

Elaborating on the Use of Personas for the Benefit of the Design Context

Wafa Said Mosleh, Mike Kirk Andersen and Yen Mai Thi Trinh,

Interaction Design

Mads Clausen Institute for Product Innovation

University of Southern Denmark, Alision 2, 6400 Sønderborg, Denmark

wamos09@student.sdu.dk, mikeka@mci.sdu.dk, maiyen@live.com

ABSTRACT

This paper sets out to present and discuss a user-centered design process, during which a new and innovative parcel delivery system was developed. The paper will revolve around emphasizing the roles of the system end-users, who in this case were lead users engaged and involved throughout the design process. The main focus will be put on providing you, the reader, with a thorough understanding of how and why the users were presented in forms of personas, and included continuously in several different formats during the process. The aim is additionally to explain and argue how the personas were applied differently at the beginning of the ideation in comparison to how they were transformed and used as a basis for testing the usability of the system later on. Consequently, we suggest, designers can benefit from using personas not only to communicate their initial inquiry to key partners, but also include them in their way towards designing systems founded on solid reasoning.

Keywords

Design Methods; Personas; Scenarios; User-Centred Design.

1. INTRODUCTION

The central idea in this paper is based on the creation and application of personas, which is a method originally introduced by Alan Cooper in 1999. Personas are, according to Cooper, a specific but fictitious representation of the users designers are targeting [1]. The project presented in this paper aims to reconsider the method as well as explore new approaches to applying personas in development processes.

More specifically, the personas created in this project have supported our process of designing as well as the developers in keeping the end-users in mind. Additionally, we have explored various ways of presenting the personas, one of which is in the form of tangible artifacts. In a different manner the personas also acted as a bridge between the different stages of the design process, and thereby ensuring deeper consideration and argumentation for why the personas were applied as leading characters in the design process.

The project was initiated when a new venture, SwipBox, in Sønderborg, Denmark saw potential in the design of a new parcel delivery system that embraces the lifestyle of today's modern person, whose primary interaction takes place online. As interaction design students our contribution was based on the design of the system's website and mobile application, as well as user involvement throughout the company's and our own design processes. The parcel delivery system basically consists of separate units that are placed in 320 convenient stores around Denmark. People who shop online are able to choose three

stations located closest to where they reside as their favorite SwipBox stations, and have their parcels sent to one of them. Additionally, users are allowed to send parcels to each other by sending them from one station in the country to another.

In general, the website and the mobile application make the system efficient, convenient, flexible and user-friendly to the average modern person, to which the Internet has become an essential daily playground.

In this matter, as Matthews et al. mentions the notion of personas has been integrated in the design process to engage the company in thinking of the users in every step of the way, and to argue for design decisions without being influenced by their own preconceptions [2]. And so, this paper is based on the premise that designers can benefit from applying personas in different forms throughout the design process. In the project referred to in this paper, personas were transformed into scenarios that explored how the different users potentially could be introduced to the SwipBox system for the first time, and how to convince them to use the system. In addition to that, the personas and scenarios were used in forms of stories to initiate and guide the usability testing to round up the design process and reach the final point of designing.

What we aim to present and discuss in this paper is therefore the ways in which personas can be used not just as mediums for communication, but rather as helpful tools that guide the design process and help designers in fulfilling the requirement of the systems along with meeting the needs of the end-users.



Figure 1: A SwipBox unit in a Danish supermarket

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2. MATERIALS AND METHODS

The following section outlines our process of creating personas and scenarios in design. To understand the basic principles of creating personas we looked into the works by Pruitt [3] and Wang [4].

