Lec 22

Developing Solutions

Ideation, wire-framing, prototyping, conceptual design, concrete design.

Omar Hammad

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What was the first slide in the first lecture about?

Let's get to know you

Name, Major, Background, Motivation

One thing you know about humans?
Moody
Emotional
Different
Creative
Lazy
Surprises
Helpful
Intelligent
Have diff expectations
Need for appreciation
Need relationships
Friendly
Different way of thinking
Valuable
Complicated
Adaptable
Love to learn

Personas

Figure 6. Example persona Julien. Photo by [ELEVATE](#) from [Pexels](#).

Family traveler

Organised **Practical** **Expects high standard**

Goals

- To book comprehensive travel quickly
- To find a trip that meets the needs of the whole family
- To feel supported and guided from the beginning of the booking experience right to the end.

Frustrations

- Wasting time filling in forms
- Too much irrelevant information
- Existing systems tend to be too diverse and complicated

Bio

Will loves to take his family on adventure holidays to explore new challenges. His children, Sky (8) and Eamonn (15) are old enough to take part in several sporting activities and he wants to make the most of this before they no longer want to go on trips with him and his wife, Claire. He likes the fact that choosing travel options is so much easier than it used to be, but is frustrated by the many different sources and disjointed options that this can result in. He wants a travel organiser that can provide clear support for family holidays while offering as wide a choice as possible.

"I want a travel organiser that will offer me a range of potential vacations that suit our needs"

Age: 35
Work: Plumber
Family: Married, two children

Personality

Introvert — Extrovert
Thinking — Feeling
Sensing — Intuition

Motivation

Price
Comfort
Choice

Favourite destinations
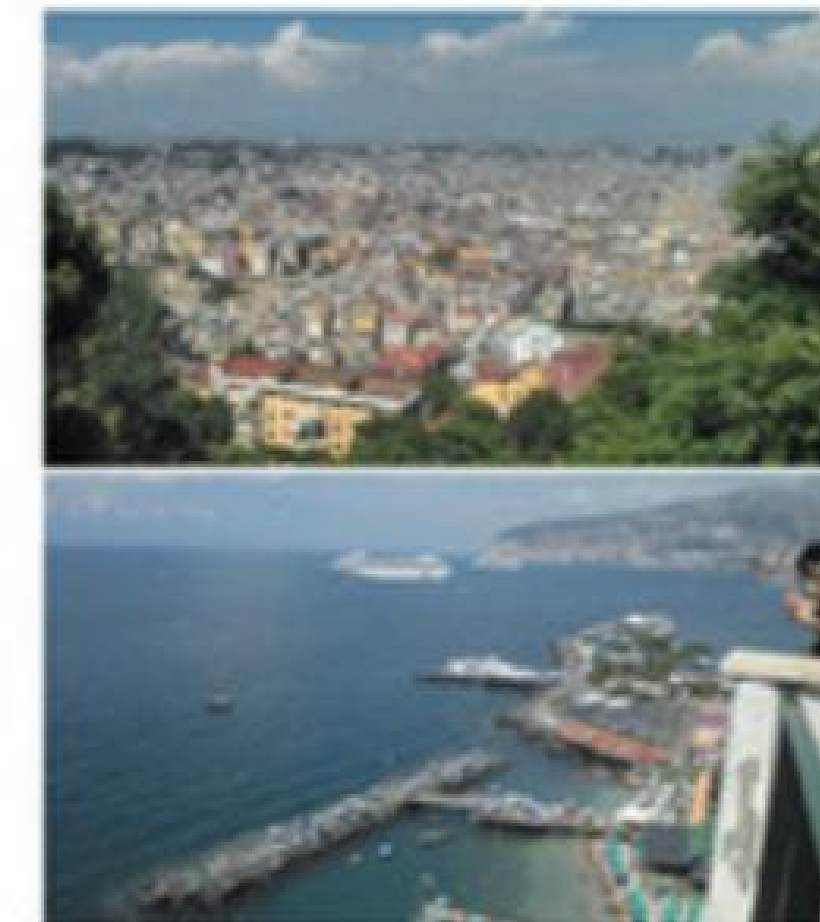
Create a persona for the most typical user

Include the following:
- image
- name
- age
- bio
- personality
- relevant goals
- relevant frustrations
- ...

