The service Ouroboros: Designing persona service cycles

Sune Klok Gudiksen[1], Eva Brandt[2]

sunekg@hum.aau.dk

*(1) Aalborg University, (2) The Royal Danish Academy of Fine Arts*

Abstract

Many companies investigate new business opportunities in a turn from product to service design. As service offerings expand over time and space, such notions as 'customer journey' or 'service blueprint' have been suggested to grasp and design the nature of the emergent services. However, we find that there is room for improvement on two levels. First, customer journeys and service blueprint tools could benefit from an empathic customer understanding; that is the design of customer-specific services. Secondly, the existing customer journey and service blueprint tools are less concerned with the cyclic nature of services, by which we mean the dynamics of a customer relationship and its development over time. We report findings from collaborative workshops, in which we challenged two companies to try a new concept and tool we call 'The service Ouroboros'. We suggest it as a more appropriate way to design various customers' service cycles.

KEYWORDS: service design, service cycles, touchpoint, service ecology, customer journey, empathic design, personas

Introduction

A major difference between service design and other areas of application is whether one designs for a single interaction with one product or for a series of events, cues, interactions or touchpoints, and therefore interactions across time and space. For instance, Shostack introduced the notion of touchpoint thinking by saying that "the design of service should therefore incorporate the orchestration of tangible evidence – everything the consumer uses to verify the service's effectiveness" (Shostack, 1984, p. 136). Carbone & Hackel likewise argue that the role of the service provider, producer or designer is to orchestrate 'clues' (Carbone & Haeckel, 1994). Several later articles echo this aspect of service design, sometimes calling it 'service encounters', 'experience points' or 'cues' as synonyms for the popular industry term 'touchpoint' (Bitner et al., 2008; Chesbrough, 2010; Zomerdijk & Voss, 2010). Clatworthy (2011) proposes that the service design field should think in terms of touchpoint innovation as one of the core foundations. The service design begins from the

moment a customer comes into contact with the organisation and lasts until the customer concludes contact. Therefore, interest in service design is related to considering time, and as part of that, the change of spatial settings, as an object of design, and creating design tools that support the sketching and prototyping of time aspects. Existing tools with a focus on time aspects in service relate to the concepts of 'customer journeys' and 'blueprints'. The creation of customer journeys is often used in industry and as far as we have seen, mostly as a post-it note identification of the touchpoints in a service. For example, in the customer journey canvas map proposed by Stickdorn & Schneider (2010) there are boxes of touchpoints, divided into pre-service, service period and post-service. The main idea is to see a customer going through these boxes in a linear way (see Figure 1).
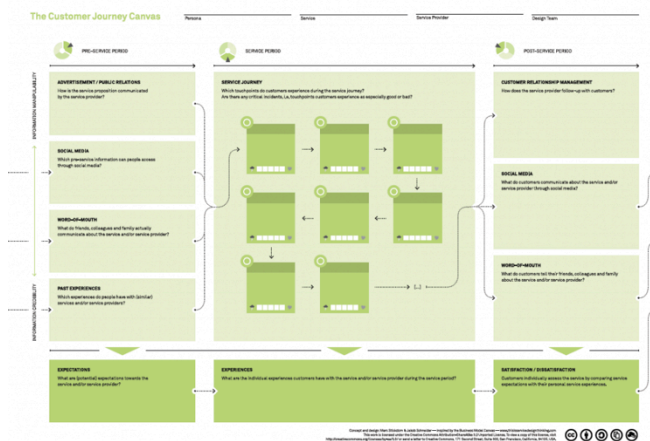
Figure 1. Stickdorn & Schneider (2010) *Customer journey canvas*.

Creating blueprints is an activity proposed by Shostack and further developed by Bitner and colleagues. It deals with components that according to the authors are important for service design — that is, delivery channels; the various actors involved, including managers, staff and partners; and the contact each of these have with the customers in a given touchpoint situation (Shostack, 1984). Service blueprints are a "visual notation for depicting business processes via symbols that represent actors and activities" (Bitner et al., 2008, p.5). Bitner's example of a blueprint consists of five components, organised in a table: physical evidence, customer actions, onstage, backstage, support processes.

