UI/UX DESIGN

Lecture 2. UX/UI Design Stages
Design thinking

UI- and UX-designers' tasks

UI-designer's task example:
on the first screen you need to make a large banner, a noticeable order button and place text from the file.

UX-designer's task example:
reduce Bounce Rate for the first screen, increase CR of the request form by at least 25%.

Key metrics in UX

- **CR (Conversion Rate)**

$$\text{Conversion Rate} = \frac{\text{Number of Conversions}}{\text{Total Number of Visitors}} \times 100$$

- **LTV (Lifetime Value)**

$$LTV = \text{Average Purchase Value} \times \text{Average Purchase Frequency} \times \text{Customer Lifespan}$$

1. Average Purchase Value (APV):

$$APV = \frac{\text{Total Revenue}}{\text{Total Number of Purchases}}$$

2. Average Purchase Frequency (APF):

$$APF = \frac{\text{Total Purchases}}{\text{Number of Customers}}$$

- **CAC(Customer Acquisition Cost), CRC (Customer Retention Cost)**
- **ROMI (Return on Marketing Investment)**
- **Bounce rate**

How the UX-designer works

How did the site generate revenue? It didn't.

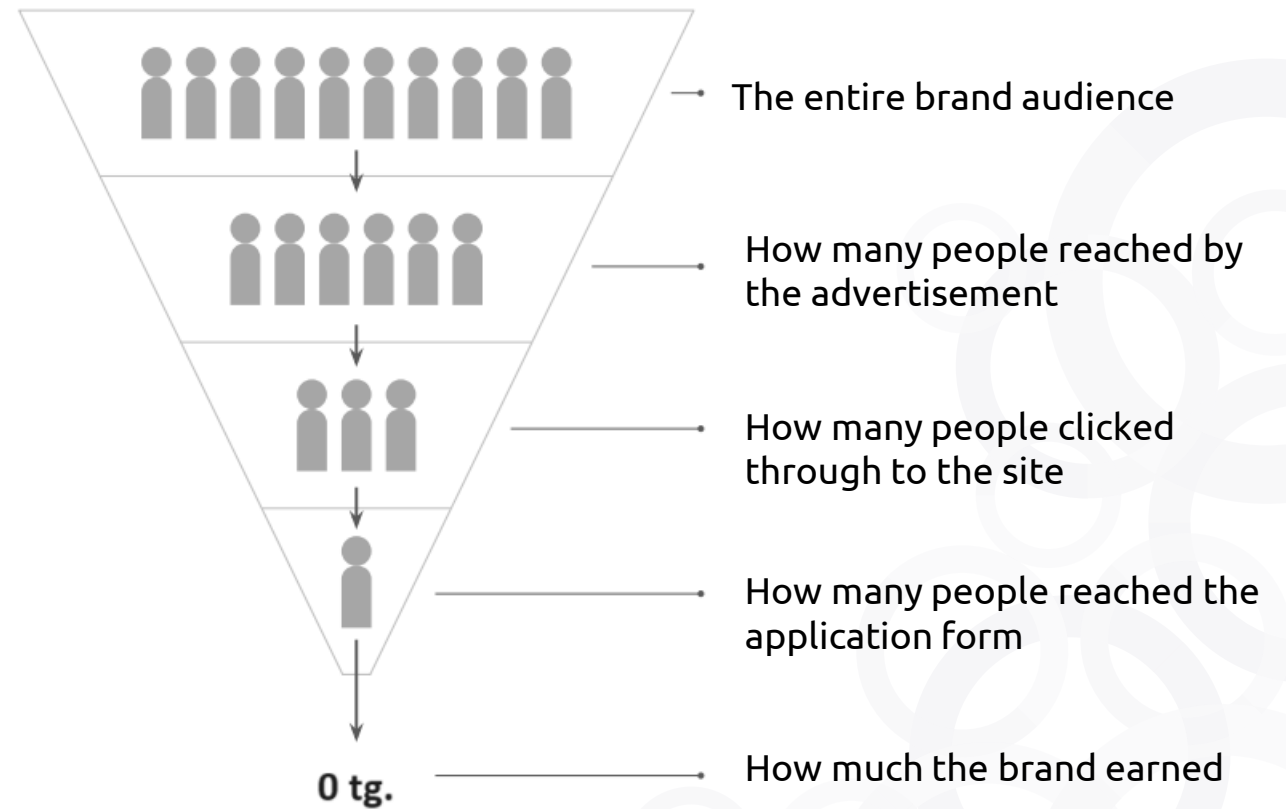Make your own business!

Stocks

Why us?

Order

| *Name | *Surname |

| *ID | *Phone | Ok! |

The entire brand audience

How many people reached by the advertisement

How many people clicked through to the site

How many people reached the application form

0 tg.

How much the brand earned

How the UX-designer works

Buy coffee vending machine!

Why us?
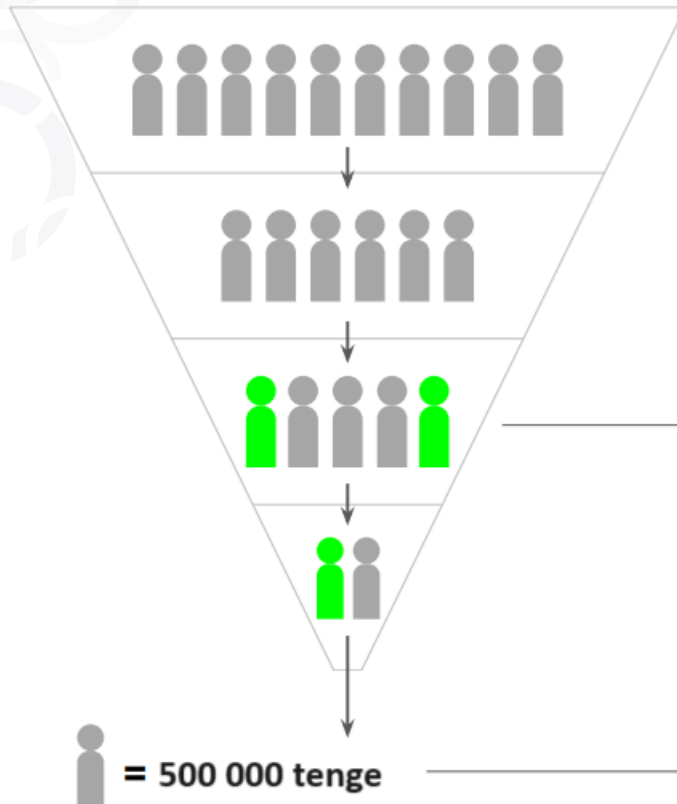
● ▲ ■ ◆

Order

*Name   *Surname

*ID   *Phone   Ok!

