



# AI-Powered Experiential Learning in the Product Management Capstone

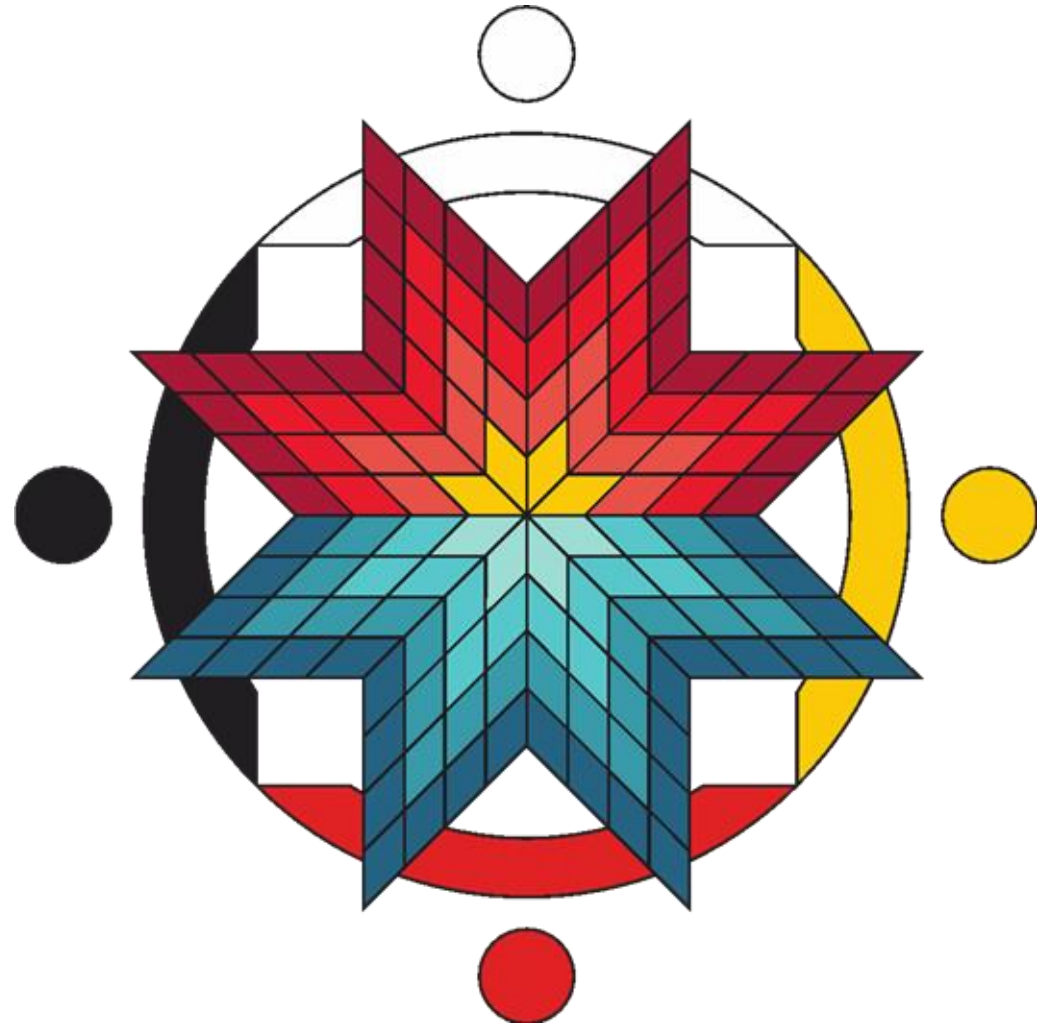
Taciano Messias Moraes  
Professor, Digital Product Management

# Land Acknowledgement

George Brown Polytechnic is located on the traditional territory of the Mississaugas of the Credit First Nation and other Indigenous peoples who have lived here over time.

We are grateful to share this land as treaty people who learn, work and live in the community with each other.

**[Learn more about our land acknowledgement.](#)**



# Agenda

1. About Me & How I See AI
2. Course Methodology
3. Learning & Tips
4. Future of AI in Education

# **section 1:** **ABOUT ME & HOW I see AI**



INSTITUTO DE  
INFORMÁTICA  
UFG

# Bachelor in Computer Science

evolved

# Masters in Software Management

Carnegie  
Mellon  
University  
Silicon Valley

crunchbase Search Crunchbase Advanced [START FREE TRIAL](#) [Solutions](#) [Products](#) [Resources](#)

 ORGANIZATION **Staircase** [CONNECT TO CRM](#)

Summary Financials People Technology Signals & News Similar Companies

**About**  
Staircase is an API marketplace for residential mortgage.

Philadelphia, Pennsylvania, United States  
11-50  
Debt Financing  
Private  
www.staircase.co/   
6,601

**Highlights**

|                                        |                       |
|----------------------------------------|-----------------------|
| Total Funding Amount<br><b>\$24.1M</b> | Contacts<br><b>10</b> |
| Employee Profiles<br><b>3</b>          | Investors<br><b>7</b> |
| Similar Companies<br><b>989</b>        |                       |

**Recent News & Activity**

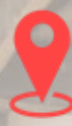
\$ Funding Round - Apr 21, 2022  
Staircase raised an undisclosed amount / D from Torch Capital  
[Discover more funding rounds](#)

\$ Funding Round - Dec 14, 2021  
Staircase raised \$18,000,000 / Series A from and 5 other investors  
[Discover more funding rounds](#)

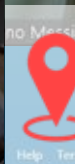
\$ Funding Round - Oct 31, 2020  
Staircase raised \$2,000,000 / Convertible N  
[Discover more funding rounds](#)

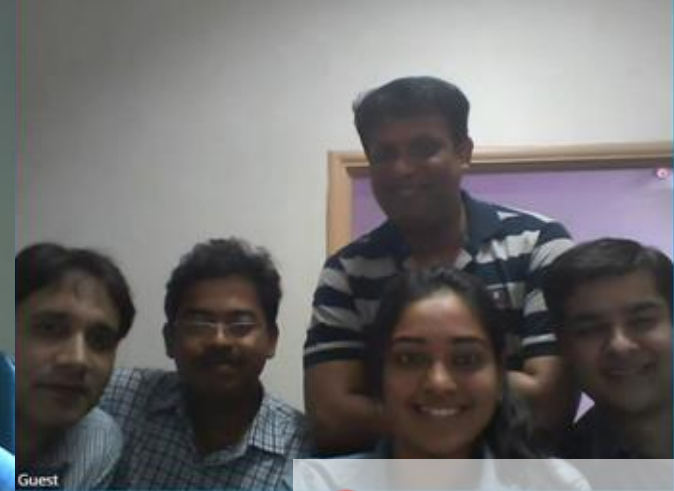
[VIEW ALL](#)



