Chapter 1
Introduction: Stories About Users

You are now reading the second edition of Personas—User Focused Design. Since the first edition, I have done a lot more research, been manager of Center for Persona Research and Application, closed the centre, coached a lot of companies, been in connection with Automated Persona Generation, and experienced how difficult it is to do international personas.

New to this edition is more on personas and quantitative data (a chapter written by the team at Hamad Bin Kalifa University (HBKU), Qatar—I thank you for this contribution), personas and agile development, personas for a global audience, and research of the application of personas in Danish companies.

New is also a distinction between design personas and marketing personas. In the first edition I did not separate the two types of personas. The difference between design personas and marketing personas lies in the users' intend—to use or to buy—and the goal of using the method—to understand use and use contexts, users and use journeys, user interactions, jobs to be done etc. Or to understand the purchase, the purchase value, purchase habits, brand awareness, media habits etc. It is the difference between designing a product or selling a product. This edition is dedicated to design and design personas.

1.1 A Career with Personas

In 1997 when I started working with 'multimedia', it quickly dawned on me that I had to know more about the users. My first task was to develop software that helped the unemployed clarify what kind of work they wanted. I spent a day interviewing job seekers and analysed the interviews. To share my understanding of the job-seeking users with the project team in the best possible way, I wrote a little story about 30-year-old Bente who falls pregnant while being an apprentice and consequently has to abandon her apprenticeship. I described her present job and life situation and her insecurity with choosing what she would like to do for a living.

I also wrote stories about Hans, Birgül, Lars, and Karl. The descriptions were a summary of my impressions of the real-life people I had met. These were presented to the project team and sparked a lot of discussions about the users, but also about those who were not part of the target group. The user descriptions were later used to describe the solution.

With the fictitious user descriptions, we had a specific tool that made it possible to discuss future products. I thought it was a powerful tool and began to explore how the descriptions could be otherwise useful. Not until much later did I discover that this was called personas and scenarios.[1] Thus, a persona is a description of a fictitious user. A user who does not exist as a specific person but is described in a way that makes the reader believe that the person could be real. A persona is based on relevant information from potential and real users and thus pieced together from knowledge about real people.

Designers, developers, and project participants, among others, use the personas to get ideas for the design of products, IT systems, and services. The descriptions help project participants identify with users and think of these instead of themselves. And they provide all participants in a project with the same understanding of who the end-users are.

The word 'persona' comes from Greek and means 'mask'. When we work with personas, we assume the mask of the users to understand their needs concerning a new product. To walk in the user's shoes gives you an idea about what their wishes are, and how they will use the new product, whether it is a digital product or a non-digital product. Furthermore, a persona makes it possible to get an idea of what the user will use the product for, and in what future situation or context it will be used.

I was lucky to be able to continue pursuing my interest in digital product development with a research project, which, in 2004, became a Ph.D. thesis about personas and scenarios—'Engaging Personas and Narrative Scenarios'.[2] The theoretical basis is, briefly stated, an understanding of stories, their sequence of events, and how we understand fictitious characters.

Throughout the years, this has led to articles, master classes, and lectures. I am still developing the method, both from theoretical understanding and practical experience using personas in development and innovation projects. The theoretical frameworks and my practical knowledge have become the method 'Ten steps to personas', which this book follows (Fig. 1.1).

Each chapter describes stages in the development of personas and the purpose, how you plan the work with personas in practice and the theoretical considerations associated with each step. The book describes the advantages and disadvantages of personas and is a guide for the whole method.

I have worked in Denmark, and the cases I present in the book are Danish. Some examples might be very specific to Denmark, but I hope that my international audi-

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[1]My first article on personas was 'Scenarios as development tool' (Nielsen 1998). In the article, I coin what was later to be known personas as model users.

[2]You can find my Ph.D. dissertation at http://personaer.dk/wp-content/samlet-udgave-til-load.pdf. See Nielsen (2004).
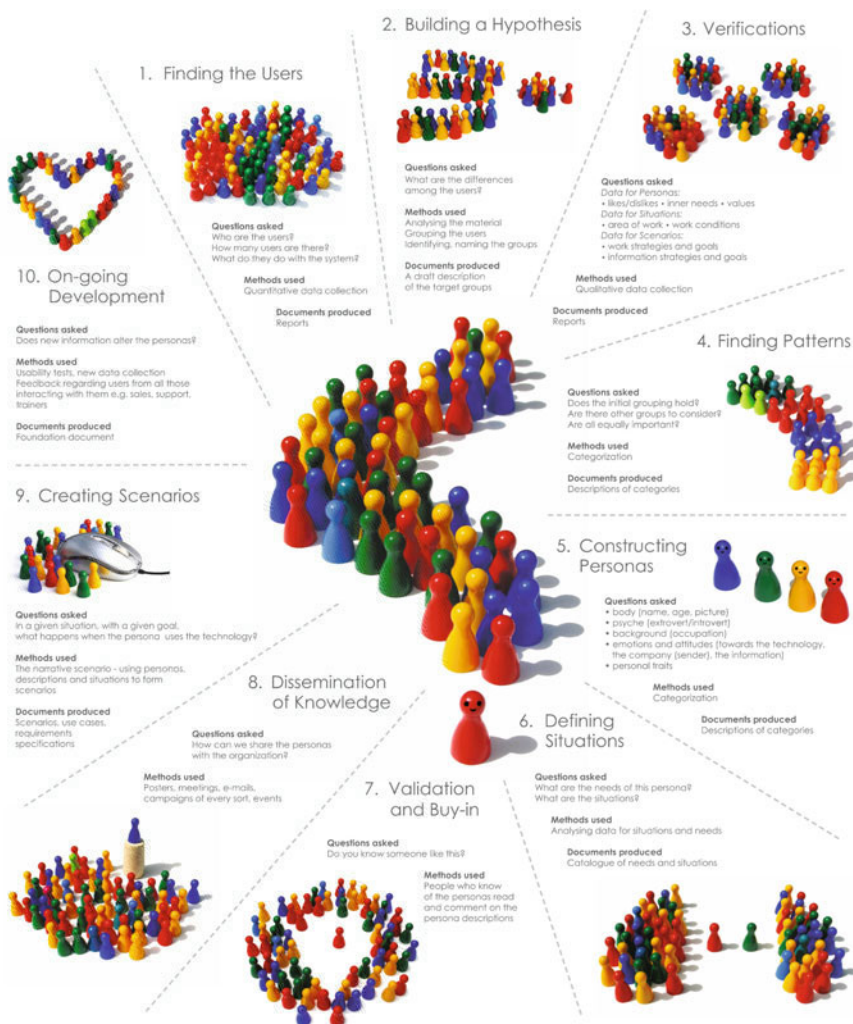
Fig. 1.1 The poster illustrates the 10 steps to personas