1. Persona

Defines who the story is about. This main character has attitudes, motivations, goals, and pain points, etc.

3. Goal

Defines what the persona wants or needs to fulfill. The goal is the motivation of why the persona is taking action. When that goal is reached, the scenario ends.
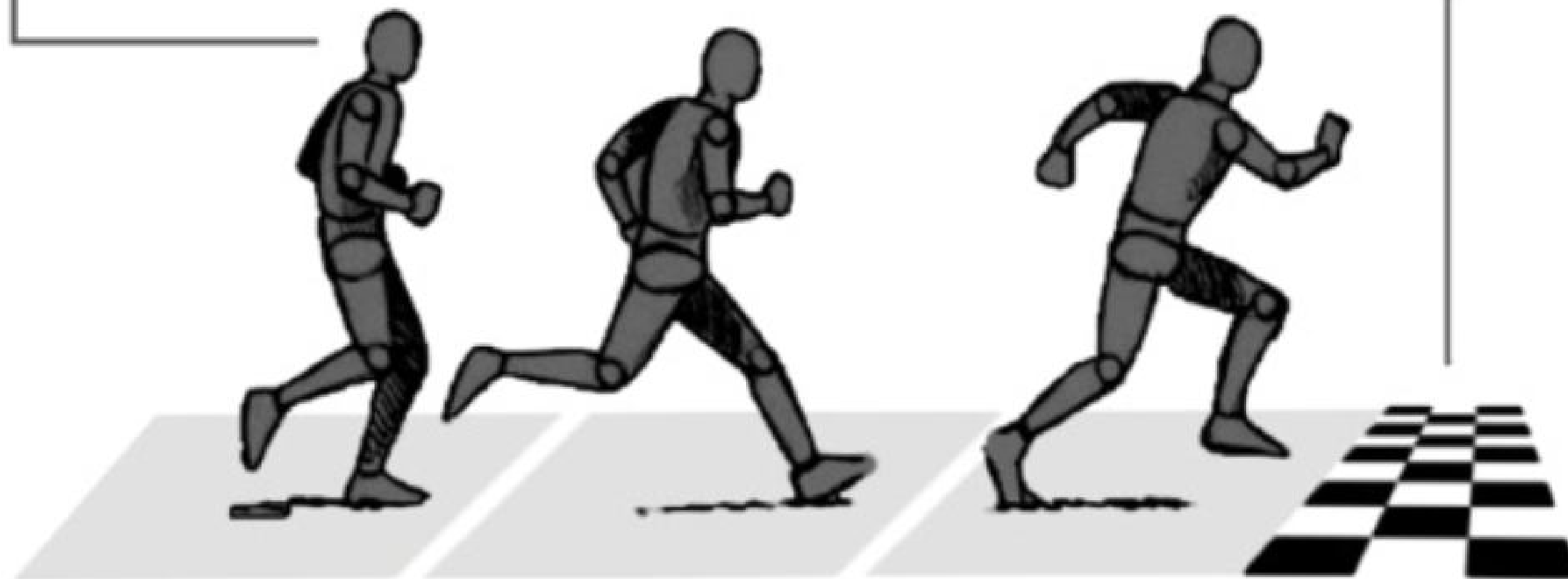
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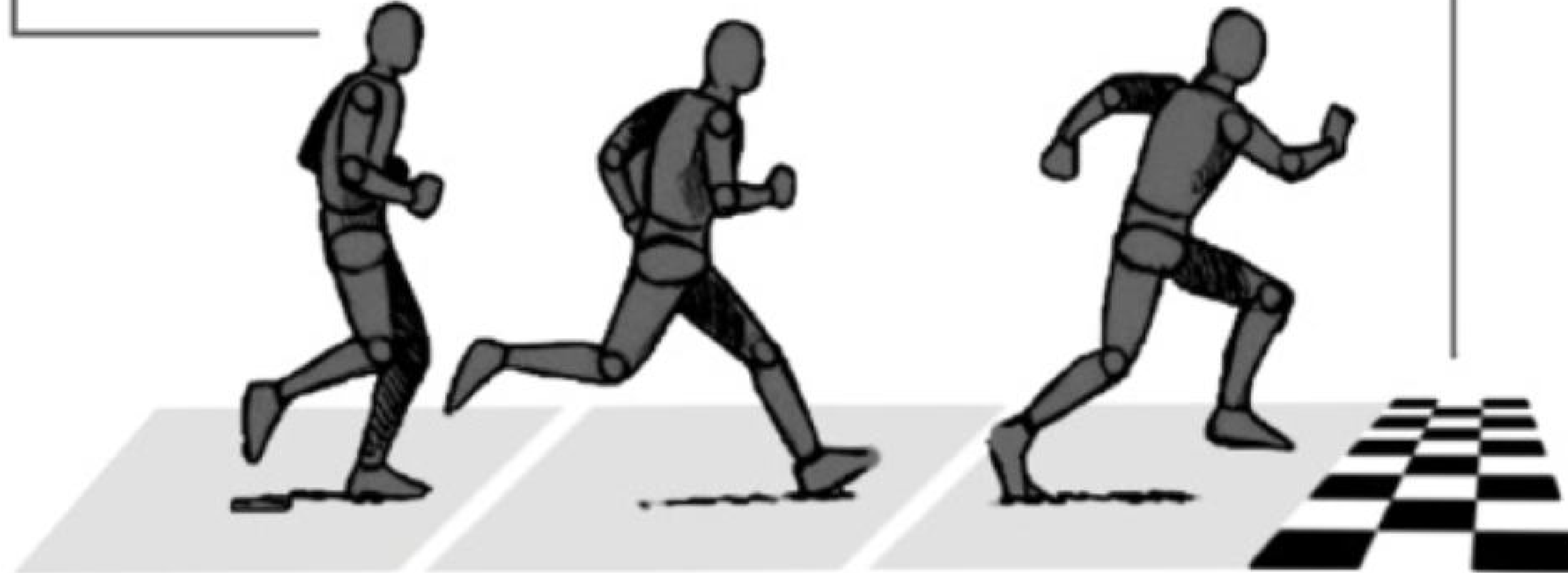
2. Scenario