 São Paulo  
Brasil



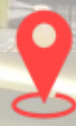
 Goiânia  
Brasil

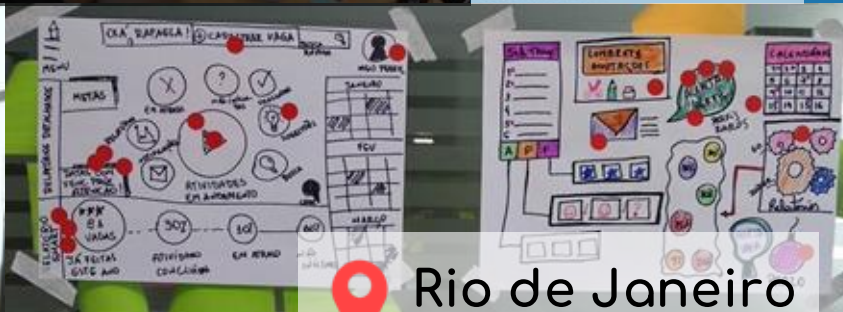


 New Delhi  
India

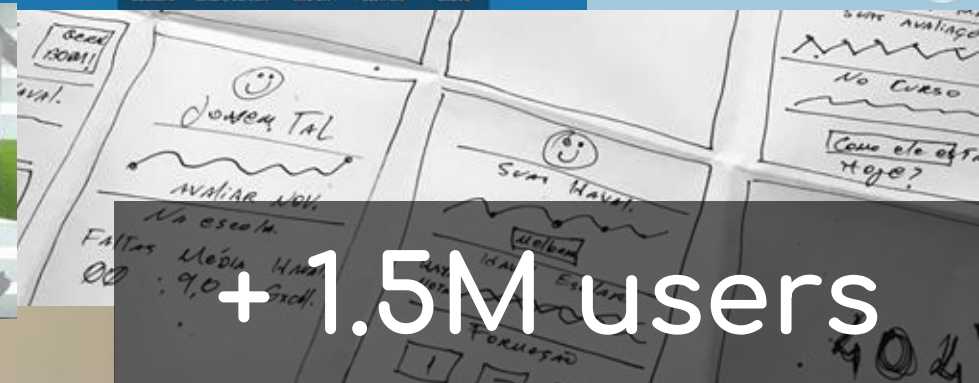
# Product Ops Director



 Barcelona  
Spain



 Rio de Janeiro  
Brasil



+1.5M users



evolvED 



EDOO





Series B Startup  
U\$ 30M Funding

arteria<sub>AI</sub>

is an AIFinTech100 company



**AIFINTECH100**  
2025

*The World's Most Innovative  
AI Technology Companies in  
Financial Services*

[www.AIFinTech100.com](http://www.AIFinTech100.com)



Stanford  
University

thinking  
course

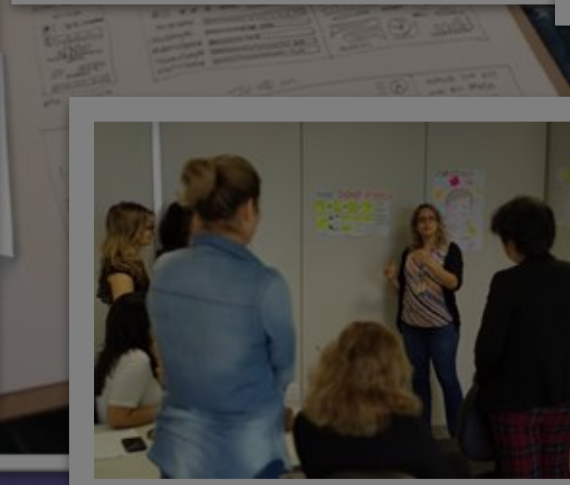
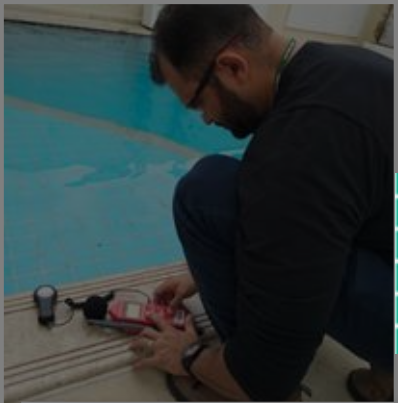
what the  
is design thinking?