ence will none the less understand the specific contexts and be able to learn from the cases. The persona method is under constant development, and I have asked specialists in quantitative methods and automated personas generation to contribute.

The book is aimed at project managers and project participants, who want to start using personas for developing new products and services and at project teams, who need to look at existing products through the eyes of the users—e.g. design or redesign of IT systems and mobile services. Finally, the book addresses students,

who want to employ the method in practice for their projects, and who also need to understand the theoretical considerations that go with each step.

The work with personas is about using the everyday experiences of the users and their needs as a starting point for developing new products. To move design closer to the daily lives of the users is nothing new and was promoted within IT system development in the movement that has been called the Scandinavian design tradition. Here, IT systems are co-designed in a dialogue with the users.[3] The Scandinavian design tradition is a theory of design and a set of design methods that involves user participation in the design process to democratise the design. This wave of design thinking was in opposition to for example the designer as someone who by experimentation with materials and form gets inspiration to create a unique product or work.

The persona method does not include real users in the design process, but instead has representations of users. The method attempts to add a user perspective in all parts of the design process, from initial ideation to coding. Furthermore, the method does not focus on democratisation, but on communicating user understanding to all participants in product development.

The persona method is often perceived as a usability method, but, as it will become apparent, personas are more of a design method covering all phases and all aspects of a development project and have a broader focus than usability.

The scientific foundation upon which the method rest, is in its essence qualitative and has a holistic perspective on humans as being specific and dependent on the context in which they participate.

1.2   To Be Able to Enter into the Lives of the Users

When we develop products, it is important to remember that we always design for someone who is different from ourselves. Others do not necessarily have the same interest in technology as I have, and this can be difficult to imagine when I work with technology all day long. That is why we, as product and service designers and developers, need to be able to envision the user's needs and wants in connection with what we are working with right now—and not the users' entire lives. Imagine that you are designing a new bike; this makes it essential to understand the users' need for biking—is it for transport or sport? What are their attitudes towards bikes? Do they buy cheap or expensive bikes? Do they value aesthetics, maintenance or equipment? What is their attitude towards traffic? Do they own a car, or is a bike the only means of transportation they have? But you do not need to understand whether the users like dogs or what political party they support.

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[3]Read more on the Scandinavian design tradition in Bødker et al. (2000).

Several research projects have shown that IT system developers, designers, and engineers talk about users without having met any.[4] To be able to do so, they draw on their individual and general knowledge of people, whom they believe resemble the users. When faced with strangers; we use our cognitive ability to categorise people into fixed types based on our previous meetings with people and our cultural background. A category could be like the following: she wears large earrings and wide, long skirts, she must listen to new age music; he wears a suit and tie, he is probably very formal. The person whom the developers and designers talk about is unfortunately quite often a stereotypical and one-dimensional version of the user, for example the stupid user who is unable to use their brilliant product or a user based on segmentation, for example The Modern Segment that likes expensive red wine and fancy cars.

The persona method tries to break with the automated perception and instead create empathic descriptions of the user. With the version of personas presented here, I attempt to go against the fact that the individual designer may have an individual perception of the user. Instead, a common and aligned understanding is created and shared among the project team.

Working with personas requires a broad understanding of the user's lifeworld.[5] The reader of the persona description must be able to understand and get engaged in the persona, even though it is just a description based on text and images. To be able to do so requires that the information presented can create a level of involvement. Thus, when gathering data, we must not only ask about for example the kind of work the users do, what their workflow is like, and what their purpose of using the product will be, but also ask about their beliefs and attitudes. Always with a focus on the area that the design is aimed at.

Here is an excerpt of the description of Camilla and Jesper, focused on their attitude towards public digital self-service. The full description is at the end of this chapter.

Camilla and Jesper—The Autonomous

> If they leave me alone, then I can figure it out on my own. I can pay the tax, and I can find day-care on my own. The less contact, the less queuing - the better it is for me.

Camilla and Jesper live on the outskirts of Copenhagen. They are 35 and 39 respectively, and they have enough on their plate with children and careers. They have lived together for the past five years. Two years ago, they had their son Storm. Jesper has two children from his previous marriage, Christian and Caroline, 11 and 8 years old. The children live with Jesper and Camilla every second week.

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[4]See for example Orr (1996) and how maintenance workers at Rank Xerox describe and talk about the users.

[5]The lifeworld can be defined as the reality you take for granted and judge with your common sense. See Schutz and Luckmann (1973), p. 3.

Attitude Towards Digital Self-service

Camilla and Jesper prefer to use self-service solutions, and they are curious about what information the public sector stores on them, and how it is stored.

> If you don't have to enter anything, and data comes from a register, then it's even smarter - you don't have to do anything. But it's important that you get a clear message from the system and know your status - or that you get a receipt.

<div align="right">(Borger.dk, 2012, authors translation)</div>

1.3   Focusing

I coin what the product is about and focus on the 'focus area'. In IT system development, the focus area is often referred to as 'the domain'. The focus area is what defines the differences between the various users. The starting point is that we as humans can have conflicting identities and opinions dependent on the social context we are part of (Jensen 1998). For example, we can hold one view privately and a slightly different one on the same matter when we are at work, due to the context. Someone working professionally with tax matters can have one opinion about paying taxes at work and another as a private individual. Therefore, it becomes essential to look at identities and attitudes within the exact focus area. If we continue with the example from the homepage of the Danish Tax and Customs Administration, Skat.dk, the focus area is users' the perception of the tax and customs area, and their needs in relation to the homepage. That could give rise to questions like: How do the users approach having to pay taxes? How do they understand the tax system? What are their expectations regarding digital reporting of taxes?

