STORYTELLING IN SERVICE DESIGN

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1 ABSTRACT:

The similarities between a story and an experience are unmistakable. This paper investigates methods for implementing storytelling in service design. Through literature an attempt is made to answer the question of how storytelling may be used to uncover important information in service design. The study of literature has shown a wide variety of practices involving storytelling in design. The article presents the values of stories and storytelling to the designer, propose four use cases for storytelling in the design process and propose some simple guidelines for the designer who wishes to incorporate storytelling in their design practice. The literature presents many different ways of applying storytelling in design. It seems that storytelling in service design can be valuable for many reasons, and is a craft that develops with practice. Storytelling tools can uncover important information, but should be combined with other design tools.

KEY WORDS: Service design, experience design, storytelling, design practice

2 INTRODUCTION:

This paper investigates methods for implementing storytelling in service design. It seeks to understand storytelling's potential for describing human experience and how this ability can aid in understanding the users and usage of a service. This article aims to explore how storytelling can be utilized throughout the service design process by asking the question: How may storytelling be used to uncover important information in service design?

The following story is an example presented by Quesenbery and Brooks (Quesenbery & Brooks, 2010) in their book *Storytelling for User Experience.* The story illustrates how Storytelling can be used in design.

"The Open University (OU) is the largest university in the UK. Its programs are offered through distance learning, so its Web site is critical to connecting students to the university and helping potential students find out about it. One of our ongoing projects is the online prospectus, the catalog of academic programs offered by OU. Originally, this prospectus was presented like a typical catalog or database, starting with a list of departments and drilling down to specific courses. This design assumed that

most people would be looking for the details of a particular course. But we were wrong. We found out instead that students wanted to talk about their dreams.

In one usability test, an older Pakistani woman, Priti, had put off her own education to raise her family. Now, she wanted to get the university degree she'd missed when she was younger. Her first course, she thought, should be the one that would help her with her English reading skills and get her back into good study habits. She and a friend worked diligently, reading each page carefully. They talked through each decision, and had good reasons for each link they chose. But in the end, they selected an upper level linguistics course, which would have been completely wrong for her. The cues about the level and content of the course that seemed so obvious to us were just invisible to them. How could a course called English Language and Learning not be perfect?

It happens that the OU has a program specifically for people like Priti. Opening courses are a gentle introduction to university study skills like re-learning how to write essays, and they would have been a perfect match. So it wasn't just that she had picked a bad starting point; she had missed a really good one. This wasn't a case of a single usability problem that could be fixed in a simple way. The site just wasn't speaking her language. This story, and many more that we collected, convinced the team that we needed to engage people in the idea of the subject before pushing them to choose their first course. We started talking about needing to tell the story of the subjects that you could study at the OU." (Quesenbery & Brooks, 2010)

This story shows us how storytelling can be used to understand users, to communicate about design decisions and to foster understanding in colleagues and stakeholders. Understanding Priti's situation

and the underlying reason for her search for a course was essential to the designers.

This article makes the connection between service design and stories based upon the assumptions that a service unfolds over time, is context dependent and delivers some form of experience and value to the user of the service (Mahamuni, Sharma, Khambete, & Mokashi-Punekar, 2017). Stories too unfold over time, in a specific place and presents some form of experience.

The similarities between a story and an experience are unmistakable (Atasoy & Martens, 2016). They both emerge from the interactions between people, places and objects (Atasoy & Martens, 2016; Zomerdijk & Voss, 2010). Stories and experiences are subjective and context-dependent (Atasoy & Martens, 2016; Peng & Matterns, 2016) and evoke emotions in their experiencers. (Atasoy & Martens, 2016; Zomerdijk & Voss, 2010) Stories can serve to ground the designers work in a real context (Quesenbery & Brooks, 2010).

In today's service design practice, several story and character driven tools are implemented to create and communicate about proposed service design concepts and the experiences they deliver. Some of the most frequently used include personas, scenarios, storyboarding and customer journey maps (Atasoy & Martens, 2011) (Razek, Van Husen, & Imran, 2017). These tools can provide the designer with valuable insight into the user's needs and the desired flow of the service. Nevertheless one might say that they lack the ability to communicate the true unpredictability and inconsistency that often characterize the contexts of modern day services. Based on this assumption, this article seeks to investigate more flexible versions of storytelling approaches in the design process.