When looking into the literature we have been surprised about that a customer perspective is not explicitly present in the first steps in the creation of a customer journey or service blueprint (see for instance Shostack, 1984; Bitner et al., 2008; Clatworthy, 2011). While these researchers properly have the customers in mind during the activities the report from, no concrete exploration of the understandings of the customers are visible. This brings us to our two concerns related to customer journeys and service blueprints.

First, current ways of designing customer journeys and service blueprints seems to rely on either a provider perspective on the touchpoints or an implicit understanding of the customers. The research do not seem to question if customers always go through the same order of touchpoints and if they always expect the same outcome from a certain touchpoint and from the service as a whole. One exception is Stickdorn & Schneider (2010) who mention creating personas as a possible activity. Still there is no supporting concrete exploration of how it might be incorporated in the service design process. This does not correspond well with Bitner et al.'s notion that "service(s) are fluid, dynamic, and frequently co-produced in real time by customers, employees, and technology, often with few static

physical properties" (2008, p. 2). In short, the existing tools are not tied to a thorough understanding of a specific customer's service run of events. As a contrast it is common in the field of interaction design to do user research as one of the first steps of the design process. As a way to keep specific user groups insights in mind throughout the design process, creating personas have been suggested (Cooper et al., 2012; Adlin et al., 2007). Personas are fictitious archetypes, which aim to describe real goals and behaviour patterns in specific user or customer groups. Previous research in personas has led researchers to claim that this activity significantly improves idea and concept development (Long, 2009; Nielsen, 2012). According to Cooper et al. (2012), personas are used mainly to avoid two problems. The first is what Cooper et al. (2012) call *the elastic user*, in which designers consistently bend the understanding of users to fit to a certain idea. In relation to the transferability of personas, the field of service design is concerned with the difference between business-to-customer (b2c) and business-to-business (b2b). Whereas end-user personas consist of such issues as skills, preferences, behaviour, desires etc., it is different for b2b as companies, institutions and the like have a different set of concerns than end-users. There might be a committee of people to address instead of a single person; companies might want long-term relationships, not just a one-time offer, and in general the selling process might be longer and more expensive (Blaney, 2012). Service and customer relationships develop over time and in service cycles, and for the provider to attend to customer-specific desires, our proposition is that a deeper customer understanding is necessary. Our first question is therefore: In what way can an exploration of touchpoints address customer-specific touchpoints through customer understandings, both b2c and b2b, as an early activity in a service design process?

The second concern we have is related to the existing service design tools ability to support the development of customer-specific service cycles. As far as we have seen, customer journeys and service blueprints seem to be grounded in a linear way of thinking. Designing and illustrating the service in the current customer journey and service blueprint style neglects the dynamic relationship between provider and a specific customer, and the difference in entry points, the order of the touchpoints, and the exit points according to a specific customer group. Furthermore, we propose to think in service cycles rather than journeys, as journeys imply an ending, not a continuum, and for b2b, not a long-term offer. In the industry and academia there is increasing attention given to ongoing journeys, or at least the tools implies that it could be ongoing. For instance, the *Customer journey canvas* from Stickdorn & Schneider (2010) includes arrows pointing towards second rounds or continuous offerings. However, in order to work explicitly with possible 'never-ending' journeys, one would have to make a new canvas mapping, and thus miss out on the relationship between the various customer service cycles. An interesting example in this direction is the AT-ONE project, in which the researchers experimented with a card-based toolkit (Tollestrup, 2009; Clatworthy, 2011). Their research found that the cards could be used to map existing situations; identify touchpoint problem areas; create awareness of the actors who are responsible for the touchpoint; attention towards routine service delivery; experimenting with addition and subtraction of touchpoints, and forced association through random card picking. These are inspirational insights, but still they are not directly tied to a deep customer understanding and do not support a cyclical service nature. Our second question, therefore, is: In what way can we create a concept and a tool that takes into consideration the dynamic relationship between a company's service and a specific customer group, like the order of touchpoints for various customers, identification of new customer specific touchpoints, and second service cycles?

In this paper we report on two collaborative workshop cases of the abovementioned two areas of concern: what a deeper customer perspective in combination with a touchpoint-related activity might result in, and how the touchpoint activity can support the design of customer-specific service cycles. In the search for a more appropriate concept and tool for the sketching and prototyping of customer service cycles, we challenged two companies to experiment with a double activity — first they had to create b2c and b2b personas, and then they had to create service cycles according to the specific customer group.

