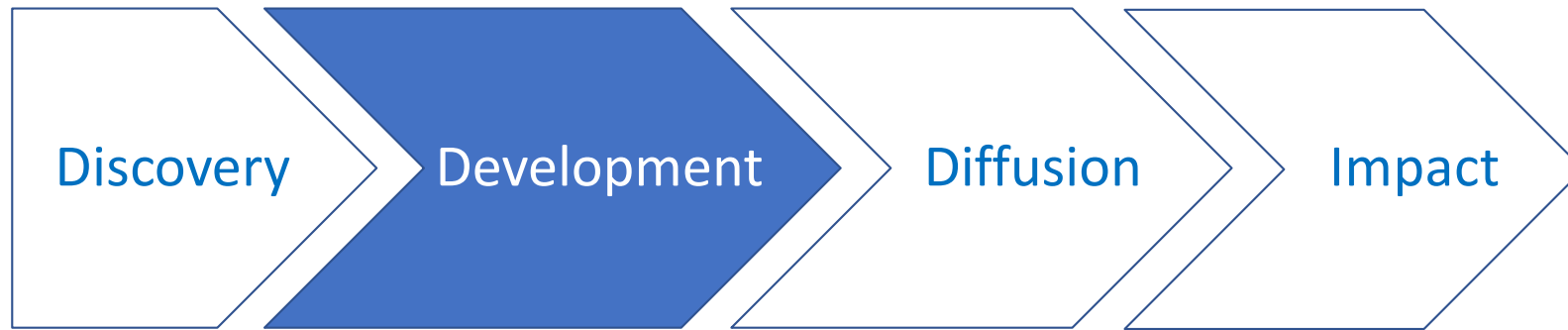


Innovation for Entrepreneur

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DIN147 (888147) 3(3-0-6)



Empathy to Design

888147 - Innovation Entrepreneur

“The purpose of a business
is to create a customer”
- Peter Drucker

design thinking

The background features abstract, overlapping geometric shapes in various shades of purple, ranging from light lavender to dark, almost black tones. The shapes are primarily triangles and polygons, creating a dynamic, layered effect. The text 'design thinking' is centered in a clean, sans-serif font, rendered in a medium purple color that harmonizes with the background's palette.

Design thinking

- Design thinking is not just about the ‘design stages’ of product development (product design, look, shape etc)
- Rather, it is a collection of processes which lead to a better understanding of the needs of a user and ways to find solutions to those needs

Steve Jobs famously said:

“Most people make the mistake of thinking design is what it looks like. People think it’s this veneer – that the designers are handed this box and told, ‘Make it look good!’ That’s not what we think design is. It’s not just what it looks like and feels like. Design is how it works”

Design thinking

People think design is what it looks like,
design is how it works

Steve Jobs

Design thinking

- Solve problems & find solutions for customers
- Spend time with customers (e.g. contextual inquiry)
- Understand their daily experiences
- Insight into their challenges
- Find the pain points, how can you solve these?
- Design is about meeting the needs of the customer

Design thinking

“match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity”

Tim Brown, CEO of IDEO

Tim Brown, CEO of IDEO, the design company that popularised the term design thinking, says:

“Design thinking can be described as a discipline that uses the designer’s sensibility and methods to match people’s needs with what is technologically feasible and what a viable business strategy can convert into customer value and market opportunity”

User-led innovation



- In *Democratizing Innovation* (2005), Eric von Hippel examined innovation created by users of products – what he called “lead users” adapt, modify, or transform these products for their own needs
- Examples include snowboards, mountain bikes, mods (modifications) for videogames, and lots of open-source software

