

Introduction

Welcome



[Hello, I'm Chris Nodder. Welcome to the third installment of the UX Design Techniques series. In this episode, we'll discuss creating personas. I'll show you how to use the data you've gathered from your site visits and from other customer interactions to build a picture of the users you care most about. Having this common understanding will make sure the whole team is designing for the same people, so the interface feels coherent and focused. Now it's time to dive in and create some initial descriptions of your target users, so let's get started.](#)

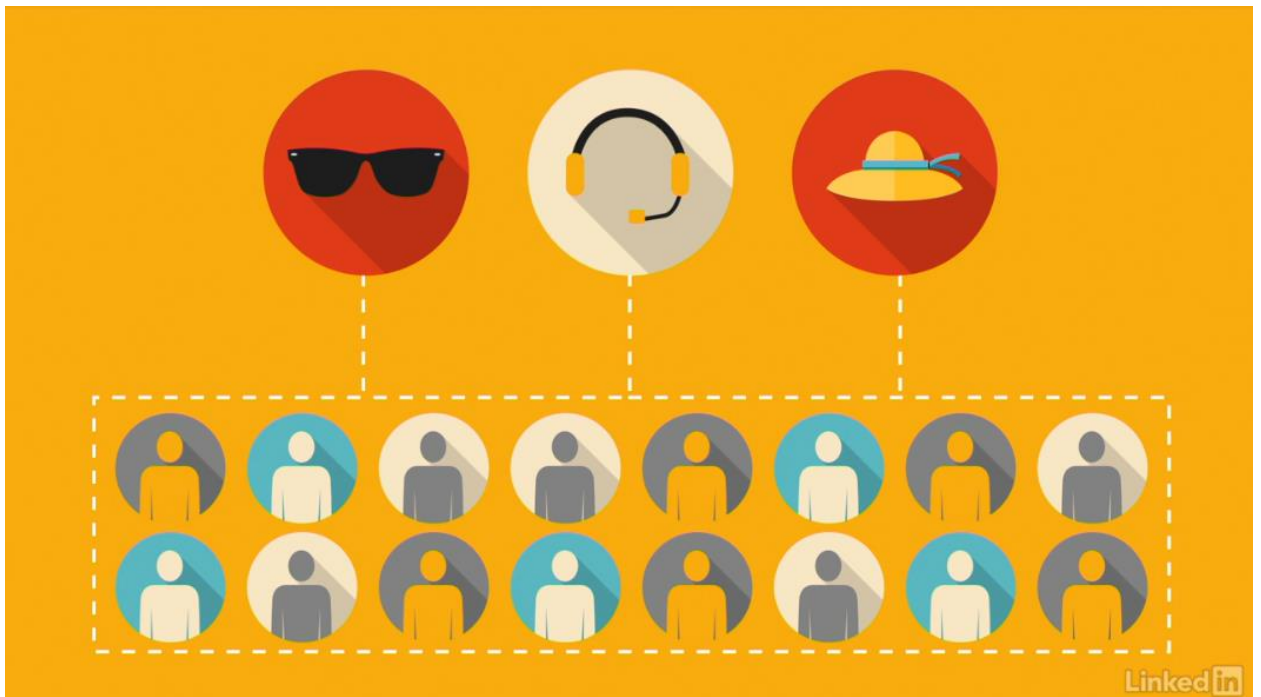
1. Personas in the User-Centered Design (UCD) Process

What is a persona?

Personas

- ▶ Provide a basis for design discussions
- ▶ Describe who a team is building for
- ▶ Focus on specific attributes of actual users
- ▶ Need the whole team's input and buy-in