Research method

This work is based on action research; that is intervention experiments in design workshops in which we engage participants in trying out new collaborative methods. The type of intervention experiment is in family with Schön's notion of *exploratory experiments* in which an action is undertaken only to see what follows, and *move-testing experiments* in which there is a possible end in mind (Schön, 1983, p. 128-168). Our results are based on research-through-design (Frayling, 1993) and an experiential learning cycle in four steps: (1) designing the tools, (2) design interventions through the tools in collaborative workshops, (3) observing the action and (4) reflecting through relevant theory and extracting design principles (Kolb, 1984). As design researchers, we work with companies to propose a new course of action to help their community improve its work practices.

We report from experiments with two workshop design cases and activities. The arrangement was respectively a one- and two-day workshop where the business case owners, together with invited participants, went through several consecutive design activities we had prepared. We report from two of these activities: creation of personas and touchpoint service cycles. These two activities took a total of one and a half hours. Towards the end of the day, we introduced evaluation sessions to get concrete feedback from participants.

The analysis is based on empirical material; on notes and observations from the day, as well as video recordings of the entire activity. Video is a vital addition to the direction of research-through-design as it helps document and communicate the results, thus preventing the results from being a gathering of reference materials (Frayling, 1993). The video recordings were transcribed and analysed through the use of interaction analysis (Jordan & Henderson, 1995). By comparing incidents across the sessions we are able to explain how the design tool scaffolds the discussions of new service design initiatives.

We present the results as design reflections related to the Schönian description of reflection-in-action, as the reflection that takes place while a design problem is being addressed and surprises occur, and reflection-on-action as the reflections that happen after an event (Schön, 1987). We seek to incorporate into the paper the design tool intentions and the reflection-on-action between the workshops, as there were some changes in the toolkit in the second workshop, which were directly initiated because of the first workshop. Our focus is on the combination of personas with touchpoint thinking, e.g. how these two elements play together, and therefore we are less interested in the personas in isolation and touchpoint innovation without explicit user understandings.

Design tool intention

In earlier workshops we have worked with the exploration of more traditional, linear customer journey tools. In the search for a concept and tool to better encapsulate the service nature we came to think of the symbol of Ouroboros, in which a serpent (in some pictures it is a dragon) is biting its own tail. This is an ancient symbol used in many cultures, including ancient Egypt, Greece and Nordic mythology, among others. Recurring meanings are the renewal of life, death and infinity; continuity and cyclic nature; the whole in relation to the parts (see Crystalinks (2013) for a short history of the symbol). Applying the Ouroboros symbol to services in the above meaning creates an opportunity to articulate a service cycle agenda in just one design tool. It implies that services per se do not have a fixed beginning, middle and end; services expand in cycles for various customers and according to the often ongoing relationship between provider and customer.
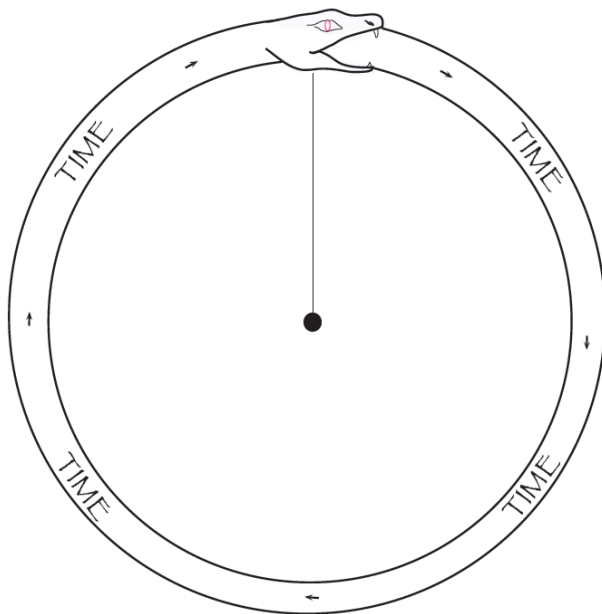
**Figure 2: The service Ouroboros template**