Design thinking

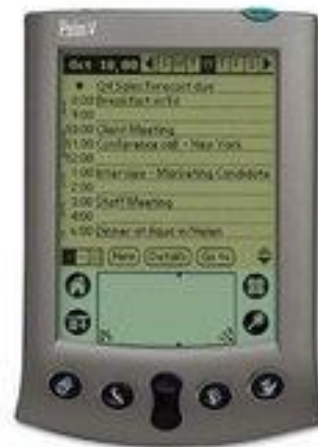
- Thinking like a designer also **allows people who aren't trained as designers to use creative tools** to address a vast range of challenges
- Design thinking draws on logic, imagination, intuition, and systemic reasoning to explore the possibilities of what could be and to create desired outcomes that benefit the end user (the customer)

Design thinking

When it should be used:

- The methodology is especially useful in finding solutions to so-called 'wicked problems', where the challenge itself is ill-defined or tricky, as opposed to challenges where you can often find a solution based on applying experience or technical knowledge
- First need to find out what is causing the challenge for the customer

Design thinking



IDEO process

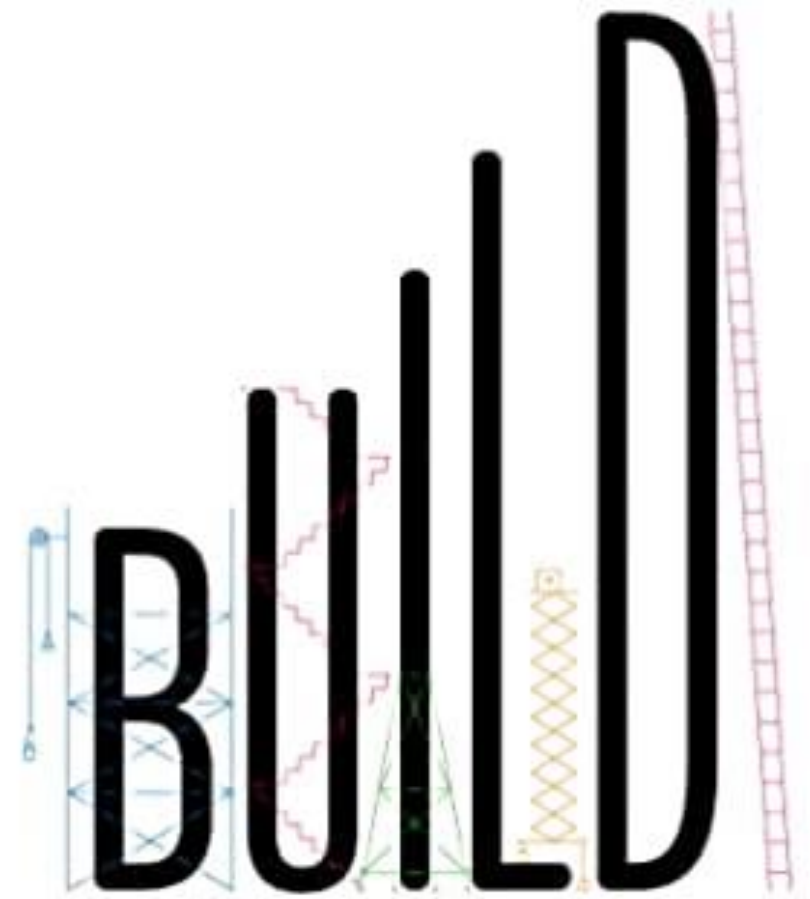
- Diverse design teams – mixture of skills, expertise
- Design research – qualitative research and quantitative analysis, observation, in-context interviews, thinking about analogous industries
- Synthesizing research, observations etc – to spot themes and patterns, look for relationships, and discover insights
- Experimentation and rapid prototyping – to test hunches
- Feedback and iteration
- Implementation – piloting ideas in practice

iPhone prototype



Build

- *Build: An Unorthodox Guide to Making Things Worth Making* – by one of the designers of the iPod and iPhone
- Useful advice not just for product design, but start-ups, success and failure, and leadership and management more broadly