Design Sprint Nanodegree

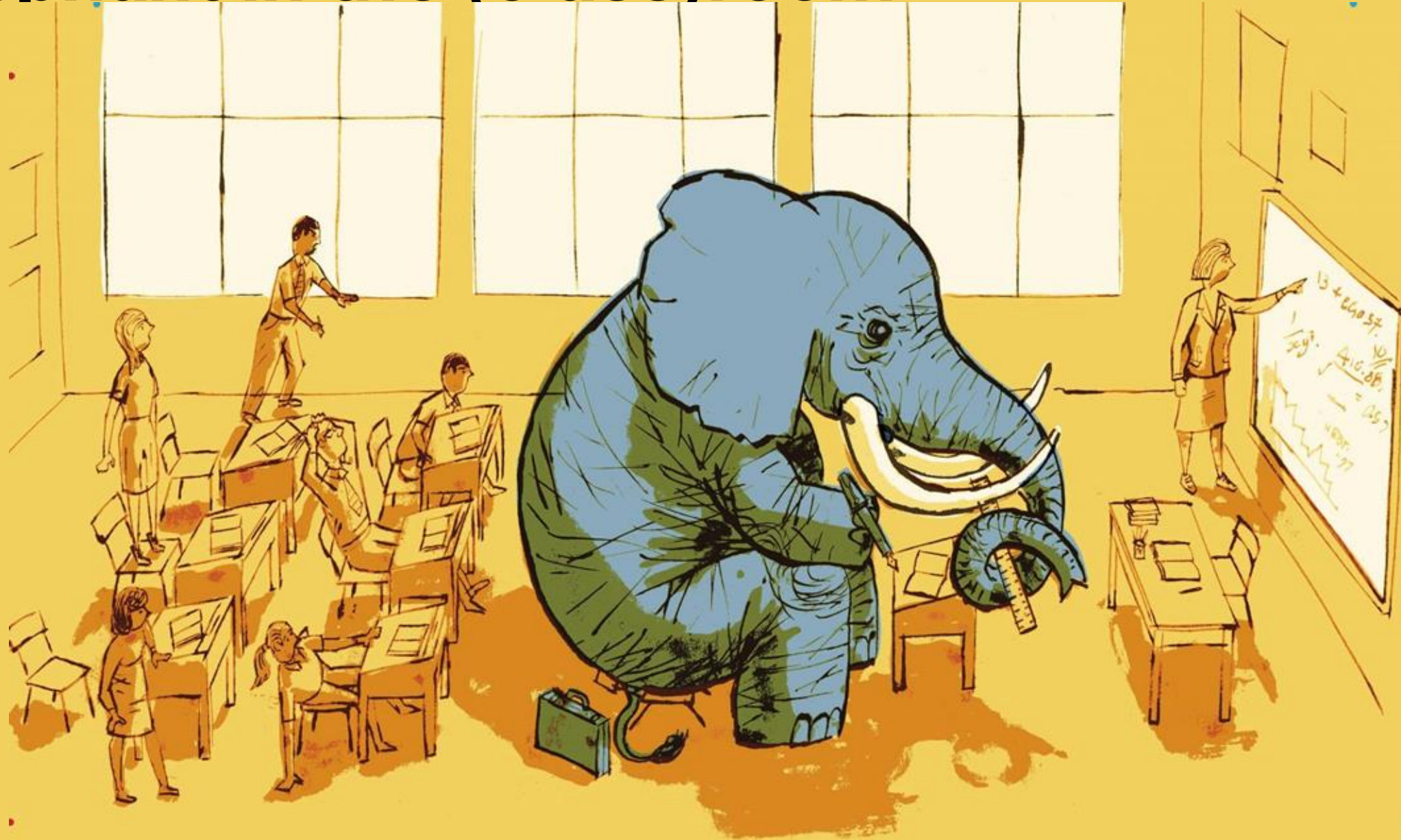
evolvED

**SESI**



**evolvED** →

# The elephant in the (class)room



# First, let's align on the problems of AI

## 21st Century Arms Race

Almost as destructive as the nuclear one.



## Concentration of Power

Exacerbating wealth and power gaps.



## Workforce Displacement

Unprecedented changes to the job market.



## Environmental Toll

Massive consumption of electricity and water.



## Rights Violations

Copyright and privacy issues with no accountability.



## Existential Risk

Potential loss of control over AGI.



## Post-Truth Era

Worsening misinformation and deepfakes.



## Algorithmic Bias

Discrimination replicated at scale.



*And many many more...*

Dr. Gilbert C. Quote on Inequality:

“THE FORCES OF EQUILIBRIUM IN OUR SOCIETY ARE TOWARD INEQUALITY, AND WE HAVEN'T ACTUALLY DISMANTLED THE STRUCTURES THAT HOLD EVERYTHING TOGETHER.”

— DR. GILBERT C. GEE



# Nobel prize winner and one of the godfathers of AI, Geoffrey Hinton



*"It's as if aliens had landed and people haven't realized because they speak very good English."*

# Quick Show of Hands

1. Seen AI in student work this year?
2. Changed your assessment design because of it?





Humans  
Need Not  
Apply

# Humans Need Not Apply

Humans Are Becoming Horses



Join



422K



Share

Ask

Save

Download



18M views 11 years ago

Support Grey making videos / cgpgrey

Robots, Etc: ...more

More than a decade ago!

“We tend to overestimate the effect of a technology in the short run and underestimate the effect in the long run.”

Amara's Law

## Humans Are Becoming Horses



CGP Grey ✓  
6.91M subscribers

Join



422K



Share



Ask



Save



Download



18M views 11 years ago

Support Grey making videos:  / cgpgrey

Robots, Etc: ...more

A futuristic robot with a metallic, segmented body is shown from the waist up, holding a glowing blue and white Earth in its arms. The robot's legs are visible at the bottom, standing on a reflective surface. The background is dark and atmospheric.

“I don’t believe machines are taking  
our place, it’s we humans who were  
taking theirs.”

**Lúcia Helena Galvão**

# section 2: course METHODOLOGY

# Back to the Classroom

## The Reality

Many students are constantly using AI regardless of policy.

## The Approach

Teaching them how to use it well:  
**Copilot** instead of Autopilot.