Besides using the Ouroboros template (figure 2), we have experimented with various material artefacts that could physical represent touchpoints. The card-based toolkit in the AT-ONE project shows that visualisation is one of the non-verbal modelling media approaches that designers often use as a way to bring tacit knowledge to surface (Polanyi, 2009; Cross, 2006). We value the visual stimulation in the format of a set of predefined cards but wanted to experiment with a more neutral set of touch points in order to have the participants themselves come up with and define the touch point they found relevant. We also wanted to explore the use of various 3-dimensional objects instead of using 2-dimensional cards. As Papert & Harel (1991, p. 1) argue, a richer learning happens 'in a context where the learner is consciously engaged in constructing a public entity'. Chances are that these tangible touchpoints become a thing-to-think-with (Papert & Harel 1991). Through his experience with the AT-ONE project, Clatworthy (2011, p. 25) argues: "Foam, wood and clay are difficult to use, since a physical representation of a single artefact does not capture the holistic nature of services." We agree with Clatworthy but tend to see the Ouroboros as a kind of game board that can bring in foam, wood, clay or other materials in the search for illustrating the holistic service in a physical, tangible way.

The physical templates for the b2c and b2b personas was made of cardboard and in a simple manner made so they could stand upright once they were filled out. The b2c persona templates looked like a silhouette of a person and had boxes to be filled out with the

categories: values, dreams, preferences, goals and demographics. This was inspired by Goodwin (2011) who argues that personas have the following characterizations: skills, attitudes, behaviours, mental models and goals, and they might also have demographics. In the templates for the b2b personas categories were: brand values, value propositions, the company's customers and revenue streams, and the silhouette looked like a building in order to illustrate the corporate nature (Figure 3). From our experience, what is important in b2b is to understand the customers core business logic or the business model they currently undertake, and if that knowledge is not present, participants have to imagine the central issues at stake for a b2b customer.

Case 1: Personal development consultancy

The case is about a start-up consultancy focusing on personal development. The offerings were e.g. courses in meditations and visualizations. Besides the case owner, participants in the workshop included a design student, a design researcher and a business consultant. The first activity was to discuss and fill out b2c and b2b personas, depending on who their customers were or could be (at least three altogether). The resulting customers were two b2c customers, 'a frustrated woman' and a 'younger career man', as well as two b2b customers, namely a large telecommunication company and a municipality. In Figure 3 the b2b customer, the municipality is filled out and ready as a shared starting point for the Ouroboros activity.
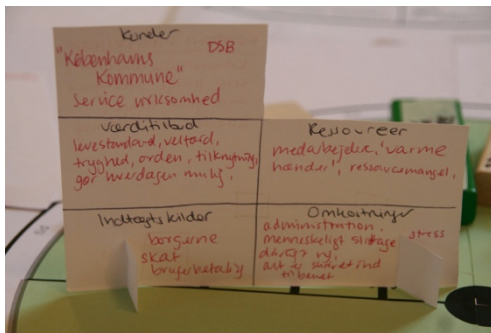
Figure 3. A filled-out B2B persona – with key persona characterizations such as the municipals brand values, value propositions, customers and revenue streams.

Placed on the Ouroboros board the physical presence of the b2b customer is a simple mean to remind everyone that this is the one the group should relate the service to. The task for the group is to identify the service run of events with as many touchpoints they could identify, starting with the first contact with the customer. They were given a set of wood bricks with writeable duct tape to represent the various touchpoints. A pattern quickly emerged in the activity. The case owner was the one who placed the touchpoints in the circle either based on the suggestions of the other participants or by her own initiative. For instance the participants discussed the order of the touchpoints and whether there were anything in between:

> (The group have been over various marketing channels and are now discussing the touchpoint of 'presentation talks for companies')
> *Case Owner:* Then they (ed. listeners/managers) might say, 'We want you to give a talk at our annual theme day.' That could give me access to new customers.
> *Participant A:* Do we think internally now, or…? I think you could distinguish in that way. You probably also have to communicate with the procurement department.

(Case owner takes a blue wooden brick and writes 'lectures for management' on it. She moves a previous touchpoint forward in the circle in order to place this new one as a preceding touchpoint)

Participant A: You could also be part of a project?