An Unorthodox Guide
to Making Things Worth Making

TONY FADELL

New York Times Bestseller

Advice from *Build*

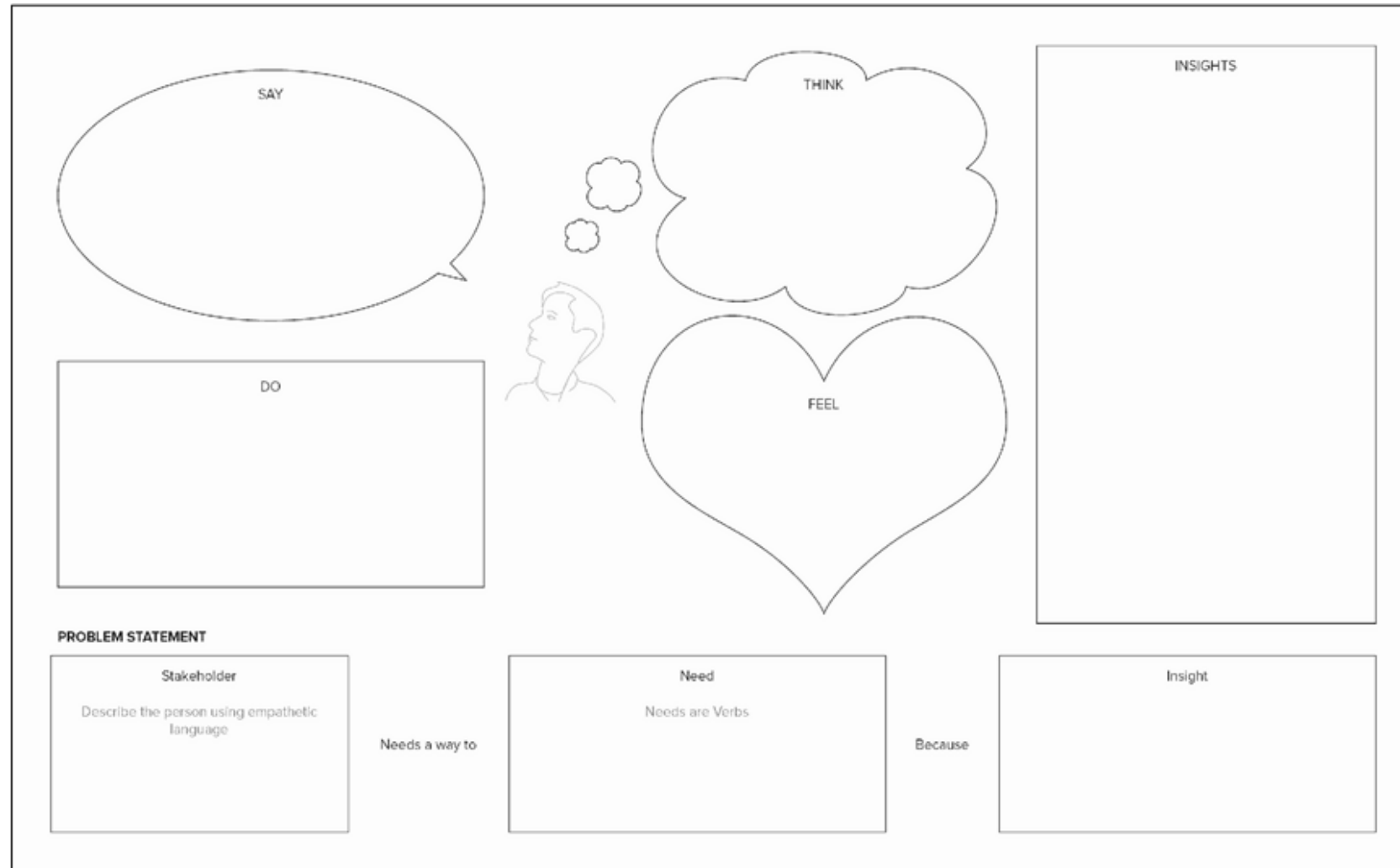
1. Be humble and flexible, and adapt to customer's needs
2. Deliver something wholly new or deliver in a novel way that competitors can't
3. Solve a real 'pain point' that is relevant to many people
4. Execute the vision – in all aspects, not just a product
5. Think about a problem/need in a way customer haven't and makes perfect sense to them when they hear/see/experience it

