

Newsletter 2021 Issue 1



**Bharati Vidyapeeth's
Institute of Management and Information Technology
Navi Mumbai**

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INSTITUTE OF MANAGEMENT AND INFORMATION TECHNOLOGY
NAVI MUMBAI**



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BVIMIT fortifies student's intellectual awaking and social transformation in different spheres that makes them to contribute to the organization and world as well. We strengthen student's hard work and commitments towards knowledge.

BVIMIT provides MCA, VI semester course enables overall development of students and give a different perspective towards corporate life.

Current newsletter entitled "***PRABHAT-exploring tech rising star***" is a combined effort of students and staff members that commences articles on emerging technologies with theme as "**USER EXPERIENCE DESIGN**" provides articles for the same.

I hope "**PRABHAT**" will take you to the world of prominent technologies.

Editorial Desk



Dr. Pratibha Deshmukh
Editor-in-chief

It is indeed a great honor to be the Newsletter Editor for me and also an immense pleasure to launch the first edition of BVIMIT Newsletter “PRABHAT- exploring tech rising star”.

As we are living in the technological era, we have selected the topic for the article as “**USER EXPERIENCE DESIGN**” to make students aware about this emerging technology. It aims to be a truly interdisciplinary platform seeking to bring together a range of diverse voices on the topic in order to stimulate discussion.

A huge thank you to all the students who contributed writing the articles, without which there wouldn't have been this newsletter.

I appreciate PRABHAT student members for their everlasting support throughout the creation of this edition.

I hope “**PRABHAT**” will convey some technical knowledge to you.



ROHIT V LOTANKAR

STUDENT MCA

USABILITY TO USER EXPERIENCE

Introduction

“Usability” refers to the ease of access and/or use of a product or website. It’s a sub-discipline of user experience design. Although user experience design (UX Design) and usability were once used interchangeably, we must now understand that usability provides an important contribution to UX; however, it’s not the whole of the experience. We can accurately measure usability.

A design is not usable or unusable per se; its features, together with the user, what the user wants to do with it, and the user’s environment in performing tasks, determine its level of usability. A usable interface has three main outcomes:

- It should be easy for the user to become familiar with and competent in using the user interface on the first contact with the website. If we take a travel agent’s website that a designer has made well, the user should be able to move through the sequence of actions to book a ticket quickly.
- It should be easy for users to achieve their objective through using the website. If a user has the goal of booking a flight, a good design will guide him/her through the easiest process to purchase that ticket.
- It should be easy to recall the user interface and how to use it on subsequent visits. So, a good design on the travel agent’s site means the user should learn from the first time and book a second ticket just as easily.

This isn’t the only set of requirements for usability. For example, a usable interface will be relatively error-free when used.

We can measure usability throughout the development process, from wireframes to prototypes to the final deliverable. Testing can be done with paper and pencil but also remotely when we have higher-fidelity prototypes.

It's important to analyze the users' performance and concerns with a web design as early as possible. From there, we can apply a set of guidelines with a grain of salt; because they tend to be general, we need to adapt them to our specific area. Guidelines show a product's features proven to improve usability. We can fine-tune design revisions according to these guidelines, as long as we look at all the dimensions. Sometimes, it might just involve tweaking a menu layout; or, it might involve looking much higher.

We have to consider the user at all points when determining usability. If our designs are to be "usable", they have to pass the test with a minimum number of criteria. If our product were a mouse and not a website, we'd have to ensure that it conformed to standards (to receive that all-important "CE" imprint). For a website, it might be easier to explore how our design ranks alongside a competitor's. Let's go back to the travel agents and see where we might improve our design.

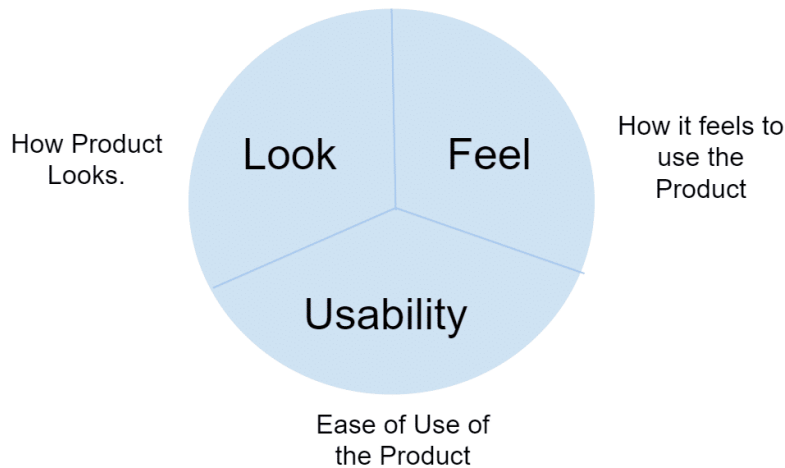
Our design

- Users can navigate to "buy" button in 294 seconds, on average.
- Returning users navigate to "buy" button in 209 seconds, on average.
- 18% of users bought a ticket on finding landing page.
- 42% of users went no further than the landing page.