Case owner: Yes, I could be part of a development project. Or it might be a user study task.

(Case owner takes two new wooden bricks and writes 'project' and 'user study' on each one, respectively. They are also placed before the 'presentation talks for companies'.)

This is a typical example of the dialogue and interaction throughout the activity. The group along the way identified what could be called 'in-betweens', touchpoints specific for that customer which they had not explicitly dealt with before as a significant part of the service. The awareness of the relations between the touchpoints, the in-betweens and in general the service structure is a core issue in service design (Chesbrough, 2010). This also corresponds with Shostack's (1984) 'identifying processes', which she notes is the first step towards creating a service blueprint, but with the main difference that this is seen from the perspective of a particular customer. The in-betweens identified below might not have been a part of service if the perspective was a provider's perspective of a standardized 'all-inclusive customer'. The circular format of the Ouroboros template and the physical wooden bricks makes it easy to include new touchpoints on the board when they are identified. The order of when touchpoints enter the Ouroboros tells us which of the touchpoints comes first to the participant's mind. These might be the most important ones. However the three 'in-betweens' (see Figure 4) might turn out to be as important as the other ones in the future.

Newly identified in-betweens
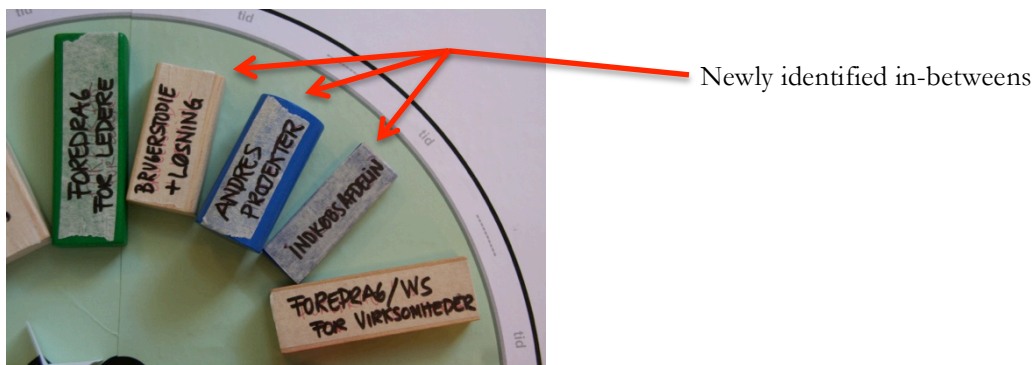
Figure 4. The three in-betweens touchpoints: 'User study/brown', 'Projects/blue' and procurement department/blue.

Through the service Ouroboros circularity and wooden bricks, the case owner reached an understanding of the service structure and how to think of it, which is new for her. The consultancy owner stated that overall she had reached a new understanding of the service and now had a lot of new matters to attend to. The use of the personas created an understanding that the various services should be designed with close attention to the needs or desires of a particular customer.

In observations we noticed that the dimensions of the Ouroboros board and the wooden bricks did not leave room for more than one persona service cycle when the wooden bricks were placed after each other and not beside each other. Therefore we changed the dimensions of the Ouroboros, making it twice the initial size. Furthermore, we decided to experiment with, hexagonal foam touchpoint bricks, to see if the possibility of connecting through the bricks' multiple sides would lead to new service routes in the Ouroboros.

Case 2: Lightweight wagon company

The next case is from the next workshop where we'll focus on the lightweight wagon company. The company has a successful business operation in value offerings to the building industry, but they foresee that in a couple years, they will have to be better at delivering value for completely different customer segments. They therefore wanted to explore how to address new segments, and develop customer strategies for these. The participants were all part of the company, but came from two different departments located in two countries. In the persona creation activity the group decided to create the b2b and b2c in pairs. Thus they found it important to investigate the similarities and differences between b2b and b2c within the same segment. The first b2b customer belonged to the 'main' segment in their business at that time — construction companies and construction sites. The imagined b2c customer was the construction company's b2c customer. The second b2b customer was a festival organizer, and the guests of the festivals were then the b2c customers.