It may seem like the persona profiles are similar to segmentation, such as Conzoom® and their division of the Danes into 36 segments or the A. C. Nielsen/AIM's Mini-Risc model with five segments.[6] But the segmentations include data gathered from a wide range of areas, and the content of the descriptions is unfocused and covers diverse subjects such as media consumption, earnings, and political conviction. The persona method uses data exclusively gathered from the focus area. There is also a difference when it comes to the description. A segment represents a group, while a persona is a description of an individual. Try comparing the description of Camilla and Jesper (Fig. 1.2) with the segment 'E4—Family Ties' (Fig. 1.3). The depiction of Camilla and Jesper is as persons whom the reader could meet in real life while 'E4—Family Ties' is an abstract description of a group.

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[6]Conzoom® segments the population according to where people live. It contains data about average age, education, job, type and size of housing, income, capital, media use, use of transportation, consumption, interests, shopping and leisure habits. Mini-Risc segments according to demography, income, life-view, and values.

"If you don't have to enter anything and data comes from a register, then it's even smarter - you don't have to do anything. But it's important that you get a clear message from the system and know your status - or that you get a receipt"

Motivation for use

Camilla and Jesper would like to be able to use online self-service solutions outside ordinary opening hours. They want to control the process themselves and they get frustrated if they cannot understand their rights and the process of the service. (11)

Accessible for all

Camilla and Jesper could have a handicap. The solution should be able to cater for special needs and for users that use compensating tools, this can be ensured by applying the guide for web accessibility (WCAG).[12]

Examples of self-service situations

• Sign up for daycare
• Change kindergarten
• Sign up for school and after-school
• Submit tax
• Report mileage to the Danish tax authorities
• Check estate information
• Change of address when moving
• Order new license plates
• Report for unemployment compensation
• Repay Student Loans
• Sell a car and buy a car

borger.dk

Fig. 1.2   Camilla and Jesper, one of the six persona descriptions for Borger.dk (Authors translation of text)

Fig. 1.3   Segment description from conzoom® (courtesy of Geomatic, 29 January, 2018)

E5 Family ties

Singles with a low income.

4 %

FACTS
• Singles in public housing in bigger cities
• Low occupation level
• Low purchasing power
• Like to go after weekly offers
• Read freely available media
• Traditional

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1.4   Many Names, One Concept

From being a technique for IT system development, the persona method has developed into use in other contexts, including the development of products, marketing, communication, and service design. Though the method has existed since the late 1990s, there is still no precise definition of what it encompasses. Often, when dealing with companies, I encounter the belief that the method is Difficult and challenging, as there is a specific and right way to work with it. Because of this view, companies assess that the persona method does not fit into their work methods. Sometimes the project participants are unwilling to accept the concept of personas, which means that the company will not use the method. A general attitude is that personas create a distance to the real users. Instead, fictitious user descriptions should be called user profiles, archetypes, types, or just plainly people. In my experience, there is not one correct way, but rather many ways to work with the method, and the method can be used on a grander scale for long-term processes and more pragmatically for smaller projects.

A persona is not the same as an archetype or a person. As described earlier, the unique aspect of a persona description is that you do not look at the entire person but use the focus area as a lens to highlight relevant attitudes and the specific context associated with these.

1.5   Product Development

In the design process, we begin with imagining how the product will work, even before any sketch is made or features described. If the design team has personas at hand while designing, the descriptions will help to maintain the users' perspectives. At that precise moment when designers imagine how a possible product can be used by a persona, ideas emerge. Thus, the actual purpose of the method is not the persona descriptions, but how they support the ability to imagine a product—in the form of sketches, writings, epics, specifications, prototypes, etc. I will designate these imaginations as scenarios. It is in scenarios that you can imagine how the product is going to work and be used, in what context it will be used and the specific construction of the product. And it is during the work with developing scenarios that the product ideas emerge, are described and tested. The persona descriptions are thus a means to develop specific and precise descriptions of products. A scenario could, for example, begin like this:

> Camilla has had three different work places this year, and she wants to report her mileage to the Danish tax authorities. Camilla sits on the couch with her tablet and opens skat.dk. She enters her ID and password and ….

1.6   Personas for IT and Products

As the persona method developed from IT systems to product development, a shift occurred. When personas are used for IT system development, it is mainly to explore interaction and navigation; they are not suited for describing what kind of information the system should contain. Let me give you an example: borger.dk is a website for citizens in Denmark. Six personas were created. One of these personas, Johannes, is a young man who very rarely uses digital self-service solutions. Johannes represents all the young users who have little or no understanding of the public domain. When a designer uses Johannes for a scenario, he illustrates what demands all of those who do not know the difference between government and municipality, which public authority is responsible for what, how the young users think and how they would like to see the information presented. But Johannes does not represent which information should be available on the site. If he did, there would, for example, not be any information on retirement.

In IT system development, there are specific methods to describe the system navigation and interaction, e.g. Unified Modelling Language or user stories within agile development methods. It is quite easy to insert personas into these. When using personas for product development, the scenario takes a different path, and the interaction with the product becomes the central issue. Here, the users' process and interaction with the product can be more easily understood if you play out the process as a sort of role-playing. Also, you might not have to deal with the same requirements regarding documentation as in systems development. You could for example use film or comic strips to capture the enactments. These differences are described in more detail in Chap. 5: Personas in Use.

1.7   Two, Four, or Six Personas?

The number of personas required for a project depends solely on how different the users within the focus area are. The differences may be seen as contrasts, and you often end up with two, four, or six personas. You must remember that personas are a design tool and that the entire process is about being able to grasp data and reduce them as much as possible. Another aspect of the number of personas is that our memory limits how many we can work with and remember. If there are more than six personas in a project, we might find it difficult to distinguish them from one another and find it challenging to remember details about each persona.