Defines when, where, and how the story of the persona takes place. The scenario is the narrative that describes how the persona behaves as a sequence of events.

Scenarios

aka. details narratives of our users
achieving their goals

components
of a scenario

- A Persona
- A Goal
- A Narrative

Sketch one scenario of your persona trying to achieve on goal

How can we know which ones to work on?

Prioritization

Impact
on User

Impact
on Biz

Impact on User

Impact on Biz
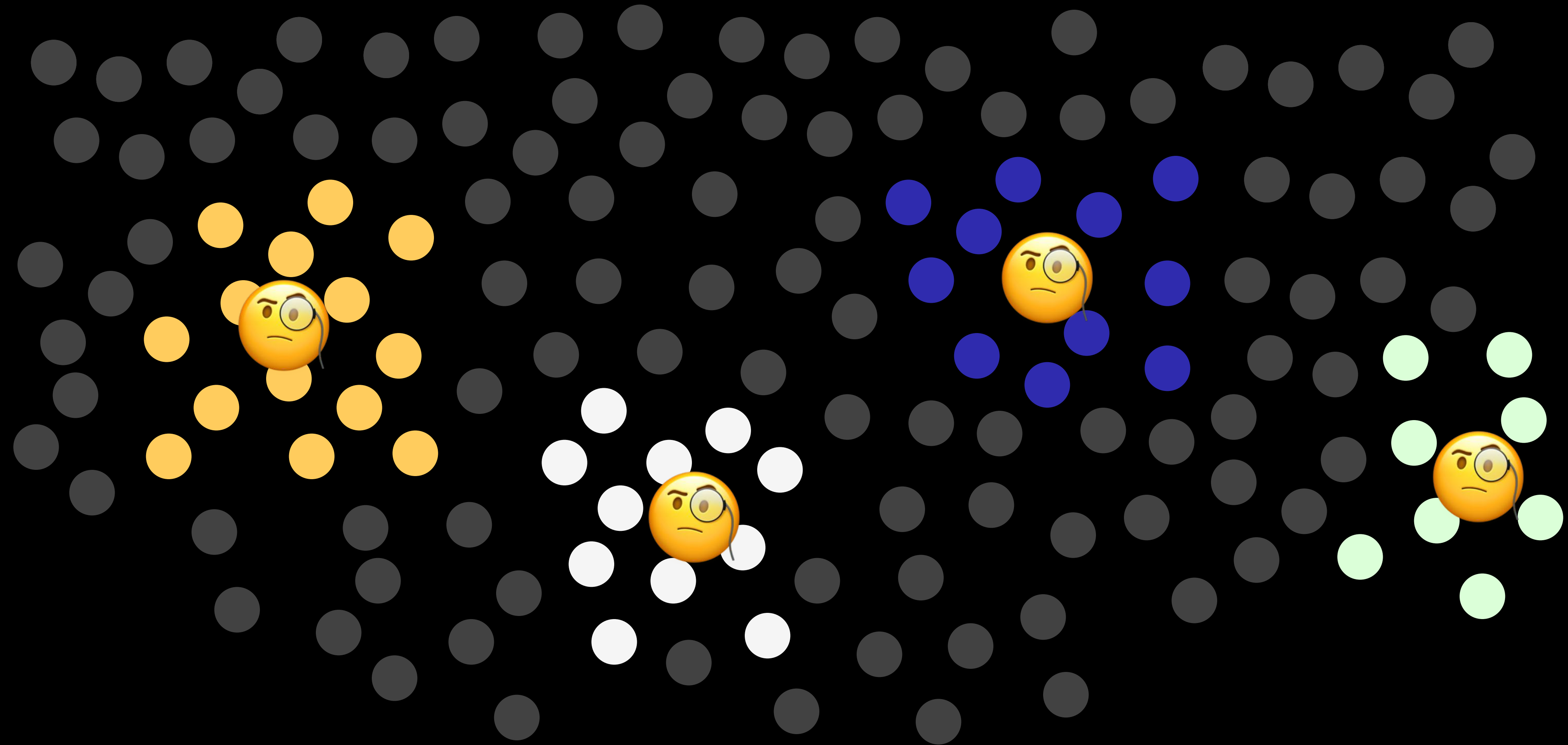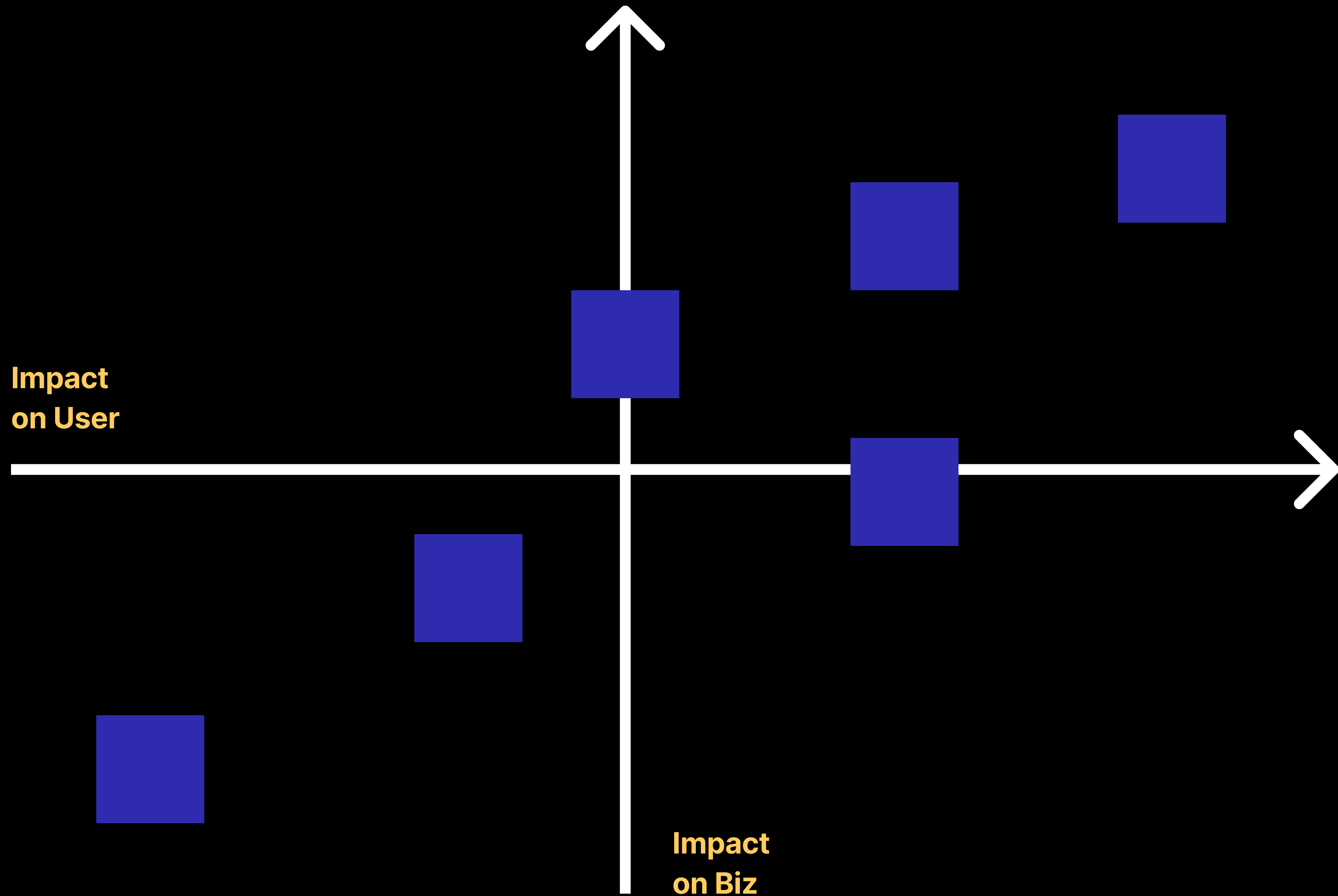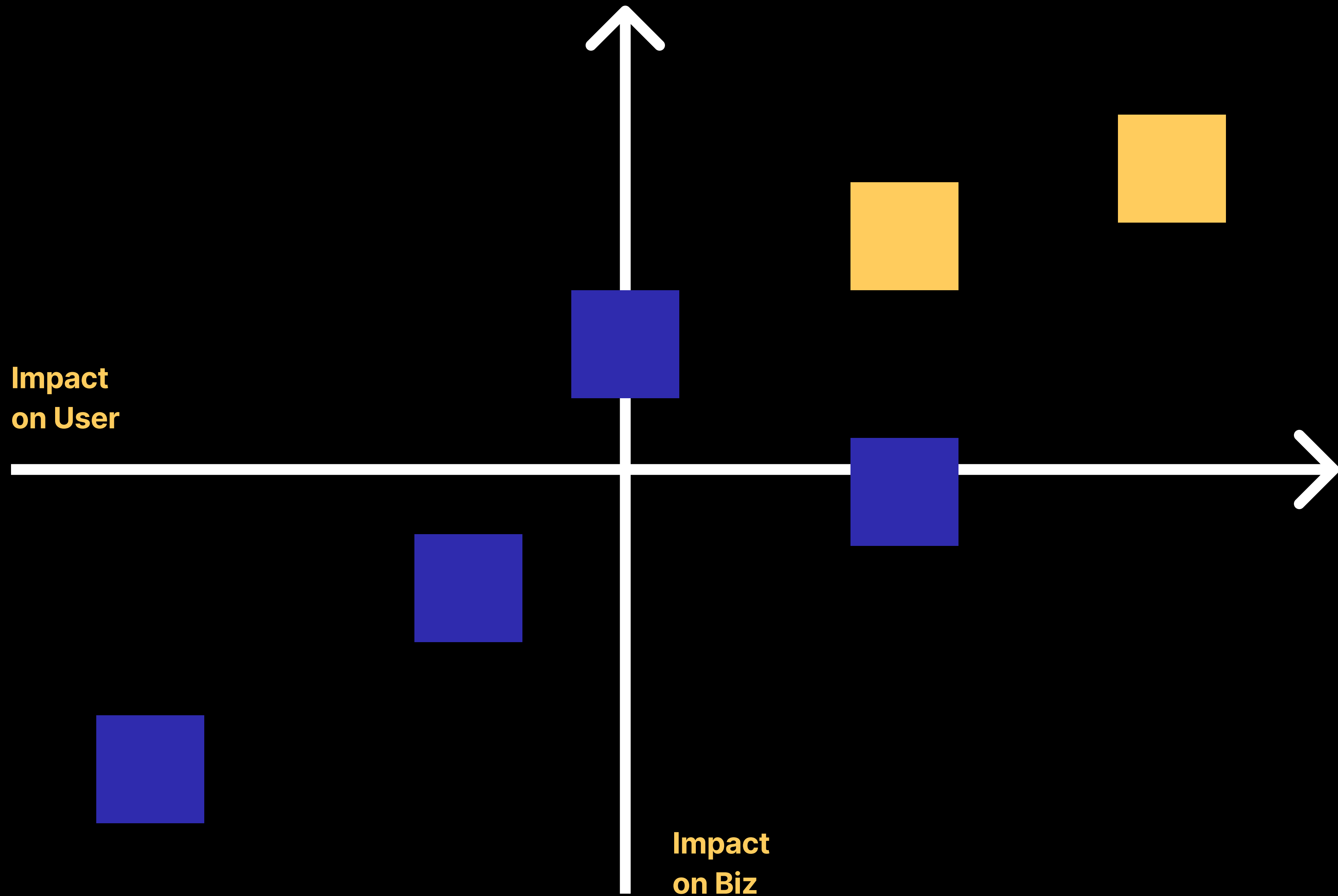
How can we write the theme in an **insightful** & **actionable** way?