In the Ouroboros activity, the group had time to create touchpoints in relation to three specific personas. The three service cycles were all present in the same Ouroboros, allowing them to address, which touchpoints were shared across various service journeys and which only seemed relevant for a single customer. The Ouroboros and physical foam bricks made comparison easy directly through the visualisation of the touchpoints as illustrated in figure 5. After having been through the festival customer service cycle (the orange ones in Figure 5), they decide to deal with the building industry next (the blue ones in Figure 5) and discuss whether it would look different for that customer segment and if there were unique touchpoints for that customer.

> *Administrative manager:* I would say that very often these particular customers might contact us and say, 'Could you perhaps do this mobile solution for this or that?' Then you would go directly from this phase to that one. (Points from market channels to production touchpoints.)
> *Administrative manager:* They know the needs but are not certain how to get there. We have a few extra contacts here. We go into a meeting with the customer and try to unfold the various needs, and pay attention to that.
> *Sales responsible B:* What I think is important here is a personal visit.
> *Administrative manager:* Yes, absolutely.
> *CEO:* If it is possible, at least.
> *Facilitator A:* Is that a new one [ed. touchpoint] then?
> *Administrative manager:* It is here, but there is also maybe a 'factory visit'. (Several participants agree by saying yes.)
> (He takes a brick and a blue post-it, writes 'factory visit' on it, and places it in the Ouroboros.)

Taking another customer into perspective actually feedbacks on the already identified festival service cycle, as a new one — 'factory visit' — is added because of this. It is discussed whether this would work for both segments. A reason for the addition of this touchpoint might be the previous discussion in itself but could also be because of the Ouroboros' ability to create an overview of all the customer-specific service cycles and touchpoints. Chesbrough (2010) notes that in service design it is of vital importance that companies are able to create strategies in order to consider when to make standardized services and when to create customizable services. As a major insight in the activity, the group became more aware of how to approach each customer, and the group continuously discussed the particular service towards the customer.
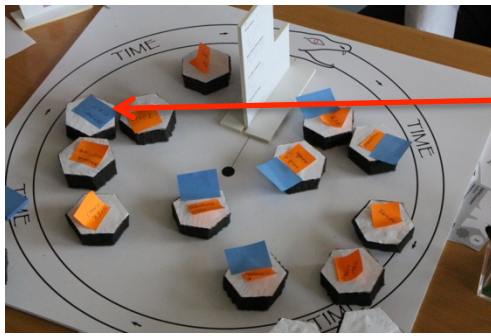
The addition of the touchpoint 'factory visit'

Figure 5. The orange ones are festivals that were placed before the blue ones. The blue touchpoints are the building industry customers. The arrow shows the addition of the 'factory visit'.

The understanding of which customers desire what is developed in a deeper way. By the end of the activity, the groups start to touch upon ways to keep bringing customers in and keep the relationship going after a first-service offer. In the example below, one can also observe how a second offer is closely related to the first one.

> *CEO:* We don't want any involvement from the customer. He has bought this product — that's it. We have experienced that customers wanted to change something, but still expected to have the same delivery time. It creates a lot of turbulence in our production.
> *Facilitator B:* Do you experience clients asking or calling?
> *CEO:* We had one in the past.
> *Facilitator A:* Is there a difference between nursing and influence on process?
> *CEO:* There might be. Why are you asking us about it?
> *Facilitator A:* I'm just asking if it is part of the service, in order for them to come back? Choosing you again instead of competitors?
> *CEO:* It's a good point. We have the possibility to, for instance, send them pictures from the process.
> *Administrative manager:* You mean for him to keep track of what's going on here?
> *CEO:* Yes, then he can see that I have the possibility to change this for the next time.
> *Administrative manager:* But you mentioned (addressed to instructor), how do we make sure that customers return to us? The fact that they feel listened to, that we have tried to accommodate all their wishes, and that we have built up a personal relationship, are central issues to address.

There is an agreement between the CEO and the administrative manager that they have less focus on how to secure the return of customers. Shostack (1984) and Clatworthy (2011) suggest that one of the key processes in service design is to identify so-called 'fail-points' or 'pain-points', by which they mean the touchpoints that are underdeveloped and do not perform well. The missing focus on returning customers is one of these pain-points. These pain-points were not visible in the same way in the consultancy case. One reason for this propably has to do with the business being in a start-up phase. The construction wagon company stated that they would continue the work with the customer strategy, attend to the difference in the service cycles based on the understanding of the customers, and think about how to keep customers in a continued relationship.