This article attempts to collect literature about the use of stories and storytelling in

design generally and service design specifically. Below will follow definitions and descriptions of some of the terms used in the article. The third part is a description of the methods used for the literature review. In the fourth part, results from the review will be presented, including the values of stories, use cases and guidelines for designers using stories. The fifth part of the article is a discussion of how the results may be combined in service design practice. The conclusion of the article can be found in part six.

2.1 Service design

Service design is the activity of organizing, planning and understanding the context and components of a service with the goal of improving the quality of the service-user interaction and making the service meet the needs of the user of the particular service (Mahamuni et al., 2017; The Interaction Design Foundation, 2017). Services unfold over time, are context dependent and deliver some form of experience and value to the user of the service (Mahamuni et al., 2017). Service design is about trying to craft more than the single product or interface in the delivery to the user as the service experience often starts before and ends after the actual service-user interaction (Zomerdijk & Voss, 2010). The general principles of service design include designing the service based on its purpose, the demand of the service and the user's needs. Services should be designed iteratively, using prototypes and should be based on input from potential users of the service. (The Interaction Design Foundation, 2017)

2.2 Emotions and values in service design

Services are more than their touchpoints and interactions - the emotional connections to the service will often be what promotes repeated purchase and positive word of mouth (Zomerdijk & Voss, 2010). Experiences are comprised of emotion as well as functional interaction between users and service providers (Beltagui, Candi, & Riedel, 2012). There is a need to understand the subconscious values and expectations of the user to make sure that the service can deliver the experience the user truly desires from the service (Mahamuni et al., 2017). Creating a user-centered service that satisfies the emotional needs and expectations of the user requires consciously designing the sequence, progression and duration of events (Zomerdijk & Voss, 2010) and a deep understanding of the use context and values the user cherishes (Mahamuni et al., 2017).

2.3 Storytelling

Storytelling is the communication of a narrative or story. Stories one of the key mechanisms through which human experience has been shared for generations (Gruen, 2000). Francis Glebas (Glebas, 2008) suggests that stories are how people organize experiences and that storytelling is the communication of these experiences with the goal of making our selves understood by others. Storytelling can also be defined as the communication of ideas, beliefs and personal histories and life lessons (Wende & King, 2015).

A story typically consists of a beginning, middle and an end which are connected by a plot (Wende & King, 2015). A plot is the storytellers pick of events and their

arrangement in time and is used to guide the audience emotionally and hold their attention (Peng & Matterns, 2016). Quesenbery and Brooks (Quesenbery & Brooks, 2010) propose that stories are made up of a set of ingredients that shape the story. These ingredients are perspective, characters, context, imagery and language.

Donna Lichaw (Lichaw, 2016) postulates that people are in their nature story-driven and use stories as their main tool to communicate with, and understand, the outside world. Whether the designers plan for it or not, the users will experience their product as a story, and they will also in turn tell others of the product, using their story-driven brains.

3   METHOD:

This article is based on a literature review of articles about storytelling in design, storytelling in service design and storytelling as a tool for prototyping. The search was conducted through general academic databases, design specific databases, like The Design Journal, and through the references in relevant articles. Through the literature search some publications were found to carry a great deal of weight in the field of storytelling and design. The article is an attempt to describe the shared and differing opinions of the professionals of the field. Thus, both literature that describe in a very general term the use of stories in design, and more specific literature about for example communicating through storytelling or prototyping were included in the review.

4   LITERATURE REVIEW:

Many articles mention storytelling as a tool specifically for service design or in design practice in general. Several detailed methods have been proposed, such as Storyply (Atasoy & Martens, 2016) and Co-constructing stories (Buskermolen & Terken, 2016), such methods will not discussed in detail in this article. Some authors point out that many practitioners do not appreciate the true benefits of storytelling (Peng & Matterns, 2016). Authors point out that "storytelling" is a notoriously generic term in design (Atasoy & Martens, 2016) without real definition or methodology, and that there is a lack of attention on improving the actual user experience through storytelling and the story itself (Peng & Matterns, 2016). Nevertheless this review has found three main topics that seem to stand out throughout the literature. These were the *values of stories* to the designer, *use cases* for storytelling in design and a set of general *guidelines* for the use of stories in design.