- A focus group of 12 people who regularly shop online was gathered, and agreed to be involved as our lead user group in the design of the new parcel delivery system. In the first workshop, the lead users were presented with existing interfaces of websites and mobile application, through which we gained knowledge about them as people and their personal preferences. Video and field notes were used as means of documentation, and considered in the creation of the personas as well as the scenarios.
- Five different personas were created on the foundation of interviews and engaging workshops. Each persona was given a personality-twist that enabled us as well as the company to remember each persona better, and identify each persona more easily while communicating. It appeared that all parties involved memorized the personas by each of their unique personality-twists more than other factors. An example would be one of the personas being an excessive liar in order to portray herself as a better person in her social community's eyes. Lying was her key-trait, so during the project team's discussions she would be referred to as "the liar" rather than her name for example.
- The personas had one specific structure in general: keywords, a quote, a daily schedule, a detailed sketch of the persona, and a description of the persona. The persona description included: personality behaviours, habits, family relations, social relations, economical conditions, spare time activities and an abnormal or excessive personality trait. The structure mainly gives the developers a thorough understanding of the personas and their values.
- The personas were created in four different formats, as they were used in different ways. Cooper [1] describes personas as mostly being discussion tools that you would want at hand for you to be able to present the viewpoints of the personas. However, to be able to discuss and present their point of view in terms of a design, you need deep knowledge and comprehensive understanding of the personas, their behaviours, habits, and everyday activities. The personas were each elaborated into the following:
 - A big poster with an in-depth persona description, a sketch, a quote and the daily schedule in the form of a timeline.
 - A small poster with a big sketch, timeline, quote, and a compressed version of the persona description.
 - A key hanger that contained all five personas in small scale cards. (This was given to the developers.)
 - A tangible persona box containing the persona's "personal" objects; money belonging to the persona with a well-paid job. (The boxes were given to the company to use during project meetings.)
- For each persona, one scenario of the person's first encounter with the system was presented in a comic strip sketch. For consistency, the scenario sketches were in the same art genre as the persona sketches.
- Both the personas and the scenarios were presented and discussed with the focus group to verify that they were closely aligned with reality, and the way the lead users saw themselves. In fact, each participant from the focus group could identify themselves with at least one persona each; mainly through attitude and lifestyle.

- We introduced the personas to the different developers who were involved in the project both internally and externally.