1.8   A Process, not a User Portrait

The whole purpose of using the method is, as already mentioned, that all project participants get the same understanding of who the users are, and in what contexts they use the product. The purpose is also to disseminate this knowledge throughout

the entire project process. Many project models include a user focus, but despite iterative project models that revise a phase several times, the reality is that knowledge about the users is added at the beginning of the project and at the end—during testing and evaluation efforts. During all the processes in-between, knowledge of the users is most often not applied. Furthermore, the programmers and graphic designers might not have access to data about the users. This lack of knowledge is something that the persona method attempts to rectify, and the condition is that personas and scenarios can be part of all stages of product development, from feasibility studies over design to marketing. If everybody in the project begins to use personas and apply scenarios, the knowledge gathered at the beginning of the project can be used later in the process.

The dissemination of what the persona method is and how to use it becomes essential and will need planning from the start of the project. Too many project participants get their first taste of personas when they discover persona posters on the wall or see an image of a persona on a mug.[7] It is therefore vital that designers and developers early in the process experience the strengths of the method for example in workshops focusing on how to use personas and showing how the technique can provide new insights. Furthermore, making the project participants understand how the method can be integrated with existing development methods.

The particular view presented in this book is based on theory and practical experience, and in my view, it is essential to include as many project participants and as early as possible in the development of personas. That way, learning how to use the method will disseminate.

Several authors have described the technique as a communications strategy, but this can lead to focusing too unilaterally on the occurrence of a sender, a message, a medium, and a recipient. In literature about the method we can see how researchers convert data and describe personas; these are then communicated to design teams as campaigns, slide-shows, and posters. In other words, information about personas will be disseminated in the organisation (Pruitt and Adlin 2006). This understanding does not include many from the project team and overlooks the most significant challenge: how to get the entire organisation to accept and use the method actively. Seeing personas as a communication strategy can, unfortunately, prevent use of the technique in daily project decisions. Therefore, it is more expedient to view personas as a process ensuring user-focused design in all phases of the project: a process that includes as many from the project team as possible and that ensures that everybody understands what it entails to use the method. Therefore, I suggest a ten-step model that provides a thorough collection of data, the inclusion of the project team in the process, the use of scenarios for innovation and idea development, the use of personas in systems development, and finally that the person who is going to read the persona descriptions is considered. In literature that advocates for personas and the benefits of using them are described like this: (1) Personas help prioritise audiences and bring about a focus on the most important audience(s). (2) In line with this, personas bring assumptions to the surface and challenge long-standing (and often incorrect) organ-

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[7]Microsoft has described how they create persona campaigns by hanging small posters on toilet doors and creating mugs with persona descriptions, photos, etc.

isational assumptions about the customers. (3) Personas focus product development on users/customers and their goals and not on technology. Furthermore, the method supports advocating for user needs with the development team. (4) Personas also help individuals realise how the users/customers are different from themselves. (5) The personas help prioritise product requirements and determine if the right problems are solved. (6) It enables practitioners to advocate their designs and prevent stakeholders from making design decisions for themselves. (7) Personas facilitate perspective takings, as they draw on our ability to form impressions and make inferences about people we encounter (see Cooper 1999; Cooper et al. 2007; Nielsen and Hansen 2014; Matthews et al. 2012; Miaskiewicza and Kozarb 2011; Pruitt and Grudin 2003; Pruitt and Adlin 2006).

1.9   Ten Steps to Personas

My process model contains four different main parts: data collection and analysis of data (steps 1 and 2). Persona descriptions (steps 4 and 5). Scenarios for problem analysis and idea development (steps 6 and 9). Acceptance from the organisation and involvement of the design team (steps 3, 7, 8, and 10).

The ten steps cover the entire process from the preliminary data collection, the active use, to continued development of personas. As can be seen from some of the cases that will be presented later, a project does not need to follow all ten steps:

1. Collection of data. In the first step, you collect as much knowledge about the users as possible. Data can come from many different sources, even from pre-existing knowledge in the organisation.
2. You form a hypothesis. Based on the first data collection, you build a general idea of the various users within the focus area of the project, including how users differ from one another.
3. Everyone accepts the hypothesis. In this step, the goal is to support or reject the first assumptions about the differences between the users by confronting project participants with the hypothesis and comparing them to existing knowledge.
4. A number is established. In this step, you decide the final number of personas.
5. You describe the personas. The purpose of working with personas is to be able to create solutions based on the needs of the users. The means is to prepare persona descriptions that express enough understanding and empathy, which enables the readers to understand the users.
6. You prepare situations. As already mentioned, the method is directed at creating scenarios that describe solutions. The situations are precursors to scenarios. In this step, you describe a list of specific situations that each can trigger the use of the product. Every situation is the basis of a scenario.
7. Acceptance is obtained from the organisation. It is a common thread throughout all ten steps that the goal of the method is to involve the project participants, allowing as many as possible to participate in the development of the personas.

Furthermore, that it is vital to obtain the acceptance of the various steps. That is why everyone should contribute to and accept the situations. To achieve this, you can choose from two strategies: You can ask participants about their opinion, or you can let them participate in the process.

8. You disseminate knowledge. For the method to be used in the project team, the knowledge of the persona descriptions should be disseminated to all. At an early stage, it is therefore essential to decide how knowledge is to be disseminated to both those who have not participated directly in the process, to future new employees, and to possible external partners. The dissemination of knowledge also includes how the project participants will be given access to the underlying data.

9. Everyone prepares scenarios. As previously mentioned, personas have no value in themselves. Not until the moment a persona is part of a scenario does it have real value.

10. Ongoing adjustments. The last step is about the future life of the persona descriptions. They should be regularly revised, approximately every second year. There can be new information, or technologies can change, and there may be novel aspects that could affect the descriptions. In this phase, decisions must be made whether to rewrite the descriptions, add new personas, or eliminate some of them.