## Assessment Pillars for a VUCA+BANI World



Critical Thinking

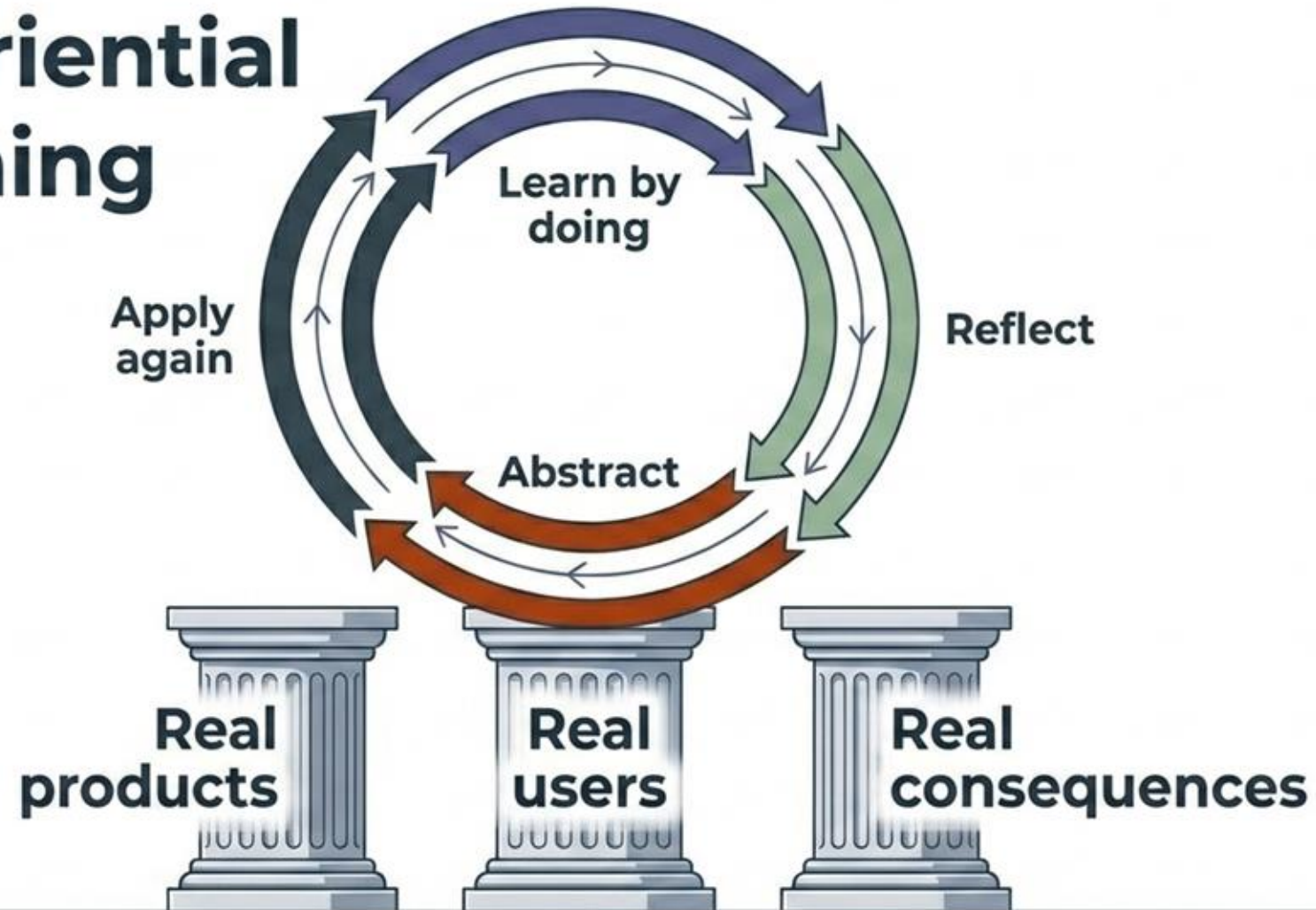


Teamwork

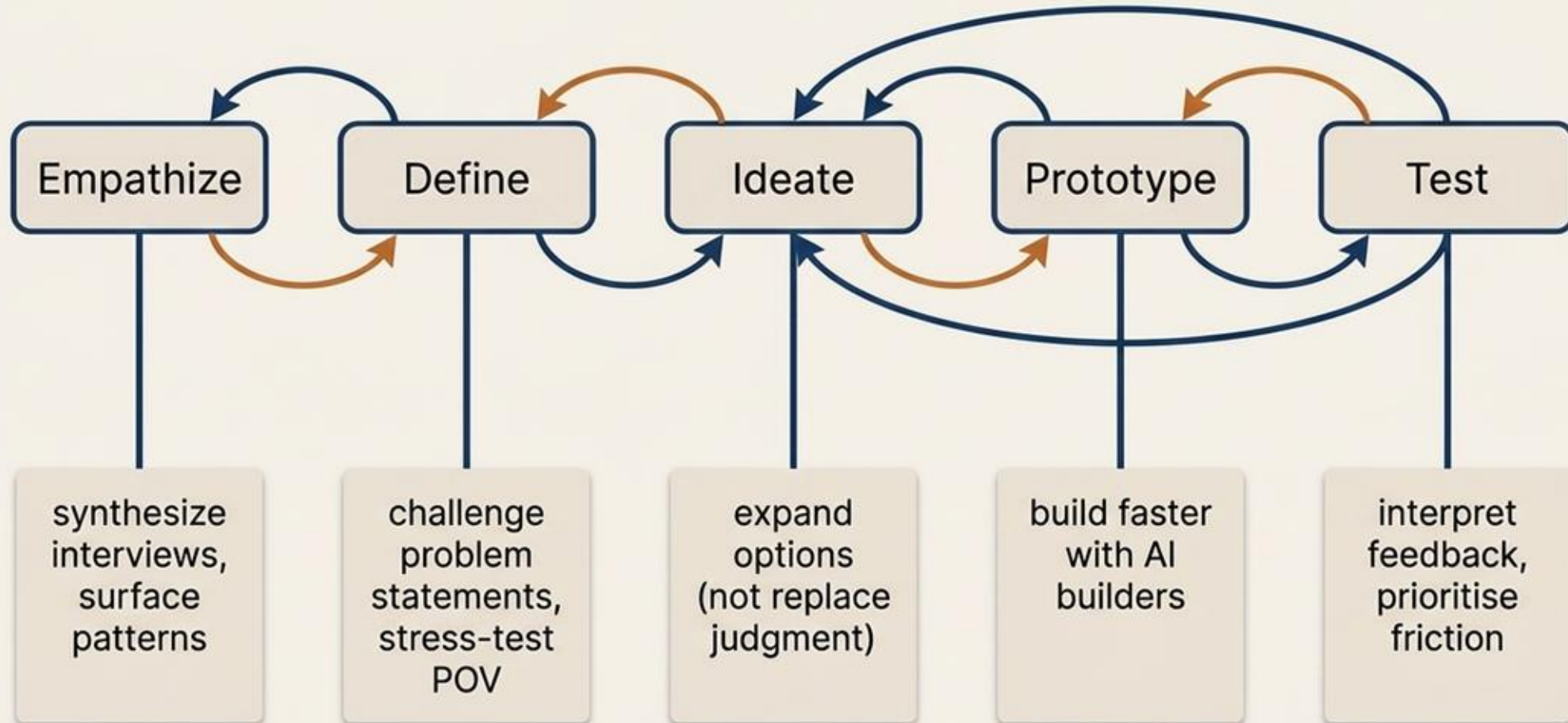


Ethical Judgment

# Experiential Learning



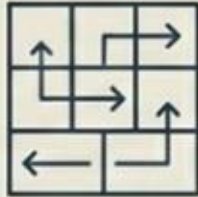
# Design Thinking + AI



# What students produce in Capstone I:



User Persona  
(evidence-based,  
interview-  
grounded)



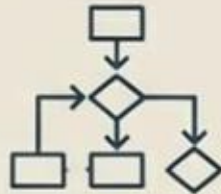
Business  
Model Canvas



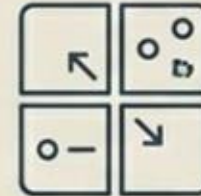
PRD — Product  
Requirements  
Document



User Stories



User Flow  
Diagrams



Competitive  
Analysis  
(2×2 matrix)



Investor  
Pitch Deck

# What students produce in Capstone II:



Working  
prototype  
(AI builder)



Lead Magnet  
(PDF, checklist,  
or template)



Multi-channel  
online presence  
(Home Base + 3  
Social Outposts)



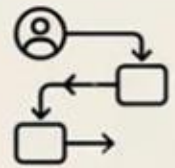
Analytics  
dashboard  
(Simple  
Analytics)



Email capture  
system  
(MailerLite)



User interview  
log (Mom Test  
protocol)