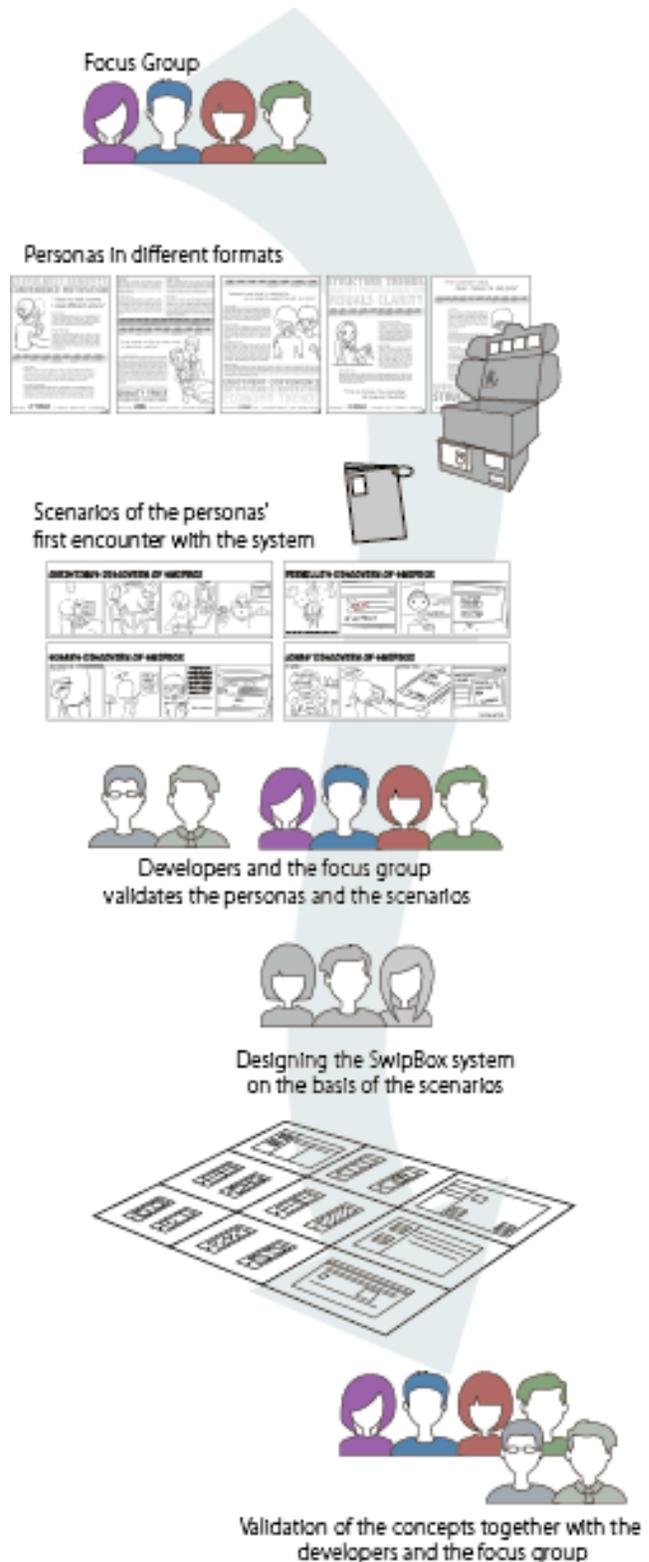


Figure 2: This image shows the process of transformation as well as application of the personas and scenarios, as described in the column on the left.

3. RESULTS

We figured that with an intended user group rich in characteristics, incorporating the use of personas to represent these different characteristics would help, not only us as the interaction designers, but the entire company that we were a part of to create a better understanding of the intended and potential future users of the system and its design.

The personas that had been grounded in our knowledge of the intended lead users were created in a wide range of formats in order to create a more comprehensive understanding of them as actual people and remember them as actual people. The different-sized persona posters and cards each emphasized on different factors and could, depending on the intended use, help focus on different aspects. The tangibility and physicality of the objects included in each persona box were to personify and characterize each of them, as well as make us experience them as the people who were to use SwipBox. This especially enabled us as the design team of a company to comprehensively communicate the knowledge of these lead users to other teams within the company.

The personas in combination with the scenarios grounded a solid base with which we could begin the ideation process. Through each persona's scenario of their first encounter of the system, we created ideas that we could see perform in front of them as if it was a real-life situation of a specific person. To help us experience each situation from the respective persona's perspective, we each acted out the personas and carried out actions and reactions through their personality and behaviour. So not only did we use the personas as a tool to externally communicate our understanding of the intended lead users to the company, but we also used the personas internally between ourselves in the design team, to help us in the process of designing a system targeted the intended lead users.

During this project it was experienced that by involving the developers within the company in the design process it becomes more natural for them to talk about the users and to take the personas point of view into account when discussing the design of the system. In one of the discussions that concerned a simple log-in feature one of the engineers said: "But what about the lying girl? Will she think this is simple or what do you think simple is to her?"

For the design team the personas and scenarios were also tools to link the different design stages, going from the user studies into the design of the system, and in the end also for usability testing. Using the scenarios as a tool gave us rich and meaningful insights about possible ways in which the users could use the system, and in this way there was always a meaning behind the different functionalities and designs of the user interfaces.

The personas helped in keeping the red thread throughout the project, and looking at the system and the simplicity the company asked for in the design, the personas played an important role in the final outcome of the simple and user-friendly system.

3. DISCUSSION

In design projects it is very natural for only parts of larger teams to be in direct contact with the people researched. While our expanded method of personas to larger extends helped in sharing our understanding of the intended lead users with the other parties involved in the project, we have figured that it is possible to better the process of creating this particular form of personas as well as the use of these personas themselves. Though created on the basis of a specific design case, this expanded form of the method can be widely used and remodeled to serve other design cases.

3.1 Process of Creation

Given that this way of creating personas was unusual for us, we had to give the creation process of these personas thorough thought and consideration. We were careful about the expansion of the existing method and focused on structuring the method to help us in the process of designing for the intended lead users of SwipBox. We realized that the result in the form of tangible personas did not alone function as a design- and communication tool, but the creation process of each persona had deepened our understanding of each of them respectively. We had naturally enhanced our understanding of them as actual people and users of SwipBox, exactly because of the thoughts and considerations put into each step in the process of creating them. Realizing that the creating process has also brought us knowledge, we suggest that this process should be considered thoroughly.

