

////////////////////////////////////

EXPERIENCE-VALUE: A FRAMEWORK FOR DETERMINING VALUES IN SERVICE DESIGN APPROACHES

Menno Manschot¹, Froukje Sleswijk Visser¹,
¹Studiolab, Faculty of Industrial Design Engineering,
Delft University of Technology,
m.a.j.manschot@tudelft.nl

ABSTRACT

The aim of this paper is to present a framework for value assessment in service processes and service design projects. This framework is based on a literature review and interviews with experts.

Central to the presented framework is the finding that value perception by people occurs fundamentally differently than value perception in an organizational setting.

We present two categories of value: Performance-value (attributed by organizations) and experience-value (attributed by the people who use the services).

The presented framework has a number of implications for designers, decision makers and researchers in service design projects.

Firstly we argue that in order to understand the full value services have for people, one has to include the experience-value of the service.

Subsequently we argue that personal and organizational value perceptions will need to be more interrelated for organizations to adequately increase the experience-value of services for the people involved.

Finally we argue that by understanding and acting upon the experience-value of services, organizations will be able to improve services in ways that are valuable for people. This will ultimately result in value increase from a performance-value perspective.

KEYWORDS

value, value assessment, services, service design, user centered design, UCD.

INTRODUCTION

In product and service innovation the integration of needs and desires of customers in the design process has become more and more established in recent years (Binder, Brandt et al. 2008). Especially in the early phases of the design process users are more consulted, studied and even asked to participate in the design (Kujala 2003; Sanders 2005). However little research is done so far to clearly indicate how valuable the delivered service is in the end. Both in practice and in academia, there is a high need for better justification of the investments and efforts concerned with these design methods (Parker and Heapy 2006; Brown 2009), and for better understanding of the value of such approaches. Current efforts of value assessment are mostly focused at monetary value of services (Bruns and Kaplan 1987), or service quality measurements (Parasuraman, Zeithaml et al. 1988). These approaches prove only partially adequate, since determining value proves to be more complex than referring to a survey result or a system performance indicator (Steen, Manschot et al. 2011).

Within the programme 'Are You Being Served', we aim to determine the value(s) that designerly approaches for service innovation have for different stakeholders.

This paper reports on the first step in this research: to understand how 'value' is understood in the context of service design processes. We aim to answer the following questions:

1. What is an appropriate conception of value in the context of service design processes?
2. How does this translate into a workable framework for evaluation?

Our goal with this paper is to compose a framework that will help us to understand how to value service innovations from all relevant perspectives. Therefore we will firstly identify which perspectives on value need to be understood. Through a review of the dominant views on value within these perspectives, we combine the insights of various disciplines relevant to our question.

In the next section we start by determining what we actually mean by the term ‘value’ in the context of service experiences. We then identify two main perspectives from which to approach this notion. First we explore a human, experiential perspective on the value of experiences; how do people attribute value to an experience? And on the other side we explore an organizational perspective; we explore the models by which companies and institutions evaluate the value of services. Both perspectives have several useful theories in light of our framework. We give an overview of the main ones, presented in table 1, before continuing to a synthesis, and finally to a discussion on the possibilities for application of the framework.

Perspective on Value	Theories on value perception
People perspective	Value in use
	Value through interaction
	Value through emotional appraisal
	Value in social arena's
Organizational perspective	Value through performance - Key Performance Indicators - Business Balanced Score Card
	Value through opinions - Service quality measurement (e.g. SERVQUAL) - Net Promotor Score - Opinion mining
	Value through non monetary scales - Social Return on Investment (SROI) - Logic Modeling (Log-frame)