USABILITY ELEMENTS:

User Experience (UX)



In addition to content, we have web development and design considerations for usability. These are (mainly) outlined as follows:

Server

Servers used to host websites are a usability consideration. Two major factors to consider when selecting servers are:

- Speed - Google ranks by usability to some extent. How quickly your page loads is one of the ranking factors — so, speed to load is also a Search Engine Optimization (SEO) concern. A website that's slow to load and slow to respond turns users off. Servers influence how fast a page will load depending on their capacity, specialization, etc. Naturally, it's not just servers that influence the speed of a page — the web designer has a lot of influence over this in the way he/she serves images, graphics, etc., too.
- Downtime - During downtime, a website is completely inaccessible. It's fair to say that most websites will experience the occasional moment of downtime when a server falls offline. However, some suffer more than most; choosing a reliable server enables the delivery of a better user experience. One bad experience might have a user shrug and come back later. But more than one bad experience and that user may go somewhere else.

HTML

Focus the HTML you use on delivering a better user experience. While, to date, only mobile websites benefit from user experience ranking on Google, it's probably fair to infer that in the future this will also be true on all platforms. Some key considerations for your HTML include:

- Use ALT tags - ALT tags are used in conjunction with images; they let you convey additional information about the image that isn't displayed as part of the main text. ALT tags assist with indexing in search engines (they let you tell the search engine about the content of the image). They also help with screen-reader narration for visually impaired users.
- 404 Not Found Page - Broken links happen, particularly on large websites. While ideally, you should test all links on a regular basis and repair any broken ones, it's a good idea to have a plan for when users encounter a broken link. That plan is the "404 Not Found Page" — a well-designed 404 page will try to assist the user in returning to a positive experience. The default 404 page isn't helpful in this respect. Clunky and primitive, it gives users the impression that they've come to the end of an escalator that isn't attached to a floor. They don't want to fall off and land on an archaic message. As a designer, never lose sight of that. That little courtesy goes a long way.

Visual Factors

The visual factors that impact the overall user experience are the factors where, normally, you the designer have the most control. That means paying careful attention to:

- Font Size and Color - Choose fonts that are easy to read. That means high levels of contrast with the background and font sizes large enough for users to read easily. If some of your user base is elderly or visually impaired, make fonts larger.
- Branding - Branding, in particular the company logo, helps users know where they are online. Based on eye movement patterns, the ideal place for the logo is the top-left corner of the screen. This is where users who read from left to right are most likely to look when first arriving on the site.
- Layout Colors - Colors need to be consistent in order to convey branding and also to develop an aesthetic appeal. In addition, they must deliver readability. Often, they need to convey a hierarchy of information, too.
- Navigation - For users to get the most from a website, they need to get from point A (the entry point) to point B (where they want to be) as quickly and easily as possible. That means providing useful navigation systems, including (for larger websites) search functions, to facilitate that transition.

- Content - The web designer may or may not be responsible for creating the website copy, but there are design elements in the way you display that copy for user experiences:
- Headings - Organize content into manageable chunks through the use of headings, sub-headings, etc. This means developing a scheme for consistent display of each type of heading throughout the website, ensuring a consistent experience as users navigate around the site.
- Paragraphs - Make paragraphs clear and easily recognizable to help prevent the user from being overwhelmed by a “wall of text”. You can also apply Gestalt principles to paragraphs to help better illustrate the relationships between blocks of content.

Website Usability Tools

- Testing your website is easy, thanks to a lot of tools. Many are free; some are freemium, others premium. Get one that works for your website, then let it gather the data about usability. Many let you test on your existing users; you can tell from the data what they’re experiencing, what’s going right and not-so-right. Here’s a list of some:
- Usabilla is another usability testing tool that can also provide information based on the actual usage of your current site.

WebPage FX is a tool for testing the readability of content on a website.

Pingdom offers an insight into the speed of response from your website.

Four elements of User Experience

- **Usability:** Is it easy to complete tasks?
- **Adaptability:** Will people start using the product?
- **Desirability:** Is the experience fun and engaging?
- **Value:** Does the product provide value to users?