4.1   The value of stories

Stories have many qualities that indicate that they can serve important purposes for the service designer.

4.1.1   Reality and designer empathy

Stories can represent the experienced reality of the storyteller. Early in the design process designers prefer to have contextualized insight about users that is grounded in real-life situations (Buskermolen & Terken, 2016) and asking users to tell their stories can give the designer valuable insight. Grounding stories in real life experiences promote understanding (Parkinson & Warwick, 2017). Stories can help designers gain empathy with

the users true life situations (Buskermolen & Terken, 2016). These real-life accounts of users are valued as trustworthy, informative and inspiring (Buskermolen & Terken, 2016).

4.1.2   Imagination

Stories rely on the listener to create mental images to fill in the gaps to fully create the story (Quesenbery & Brooks, 2010). Stories have a transformative power to fuel the imagination (Tassinari, Piredda, & Bertolotti, 2017), they engage and live in the imagination of the audience and storyteller (Quesenbery & Brooks, 2010). Stories can evoke new ideas and helps the listener make intuitive, but illogical conclusions (Quesenbery & Brooks, 2010). Because of this, designers can use stories to spark their own or other's imagination and uncover new ideas or perspectives.

4.1.3   Emotions, values and motivation

The stories people tell can be used to learn what matters to the storyteller, and they can represent both real and envisioned experiences (Buskermolen & Terken, 2016). The stories people choose to tell can say a lot about their concerns and interests (Quesenbery & Brooks, 2010) and they may provide information about how something might give rise to valuable experiences (Buskermolen & Terken, 2016).

Stories could explore the role of emotion in narratives (Ryokai, Raffle, & Kowalski, 2012). Crafting stories also has the potential to create emotionally satisfying experiences (Atasoy & Martens, 2016). The first step in crafting a story is defining the motivation of the characters (Quesenbery & Brooks, 2010). If the listener to a story is not told why something happened, they are likely to invent a reason (Quesenbery & Brooks, 2010). Stories can also provide the designer with a tool to help people grasp new

concepts on an emotional level (Quesenbery & Brooks, 2010).

4.1.4   Flexibility and context dependency

Designers need to envision future contexts of use to understand the effect of a concept (Buskermolen & Terken, 2016) and storytelling is, as service design, completely context dependent. Placing a character in a context and using imagery of the sensory experience is what differentiates storytelling from other techniques in design (Quesenbery & Brooks, 2010). Stories are descriptive and can set the stage and illustrate both the contextual and the temporal development of a service. Storytelling is also flexible and allows the designer to envision both the temporality and the dynamic change of the emotional experience for the user. Services should be designed on the understanding that special events should be treated as common events (The Interaction Design Foundation, 2017), meaning that you should not solely for the desired outcome. Storytelling can aid to uncover these special events. Stories are subjective and this can allow the designer to discover unexpected turns of a narrative, depending on who the storyteller or audience is.

4.1.5   Sociality and naturalness

Storytelling is natural to us as humans. It is how we organize and communicate our experiences (Glebas, 2008). Through telling stories of our own experience we attempt to make ourselves understood. We do this to create social bonds, for example when we are looking for a potential partner. The stories people tell about themselves are ways to communicate ideas and beliefs (Wende & King, 2015). Even though storytelling can be seen as an expert's craft,

everyone has in their life practiced storytelling and can tell their own stories.

4.2 Use cases for storytelling in design

The literature uncovered a wide variety of use cases for storytelling in design. Quesenbery and Brooks (Quesenbery & Brooks, 2010) point out that stories can be used in many ways, including gathering and sharing information, putting a human face on data, sparking new design concepts, sharing ideas, foster understanding and as a tool for persuasion (Quesenbery & Brooks, 2010). Several writers mentioned using storytelling in research, communication, concept creation and in testing.

4.2.1 Research and user insight

As shown in the example about Priti and UO in the beginning of this article, listening to real-life stories from the real-life users of a design can provide the designer with valuable insight. Concrete stories of how and why a user has experienced a certain situation, context or product is one of the truest form of user insight a designer can acquire.