Table 1: Reviewed theories/models on value perception

MEANINGS OF THE TERM VALUE

First of all we should take moment to look at the meaning of the word ‘value’. Out of several significations of the word there are three main meanings for which this term is used that are particularly relevant to this discussion. Firstly, ‘to value’ is the activity of assigning importance to a thing or an experience. This meaning touches upon the central notion of this paper: We argue that people value service experiences in a fundamentally different way then the organizations that provide the services. The second meaning is ‘value’ as in a set of human or moral values. This has relevance to our discussion in the sense that these human values drive the way people appreciate a service experience. As an example: if privacy is particularly important to you this will influence your evaluation of a social media service. The third meaning is ‘value’ in an economical sense. In design related publications creating value in this sense is often described in terms of changing inputs into product development, and thus making a company’s products more competitive and/or more profitable (e.g. (Erhorn and Stark 1995). Although all three meanings are interrelated, we ultimately assess the value of service design processes in an economical context. Decisions on innovation projects are typically made in boardrooms of organizations, in a business discourse. Any understanding of the value of service design processes should therefore be relevant to this type of decision-making, by relating to this predominantly economical discourse. Adopting this third meaning of value as the leading entity of evaluation, leads us to two perspectives from which to perceive this value, namely the two principal entities in an economical arena: people and organizations. People are the actors in a service. They either receive or provide service activities, through interactions. Organizations are the structures that enable these interactions. It is important to stress that this distinction is different then the user-provider distinction often described in marketing literature. By differentiating between people and organizations we acknowledge that organizations (and services) are manned by people. These people can value the service they are



Figure 1: the mail delivery as a process and as an experience.



offering quite differently than the organization they are working in.

AN ILLUSTRATION ON VALUE IN SERVICE

An example illustrates the two perspectives on the value of a service: Let's look at the value of traditional mail delivery (figure 1).

Person A, the sender, sends a letter through the mail to person B, the receiver. The letter arrives from the mailbox in the street to the doormat of the receiver, through a logistical system. A billing system ensures that the revenue from the stamps arrives at the mail company. These systems are part of the organizational structure of the mail company. They are processes that are managed to perform to a certain standard or target. These systems are also manned with people doing part of the activities needed to make the process work. These people can be employees, but can also be subcontractors, customers or otherwise involved in delivering the service experience.

The value of this mail service might be described in organizational terms by referring to the net profit the mail company makes by selling the stamps, the efficiency by which it performs the mail delivery process, or the percentage of mail delivered on time at the right address.

From a people perspective the value is more readily described in terms of the timeliness of the mail man ("the arrival of the mail tells me what time it is"), the importance of keeping in contact with friends and relatives (exchanging Christmas cards for example), or the emotional experience of opening a newly arrived delivery ("I enjoy opening a letter carefully with a letter opener").

How should we view the value of this mail service in order to be able to (re)design it?

To properly evaluate the value of service design processes for all stakeholders, one has to understand how both people and organizations come to value this service.

PERCEPTIONS OF VALUE

The next section explores current thinking on value perception from these two perspectives.

ASSESSING VALUE - A PEOPLE PERSPECTIVE.

How people value or appreciate a service is described mainly by theories from the human sciences such as psychology, sociology and behavioural studies. In these views, people do not value the service as such. Rather people experience a service (or any other design for that matter) through sensory perception, and subsequently attribute importance to this experience. Some argue that this is a process that occurs individually. Other theories emphasize the role of social collectives in value attribution processes.

From an economical and a psychological point of view people are viewed as individuals with personal value attribution processes. Taking an economical and marketing point of view Arnould and Thompson (2005) argue that value 'resides' in the experience of consumption. Consumption in their view includes the symbolic and non-utilitarian aspects of use, such as fantasies, feelings and fun. Vargo et al. (2008) strengthen this view by stating that the creation of value in services is an interactive process between user and service provider, where value is determined by the user.

A more design oriented model on product appraisal processes from Desmet et al. studies values in relation to product appraisal. First they mention human values (the second meaning of value) as a determining factor in the appraisal process of product stimuli (Desmet, Hekkert et al. 2004). This appraisal of product stimuli - or service stimuli for that matter - is then input for value attribution (in the first meaning of value).

Value attribution as a social process is less well described. Various disciplines have theorized on this notion, and all have created their own models and assumptions, of which it is difficult to extract a dominant view. However, what remains of interest in a context of services and service design is the notion of arenas of collective value, that is, collectives in which value is attributed and created between and for people (Cockton 2006). Five types of arenas are described. Next to the social arena of family and friends, 'locales' are mentioned as an arena, which is any grouping relating to geographical location (neighborhood, city, or country). Another arena is formal institutions (as an employee of a company or a student at a school you have a formal relation to an institution). Informal institutions are for example communities of interest, or political movements, and finally they mention the market as an arena of value attribution.

In resume, the process of value attribution is interpreted in many ways depending on the discipline discussing it.

