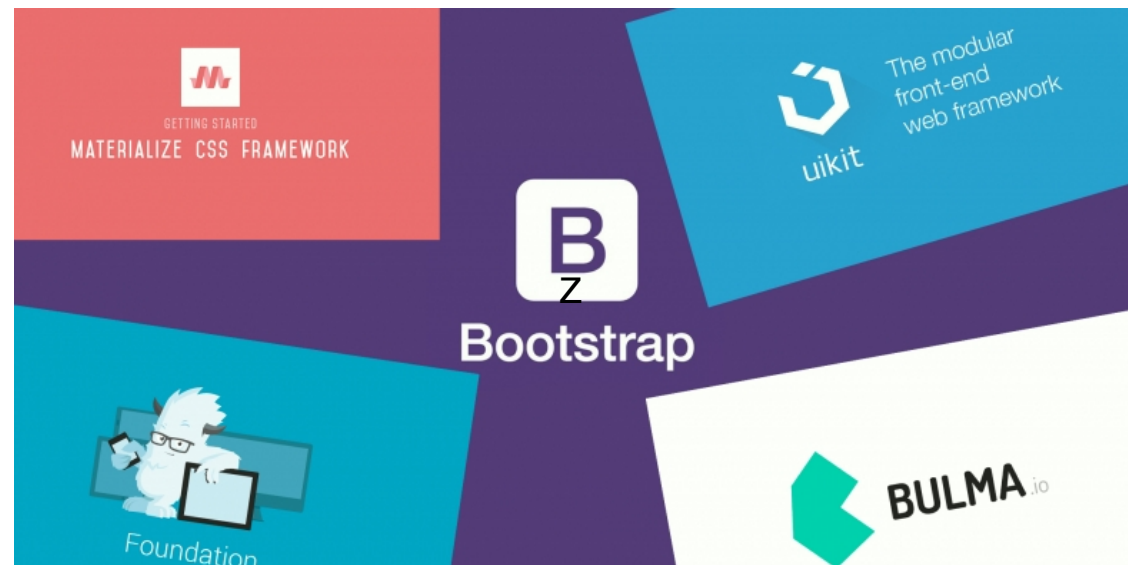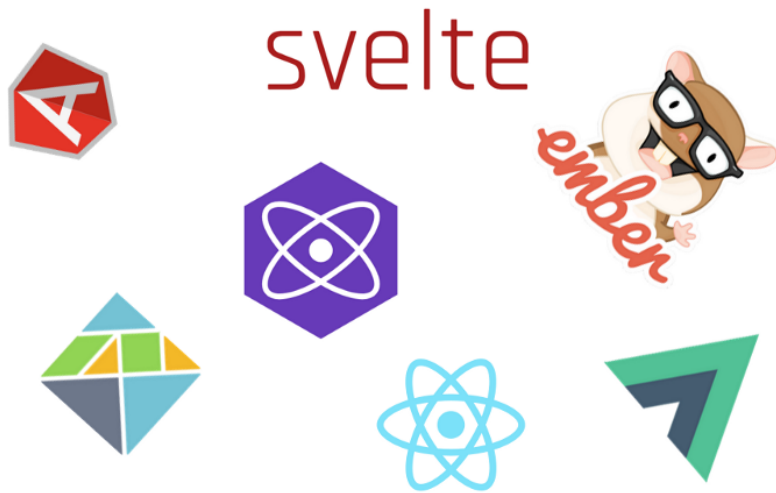# An introduction to

# UX DESIGN: WHY, WHAT AND HOW

Understanding how user feels interacting with the system

Euaggelos Gkaragkanhs
Presentation for Software Engineering Course 2018

# The programming landscape is evolving fast

So does , developing capabilities and design options

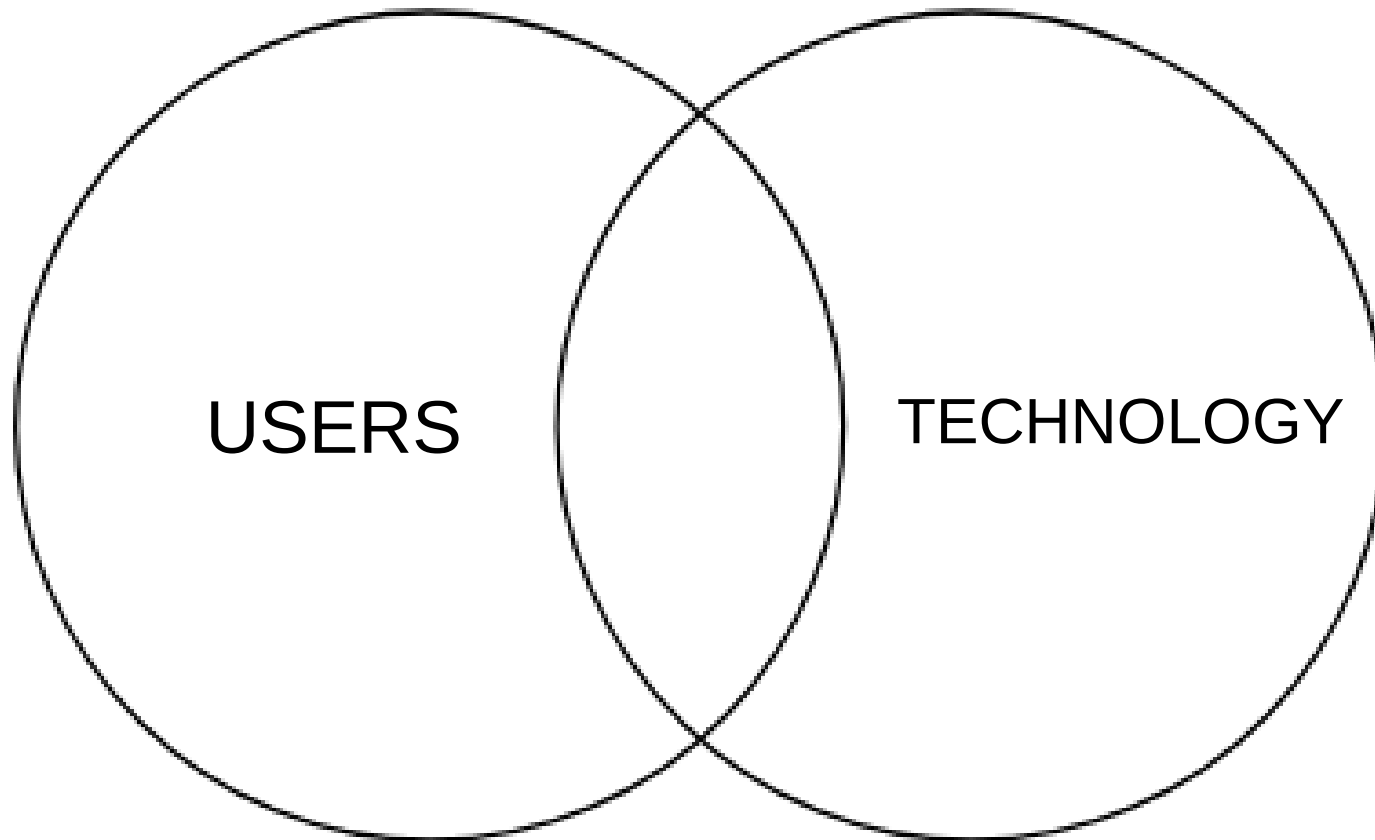# But still , users aren't always satisfied



