

The background features a gradient from light green at the top to dark blue at the bottom. It is overlaid with several semi-transparent circular gauges and arrows. One large gauge on the left has numerical markings from 140 to 260. Other gauges and arrows are scattered across the scene, some pointing in different directions, creating a sense of dynamic movement and data analysis.

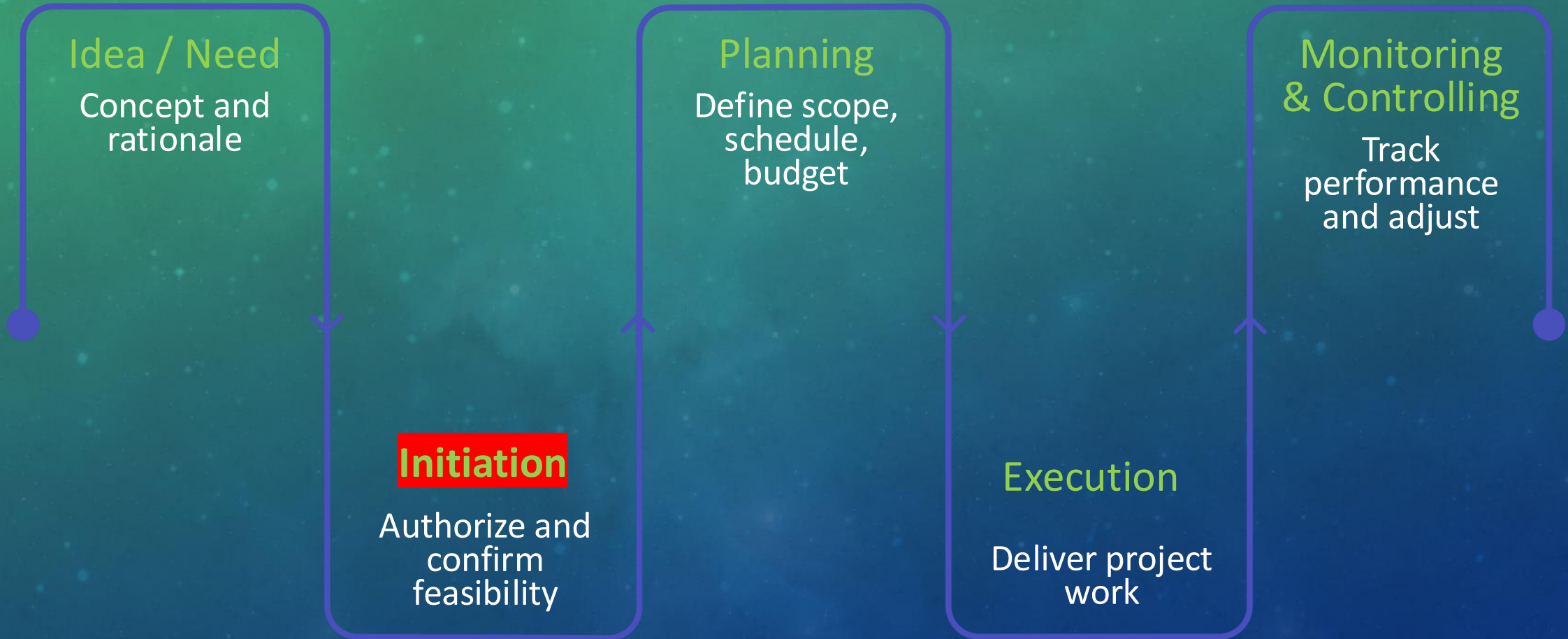
**Understanding the Customer**

**Market and Needs Validation**

The background features a gradient from light green at the top to dark blue at the bottom. On the left side, there is a large, semi-circular scale with numerical markings from 140 to 260. Several circular and semi-circular graphic elements, including dashed lines and arrows, are scattered across the scene, creating a sense of motion and technology.