Commonalities of theories

Although the disciplines mentioned here vary in their models and theories, the views on personal value perception have a number of elements in common:

- What people value is not the service as such but their experiences of the service provided by other people and systems.
- Value is seen as a very personal and multifaceted notion; none of the models try to come up with a definition or closed set of ingredients for value perception.
- How people value an experience is closely linked to the purpose the user has with the service (his goals), the habits and moral values a user has (his

personality) and the context in which a user experiences the service (his situation).

- People perceive value in a social context, next to personal experience. An experience is often (or always, according to some) valued in relation to social collectives to which the person is relating. One of those collectives is the market (economic/marketing value) but other collectives are family and friends, (in)formal institutions and locales such as city or country.
- Finally the capacities a user has to act in the experience also influence the perception of the experience by the person.

All these elements come into play when people value an experience. In combination they produce an overall picture or feeling about how valuable an experience is to someone.

For the case of the mail company individual value attribution would be the observation that it is comforting to be able to tell the time through the punctuality of the mail delivery, and that opening a parcel is an exciting experience. From a collective viewpoint value attribution would be for example the observation that mail services provide a means bonding between family and friends, through Christmas card exchanges.

ASSESSING VALUE - AN ORGANIZATIONAL PERSPECTIVE.

Organizations prove to perceive value of services quite differently from people. Through a series of interviews¹ with service managers and customer experience managers of leading Dutch service organizations and a subsequent literature review, we assessed the commonly used value models.

Performance as value indicator

The interviews revealed that these organizations do not mention the value of a service as a direct indicator on which they steer their business. In a managerial setting, organizations generally talk

¹Four interviews have been held with managers and consultants of customer experience departments and customer service departments of an energy company, a logistic service company, a customer service consultancy agency, and a consumer electronics company.

about service quality or service performance. Both are examples of performance indicators focused at processes rather than direct indications of the value the services provide.

Looking at performance, organizations manage their service processes in quite varying ways. Although all approaches are loosely based on the Business Balanced Score Card model introduced by Kaplan and Norton (1993), there are big differences in the strategic value and amount of management attention services are being given between organizations. One company has implemented a highly elaborated set of key performance indicators (KPI's), which shows the relations between service alterations and the company's financial results in great detail. Some examples of these KPI's are profit of business, number of new customers, percentage of customers leaving, periodic number of complaints, percentage of first time right installations in the case of initial installation processes with new customers (such as phone or energy companies).

In contrast, another company indicated that they used one self developed periodic customer satisfaction survey as their sole indicator of customer experience in the set of KPI's on their management dashboard.

Opinions as value indicator

The periodic customer satisfaction survey is an example of a specific type of indicator targeted at measuring opinions. Here the value of services is extracted from what people say about their perception of a service. Organizations steer on improving the opinion of their customers. There are several commonly adopted opinion indicators. Some are directed at customers, others at the opinions of the general public.

From a service marketing standpoint the extensively elaborated and validated service quality questionnaire SERVQUAL (Parasuraman, Zeithaml et al. 1988) is the dominant standard in service quality monitoring instruments. SERVQUAL is a standardized questionnaire that asks the judgment of consumers on a set of questions regarding various aspects of service performance. The questions are grouped in the following categories: Reliability, Responsiveness, Assurance, Empathy and Tangibles. As theory and

practice on service marketing have evolved over the last 20 years, many variations have been developed targeted at specific domains and technologies. Although this instrument has earned its credits in its 20 years of development it seems to be applied mainly in the context of back-office service optimization. The focus lies more on reaching a service level that is acceptable for the organization against given budgets, rather than making the customer experience a steering factor in improvements. Service is thus seen as a cost element rather than part of the core business of a company.

Another indicator of public opinion rapidly gaining popularity is the Net Promotor Score developed by Reichheld (2003). This is a number based on a computation of the percentage of customers that indicate that they are willing to promote the product or service to their peers. All interviewed companies mention that they are familiar with the Net Promotor Score, but none of them currently use it.

An interesting development in this area is sentiment mining or opinion mining (Lee, Jeong et al. 2008). This is a practice where opinions around a brand, company or keyword are monitored as people vent them through interactive media. With the increasing importance of online channels in companies' marketing strategies more and more organizations make use of these techniques. Although this poses interesting opportunities for zooming in on actual experiences of users, these methods are currently mostly used as damage control mechanisms. They serve as early warning systems for negative attention.