UX/UI designer analysed metrics. Insight - people leave from the first screen. They don't understand what we offer.

Solution - changing the first screen: text and visual.

Result: better, but marketing costs the brand 200,000 tenge a month, and design costs 600,000 tenge. The company spends more than it earns!

How the UX-designer works

The designer changed the first screen: it became clearer what the product was about.

Ⱡ = 500 000 tenge

The brand started to make money, but not enough
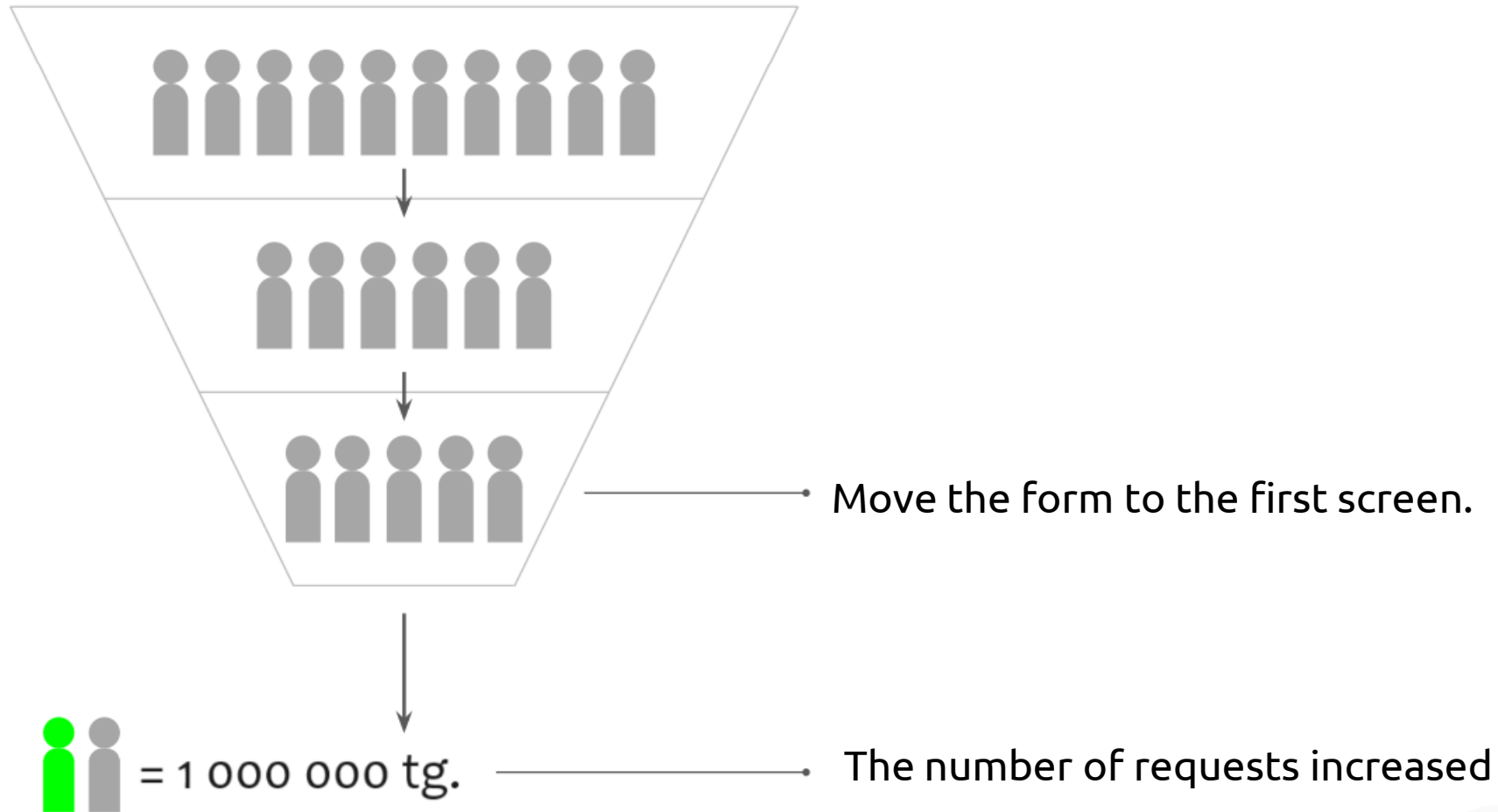
How the UX-designer works

The designer analysed metrics again.

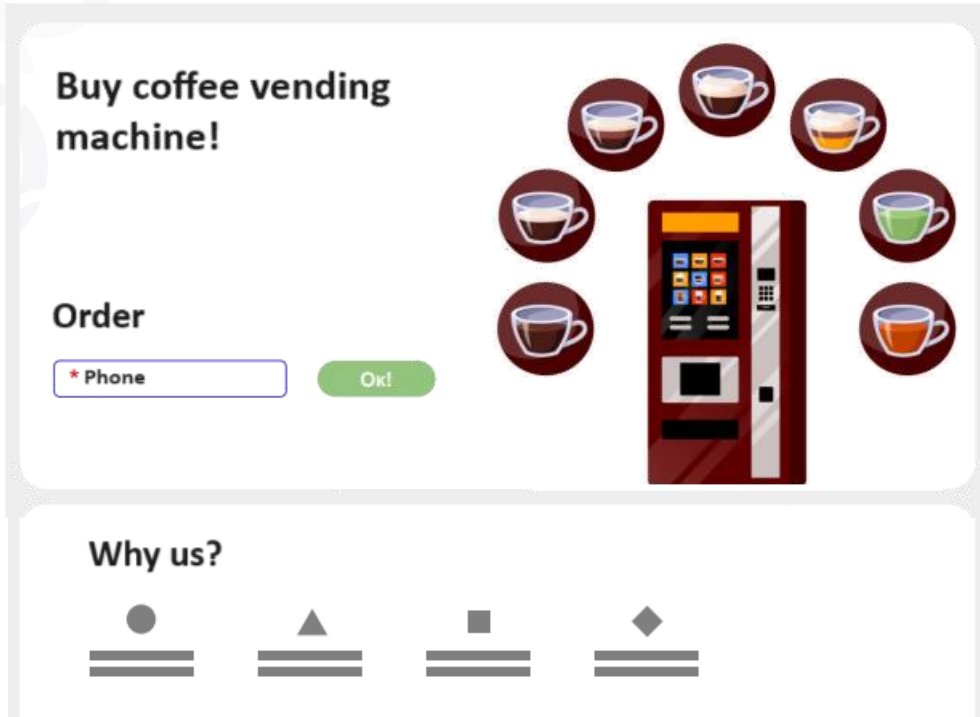Insight: Bounce Rate of the site is 35%. These people don't scroll down to the order form.

