TOWARDS A STRUCTURED WAY TO REPRESENT FUTURE SERVICE ROLES

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ABSTRACT

Service designs suggest changes in service systems, that – when implemented – change roles of actors in such systems. To fulfil their new role, actors in a service need to know what is expected of them and be both willing and able to perform this new role. Combining data from an ongoing service development project with existing knowledge of external representations used in service design and Role Theory, we propose a framework showing the extent to which different aspects of envisioned roles are included in different types of service representations. This provides a structured way to describe and evaluate roles, adjust them if needed and prepare service actors for their own and others' new roles.

INTRODUCTION

Designing for service suggests new constellations of actors in service systems (Kimbell, 2011), which often imply changes in roles of service actors (e.g. Lin et al., 2011; Wetter-Edman et al., 2014). Successful reconfiguration of the service actors requires that service actors know what is expected of them in their new role and that they are able and willing to fulfil that role. This requires the development of structured ways to explore, evaluate and adjust envisioned roles and to learn about what actors need in order to fulfil them.

As part of an ongoing service development project, we have conducted interviews where a visualisation of the process of an envisioned service was used as a discussion piece. In this paper, we show that it's possible to use Role Theory vocabulary to articulate different aspects of envisioned roles that informants comment on, some of which were made explicit in the process visualisation used.

We combine these insights with our understanding of service representations and a structural model of roles from Role Theory to hypothesise a how (well) external representations commonly used in service design facilitate the representation of different role aspects. Having such a framework supports decision-making when using representations to describe and evaluate envisioned roles. Furthermore, it creates awareness for what role aspects informants comment on when interacting with a representation.

BACKGROUND

Various external representations of future services are used in service design (Blomkvist and Segelström, 2014). Visualising aspects of a service is done to articulate insights, communicate insights or keep empathy (Segelström, 2013). Different types of visualisations exist: *flows* (e.g. customer journey map)*, maps* (e.g. stakeholder map)*, images* (e.g. personas) or *narratives* (e.g. storyboard) (Diana, Pacenti and Tassi, 2009). Prototyping is a collaborative activity that is used by service designers for learning (exploring and evaluating) or communicating (Blomkvist and Holmlid, 2010). Prototypes are definite or ongoing representations of a service, where definite representations do not allow you to experience a service, while ongoing representations do (Blomkvist, 2016). Examples of such ongoing representations are role plays, service walkthroughs, (where interactions in a future service are played out), and desktop walkthroughs (where a miniature version of the service system is built, using – for instance – LEGO) (Blomkvist, Fjuk and Sayapina 2016).

Some of the ongoing representation techniques build on (enacting) roles in a service (Blomkvist, Åberg and Holmlid, 2012). In addition, in (service) design research, various techniques and methods exist to document existing roles (e.g. Sangiorgi, 2009) and question these roles, for instance through Forum Theatre

(Boess, 2008; Buur and Torguet, 2013). We intend to build on and contribute to this by developing structured ways to explore and describe *envisioned* roles.

We see a potential for Role Theory (see e.g. Biddle, 1986; Guirguis and Chewing, 2005) in developing these structured descriptions of envisioned roles. Role Theory frames roles as a set of expectations for behaviour that is related to a specific position in a social system (e.g. parent, friend). An actor taking such a position is referred to as role incumbent (Dahrendorf, 1973). Different metaphors have been used to highlight different aspects of a role (Biddle and Thomas, 1966, p. 13). A theatre metaphor (e.g. Goffman, 1959) puts emphasis on dramaturgical aspects of a role in interactions. A structural model shows how actors in a social system form a network and how functions and aims are distributed among them, in the form of roles (Turner, 2001). Each role has a specific purpose as a part of the system, which includes specific activities and demeanour. Fulfilment of a role requires certain skills, talent, resources (e.g. time, energy) and motivation (Turner, 2001). Figure 1 shows our view of roles when using a structural model for roles. In this paper, we chose this structural model because we are interested in how roles affect the way value co-creation takes place in a service (eco)system as a whole (see e.g. Vargo and Lusch, 2015, p. 10-11) rather than the level of individual interactions. This is also the reason why we decided not to use the theatre metaphor for roles.
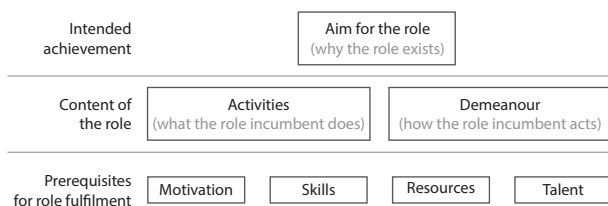

