific service design concepts that we might have more rigorous discourse and more ready to claim service design as a field. To this end, we have created a set of 'service design descriptors'. These descriptors are created mainly intuitively and should be taken as our hypotheses as how service is designed. We have grouped the descriptors into two main categories, namely CONTEXT and FORM. This decision is based upon the concepts from Alexander (1964) and Simon (1996). They conceive design as an activity in the INTERFACE region between FORM and CONTEXT and which aims at the creation of the fit between them. Simon argues that the link between FORM and CONTEXT is created by means of the purpose of the artefact. Even more obvious than that in product design (where the fascination with FORM may prevent the designer to concentrate on the true purpose of the artefact) INTERFACE indicates the focus of service design efforts. Nevertheless, INTERFACE can only be designed via / by means of FORM. We have used the descriptors to analyze existing services and have been able to match the different design elements with these descriptors. We will describe these descriptors together with these examples with the intention to facilitate discussions.

Keywords: Service Design, Terminology, Service Design Descriptors

1 INTRODUCTION

1.1 Overview

Although Service Design has been practised and taught for a good period of time, during a recent study, we were surprised to find no established terminology that is Service Design specific. We were investigating service design transfer which results are also presented at this conference. We collected over 220 existing mobile internet services, services in general and performing art practices. We needed first of all to sort these into different categories. Secondly, in order to analyze the services, we needed to break them down so to describe them in details. In order to do these two tasks, we needed a set of service design concepts or terminologies to guide us. Certainly, we had some in mind but found it important to review existing categories. We did quite extensive literature search but found little published or when published, we found them incomplete. We found also some equivalence in Service Management, but we hesitated to use them uncritically. There had been some highly interesting developments that endeavoured to relate management to design. For example, Boland et al (2004) explored Management as a design discipline. Despite this effort, until and unless the relation between management and design is well established, we think it important and necessary to develop designerly concepts and terms. As Krippendorf (1995) has pointed out rightly, the design field lacks its own discourse and as a result, it is prone to being colonized by other fields. We believe it is through developing design concepts that we might have more rigorous service design discourse and more ready to claim service design as a field.

To this end, we have created a set of 'service design descriptors'. We have organized the descriptors into two main categories, namely CONTEXT and FORM. This decision is based upon the concepts from Alexander (1964) and Simon (1996). They conceive design as an activity in the INTERFACE region

between FORM and CONTEXT and which aims at the creation of the fit between them. Simon argues that the link between FORM and CONTEXT is created by means of the purpose of the artefact. Even more obvious than that in product design (where the fascination with FORM may prevent the designer to concentrate on the true purpose of the artefact) INTERFACE indicates the focus of service design efforts. Nevertheless, INTERFACE can only be designed via / by means of FORM.

1.2 The concept of form

Alexander argues (1964: 15-19) that *"The ultimate object of design is form."* and continues:

... every design problem begins with an effort to achieve fitness between two entities: the form in question and its context. The form is the solution to the problem; the context defines the problem. In other words, when we speak of design, the real object of discussion is not the form alone, but the ensemble comprising the form and its context. ... we may even speak of culture itself as an ensemble in which the various fashions and artifacts which develop are slowly fitted to the rest.

... The form is a part of the world over which we have control, and which we decide to shape while leaving the rest of the world as it is. The context is that part of the world which puts demands on this form; anything in the world that makes demands of the form is context. ..."

What means *form*?. A systems theoretical insight says that terms / concepts only make sense in difference to their counter-terms. So, what are the potential, mostly implicit, counter-terms of form?

Form – Content evokes the widespread artistic concept of an autonomous "opus", created by an "author" who is solely responsible to him/herself. Design (*Form*gestaltung) in this sense is useful art, at best, if the content provides a valuable function for some third party. Such a *form* – as a museum piece, for example - can have eternal validity.

Form – Context implies an *interface* between the form and a psychic, social, cultural, economic, ecological, etc. environment. Human-centered design aims at optimizing this interface; a difficult task since forms in this sense can lose their validity very quickly, if their environments change or if the ascribed meanings no longer correspond with those actually perceived.