Solution: Move the form to the first screen.

Result: Bounce Rate falls, the number of steps in the sales funnel decreases, requests increase. Revenue – 1 000 000 tg, marketing and design costs - 800,000 tg.

How the UX-designer works

Move the form to the first screen.

= 1 000 000 tg. ——————→ The number of requests increased

How the UX-designer works

The designer analysed metrics again.

Insight: 50% of potential customers start filling out the form, but don't finish and submit.

Solution: only one field in the application form.

Applications doubled, revenue 2,000,000 tg. The design brings profit to the brand.
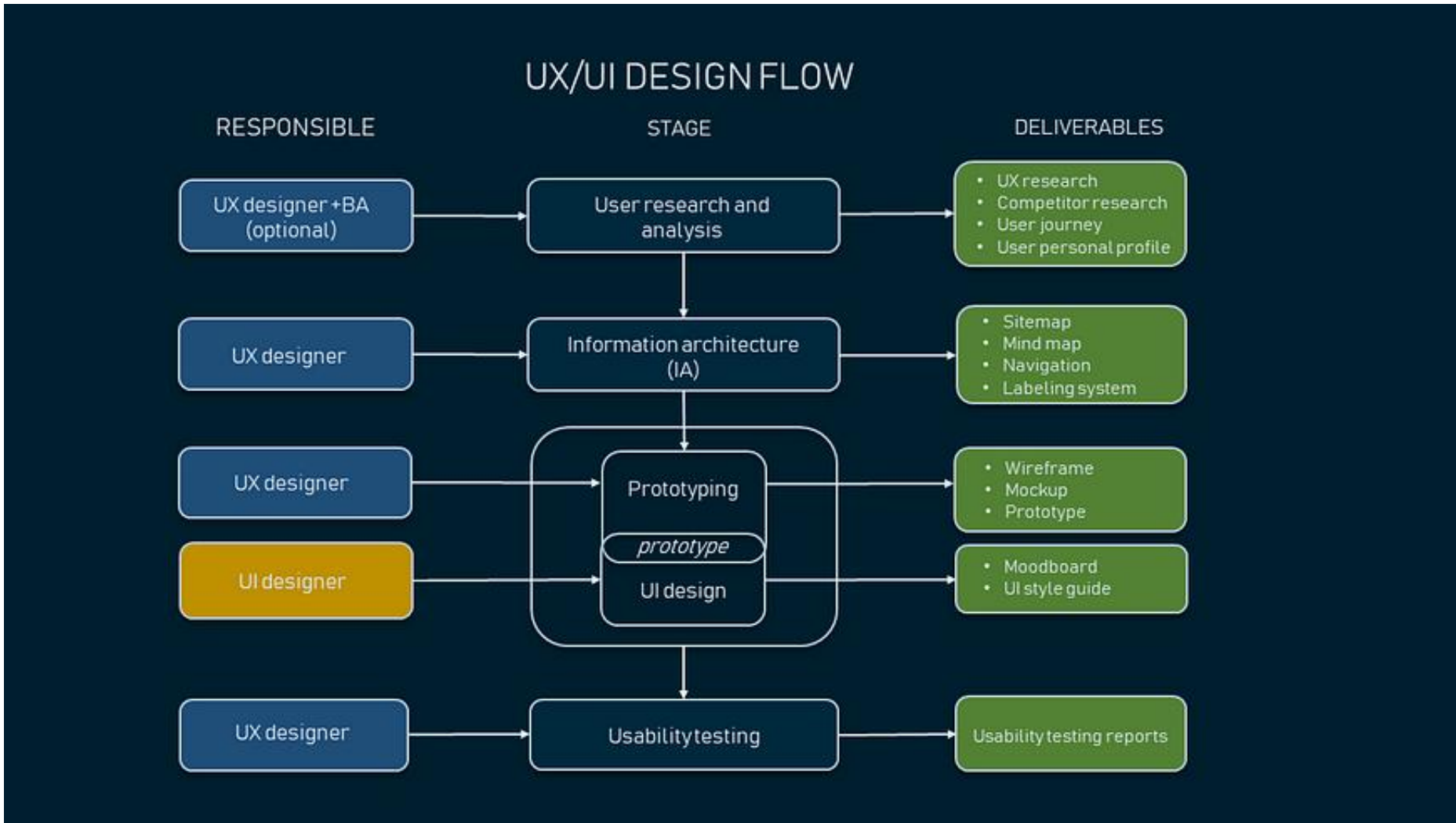
How the UX-designer works

The designer reduced the number of fields in the application form.

= 2 000 000 tg.