business from your
customer's eyes

The Design Process



Empathy maps

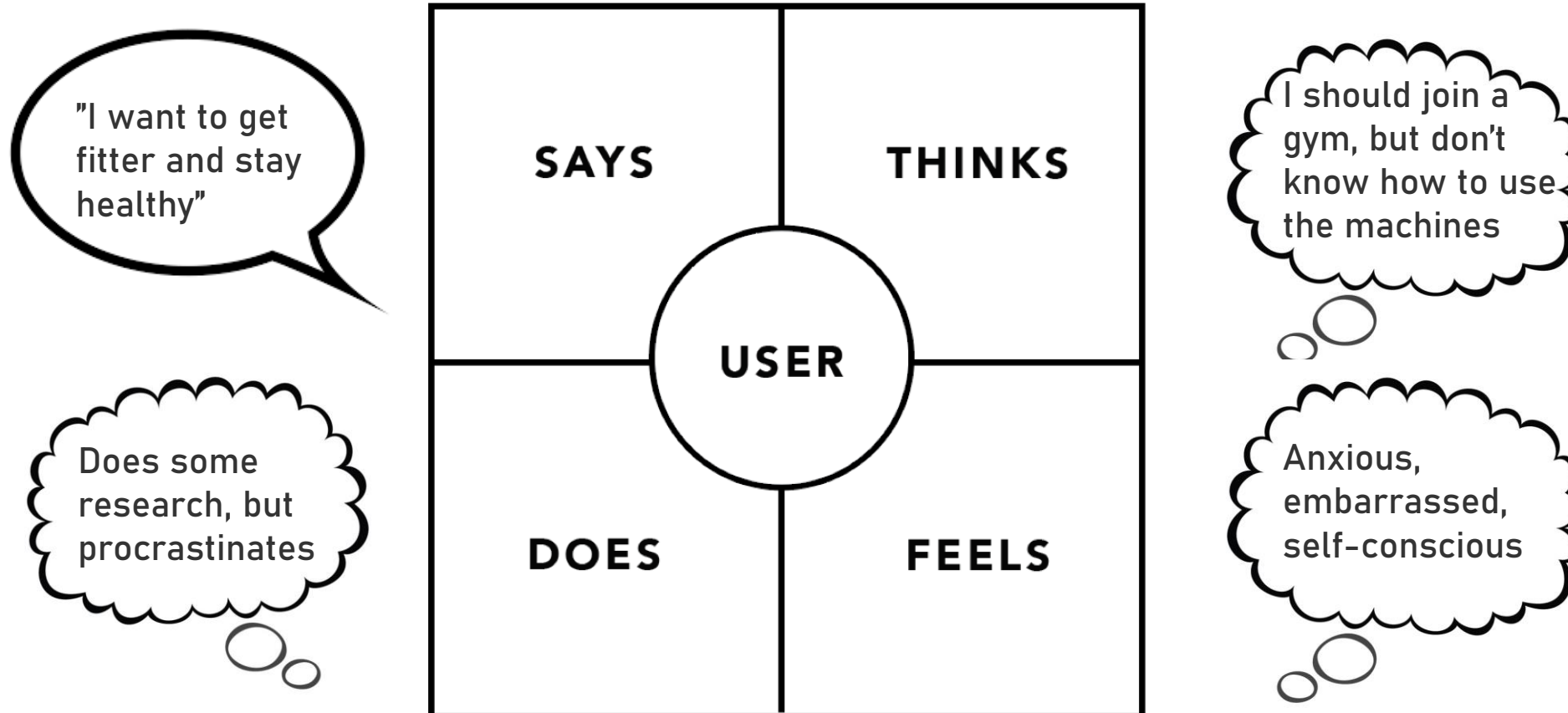


Empathy maps

- An empathy map is a visualization used to articulate what we know about a particular type of user
- It externalizes knowledge about users in order to 1) create a shared understanding of user needs, and 2) aid in decision-making
- Empathy maps can be used to create (various) potential ‘customer personas’