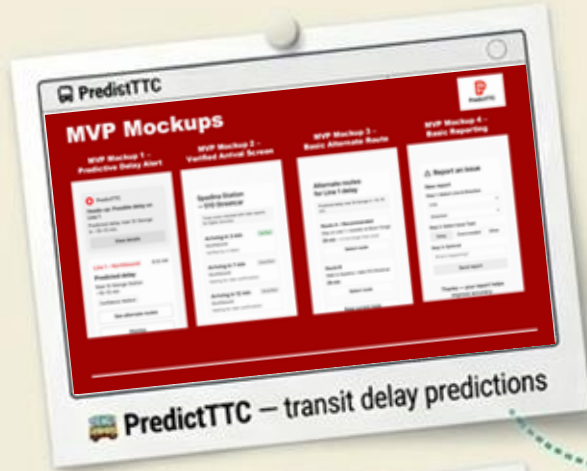
Friction log  
(silent prototype  
testing)



Payment  
infrastructure  
(Gumroad /  
PayPal)



Growth story +  
12-month  
scaling plan



**PredictTTC** – transit delay predictions



**FoodSave** – food waste for restaurants



**MindTrak** – ADHD-friendly item finder



**Mindquest** – mental wellness journaling



**LingoLeap** – AI-powered exam prep



**HECuPPS** – personalised surprise planning



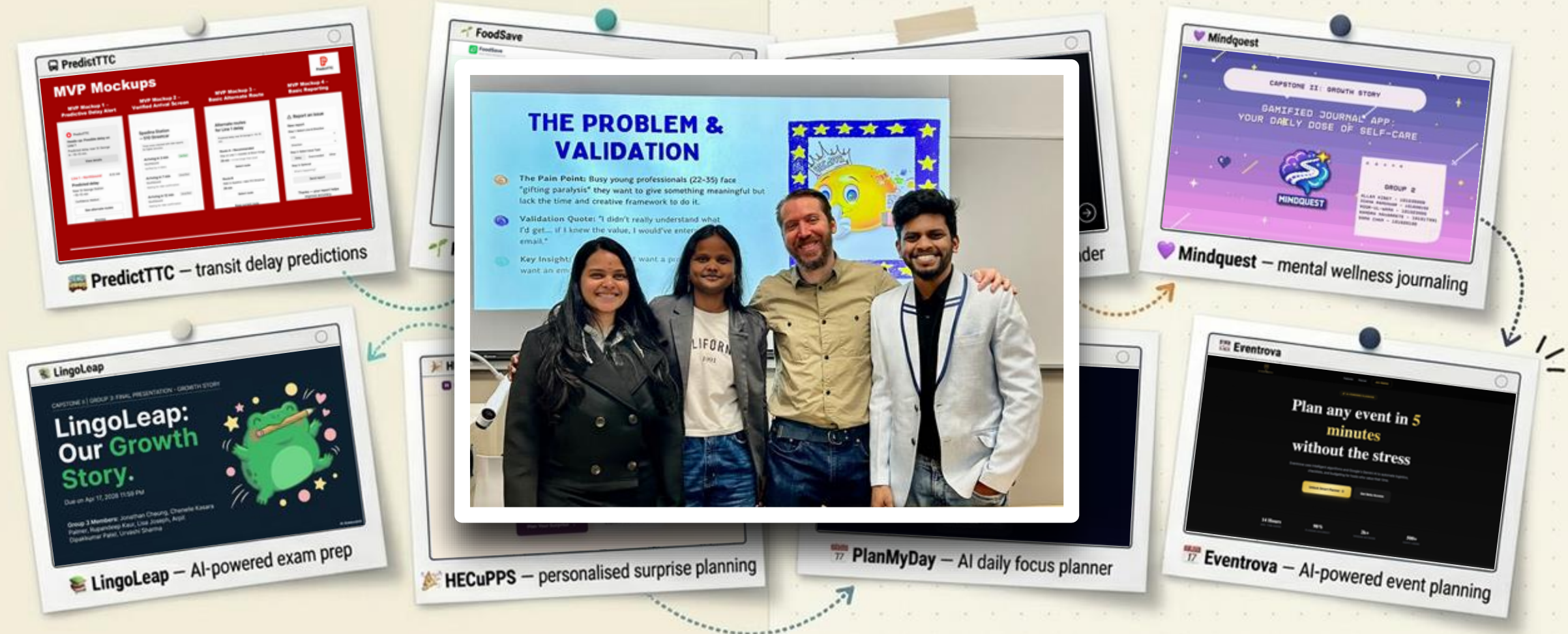
**PlanMyDay** – AI daily focus planner



**Eventrova** – AI-powered event planning

No mock briefs. Real problems. Real users. Early revenue signals.  
All learned something AI couldn't have told them.

## Student Deliverables Showcase (Part 2)



No mock briefs. Real problems. Real users. Early revenue signals.  
All learned something AI couldn't have told them.

