

The Limits of Personas

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ABSTRACT

While personas are effective for workplace systems design, they are less useful when designing for vulnerable users, due to problems with gaining sufficient understanding of the target audience and problems making evaluations without prior knowledge of the users. Designers need to be involved in the development of personas to gain the most benefit from them. Problems also arise designing for populations with impairments, since this implies multiple interfaces, which increases the number of personas required.

Keywords

Diversity; Personas; Personae; Interaction Design; Perspective taking; Empathy; Goal directed design.

1. INTRODUCTION

The use of personas within the interaction design community is growing, but there is still a significant level of disagreement as to their merits and uses. There is also a great deal of difference in the detail of how they are created and used. To inform the debate it is important to understand why personas work, which it is believed will also lead to a greater understanding of how they should be used and where their limits are. Personas, used correctly, can be a powerful tool but their use can require some care.

2. THE PURPOSE OF PERSONAS

When designing a system having an understanding of the intended audience is vital. The design clearly has to solve problems that genuinely exist for the target audience [1], in a way which they will recognise and understand. The potential pitfall, known as self-referential design [2], is designing a system which serves the designers needs and desires, but fails to fulfil those of the target users. Without a model of the target audience the design can only fall back on their own taste and preferences when evaluating design decisions. A key part of the model is an understanding of the motivations of the target users, in other words, the user's goals.

To avoid self-referential design the designer must keep the target audience in mind almost constantly, and be able to carry out very rapid tests of new concepts against this audience. During the design phase doing this with a real test group is impractical, since ideation is too rapid to test every single idea.

Personas allow the designer to play the role of an archetypal user, and evaluate ideas from their perspective. Although it

cannot be as accurate as genuine user testing it is sufficient to cull the most problematic design ideas, and at the very least reduce the options to a small set, which if necessary can be tested with actual users.

To be effective a persona-based design process relies heavily on the ability of the designers to accurately portray the persona and predict their responses [3]. Because of this any problems with either the information used to generate the persona, or with the designers ability to get into role has the potential to weaken the resulting design.

3. PROBLEMS USING PERSONAS

Using a persona requires the designer to take a design element and accurately answer the question of whether that element would be effective and appropriate for that persona. To do this the designer needs to be able to see the world from the personas point of view, what psychologists refer to as "perspective taking". Epley et al [4] suggest the way that people take other perspectives is an iterative process, starting with an assumption that other people have motivations and behaviours similar to themselves. They then modify their mental model of the other person until they feel their model explains the observed behaviour. To do this would require an understanding of the direction in which to modify the model, and some experience with the actual behaviour of the person being modelled to test the model against.

Clearly it is not possible to observe the behaviour of a persona, so the designer must draw on their experience of real people who share traits with the persona.

The implication here is that while personas are very useful in providing a focus for designers and for communicating design solutions they can't work if the designer doesn't have a pre-existing understanding of the population the persona was drawn from. In many, perhaps most cases, this does not cause a problem, since people do generally have an enormous wealth of experience in understanding other people.

However, there are populations that many people have little experience working with. Specifically, disabled and elderly users are likely to be underserved by personas. With elderly users, although most designers will have elderly relatives, who will inform their understanding of the elderly, the range of impairments is vast, so it is very unlikely that a designer, without specific training in designing for the elderly, would appreciate all the problems just from a persona description.

A solution to this problem would simply be to avoid splitting the roles of persona creation and persona use. Many design firms do precisely this, and have their designers carry out the

fieldwork, create the personas, and then design the product. This helps to ensure that the designers have contact with, and therefore better understanding of, the target audience.

To complicate things further, as digital products penetrate further into the home, the population being designed for is more heterogeneous. When designing office products the behaviour and goals of the user are largely prescribed by their job role. In the home there are no such restrictions. A number of designs may be required which offer the same functionality, but with different interfaces for different sections of the population. By creating a number of personas and designing a system to suit each one, this can be dealt with. However, when the population is heterogeneous in terms of desires and in terms of impairments the number of resulting combinations threatens to make using personas unwieldy. While the personas may be useful for expressing the goals of the various groups, using them for each interface variation may be impractical.

Given that using personas requires an ability to see the world from another's perspective, it may be that the technique is most attractive to exactly those designers who have this ability. It is possible that the technique is less useful for those who are less able to do this.

4. PROBLEMS GENERATING PERSONAS

A persona should be an accurate representation of the archetypal member of the target audience. To create this there clearly needs to be some understanding of the audience, and this is best gathered by field studies and ethnographic methods. The researcher who creates the persona has to first understand the audience however, before they can represent them. So anything which disrupts the ability of the researcher to understand the audience will distort the resulting persona, and through that may distort the ultimate design solution.

Again, with digital products entering the home this problem increases. When designing office systems the level of understanding required is at a fairly impersonal level. When the systems being designed are being used in a more intimate environment the understanding needed to design them is similarly more intimate. The designer will ultimately need to understand the constraints on the design that are imposed by the lifestyle and abilities of the users. However, especially with users who suffer impairment discussing problems which will impact the design may be uncomfortable, making it difficult for the researcher to fully assess their impact with respect to the design problem. Fear of technology may also be a factor, especially with older users. The problem here is that what might, naively be considered to be a discussion about desired functionality, may in fact be an emotionally sensitive topic, where the researcher needs to understand the emotions of the subject in order that they incorporate those into the persona description so they can inform the design.

This requires an ability on the part of the researcher to be empathic towards the subject. Buie [5] suggests however that there are limits on the accuracy of empathy. He argues that empathy is an inferential process, and that the observer uses visual and auditory cues and attempts to model the emotional state that would result in those cues. This process is prone to error though. It is exacerbated if the subject wishes to hide their emotional state. Problems also arise from overconfidence in the ability to empathise. Buie reports that clinicians failed to detect emotional states that lead to suicide because the patients successfully hid their emotions, despite other

evidence that the patients were suicidal. While this example is extreme it suggests that researchers trying to create personas for use in design need to be aware that they cannot rely on their ability to empathise, because while it might feel convincing it is unreliable.

5. CONCLUSION

While personas are an extremely effective tool for aiding the design of workplace systems, and for many devices in the home, there are limits to their effectiveness. Designers are likely to find personas less useful when designing for a population who suffer impairments, simply because a single persona cannot be used to represent the whole target population. Working with a large cast of personas is likely to be unwieldy. In these cases it is suggested that using the personas to decide on the necessary functionality is probably effective, since impairments are less important at that level of detail.

For designers to get the best out of personas it is strongly suggested that they carry out the field studies and ethnographic work that leads to the creation of the personas rather than work with personas created by other members of the team, especially when designing for populations that are dissimilar to themselves. This ensures that the designer has some personal experience of the population they can draw on to fill in the characterisation of the persona. In this respect using a persona is somewhat similar to acting.

Finally it should be realised that personas can never provide a perfect prediction of how the eventual users will respond. Therefore a level of testing of the design will be helpful, especially when designing for more challenging populations.

6. ACKNOWLEDGMENTS

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