The number of applications increased 2 times
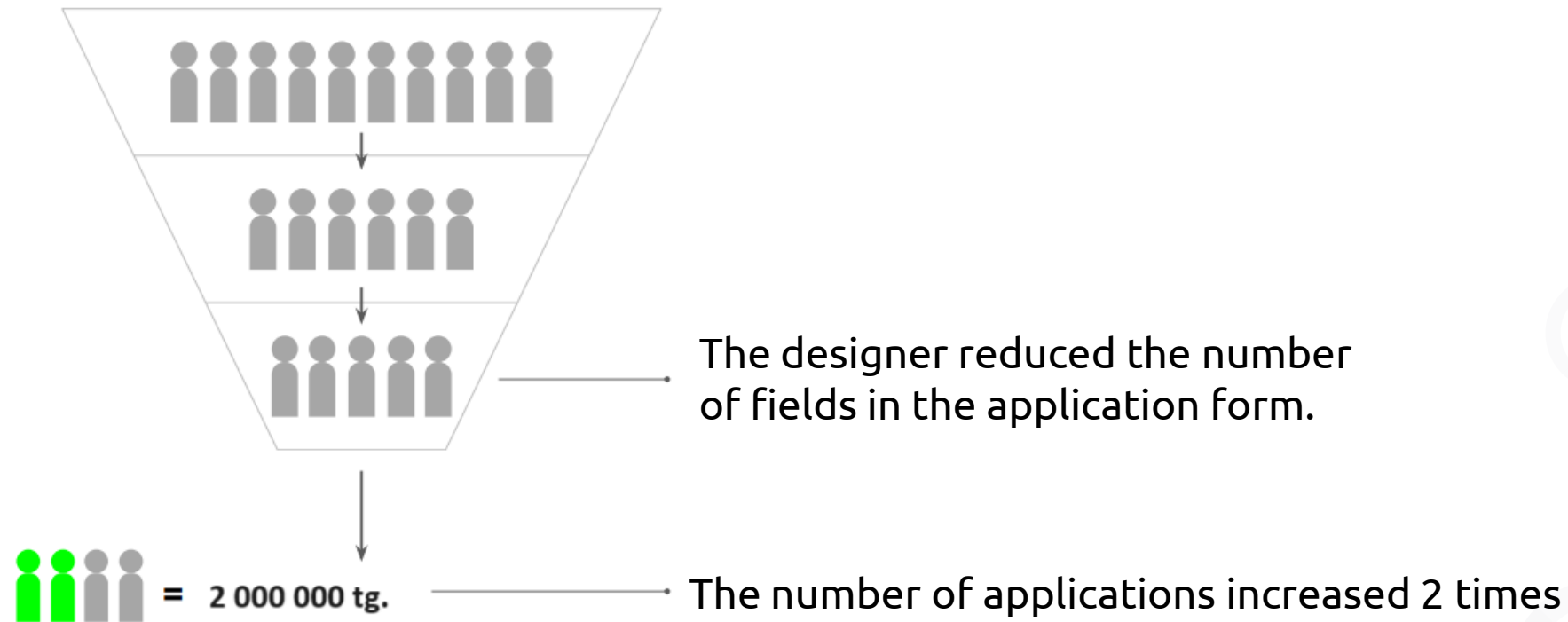
$$ROMI = \frac{(Value\ Generated\ by\ Marketing - Cost\ of\ Marketing)}{Cost\ of\ Marketing}$$

ROMI = (2000 000 − (200 000 + 600 000)) / (200 000 + 600 000) × 100 % = 150 %
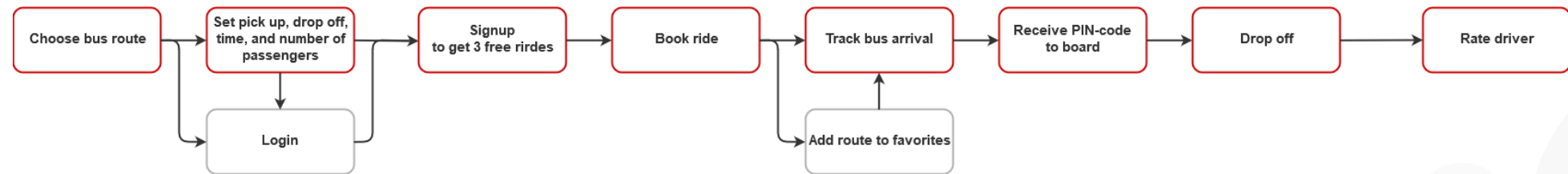
UX/UI Design Stages

User research and analysis

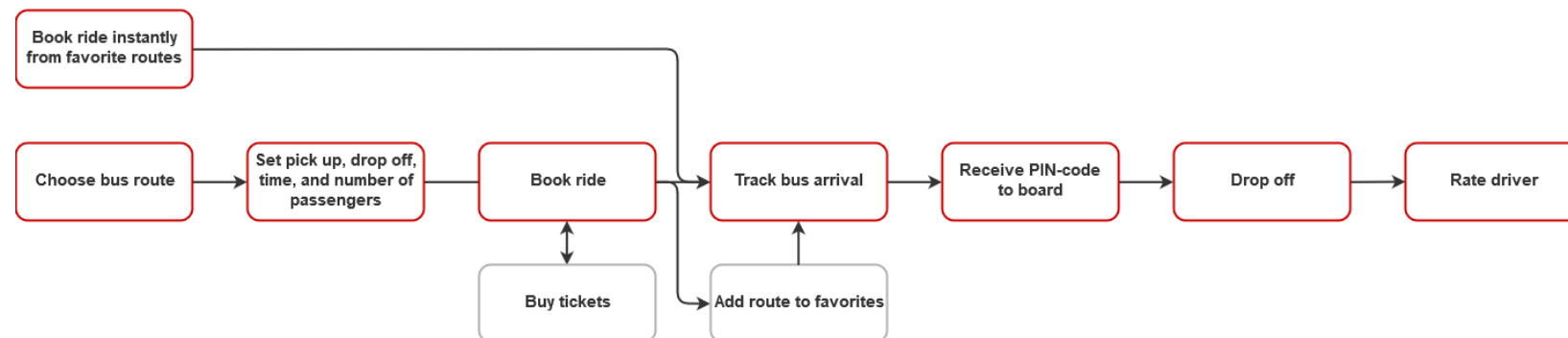**Key roles:** *Business analyst, UX specialist*

Main deliverables*:*
- UX research
- competitor research
- user journey
- user persona profile

User journey (user flow)

1. New User Flow

Choose bus route → Set pick up, drop off, time, and number of passengers → Signup to get 3 free rirdes → Book ride → Track bus arrival → Receive PIN-code to board → Drop off → Rate driver

Login

Add route to favorites

2. Main User Flow

Book ride instantly from favorite routes

Choose bus route → Set pick up, drop off, time, and number of passengers → Book ride → Track bus arrival → Receive PIN-code to board → Drop off → Rate driver

