Service Dominant Logic in Practice: Applying Online Customer Communities and Personas for the Creation of Service Innovations

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Many companies try to adopt a service-oriented perspective when developing new offerings by posing the question of how the creation of value jointly with customers can be improved. This requires a holistic view of customers beyond retrospective methods such as surveys. Observations of everyday life provide a valuable complement, because they initiate innovations not explicitly based on wishes formulated by customers, but on customer practices. Drawing on a case study of the Swiss Federal Railways (SFR), it is explored how 'value-in-context' and 'co-creation' can be put into practice. Online customer communities were used in the case study as they unveil value-in-context and practices of customers, which are important sources of innovation. The findings suggest that personas that were constructed based on the results from an online customer community consolidates user behaviour and contextual data and can help managers to improve their offerings in a service-oriented way.

Key words: personas, online customer communities, value-in-context, co-creation, service innovation

Introduction

What is the key to the success of Facebook, Google and Twitter? What's the reason why, within the space of just a few years, they are now enjoying a higher company value than long-established 'brick and mortar' companies? Traditional management and marketing literature, with its basis in the separation between producer and consumer, provides little in the way of approaches to explain this fact. In reality, this sharp dividing line is becoming increasingly blurred, with a rise in co-creation, and customers becoming increasingly involved in business activities and firms' marketing (Prahalad

and Ramaswamy 2000; Vargo and Lusch 2004). Companies taking a service-centred perspective in accordance with Service-Dominant Logic (sdl) can benefit considerably in their business activities. Beyond traditional word-of-mouth practices, customers attempt to influence public opinion and policies of companies, e.g. by negotiating directly with suppliers intending to bypass the provider (Vargo and Lusch 2009). This trend of perceiving customers as a part of the extended enterprise and co-producers of the firms' marketing is projected to rise over the next decade. 'Thus enterprises have to learn not to fear it but embrace it as a healthy part of a highly networked market economy' (Vargo and Lusch 2009, 6).

But how can companies fulfil these requirements that are known as the Service-Dominant Logic (sdl) paradigm and put them into practice? Companies are still hesitant in their use of methods that go beyond traditional one-way communication, e.g. surveys when it comes to new service development (Schäfer, Sager, and Stricker 2014). Yet there are approaches worth applying to innovation processes to gain a more service-oriented perspective. The Persona Approach for example (Cooper 1999; Adlin and Pruitt 2007), familiar from product and software development, offers a good starting point for this, as it supports companies with taking a service-centred perspective. The following contribution shows the results from a case study that was part of a research project of Swiss Federal Railways (sfr), applying specific approaches for sdl. An online customer community should unfold the 'value-in context' perception of the customers and help to adopt a customer-centred perspective for the development of new service offerings.

The sdl Perspective in the Case Study 'Integrated Mobile Work'

The starting point of the 'Integrated Mobile Work' (imow) research project reported herein was the observation that people increasingly use places and rooms as their workplaces which were not originally intended for this purpose. This 'expands' the generic service of mobility provided by public transport by a new component: Commuters and business travellers increasingly use the train as a place to work, and thus co-create new services. It is estimated that in Switzerland up to 50 per cent of the workforce manage their work flexibly as far as time and place are concerned (Grote and Staffelbach 2010). Swiss commuters increasingly use the railway as their main means of transportation: In 2012 their number reached 591.000 commuters; this is a significant increase compared to 327.000 in 1990 (Bundesamt

für Statistik 2014). The sfr reacted to this development not only by expanding the railway network, but also by investing in the infrastructure, for instance by installing sockets and creating business areas or quiet compartments on their trains.

But how can the service offering for mobile workers on the train be improved? And how can mobile and multi-locational knowledge work be managed and supported in a more efficient and effective way? These were the central questions of the research project that included the sfr, amongst others representatives of Swiss companies interested in mobile work, and researchers from the Northwestern University of Applied Sciences and Arts and Lucerne University of Applied Sciences and Arts.

In order to answer these questions, the sfr had to gain knowledge about this increasing customer segment. The service-oriented perspective supports the search for innovation potential by posing the question of how the creation of value jointly with customers (co-creation) can be improved. For that reason, the focus was placed on commuters and business travellers in their roles as co-creators including these customers' way of working on the train (e.g. preparing meetings), their use of electronic and other devices (e.g. working on a laptop or on paper) and their habits while commuting (e.g. choosing the best place to sit and work).

