User Experience Design

5 Essential Elements of Great User Experience Design

BY ANAND BHUSARI, MARCH 28, 2019



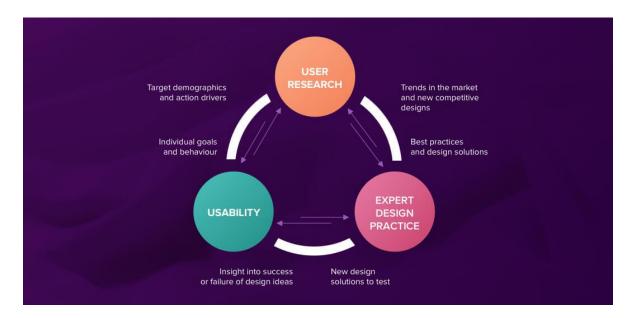
"Design is not just what it looks like and feels like. Design is how it works."

Steve Jobs

Of late, user experience design has emerged as a factor crucial to the success or failure of a product. Designing for a good user experience (UX) has turned out to be essential. It includes everything, from information architecture and visual design to usability, interaction design, and prototype development. More importantly, the UX design is not just about design. It is about creating an engaging experience resulting in customer satisfaction.

A great experience is hard to create and deliver and there's no definitive formula to get it. But there are some key principles that can help to broaden the perception of <u>user experience</u> design, which is still a widely misunderstood term, even within the design community. Here are these 5 essential elements of a great UX Design.

1. User-Friendly Information Architecture



Information architecture (IA) is the science of organizing, labeling, and classifying the content of a website, apps, or software. The goal is to create a website structure that helps users understand and find the content they need.

Even an attractively designed and well-optimized site can fall flat without user-friendly information architecture. If the website visitors can't find the information easily, using the website navigation, they'll leave your site and most probably take their business to your competitors.

The following three things will help you create user-friendly information architecture:

- Users: The target audience, who are looking for particular information from your services.
- Context: What kind of information are you providing to the target audience? In what terms
 are you providing the information to your audience? Content: What is the type of information,
 are you offering your users to read, access or use such as texts, images, videos, or quotes?
 Content is all about engaging the users and providing value

Information architecture UX can be referenced as the keystone of a digital product. It helps design the navigational context of your services, and if the base is strong, the experience will be stronger.

2. Good Interaction Design = Good UX



"Interaction Design (IxD) defines the structure and behavior of interactive systems. Interaction designers strive to create meaningful relationships between people and the products and services that they use, from computers to mobile devices to appliances and beyond. Our practices are evolving with the world."

— The Interaction Design Association (IxDA)

To be more specific, interaction design is focused around user behaviors, how they think and how they expect the user interface of a website to work. Here's a list of key interaction design principles:

Consistency

Being consistent is the key to creating successful interactions with a website or app. For e.g., if the navigation menu is placed at different positions, looks different, or behaves differently across pages, it would lead to confusion.

A website should be consistent in relation to the following elements of interaction design:

- Consistent content, for e.g. same words or phrases should not convey different meanings across different pages or interactions.
- Typographic consistency, such as font face, font size, font decoration, etc.
- Color consistency, including text color, background color, etc.
- Consistent navigation menu design, positioning, and behavior
- Consistent-looking hyperlinks

Perceivability

Website users should be able to perceive interaction opportunities within a website. Provide visible clues to users about when to start an interaction and identify interaction signals. Using different calls to action text or graphics, such as 'start a demo', 'download', etc. will help users interact easily with the website.

Following elements improve the perceivability of interaction:

- Readable text
- Easily distinguishable and legible icons
- Hyperlinks with different colors from other content

Predictability

Make the interaction predictable. Users should have a clear idea of what a particular interaction will lead to and what the steps involved are.

For e.g., while purchasing a product on an eCommerce site the user should be able to see trail navigation of all the steps he needs to follow, such as filling out personal information, delivery address, payment information, and checking out. Providing numbering for each step involved in a process, and displaying estimated time required to complete these steps will further increase the predictability of the interaction.

Feedback Capability

In most cases, users don't have much patience to wait for a particular request to process, and they often abandon interactions if they don't have a clue what's going on in the background.

Therefore, providing visual clues or text messages while a request is being processed will give the user a clear picture of what's happening within the application.

3. Good Usability Design



Usability means enabling users to effectively attain their end objective with a product. Poor usability leads to the bad user experience.