This inventory shows that of the commonly mentioned KPI's almost all are linked to financial costs and benefits of the organizations, either directly or through computation. Companies seem to view the value of service processes ultimately in monetary terms. This may be due to the way decision-making processes work in organizations, or it may have to do with the fundamental reasons of existence of many organizations: making profit.

Non-monetary impact as value indicator

Looking back at the personal perspective on value it is worthwhile to investigate assessment models that aim to include non-financial value into the assessment.

The field of business performance management literature presents various value measurement instruments that aim to explicitly include these values. These are predominantly used in public sector, and non-profit management.

One example is the logic model or log-frame method (Julian 1997). This model describes the relations between efforts and material inputs in a specific project or programme and the (expected) outcomes of it. It provides methods and tools to develop an operationalized monitoring framework linked as much as possible to the overall goals that are envisioned with the programme. Often in public and non-profit programs these goals are not tied to monetary returns, on the contrary they often have societal changes in view.

Although logic modeling provides a general approach for impact-, or value evaluation, the method is very generic and needs a lot of customization to be usable in specific situations.

Similarly to logic models, the approach of Social Return On Investment (SROI) tries to include non-monetary results in business cases. It is a framework that seeks to incorporate social, environmental and economic costs and benefits in the planning and evaluation of business cases (Nicholls, Lawlor et al. 2009). Most SROI models use monetary values to represent these costs and benefits, as this enables a ratio of benefits to costs to be calculated. For example, a ratio of 3:1 indicates that an investment of €1 delivers €3 of social value. However, like the log-frame, there is much variation in modeling and implementation of SROI evaluations. Although there are general principles, SROI analysis are said to be tailor made to individual programs or organizations.

Both Log-frame and SROI approaches have elements in them that can serve as building blocks for a value framework in a service design context.

One is the participatory approach in the definition of project success. Another interesting element is the

iterations of evaluation activities and the adjustments of success parameters and the project design itself.

Framing value or impact in this type of reasoning also presents a potential risk, however, when reducing it to a collection of indicators. Paton states that for social enterprises, and many service initiatives as well, performance is not some underlying attribute. Performance is what the people involved more or less agree, implicitly or explicitly, to be performance (Paton 2003). This is analogous to the observation of Parker and Heapy (2006) that organizational targets tend to focus energy on underperformance in operational efficiency, at the expense of underperformance in the transformation of people's lives. Most standard KPI's measure success at a systemic level (such as progress against targets). According to them, organizations need to find ways to measure experiences as well as the performance of their systems and processes.

VALUE IN THE CONTEXT OF DESIGNING SERVICES

Through this reviewing an array of approaches to understanding how people value objects, services and processes, it becomes clear that personal value is qualitative, contextual and multifaceted. Organizational views on the value of objects, services and processes on the other hand are all ultimately linked to monetary terms.

In this incongruous understanding of the value of things lies the main challenge when trying to determine the value that service designing might have for the stakeholders involved.

THE FRAMEWORK, EXPERIENCE-VALUE AND PERFORMANCE-VALUE

In an attempt to answer to this challenge we present a framework for value assessment in service design processes. The framework is an overlay over the regularly used representation of service processes in the form of a customer journey (figure 2).