User's viewpoint

# Neither are developers...



Development viewpoint

As we see , there's a gap revealed when it comes to user needs and technology's perspective

USERS

TECHNOLOGY

# Inside this kind of gap , some interesting statistics can be observed

- *39% of people will stop engaging with a website if images won't load or take too long.*

- *88% of online consumers are less likely to return to a site after a bad experience.*

- *Judgments on website credibility are 75% based on a website's overall aesthetics*

- *You're 279.64 times more likely to climb Mount Everest than click on a banner ad ( lol true )*

- *68% of users give up because they think you don't care about them.*

- *60% of users don't find the information they were looking for at a website.*

# Having respectively the following business cost

- *Poor customer experience costs UK brands £234billion a year and 92% of consumers have had a poor customer experience*

- *It's 6 times more expensive to gain a new customer than to keep the current one.*

- *Slow-loading websites cost retailers £1.73 billion ($2.6 billion) in lost sales each year*

- 5 to 15 percent will be abandoned before or shortly after delivery due to poor usability. This amounts to $150 billion lost.

- The website Time.com reduced the drop by 15% after adopting infinite scroll on the homepage

**Bad UX**

The costs run deeper
than they appear.
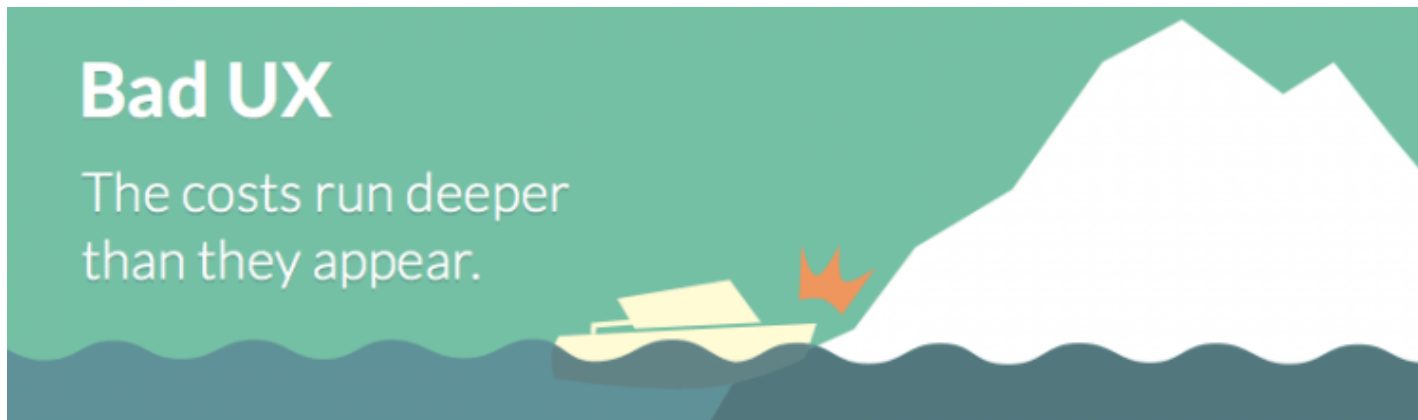
Fortunately , business is starting to realize that

# It's financial value , as well

*– 49% of businesses that ran UX testing in 2013, increased their budget in 2014*

– Visit-to-lead conversions can be 400% higher on sites with a "superior user experience"

*– For every $ 1 invested in email marketing, the average return is $ 44.25.*

– Choosing a particular shade of **blue** resulted in additional income of $ 80 million dollars to Bing.