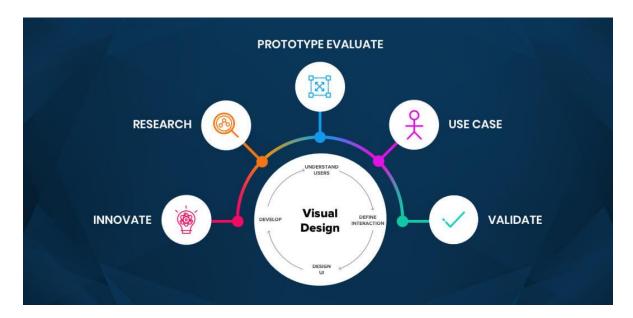
From the user's perspective, usability is very crucial as it helps users complete their task precisely, and users can check it with an enjoyable mood rather than feeling stupid. And, from the developer's aspect, usability is an important principle when it comes to determining the success of a system.

For good usability design, here are the 3 things to consider:

- Effectiveness How users can interact effectively with a product; how easily a product can be operated, and how the product is beneficial to the user
- Efficiency How users can complete a given task and reach a specific goal in a short time
- Satisfaction How users can get satisfaction by using particular information, service, or a product

Usability is an essential consideration for UX designers as it helps in achieving better customer engagement and increase in online sales with better ROI.

4. Great Visual Design



<u>Visual design</u> plays an important part in the user experience, and the users will know what they need to react to and what not. It consists of Information design and visual design.

Information design is aimed at the presentation of information in a way that users are able to understand it. It involves navigation schemes, table of contents, visual hierarchy, and more, so that end users can navigate easily through the information.

Visual design is the final step in the design process that gives the look and feel to the entire structure of the information. The main objective of visual design is to shape as well as improve the user experience through considering the effects of photography, typography, illustrations, spaces, colors, and layouts on the usability of products and on their aesthetic appeal.

5. Planned User Research

"User research is how you will know your product or service will work in the real world, with real people. It's where you will uncover or validate the user needs which should form the basis of what you are designing"

Chris Mears, UX

User research is another essential part of the design process that shouldn't be ignored by UX designers. It's quite apparent that if you are designing for users, you must research user needs, requirements, and expectations. Therefore, user research proves to be a highly effective tool that supports UX designers in making better design decisions.

Listed below are the user research guidelines that will help you in making informed decisions about UX design.

Measuring Metrics of Success

Any type of research or study is worthless if you can't accurately measure the outcomes. Therefore, it's critical to measure design success to derive value from research activities.

There are two ways of measuring UX design success – quantitative and qualitative.

- Quantitative methods include analyzing click-through rates, conversion tracking, and other analytical metrics. It provides a deep understanding of user behavior.
- Qualitative methods include assessing the ability of users to navigate the UI effortlessly, and their ability to complete a set of tasks. It adds credibility to your research findings.

Thus, it's advisable to use a combination of quantitative and qualitative techniques in measuring design success.

Prototyping

Prototyping involves evaluating a prototype with potential users to understand how a user interface or the web application looks and behaves in a real-world scenario. A prototype gives you a good idea about how a particular product, website, or app will respond to user inputs, and what improvements can be made in the product's design to make it feasible.

Prototyping proves to be a great way to keep a design project on track and helps you predict a possible course of design activities.

Focusing on Research Goals

It's very important to keep the focus on research goals while conducting user research. Conducting research won't make much sense if the development team isn't sure about the impact of research on the final product.

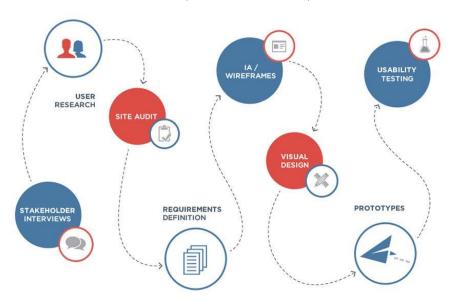
To keep the research focused on the design goals, it is better to answer questions such as to what extent the research will influence the product design. Will it help improve the interactions with end users? Or you just want to conduct the research to justify your design approach?

Final Thoughts

To conclude, there's no sure-shot way to achieve good user experience design, but by following the 5 above-mentioned elements, one can get closer to meet their UX goals and fulfill the end users' requirements. This, further, helps in driving the revenues and delivering good user experience.

