

HOGSKOLEN I GJØVIK

# Personas

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Theory versus practice

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## INTRODUCTION AND RESEARCH QUESTION

In 1999, Cooper introduces personas as the necessary foundation for good interaction design (Cooper 1999) and since then, many practitioners have used the method in their work (Pruitt&Grudin 2003, Grudin&Pruitt 2003, Matthews 2012, Nielsen&Hansen 2014, Billestrup et al 2014). The method is, in some companies, *the* way of doing user experience work (Chapman et al 2006).

In this paper, research from real world projects is examined, with the attention on how personas are used in a real world context. The main focus will be on how these persona practices coincides with Cooper's proposal of use and implementation.

This paper has the following outline: Section 1 contains an overview of the concept of personas, section 2 is a synopsis of relevant research project. Section 3 is a discussion of the pros and con arguments followed by chapter 4, the conclusion.

Based on the discussion in section 3, I will try to conclude to the following:

*“By looking at current research on the topic: is the real world context use of personas in design industry similar to personas as suggested by Cooper?”*

### 1. PERSONAS

In user-centered design, early focus on users and their tasks are one of three main principles that according to Gould and Lewis, (1985, as cited in Rogers et.al 2011:p425) would lead to “*useful and easy to use computer systems*”. To capture the characteristics of the user and gathering knowledge about the intended user or user group is one way to create a user profile. In order to make these user profiles more realistic, Alan Cooper (1999) suggested the use of personas.

The concept of personas origins back to Cooper's book “*the inmates are running the asylum*” (1999), where Cooper describes personas as “*hypothetical archetypes of actual users*”. Cooper further describes personas as fictional, yet defined with “*significant rigor and precision*” containing their names, a picture, some personal details and goals. The personal

details in a persona are derived from research and analysis. Cooper (1999) describes the use of personas like this:

*«If you want to design software-based products that make people happy, you have to know who those people are with some precision. That is the role that personas play»  
Cooper, 1999*

In research literature regarding personas and the use of personas in design project there seems to be a common understanding of what a persona is: an aggregation of research data where each persona represent the goals, behaviors and attitude for a user group when interacting with a particular product or service (Blomquist & Arvola 2002; Rönkkö et al 2004; Rönkkö 2005; Chang et al 2008; Billestrup et al 2014; Nielsen&Hansen 2014). In general, personas can be seen as “*a precise description of a user’s characteristics and what he or she wants to accomplish*” (Chang et al 2008), with “*primary goal of substituting the users*” (Blomquist & Arvola 2002).

## **2. PERSONAS PROJECTS IN REAL WORLD**

### **CONTEXT**

There are some studies on actual use of personas in design projects, conducted in the timespan from the early days of personas until present time, i.e. 2002-2014. In this paper, 9 studies are chosen due to their first-hand experience with the method. Some papers report successful use of personas, while others have different experiences with usage of the method.

The studies used in this paper deal with users with different experience levels with personas, from studies on unexperienced users, for example students (Rönkkö 2005) to the experienced practitioner’s use of the method (Blomquist&Arvola 2002; Rönkkö et al 2004; Pruitt&Grudin 2003; Matthews et al 2012; Billestrup et al 2014; Nielsen&Hansen 2014).

The following is a closer presentation of the chosen field-studies of actual use of personas in a real world context:

In Blomquist and Arvola’s field-study (2002) in company Q, the focus was on how persona was used in the design process and to what extent the presence of the personas had influence on design decisions.

Grudin and Pruitt (2003) provide a description on how they implemented personas in the design process in Microsoft. They also describe how the organization addressed the weaknesses of the concept, as they saw it.

Rönkkö et al's studied the use of personas in product development for the mass market (2004).

Rönkkö (2005) describes a student context project, following three different software development projects, where the usefulness of personas is discussed.

