**Outline**

**Activity: What do you think UX is? Spend a few minutes brainstorming and jotting down all the ideas that come to mind.**

**What is UX?**

1. What is UX?

UX is not the visual design or prettiness of a website or application…you will see that it is much more as I go through the slides tonight. The official definition of User Experience or UX is “A person’s perceptions and responses resulting from the use or anticipated use of a product, system or service”.

Donald Norman said that he invented the term because he thought human interface and usability were too narrow. He wanted to cover all aspects of the person’s experience with the system including industrial design, graphics, the interface, the physical interaction, and the manual.”

User Experience Design is a process through which we determine the user’s needs, aligns them to the business goals while considering the technical requirements and limitations so that we create something that customers actually want.

1. User Experience Design

Is multi-faceted / multi-disciplinary (including Human Centred Design, Usability, UI Design, Interaction design, Visual Design and Information Architecture) and it is focused on enhancing the user’s satisfaction by improving the usability, accessibility and overall experience of the **product**. It involves tweaking layouts, features, interaction patterns and more to create a seamless and happy experience for the user.

It is an iterative process of understanding a problem

* By observing and understanding the needs of real users
* Generating ideas
* Prototyping different designs which meet the requirements and user needs
* Testing and refining the designs to ensure that it solves the problems users are facing

**Why is it important?**

1. Users are our customers

Understanding stakeholders and users through targeted user research will ultimately improve an organisations bottom line.

The Need for User Research - Using targeted research methods, we are able to collect crucial information into a user’s requirements and ways of thinking.

Making Research Useful - We collate and analyse our research to uncover crucial insights into the needs of users.

Insights Guide Design - so we can tailor a platform to user requirements. Clients are also be able to share in these insights to guide their own processes.

A Better Bottom Line - By tailoring software to target users, they are able to complete a given task more effectively and efficiently. This in turn means a better bottom line for the client because it increases brand loyalty and decreases support costs.

1. Ensure that a product is:

Peter Morville states that a product needs to be useful, usable, findable, credible, desirable, accessible and valuable because these factors determine the users overall experience with a product.

1. Comparing Development with or without UX

|  |  |
| --- | --- |
| Development without UX | Development with UX |
| * Lots of rework * Making assumptions about what problem you are trying to solve * The product is inconsistent * Features are delivered based on business need and timelines * Marketing has to try and sell the product to customers | * Simplifies the product and processes * Can help prioritise features * Makes the user and clients happy * Helps to align the business requirements, technical requirements and user needs * Less time needed for training users * Consistent design * Focusing on UX can reduce support costs by up to 90% * For every R30 spend on UX R1500 is returned, it greatly impacts return on investment * It can save 50% development time by decreasing rework * Customers are 15% less likely to switch brands with good UX * Quality persona’s reduce the amount dev teams need to rework and up to 4x ROI * Wireframing can help more accurately estimate build time and cost * Wireframing helps reduce the clarification by the dev team up to 80% * Wireframing Reduces rework and bug fixes post launch by up to 25% * Proper usability testing and iterative design improvements can reduce support costs by 90% * Spend R1 on research or R10 to change the design or R100 to change something in development * When organisations invest in UX during the concept phase they can reduce the development cycles by 30-50% * UX can better focus feature sets – 5 % of features are used 95% of the time |

**The UX Design Process**

1. The Basic steps in the UX process:
   1. Get to know your stakeholders and define the problem
   2. Observe, engage, get to know users and their context
   3. Research into useful data that guides the rest of the process
   4. Design a prototype that aligns the user needs with business goals
   5. Test and refine your prototype, then do it all over again
   6. Implement your vision in the real world and measure for success

**Design Thinking**

1. Design Thinking

Design thinking is not an exclusive property of designers it is a methodology used to tackle all sorts of problems in a creative way—all great innovators in literature, art, music, science, engineering, and business have practiced it. So, why call it ‘design thinking’? What’s special about design thinking is that designers’ work processes can help us systematically extract, teach, learn and apply these human-centered techniques to solve problems in a creative and innovative way. Design thinking can be applied to everything you do. Many people in this world think that they are not creative and the design thinking process proves that to be wrong. Design Thinking methodology gives you a [confidence to be creative.](https://www.ted.com/talks/david_kelley_how_to_build_your_creative_confidence) By trusting the messy approach and its mindset, you can overcome fear and execute bold ideas.

Design thinking helps to avoid risk by creating a smallest thing to learn from the users who actually use the product. One of the phase is prototyping, which means creating an experience through something cheaper and tangible called prototypes. A prototype could be a product, service, space, et al.

The Methodology include different phases and each phase includes a bunch of methods that can be used based on the needs. Since 2009, there are many design thinking versions available on the internet. But I don’t want to discuss those in detail, the one I am taking you through tonight is used by Standford and The interaction design foundation.