Form – Medium denotes a still more fluid configuration. In a hybrid medium of initially just loosely coupled or uncoupled elements of any kind more stable closer coupled configurations or *forms* emerge temporarily, similar to Latour´s (2005) collectives or Luhmann´s (1997) social systems: traffic systems, web-based communities, health-services, discourses, etc. Here the interfaces, or better transition zones, between *form* and medium are fuzzy, ephemeral, mainly self-organizing, only partially controllable.

The third meaning of *form* is becoming more and more significant and means an enormous challenge for design. Concepts such as "author" or "opus" become meaningless. Here we keep the more general and established notion of Context. The older difference to content points to the shape / the aesthetic of a service design artefact, an issue which is hardly understood yet.

To describe CONTEXT, we use four concepts: 1 Category (type of service), 2 Function (purpose of service), 3 Stakeholders involved and 4 Infrastructure / resources needed. For FORM, we have five concepts: 1 Steps / components of service process, 2 Medium of communication / channels, 3 Type of interaction, 4 Touch-points, tangible interactions and 5 Unique characteristics. We have used the descriptors to analyze existing services and have been able to match the different design elements with these descriptors. We must mention that these descriptors are created mainly intuitively and should be taken as our hypotheses as to how service is designed and their values are still to be tested. Therefore, by describing these descriptors together with the examples, we intend no more than to facilitate discussions.

2 SERVICE DESIGN CONTEXT DESCRIPTORS

2.1 Category (Type of Service)

For the study in service design transfer, we have searched for existing internet services, services in general and performing arts practices and compiled over 220 sources. Given the amount, we needed to sort them into types of services to create meanings. So we needed some categorization scheme. We decided to consult with experts but found few established or agreed service categories. We found that service types are categorized as Business to Business Services, Business to Consumer Services, Internal Services, Public Services and Not for Profit Services (Evopark 2008). In our conversation with Nicola

Morelli, he also mentioned that Business Service should be treated differently from non-profit services. Although we could see the reasons behind these categories, we were not sure if they were always applicable or whether they were the most suitable for design. For example, in marketing people are categorized basically by buying power. Although buying power is not irrelevant to design, it might not be the most critical one when designing for people. We believe that we still need to examine and argue about service category from a design point of view. As categorizing is always done with interest and for a reason, we have decided to develop our own by grouping and regrouping the sources together until we felt satisfactory about them, see below:
Categories of internet services: information, communication, entertainment, sale, transmitter, comparison,
Categories of services: public, security, business, amusement, education, social
Categories of performing arts: high-culture, individual, traditional, mass.

Through the mapping of existing internet services and services in general, we have found out accidentally that currently majority of internet services are under the categories information and communication. But other areas of services, such as public services, security, amusement, are not extensively internet supported. This means, there is a substantial space for design service exploration. The point to be made here is that if we would use the business, non-profit type categories, we might not have identified this space. Category creates frame of reference and perspectives, so it is probably very helpful to have different sets of category. And what we need is a way to identify when to use which category.

2.2 Function (Purpose of Service)

According to Jan Michl (2002), there are three meanings for "function" in design. Firstly, function means purpose as in 'form follows function'. Secondly, function means the actual functioning and this is why 'function follows form'. Thirdly, function refers to a metaphysical concept – the essence of thing. Here we use function to mean purpose of service. Purpose (the solution) is very similar to need (the problem) and a proper formulation of the need is the purpose or the function of the service. Function and purpose are discussed in service design literature. Function is sometimes termed values of the service. Hollins (2007) also mentions the important of having a 'service design brief' which should document and describe the primary purpose of a service. He also mentions 'service specification' to prescribe the requirements to which the service has to conform. Certainly, function, purpose, brief and specification are not new concepts and have been in use in design for a long time. It seems reasonable that it is included in describing service design. In hindsight, we realize that we have intuitively sort the services by functions. We identified the function for different categories of internet services: Information: to learn and to know, Communication: to make contacts, Entertainment: to relax, Sale: to make money, Transmitter: to compete, Comparison: to choose the best.