The UX Design Process – How to do it the right way

BY ANAND BHUSARI, OCTOBER 22, 2013 (NETSOLUTION.COM)



In my previous post, I talked about 5 vital elements of user experience design. My aim was to clear the clouds off user experience design, which is still a misconstrued concept in the design industry. I believe we now have a pretty good idea about how some of us perceive user experience design and what exactly UX design is.

Now let me walk you through the <u>User Experience Design</u> (UXD) process, which is how you actually create great user experiences.

1. Stakeholder Interviews

The first step in any design or development process is to interview the stakeholders to find out what are their business goals and what they expect out of a final product, e.g. a website, application, or software product.

Stakeholders are those people whose feedback and approvals are required throughout the UX design process. Stakeholders are behind the concept of a software product or a website, so it's critical to understand what final product they have envisioned.

Stakeholder interviews usually build around a problem statement, and then finding possible solutions to that problem. Problem statement translates to the business needs which provide a clear picture of what's the basic reason to develop a particular product.

Here are some tips on conducting a successful stakeholder interview:

- Identify all key stakeholders whose feedback and approvals are required to carry out UX design activities
- Try to conduct one-on-one interview with each stakeholder to uncover unexpected viewpoints

- Record stakeholder interview as-is, and don't rephrase their answers, as it may distort the actual message
- Compile the insights of individual stakeholders into one document and distribute it to all stakeholders for review and comments

Stakeholder interviews offer rich insights into the minds of stakeholders and help UX designers to get the focus right. The best thing to do is to keep the designers and developers actively involved in the process so that they get a clear picture of what's the goal of a product.

2. User Research

User research is often conducted simultaneously with stakeholder interviews, and there's not much difference between the expected outcome of stakeholder interviews and user research. While stakeholder interviews give us insights into what is the business goal of a product, user research tells us what features users expect from the product.

However, before you even start conducting user research, you should know what type of users fall within the target audience, what are their behavior patterns, what they expect from the product, etc. Create user personas or user profiles to get into end-users' mindset, and identify user journeys to know exactly what steps different users take to complete a specific task in a system.

I've explained the two important facets of user research below.

User Profiles

Creating user profiles or user personas is the first step in conducting user research. A user persona is usually based on two dimensions – Demographic and Psychographic. Elements such as age, gender, education level, income group, culture, etc. fall under demographic dimensions.

On the other hand, Psychographic dimensions cover the behavioral aspects of a user, such as likes and dislikes.

Here's an example of a user persona:

Sarah

Works at an apparel store in New York

26 years, Single

- Wears assorted, expensive designer apparel
- Curates music collections and promotes local bands
- Uses iPhone
- Loves exploring new places to hang out
- Comes from a creative, middle income family
- Avid traveler
- Advocates cross-cultural social initiatives

User Journeys

User journeys describe at a high level what path different users follow to complete a specific task within a system, a website, or an application. In case of an existing application or website, user journeys show the current user workflow, and help us find areas of improvement for a better workflow.

User journeys are a great way to understand the application from a user's point of view. It gives you valuable insights about how you should create the flow of activities from one point to the other, so that everything false in the right place and users are able to complete a set of tasks effortlessly.

3. Site Audit

Site audit is done specifically in scenarios where we already have a website or application, which needs to be improved from UX perspective. Site audit is necessary to know the exact state of UX in the current product and find out areas of improvements that could lead to a better user experience.

Though site audit includes a vast list of elements to verify, here's a list of some key areas that shouldn't be left out.

- Key user-specific activities should be easy to locate in the app or a website, e.g. objects, actions, options, and menu items. In addition make sure that main navigation is easily identifiable and navigation labels are clear and concise.
- The system should always keep users informed about what's going on at the backend.
- The app or website should use non-technical and day-to-day terms that are familiar to end users.
- It should be clear whether different words, situations, or actions mean the same thing.
- Error messages should be expressed in plain language and they should also offer a solution, a next step for users.
- Make sure that the help information is easily accessible, well-organized, and relevant.
- Page or application load time should be reasonable.
- Font types and text formatting should be conducive to easy readability.
- Homepage should be easily digestible in 5 seconds. If users take long to understand what the page is all about, it's highly probable that they'll leave the page.