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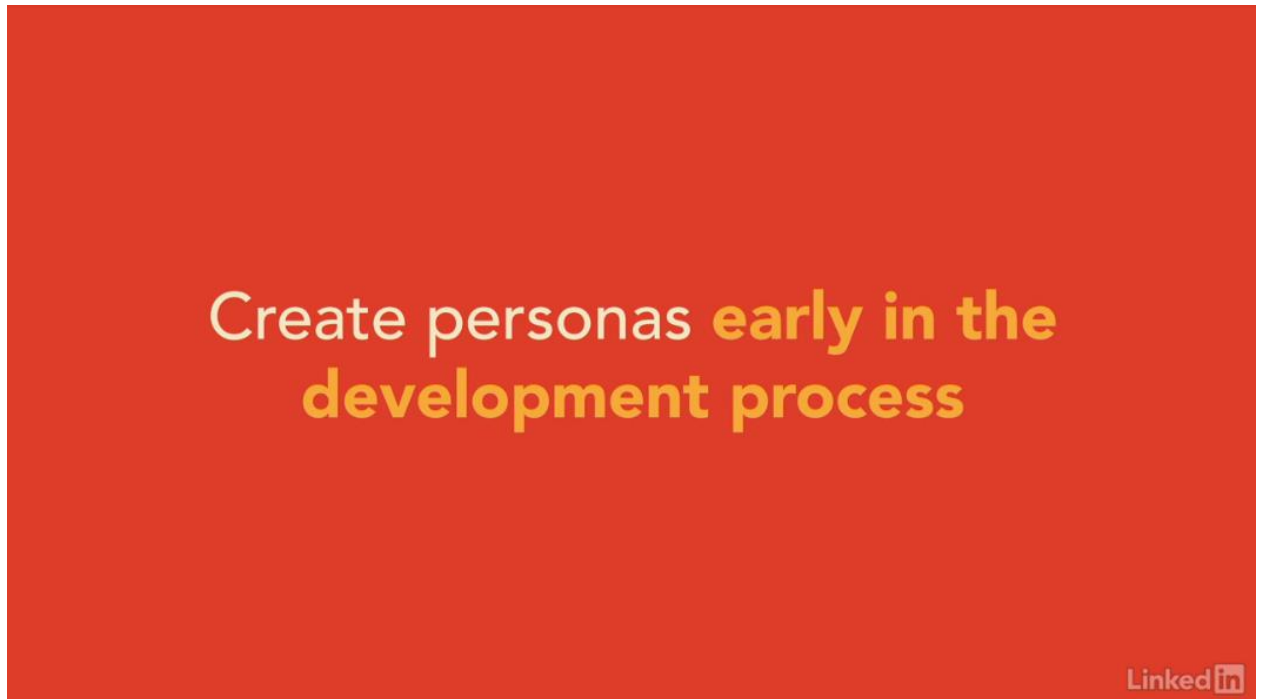


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Personas are imaginary, yet realistic and detailed descriptions of the users of your product. They provide a basis for design discussions by concentrating many pieces of user data into key focused, believable descriptions of your primary audience. Creating personas gives the team a shorthand way of describing who they're building things for. Rather than saying, the user, which could mean anyone. To focus on some set characteristics with specific attributes means that product development takes those personas's needs into account. The whole team needs to buy into the concept of personas. The easiest way to ensure they agree on the key attributes is to get everyone involved in creating the personas to start with. Now, how can just a few fake people be sufficient for designing a whole product? As you'll see the personas you create are highly representative of your key users. Their value is in the focus they give you. Rather than trying to be all things to all people, this focus will mean you deliver a streamlined product with a consistent message. What's really interesting about persona-based design is that, although you're only designing for a couple of key individuals, the vast majority of your user base is likely to share the same needs, or at least

[be able to work with the same features. So by focusing clearly on the requirements of a small group of users, you actually build a better product for all your customers.](#)

How personas fit into UCD



[Personas are created from site visit data in order to focus future design and development efforts. They're essential for ideation, scenario creation, prototype development, and for recruiting the correct user types for prototype usability testing. You can create personas at any time during the development process, but the earlier you do it, the more benefit you'll get from the focus the personas provide. The best time to introduce personas is just after you've finished analyzing your site visit data when the site visits are still fresh in team members' minds. Hopefully, you already conducted site visits with people who you think are representative users or potential users of the product you'll be building. That means their attributes and behaviors are likely to be representative of the attitudes, skill level and background knowledge that you expect in your general user base, so you can use data from your site visits as one input to the personal creation process. As we described in the analyzing data course earlier in this series, part of your experience map was set aside for listing user attributes. Now you can revisit that information to help inform your persona creation.](#)

Successful personas get used in everyday product conversations.