1.10   Other Approaches to Personas

The ten steps approach is my persona method recipe. But I am not the only one in the world attempting to explain how to use the method. The entire persona approach stems from IT system development where, in the late 1990s, many were wondering how to communicate an understanding of the users. In literature, various concepts emerged such as user archetypes, user models, life-style snapshots, and my phrase, model users. In 1999, Alan Cooper wrote the book 'The Inmates are Running the Asylum', where he introduced the concept of personas. The book was a tremendous success and became the beginning of the understanding of personas as a concept describing fictitious users. Though there is a vast number of articles about the use of personas, there is no definition of what a persona description is and a unilateral understanding of the application of the method. In literature about the approach, there are today four different perspectives regarding persona (Sønderstrup-Andersen 2007)

– The goal-directed perspective (e.g. Cooper)
– The role-based perspective (e.g. Grudin, Pruitt and Adlin)
– The engaging perspective (that I propose, which emphasises how the story can engage the reader)
– The fiction-based perspective (e.g. Blythe).

What the first three perspectives have in common is that the persona descriptions are founded on data. The fiction-based perspective does not include data as a basis for the personas but creates personas from the designers' imagination, intuition and assumptions. They have names such as ad hoc personas (Norman 2004), proto-personas (Gothelf and Seiden 2013), extreme characters (Djajadiningrat et al. 2000) or pastiche scenarios that uses characters from novels for design (Blythe and Wright 2006).

1.10.1   The Goal-Directed Perspective

Cooper characterises his persona method as 'goal-directed design'. He describes the approach as one that can make designers understand the users. Goal-directed design becomes an efficient psychological tool for looking at problems and a guide for the design process. The central issue in the method is the hypothetical archetype who is described not as an average person, but rather as a unique character with specific details. The technique focuses on choosing one persona as the primary, while it is also possible to use a number of secondary personas.[8] A persona is defined by its personal, practical, and company-oriented goals as well as by its relationship with the future product. Furthermore, by the emotions of the users when using the product, and the goals of the persona in using the product (hence goal-directed).

The users' (work) goals are the focus of the persona descriptions, e.g. workflow, goals, contexts, and the attitudes of the persona. The advantage of the perspective is that it provides a focused design, and that it is a communication tool to finish discussions.

1.10.2   The Role-Based Perspective

The role-based perspective shares goal direction and the focus on behaviour with Alan Cooper. But apart from that, its basis is the criticism of the traditional system development approaches and Cooper's approach to personas. The criticism of the conventional methods for developing IT systems is directed at the use of scenarios; these are criticised for lacking clarity and consistency in the user descriptions. The role-based perspective suggests expanding the user archetypes in such a way that they can communicate the essential knowledge about the users and thereby support the design process. Cooper is criticised for underestimating the value of user involvement and for seeing the method as one single method that can handle everything (Mikkelson and Lee 1993; Grudin and Pruitt 2002). The role-based perspective uses the criticism as a starting point to further develop the method. The most important additions are

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[8]About the early history, see Goodwin (2001, 2002), and Brechin (2002). Alan Cooper has written two books, see Cooper (1999) and Cooper et al. (2007).

as follows: It is crucial that both qualitative and quantitative materials supplement the persona descriptions, and there should be a clear relationship between data and the persona description (Grudin and Pruitt 2002). Personas can communicate more than design decisions to designers and clients; they can also deliver information from market research, usability tests, and prototypes to all participants in the project. Finally, the method is regarded as a usability method that cannot stand alone but should be used in tandem with other methods. The persona description itself should contain information about several issues: market share, market influence, computer proficiency, activities, the hopes and fears of the user, as well as a description of a typical day or week in the life of the user. In addition to this are strategic and tactical considerations (Pruitt and Adlin 2006).

The role-based perspective focuses on the users' roles in the organisation (Sønderstrup-Andersen 2007). Personas are an efficient design tool because of our cognitive ability to use fragmented and incomplete knowledge to create a complete vision about the people who surround us. With personas, this ability comes into play in the design process, and the advantage is a greater sense of involvement and a better understanding of reality.

1.10.3 The Engaging Perspective

The engaging perspective is rooted in how stories can create involvement and insight. Through an understanding of characters and stories, it becomes possible to create a vivid and realistic description of fictitious persons. The purpose of the engaging perspective is to go from designers seeing the user as a stereotype with whom they are unable to identify and whose life they cannot envision to creating a platform, from which designers can actively involve themselves in the lives of the personas.[9]

The perspectives presented earlier, are criticised for creating stereotypical descriptions by not looking at the whole person but focusing on behaviour (Nielsen 2004).

The starting point for the engaging perspective is the way we interact with other people. We experience specific meetings in time and place, and we mirror ourselves in the people we meet. We see others as both identical to and different from ourselves. Also, we experience relationships that are not specific and where someone we meet is anonymous and represents a type. Here, we use our previous experiences to understand the person and to predict what actions he or she will perform. If the designers see the users as representatives, they create a mental image of the users

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[9]Both within psychology and sociology, anonymous meetings are described. Within sociology, the term 'the anonymous' is described as 'a representation of a type', within psychology the term stereotype is used. You can read more about types and stereotypes at Schutz and Luckmann (1973) and Macrae and Bodehausen (2001). The difference between clichés and stereotypes can be described as follows: 'Stereotypes differ from clichés in that the former reduce an entire class (e.g. fat people, depressed women, or post office workers), and let the reader assume the rest. In contrast, a cliché is a hackneyed phrase. A stereotype is not identical to the real thing. Stereotypes seem to work best when characters are not created to be deep, but only to be a mental picture' (Edelstein 1999, p. 13).

together with typical, but automated imagined acts. These representations prevent insight into the unique situation of the users and reduce the value of the scenario as a tool to investigate and describe future solutions.

An engaging description requires wide knowledge of the users, and data should include information about the social backgrounds of the users, their psychological characteristics, and their emotional relationship with the focus area. The persona descriptions balance between data and knowledge of real applications and fictitious information that, as mentioned, is intended to create empathy. This way, the persona method is a means to avoid automated thinking.