## ● Capstone I (DPM 4002) — Discovery, research, wireframes & prototyping

### AI RESEARCH & SYNTHESIS



### AI NOTETAKING



### WIREFRAMING



### MOCKUP



### PROTOTYPE



### BONUS: AI-POWERED PROTOTYPING TOOLS



## ● Capstone II (DPM 4016) — Build, launch, grow & monetise

### AI RESEARCH, SYNTHESIS & BUILDING



### WEB PRESENCE & ANALYTICS



### EMAIL, CONTENT & AUTOMATION



### MONETISATION



# section 3: Learnings & TIPS

# Challenge 1: Too many tools, too fast

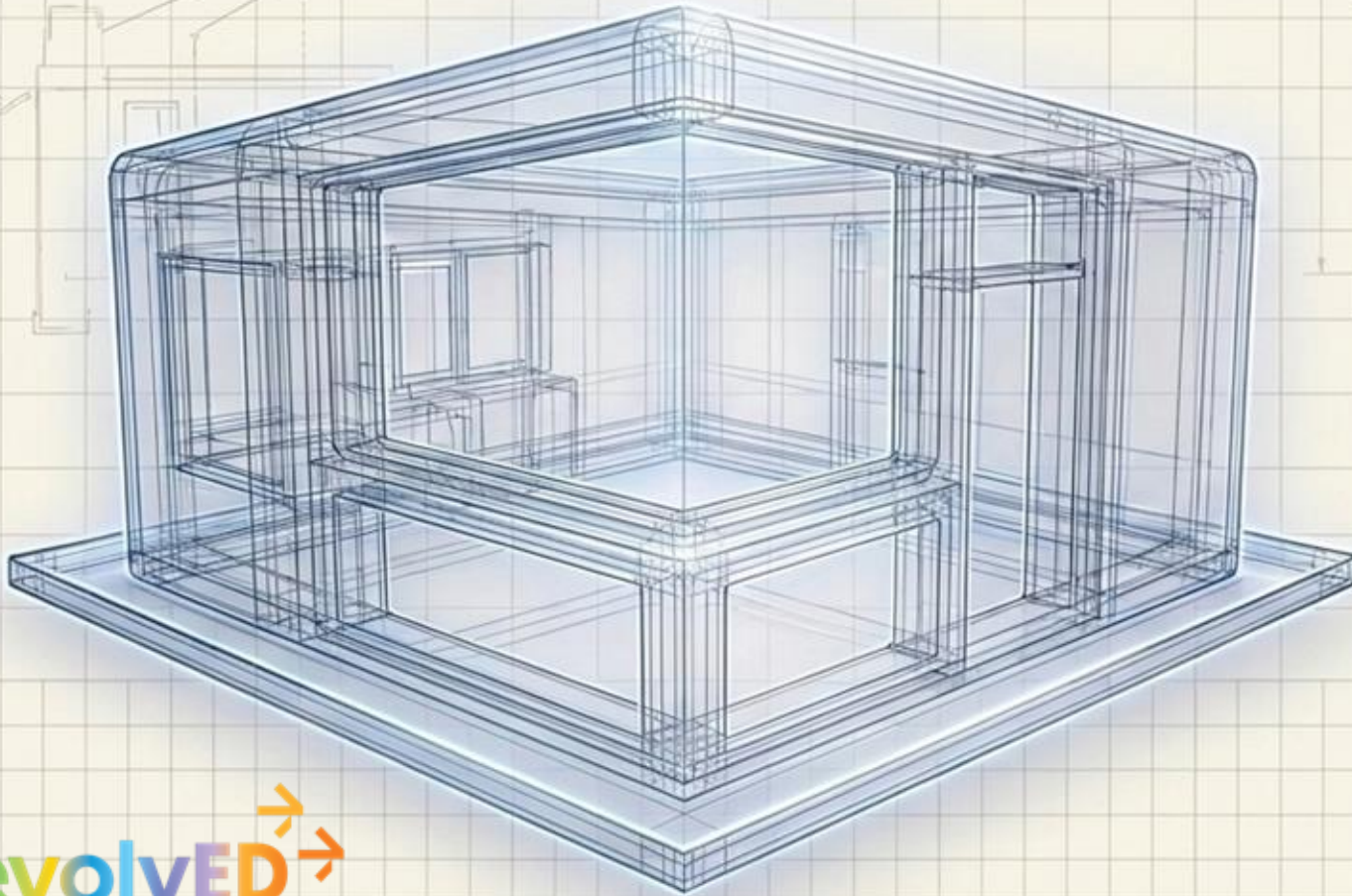
Students evaluating tools instead of solving problems.

Analysis paralysis in a course designed for building.

**One tool.  
One use case.  
One sprint.**

## Challenge 2: AI as the first move

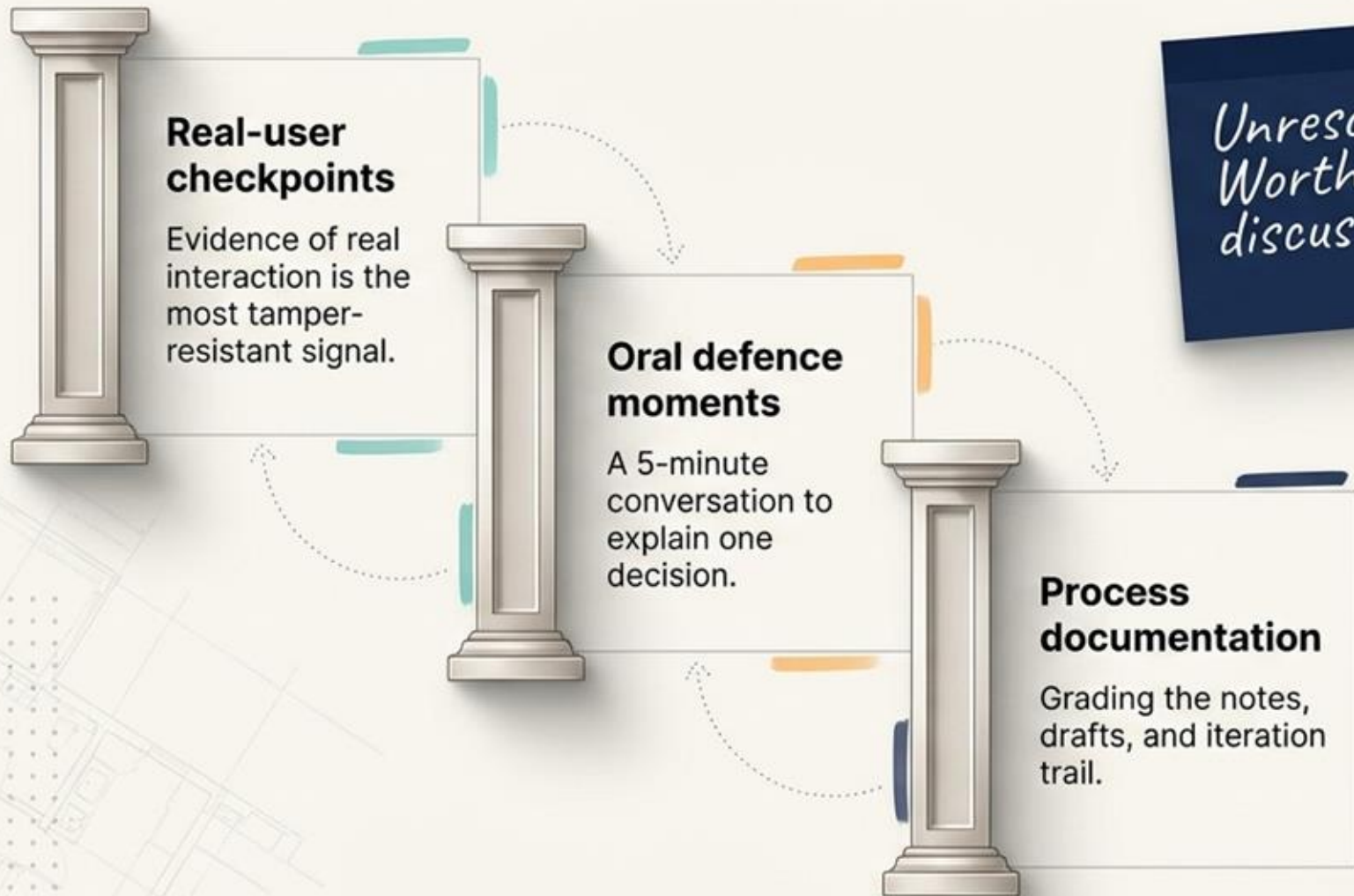
- Students prompting before interviewing.
- Plausibly wrong output mistaken for research.



