

# Top 10 Skills and Knowledge Set Every User Experience (UX) Professional Needs

The user experience (UX) of your products is only as good as the knowledge and skills of your UX staff. Here are the top 10 things UX professionals should know and be able to do.



### Introduction

As the diversity of your team increases, it's possible that particular individuals may have gaps in their skill-set.

You want your target audience to have a great user experience with the products you are designing. And for that to happen you need a top notch user experience (UX) team to design the product. But what does it mean to have a top notch UX team?

As organizations realize how important the user experience is to the success of their products, UX teams are expanding. People come to role of UX from more and more diverse backgrounds. Some UX staff used to be web designers. Others used to be visual designers. Others used to be usability testers. The plus side of this is that you may find yourself with a team that has a wide variety of skills. In the past you were hoping to find someone with skills in user interface interaction and usability testing. These days you may also get people with programming, animation, and visual design backgrounds. That sounds like an advantage, and it is. But it has a down side too. As the diversity of your team increases, it's possible that particular individuals may have gaps in their skill-set. And the team loses a sense that there is a core set of skills and knowledge that everyone possesses.



### Introduction

Added to this is the fact that there is not agreement about what a UX role is, and what work UX professionals should be doing. A quick read of job descriptions shows this confusion. Some job postings for UX professionals include HTML coding and visual design, others have user testing and prototyping, and still others talk about UI (User Interface) design.

This means that publishing a list of the Top 10 Skills and Knowledge Set Every User Experience (UX) Professional Needs, is asking for controversy. Your top 10 list, therefore, may not be exactly the same as this one. Perhaps it can be a starting point for discussion in your team about what the common set of skills and knowledge should be.

#### Some caveats:

-- The list is not in any particular order.



### Introduction

- -- This is not necessarily the list of *every possible thing* a UX professional should know and be able to do it's the top ten. You might have to add to the list for the particular products your organization designs. However, this list should be a good starting point, and hopefully will take you 80% or more of the way.
- -- This is not everything the whole team needs to know or be able to do. For example, you won't find visual design or programming on the list. Not because they aren't important, but because they're not part of the top 10 things the UX professional needs to know and be able to do. (I told you you might not agree with the list!)
- I have not included "soft" skills, such as communicating clearly, making powerful team presentations, or effectively managing projects. These are critical to success, but not as specific to UX, so they will be covered in a separate whitepaper.



# #1: Psychology

### **Psychology**

Psychology, including cognitive psychology, perceptual psychology, social psychology, and the more recent psychology of unconscious motivations and decision-making.

It's critical that people who are designing products for people to use understand the psychology of the people they are designing for. Here are some examples:

There are psychological principles that apply to almost all people – how people react to colors, what layouts make people think that some information goes with other information and some stands alone, the typical errors people make, the fact that we are influenced by what other people are or are not doing,( which is what makes reviews and testimonials very effective), and so on.



# #1:

# **Psychology**

UX professionals need to have a basic understanding of the most important psychology factors and how they directly affect UX design. Then there are psychology factors that apply to your particular target audience – what motivates that particular target audience? Is it the need to belong? The desire for mastery? Or the research that shows that people have different expectations of how technology should work and what it should do depending on what was the dominant technology was when they were between the ages of 8 to 12? In other words, some psychology factors are specific to your particular target audience.

There are dozens of these psychology factors, and UX professionals need to have a basic understanding of the most important ones and how they directly UX design.



# #2: User Testing

To be sure that you are getting useful, valid, and reliable data during a user test, the person conducting the test must know about standard industry practices of user testing.

#### **User Testing**

User Testing is a particular technique to observe people who are in your target audience using a particular product. It is the standard way to collect feedback on a design, interface, or user experience directly and one-on-one with each participant. There are many ways to do user testing (in-person, remotely, un-moderated), and with many tools (video, eye tracking, clicks) but regardless of the variations, most user testing follows established protocols that cover who is recruited, what instructions are used, what the participants do during a test, how long a test is, and more. To be sure that you are getting useful, valid, and reliable data during a user test, the person conducting the test must know about standard industry practices of user testing, and have experience planning test sessions, creating test materials and conducting, moderating, and interpreting tests.



# #3:

# **User Research**

#### **User Research**

Some people put user testing and user research together, and although there is some overlap, they are somewhat different and require a different set of knowledge and skills. Instead of devising a session to get feedback on a particular interface (user testing), user research refers to collecting data and information from the target audience that goes beyond the scope of observing them using a particular interface. User research includes a wider spectrum of possible activities, including:

- -- interviews to discuss items such as needs, wants, desires and/or task flows
- -- ethnographic observation of people in their natural setting



### #3:

## **User Research**

With Lean Startup and the corresponding Lean UX becoming more widespread, organizations require that UX professionals have the skills and knowledge to conduct critical just-intime user research.

- -- specific structured sessions that include tree tests, or card sorts
- -- surveys to collect demographic, technical or environmental data
- -- documenting all of this user research in various ways such as personas, scenarios, task flows, user stories, journey maps, videography

As philosophies such as Lean Startup and the corresponding Lean UX become more widespread, organizations require that UX professionals have the skills and knowledge to conduct critical just-in-time user research



### #4:

# Principles of Usability

UX professionals need to be familiar with the principles of usability both for design and for evaluation of an existing product.