1.10.4   The Fiction-Based Perspective

The personas in the fiction-based perspective are often used to explore design and generate discussion and insights in the field (Floyd et al. 2008). Ad hoc personas are based on the designer's intuition and experience and used to create an empathetic focus on the design process (Norman 2004). Extreme characters help to generate design insights and explore edges of the design space (Djajadiningrat et al. 2000). Pastiche scenarios create personas derived from fiction like Bridget Jones or Ebenezer Scrooge and help designers be reflexive when creating scenarios (Blythe and Wright 2006) and investigate the value of potential technologies (Blythe and Encinas 2018).

1.11   Criticism

The critique of the method concerns empiricism, especially the relationship between data and fiction. The implementation of the technique in companies has also come under fire (Rönkkö et al. 2004; Chapman and Milham 2006; Chapman et al. 2008; Portigal 2008).

Because the persona descriptions have fictitious elements, some find it difficult to see the relationship between the real users and the way that data is collected and analysed. Here, the criticism is that the fictitious parts prevent the method from being regarded as scientific, as one of the criteria for being scientific is that the study must be reproducible. At the same time, the method has been criticised for not being able to describe actual people as it only presents typical characteristics.

When it comes to implementation, the method is criticised for preventing designers from meeting actual users as actual stories, and encounters with real users give a better understanding of the users' needs. Another objection is the fact that the method does not take internal politics into consideration, and that this can lead to limited use.

The criticism is refuted in this book regarding the method's scientific foundation, with insight into the relationship between empiricism and fiction and with examples of specific ways to implement the persona process in the company.

1.12   Persona, Narrativity, and System Development

I will go into more details about how personas and scenarios are tightly interlinked with narratives. Here, I think of both the relationships between the fictitious characters, the story and the general narrative structures. It is not a novel approach to use narratives within IT system development. Stories have been suggested as a starting point to collect data and as a method to theorise over various project types and project phases. At the same time, focus on stories can play a part in creating insights into what goes on outside and below the official course of events. Thereby, the many, often contradictory and competing, stories and interpretations that circulate in an organisation can be revealed. Narrative descriptions can also be used when you want to theorise about organisations, IT systems, and IT system development. An organisation can be seen as a collective narrative system where members on an ongoing basis construct and play out sequences of events, both individually and together, to be able to remember and create meaning of past, present, and future events (Boje 1991, 1995). Narratives can be used in the process of structuring both the IT system development process and the IT system itself. Here, the narrative contributes to creating a partnership and a shared understanding of the stakeholders and their goals. It applies both to the development and the presentation of the system for the user (Gazan 2005). On several levels, stories also work as templates for gathering and analysing empirical data. This happens in interview situations when you need to determine system requirements. The developers can focus on the users' stories about existing and future practice, analyse them, and this way become aware of requirements (Alvarez and Urla 2002). The requirements can be described in narrative scenarios that are easy to relate to and remember. The scenarios draw on our ability to both create meaning individually and jointly and to arrange and concentrate information in a narrative form (Carroll 2000). Subsequently, the narratives can be used to analyse the process, the mistakes, and the political implications of the development and implementation process (Brown 1998; Brown and Jones 1998).

1.13   Reporting at Virk.dk and the Citizens of Denmark

The two primary cases I use in this book follow different sequences of events and show different ways of using the method. I have monitored the Internet portal Virk.dk for several years, both in practice and as a researcher, and this is the case that best illustrates a complete persona process. With the company SnitkerGroup, I was in 2012 given an assignment to create personas for the internet portal borger.dk. The personas represent all citizens in Denmark, and of all the projects I have been involved in, this one had the potential to become the most significant of my career, as it concerned the development of public digital self-service solutions.

1.13.1   Reporting Through Virk.dk

The first case is about the development of personas for the internet portal www.
virk.dk (Virk.dk). Virk.dk is owned by the Danish Business Authority and is a web
portal through which companies report to the public authorities. Many reports to
the public authorities are mandatory, for example taxes and VAT; others will trigger
compensations, for instance sickness benefits. The reporting takes place by using
forms that are filled out digitally. In 2006, when the project started, for a company to
do a digital report, the company had to have a digital signature. The portal contains
about 1500 different forms, and they have all been developed by different suppliers.
There are, for example, forms for wage statistics reported to Statistics Denmark. The
form itself is developed by Statistics Denmark. Forms for payment of wages reported
to the Danish Tax and Customs Administration, and the Danish Tax and Customs
Administration have designed the form.

   Shortly after launching the portal Virk.dk, a headline read: 'The Danes turn their
back on Virk.dk. Six months after launching, the common portal Virk.dk falls short of
expectations. Only 1500 companies are registered users against the expected 50,000'
(Computerworld 11. February 2004, author's translation).

   The reputation of Virk.dk did not significantly improve in the following years, and
in 2007 it was rated no. 10 on the web-magazine Computerworld's list of Denmark's
most prominent IT scandals over time (Computerworld 20. July 2007). When the
Danish Business Authority launched a project to redesign Virk.dk, they wanted a
significant improvement, and one of the tools to improve Virk.dk should be personas.

   The problem with the project was that only a few companies made their reports
digitally, and that the ones who reported digitally were unable to locate the correct
form. To solve the problems, the Danish Business Authority also wanted to include
those who created the forms. The project participants thus came from both the Da-
nish Commerce and Companies Agency and suppliers such as the Danish Tax and
Customs Administration and Statistics Denmark. Furthermore, project participants
from the external suppliers in charge of the web system and graphic design also
participated. The persona part of the project would run over a period of three months.

   The result was a change of focus. Earlier, the portal had emphasised both infor-
mation and reporting, but with the new website, reporting came into focus. There is
still a lot of information on the site, but this is not the first thing that catches the eye
(Fig. 1.4).