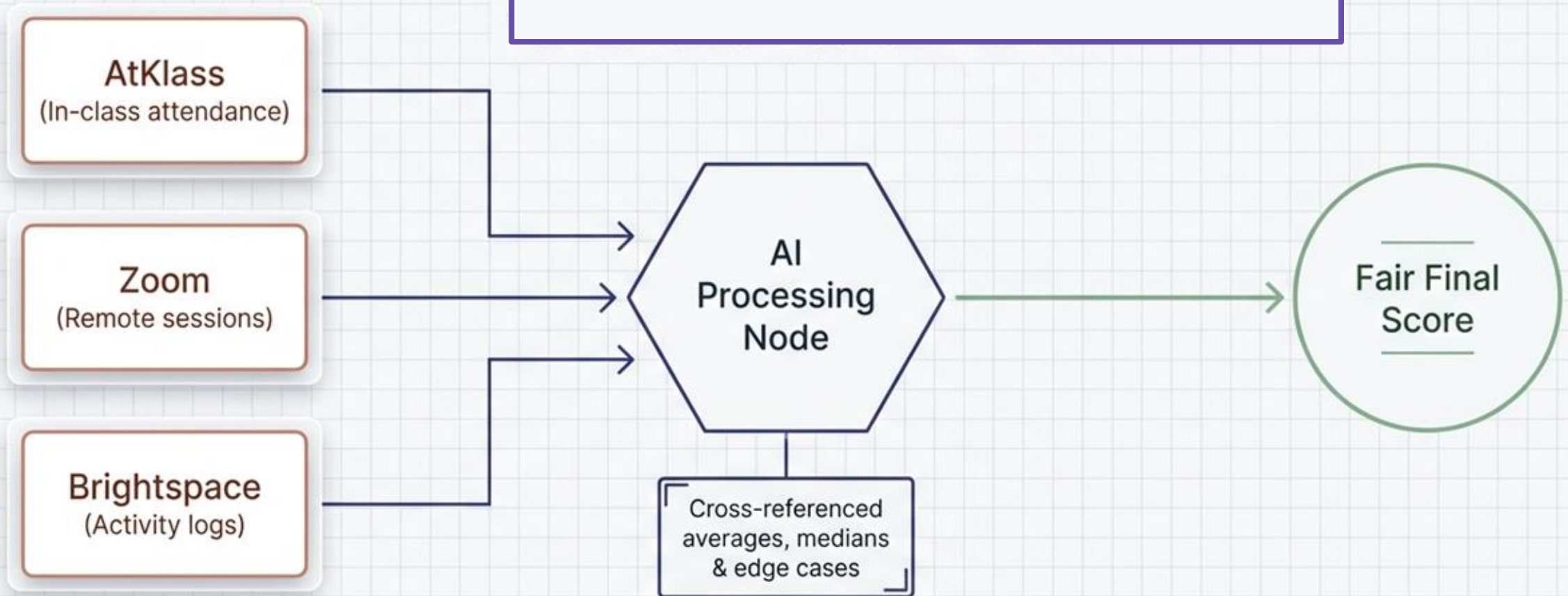
**AI is only as good as what you feed it and feeding it your assumptions produces beautiful-looking nonsense.**

### Challenge 3: How do you grade AI-integrated work fairly?

I don't have a complete answer. Here are three partial ones.