Focus

- ◆ Helps provide a consistent interface
- ◆ Assures the use of common metaphors
- ◆ Trims out unneeded features

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Even users outside of your persona descriptions will benefit from a consistently designed product.

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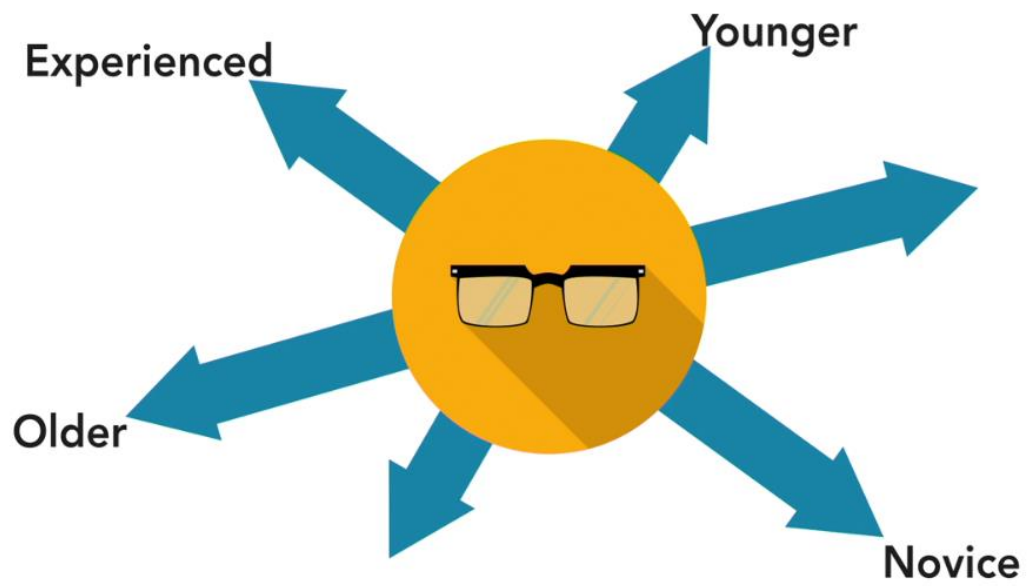
Personas give everyone on the team a common vocabulary for describing the users you will design and develop for. As a result, decision making is easier and the resulting product is more focused. By common vocabulary I mean that team members can use the personas name as a kind of short hand to describe a set of attributes, desires, and behaviors. The attributes, desires, and behaviors are well enough defined that by using the personas name everyone in the conversation immediately knows how that persona might respond to the interface you're developing. In fact, it's a sign that your personas are successful when team members start using the personas names in their everyday conversations about the product. For instance, saying, "Yes, George would want it to behave like that," or, "No, Jesse wouldn't expect "to see that type of interaction here." Having clearly stated persona attributes also helps in decision making. You might be wondering how important each of a set of new potential features would be to your users. It's easy to take what you know about your personas and use that as a way of prioritizing the different features. If your personas are clearly defined, everyone on the team should be able to agree about which

features will provide the most benefit for those personas, and so, which features you should give priority to. And building your product for a set of well defined personas means it will have a focus that would be lacking otherwise. That focus is important, because it makes sure the interface behaves consistently, uses common metaphors, doesn't jump between being aimed at novices and being aimed at experts, and doesn't include just in case features. You know the type of thing I mean, a menu option or other functionality that's put into the product just in case there's one user out there who might want it. Having a defined group of target users means that just in case features can be removed from the priority list, because they wouldn't be useful to your personas. That ability to streamline the product alone is worth the small investment in creating personas. Even if not every user matches your persona description, they will all appreciate the cleaner design that persona focused development allows you to create. Next, I'll explain how to create some simple initial assumption personas, which should be good enough to get you started on the development path.