– 73% of companies currently not conducting user experience testing will be doing so in the following 12 months

– By 2020 , customer experience will overtake price and product as the key brand differentiator
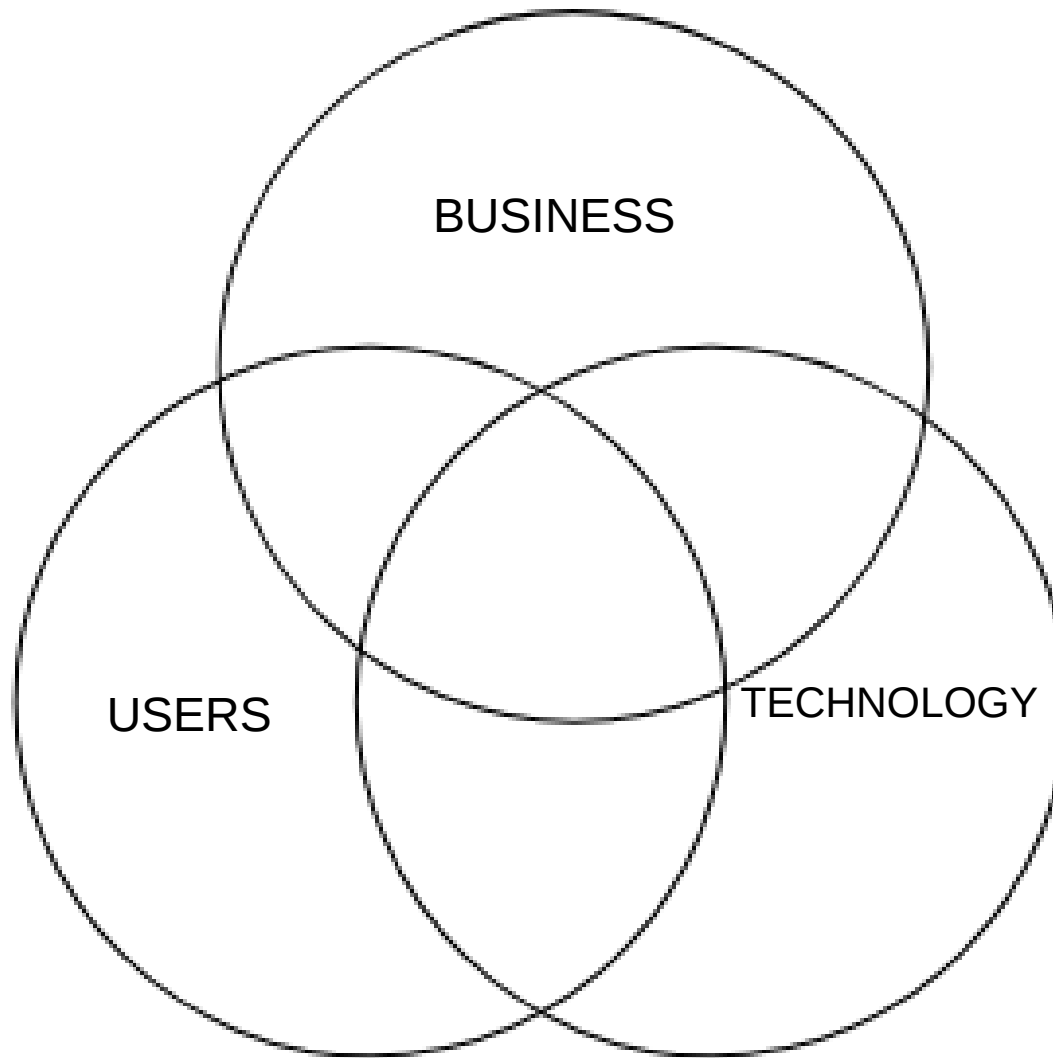
Adding business , the core components of software development industry is completed

So, what's the common ground between User Needs , Technology's Capabilities and Business Goals ?
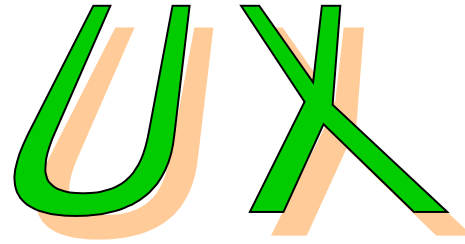


And , what kind of action is required , in order for all these three to coexist harmoniously and achieve utilization for business and users needs fulfillment ?
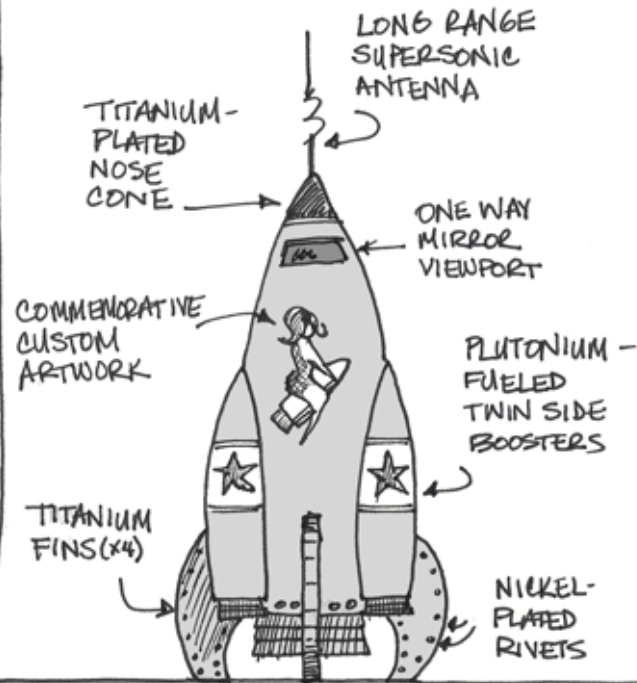
Legitimately the answer is

UX PERIENCE
SER

UX

- **Puts the end user needs in the center of design and development process, taking them into account at every stage of product life cycle.**

- **Tries to understand the what, when, where, how and why someone uses a product.**