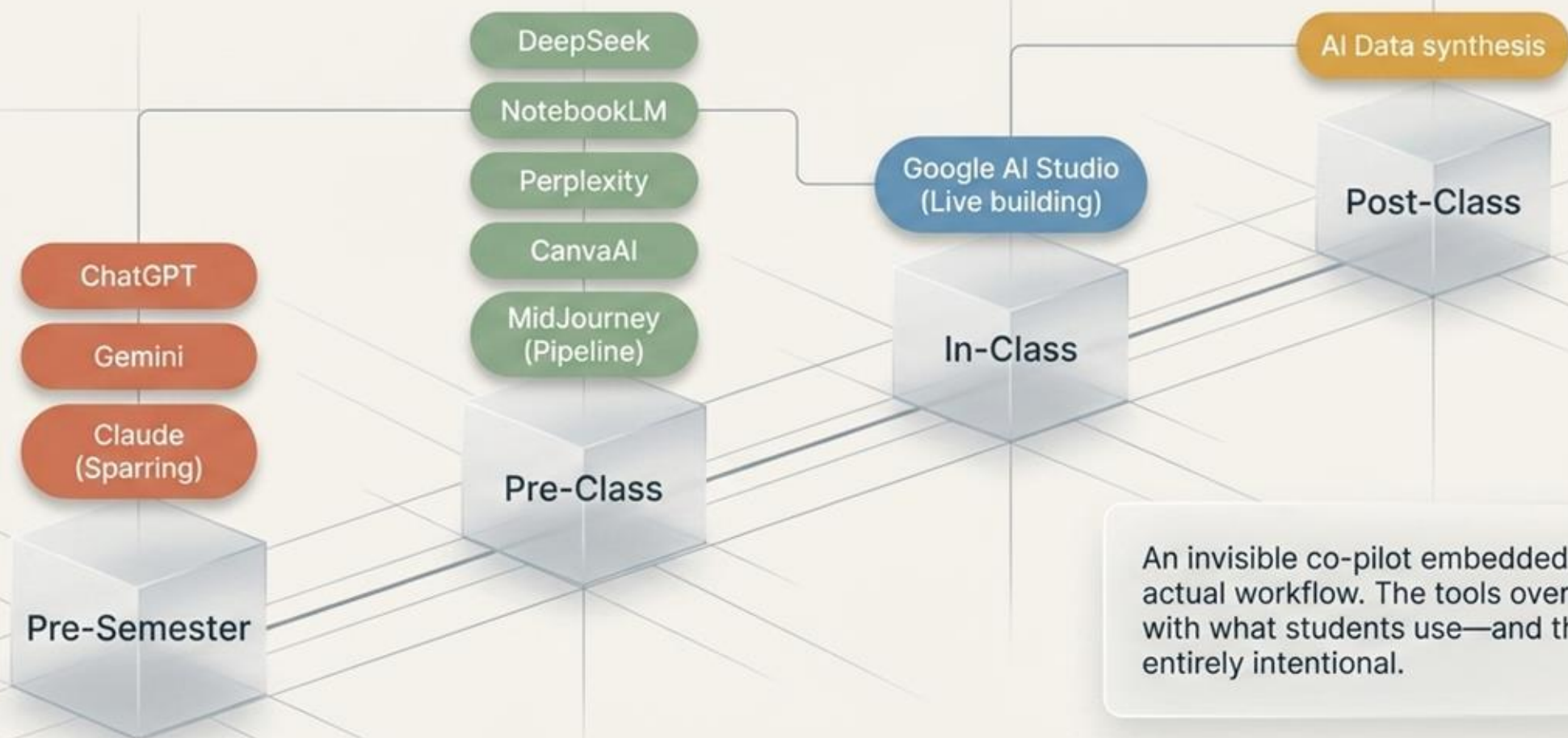


# Student Participation



# A deliberately assembled pedagogical infrastructure

## The Instructor AI Stack





## Claude Skills — GBC Teaching Workflow

AI assistant capabilities mapped to course design, research, grading, and memory

### COURSE DESIGN & DOCUMENTATION

#### doc-coauthoring

Outlines, rubrics, briefs

#### write-spec

Assignment specs

#### docx

Word export for LMS

#### pdf

Create & extract PDFs

### RESEARCH & FEEDBACK SYNTHESIS

#### synthesize-research

Course evals → themes

#### research-synthesis

Student data → insights

#### user-research

Interview guides & surveys

### DATA & GRADING

#### analyze

Grade & attendance data

#### explore-data

Profile exports first

#### statistical-analysis

Trends & significance tests

#### build-dashboard

Interactive cohort HTML

#### xlsx

Grade trackers & rubrics

### MEMORY — CLAUDE-MEM

COMPRESSED · SEMANTIC · AUTO-INJECTED AT SESSION START

#### mem-search

Cross-session recall

#### knowledge-agent

Queryable course history

### CONTEXT — CONTEXT-MODE

EXACT · INDEXED · SESSION-AWARE

#### ctx\_index

Index course materials

#### ctx\_search

Batch search indexed docs

#### ctx\_fetch\_and\_index

Fetch & index URLs

#### ctx\_stats

Session efficiency check

### PLANNING

#### make-plan

Phased plan before multi-step work

# section 3: FUTURE OF AI IN EDUCATION

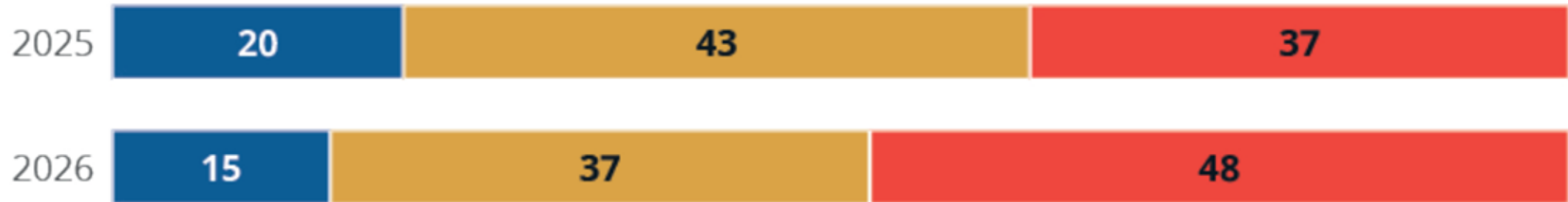
**There's a light at the  
end of the tunnel...**



## Gen Z Workers' Perceptions of Risks vs. Benefits of Artificial Intelligence in Workforce

Which of the following comes closest to your opinion about artificial intelligence?

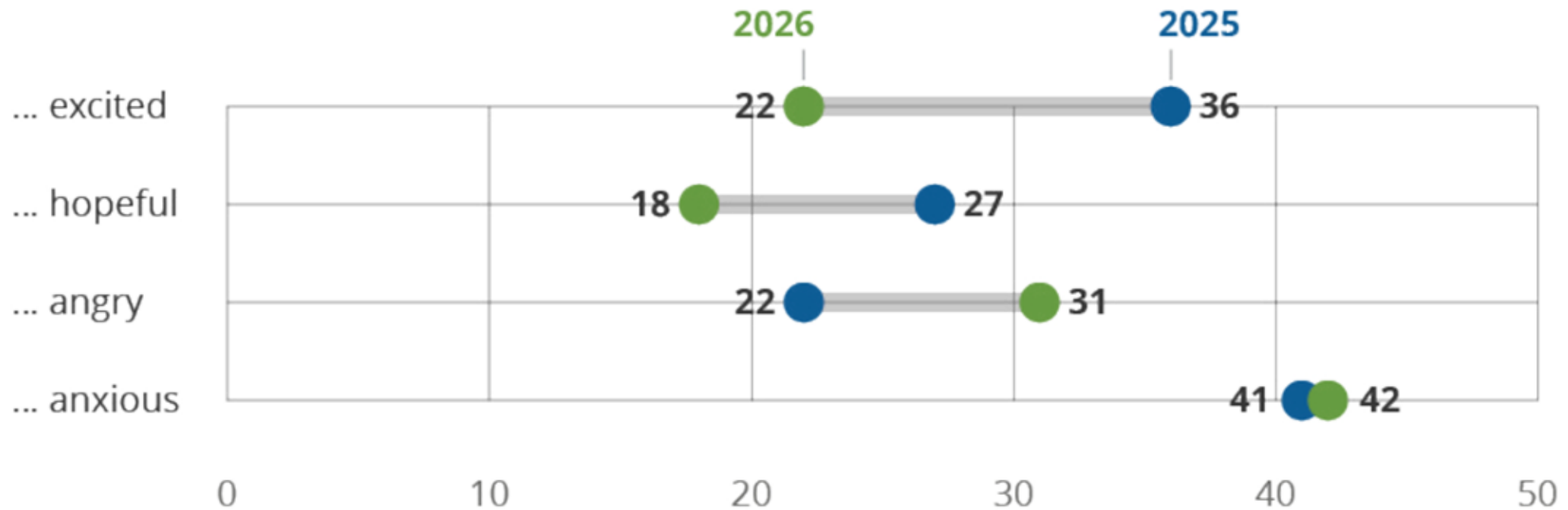
- % Potential benefits of AI in the workforce outweigh the risks
- % Potential benefits and risks of AI in the workforce are about equal
- % Risks of AI in the workforce outweigh potential benefits



# Gen Zers' Feelings About Artificial Intelligence Have Worsened

Artificial intelligence makes me ...

% Strongly agree + Agree



## Gen Z Perceptions That Artificial Intelligence Will Make Future Learning More Difficult

How likely is it that AI designed to mainly complete tasks faster will make learning more difficult in the future?

■ % Very likely   ■ % Somewhat likely   ■ % Not very likely   ■ % Not at all likely



# Thank You Let's Connect



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[linkedin.com/in/tacianomm/](https://www.linkedin.com/in/tacianomm/)

Slides available on request