# Innovative Business Project Initiation

# Where is Initiation in the Innovative Business Project Life Cycle



It is not yet full-scale planning — it clarifies rationale, direction, and high-level feasibility.

**In your opinion**

**What is the biggest risk when  
developing an innovative solution?**

# Maybe:

- **Technology does not work**
- **No funding**
- **No customers**
- **Strong competition**
- **Regulatory barriers**

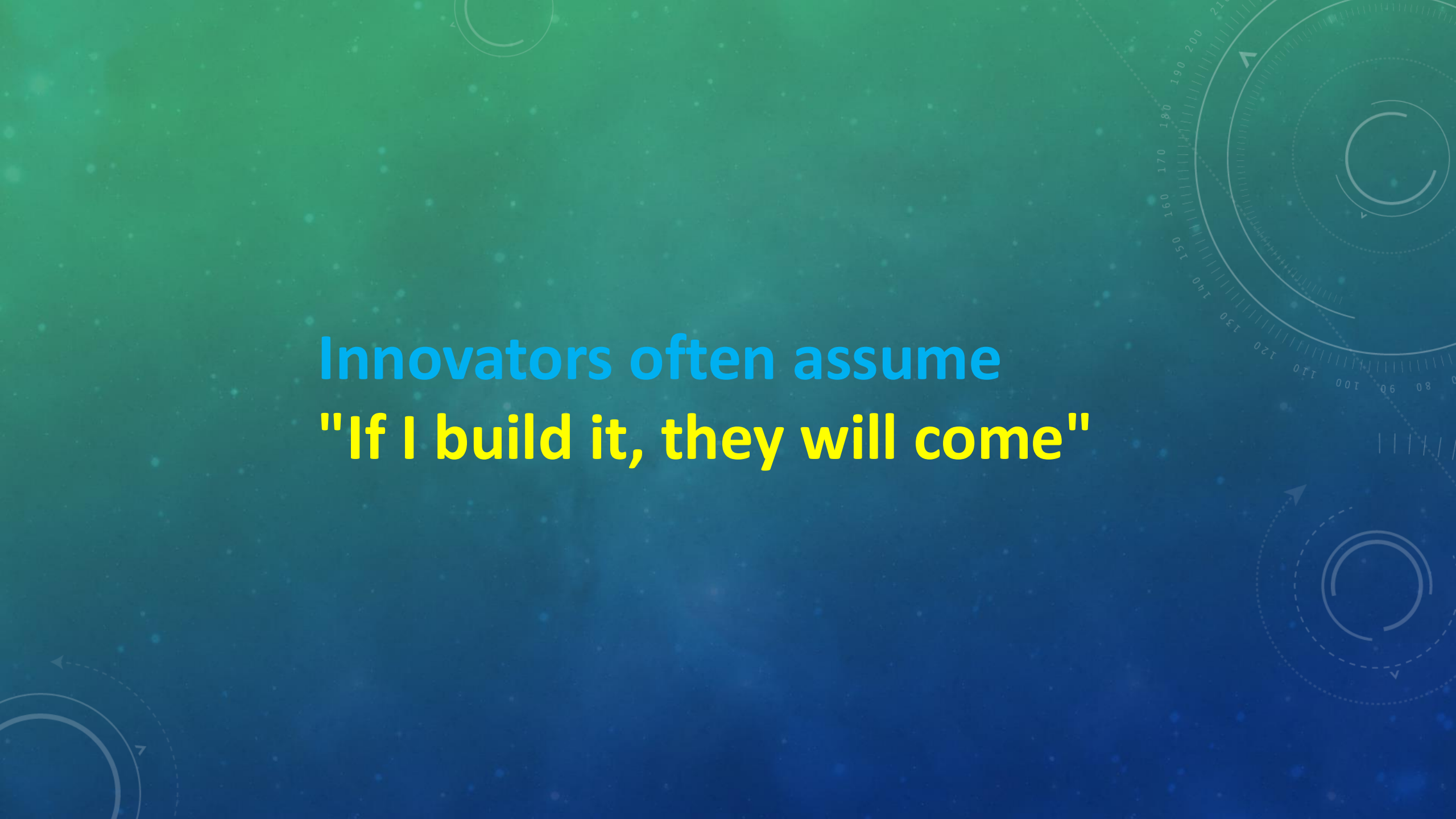
**In academic research we validate theories  
and hypotheses**