So , we just need to find what user wants.
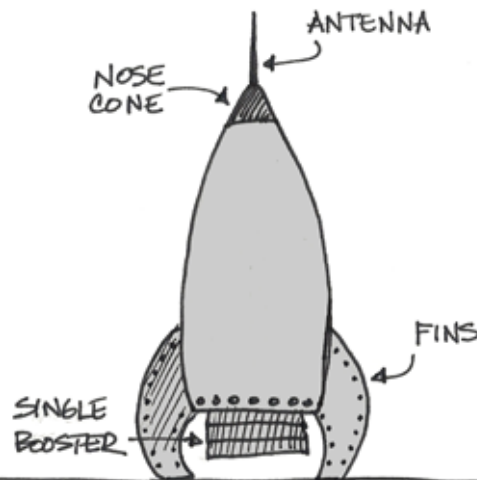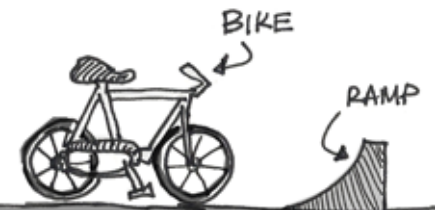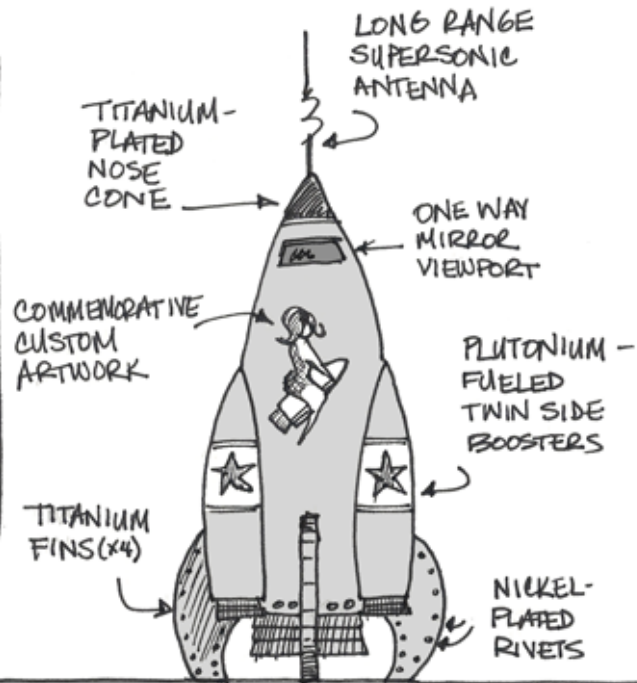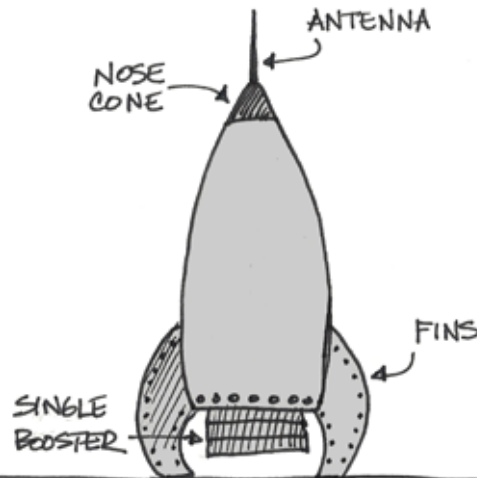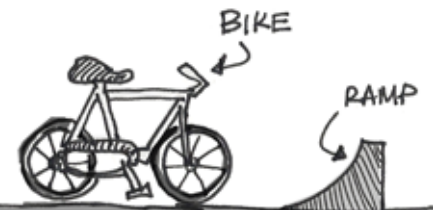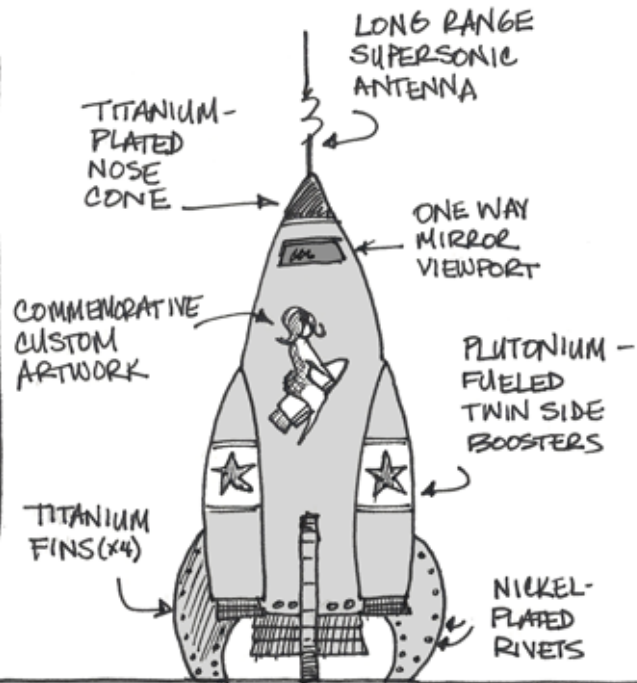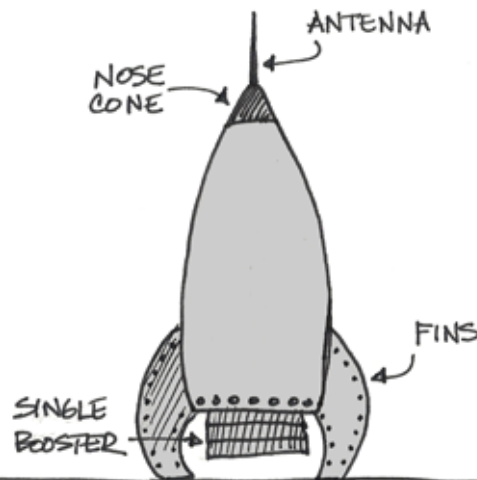
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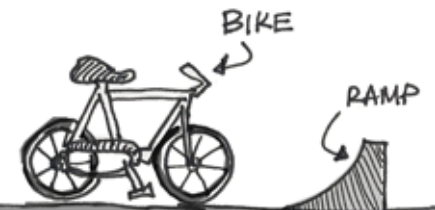
Okay...How about asking them what they want ?
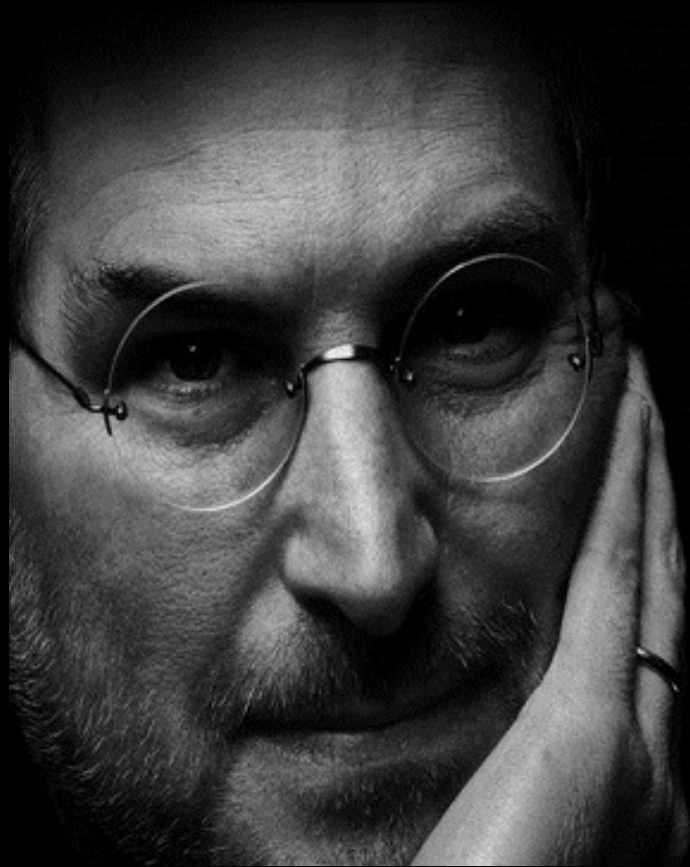
" It's not the customer's job to know what they want "