4.2.2 Communication and the shared story

Storytelling is often utilized as a tool for cross disciplinary communication. Stories about users, like in the example of Priti and OU, can bring teams together with a shared understanding of the user's goal (Quesenbery & Brooks, 2010). It is an articulation tool that allows all stakeholders to contribute to the design discussions regardless of background (Atasoy & Martens, 2016). Stories are easily remembered and communicated and they

can thus establish a shared vision among the members of a team (Buskermolen & Terken, 2016).

4.2.3 Concept creation and the dramatic structure

Donna Lichaw (Lichaw, 2016) makes the argument that using a traditional story structure to predict, describe or map out the experience of a service can help designers better understand how it should be designed. Using the structure or a story can help designers for example locate and envision the beginning of the interaction between the user and the service. Using story structural descriptions like *rising action* and *climax* can help the designers imagine not just *how* the service works, but what emotional experiences may result from the user-service encounter. Lichaw calls this *storymapping*.

Lichaw (Lichaw, 2016) also explains how storytelling can be used to map different parts of a service design. It can for example be used to understand the general use and interaction within a service system, but also specifically the first meeting between the user and the service where the user decides to continue to interact with the service.

The previously mentioned method Storyply (Atasoy & Martens, 2016) is also an example of how story structure and story visualization can be utilized in conceptual design workshops.

A way of describing a service design and context is through the metaphor of a story in theatre, using the metaphors of *a stage, actors, scripts* and *the audience* to describe *the physical environment, the service providing personnel, the service delivery process* and *the fellow service users* (Zomerdijk & Voss, 2010). Combining the story structure and the theatre metaphors

may allow designers to envision a proposed service concept in a valuable way.

4.2.4 Prototyping and testing

Storytelling can be used to test and evaluate design concepts before any other material is produced. Prototyping services is a tool for testing and communicating a proposed service. A service prototype permits early testing and user evaluation through simulation of the service experience. (Razek et al., 2017) Creating example stories of problems to solve or a vision of what life might be like with the solution can help to create understanding in a stakeholder or user that is needed for validation and can elicit responses to the envisioned future (Quesenbery & Brooks, 2010). Using a story structure and characters in an in-team walk-through of the service can also help designer take steps outside the most logical flow (Quesenbery & Brooks, 2010). It can also be used to create scenarios or tasks in usability testing (Quesenbery & Brooks, 2010).

4.3 Guidelines for the designer

The use cases proposed in the previous chapter demand of the designer to perform different tasks to best utilize the potential of storytelling in design. Throughout the literature a peltry of guidelines or recipes for the use of storytelling in design practice was found. Some were more general and others more specific to the proposed method. This chapters proposes some guidelines to activities that may aid in the previously proposed use cases.

4.3.1 Crafting the story

Storytelling in design can sometimes demand of the designer to craft stories, for example to envision a future design context or as a tool to communicate the imagined customer-service interaction. To succeed in this activity the designer needs to understand the structure and ingredients of a well-formed story.

A well-formed story should follow a conscious story structure. This can mirror for example Campbell's *Hero's Journey*, the Aristotelian three-part story system or Freytag's expansion to a five-part structure called the *Freytag Curve (Atasoy & Martens, 2016)*. These structures all include some form of beginning, middle and end, and attempt to describe the development of the emotional journey and motivations of the characters, and in extension also the listeners.

Quesenbery and Brooks (Quesenbery & Brooks, 2010) also proposes the following list of vital story *ingredients*: Perspective, characters, context, imagery and language. They elaborate expressing that when a story is crafted with focus on the right ingredients, and the story has a good structure and the appropriate plot points it will be well suited to meet a set of *characteristics*. If these characteristics are met, the story will serve its purpose. The proposed characteristics are as following. *Coverage* means that the story addresses all the necessary facts. *Coherence and plausibility* assures that the story does not confuse the listener. *Fit* means that the story is naturally paired with the provided facts, it is not forced into place. *Uniqueness* means that it is compelling, intriguing and stands out as a new perspective. A good story also leaves something to the *audience imagination*, holes for the audience to fill.

Creating a good story also means creating the right story for the audience. It must be fitted to the purpose and setting in which it will be told. (Quesenbery & Brooks, 2010)

4.3.2 Ending the story

Users generally do not remember every single moment of an experience, instead they remember the sequence of pain and pleasure and the ending (Zomerdijk & Voss, 2010). This means that the ending of the story can be vital to how the story is reacted to and retold by its listeners. It is essential to end the story to fit its goal.