In Chang et al (2008), the researchers examined on the approach of two design teams where one team used personas in the design process, while the other was instructed not to. The scope of the project was to see if there was a difference in usability between the solutions, and how personas was used with practitioners in the design process.

In Friess' study (2012), the main question was how personas came to life in design decision-making sessions, using a linguistic analysis.

Matthews et al (2012) examined how practitioners used personas in one company. The practitioners were grouped according to their experience level with the method, and asked about their attitude towards personas.

Billestrup et al (2014) conducted a survey among development companies in one region in Denmark, to examine if the implementation of personas in the industry was according to personas as proposed in literature.

Nielsen and Hansen (2014) conducted a survey to reveal how practitioners in Denmark used the method, and their perceptions of benefits and challenges when using the method.

### **3.FINDINGS**

In Cooper et al's book, "About Face 3" (2007), Cooper states that personas is a "*uniquely powerful tool*" to create a descriptive model of a user (Cooper 2007 p75). In both Cooper's book and literature elsewhere, the effectiveness of personas are categorized into five categories: 1) a tool for invoking user empathy, 2) a tool to create clear focus on the user and

user-goals, 3) a communication tool, 4) a tool for preventing user stereotyping and finally, 5) a tool for guiding design decisions and evaluating design ideas.

In the following, these claims about personas are looked into, in light of real world practice.

### **3.1. INVOKING USER EMPATHY**

Personas as a tool for evoking user empathy is a common argument from personas proponents. Personas is not real people, but are synthesized from observation or interviews with real people, and in this way, personas are personifications of real people (Cooper et al, 2007). When the personas is personified, stakeholders and engineers may think of them as real human beings resulting in increased interest in creating a product that provide a better user experience for this person. (ibid). Cooper et al. claims that “*empathy is critical for the designers, who will be making their decisions for design frameworks and details based on both the cognitive and emotional dimensions of the persona*» (2007 p.81). One way to facilitate the personification of the personas was a great and specific personas description.

In Nielsen&Hansen (2014) and Grudin&Pruitt (2003), the real world practice is aligned with Cooper’s original proposal. Two respondents reported that personas was useful since they turned the user into real people, and real people evoke empathy, Cooper claims (2007). The only challenge Nielsen&Hansen (2014) found in their study, was that developers found it hard to identify themselves with personas that were very different from themselves.

In other real project, the situation is somewhat different: The detail level in the descriptions varies, and sometimes omitted almost completely, as reported in Matthews et al (2012). The description sometimes consisted of only a name and a photograph. In Blomquist and Arvola’s project (2002), the persona development had been built on pre-suppositions and not on empirical work, resulting in the lack of trust in the persona. A quote from an interaction designer indicates that the persona is not sufficient alive to be credible.

This also applies to the study of Matthews et al (2012), where some of the practitioners reported that personas were too impersonal for the practitioners to use in their work. The personal details provided in the personas were not enough for the practitioners to feel that they truly understood the users they were designing for, and did not provide any sense of user empathy.

Many of the practitioners in the Matthews et al' study (2012), also reported that they did not have any significant usage of personas in their design work. Personas was considered abstract, impersonal, and their personal details was misleading and a distraction (Matthews et al 2012). These practitioners preferred access to real users or the option to study user data themselves. The designers considered details about actual users as critical to their work, and the faith in personas being the equivalent was absent: "*they [personas] are not real people, and any sort of dressing that makes it seem like a real person is not very helpful*" (quote from a designer, Matthews et al 2012).

One designer made it even more explicit, while stating that he did not care about Paul (the persona), but only what Paul did at work (Matthews et al 2012). However, some respondents reported that the personal details in their personas was very important to them, and that they made good use of them in their work.

In Chang et al (2008) the empiric foundation of the personas was found in a video clip. In Cooper's persona, the details was derived from field studies, interviews and observations (Cooper 1999), but in in Chang et al's study they found that the content of the persona came partly from the user study (the YouTube video) and partly from the designer's assumptions, experiences and other possibilities (Chang et al 2008).