Empathy maps

Traditional empathy maps are split into 4 quadrants (Says, Thinks, Does, and Feels), with the user or persona in the middle. Empathy maps provide a glance into who a user is as a whole, and are not chronological or sequential





PRODUCT DESIGN IS

The process of **identifying** an opportunity, **defining** the problem, **developing** a solution for that problem and **validating** the solution with real users.

- Nick Babich (Smashing Magazine)

User Research

User interviews

uncover insights from direct conversation with users

User Research

Online surveys

Surveys and questionnaires enable you to obtain a large volume of quantitative data in a short amount of time.

User Research

Market research

Understanding how your competitors approach problems

User Research

Contextual inquiry

observe people go

about their day-to-day tasks

in their natural environment.

allows you to truly empathize

put yourself in their shoes



PRODUCT MARKET FIT

In order to build useful products, we need to understand whether there is a **need** for our product.



example



SHIMANO

Q: Why aren't people biking more?

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IDEO created an inter-disciplinary team of engineers, designers, behavioural psychologists, sales and marketing practitioners to find out

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Q: Why aren't people biking more?

IDEO created an inter-disciplinary team of engineers, designers, behavioural psychologists, sales and marketing practitioners to find out

In-depth interviews revealed that people had happy memories of cycling as children, when riding a bike was simple and free of stress.

But...



Q: Why aren't people biking more?

IDEO created an inter-disciplinary team of engineers, designers, behavioural psychologists, sales and marketing practitioners to find out

In-depth interviews revealed that people had happy memories of cycling as children, when riding a bike was simple and free of stress.

A: Bikes were too complicated and intimidating. They needed to design an easier-to-use bike.



Shimano's Coasting project is a casual bike for adults. The bike is equipped with puncture-resistant tires, a hidden chain, and an automatic gear-changing.

Create personas

Clark Andrews

AGE 26

OCCUPATION Software Developer


STATUS Single

LOCATION San Jose, CA

TIER Experiment Hacker

ARCHETYPE The Computer Nerd

Friendly Clever Go-Getter



"I feel like there's a smarter way for me to transition into a healthier lifestyle."

Motivations

- Incentive
- Fear
- Achievement
- Growth
- Power
- Social

Goals

- To cut down on unhealthy eating and drinking habits
- To measure multiple aspects of life more scientifically
- To set goals and see and make positive impacts on his life

Frustrations

- Unfamiliar with wearable technology
- Saturated tracking market
- Manual tracking is too time consuming

Bio

Aaron is a systems software developer, a "data junkie" and for the past couple years, has been very interested in tracking aspects of his health and performance. Aaron wants to track his mood, happiness, sleep quality and how his eating and exercise habits affects his well being. Although he only drinks occasionally with friends on the weekend, he would like to cut down on alcohol intake.