1. Empathise (What empathy is)

Empathize – Empathise with users. Actively listen and understand what the users need. Ask why. Empathy is an important part of UX, it is one's ability to have or show concern for the wellbeing of another. It helps to advocate for the user

* It is important to understand the users perspective
* Withhold judgement
* Remove bias and prejudice
* Consider users emotions

How to be empathetic:

* abandon your ego
* be humble
* listen attentively for deeper meaning
* let go of your own opinion
* practice your observation skills and watch their body language and unspoken cues
* care about your users
* be curious, let the user take you on their journey
* be sincere

An empathy map can help you jot down what the user is feeling:

* Said
* Did
* Thought
* Felt

Empathise (user and stakeholder interviews)

|  |  |  |  |
| --- | --- | --- | --- |
| Understand the business problem | Perform contextual inquiries | Use card sorting to organise information | Use focus groups |
| We conduct stakeholder interviews,  to better understand the business  problem:   * Product Owner * Product Sponsor * Project Manager * Technical Lead * Marketing/Sales   Interview length: 1 hr/stakeholder  Considerations: Consent  Equipment: Audio-visual equipment  Participants: Varying  We interview those with stake in the project.  These interviews give us an understanding of each  stakeholder’s requirements, as well as the  company or division as a whole. | We make use of contextual  inquiries to assess the use context  and need:   * Current Users * Potential Users   Interview length: 1 hr/user  Considerations: Consent  Equipment: Audio-visual equipment  Participants: One on one  We go to where users are; observing and  interviewing them in the context of use. An  understanding of their ways of working tells us  how best to design for them. | We employ an information  organising method called card  sorting to see how users navigate:   * Current Users * Potential Users   Interview Length: 30min/user  Considerations: Consent  Equipment: Audio-visual  Participants: One on one  Card sorting allows us to understand how users  organise content. Cards are representative of  navigational items and pages. | We use focus groups to gain an  understanding of user’s  perceptions and attitudes:   * Current Users * Potential Users   Interview Length: 2hr/group  Considerations: Consent  Equipment: Audio-visual  Participants: 5 -10 |

1. Define

Define – your users’ needs, their problem, and your insights

Create meaningful personas of users from actual user research - Personas help visualize user research and understand users better, Personas consolidate users with similar

characteristics into a single imagined user. A single persona represents a larger group of real users.

Create scenarios from each persona – The When, Where and How a User Engages

Can be used to further create user stories, We design around user’s goals through persona scenarios. The persona becomes a character in a user story, wanting to achieve a specific goal.

1. Ideate

Brainstorm and design different solutions - sketch out solutions, not dissimilar to an

architect’s blueprint. This is a way to quickly visualise and explore different design approaches.

1. Prototype

Create interactive designs to assess our solutions

Use paper prototypes or software – turn the design concepts that we came up with into prototypes so that we can give users and stakeholders the experience of using the software, website or product without having to develop it.

1. Test

We test our prototypes on real users, ensuring we have vetted our design decisions before development begins. We review the ease with which a user is able to complete given tasks.

1. Implement

Building and Testing - Collaborate with developers while they create the product. Get them to add in analytics so that the design team can gather more data and continually improve the product. It is vital we set up analytics during development to see the effectiveness of our design. With these measurements, we are able to continually improve our product, as time goes on.

1. Design thinking in reality

Design thinking can be a highly iterative process and you can start the process at any stage and go back to different stages at any point in time when new insights have redefined the problem or new ideas come up.

**UX in a project environment – how does it fit in?**

1. Integrating UX and design thinking into a project

UX is not a separate from the development process, they function together and are tightly woven to obtain best results. Integrating it depends on what development methodologies are being used in your organisation or for a project

1. Different UX Methodologies

This is just to quickly touch on the point that there are different UX methodologies that you can employ in your project. Lean UX is less focus on deliverables and a greater focus on actual experience. Agile UX is focused on unifying developers and designers in the agile process whilst still holding traditional UX principles of design

|  |  |  |  |
| --- | --- | --- | --- |
|  | **Design Thinking** | **Lean UX** | **Design Sprints** |
| **Research** | Heavy upfront, iterative later | Iterative (research, develop, repeat) | User testing at end of cycle |
| **Time frames** | Have time | Little time, need it out now | 5 days for one solution to a problem |
| **Environment** | Waterfall or before Agile | Agile | Agile |
| **Best time** | A few months before a new project | In an existing agile project (slots in) | Anytime (Before start-up or aim at specific problem) |
| **Pros** | Research upfront gives clear direction | Quick delivery on an MVP | Reduces Start-up Failure (Learn fast) |
| **Cons** | Time and resource intensive | Higher chances of delivering the wrong thing | Burn out if done too frequently |

1. Combining Design thinking and Lean UX into Agile

Sometimes you don’t have to pick only 1 methodology, you can pick 2 and have then work hand in hand. Design thinking in the beginning with gives the project a clear direction, and when the project kicks off Lean UX helps deploys small MVPs which is suited to the agile environment

**Activity: Applying Design thinking? Design the perfect pair of shoes for the person sitting next to you?**

Spend 5 minutes empathising

* Define the problem you are trying to solve
* Ideate different ideas
* Design the pair of shoes
* Test your idea with your user to see if you came up with a solution they are happy with
* Refine your design based on their feedback