4.3.3 Telling the story

The way a story is told can be just as important as the story itself. Good storytelling is interactive. It's a conversation, even when the stories are carefully crafted and rehearsed (Quesenbery & Brooks, 2010). It is important that the listener understands the story and empathizes with the presented situation, but they should not be overwhelmed by it and should feel free to shape the story (Buskermolen & Terken, 2016). Stories are as much a part of the audience as of the storyteller. They come to life in the imaginations of the audience members (Quesenbery & Brooks, 2010).

4.3.4 Listening

Storytelling can be a process of discovery for the person telling the story (Parrish, 2006). Listening to people tell their stories or to how they respond to your stories is critical to exploit the benefits of storytelling in service design. Listening to not just what people say, but how they say it can reveal subtext and give a greater sense of who the speaker is (Quesenbery & Brooks, 2010).

5   DISCUSSION:

This article has this far presented values of stories to be exploited in service design, use cases and guidelines to best perform storytelling related design activities. It has made an attempt to present ideas in literature concerning how storytelling can be used to uncover important information in service design. Based on the information presented in the results of the literature review the author of this article will suggest some uses of storytelling to uncover information in service design.

Combining the use case *research* with the values of *reality* and *naturalness* using the guidelines for *listening* the designer can see value in asking users specific questions about their personal experience. Actively listening, giving the user time to associate and elaborate, paying attention to what kind of stories the user tells and asking them to elaborate about their concrete emotional experience can give the designer valuable insight. These true stories can be more valuable and honest than the generalized thoughts and opinions that may plague the classic research interview and can thus uncover valuable information. It should though be noted that not all opinions or values can be connected to an experienced story and the designer should be wary of focusing solely on the concrete stories a user tells.

Telling open-ended stories to *test* a design can help spark the *imagination* of the user. Here the value of *imagination* can also play into *emotions and motivations.* Asking the listener to explain the behavior or decisions of a character in a story may uncover some of the listeners own emotions and motivations, as they may attribute these to the character. Thus, the designer may uncover information not just about the user's conscious evaluation of the proposed design, but also information about the potential emotional experience of a service. This may also be an economical way of testing a service prototype without crafting more than a relatable story. Though this may be an efficient way of testing unconscious

emotions and motivations in a service, the designer may also try and use the proposed story to uncover information about the user's conscious appraisal or evaluation of the proposed experience.

Stories can also be used to uncover information about the flow of a service. The *context dependency* of a story mirrors that of a service and using this in conjunction with *crafting stories* and *concept creation* can allow the designer a tool to shape the dramaturgical development of a service experience. Here an example can be to use story structures like the *Hero's Journey* to uncover and envision potential hurdles the user may face when first meeting the service. Potentially, envisioning these hurdles can help the designer facilitate for a better first encounter with the service and avoid users leaving the service before they are fully integrated into the service system loop. The risk of using stories in concept creation can be that it is impossible for a single person or team to envision all the possible turns of events. The rigidness of some story structures may also to some degree limit the possible string of events. This may close the designers "field of vision" and the story may therefore disguise some part of the service from the designer.

Communicating important information to stakeholders can be aided by using the *real stories* of users. A designer may also play into the *emotion* of a story to convince their listener. *Crafting* a shared story for a team to use in the understanding and design of a story can also be valuable.

6   CONCLUSION:

Literature found in the research for, and writing of, this article implies that storytelling is a powerful tool in design practice. There could not be found a real consensus on exactly how to best utilize the qualities of storytelling for the benefit of the service design process. This seems natural, as storytelling comes in many forms and is as flexible and varied as the design process itself. The use of storytelling is wide and varied and it is described as a versatile tool.

There seems to be a movement toward more explicit methods and guidelines for storytelling in the design community. This also brings with it a need for designers to become even better storytellers. With focus moved from product to system and the holistic experiences of services, storytelling can prove to be a valuable tool for the designer.

In conclusion, using narratives and storytelling in service design can be valuable for many reasons. Even though humans are natural storytellers, it is a craft that requires and matures with practice. Storytelling tools can uncover important information, but should be combined with other design tools. Storytelling as a tool by itself may at times not be sufficient to uncover the necessary information in a service design project. Nonetheless incorporating storytelling into the design process, when fit, may provide the designer with new perspectives and insights.

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