Figure 1: Framework of role aspects using a structural model for roles

METHOD

We work together with a producer of trucks and buses in a project that researches hardware and software for guided troubleshooting, both remotely and in a garage, to improve the process of troubleshooting and repairing trucks and buses. In addition to the deployment of the technology, a new touchpoint will be introduced in the service process, where remote troubleshooting is performed by what is referred to as a *helpdesk* in the remainder of this paper.

We performed 26 semi-structured interviews with actors in the current service system for troubleshooting and repair of trucks and buses, to learn about their conception of consequences that the deployment of the technology can have on their work. The first author conducted the interviews in spring 2016, in Spain (4 customers, 7 workshop employees), Germany (3 customers, 10 workshop employees) and Sweden (2 roadside assistance operators). We did not have the opportunity to interview drivers.

The interviews consisted of two parts. The first part focused on the current practices when a truck experiences technical problems. In the second part, we presented a written description of project and a *flow*-type visualisation of the service process as envisioned by the project team of the truck manufacturer. The visualisation showed actions that will be performed in each step of the process, who will be involved in each step and what service resources these actors need in order to complete the actions in a specific step of the process (see Overkamp and Holmlid (2017) for the visualisation). This part of the interview focused on what the interviewees saw as consequences for (1) their own work and (2) the work of other actors in the service system. Role Theory was not used as a starting point for (developing the questions for) the interviews.

RESULTS

We used Role Theory as analytical framework to articulate how informants talked about possible effects of deploying the technology in the service system. They mostly commented on aims and activities of envisioned roles, followed by comments about the skills that are required for these roles. Examples are given below.

Activities and aims of the future role: *"I expect that if the helpdesk can do a first troubleshooting then the mechanic will not have to do so much troubleshooting anymore."* – Spare parts responsible, Germany (translated by the author).

Skills needed for the role: *"[The helpdesk] has to be really well prepared and also they have to know how to deal with the driver"* – Customer #2, Spain (translated by interpreter).

Fewer comments were made about resources and motivation, but these aspects were still mentioned:

Motivation to take the envisioned role: *"I am not sure whether I would be willing to take on the role of the helpdesk. Depends on the case, depends on the day."* – Workshop manager #1, Germany.

Resources needed for the role: *"Maybe they will have to change the current organisation, because maybe [if] the workshop manager receives all this information the workshop manager could be overloaded."* – Receptionist #1, Spain (translated by interpreter).

Comments relating to demeanour and talents were least common. Some quotes touch upon these aspects tangentially:

Talent: *"If you have to take information from the driver it also depends on some of the drivers. Maybe it's helpful if you have a pro-active driver (...)"* – Customer #1, Spain (translated by interpreter).

Demeanour expected from a role: *"When it is a serious problem and the helpdesk already says that, then the customer already knows that. Maybe he also has more understanding then as well."* – Jr. mechanic #1, Germany.

	Flow	Narrative	Image	Map	Role play	Service walk-through	Desktop walk-through
Aim	possible	possible	possible	possible	possible	possible	possible
Activities	represented	represented	possible	possible	represented	represented	represented
Demeanour	n/a	possible	represented	n/a	represented	represented	possible
Motivation	n/a	possible	possible	n/a	possible	possible	possible
Skills	possible	possible	represented	possible	represented	represented	possible
Resources	possible	possible	possible	possible	represented	represented	possible
Talent	n/a	possible	represented	n/a	represented	represented	possible

Table 1: Framework with propositions regarding whether certain role aspects are always represented, possible to represent or not available in different types of external representations that are commonly used for communication and learning in service design.