In the course of the transition to flexible labour, mobile methods of work are of increasing importance. To adequately support and manage these is central for performance and the realization of savings potentials in facility management. The imow research project that was carried out between September 2012 and March 2015 was employed to develop methods and tools to diagnose and design successful mobile labour and Swiss Best Practices.

Core Principles of sdl: 'Value-in-Use', 'Value-in-Context' and 'Co-Creation'

sdl considers the creation of value to be a process determined individually. If someone buys a material product, he does so to use it within a certain context; hence he benefits from it in a certain way. In consequence, all offers are services either provided in direct contact with customers (e. g. visit to the hairdressers) or with the help of a material commodity (a car serves to provide the benefit of mobility) (Vargo and Lusch 2004).

While the traditional economic model assumes that value – which is generally viewed from a financial perspective – is created through the exchange of products and services (value-in-exchange), sdl

makes a case for so-called value-in-use: Value is only created once customers use products and services. Customers are always contributing to the creation of value in the shape of co-creation by using products and services provided by the company for their own value-creating activities. As this use can vary, value-in-use also differs from one customer to the next (Vargo and Lusch 2004). Later, value-in-use was revised towards value-in-context underpinning the absence of the dichotomy between firms and their customers, but replacing them with a collective conceptualization of actors based on resources, service efforts and contexts (Vargo and Lusch 2011). Context is an important dimension of value co-creation because it frames exchange, service, and the potentiality of resources from the unique perspective of each actor, and from the unique omniscient perspective of the entire service ecosystem (Chandler and Vargo 2011).

The service-oriented perspective supports the search for innovation potential by posing the question of how the creation of value jointly with customers (co-creation) can be improved. This requires a holistic view of customers, along with customer details beyond retrospective methods such as surveys or interviews. Observations of everyday life provide a valuable complement, because they initiate innovations not explicitly based on wishes formulated by customers, but on the identification of customer-specific and context-related value-in-use. In practice however, a heavily product-focused concept of innovations often prevails. Statistics identifying the competitiveness of national economies consider the number of patents registered to be a yardstick for this purpose. This key figure, while important, is based on the idea that research and development is a process leading to technologically new and better solutions. However, this obscures new ways of finding solutions to customers' problems jointly with them (Michel, Brown, and Gallan 2008). The use of personas can support the process of raising awareness of co-creation and of making it visible.

Studying 'Value-in-Context' with Online Customer Communities

Applying SDL logic requires methods and tools to observe how customers are using products and services on an everyday basis. Self-reporting techniques and diaries of end-users are classic techniques for this purpose and have a long tradition in the social sciences, ethnographic studies and market research respectively. Nowadays, social technologies and mobile devices are opening up new opportunities to study customer behaviour in a real-life context and in real-

time. With self-reporting tools such as online diaries, customers can participate actively in generating new ideas, and such methods have attracted widespread interest, especially in design research (Hagen and Robertson 2010). More recently, so-called online research communities (ORC; or MROCS for market-research online communities) have been used, especially in studies that focus on customer usage of services (Poynter 2010). These new Internet-based survey and contribution methods make it possible to remain close to specific situations of how services are used, and therefore differ from traditional methods of market research (e.g. interviews, focus groups, surveys) this way.

Representing 'Value-in-Context' with Personas

Besides collecting 'value-in-context' data, there is also a need for analysing user insights and presenting them in a way that researchers, marketing specialists, developers and other stakeholders can understand and use for developing new services. We found that the persona approach would be most appropriate to consolidate user behaviour and contextual data. 'Personas are not real people, but they represent them [...]. They are hypothetical archetypes of actual users. Although they are imaginary, they are defined with significant rigor and precision' (Cooper 1999, 124). Although there is no common understanding in literature about the utilization of personas, all methodological approaches pursue the objective of obtaining a deeper understanding of users. The precondition for this is the creation of personas based on user behaviour and contextual data. 'Effective personas are based on the kind of information you can't get from demographics, survey data, or suppositions, but only from observing and interviewing individual people in their own environment' (Adlin and Pruitt 2007, 993). So far, personas have mostly been created from interview studies (Goodwin 2009). In our research case, we wanted to challenge this by creating personas from the data collected by customers from the online community. We report on this procedure in the following sections.