It would be wonderful if we could draw the borders of user experience as if it were a country on a map. Unfortunately, the reality is fuzzier. As much as we like making sense of phenomena and applying frameworks, we must remember that users are people. As such, they make decisions steered by logic and emotions.

As we saw above, many designers get confused at the difference between usability and the larger branch of user experience. Core areas of the user experience include (Usability, 2014):

- **Usability:** A measure of a user's ability to arrive on a site, use it easily, and complete the desired task. Remember, we're designing websites, where there is flow, rather than focusing on page design and assuming everything will flow later.
- **Useful content:** The website should include enough information in an easily digestible format that users can make informed decisions. Keep Hick's Law in mind here: streamline your design to be simple. Use restraint.
- **Desirable/Pleasurable Content:** The best user experiences come when the user can form an emotional bond with the product or website. That means moving beyond usable and useful and on to developing content that creates that bond. Emotional design is a huge part of the user experience. An English grammar website that offers daily tips might prove itself useful. But if that tip is funny, users won't only remember the rule; they may return for more!

- **Accessibility:** For people with different levels of disability, online experiences can be deeply frustrating. There are a set of accessibility standards with which sites should conform to assist the visually impaired, the hearing impaired, the motion impaired, etc. Content for the learning disabled needs careful consideration in order to provide a more complete user experience, too.
- **Credibility:** The trust that your website engenders in your users also plays a part in the user experience. One of the biggest concerns users have online is security (in many cases, they worry about privacy, too). Addressing these concerns through your design, for example by showing security features and having easily accessible policies regarding these concerns, can help create a sense of credibility for the user.

Naturally, the usability of a design is important. However, we need to consider usability alongside these other concerns to create a great user experience. The UX comes as much from graphical design, interactive design, content, etc. as it does from usability alone.

The Takeaway

Usability refers to how easily a user interacts with a website or product. It comes under the heading of UX design but is not the whole story of user experience design. In usability, we designers have to focus on three aspects in particular:

- Users should find it easy and become proficient when using a design interface.
- They should be able to achieve their goal easily through using that design.
- They should be able to learn the interface easily, so that return visits are just as, if not more, easy.

We should analyze our web design when determining usability, taking into account everything from accessibility and usefulness of content to credibility and designing content users will enjoy. That means thinking ahead. Who are your users? Might they have trouble reading your text? Can you make them smile or laugh by adopting a fun tone (e.g., edument—entertainment and education—is useful when teaching)? Users will want to feel reassured that they are navigating securely. Make them feel so.

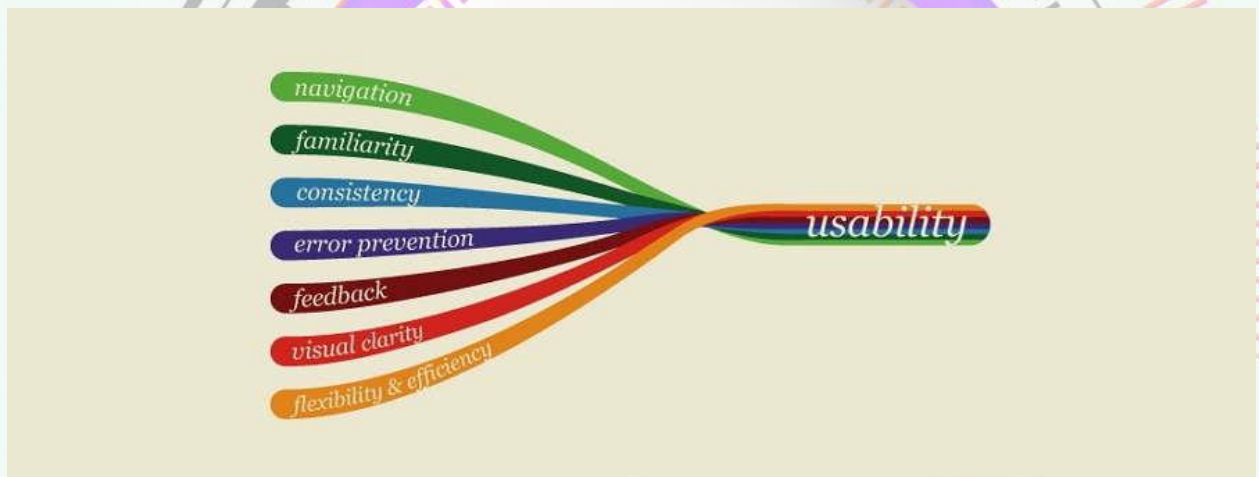
You also should consider the realities of the web. Finding a reliable server for your site that loads quickly is crucial. At the HTML level, you should use ALT tags and design a helpful catch page in case a link is broken.