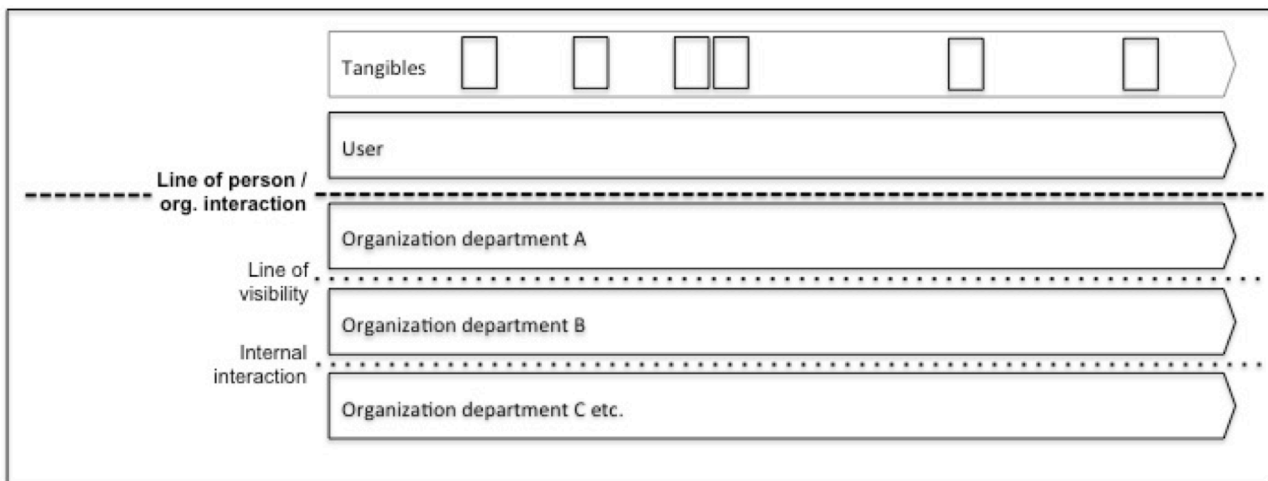


Figure 2 The generic customer journey representation

In a customer journey all process elements of a service are ordered in a timeline, identifying the perspectives of the user, the provider and other relevant parties that may be involved in the journey. It details both the points of contact between user and provider (sometimes called on-stage actions) as the behind-the-scenes processes (sometimes called off-stage actions) (Stickdorn and Schneider 2010).

Figure 3 shows our value-in-service-framework, visualized as an overlay of the generic customer journey. It shows two spaces where value is perceived. In each space a different type of value is perceived of the same service. We call them Performance-value, and Experience-value. The green space represents the arena of Experience-value

formation, with examples of possible key instances as circles. The red space shows the arena of Performance-value formation, with examples of possible key instances as squares.

Person A, in the top half, is interacting in the service with organizational processes, shown in the bottom half as Process I. Processes II and III take place without customer interaction and support the service. Persons B and C represent people in the peer group of the customer, who might influence his experience and perception of the service. On the right is illustrated how value attribution manifestations vary in kind between the two types of value.