Steve Jobs

" It's not the customer's job to know what they want "

Steve Jobs

*Thanks Steve*
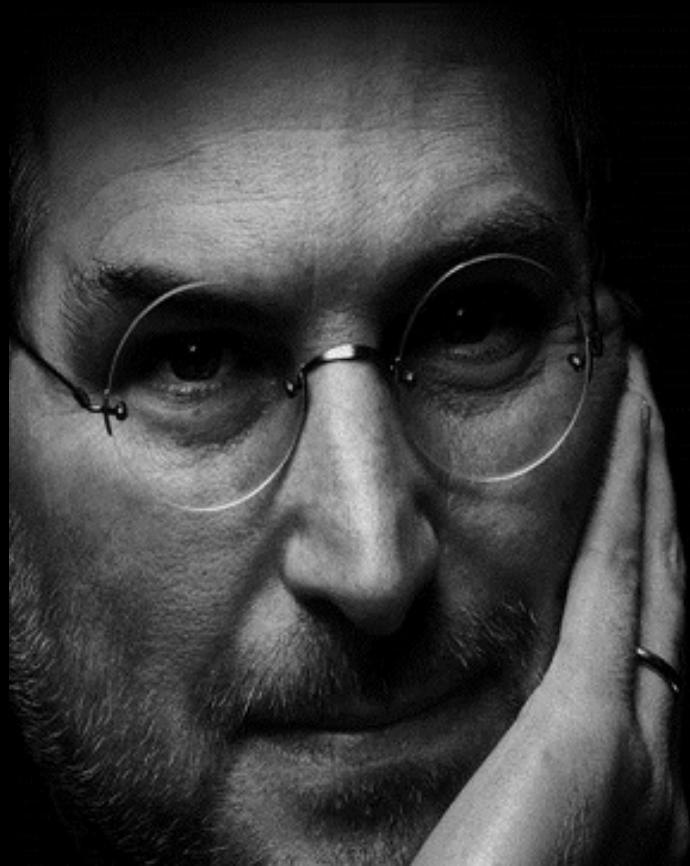
# Let's ask the insiders , what are their thoughts.

What are needed is , understanding the underlying mechanisms that triggers  user's satisfaction and loyalty to product.

*We should focus on improving usability , case of use , pleasure provided when it comes to the interaction between customer and product.*