Buy tickets

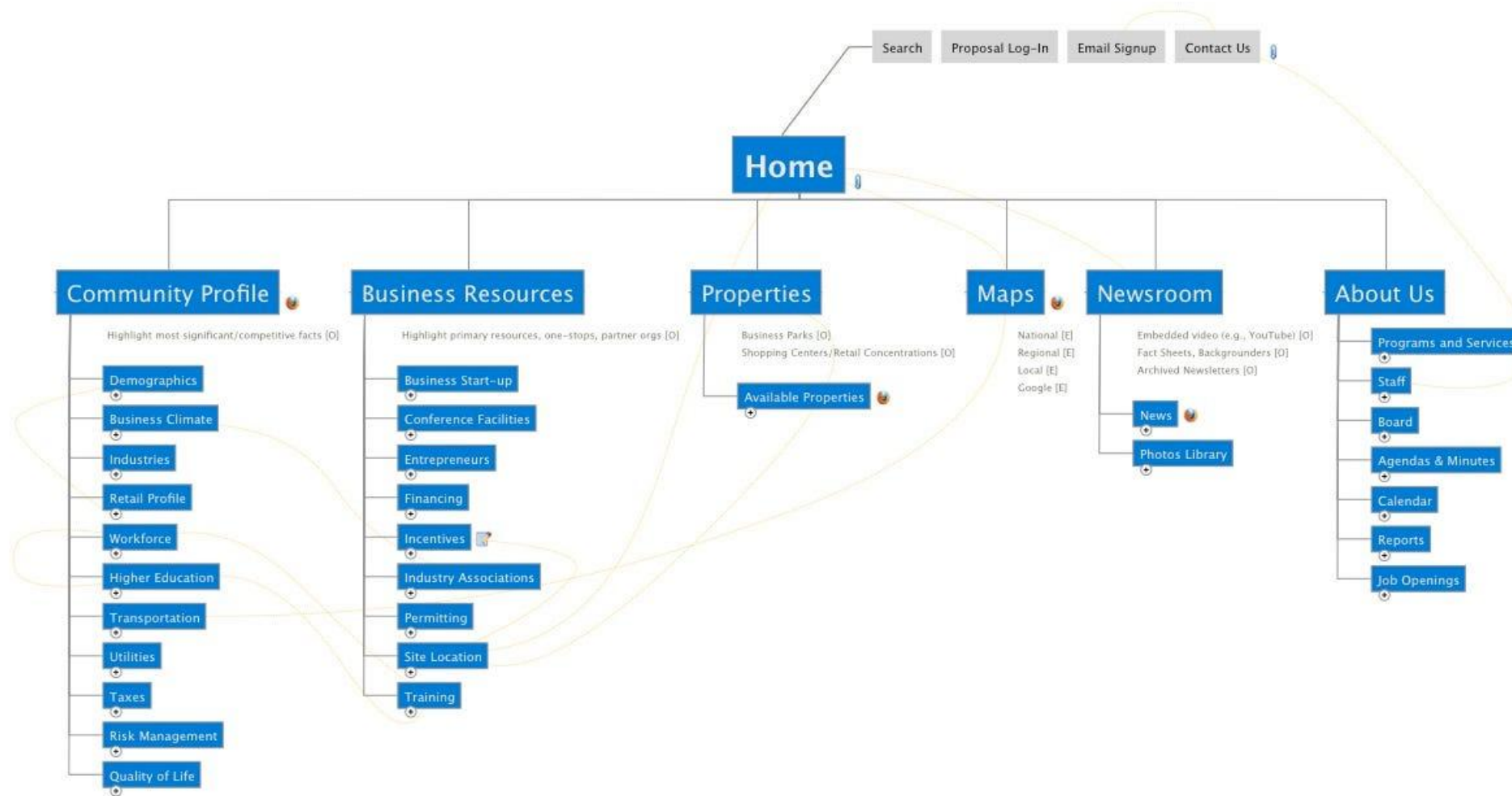Add route to favorites

User persona profile

Information architecture (IA)
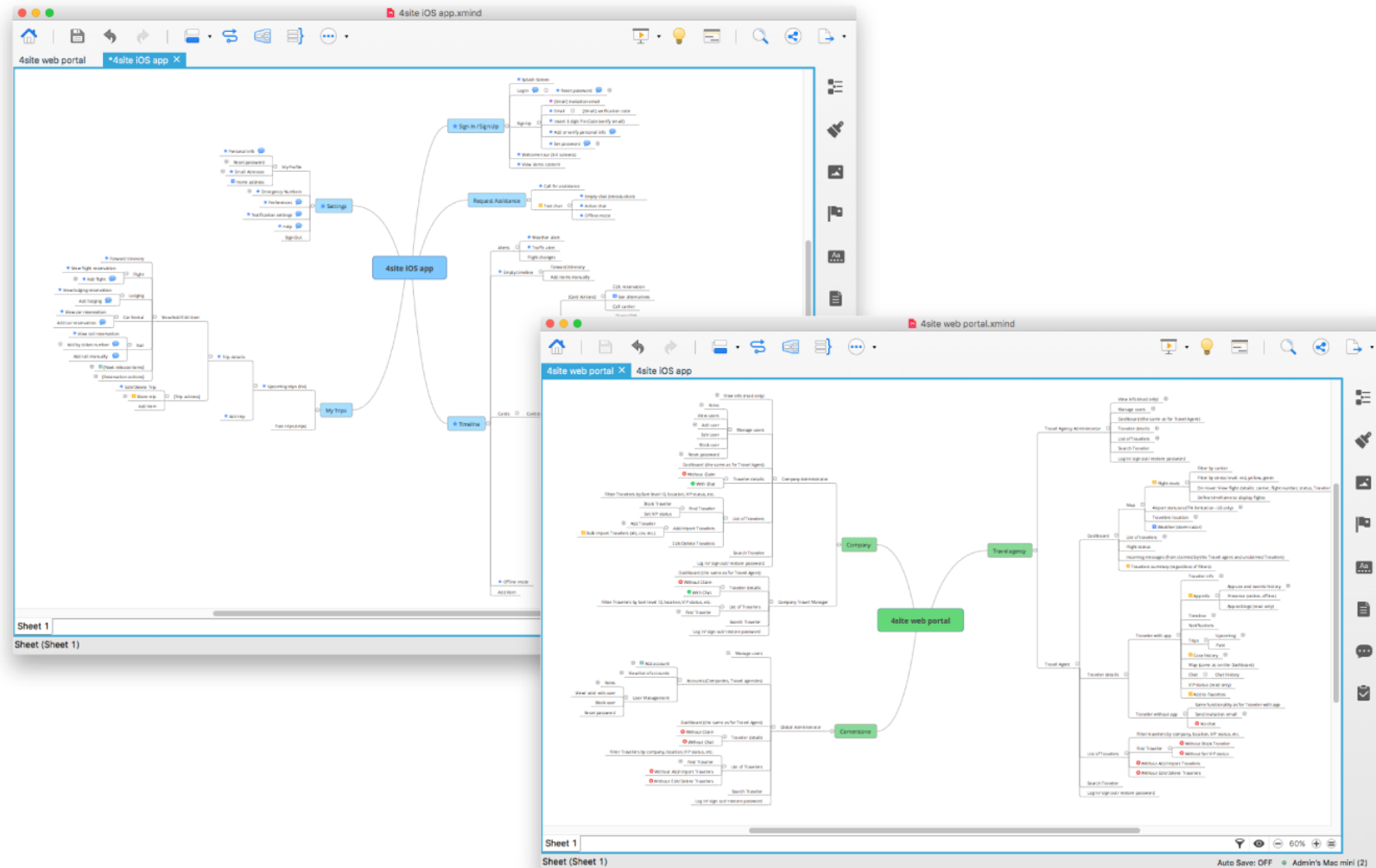
Key roles: *UX designer*