DISCUSSION

Flows commonly represent activities of different actors in a service process. The aim of a role, as well as skills and resources needed for it can be added. Demeanour, motivation and talent for a role are normally not represented in flows. The flow-visualisation that we used during the interviews focussed on what happens in the envisioned service process. We believe that making the actions for each step of the process explicit in the visualisation, contributed to the frequency with which informants commented on activities for a role compared to other role aspects, such as talent and demeanour.

Other types of service representations are suitable for representing a different set of role aspects than *flows*. In Table 1, we hypothesise how well different service representations articulate different aspects of a role, based on our repertoire of examples of the different service representations that we know of. Depending on the type of external representation, role aspects are always represented, possible to represent or not available (n/a) in the representation. *Narratives* commonly contain information about activities and it is possible to articulate demeanour that is expected from a specific role in these activities, as well as prerequisites that are needed for the role. A persona (*image*-type of visualisation) makes demeanour that is representative for a specific service actor explicit. *Maps,* in their basic form, contain little of the role aspects, but it is possible to add information on role aspects. Demeanour of different roles is represented in role plays and service walkthroughs, where service interactions are acted out. Desktop walkthroughs represent the activities of the service process as well as who are involved in them. They facilitate the representation of demeanour to some extent, by *animating* avatars used for the service actors.

Visualisation and prototyping techniques can be used in different ways. The choice of method and who makes the representation (e.g. service designers vs. actors in the service system) provides access to different types of knowledge and leads to differences in power dynamics

between those articulating and those commenting on the representation. In the project we are involved in, technology developers made the flow visualisation of the service process with remote and workshop troubleshooting. This representation was then used as a discussion piece in interviews. As a result, informants who comment on the representation may have experienced less freedom to challenge the (expectations for) roles than if they are involved in articulating them.

However, as the interview data shows, not just role aspects that are articulated through the service representation are necessarily discussed. It is possible that aspects that are not articulated in the representation are be taken up by informants anyway. Yet, we expect that comments for those role aspects that are represented (and thus made explicit) will be more specific in nature because informants respond to something which made explicit in the representation.

Evaluating and adjusting future roles upfront allows a smoother process realisation of the roles. Being aware of the expectations for behaviour that are related to a role helps role incumbents prepare for their role. It also helps managers prepare the prerequisites (e.g. skills, resources) for their staff. However, we do not expect that it is possible to evaluate all role aspects upfront. Also, having a role in role play may work, but doing so for a longer time might not. Or vice versa: experience with a role can be gained quickly, making a role tenable.

Finally, focusing on (representing) envisioned roles of actors in a service system raises the question whether roles can be a design material in services as well as whether it's possible to imagine entirely new roles or if future roles will always be built on/derived from existing roles.

For flows, we have made a first evaluation of our hypotheses from Table 1 with data from the interviews, but for the remainder of the framework, our hypotheses need to be tested by looking at the use of external representations in other cases.

CONCLUSION AND FUTURE RESEARCH

With the realisation of new ways of value co-creation, the roles of actors in the service system change. In this paper, we hypothesised how well differnt aspects of envisioned roles are represented by different representation techniques that are commonly used in service design. We grounded some of these hypotheses in data from an ongoing service development project.

Knowledge about which representations provide access to what aspects of an envisioned role supports decision-making regarding what techniques to use in order to cover all aspects of envisioned roles. It also makes it possible to point to what element(s) of an envisioned role service actors address when working with representations of the future situation of service. This paper is thus a first step towards a structured way of describing and evaluating envisioned service actor roles

More research is needed in order to test our hypotheses regarding what representations facilitate communication and learning about which role aspects. For instance, by looking at the use of external representations in other cases, to see what aspects of roles are articulated in and discussed using those representations.

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