This requires us to deepen into a variety of science
And human fields , and poses different skills and characteristics
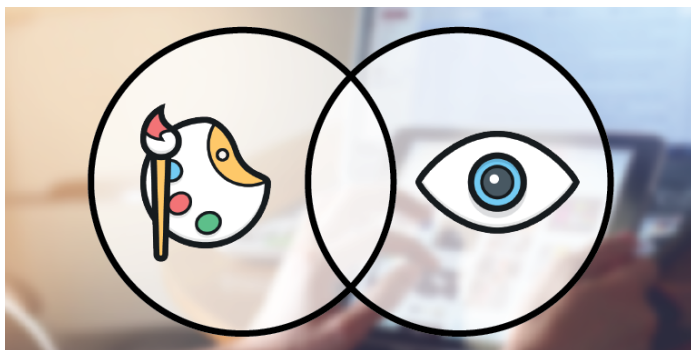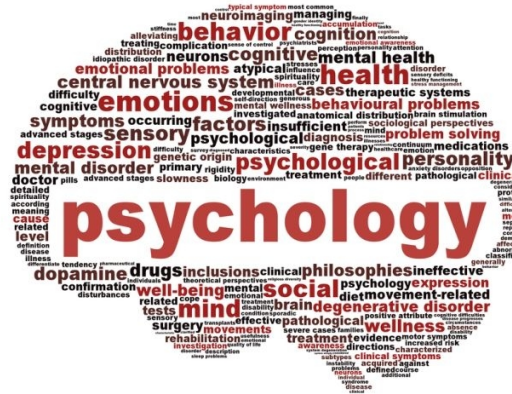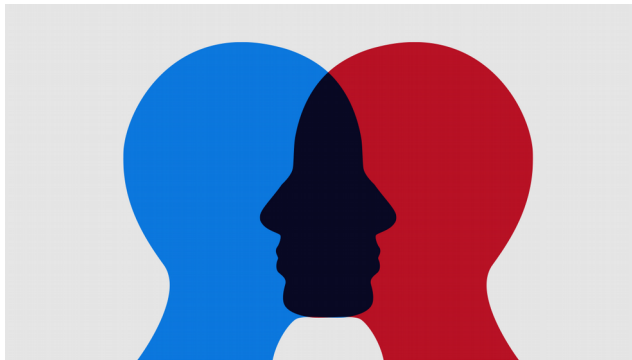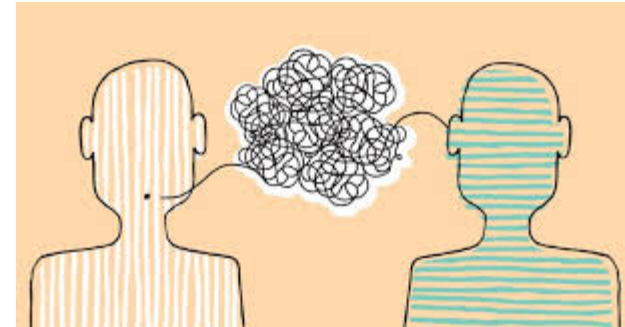
# Gather them together



# Puzzle out how do they work



# Be a UX unicorn

# UX Unicorn

UX | Unicorn

**Data Analytics**
Behavioural Insights
(What)

**User Research**
Usability Testing
(Why)

**Evidence**

**User Journey Mapping**
Experience Mapping
Task & Process Analysis
(Who, When, Where)

**Empathy**

**Sketching**
Wireframing
Interaction Design
Micro-Interaction Design
(How)

**Conversion optimisation**
UCD Strategy
Persuasive Design

**Psychology**

**Exploration**

**Finesse**

**Creativity**

**Experimentation**

**Execution**

**Collaboration**

**Enough Coding &**
Technincal Knowledge
To Design For Feasibility

**Interactive Prototyping**
Development Collaboration

**Information Architecture**
Accessibility
Security

**Philosophy**

**Visual Design**
Creativity
UI Detail & Delight

**Workshop Facilitation**
Design Collaboration
Concept Presentation & Justification

But , how do you become one ?

How do you follow the above signposting ?

And , most important , how can we satisfy the users ?

The procedure that leads a UX designer , to fine crafted products , sticked to the initial goals and validated to user satisfaction is called

# UX PROCESS



**IDEAS**

**STRATEGY**
Articulates the brand, guiding principles, and long-term vision

**PRODUCTION**
High-fidelity design such as, images, icons, and text are created for user testing sessions

**LAUNCH**
Taking the website live while the evaluations and testing continue to occur through in an Agile environment

**DESIGN**
Collaboration and iterations happen through interactive wireframes and prototypes

**RESEARCH/DISCOVERY**
User and competitor research, informal interviews and surveys

**ANALYSIS**
Draws conclusions from data collected during the research phase

Although a UX process is dependent to many factors , highly iterative with many back and forths



Product Definition → Research → Analysis → Design → Validation
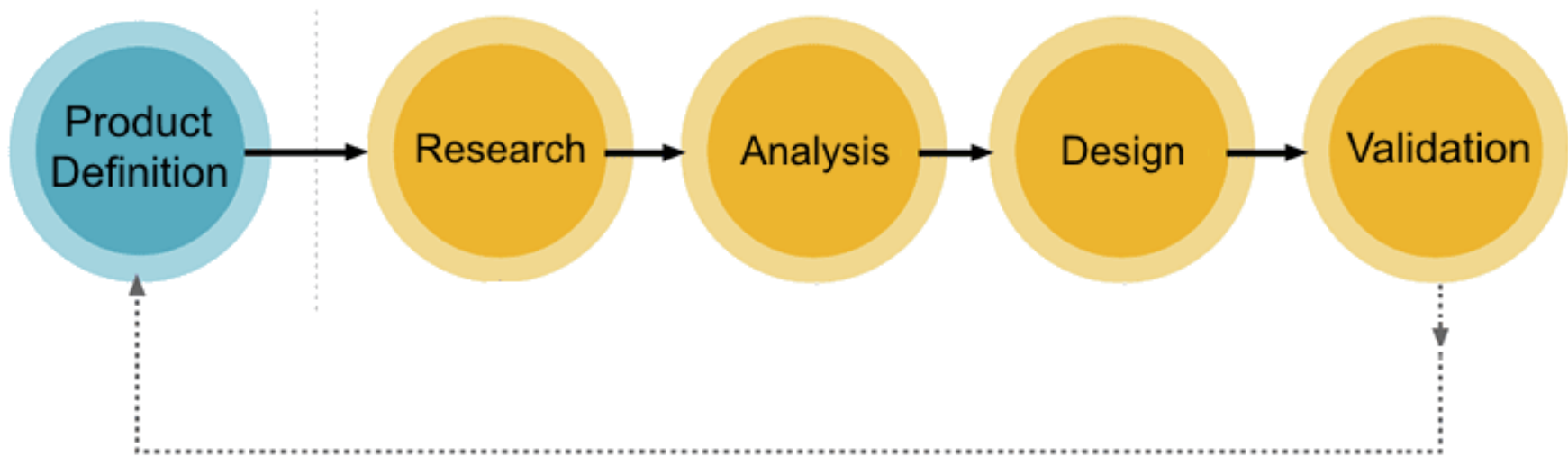
Five key phases can be captured

# 1. PRODUCT DEFINITION/STRATEGY PHASE

The goal of this phase is to understand product's context of existence , reveal hidden skeletons and gather large amounts of information , through brainstorming.