Main deliverables:
- Sitemap
- Mind map
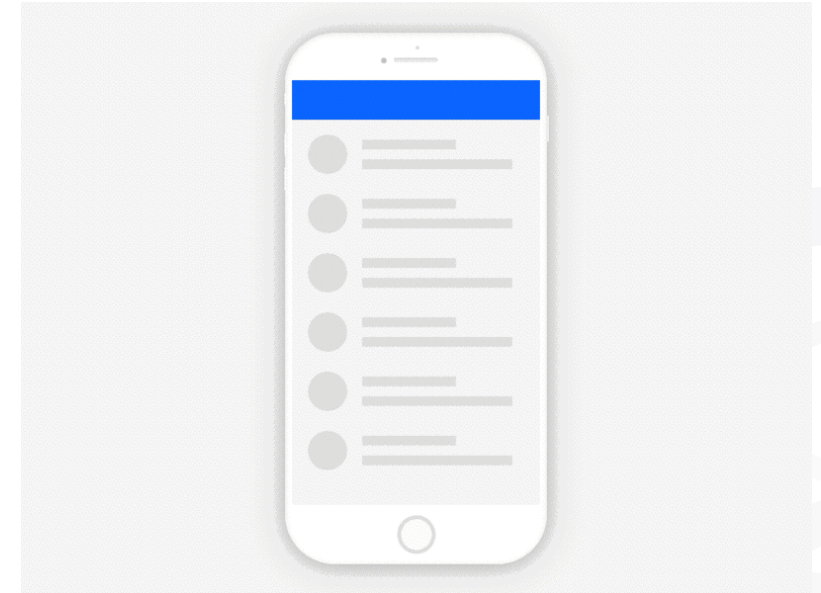- Labeling system
- Navigation

Sitemap

Mindmap

Prototyping
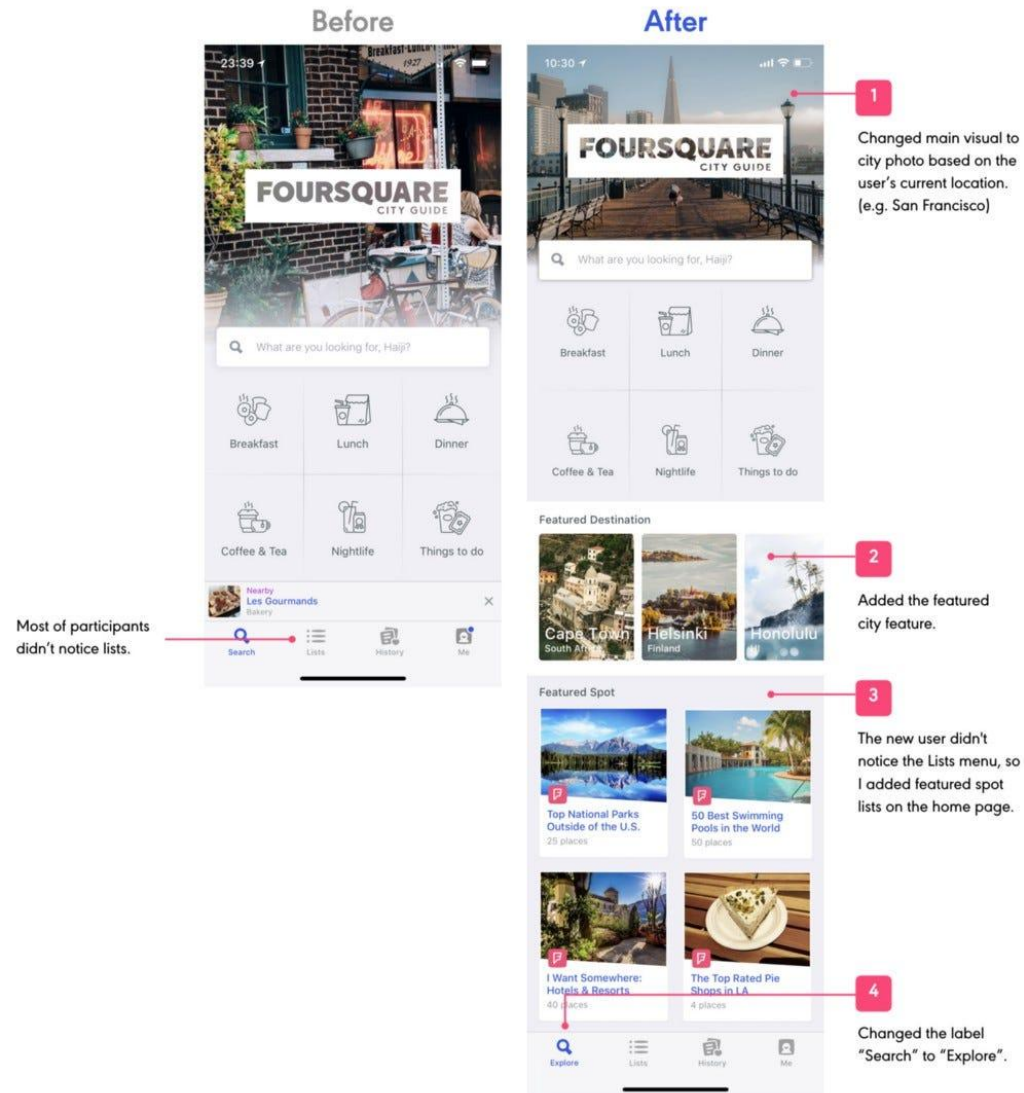
Key roles: *UX/UI designer*

Main deliverables*:*
- Wireframe
- Mockup
- clickable prototype

Wireframes

Mockup

Prototyping tools

• Sketch — a vector-based design and prototyping tool for Mac users.