Write vague statements about the themes

Problem Statements & User Stories

Problem Statement

First-time users of the fitness tracking app struggle to **log their workouts** due to **unclear navigation labels and lack of onboarding guidance**. This causes frustration, particularly when they are at the gym and **need a quick solution**, resulting in **reduced app usage and poor retention rates**. Observational studies showed that **70% of new users abandoned** the app after their first attempt to log a workout.

components of a problem statement

- The User's Goal
- The Problem/Pain
- The Context
- Impact on the User
- Evidence
- Why It Matters

As a **trainee**, I want to a **quick and easy way to log my exercises** so that I **focus on my workout**

Modify your previous problem statement & write one user story from it

Practical Assignments 2/4 Define

Objective:

To analyze and synthesize data gathered during the Discovery phase, using various analytical methods to identify themes, user needs, and pain points. This phase will help define clear, actionable problem statements for the next phase.

Instructions:
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1. Data Analysis:

    - Quantitative Analysis:
        - Organize and analyze numerical data (e.g., ratings, frequency of feedback themes).
        - Create at least three statistical visualizations (e.g., bar charts, pie charts) to summarize key findings.
    - Qualitative Analysis:
        - Perform thematic analysis to identify at least 5 recurring themes from user reviews, interviews, and observations.
        - Conduct semantic analysis to extract deeper insights from user sentiments.

2. Mapping Tools:

    - Design personas for one distinct user group, including their goals, frustrations, and needs.
    - Create empathy maps for at least one user archetypes, focusing on their thoughts, feelings, actions, and challenges.
    - Develop a user journey map for one primary task, highlighting pain points and opportunities for improvement.
    - Draft two scenarios for your persona, describing its interaction with the product in a specific context.

3. Problem Definition:
    Summarize your analysis and define at least 3 key problems to be solved in the next phase. Each problem statement should be user-focused, actionable, and rooted in the analysis. an example of a well-defined problem:

    "First-time users of the fitness tracking app struggle to log their workouts due to unclear navigation labels and lack of onboarding guidance. This causes frustration, particularly when they are at the gym and need a quick solution, resulting in reduced app usage and poor retention rates. Observational studies showed that 70% of new users abandoned the app after their first attempt to log a workout."

    It includes: The User's Goal, The Problem/Pain, The Context, Impact on the User, Evidence, Why It Matters

4. Presentation:
    Create a 5-minute presentation to share your key findings, mapping outputs, and problem statements with the class. Focus on clarity, logical flow, and impactful visual aids (e.g., charts, empathy maps).

Submission:

Submit your presentation slides to Blackboard. Be ready to present your findings in the next class.

Grading Criteria:
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1. Data Analysis (10 points):

    - Were both quantitative and qualitative analyses conducted thoroughly and appropriately?
    - Are visualizations and themes well-documented?

2. Empathy and Mapping (10 points):

    - Are empathy maps, journey maps, personas, and scenarios detailed and user-centered?
    - Do they effectively reflect the analyzed data?

3. Problem Definition (5 points):

    - Are problem statements clearly defined, actionable, and based on analysis?

4. Clarity and Presentation (5 points):

    - Is the report well-organized and easy to follow?
    - Is the presentation engaging, clear, and insightful?