2. Persona Creation

Elastic vs. concrete users

 PANTONE Mystic Blue 11- 4303 TCX	 PANTONE Blue Fox 14- 4804 TPX	 PANTONE Delphinium Blue 16-4519 TCX	 PANTONE Oil Blue 17-5111 TCX	 PANTONE Colonial Blue 18- 4522 TCX	 PANTONE Classic Blue 19- 4052 TCX
 PANTONE Bit of Blue 11- 4601 TCX	 PANTONE Eggshell Blue 14- 4809 TPX	 PANTONE Maul Blue 16- 4525 TCX	 PANTONE Green-Blue Slate 17-5117 TCX	 PANTONE Mosaic Blue 16- 4528 TCX	 PANTONE Olympian Blue 19- 4056 TCX
 PANTONE Bluewash 12- 4304 TCX	 PANTONE Canal Blue 14- 4810 TPX	 PANTONE Cyan Blue 16- 4529 TCX	 PANTONE Corsican Blue 18-3828 TCX	 PANTONE Blue Jewel 18- 4535 TCX	 PANTONE True Blue 19- 4057 TCX
 PANTONE Spa Blue 12- 4305 TCX	 PANTONE Angel Blue 12- 4814 TPX	 PANTONE Blue Atoll 16- 4535 TCX	 PANTONE China Blue 18- 3918 TCX	 PANTONE Methyl Blue 18- 4537 TCX	 PANTONE Majolica Blue 19- 4125 TCX



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Personas transform "the user"
into concrete people.

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Any focus is better than **no focus**
when it comes to product design.



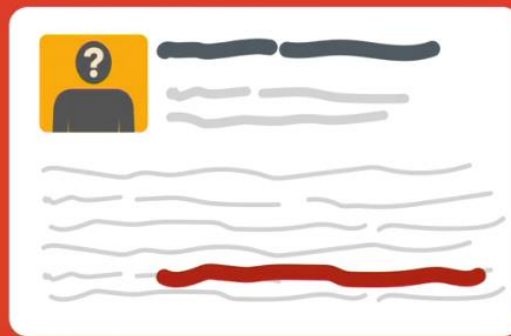
If you asked everyone on the team to think of the color blue, and then showed each of them a selection of Pantone color swatches, how many of them do you think would choose the same swatch? It's the same thing when we ask the team to think about the user. Each of them has a different picture of who the user is. If you're lucky, it's the last customer they saw. If you're unlucky, it's more likely to be the generic "my mom." When you build software, that user description gets stretched in many directions. Sometimes, someone on the team suggests that the user is experienced. Sometimes, they aren't. Sometimes, they're older. Sometimes, they're just out of college. The result is a product that aims at different users at different points in the interaction. Real users aren't made of elastic. They find it hard to cope with our schizophrenic interfaces. Personas let the whole team get on the same page. By creating an explicit persona, you make the concept of "the user" concrete rather than elastic. Even if the persona you created is slightly different from each real-end user, your customers will much prefer a consistent interface over an inconsistent one. Any focus is better than no focus when it comes to product design. Products that don't tell a clear story are harder to learn and harder to use. By building a product around key persona's needs, you give it that focus. In the next video, we'll talk about the easiest type of personas to make: assumption personas.



Assumption Personas

- ▶ Use the data you already have
- ▶ Make assumptions where needed
- ▶ Must be verified as more data is collected

Note which persona attributes are based on assumptions



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Market Segmentation

- Groups customers by purchasing decisions
- Describes general traits in aggregate

Personas

- Describe actual users and behaviors
- Group users by tasks

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At this point in your design process, you might not have a large amount of data about your users, however, you can still build personas based on a combination of the data that you do have, and some assumptions that you make about your user base. The important thing, is to make the assumptions clear, and to talk them through with other team members, this helps you reality-check your assumptions, and then follow up with more data collecting activities, to flush out your assumptions later. The important thing, is to note which persona attributes are based on assumptions. Later on, when we recruit users for usability testing based on these persona descriptions, it will give us an opportunity to test our assumptions, and work out whether our personas need to be tweaked at all. This way, you always have a working model of your personas, and you make small course corrections over time, as you learn more about your users' needs. It's worth mentioning here that personas aren't the same thing as market segmentation. Market segmentation divides customers by the type of purchasing decisions they make. For instance, are they cost-conscious, or early adopters? Market segmentation forms groups using similarities based on

statistical attributes, and it's primarily used to create product differentiation strategies, such as pricing, and features. It describes types of customers in aggregate format. In comparison, personas describe actual users and their behaviors, however fictional the individual really is. Personas are based on the tasks that people want to perform with the product, and they are used primarily for feature creation strategies, such as deciding what features fit with user needs. Market research data can still be really useful for persona creation, but personas are focused more on the creation phase, than the selling phase of product development. So, next, we'll look into more detail at the process of creating assumption personas.