• InVision Studio — a free prototyping tool with animation, compatible with all types of devices.

• Figma — a tool for online UI design, prototyping and testing.

• MockFlow — a platform for UX design that allows a UX designer to create wireframes, style guides, and sitemaps.

• Moqups — an online tool for UI prototyping, wireframes, mockups, and diagrams.

• Lucidchart — a tool for diagrams and wireframes.

• Balsamiq — a web app with a desktop version for wireframes and mockups

• Wireframe — an online tool for wireframing and mockups

UI design system

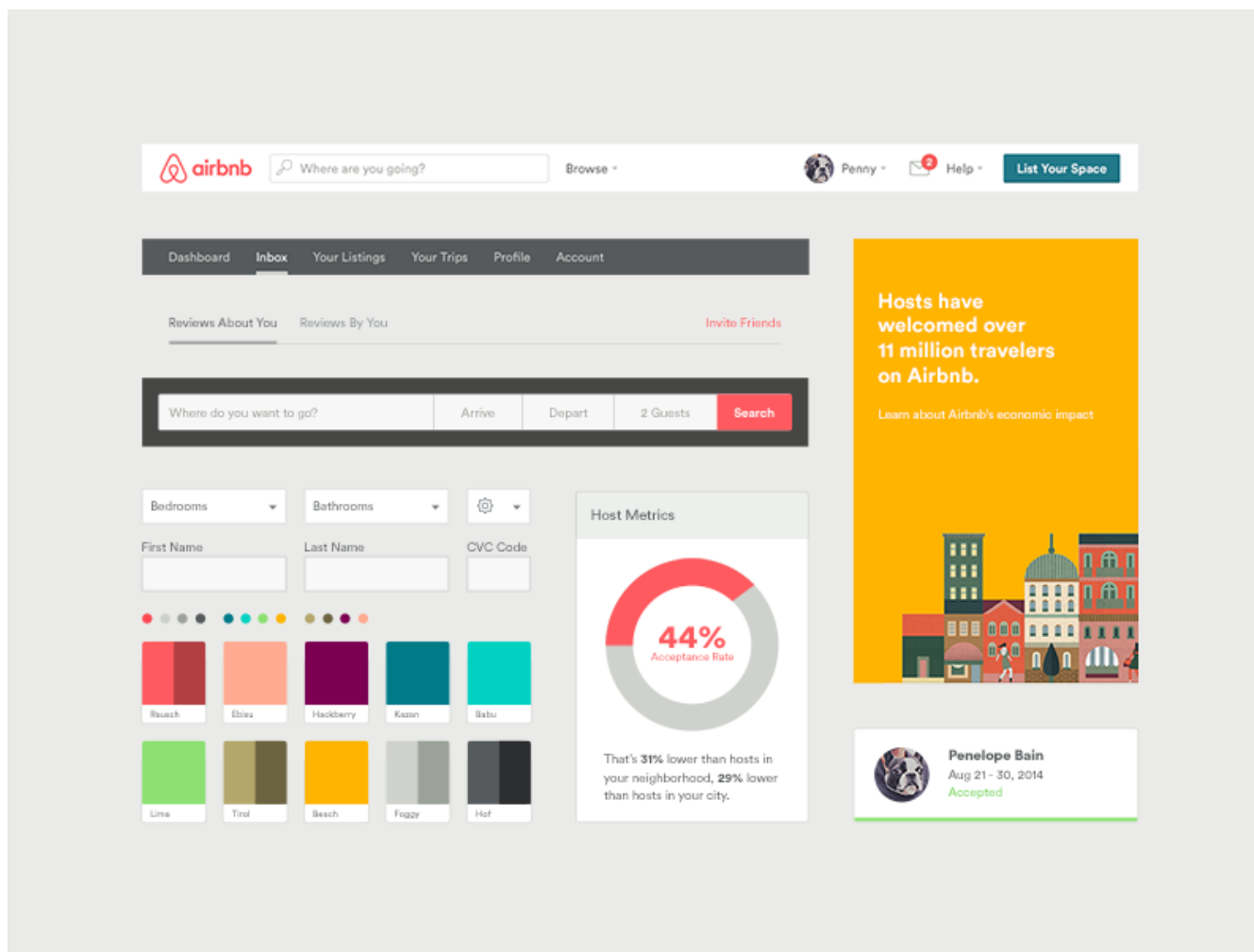**Key roles:** *UI designer, front-end development team*

Deliverables:
- *Moodboard*
- *UI style guide*

Moodboard

UI style guide.

Usability testing

Key roles: *UX designer, front-end development team, UI designer*

Comparative usability testing is used to compare one product to another, for example, a competitor's, or it can be like A/B testing when two versions of a design are compared, and the best one is chosen.

Explorative usability testing is usually conducted before the release. It's focused on finding the blind spots and gaps in a product design that were not seen before but are observed by the users. This testing facilitates improvement of the product before it reaches the market.

Usability evaluation occurs after the product is launched and all necessary improvements are made. That's when the product is tested again to make sure that the changes accommodate a positive and intuitive user experience.

Usability testing

Support and further development

Further testing and evaluation. New content and functionality usually require changes in an interface to improve key performance indicators. This means that the team may reiterate usability evaluation, suggest additional implementations of certain screens, and run A/B tests to define the best performing version.

Improvements and new features. A UX designer must learn which new features the users need and decide how to place them within an existing design. A UI designer changes the design according to the new requirements and supervises A/B or multivariate testing.

Redesign. In case a product needs redesigning, the team repeats the whole process from the very beginning: conducting new UX research, creating a new sitemap and wireframe while the UI designer contributes a mockup and invents prototypes, etc.

UX/UI designer knowledge and skills

Hard skills:
- The basics of interface development;
- How to work with basic web programs and tools;
- The basics of digital marketing;
- Possess analytical skills;
- Visual design language;

Soft skills:
- Being empathic;
- Strive for development and self-improvement;
- Be diligent and persistent;
- Be able to communicate;
- Be creative.