1.13.2   The Starting Point

The project did not include funds for doing new interviews with users as most
resources were spent on preparing a report about the attitudes of companies towards
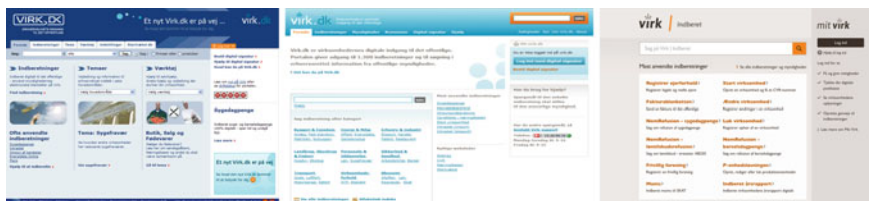digital reporting. The working group began by reading and analysing the initial

Fig. 1.4 Different versions of the homepage of Virk.dk representing 2004, 2010 and 2018

research. Meanwhile, interviews were carried out with staff at Virk.dk support, on issues concerned the users and their typical problems and attitudes towards Virk.dk.

The Danish Business Authority has traditionally split up Danish companies according to their line of business and size. Based on the reports and the interviews, we found that what matters is the size of the company. Large companies have employees who report a lot. In small businesses, the reporting occurs more rarely, and the employee has many other tasks to handle. It is also significant whether the person in charge of the reporting is doing the reporting for the company that the person works for or as a consultant for more businesses.

We presented the result to the project team from The Danish Business Authority and to digital form suppliers. The participants in the workshop confirmed our initial hypothesis. A decision was made that Virk.dk has four primary personas: An employee in a large business who does a lot of reporting. An employee in a small company who does not do a lot of reporting. A consultant who reports on behalf of other businesses. Finally, one who recently became self-employed and hardly does any reporting at all. In addition to these four categories, there were two secondary personas who, for various reasons, are not important, but still had to be included in the project.

The participants discovered that three job roles influence whether the personas begin using Virk.dk and created three 'influencers': an IT manager, a manager, and an administrative employee who receives the forms. These also had to be described in the persona catalogue but not in as many details as the primary personas.

1.13.3 The Personas

In the next workshop, the four persona categories were described: Karina, working in payroll processing in a big company. Dorte, employed in her husband's plumbing firm. Jesper, an accountant in a big accountancy firm. And Michael, self-employed with a deli and wine shop in a small town. The participants created descriptions, which were later revised by the consultants to a linguistically coherent layout to follow the same basic template (Fig. 1.5).

Karina, 40 years old, higher commercial course, holder of a diploma in business studies. Has worked in the payroll office of a larger company for 15 years

Background

Karina has been married to Anders for 13 years, and they have two children, a boy of 11 and a girl of 13. Anders works in sales and is employed at a larger company, also in Horsens. Karina enjoys nature and hiking in the rain and wind, doing a Sudoku ensconced in her sofa, or hanging out with the kids. Karina grew up with four younger siblings, which means that she has always been used to extra responsibility; this characterises her outlook on life

Work

Karina is good with numbers, she knows touch-typing, is used to a numerical keyboard and tabulation. She is in control; she saves things, files away, and tidies up. She is structured, well-organised, thoughtful, and calm and would describe herself as meticulous. She prides herself on doing a good job. Her work practices are governed by a calendar. Karina is adaptable and willing to accept changes, if she can see that this will streamline the work flow.

Reporting

Karina prides herself on knowing digital reporting so that others can consult her. She has built up a routine in using reporting through the portal Virk.dk.

The best way for Karina to take in new knowledge is seeing a demonstration, and she has a good memory. She knows the beaten track inside out, but if things do not turn out as expected she can become unsure of herself. She reads error messages if they pop up and attempts to deal with them, but she prefers calling her IT supporter instead of guessing what the solution may be.

Since Karina does her work well, thoroughly, and on time, she finds it critical if the system is down. She finds it annoying and unacceptable but will just try again later. Sometimes she goes to work very early in the morning to do the reporting, because she knows that the system will not be overloaded at that time.

There are many things that could be improved, and if she takes the time to call support she makes suggestions for improvements of the system, as this will benefit both her and others.

Karina can see long-ranging perspectives in digital reporting. It can help her skip much data entry because it offers the possibility of reusing earlier entries and automatically retrieving master data for all employees.

Fig. 1.5   Karina, one of the four personas for Virk.dk (Authors translation)

1.13.4   Scenarios

When the final development of Virk.dk was about to start, it was important that developers and graphic designers also knew the four personas (see Fig. 1.6). Therefore, the last workshop was held with the participation of project managers, system developers, graphic designers, and project participants from the Danish Commerce and Companies Agency. The purpose was partly to introduce them to the four persona descriptions and partly to make them aware of how you work with personas.

The second part of the workshop concerned development of scenarios to gain an understanding of some of the issues that arise when you design a website for four very different user groups. The task for the participants was to describe what will happen the first time the various personas use the new Virk.dk.

1.13.5   In Use

After the project, the Danish Business Authority manufactured different posters: one of each persona, a poster that describes those who affect the use as well as the secondary personas and outlines of the characteristics of each of the four personas assembled in one poster. Over the years they have added more personas and updated the original descriptions.

1.13.6   Borger.dk

For the website borger.dk, aimed at all citizens in Denmark, SnitkerGroup and I were asked by The Danish Agency for Digitization to develop a new cast of personas during the spring of 2012. The initiative should support the first wave of public digital self-service solutions. The aim was to help citizens do digital self-service in specific areas and to reduce the workload of governmental bodies. It was a strategy lasting three years, and by 2016 80% of all communication between citizens and governmental bodies should be digital.

Fig. 1.6   The four personas for Virk.dk: Karina, Jesper, Michael, and Dorte (these are the original personas. Over time they have been altered several times)

The Danish Agency for Digitization was the first in Denmark to create and use personas. They had in 2005 created a cast of 12 personas, but when the government released this strategy for digital self-service, they needed a new one. The old cast had a focus on specific life situations and ICT skills; one was in the middle of a divorce, another about to retire. It narrowed the use of the individual persona in design situations as it became difficult to use them for other cases. Furthermore, the cast was too vast to design for, and the reality was that not all were used.