Findings - Towards persona service cycle design

In this paper we have experimented with a concept and tool for creating and exploring persona service cycles. The service Ouroboros has been suggested as a format for companies to consider the relationship between a company's services and a specific customer. The

activity is divided in two where the first focus is on creating an elaborate and common image of the b2b and or b2c customer using the Persona technique, and the second part deals with the various personas touchpoints in the Ouroboros.

To critically address our approach it can be discussed whether these fictitious persona archetypes actually create a *deep enough* account of the customers. If time is given in collaboration projects with companies we would suggest ethnographic fieldwork as the first step, or at least as a second step, in order for the personas to be data-driven, and to challenge company assumptions about them. Another way to create a deeper understanding of the customers is to invite them in if one knows who they are before entering the workshop. Though, in other workshops we have noticed that any company-outsider participant in a workshop tend to take, in an intuitively way, a customer perspective resulting in positive conflicts (Gudiksen et al., 2014, see also Buur & Larsen, 2010). Hence, the participative endeavour with outsiders through a tool like the Ouroboros, can, as illustrated in this paper, lead to new insights and new customer understandings.

The tangible touchpoints incentivise a more dynamic use of the tool where touchpoints can be moved around as insights appear, or new touchpoints are suggested. Three-dimensional physical objects like the Ouroboros board and the touchpoints can help us stay in control when dealing with a complex set-up, or these objects can function as a way to externalize ideas. Therefore they also assist to keep track of underexplored touchpoints areas, or ideas for new ones, and with the Ouroboros board participants can see their interconnection. We emphasise the importance of this holistic overview as a counter position to reductionism. This does not prevent deep dives into single touchpoints, but the Ouroboros can be the glue that holds them all together, and prevent participants to loose track of the larger picture. If one separates customer specific cycles from each other we are less likely to find similarities or dissimilarities, which might be important for new design moves. This was demonstrated in the case with the lightweight wagons. We also tend to see these tangible objects as a way to reach agreement in a different way based on a shared understanding. In the words of Roos (2006, p. 85) an object-mediated communication activity like the Ouroboros results in a "tangible outcome of the communication, exhibiting areas of agreement reached as well as persisting differences". Though, it seems we are on the right track with the tangibility issue, the Ouroboros board and touchpoint objects, could perhaps benefit from the same type of images used in Clatworthy's (2011) touchpoint cards. Similarly with previous studies on visualization and cognition (Arnheim, 1969; Latour, 1986; Goldschmidt, 1991) Clatworthy finds that the visual nature of the cards provides embodied communication, and a richer learning than purely text-based activities. Therefore, three-dimensional objects with images providing suitable ambiguity might be a favourable future solution.

We have illustrated how the two companies identified customer specific touchpoints and shortly dealt with prolonged or second-time service offerings. In the construction wagon company they gained an overview of several customer services, which seemed to help them in the identification of the touchpoints that go across several customer groups or that are unique for a specific customer. However, the service Ouroboros concept and tool are still in their infancy. Therefore we suggest the following considerations for upcoming experiments with the Ouroboros or for other similar studies:

Service-related personas: We find that it would be appropriate to add a characterization to the personas in which the current, and maybe future state of the relationship is suggested, which would be different from product-oriented personas. If possible data-driven, ethnographic based personas would be preferable to prevent inadequate understandings of customers.

Holistic overview of service cycles: In a board like the Ouroboros it is possible to place several service cycles allowing for comparison. If a company have many customer groups the dimensions should be bigger, or one can maybe build in heights. This could lead to an overview of standardized and customized touchpoints

Tangible objects and images: We suggest that the tangible objects, whether it is the Ouroboros board, the tangible touchpoints or similar, are combined with images. We suspect that the combination of three-dimensional objects with visual imagining can result in multiple senses being used to achieve new insights.

Service design components: It might be that the components from Bitner et al. (2008) service blueprint such as backstage/front stage and support processes can be added to the Ouroboros through the use of different objects. This might lead to a higher complexity, which is not necessarily fruitful, or on the other hand the result might be beneficial in terms of clarity. We have yet to explicitly experiment with these components as part of the Ouroboros.