Design thinking

"Design thinking is a human-centered approach to innovation that draws from the designer's toolkit to integrate the needs of people, the possibilities of technology, and the requirements for business success."
— Tim Brown, CEO of IDEO

The End Goal of Design Thinking: Be Desirable, Feasible and Viable

Three Lenses of Design Thinking

Start here
What do people desire?

Desirable

Goal

Is it technically possible to build the solution?

Can the company profit from the solution?

Feasible

Viable
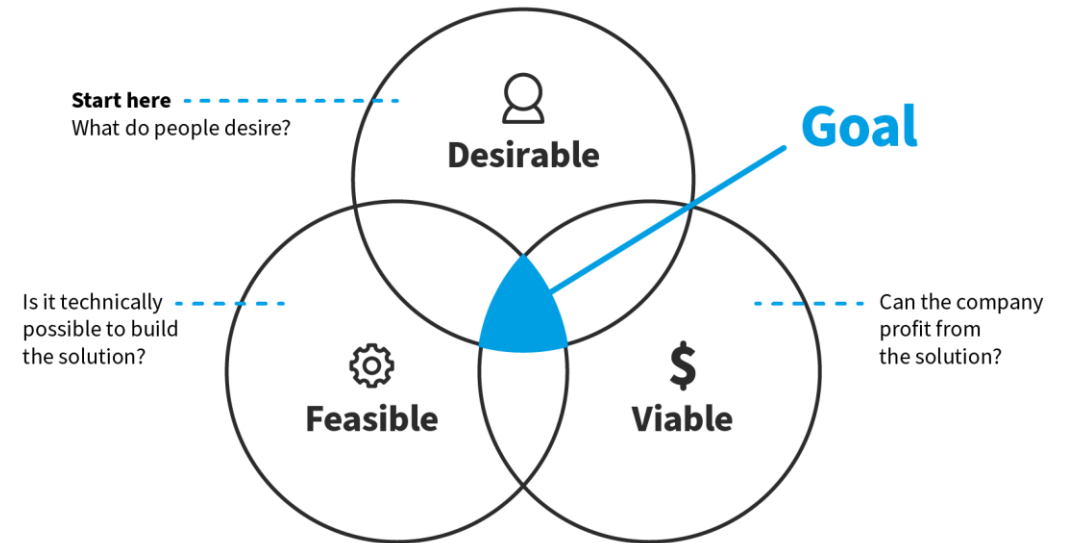
Interaction Design Foundation
interaction-design.org

The Five Stages of Design Thinking

- Empathize - Research Users' Needs

- Define - State Users' Needs and Problems

- Ideate - Challenge Assumptions and Create Ideas

- Prototype - Start to Create Solutions

- Test - Try the Solutions Out

# Empathize

Empathy - the ability to sense other people's emotions, coupled with the ability to imagine what someone else might be thinking or feeling.

Having empathy in design means understanding users: not just their needs, but also their constraints and the context of their situation. Empathizing potential users is very important in every step of the design thinking process.

LISA VERTUDACHES
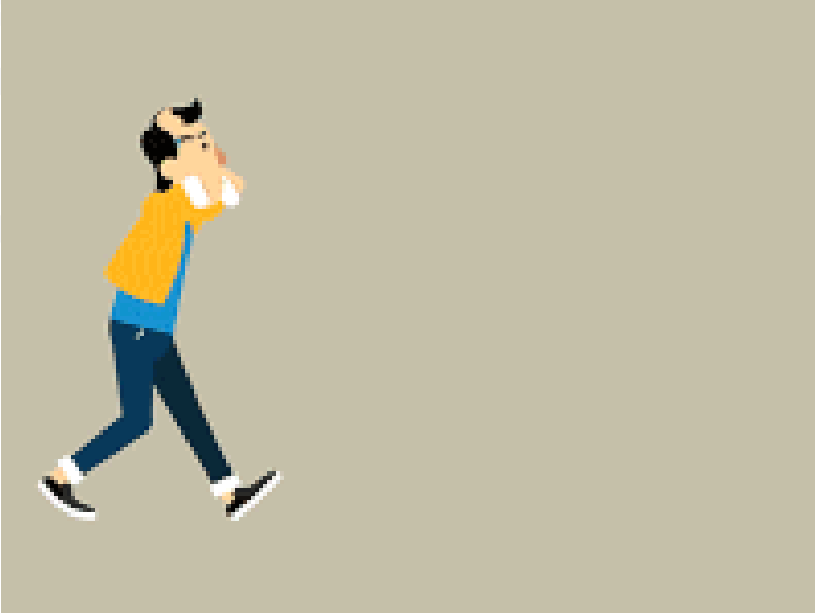
Define

The Define mode of the design process is all about bringing clarity and focus to the design space. It is your chance, and responsibility, as a design thinker to define the challenge you are taking on, based on what you have learned about your user and about the context. After becoming an instant-expert on the subject and gaining invaluable empathy for the person you are designing for, this stage is about making sense of the widespread information you have gathered.

The goal of the Define mode is to craft a meaningful and actionable problem statement – this is what we call a point-of-view. This should be a guiding statement that focuses on insights and needs of a particular user, or composite character. Insights don't often just jump in your lap; rather they emerge from a process of synthesizing information to discover connections and patterns. In a word, the Define mode is sensemaking.

Ideate

Ideate is the mode of the design process in which you concentrate on idea generation.

Mentally it represents a process of "going wide" in terms of concepts and outcomes. Ideation provides both the fuel and also the source material for building prototypes and getting innovative solutions into the hands of your users.

Prototype

The Prototype mode is the iterative generation of artifacts intended to answer questions that get you closer to your final solution. In the early stages of a project that question may be broad – such as "do my users enjoy cooking in a competitive manner?"

In these early stages, you should create low-resolution prototypes that are quick and cheap to make (think minutes and cents) but can elicit useful feedback from users and colleagues. In later stages both your prototype and question may get a little more refined.

Test

The Test mode is when you solicit feedback, about the prototypes you have created, from your users and have another opportunity to gain empathy for the people you are designing for. Testing is another opportunity to understand your user, but unlike your initial empathy mode, you have now likely done more framing of the problem and created prototypes to test.

Both these things tend to focus the interaction with users, but don't reduce your "testing" work to asking whether people like your solution. Instead, continue to ask "Why?", and focus on what you can learn about the person and the problem as well as your potential solutions.

THANK YOU!