Data originated from existing data from statistics, scientific reports, knowledge from various public offices, and a few interviews with citizens. Common for all the data was a focus on the following issues: understanding of the public sector, use of IT, and use of and attitude towards public digital self-service. From the data six personas were developed, they vary in their knowledge of what it takes to be a citizen, their understanding of the public sector, their ICT use and competences, and finally their use of digital self-service solutions and attitude towards digital self-servicing.

From the beginning, we created the hypothesis that there is a difference in citizens' ICT skills and their understanding of the public sector, its language and layout (Fig. 1.7). Initially, this created four groups: the young ones who have high ICT skills and are eager to do self-service but cannot, as they do not understand the public sector. A group between the ages of 30 and 49 who have high ICT skills, are eager to use self-service and can do so since they understand the public sector and can use self-service. A group of middle-aged persons who have lower ICT skills and are eager to do self-service but cannot, as they do not have the ICT skills. And finally, the oldest group who neither can nor will, as they lack ICT skills and have complicated problems.

These four groups made sense initially, but when we did data analysis, we divided the eager group into two, based on the level of education: the higher education, the more trust you have in your ability to do digital self-service.

When we presented the five categories, The Danish Agency for Digitization identified the sixth group: foreigners who come to Denmark to work for a period (Fig. 1.8).
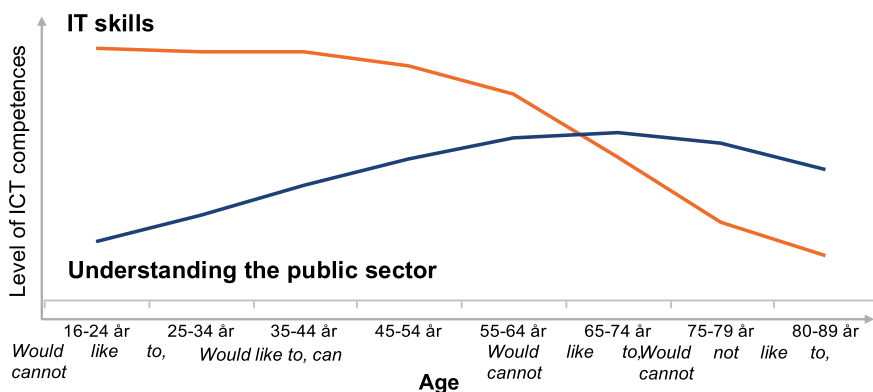

Fig. 1.7 The hypothesis developed by Jimmy Kevin

1.13.7   The Personas Descriptions

The descriptions consist of four parts: personal information, information about attitude toward digital self-service, the solutions relevant for the persona, and a part on accessibility that points to the fact that this persona could have a handicap. Below follows a translation of the first part of the persona description of the couple Camilla and Jasper. Please note that we decided to create a couple, the reason being that in digital self-service there are several obstacles for couples especially in relation to children (Fig. 1.8).

Camilla and Jasper—The Autonomous

> If they leave me alone then I can figure it out on my own. I can pay the tax, and I can find day-care on my own. The less contact, the less queuing - the better it is for me.

Camilla and Jasper live in the outskirts of Copenhagen. They are 35 and 39 years of age, and they have enough on their plate with children and career. They have lived together for the last five years, and two years ago they got their son Storm. Jasper has two children from his previous marriage: Christian and Caroline who by now are 11 and eight years. The children stay with Jasper and Camilla every second week.

Camilla and Jasper's days are busy, and they spend the weekends on planning who is going to do what in the coming week. Even though they have help to do the cleaning and a young girl who picks up Storm in day-care twice a week, it is difficult for them to find time for everything. When the older children stay with them, they also have to drive them to their after-school activities.

Camilla has a Master of Science in engineering and works in a production company as a senior consultant. In her spare time, Camilla does kayaking and has a plan to do an instructors course when Storm is a little older. She has a secret dream of giving up her job and living off teaching kayaking.
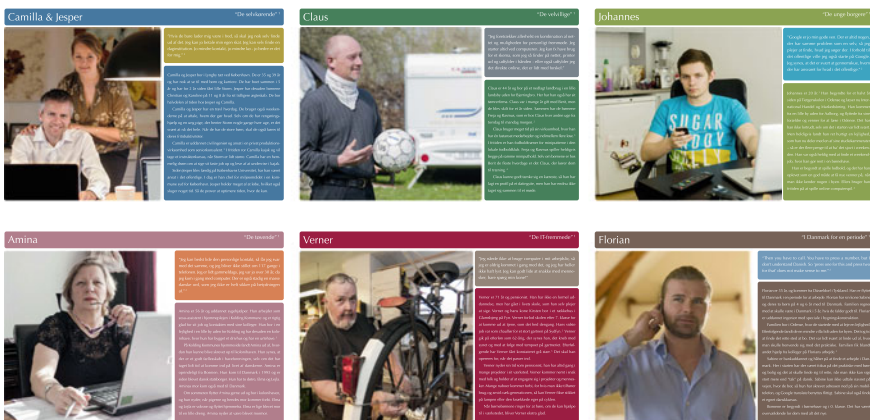

Fig. 1.8   The six citizen personas for Borger.dk

Since Jasper did his Master at Copenhagen University, he has had positions in the public sector. Today he is head of Environment in a municipality south of Copenhagen. Jasper likes to run, which takes up a lot of his spare time.

Jasper and Camilla try to optimise time as much as possible.

Attitude Towards Digital Self-service

Camilla and Jasper prefer to use self-service solutions, and they are curious about what kind of information the public sector has on them and how it can be used.

> If you don't have to enter anything and data comes from a register, then it's even smarter - you don't have to do anything. But it's important that you get a clear message from the system and know your status - or that you get a receipt.

Motivation for Use

Camilla and Jesper would like to be able to use online self-service solutions outside ordinary opening hours. They want to control the process themselves and they get frustrated if they cannot understand their rights and the process of the service.

Accessibility for All

Camilla and Jesper could have a handicap. The solution should be able to cater for social needs and for users that use compensating tools, this can be ensured by applying the guide for web accessibility (WCAG) (Fig. 1.9).

Fig. 1.9 First part of the Borger.dk personas (in Danish)

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