As I said, there are several other factors that need to be verified in a site audit, following the ones mentioned above will ensure a good user experience. Even then, I suggest you conduct the audit based on the requirements specific to your application.

4. Requirements Definition

Gathering requirements itself is a standalone process in a <u>software development</u> life cycle (SDLC), which includes conducting stakeholder interviews to describe product overview, business perspective, functional requirements, technical requirements, usability requirements, assumptions, project constraints, and more.

Therefore, the next step is to document the requirements based on information gathered from stakeholder interviews, user research, and site audit. Remember that the requirements are purely based on insights gathered from stakeholder and user interviews, so it's important to do the first three steps right in order to create an accurate requirements definition document.

The business analysis team is primarily involved in requirements definition of the project, and they follow a typical structure for the requirements definition document, as described below:

- Documents:
 - Current process and problems
 - Goals and objectives
 - Stakeholder requirements
 - Issues and risks
 - Thoughts and ideas
- Business process sketches
- User interface sketches
- Screen flows
- Wireframes
- Use-case specifications
- Use-case diagrams
- Glossaries and terms

The entire design and development activities are done as per the requirements mentioned in this document; therefore, requirements should be described meticulously, so as to keep the project on the right track.

5. Information architecture/ Wireframes

Information architecture (IA) and Wireframe are all about organizing the content and flow of a website or an application, so that users can complete their tasks and achieve their goals easily. The focus is on creating usable content structures out of complex sets of information.

On the other hand, wireframe is the skeleton of a web page or an application. It shows the priority and organization of various elements on the screen, and how all these elements fit in to the overall structure of a website.

Following are the steps involved in developing information architecture of a website, which also includes wireframing.

Content organization

Organization of content is the first step in the IA process, which deals with formally classifying content based on how the users of a particular domain might access it at various levels. However, before your start organizing content, it's critical to develop a thorough understanding of that content.

Techniques such as card sorting can be used here, where all navigation labels of the website are written on different cards, and users are asked to place these cards in a way they want the information to be organized. This technique provides valuable insights, from end user's perspective, on how various content elements can be organized to make content discovery effortless.

Information relationships

Creating information relationships is all about making the information usable. For example, on an online bookstore, people might not always remember a book they want to purchase by its title. Therefore, it's important to connect various metadata elements to a particular book, such as author, publisher, year of publishing, awards, etc. so that users can find a book title by its author name or publisher name, and so on.

Creating Navigation

The next step is to provide a navigation structure to the content being organized. This is where sitemaps and wireframes come into play. While sitemaps display page relationships and paths, wireframes display page-level content organization.

Basically, wireframes bring together all three elements of information architecture – content organization, information relationships, and navigation system – and present them through a basic structure.

Before you actually start working on wireframes, choose the appropriate fidelity of wireframes:

- a) Low fidelity: Low fidelity wireframes are usually created during the initial stages of a design cycle. Paper sketching is the low-fidelity approach to wireframing and is specifically useful during the brainstorming and conceptualizing phase.
- b) Medium fidelity: Medium fidelity wireframes are more refined versions of wireframes which show the behavioral or minimal functional aspects of the application or a website. These wireframes are more relevant in determining how good the user experience is, and whether user needs will be met.
- c) High fidelity design: High fidelity designs are closest to the final product, with various visual elements incorporated in the design, like colors, images, design, and typography. High fidelity designs can be used for usability testing and serve excellent reference for developers to get a good idea of the final product.

6. Visual Design

Visual design focuses on the aesthetics of a site or application. But more than the 'look & feel' factor, the design is driven primarily by the 'usability' factor. By usability, I mean focusing toward creating delightful user experience for the users.

Especially in case of user experience design, user-centered visual design is the dominant design approach. That's why visual design is also referred to as user-centered design within UX design process.

You would agree with me in that look & feel alone cannot guarantee a great user experience for end users. If the design, irrespective of its creative quality, interferes with the usability of a website or application, it's not a good design. Let's unravel some key principles that are associated with visual design.

Based on explicit understanding of users

Visual design is based upon explicit understanding of users, tasks and environments. The aim is to use the design as a supporting element that enhances usability. The design goes beyond the look and feel element and leads to the workability of the design.