The Mobile Working Online Customer Community

In the research project, the online customer community 'iworkmobile' with the look and feel of a social network site was employed. We selected a representative sample of 33 Swiss commuters and business travellers working regularly on the train. According to Poynter (2010) a sample between 30 and 40 participants is suggested to

deliver sufficient information within a two-weeks short-term community focusing on qualitative insights. The participants were recruited through a customer panel using a recruiting screener (questionnaire) to select participants according to specific criteria. The criteria were developed based on existing demographic data of sfr's customer segments and official statistics for commuting and business travelling in Switzerland, indicating for example that 60% of business travellers are male (Bundesamt für Statistik 2014). The resulting sample constituted 11 women and 22 men with an average age of 44 years and a range of 27 to 61 years. 73% were commuters, 85% were business travellers (overlapping categories). 82% of the participants were employees, 12% self-employed. Another important criterion was the frequency of mobile working on the train. Five participants indicated to work on the train five or more days a week, eleven said they worked three to four days a week, and eight persons stated that they worked three days a week. The rest of the participants worked less than two days a week on train. The last criteria to create a representative sample was the commuting time: In each case, a third of the participants had a commuting time of either 15 to 30, 31 to 60 or more than 60 minutes.

The main purpose of the online community was to document problems occurring while working on the train, and to collect ideas for new services directly from the customers. The online community was open for two weeks and could be accessed by computer or smartphone. This was especially important as participants reported directly from the train or wherever they experienced a critical situation. Participants created a personal 'mobile worker'-profile, kept a diary of mobile working experiences via blog articles and pictures of current situations on the trains, contributed to online discussions, and participated in ideation tasks like 'build the future mobile-working train'. Participants could also contact each other and initiate discussions with each other. The activities on the platform were moderated by one of the authors.

A content analysis was conducted of the qualitative material from the online research community. The categories we derived served as the basis for developing personas. The most important category with regard to co-creation of value was the behavioural category 'activities'. Within this category, different characteristics were identified, e.g. being on the phone a lot/rarely, reading a lot/rarely, or creating many/only a few documents. Looking for common features and differences in these characteristics helped to form groups. These represent the so-called 'persona skeletons' (Adlin and Pruitt 2007). To

Notes Nora, 50, self-employed Consultant

As a consultant, Notes Nora often travels to client meetings. She **travels second class** and has a **Half-Fare travel card subscription**. She would not buy a general travel card subscription, as she thinks this would not be worth it for her. Notes Nora does not have any seating preferences. However, it is important who she sits next to, as she likes to travel in a pleasant atmosphere.

Activities

Notes Nora usually makes a **spontaneous** decision about whether to work, and what on, while she is travelling. On the train, this mainly involves **reading** documents and reflecting on **client discussions**. For this reason, Notes Nora mainly travels with **paper and pen**. She very much appreciates paper as her working material. She only ever uses her **notebook** sporadically to correct documents or revise them.

Her attitude towards the train as a place of work Because her **work-life balance** is very important to her, she deliberately ensures she can relax. She considers trains to be both a place of work and also a chance to **relax**. She is therefore often bothered by the **noise** other passengers make, especially when they are on the phone.

Wishes and needs
• Bright, adjustable reading light
• Generous spaces to rest papers on
• Safety

Laptop Luis, 43, Department Head

Laptop Luis has a general travel card subscription and travels **first class**. He prefers to sit in the **business compartment** because of the large tables provided, providing him with plenty of space for his **laptop** and his papers. If he cannot find a seat there, he will look for a quiet four person compartment. The main thing is he can **work without interruptions**.

Activities

His activities on the train mainly involve the **creation of documents, reading** and processing **of reports and protocols** and working through e-mails. Laptop Luis is always **very well prepared** and structured, so that he can use his time on the train as effectively as possible. His working day starts on the train, and he considers his long journey times working hours. Internet interruptions really annoy him.

His attitude towards the train as a place of work The reasons for Laptop Luis to interrupt his work on the train are few. Very rarely he does read the papers. The thing Laptop Luis particularly appreciates about his first class general travel card subscription is the **SBB Lounge** at Zurich main station. He often spends his time there working while waiting for his next appointment. He would like to see such **"Wait & Work Places"** established at all larger stations.