### **3.2. CREATE CLEAR FOCUS ON THE USER AND USER-GOALS**

Cooper claims that personas may help designers to understand, describe, focus and clarify user's goal and behavior patterns (Cooper 1999, Cooper et al 2007). According to Cooper, personas is also useful in determine who not to design for: the non-user.

In Pruitt and Grudin (2002), this is the case. In their work, they found personas helpful in revealing who not to design for. They also state that the utilization of personas in the organization creates a strong focus on users and work context. Grudin and Pruitt continues; the use of personas has resulted in engagement in other user-centered activities, leading to an increased general user focus and awareness in the organization.

This aligns with Nielsen and Hansen's study (2014), where one respondent said that it was very important to them that the system was easy to use, which was why "*mapping the user types are important*". Personas was also useful for "*guiding suggested solutions to match the user needs*" (Nielsen&Hansen 2014).

This also applies to Matthews et al's findings that personas was used to advocate user needs (Matthews et al 2012). Many of the practitioners in their study reported that they did not have any significant usage of personas in their design work, although they found personas useful in requirement gathering. In Rönkkö et al (2005), personas was chosen primarily due to the lack of agreement on user requirements, hence this was an attempt to avoid the 'elastic user'.

The elastic user as described in Cooper (1999), is a user which is "*bent and stretched and [who] adapts to the needs of the moment*" (Cooper 1999). Cooper proceeds: "Designing for the elastic user gives the developer license to code as he pleases while paying lip service to "the user." *Real users are not elastic*".

Cooper suggests that the persona should be developed "*before even writing a single line of code*" (Cooper 1999 p129). However, Chang et al (2008) found that "*a persona can be born any time during the design process*", and further; the development of the persona can last until the design was complete. This may be interpreted that the persona in Chang et al's study was an "elastic user", in which personas was meant to replace.

### **3.3. PERSONAS AS A COMMUNICATION TOOL**

"*Personas provide a powerful tool for communicating about different types of users and their needs*" Cooper et al. claim in "Face 3. The essentials of interaction design (2007). Pruitt and Grudin (2002) agree with Cooper and states about personas: "*their greatest value is in providing a shared basis for communication*". Personas is, according to them, therefore a psychologically compelling approach to communicate information about users to development teams, like developers, marketers, writers, testers and others. Further, when a set of personas was familiar to the design team, new findings can instantly be communicated (ibid).

Personas as a tool for communication is aligned with the findings of Matthews et al (2012), where the designers did not use the developed personas in the design process, but mainly for communication with others. This also applies to Billestrup et al (2014) where indications of personas helping the team to share "*a specific and consistent understanding of several different user groups*" were found, and to Nielsen and Hansen (2014), where several actual references to the personas was heard.

In contrast to this, the findings of both Friess (2012) and Blomquist and Arvola (2002) claims otherwise. In a field-study analysis of communication in a design project, Friess discovered



that personas was hardly used in design-decision discussions, and in Blomquist and Arvola's study (2002), nobody talked about the personas, but referred to the users with terms like "the administrator", "the user" or "you". Friess (2012) discovered that during design meetings, references to "the user", "you" or "the administrator" was more common than the reference of "Eric" or "Richard", the personas. Some of the team members did not even know who Eric and Richard were.

### **3.4. PREVENTING USER STEREOTYPING**

A persona is not the same as a stereotype. Stereotypes are, according to Cooper et al (2007), the "*antithesis of well-developed personas*". In this lies the risk of stereotyping the user if the creation of the personas is made on researcher biases or assumptions: if not built on empirical data, the risk of degrading the personas to stereotypical caricatures may occur (Cooper et al 2007).