Create a persona



Your Users

- ▶ What attributes do they share?
- ▶ What qualities differentiate them?

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User Attributes

- ▶ Cluster similar attributes in groups
- ▶ Name each group using a role
- ▶ Make each role personal

Attributes

- ▶ What do they do in real life?
- ▶ How comfortable are they with technology?
- ▶ How experienced are they in your field?
- ▶ What design implications are there for each attribute?

Goals

- ▶ Are they concerned about speed?
- ▶ Are they concerned about efficiency?
- ▶ Are they concerned about accuracy?
- ▶ Are they concerned about looking good?

Goals


- Did they choose your product?
- How frequently do they use your product?
- Do they use your product by themselves?
- Do they use your product on a mobile device?
- What do they need to be convinced of?



The process of making personas is quite simple. It's best done as a team, because then every team member feels like they've contributed and so they can buy into the final personas. First, consider the users you observed during site visits. What attributes did they share? What qualities differentiated some from others? You might have these attributes listed in your experience map, or you can get all team members who attended the visit to individually write down the attributes on sticky notes. Now, group the attributes by bringing all the sticky notes together. Once you have some sensible clusters, name each group using a role described by its attributes. You'll probably create between five and 10 roles this way before people run out of energy. Now, you have to make each role personal and believable, taking each cluster of sticky notes in turn. Turn the attribute descriptions into a believable persona. On a large size index card, give the persona a name and an age. It often helps to give them a two to five word tagline. When I was working on Windows Vista, we had Abby the AOL Mom, Nicolas the Knowledge Worker and Ichiro the IT Pro, among others. See what your persona does in real life. Are they a student, a businessperson, retired? And what's their level of comfort with technology? How experienced are they in the topic your product will address? Justify each piece of information you add by showing how it's important to the design decisions you'll have to make later on. For instance, there may not be any point describing the car that the persona drives if you're building a document management system, but it could be every point if you're creating a forum for classic car enthusiasts. Think about the design implications of each of the pieces of information you've provided. For instance, saying that a persona is detail-oriented suggests that they may need to see certain characteristics in the product in order to be happy using it. What are those features? Now write down what their goals are when they're performing tasks with your product. Are they concerned about speed and efficiency, about accuracy, about looking good when they're using the product? What other needs do they have that might not be vocalized but which might factor into their product usage? Next, provide the context for how this persona would interact with your product. Is it through choice or because it's part of their work? Do they interact frequently or just occasionally? Alone or as part of a team? Is their interaction on a mobile device or on a PC? What are the things they need to be convinced by before they would be happy to use their product? In other words, what are their concerns? It's also good to add a couple of quotes that really sum up this persona's attitude. Normally, these will be really easy to find just by looking at the sticky notes on the experience map you already created. After you've done this for several of the clusters of attributes, you'll probably start seeing similarities between some roles such that you could merge them. Maybe some of the roles are feeling more important than others. If you can, narrow your list down to just two personas. Maybe

[with just one additional secondary persona. For instance, a call center support person within the organization who has to interface with the application in order to help customers. If you have a large product with a diverse user base, you might end up with more personas. However, for any one feature set, you need to define the top one or two personas that you care most about for that feature. Whittling down the number of personas is difficult, even at this early stage, because even with such a meager description, you're probably likely already becoming fond of some of the individuals that you've described. But you'll thank yourselves later for being ruthless now. It's much easier to keep the needs of two or three well-differentiated users straight in your head than to try and please a whole herd of ill-defined individuals. The results of this early streamlining will show up in a more focused product.](#)

How many personas do you need?



The infographic is split into two vertical panels. The left panel has a blue background and features a large yellow circle containing a white document icon with a question mark and a person silhouette. The right panel has an orange background. The title 'Reference Your Personas' is written in blue text at the top of the orange panel. Below the title is a list of five bullet points, each preceded by a blue circle with a white arrow. The bullet points are: 'Streamline conversations', 'Discuss the priority of features', 'Remove personal opinions', 'Describe your target audience', and 'Recruit for usability studies'. In the bottom right corner of the orange panel is the LinkedIn logo.