This phase sets the stage for the success of the product by :

- �![arrow] Developing clear defined goals
- ➔ Estimation of product's value
- ➔ Creating consensus to key players.

# This phase includes:

✔ **Create Value Proposition**
Maps out the key aspects of the product , answering questions like
What the product is , who it is for , when /where it will be used.
In that way , unison is created between stakeholders and team .

✔ **Concept Sketching**
Creating an early mock up of what the team is looking to build.

✔ **Project Kickoff Meeting**
The kickoff meeting brings all the key players together to set proper expectations both
for the team and stakeholders. It covers the high-level outline of the product purpose,
who is involved in designing and developing the product, how they will work together,
and what stakeholders expectations are .

✔ **Stakeholder Interviews**
Interviewing key stakeholders in a project to gather insights about their goals. Defining the
goals and values of the product that you would like to build is a key driver for a results-
driven process.

## 2. PRODUCT RESEARCH PHASE

The goal of this phase is to inform product about user and market environment that it is going to be landed.

Provides the other half of the foundation for great design by:

- Saving resources , as it lands early in design process.
- Spying on competition and user insights.

# This phase includes:

✔ **`Individual in-depth interviews(IDI):`**
Dive deeper into user's needs , fear , motivation and behavior.

✔ **`Competitive research`**
A comprehensive analysis of competitor products maps out their existing features in a comparable way. Research helps UX designers understand industry standards and identify opportunities for the product in a given area.

# 3. ANALYSIS PHASE

The goal is to draw insights from data collected during the Product Research phase.



Confirms that the most important assumptions being made are valid by:

- Capturing, organizing and making inferences from the "what" users want/think/need.
- Derive from them in order to understand the "why" users want/think/need.

# This phase includes:

✔ **`Create hypothetical personas`**

Personas are fictional characters created to represent the different user types that might use a product in a similar way. The purpose of personas is to create reliable and realistic representations of the key audience segments for reference.

✔ **`Create experience maps`**

An experience map is basically a visual representation that illustrates user flow within a product/service. A basic experience map just follows one path (one user, one goal, one scenario) even when the product/service allows multiple path variations.

# 4. DESIGN PHASE

The goal is to visualize our ideas.



Guides UX designers to flesh out product's outcome by:

- Create different versions for solving a particular problem.
- Adding the main structure.
- Emphasizing functionality.

## This phase includes:

✔ **`Sketching`**

   Sketching is the easiest way of visualizing ideas. Drawing by hand is also the fastest way to visualize a concept – it allows the designer to visualize a broad range of design solutions before deciding which one to stick with.

✔ **`Create wireframes`**

   A wireframe is a visual guide that represents the page structure (hierarchy and key elements). Wireframing acts as the backbone of the product – designers often use them as the skeletons for mockups.

✔ **`Create prototypes`**

   Prototypes are about interaction experience from it (both look and feel). A prototype is a simulation of the product, commonly using click-able wireframes.

✔ **`Create a design specification`**

   Design specifications usually consist of user flow and task flow diagrams which outline the functionality and style requirements of the product. Design specifications describe the processes and graphical assets needed to make a working product.

# 5. VALIDATION/TESTING PHASE

The goal is to validate results by user's perspective.

Estimates users' approval and product's success by :

➡ Getting and analyzing feedback with different methods and users' sample.

# This phase includes:

✔ **`"Eat your own dog food"`**
Testing it with the product team is a great low-cost validation technique.

✔ **`User Diaries`**
Capture information by asking open-ended questions using Google-Like forms

✔ **`Metrics analysis`**
Numbers provided by an analytics tool about how a user interacts with your product: clicks, navigation time, search queries etc.

✔ **`Working with feedback from users`**

Feedback data such as support tickets, bug reports, and other analytics are able to drive product refinement.

✔ **`User testing sessions`**

User testing sessions serve as a validation of design, based on tests with real users. User testing sessions have a lot of forms, some of the most popular are usability testing, focus groups, beta testing, A/B testing, and surveys , with the following characteristics each :

# User testing sessions include:

✔ **Usability Testing**

Usability testing is the process of watching/tracking an actual user while they use your product to see if it's in fact usable  It is divided to *moderated* and *unmoderated* , based on testers' presence.

✔ **Focus Groups**

Focus groups are a tried and true method of communication between a researcher and users. In a focus group, you bring together 6 to 12 users to discuss issues and concerns about the features of a UI.

✔ **Beta Testing**

Beta testing allows  to roll out a near-complete product to individuals who are happy to try it and provide critical feedback. This testing method allows you to ask users questions after they have the new product, track their usage and have them file bug reports.