In Blomquist and Arvola's study (2002), the developed personas had poor empirical foundation, and had been built on pre-suppositions about the work of a system administrator. This might have led to a stereotypical user description, although this is not concluded in the study. However, the study refers to the lack of faith with the personas, possibly due to the lack of realism in the persona. Chang et al (2008) found in their study that a vast majority of user properties came from "designer's assumptions, experiences and other possibilities", which according to Cooper et al (2007) may lead to the stereotyping of the personas.

The same applies to some of the respondents in Matthews et al (2012), where sometimes the persona description was reduced to a name and an image only. The designers in the study reported that they seldom used the persona in their design work, due to the distracting and misleading characteristics of the persona. In contrast to this, some other practitioners from Matthews et al's study (2012), reported that their personas was entirely based on data from real users.

"*Personas forces one to decide precisely whom one is design to support*", Grudin and Pruitt (2003) states. A persona has a name, gender, age, ethnical and family arrangements among others. These properties provides the necessary freedom from using full spectrum of user data, and potentially enter the pitfall of generalization (ibid).

Nielsen and Hansen (2014) found that not all personas were created entirely from data, but also from fictitious elements and assumptions. However, the practitioners had a clear distinction on which parts of the persona that was real and which parts were fictional.

### **3.5. GUIDING DESIGN DECISIONS AND EVALUATING DESIGN IDEAS**

Cooper et al claims that one of the benefits of personas is that design choices can be tested on the persona in the same way as with real users, hence providing a “powerful reality-check tool for designers trying to solve design problems” (Cooper et al 2007 p79).

In Nielsen and Hansen’s study (2014), the participants reported that personas only became valuable when used directly in the design process. They also found that designers often referred to the personas and their needs in order to take the right design decision.

However, this is not always the case in all real world projects – other approaches were used: In Rönkkö (2005), the designers did not use the personas as direct input to the design decisions. Instead, an iterative mock-up session was used. Blomquist and Arvola (2002) found that scenarios were used instead of personas in design decisions. In Friess’ study (2012), personas was primarily used as a role-playing mechanism, when invoked in the design decision meetings. However, personas was used in only 2% of the conversational turns, making the use of personas in design decisions relatively scarce.

In Matthews et al (2012), one of the main findings in their study, was that most practitioners did not use personas as a design tool, due to multiple reasons: personas was too impersonal and abstract, and provided personal details was misleading and distracting.

In Friess’ study (2012), the designers spent four weeks in gathering data material for the development of eight personas. However, Later on the personas was scarcely referred to in design-decision meetings, and the designers later on used their own opinions and impressions to persuade others. In Friess’ study the participation of non-designers in the project team may explain the lack of personas references in meetings

## 4. CONCLUSION

Personas proponent claim that personas has several benefits: the ability to evoke user empathy, to create clear focus on users and user goals, as a communication tool, as a mean to prevent user stereotyping and finally; as guidance to design decisions and evaluating design ideas.

As seen, the practice in real world projects does not always align with this. In some real world projects, the anticipated user empathy occur, while in others this empathy is absent for many different reasons.

The use of personas creates clear use focus and focus on user goals, Cooper et al (2007) claims. This claim is also confirmed in many real world projects. However, if not building the personas from the correct empirical data, the persona may transforms into the elastic user.

The method's strength in facilitating communication between project stakeholders (Cooper et al 2007), is confirmed repeatedly in several of the examined project. However, this notion was not always the case. Due to various reasons, the personas was not used as a communication tool in two of the projects: Friess (2012) and Blomquist and Arvola (2003).

According to Cooper et al (2007), when building the personas on researcher's assumptions or bias', the risk of stereotyping the personas occur. In several projects, the persona was developed on assumptions or poor empirical data, resulting in the lack of trust in the persona, a negative attitude towards the method. On the other hand, building the personas on a mix of empirical data and fiction was not considered a problem by some.

One benefit of personas as design tool is the method's ability to measure a design's effectiveness (Cooper et al 2007) due to the possibility to test a design on the personas as one would with real users. Some reported similar use of the method in their project, while others reported that other methods displaced personas as a design decision tool.

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