Similar to how data is often collected through interviews and observations, then sorted and analyzed to help in creating personas, tangible data can be collected from the users – such as in the form of probes. We agree with Lange-Nielsen et al. who state that probes as a method in its contemporary interpretation and use "has been diverging from its origin" [5]. They explain that the method is widely used as an ethnographic method to gain information then analyzed as data, whereas probes are intended to be "a subjective, playful approach with returns to be interpreted" rather than analyzed. Though we must admit that even if the extensive way of using probes diverges from its origin, the method does serve well as an ethnographic method. Whether aiming to obtain real information for analysis or imaginary information for inspiration, probes can be modified for application. Like how we found the tangible personas would help us in communicating our knowledge to others, tangible probes will add to the knowledge that designers can gain from the people researched. The physicality in tangible probes adds an aspect that is not found in most other research methods; it speaks to other senses and can thereby help designers in gaining knowledge through a more personal and alive experience of data collecting and –analyzing.

3.2 Process of Using

During the process of designing the personas were used for enhancing our understanding of potential users of SwipBox; but also help us avoid making assumptions in terms of user understanding and experience. Additionally, we used the personas as an internal design- and communication tool to communicate our findings to the other developers within the company. We had to find extensive ways in which we could compress a concentrated representation of the specific lead user characteristics to use as a design- and communication tool.

To try out various ways of becoming familiar with the end-users we carried out a session within the company where we all acted out the personas and some different scenarios. The unfamiliarity between the developers and the personas did to some extent make it awkward. Moreover, at the beginning stages of introducing personas, for the developers it was hard to immediately let go of – or simply steer away from – personal biasness. Rather than acting out impromptu situations, semi-set scenarios in the form of guided tasks were used to familiarize oneself with a specific persona and their characteristics.

The definite structure made the parties focus more on the persona's personality and practice. Once they had familiarized themselves with the personas they fully took on the role of the character, giving more space for behavioral actions.

3.3 Personas as tools for Designing

What we argue in this paper is that vast potential lies in the application of personas for the actual process of designing, more so than merely using them for communication within project teams. Especially in design processes where the aim is to design for people, the method of personas can be used for the benefit of the design process itself. In such cases personas are often created on the foundation of people with specific personality traits and characteristics. With people come lives, which then results in each persona created to represent people also having a life: a past, a present, and a future. Creating different scenarios to portray situations of a persona's life can especially support the process of ideation, as it helps creating ideas that can be placed in the hands of a certain person in a certain situation. The combined application of personas and scenarios can thereby help designers in distancing themselves from their own self as they step into another person with another personality and another life, to then enhance the understanding and experience of a design through somebody else.

Creating user experiences on the means of the user themselves is not an unfamiliar concept in the field of design, hence why user centered design processes are often desirable. For any design case, we imagine the method bringing users and their presence to life. Similar to our design case where a new product and service was introduced to the industry of an existing concept (parcel delivery), one way of implementing the method is to through scenarios find ways to introduce the new design to personas for adaption and use. In a design case of redesigning an existing product or service, the method could be used to through scenarios figure out where, when and how personas might be able to replace the use of the existing design with its redesign. Given that the user is already in the habit of using the existing design, this case can be more complex and the scenarios might not be as straightforward as in the case where a new design is introduced to be adapted. For a better understanding tangible personas, objects related to the created scenarios can be put into the persona. With the physical presence of case-involved objects, designers might be able to better understand how a design performs compared to how it should or could perform.

4. CONCLUSIONS

At first encounter, personas seem perfect for communication purposes. However, we believe that the notion of personas can be expanded to a more applicable tool in design processes. We argue that personas are useful in keeping the users in mind throughout the process, so that they can guide the way towards the ideation

activities as well as the usability testing of products or systems. In exploring ways to mix the two design methods of personas and probes, we have discovered how tangible tools that represent the users of the design can benefit designers in getting a deeper and more comprehensive understanding of the people they are designing for. Integrating personas in different formats adds value to the design process, and enables the method to be used in different contexts, as each format focuses on different aspects. Moreover, the use of personas and scenarios together can provoke and inspire the ideation process and enhance designers' abilities to envision different design ideas in use scenarios of the intended users. Rather than imagining a design in a situation of use, designers can act out the personality of the personas, and perform as they would perform in the situation of a scenario, to truly understand and experience a design.

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