Performance-value is the value of the service, as it is

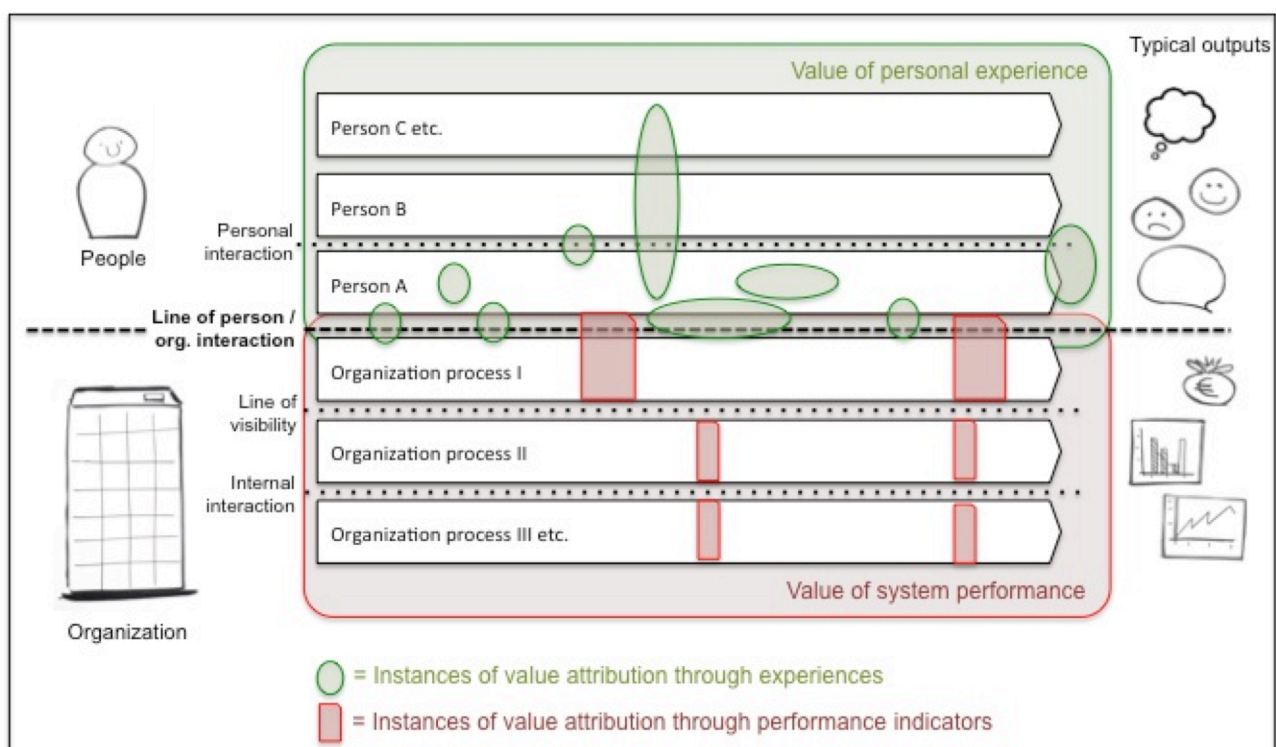


Figure 3 - The service value framework

perceived within the context of the organization (see figure 3 and table 2). It is mainly perceived through assessments in the processes of the organization. It can include assessments of the opinion of customers. In that sense performance value has some relation to the context of the customer, but the value perception is formed based on performance parameters and targets. This value is manifested mainly through periodic reports based on quantitative data. Currently organizations predominantly steer their initiatives of service development based on performance-value assessments.

	Formed through:	Manifested in form of:
Experience value	experiences, dialogues, associations and attitudes	emotions, testimonials, changed attitudes and user behaviour.
Performance value	performance parameters and performance targets, including aggregated consumer opinions.	periodic reports based on quantitative data.

Table 2: characteristics of experience value vs. performance value.

Experience-value is the value of the service, as it is perceived on the other side of the interaction line. It is formed through the experiences, dialogues and associations of the people that interact with the organization. An important part of this value is formed through peers of the person directly interacting with the service.

Experience-value manifests itself in the form of emotions, testimonials, attitudes and user behaviour. Some of these forms can be assessed more easily than others. The key to the assessment of experience-value is the rich collection of all manifestations.

Experience-value is similar to the term value-in-use often addressed in marketing discourses (Lusch, Vargo et al. 2007), with the addition that next to value perception in actual use, it also includes value

perceptions in symbolic ways (such as the accuracy of the mail man for time keeping), and in aesthetic ways (such as the feeling of opening a letter). The notions of experience- and performance-value align closely with the experience indicators and performance indicators mentioned by Parker and Heapy (2006).

Let's look at the mail company again to illustrate the model. We take the example of replacing regular postmen with temporary personnel on flexible contract. In this case there is a tension between the values for people and the value for the organization of operational efficiency. People value having a familiar regular postman. The company sees value in employing temporary flexible personnel, to increase its performance. For the organization this performance-value is visible as reduced personnel costs and increased efficiency. The (reduced) experience-value for clients and employees however is more complex to identify. Clients might experience changes in delivery times and frequencies. They might have a different feeling towards an anonymous mailman, or they might judge the character of the mail service differently. These attributions might then in some cases influence their behaviour towards the mail service. But even if they do not change their behaviour, the experience-value changes. If this value for people is at all evaluated, this is currently mostly done through customer satisfaction questionnaires or by monitoring the number of complaints by customers or employees. These methods are poor reflections of the actual experiences of the clients and employees.

We argue that experience-value and performance-value are fundamentally different. Often this leads to a tension in service optimization and design processes, where organizational goals and concerns conflict with concerns of people involved in the service.

IMPLICATIONS OF THIS FRAMEWORK

This representation of value perception in services has a number of implications for designers, decision makers and researchers in service design projects.

Firstly we argue that in order to understand the value that services have for people, one has to include and therefore adequately capture the experience-value of the service.

Subsequently we argue that both viewpoints will need to become more interrelated for organizations to adequately increase the experience-value of services for the people involved.

We argue that by understanding and acting upon the experience-value of services organizations will be able to improve services in ways that are valuable for people. This will ultimately result in value increase from a performance-value perspective.