Reference Your Personas

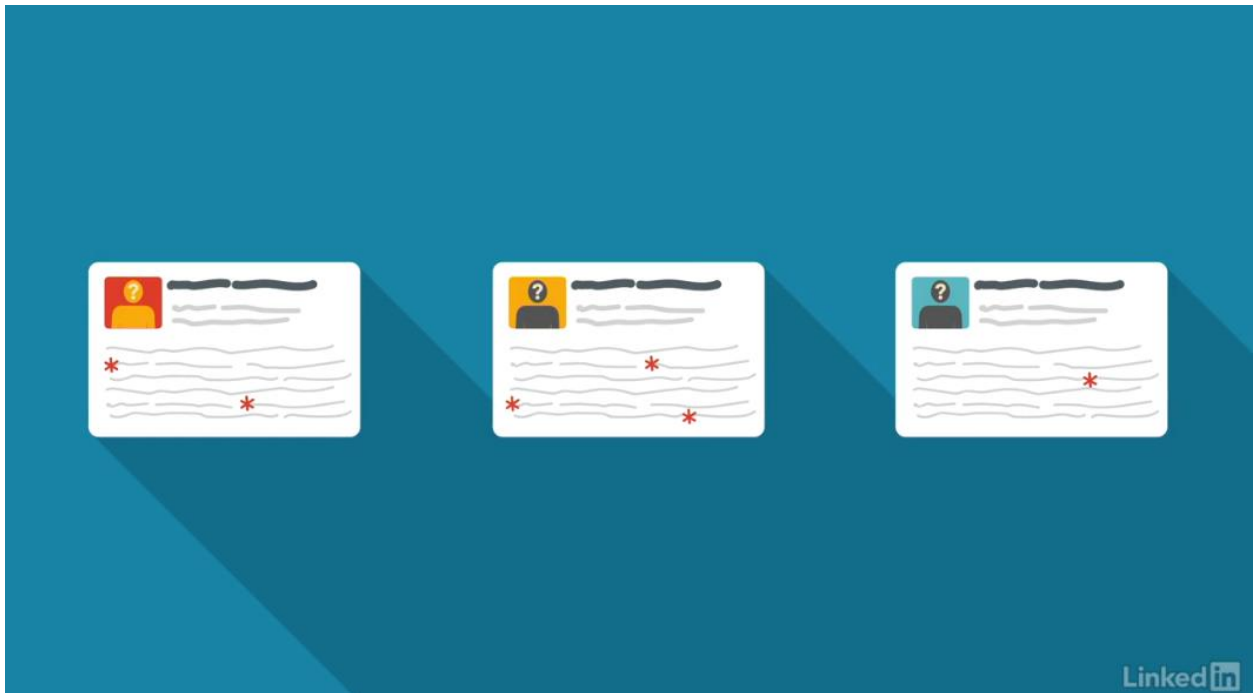
- ▶ Streamline conversations
- ▶ Discuss the priority of features
- ▶ Remove personal opinions
- ▶ Describe your target audience
- ▶ Recruit for usability studies

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[The first uses for your new personas will be in the user centered design techniques that follow this course, ideation, scenario creation, and paper prototyping. But personas don't stop there. As the team continues development work, they'll be making decisions about what interaction style users might prefer. Wherever the team needs to focus on who their users are, they should be referencing these personas rather than falling back into talking about the generic user, whoever that might be. Personas are really useful for streamlining the conversations you have as a team during design activities and feature prioritization discussions. They make it easier to remove the personal opinions of team members from the discussion. Instead of starting a sentence with I think, you can say our primary persona needs. Personas also serve many practical purposes. If you need to describe your target audience to anyone, you can list the top attributes of your personas. When you recruit for usability studies, you have a ready-made template for the attributes you want your participants to match. The more you start adopting these personas, the more likely it is that you'll want to move beyond your initial thumbnail sketches and start gathering more data to backup the assumption personas you created. We'll discuss that process in the next chapter.](#)