✔ **A/B Testing**

An A/B test is ideal as the appropriate testing method when designers are struggling to choose between two competing elements. This testing method consists of showing one of two versions randomly to an equal number of users, and then reviewing analytics on which version accomplished a specific goal more effectively.
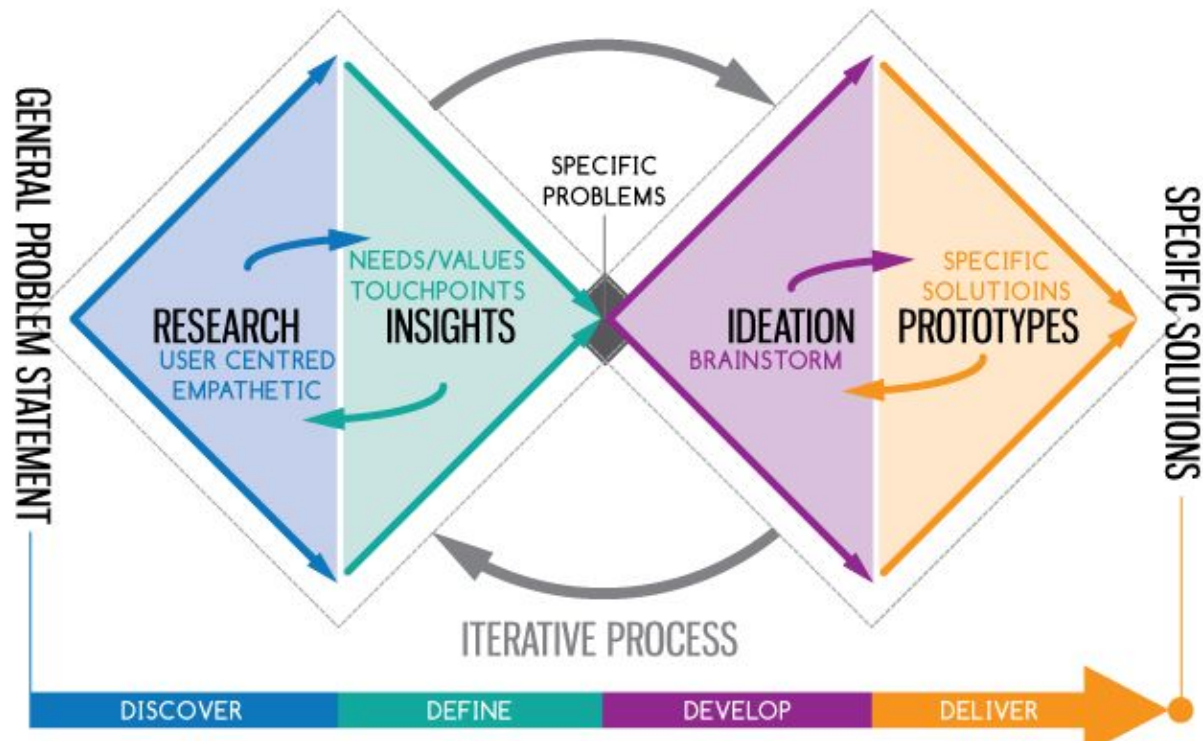
✔ **Surveys**

Questionnaires and surveys are an easy way to gather a large amount of information about users, with minimal time invested. The right questions can uncover customer needs, desires, and pains.

With validation phase , UX process **cycle** is completed.
One step closer to reality presentation , is the :

## Double Diamond DESIGN PROCESS

GENERAL PROBLEM STATEMENT

SPECIFIC SOLUTIONS

SPECIFIC PROBLEMS

RESEARCH
USER CENTRED
EMPATHETIC

NEEDS/VALUES
TOUCHPOINTS
INSIGHTS

IDEATION
BRAINSTORM

SPECIFIC
SOLUTIOINS
PROTOTYPES

ITERATIVE PROCESS

| DISCOVER | DEFINE | DEVELOP | DELIVER |

As already stated , UX design isn't a linear process. The phases of the
UX process often have considerable overlap and
multi-pull iterations , so it's up to UX designer's flexibility to adjust to
project needs and requirements.

# in summary

✔ **We saw why UX is getting more noticeable in software development, examples explaining the core of the need and how it's future potential will escalate.**

✔ **We acknowledged what UX actually is , what it does and the depth of human and science factors it reaches.**

✔ **How a UX designer works & the process that brings to the surface user insights about satisfaction & relationship with the product.**
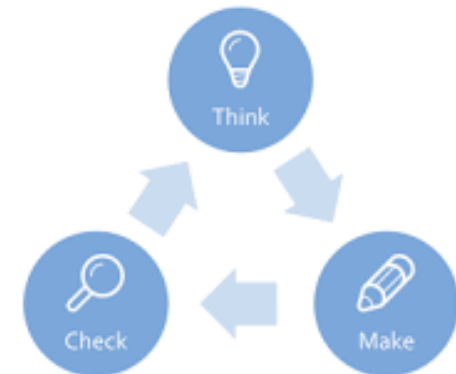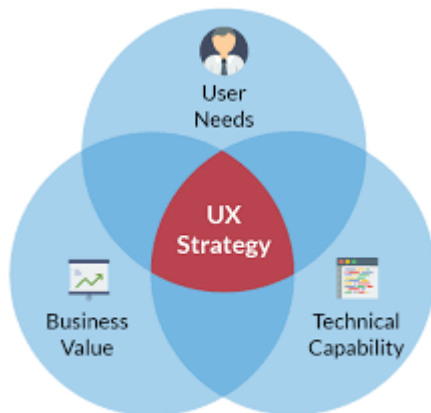
> Our job is to give the clients, on time and cost, **not what he wants**, but what **he never dreamed he wanted**; and when he gets it, he recognises it as something **he wanted all the time**.

Dewys Landon, quoted by Tim Peters in The Circle of Innovation

> When technology delivers basic needs, **user experience** dominates

Donald Norman, Director of The Design Lab at University of California, San Diego.

> If you think good design is expensive, you should look at the cost of bad design.

Dr. Ralph Speth, CEO Jaguar

# Resources:

## Got whole load of articles , really can' t enlist them all , from

https://medium.com/

https://uxstudioteam.com/

https://uxmastery.com/

## Really helpful , eye opener articles :

https://theblog.adobe.com/ux-process-what-it-is-what-it-looks-like-and-why-its-important/

https://medium.com/@uxmuch/ten-skills-you-need-to-be-a-ux-unicorn-f7ec555981b0

## Books:

https://theuxreader.com/

## Courses:

https://careerfoundry.com/en/home

## Youtube Channels:

https://www.youtube.com/user/uxmastery/videos

## Images:

https://www.google.gr/imghp?hl=en&tab=wi&authuser=0

The use of images from Google search falls under fair use in education , for a classroom representation

Thanks for attending :)

# QUESTIONS ?

Presentation created using :