POSSIBILITIES FOR APPLICATION OF THIS FRAMEWORK

This framework is useful to various purposes:

- It helps us to describe existing services, defining between the two viewpoints for value.
- It facilitates discussions on performance and experience of existing services and in design-conversations, with an increased understanding of the value of service design processes.
- It will guide our development of a value-sampling instrument, to capture rich experience documentation from people (users, employees, etc.). We aim to strengthen existing service evaluation techniques with more accurate experience information in such a way that it will relate to the organizational value discourse.
- It helps us to translate experience-value insights into metrics relevant for organizational decision-making. These are the foundations for developing evaluative tools for service innovation projects by determining appropriate parameters for impact.

This research into value assessment of service design processes is done within the "Are You Being Served" program. In this three-year program several Dutch design agencies are conducting service design projects to innovate the area of Central Station Utrecht. This is done in cooperation with academic institutes and various stakeholders concerned. One goal of this joint program is to better identify and illustrate the value service design approaches can have in tackling complex service innovation

challenges. In this programme we will build an instrument to evaluate these cases in terms of experiences of end users and in terms of value for organizations. We expect it to be useful for other service design projects as well. General applicability of this instrument is therefore an important requirement in the development of it.

The creation of this framework has been the first step in our project to develop an evaluation instrument for the innovation of services. The application of these insights in practice, in the next phase, will prove its practical value and usefulness, which will be evaluated thoroughly.

REFERENCES

- Arnould, E. J. and C. J. Thompson (2005). "Consumer Culture Theory (CCT): Twenty Years of Research." *Journal of Consumer Research*.
- Binder, T., E. Brandt, et al. (2008). Editorial: "Design participation(-s)." *CoDesign* 4(1): 1-3.
- Brown, T. (2009). *Change by Design: How Design Thinking Transforms Organizations and Inspires Innovation*, HarperBusiness.
- Bruns, W. J. and R. S. Kaplan (1987). *Accounting and management: field study perspectives*. Boston, Harvard Business School Press.
- Cockton, G. (2006). "Designing Worth is Worth Designing". *Proceedings of NordiCHI 2006: Changing Roles*, Oslo, Norway.
- Desmet, P. M. A., P. Hekkert, et al. (2004). "Values and Emotions; an empirical investigation in the relationship between emotional responses to products and human values." *Proceedings of the fifth European academy of design conference*, Barcelona, Spain.
- Erhorn, C. and J. Stark (1995). *Competing by design: Creating value and market advantage in new product development*, John Wiley & Sons Inc.
- Julian, D. A. (1997). "The utilization of the logic model as a system level planning and evaluation device." *Evaluation and Program Planning* 20(3): 251-257
- Kaplan, R. S. and D. P. Norton (1993). "Putting the Balanced Scorecard to Work." *Harvard Business Review* (Sep/Oct).
- Kujala, S. (2003). "User involvement: A review of the benefits and challenges." *Behaviour and Information Technology*, 22: 1-17.
- Lee, D., O.-R. Jeong, et al. (2008). "Opinion Mining of Customer Feedback Data on the Web." *Proceedings of the 2nd international conference on Ubiquitous information management and communication*, Suwon, Korea.
- Lusch, R. F., S. L. Vargo, et al. (2007). "Competing through service: Insights from service-dominant logic." *Journal of Retailing* 83(1): 5-18.
- Nicholls, J., E. Lawlor, et al. (2009). *A guide to Social Return on Investment*. UK Cabinet office - Office for the Third Sector.

- Parasuraman, A., V. A. Zeithaml, et al. (1988). "SERV-QUAL: a multiple item scale for measuring consumer perceptions of service quality." *Journal of Retailing*(64): 14-40.
- Parker, S. and J. Heapy (2006). *The journey to the interface*. London, Demos.
- Paton, R. (2003). *Managing and measuring social enterprises*. London, Sage.
- Reichheld, F. F. (2003). "The One Number You Need To Grow." *Harvard Business Review* (Nov/Dec).
- Sanders, E. (2005). "Information, Inspiration and Cocreation." *Proceedings of the 6th International Conference of the European Academy of Design*, University of the Arts, Bremen, Germany.
- Steen, M., Manschot M., et al. (2011). "Benefits of co-design in service design projects." *International Journal of Design* (accepted), publication pending: August 2011.
- Stickdorn, M. and J. Schneider (2010). *This is service design thinking. Basics, tools, cases*. Amsterdam, BIS Publishers.
- Vargo, S., P. Maglio, et al. (2008). "On value and value co-creation: A service systems and service logic perspective." *European Management Journal* 26(3): 145-152.