3. Data-Driven Personas

Data-driven personas are more believable



You may find that assumption personas are sufficient for your needs on a shorter development job. But if you're likely to be building software for the same users over a period of time having a set of database personas really helps to keep the team focused on who they're building for. This in turn, keeps the user interface focused and makes your users happy. By data based, I mean that every statement on your persona descriptions is backed up by data points and you have additional back up data points that cover other activities your persona may perform and interests they may have. The additional data backing up each of your persona statements, makes the personas much more believable. And also, much more defensible. If someone on the team questions where the customers really do behave a certain way, you'll be able to use your data driven personas to verify that you're heading in the right direction. Typically this is also the time when your personas graduate from being handwritten on index cards to being glossier, well designed posters that you can share with a wider audience. Just recruiting usability test participants to match the assumption personas will help verify your initial decisions. However, there's more data you can collect to build more stable, believable, and accurate persona descriptions.

Gathering Data

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Data Sources from Your Company

- ▶ Field visits
- ▶ Market research
- ▶ Segmentation studies
- ▶ Metrics and log files
- ▶ Helpdesk calls
- ▶ Sales team data

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Think Tanks, Trade Groups, and NGOs

- ▶ Pew
- ▶ International Monetary Fund
- ▶ stats.org
- ▶ Pollingreport.com
- ▶ Yougov.com

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Commercial Research Companies

- ▶ Forrester
- ▶ Gartner
- ▶ Gallup
- ▶ comScore
- ▶ Quantcast
- ▶ Nielsen ratings

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User Experience Research

- ▶ Nielsen Norman Group
- ▶ UIE (User Interface Engineering)
- ▶ Human Factors International

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Government Databases

- ▶ US Census Bureau
- ▶ CIA World Factbook
- ▶ CDC VitalStats
- ▶ Fedstats.gov
- ▶ Data.un.org

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"We saw two users having problems with passwords. How many failures do we get each month?"

- Site metrics
- Server log files
- Helpdesk

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"How likely is it they'd use an online backup system?"

- Industry reports
- NGO whitepapers

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To build data driven personas you obviously need sources of data that relate to your target audience. Some of those will come from within your organization and some will come from third-party research. We've covered field visits already in the course on analyzing user data. The rich information you get back from watching people work with your product in their own environment is invaluable. You can augment it with other sources of information that your company is probably already collecting. Market research is a core component of most company's business. It's important to know what the current state of the market is in order to adapt products accordingly. You can use this research data to help you flesh out your personas. Marketing segmentation is not the same thing as personas as we've already said, however, it's important to understand why the marketing group has chosen to target certain groups and to see how that data corresponds with your personas. Hopefully you collect metrics, or at least have log files for your product that you can query to get usage information and behavioral data. Help desk calls are a wonderful source of information about your personas' wants and needs as well as their current level of expertise. Spend some time listening in on calls and ask the help desk or support group for a list of the top

10 user issues. The sales team are typically a great source of information. They know how the product is being used and by whom. Sales teams typically have contact management systems where they store information about customers. Just be careful using this data, though. Apart from confidentiality issues, often the sales team deal with procurement people rather than with real end-users. You'll have to work out which pieces of data are relevant for the personas you're creating. Now, let's move on to third-party research sources that you can use. Plenty of research institutes sell and give away data. Think tanks, trade groups, and non-governmental organizations such as Pew, the International Monetary Fund, stats.org, Pollingreport.com, and Yougov.com all produce original research and make it available for free. Even if you aren't interested in the main topic of a report, or think that the organization is trying to push a certain agenda, it may contain useful demographic or behavioral data that's relevant to your case. For instance, a report on broadband adoption might note that average data connection speed for certain segments of the population, one of whom is a good match with your persona. Then, there are research organizations who sell reports based on data they've collected. There are the bigger players like Forrester, Gartner, Gallup, comScore, Quantcast, and Nielsen ratings. Then, there are companies who work in the user experience space such as Nielsen Norman Group, UIE, and Human Factors International. You might not have the budget to pay for a full report but these organizations always tease with useful snippets. You can find those in blog postings and in press releases. Finally, there are government databases. Sometimes these aren't as easy to parse as you might like but they tend to contain some of the largest data samples. I'll just list a couple here. The US Census Bureau, the CIA World Factbook, Centers for Disease Control VitalStats, FedStats.gov, and Data.un.org. The examples I've given here are mainly US centric but, hopefully, you'll see the opportunities here and you'll be able to search out some of those data sources in other countries if you need a more local flavor for your personas. The best way to use these sources is to approach them with a question in mind. Otherwise, you can spend hours browsing without gaining any real insight. So, use the data you gather to back up your observations from the field. You might have a question like, we saw two users have problems with passwords. How many failures do we get each month? That's the kind of answer you'd expect to find in your site metrics or server log files or maybe from support staff. Or, you might want to know how likely it is that one of your personas would use an online backup system. So you want to know what bandwidth that type of persona has on average. Industry reports and NGO whitepapers will be a good starting point to answer this question. Remember that you're trying to find data that will verify or augment your initial assumption persona descriptions. Of course, once you've found it, you need a way to catalog it. The initial persona description scrawled on an index card isn't going to be sufficient anymore. In the next video, we talk about how to maintain a data file for each of your personas.