Visual factors, including layout colors and content formatting, are important, too. Having a good-looking site is all very well, but can users navigate easily?

Finally, test, test, and test. A plethora of website usability tools exist. Never underestimate the value of testing from an early stage. By working out where users click, for example, you'll be well on track to learning their ways and how usable your site is.

Four elements of Usability

- **Functionality:** Can this product work functionally?
- **Learnability:** Can this product be used without extra learning?
- **Flexibility:** Can this product do extra things apart from the main tasks?
- **Design:** Does this product look pretty?



Different goals

Usability: Is it easy to use?

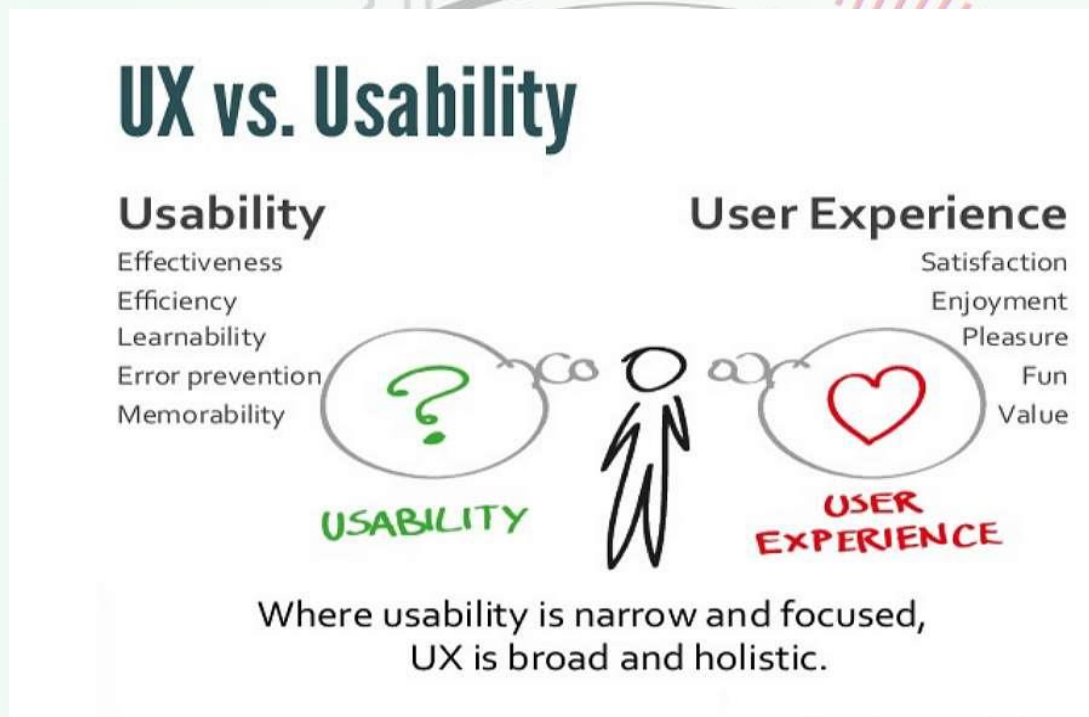
For a website or app, the only goal of usability design is "easy to use".

In other words, when a product is intuitive and easy to understand, and users can easily complete any task in a few clicks, we often say that a product has high usability. However, if most users have difficulty in understanding the interfaces and functions, and a complicated process is involved in completing a task, we often say that a product has very low usability. If so, we often think that its usability needs to be improved.

User Experience: Does it feel good?

However, the concept of user experience is about the overall feeling that a user gets before, during, and after using a website. Usability is related to how easy it is for the user to complete a task while using the site; the user experience focuses on the user's perception of how the site interacts with him.

So, if users do not have a good feeling about a product, we often say that its user experience needs to be enhanced, including the functions, interactions, interfaces, and more.



Typical Issues

While designing a user-centered product, designers often analyze many aspects of a product.

Typical user experience aspects

Design and evaluate what the users do in the process of starting and ending interactions with the product.

Maximize the realization of the stimulus, recognition and arouse emotional resonance.

Typical usability aspects

Evaluate overall effectiveness and efficiency of the product and consider it as a design goal.

Evaluate the degree of user comfort and satisfaction and consider it as a design goal.

Design the product for ease of use, and evaluate usability issues.

Design Principles

There are a few basic principles that designers often adhere to:

5 Crucial Principles of Website/app UX design

1) Usability first

The functions a product offers are often why people choose to use it. So, no matter what types of websites or app you are working on, usability design is one of the top things you should pay attention to while designing UX.