User-centered evaluation

The entire design process is driven by user-centered evaluations. Users are constantly involved throughout the visual design process to get feedbacks, make changes, and redesign. Design iterations are done based on the feedback received from users' evaluation of the design. After each evaluation, design is refined further. In this case the priority is given to the usability factor, and several look & feel factors might be sacrificed.

Focus on whole user experience

Visual design cannot be done in isolation from other UX elements, such as information architecture, user research, prototypes, etc. The design addresses the whole user experience, not just the 'design'. Eventually, the design should support all the elements of UX design.

7. Prototypes

Prototyping is the process of creating interactive simulations or paper sketches that work or look like the final product, and getting these validated with broader teams of users, including end users, stakeholders, developers and designers. And doing all this rapidly is call rapid prototyping. In recent years, rapid prototyping has been adopted by design and development teams alike to get better results, faster.

A typical rapid prototyping process involves following three steps:

a) Creating the Prototype

In the first step, prototypes are created based upon the description of the product given by stakeholders and data gathered from user research.

b) Reviewing the Prototype

The final prototype is reviewed by stakeholders and other users, and it's evaluated on the basis of whether it meets the end users' requirements or not.

c) Refining the Prototype

Once the feedback is received, the prototype is refined as per the changes suggested by users. The above 3 steps usually go through multiple iterations until the prototype meets the requirements of the final visualized product.

However, before getting into rapid prototyping it's important to scope a prototype, while keeping following things in your mind:

- Decide what needs to be prototyped. Mainly, complex applications are a good candidate for creating a prototype.
- Determine what percentage of the final product needs to be prototyped. In this case, focus only on those features that will be used most number of times.
- Weave a story around the prototype so that it covers all features developed in the prototype.
 It's about creating a user journey that should evaluate all features included in the prototype.

- Plan your iterations, so that broader areas are prototyped first, such as creating homepage
 or key landing pages first. As you move along several iterations, focus on detailed aspects
 of prototyping, such as users trying to find a brochure or downloading it.
- Determine how closely the prototype will resemble the final product. For example, will it be
 a sketched prototype or a styled prototype? Will it be static or interactive? Will it include
 dummy text or real content?

8. Testing

Testing involves evaluating and benchmarking the usability of a final product with real users. <u>Testing</u> is the key to delivering delightful user experiences to end users. Depending on a particular project, testing may involve following types of testing approaches:

Usability testing

Usability testing involves evaluating and benchmarking the usability of a final product with real users. It is the key to delivering delightful user experiences to end users. All or a combination of following techniques can be used to conduct usability testing:

- **Concurrent Think Aloud** (CTA) testing involves real-time feedback and responses from users as they interact with a product.
- **Retrospective Think Aloud (**RTA) technique asks users to retrace steps they followed to complete a task. This helps in determining whether a particular process is repeatable.
- **Concurrent Probing** (CP) involves asking questions from users while a testing session is in progress.
- Retrospective Probing (RP) is about asking questions and thoughts of users after they've completed their session.

Site analytics

This is particularly relevant in scenarios when you already have a website up and running. Site analytics provide valuable data related to various metrics like click-path, average time spent on the website, bounce rate, etc. that gives valuable insights about user behavior – how the website visitors are using your website.

Based on the analytics data, you can then enhance the IA, navigation and other UX elements, implement the changes, and again revisit the analytics data to see if the changes resulted in any improvement.

A/B testing

A/B testing is a method to test two variations of a web page by subjecting them to experimentation and finding the version that delivered better results than the other.

For example, there are two website designs and you want to know which works better. To find this out, split the traffic to these two versions of the website and measure their performance based on metrics such as number of conversions, bounce rate, sales, etc.

Summary

User experience design process may differ according to the type of website or application you are developing. For example, in some UX design processes, designers and developers prefer doing a prototype before the visual design or user-centered design so that they only design the

final product ones it's thoroughly tested and meets all major requirements of stakeholders and end users.

Though the order of some steps in UX design process might differ in different scenarios, it's important to start from scratch i.e. conduct stakeholder interviews and user research. UX design is all about delighting end users, therefore stakeholder interviews and user research should be done with due diligence. These are the two critical steps that are skipped during most projects. Do these first and the rest will fall into place, and the chances of failure will be very low or non-existent.



About the Author

Anand Bhusari heads creative group at Net Solutions and has been in this field from past 15 years possessing vast experience in print, web and mobile. Anand thinks simplicity is the key to design. He is apple fanboy and loves spending time with his family.