### Principles of Usability

If you want a product to be easy to use then you need to design the product according to the principles of usability. Usability principles have been evolving over several decades, and there is now a set of principles that is fairly standard across practitioners. Although usability professionals will often argue about what goes on the list, most of those arguments are about what to call things, how to categorize them, and how to prioritize them. There is general agreement on the basic usability principles such as: designing to match how the users want to do a task, providing feedback, making it easy to recover from errors, and so on. UX professionals need to be familiar with the principles of usability both for design and for evaluation of an existing product.



## #5:

# Principles of Engagement

UX professionals need to be familiar with the principles of engagement and persuasive design if they are going to design products that people want to use, and that encourage the target audience to take specific actions.

### Principles of Engagement

When usability principles first came into use the concentration was on making sure that products were easy to use. In recent years there is an understanding that ease of use is not all there is. If you want your target audience to take a specific action it may not be enough to make sure that action (press a button, sign up for a newsletter) is easy to take. It might be easy, but will the person be motivated to take the action? What makes a product not only easy to use but interesting and engaging? And then there is the example of games, some of which are not easy to use, on purpose. UX professionals need to be familiar with the principles of engagement and persuasive design if they are going to design products that people want to use, and that encourage the target audience to take specific actions.



# #6: Lean UX Design

With the emphasis on innovation, and bringing products to market in times of uncertainty, Lean UX is an important force in design and user experience.

### Lean UX Design

Based on Eric Ries' ideas in the book *Lean Startup*, Lean UX covers fundamental ideas about how to design. These include concepts such as fail often and fail fast, iterations, running design experiments, and collaboration. With the emphasis on innovation, and bringing products to market in times of uncertainty, Lean UX is an important force in design and user experience. Even if your organization doesn't practice Lean philosophies, UX professionals should know what they are and how they are different



## **#7**:

# Conceptual Modeling

Conceptual modeling is the early macro design before you design specific interactions.

### Conceptual Modeling

Once you have the relevant target audience research completed you can't just start creating pages, screens, and panel designs. There is an interim step, called conceptual modeling, that UX professionals engage in and may not even realize they are doing. When you work with others, however, it's important to be able to pull out this piece so that you can explain to others where your design concepts are springing from. Conceptual modeling is an early part of design. It's the macro design including information architecture, object maps, screen flows, and navigation diagrams – all things you decide on before you design specific interactions.



### #8:

# **Iterative Design**

UX professionals not only design, they have to successfully lead a collaborative group.

### Iterative Design

If there is one thing that most designers and UX professionals agree on it's probably the need for design to be iterative and collaborative. UX professionals not only design, they have to successfully lead a collaborative group through iterative design sessions that incorporate sketches, storyboards, wireframes and prototypes.



### #9:

# Interaction Design

The true sign that a product is easy to use and engaging is what happens at the micro level.

### Interaction Design

In many ways the true sign that a product is easy to use and engaging is what happens at the micro level. You can have a great information architecture, and wireframes with a visually interesting yet simple layout, but you can tell when a product has been designed well when someone is successful at getting something very specific done, such as register for a specific class, find a doctor while traveling out of the country, or buy the product and have it shipped to a different address. This requires knowledge and skills regarding the best choices to make for even the smallest interface design decision.



# #10: Current Trends

UX professionals need to keep up on the latest trends.

#### **Current Trends**

UX professionals need to know what's going on "out there." They need to keep up on the latest trends (flat design? one page websites? parallex scrolling?). Some of these trends may not last, but others will become standard (remember when responsive design was new and radical? – designing FOR mobile rather than just having a website run on a mobile device!). Teams look to the UX professional to know what others are doing.



# Summary

### Here's the top ten list:

- 1. Psychology
- 2. User Testing
- 3. User Research
- 4. Principles of Usability
- 5. Principles of Engagement
- 6. Lean UX Design
- 7. Conceptual Modeling
- 8. Iterative Design
- 9. Interaction Design
- **10.**Current Trends



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#### About the author

Susan Weinschenk is the founder of The Team W. She has a Ph.D. in psychology and applies research in psychology to design digital products that convert. Her clients call her "The Brain Lady" because she uses brain science to predict, understand, and explain what motivates people and how they behave.

Dr. Weinschenk is the author of several books, including *How to Get People To Do Stuff*, and *100 Things Every Designer Needs To Know About People*. She writes a popular blog: <a href="www.theteamw.com/blog">www.theteamw.com/blog</a>, is a blogger with Psychology Today (Brain Wise: Work better, work smarter), and is an international keynote speaker.

#### About The Team W

The Team W teaches and advises companies and organizations on how to apply psychology to understand, predict, and control behavior. Our clients include Fortune 1000 companies, start-ups, non-profit agencies, and educational institutions.

We consult, teach, mentor, and speak. Our areas of expertise are user experience (UX), including Lean UX, engagement design, persuasion, and usability. Our work includes applying psychology to the design of websites, software, medical devices, TV ads, physical devices, experiences, and physical spaces.