**In entrepreneurship we validate market  
assumptions and customer needs**

# Why Customer Validation Matters ?

**The Start-up as a Learning Process Introduce the concept of:**

- **uncertainty**
- **experimentation**
- **evidence-based entrepreneurship**



**Innovators often assume  
"If I build it, they will come"**

# Customer validation helps answer:

- **Does the problem really exist?**
- **Who experiences it?**
- **How important is it?**
- **Is the current solution insufficient?**
- **Is there a market opportunity?**

**In your opinion**

**How is market validation similar  
to scientific research?**

# Maybe:

- **hypothesis testing**
- **data collection**
- **evidence gathering**
- **reducing uncertainty**



## Stage 1: Exploration - Qualitative Research

Goal: Understand the problem and customer context.

### Used when:

- we know little about the problem,
- we want to discover motivations,
- we seek unexpected insights.

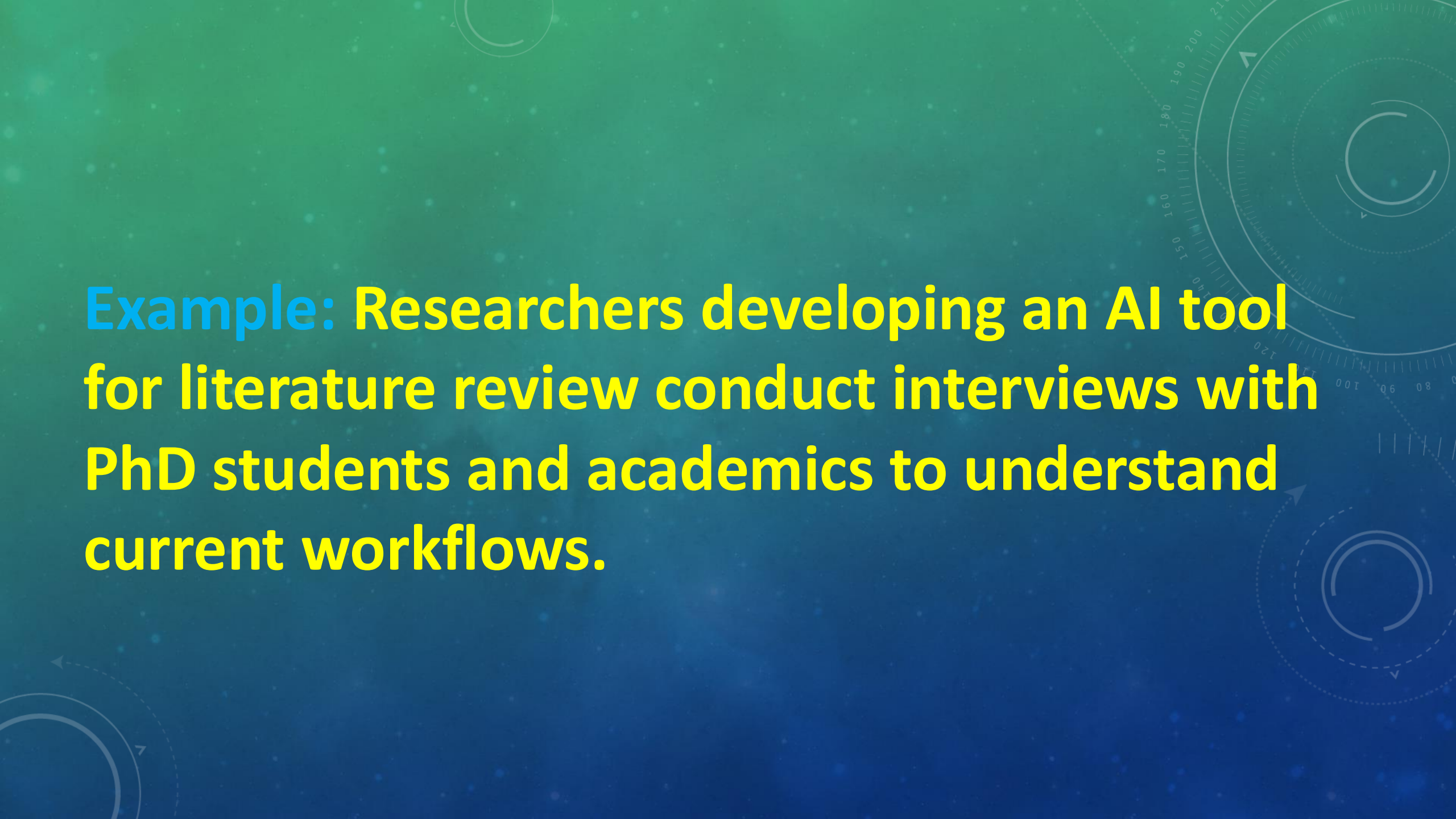
# Qualitative Research - Methods:

- in-depth interviews
- semi-structured interviews
- focus groups
- observations
- ethnographic approaches
- diary studies

# Qualitative Research - Methods:

## Questions answered:

- **Why does the problem occur?**
- **How do people currently behave?**
- **What frustrates them?**
- **What language do they use?**



**Example:** Researchers developing an AI tool for literature review conduct interviews with PhD students and academics to understand current workflows.

## Stage 2: Exploration - Validation

Goal: Measure how widespread the problem is.

### Used when:

- we want statistical evidence,
- we test assumptions identified qualitatively,
- we estimate market potential.

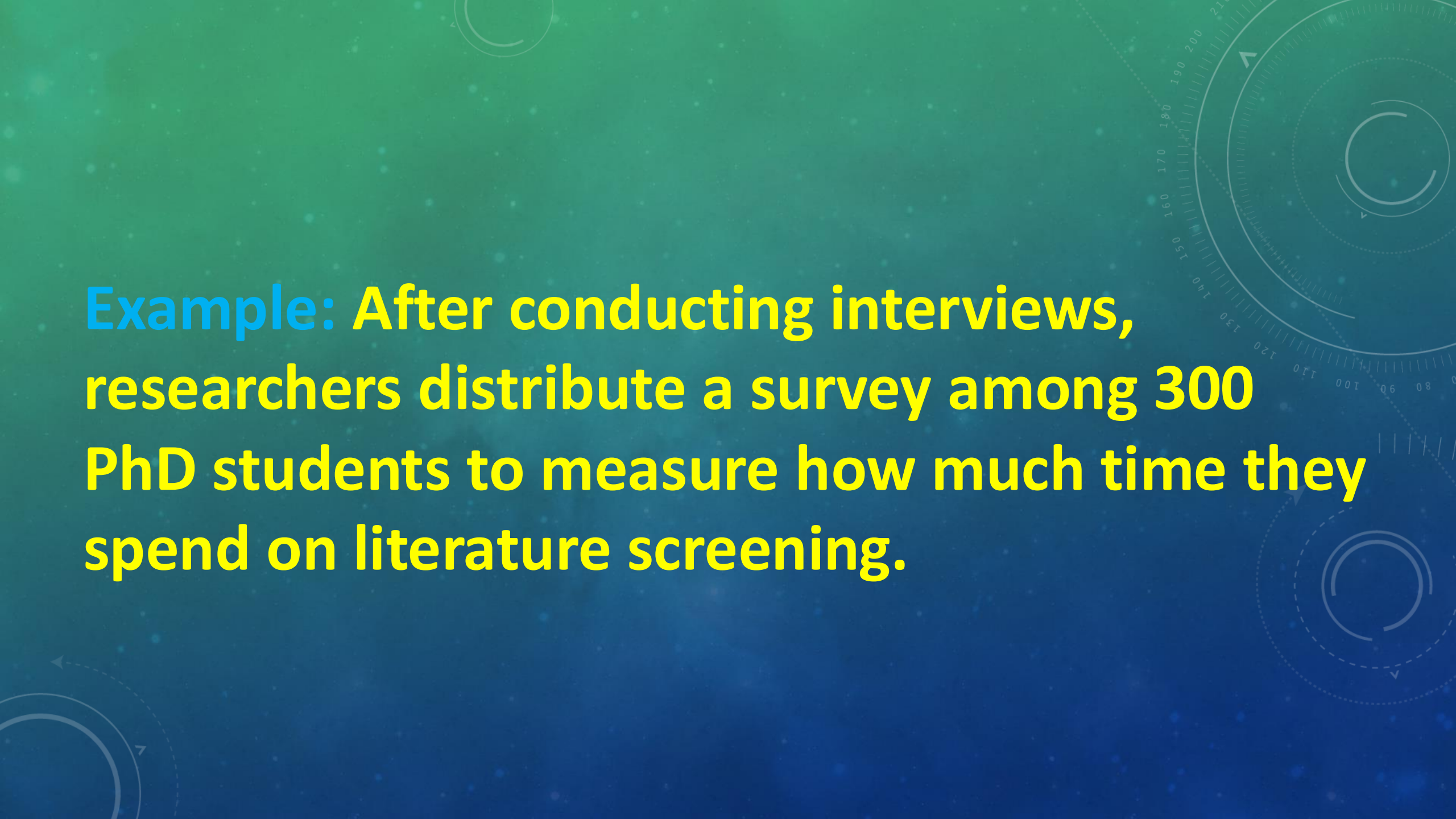
# Quantitative Research - Methods:

- online surveys
- questionnaires
- experiments
- usage analytics
- A/B testing

# Quantitative Research - Methods:

## Questions answered:

- **How many people experience the problem?**
- **How often?**
- **Which segment is most affected?**
- **Which solution attributes matter most?**



**Example:** After conducting interviews, researchers distribute a survey among 300 PhD students to measure how much time they spend on literature screening.

# Research Approach Comparison

Qualitative	Quantitative
Explores	Measures
Small sample	Large sample
Why?	How many?
Interviews	Surveys
Rich insights	Statistical evidence
Early stages	Later stages

**Start-ups rarely begin with surveys**

**Usually**

**Qualitative → Quantitative → Product Testing**



# Building a Customer Persona from Research Evidence

# Who is a Persona

**A persona is a research-based representation of a target customer.**

# A Persona - helps answer:

- Who are we designing for?
- What problems do they face?
- What motivates them?
- How do they make decisions?

# A Persona IS:

- ✓ evidence-based
- ✓ realistic
- ✓ actionable

# A Persona IS NOT:

- ✗ a stereotype
- ✗ a guess
- ✗ an ideal customer invented by the team

**How research contributes to a Persona?**

The background features a vertical gradient from light green at the top to dark blue at the bottom. It is decorated with faint, semi-transparent circular patterns and a scale on the right side. The scale is a circular arc with numerical markings from 0 to 210 in increments of 10. There are also several concentric circles and dashed lines scattered across the background, some with small arrowheads pointing in various directions.

# Qualitative research tells us:

- motivations
- frustrations
- behaviours
- emotions
- language customers use

# Example

## Interview findings:

"I spend hours searching for relevant articles."

"I often miss important publications."

"I don't trust AI-generated summaries."

# Quantitative research tells us:

- **frequency**
- **prevalence**
- **segment size**
- **priorities**

# Example

## Survey findings:

- **72% spend more than 5 hours weekly screening literature**
- **61% use reference management software**
- **68% report information overload**

# Exercise

## Scenario

- **Your team is developing an AI-powered literature review assistant for researchers.**
- **You have collected preliminary research data.**