Personality

Extrovert Introvert

Sensing Intuition

Thinking Feeling

Judging Perceiving

Technology

IT & Internet

Software

Mobile Apps

Social Networks

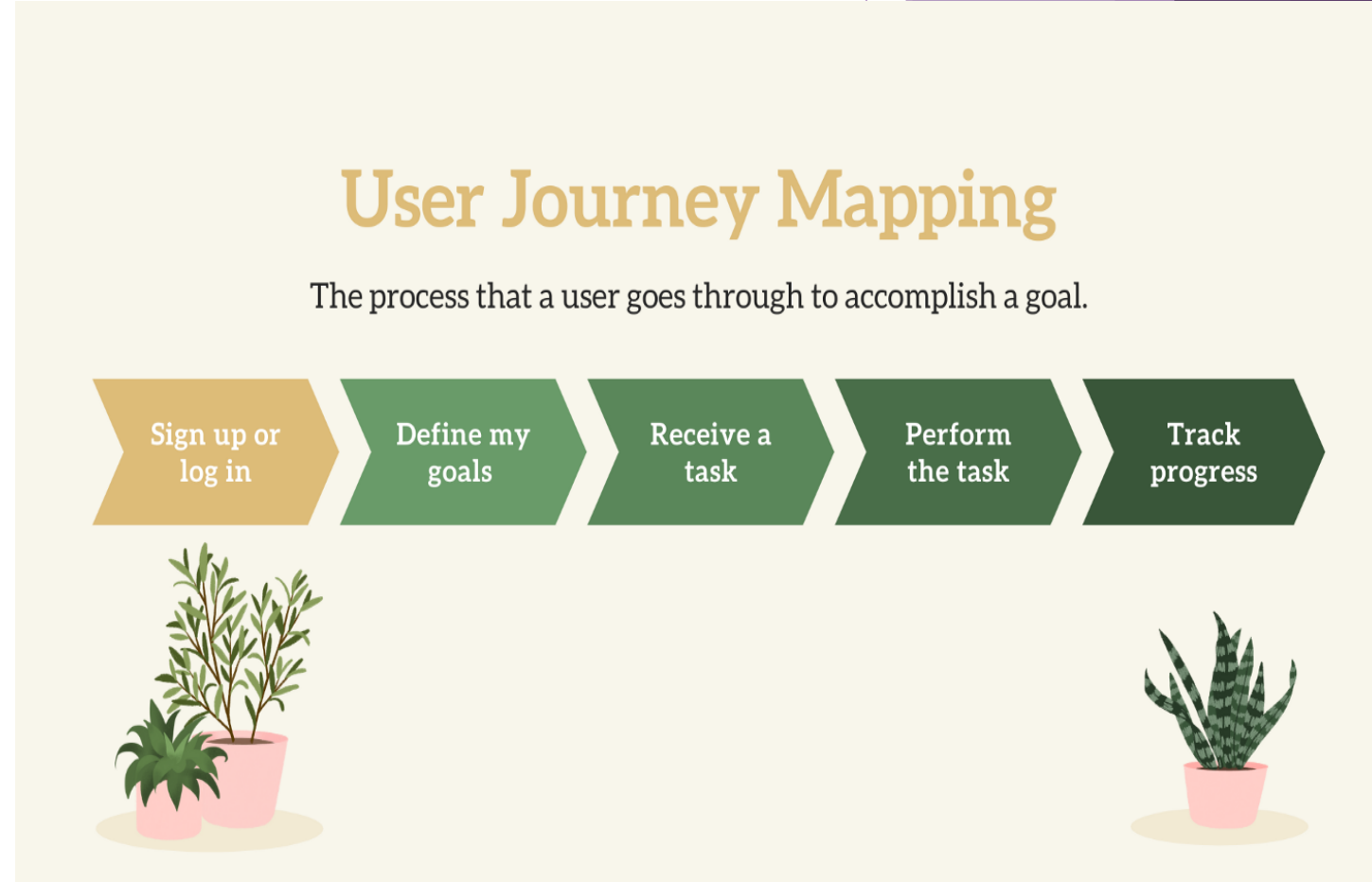
Brands

Nike +

31 Heart Alarm

User Journey Mapping

- a process that a user must go through in order to accomplish a goal.
- A user journey is presented as a series of steps and actions in a timeline skeleton.
- Such a layout makes it easier for all team members to understand and follow the user's narrative.