2.3 Stakeholders

The concept stakeholder has been much elaborated by Krippendorf (2006) in design. According to him, stakeholders are those who claim a stake (interest) in the development or consequence of a design and their ideas, value and goals should be respected. In the service design literature, there is also the mention of the wants and needs of the users and also the service providers. However, there is less discussion on the rest and we suggest that stakeholder is more encompassing and more holistic a concept than users. The stakeholders of a service include the service provider, designer, staff, users, and people affected by the service.

2.4 Infrastructure & Resources

Infrastructure and resources are material or human aspects that enable or constraint the execution of the service. There are two existing concepts that have the same meanings. 'Resource Model' describes the needed resources in order to carry out the service (Instutut für Zukuftsstudien 2008). 'Service Landscape' refers to the environment in which the service takes place (Knaus 2008). Besides facilities, the competence and experiences of staff are also considered as part of the infrastructure and resources.

3 SERVICE DESIGN FORM DESCRIPTOR

3.1 Steps & Components of Service Process

Steps and components of service are what people likely think of when they talk about service design. There are different expressions for this, such as 'service blueprint' (Hollins 2007), 'service journey'

(Design Wales date unknown). 'stage, roles & scripts' (Mager 2006) or 'operational process' (Scholl 2002). In our study of internet based services, components of the service include self-generated content, collection, download, comparison, search, overview etc.

3.2 Medium of Communication

Medium of communication is less discussed in the service design literature but we think it is quite important. Each medium has its advantages and disadvantages and has different effects. It is much like different materials in product design. Medium of communication might include face-to-face, telephone, internet, video, stand alone computer terminal, print etc. Having pointed them out, we believe that we can more systematically investigate each of this medium for improving service design.

3.3 Type of Interaction

For type of interaction, we refer to the user point of view and are thinking of active, passive, and interactive; plus individual, small group and mass. For example, on the internet, some computer games are small-group or mass-interactive. But news service on the internet is mostly individual-.passive. We see that some more systematic research here will also be useful.

3.4 Touch-Point

Touch-Point (Design Wales date unknown) is the point of contact between the user and the service and is a known concept in Service Design. It is also referred to as 'Customer-Staff Interaction' (Stauss date unknown).

3.5 Unique Characteristics

Unique characteristic refer to the overall quality of the service. It is related to the concepts 'High Touch' 'Key differentiator' (Design Wales) and the often discussed emotional quality of the service. A service should have high trustworthiness, responsiveness. In our study, we find also other qualities, such as being current and updated, quick, comfortable, interesting, and useful.

In our study, we use the descriptors to examine individual services, for example, the library was described in the following ways:

Category: Public
Function: Give everyone access to literature and knowledge
Stakeholders: The public, taxpayers, librarians, publishers, writers, architects, engineers, builders, designers.
Infrastructure & Resources: Building, information & communication equipments, catalogue, staff, location, transportation availability,
Steps & Components: Access to library catalogues, search for books online, get the books, check-out, take home and read, get reminder of due date, return books.
Medium of Communication: Computer terminal, telephone, face to face
Type of interaction: active, individual or small group
Touch points: Building, reception, librarians.
Unique Characteristics: Organized, size of catalogues.

4 CONCLUSIONS

We believe that the descriptors are not unfamiliar and we have merely conceptualized them more systematically and perhaps also in more details. These descriptors, we hope, might help us teach and design service more holistically. And also they might serve as points of discussion and research. Each descriptor poses questions as how it might be considered. As mentioned already, what are the categories of service and when should they be used? How might function of service be identified? What are the methods for stakeholder involvement? How might infrastructure and resources be utilized optimally? What are the representations or models of steps of service? What are the various ways to use media? What might be other types of interaction and touch-point? How to create unique characteristics? These are just some of the questions that might be raised following the map of descriptors.

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