Service time aspects: A final element we find highly interesting is to explore how the time issue can be further explored. For instance the Ouroboros can be divided into circles or spirals with outer and inner rings to address prolonged/returned use. After we have taken the first step towards service cycle exploration time issues can be dealt with in new, interesting ways.

References

Adlin, T., Pruitt, J., & Grudin, J. (2007). *The persona lifecycle: What personas are, why they work, and how to create and use them.* San Francisco: Morgan Kaufmann Publisher.

Arnheim, R. (1969). *Visual thinking.* Oakland: University of California Press.

Bitner, M. J., Ostrom, A. L., & Morgan, F. N. (2008). Service blueprinting: a practical technique for service innovation. *California Management Review*, 50(3), 66.

Blaney, B. (2013). *B2B a to Z: Marketing Tools and Strategies That Generate Leads for Your Business-To-business Company.* Indiana: Denham Publishing.

Buur, J., & Larsen, H. (2010). The quality of conversations in participatory innovation. *CoDesign*, 6(3), 121-138.

Carbone, L. P., & Haeckel, S. H. (1994). Engineering customer experiences. *Marketing Management*, 3(3), 8-19.

Chesbrough, H. (2010). *Open services innovation: Rethinking your business to grow and compete in a new era.* New York: John Wiley & Sons.

Clatworthy, S. (2011). Service innovation through touch-points: Development of an innovation toolkit for the first stages of new service development. *International Journal of Design*, 5(2), 15-28.

Cooper, A., Reimann, R., & Cronin, D. (2012). *About face 3: the essentials of interaction design.* New York: John Wiley & Sons.

Cross, N. (2006). *Designerly ways of knowing.* London: Springer.

Crystallinks. (2013). *Ouroboros.* Retrieved July 3, 2013, from http://www.crystalinks.com/ouroboros.html.

Frayling, C. (1993). *Research in art and design.* London: Royal College of Art.

Goldschmidt, G. (1991). The dialectics of sketching. *Creativity research journal*, 4(2), 123-143.

Goodwin, K. (2011). *Designing for the digital age: How to create human-centered products and services.* Indianopolis: Wiley Publishing.

Gudiksen, S., Poulsen, Søren & Buur, J. (2014). Making business models. *CoDesign*, 10(1), 15-30.

Jordan, B., & Henderson, A. (1995). Interaction analysis: Foundations and practice. *The Journal of the Learning Sciences*, 4(1), 39-103.

Kolb, D. A. (1984). *Experiential learning: Experience as the source of learning and development* (1). Englewood Cliffs, NJ: Prentice-Hall.

Latour, B. (1986). Visualization and cognition. *Knowledge and society*, 6, 1-40.

Long, F. (2009). *Real or imaginary: The effectiveness of using personas in product design*. Proceedings of the Irish Ergonomics Society Annual Conference. pp. 1-10.

Papert, S., & Harel, I. (1991). *Situating constructionism*. In Harel & S. Papert (Eds.), Constructionism (pp. 1-11). Ablex Publishing Corporation.

Polanyi, M. (2009). *The tacit dimension*. Chicago: University of Chicago Press.

Roos, J. (2006). *Thinking from Within: A Hands-on Strategy Practice*. Basingstoke: Palgrave Macmillan.

Schön, D. A. (1987). *Educating the reflective practitioner*. San Francisco: Jossey-Bass.

Shostack, G. L. (1984). Designing services that deliver. *Harvard Business Review*, 62(1), 133-139.

Shostack, G. L. (1987). Service positioning through structural change. *The Journal of Marketing*, 51, 34-43.

Stickdorn, M., & Schneider, J. (2010). *This is service design thinking: Basics--tools--cases*. Amsterdam: BIS Publishers.

Tollestrup, C. (2009). *Conceptualising services: developing service concepts through AT-ONE*. Proceedings of First Nordic Conference on Service Design and Service Innovation, Oslo, Norway.

Zomerdijk, L. G., & Voss, C. A. (2010). Service design for experience-centric services. *Journal of Service Research*, 13(1), 67-82.