Affinity mapping

Unhealthy habits

Working longer hours than usual

Back pain from improper desk setup

Becoming more sedentary and exercising less

Isolation

Mental health issues can arise e.g. depression

Loneliness for people living by themselves

Distractions

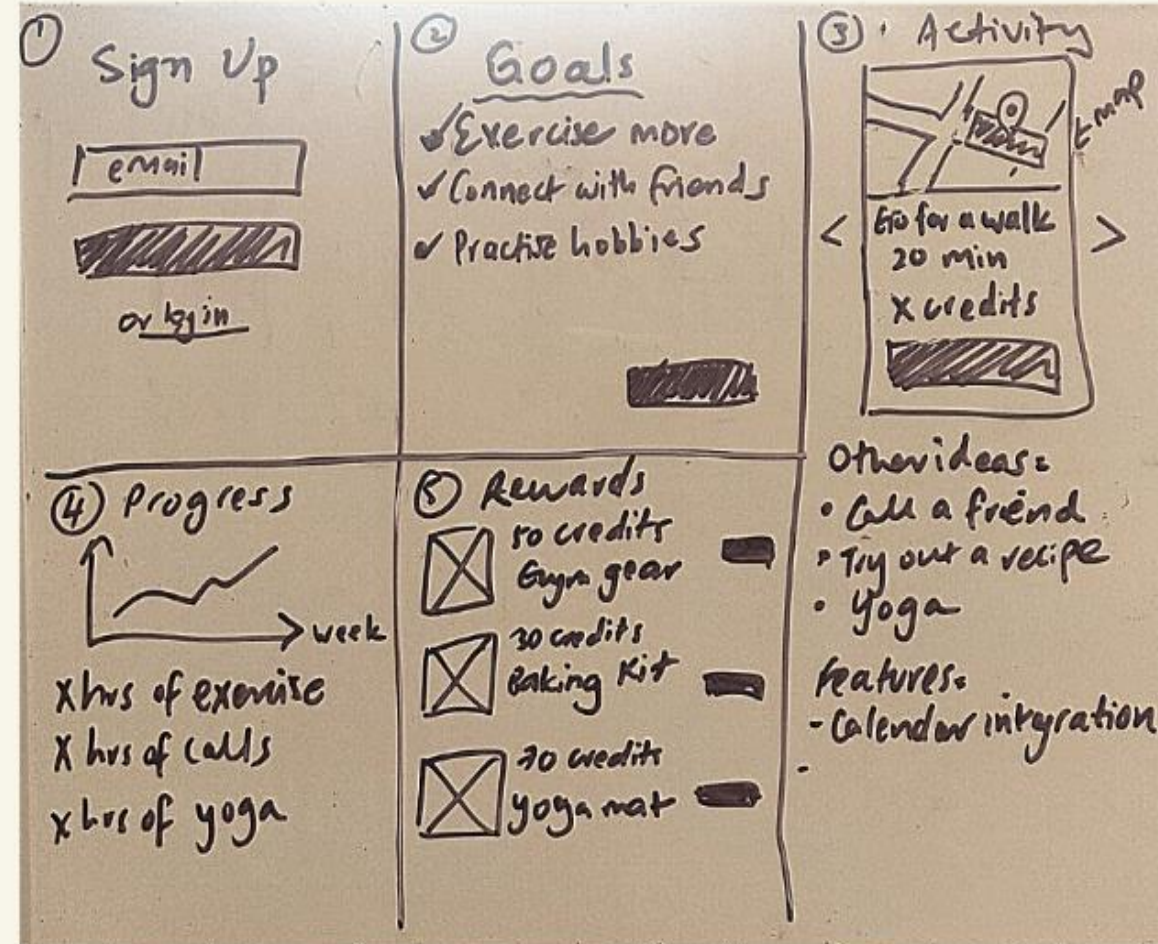
Pet and children distractions

Poor internet connection

Design the Solution

Example

An app that nudges you to take a break by providing you with personalised health and wellness activities.



The background features abstract, overlapping geometric shapes in various shades of purple, ranging from light lavender to dark indigo, creating a modern, layered effect.

Thank you!
any questions?