Maintain a persona data file



Storing Persona Information

- ▶ Attributes
- ▶ Goals
- ▶ Scenarios of use
- ▶ Background information

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Don't share persona data files
with anyone

Linked 

Use your research to **back up and clarify** your statements



[Storing all the information you find about your target Persona's needn't be difficult. You can keep it all in a single document, adding to it over time as you gather more data. Split the document into sections, such as Attributes, Goals, Scenarios of use, and Background information. Add new data to it as you find it. And include references to the source of each piece of information, whether it's site visits, or usability test results, URL's to online articles, or links to other company research documents. Here's the really important point about persona data files. Don't share them with anyone. Instead, share the information they contain, and do that in easily consumable chunks, such as posters or summary documents. To clarify what I mean by this, I will use an analogy that Jared Spool from UIE, adopted awhile back. There's a big difference between going on vacation, and seeing someone's vacation photos. You get an idea of the vacation from the photos, but you don't really experience it. So printing off the document as a record of your persona, is a bit like showing someone the vacation photos. It may say that looks nice, but they don't necessarily internalize anything. Instead of sharing the document, share your insights. Use the research you do to back up statements you make, or to clarify statements other team members make. Mine the research for new insights and product solutions. By continually doing new research, you keep the personas fresh, up to date, and most importantly, believable. You replace your initial assumptions with real data. And as a result, you can be more confident in the product decisions you make. The persona data file is just the storage medium for your insights and ongoing research. I've only given you a working overview of data-based personas here. John Pruitt and Tamara Adlin describe how to create assumption and longer term data-based personas in their book, The Essential Persona Lifecycle. This book is well worth reading, if you want to get more detail on the process of creating and maintaining personas over time.](#)

Conclusion

Know your user

How can you possibly do user-centered design without knowing who your user is? A persona description gives your team a common understanding of who they're building for, what that individual's goals are, and what types of interaction they'll be happy to work with. Just saying, "the user," is so vague that different team members can easily go in different design directions. That lack of focus really shows in the products you ship. Instead, creating personas lets you share the basic information about who the product is for. This information is the foundation of a focused, clear, interface that really meets users' expectations. As we've mentioned before, this course is one in a series on user-centered design. Subsequent courses in the series will all make the assumption that you've created personas and will personas as a tool during the development process. This course has shown you the steps necessary to create assumption personas. Some options for collecting additional information to make your personas data-driven and the benefits of having personas as you move forward with user-centered design. Use your personas every time you describe your users. If you do this well, the persona names will become shorthand on the team for a shared knowledge about a set of attributes. The next courses in this series will build upon your personas. When you ideate to create a wide range of design ideas, you'll do it with your personas in mind. When you write scenarios, you'll be writing them for a specific persona. When you create design sketches and prototypes, you'll be building them for a specific persona. When you run user studies, you'll recruit participants who meet your persona description. These tasks all require a good understanding of who you intend to build for. You can approach these activities with more confidence once you have a suitable assumption persona. Personas put the user in user-centered design.