Wishes and needs
• Comfortable furniture
• Better Internet connection
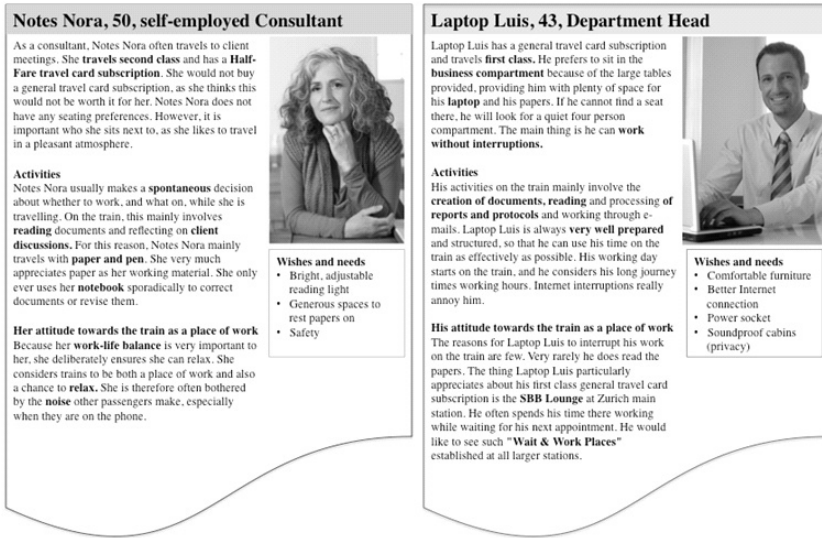• Power socket
• Soundproof cabins (privacy)

FIGURE 1   Personas Created from Online Customer Community

describe these personas in more detail, personal profiles and narrative text elements were used, e.g. describing which personal devices are used (smart phone, laptop, pencil and paper), which activities are done during the train ride (write emails, read, prepare meetings, talk on the phone, relax), whether a special seat is chosen (in the silent zone, where tables are available) and which desires and concerns are prevalent (free WIFI, privacy). A succinct name was then selected to reflect the most important characteristics of each persona. In total four different personas could be identified: 'Tablet Toni', 'Comfort Karl', 'Notes Nora' and 'Laptop Luis'. They represent personas from the mobile working community. In picture 1 an example is given for two persona descriptions. In this way every persona becomes a representative of one user group and specifies a respective 'value-in-context': Notes Nora's 'value-in-context' consists of using the train ride to simply relax or to prepare client meetings. For this reason she reads documents that she printed out beforehand, and takes notes on paper. Laptop Louis, instead, uses his laptop a lot on the train. For him, travelling is valuable time to work on his emails.

Service Offerings Gained from the Mobile Working Community

With the help of the content analysis, we were able to be identified four main user needs and to represent them in the personas: Quiet-

ness allowing for concentrated work, privacy (confidential data and phone calls should not be seen/heard by others), ergonomic workplace design (e.g. suitable tables), and safety issues (e.g. anti-theft solutions for work equipment).

Commuters and business travellers not only documented their user behaviour and problems in the online community, but also their own suggestions for solutions to their problems. For example, to meet the need for privacy on the train, Laptop Luis suggested using telephone booths on trains for confidential discussions. Notes Nora would appreciate a lockable storage space integrated into her seat, and the use of sound-absorbing materials in train interiors.

To systematically generate solutions to the problems and needs identified in the online community study, we conducted a workshop with sfr representatives and customers. The personas served to select participants for these workshops as representatives of their target groups. The outcome of this workshop was the basis for a design sketch of a new business coach for mobile workers. For example, a 'single working space' area was created in a new business coach, allowing for individual and concentrated work. In a following step, the personas were sent on an imaginary journey in the new business coach. As a result it can be stated that the 'single working space' covers many demands concerning the mobile work of Notes Nora and Laptop Luis. Some details (e.g. the design of the tables and coat racks) not yet considered in the design sketch were uncovered and were considered in the further development of the concept.

Conclusions

The case study shows how 'value-in-context' and 'co-creation' can be put into practice. Applying an online tool for customers proved to be a useful instrument for reporting their daily experiences and for gathering information on value-in-use. Besides transportation from A to B, Notes Nora benefits from the train ride because she can read and relax, and Laptop Louis benefits by being able to deal with emails in an effective way. The personas were a major guideline for the design of the new train coach and helped to focus on the essence. In a complex reality, companies are often faced with the challenge of identifying the 'right' customer needs. Personas make it possible to condense a multitude of data and to reduce them to the most significant points from a user perspective. The Personas generated from the online user content served to (1) getting to know and understand the user (Cooper and Reimann 2003), (2) raise awareness of the user perspective in the overall innovation process, and (3) take up

specific customer ideas. This way co-creation was put into practice.

Companies should shift their product-focused perspective on innovations towards a service-centred perspective. Increasingly, successful innovations are no longer developed in R&D labs, but are solutions arising from co-creation with customers. An important precondition for this is a basic understanding of the active role of customers and their involvement, systematically and continuously throughout the innovation process.

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