2) Content is key

To make a product usable for everyone, the content in every page should be simple, short, and easy to understand. So, it is always necessary to spend a lot of time on page text design.

3) Pay attention to visual design

To provide users with a more enjoyable experience, a product should have good visual design. For example, you may need to create a clear, intuitive hierarchical layout, a beautiful or fashionable color scheme, an immersive video, audio, images, or other visuals.

4) Keep designs consistent

Design consistency is one of the most important factors that can put users in a good mood and give them a better experience.

5) Make users enjoy waiting

It is inevitable that you have to let users wait sometimes due to poor network or much page data. You can add a loading animation or progress bar to make users enjoy waiting.

5 crucial principles of website/app usability design

1) The 2-second loading rule

A product with high usability will not make users wait too long. So, to improve the usability design of your product, you should try your best to decrease the loading time of every page to less than 2 seconds.

2) User-centered design

Usability focuses on the functional part of a product. And the functions that a product should have often rely on the needs of users. So, always remember to design everything based on users' needs.

3) Manage errors correctly

Apart from main functions, you should also learn to manage errors correctly. All products can have problems. How you explain the problems and guide users to overcome the problems can make your product stand out easily.

4) Make CTA buttons clear

To help users buy a product or complete a task, CTA buttons help a lot. A clear and effective CTA button can definitely streamline the entire process.

5) Make easy-to-follow navigation

An intuitive and easy-to-follow navigation also helps users find their desired functions and information quickly.

Principles that both usability design and UX design should follow:

1) Testing

No matter what types of designs you are working on right now, continuous testing is one of the basic rules.

2) Accessibility

These days, many people use different websites/apps on their mobile phones. So, while designing a product, you should also pay attention to the responsive design and make it accessible on different PC or mobile devices.

3) Responsibility

Be responsible to your users and try to think from their perspective.

Best Examples

We've picked 5 of the best usability design and user experience design examples. They can enable you to have a better understanding of the differences between them.

5 best user experience design examples

1) Line Friends Online Store

Day and night view modes help highlight page content and reduce eye strain, often providing users with a pleasant experience. Line Friends Online Store is a considerate website which uses day and night modes to enhance UX effectively.

2) Bike Shop

To help users find their desired bikes quickly, Bike Shop uses seamless, immersive navigation interactions and animations to provide a cool user experience.

3) Explore the Space

Explore the Space has a very eye-catching hand-drawn design style that helps attract users and ease the entire browsing process.

4) Rate Your Ride

Rate Your Ride uses cute emojis to guide users to rate their rides and provides them with a different and interesting experience.

5) Tesla Mobile App

Tesla mobile app uses an intuitive, simple sidebar to guide users through the app, and know more information about their cars. It simplifies the user exploration process effectively.

5 best usability design examples

1) Baker Tilly

A poor navigation experience is among the top reasons why users leave a website. So, the navigation usability design is an important aspect that designers should pay attention to. Baker Tilly provides clear navigation menus. Every website visitor can have a fluent and pleasant navigation experience.

2) The Bazaar

The Bazaar has a cool accordion style navigation bar that simplifies the entire navigating process effectively.

3) Housing Search

Search usability design is another vital part that cannot be underestimated. Housing Search is designed with a powerful search bar that allows visitors to easily search for their desired houses quickly. It helps empower the navigation system of the entire website.

4) Bug Store e-commerce Website

Precise and well-formed website content helps explain website services or products clearly, and guides visitors to complete tasks easily. So, content usability design should be a focus of the design process. Bug Store e-commerce Website uses simple and clear hierarchical content design to enable users access information on the page quickly.

5) Userberry

As we've mentioned above, managing error messages correctly is an effective way to improve website usability. Userberry has a very interesting 404 animation design that helps visitors understand the error and guide them to browse the website smoothly.

So, user experience design includes every detail that can improve user experience on your website/app. However, usability design is a part of user experience design and covers everything that can help people use your website/app easily. They are different and also similar to some extent.

Extra Things You May Want to Know

1. Usability plays an important role in creating good UX

Products with good usability are convenient and make users feel comfortable while using a product. It also reduces the possibility of users making mistakes while operating a product. If it arouses a good emotional experience and makes the user feel happy and enjoyable, then the user experience design of the product is good.

2. The Difference between Website Usability and Accessibility

Accessibility refers to whether a website is available and can be easily accessed by a normal person or even a disabled person. Accessibility testing focuses on testing if the website is accessible to disabled people and is compatible with various tools used by them.

Usability deals with how easy and intuitive a website is to use. If the users can use a website without any instructions, it can be called highly usable. Usability testing focuses on measuring the ease of use of a website. Remember, you should conduct a usability review before jumping into design.

