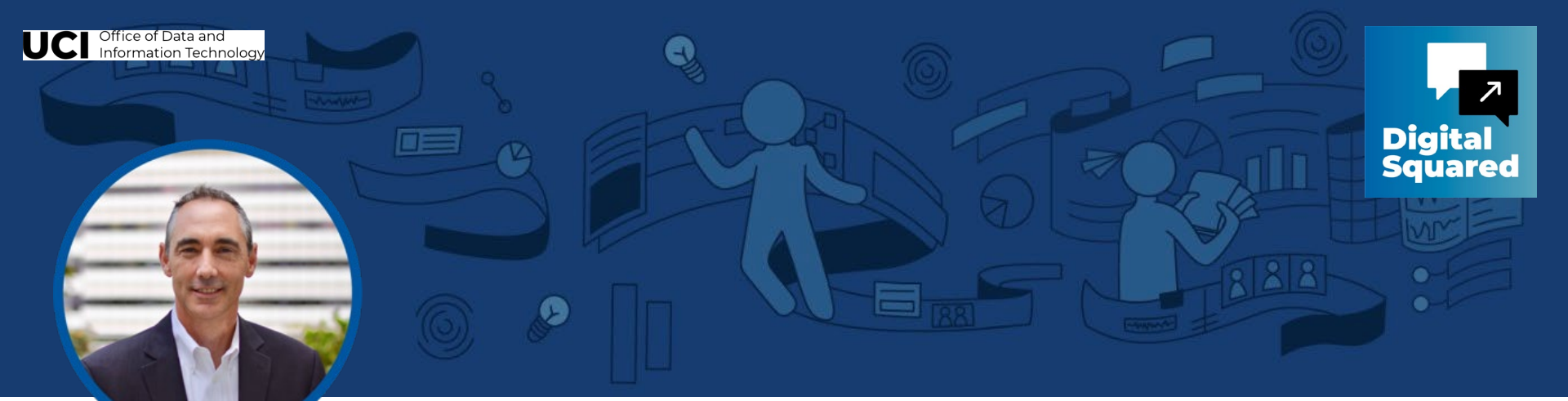
The Imperative to Rewiring and Retooling in the Age of AI

Tom Andriola
Vice Chancellor for Information Technology & Data
Chief Digital Officer



Tom Andriola

Current Roles:

- Vice Chancellor and Chief Digital Officer
- Responsibilities across research, education, patient care, innovation & corporate collaborations
- Advisor for a variety of UCI research units and external organizations in public and private sector
- Host, Digital Squared podcast
- Thought leader & speaker on a variety of technology, data, AI and change management topics

Past Experiences

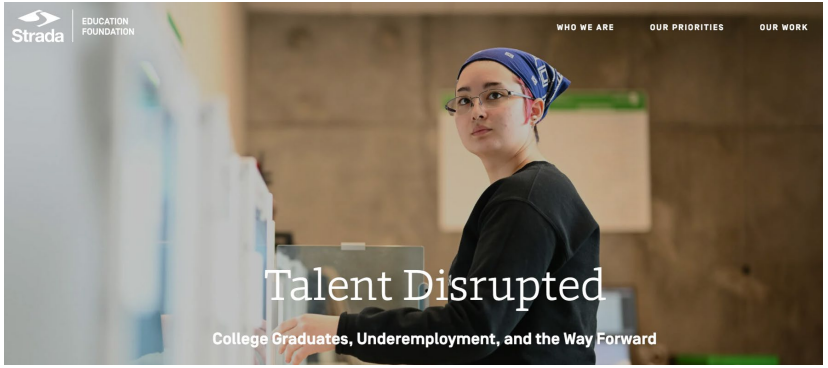
- VP & Chief Information Officer for UC System
- Chief Information Officer for UC Health
- General Manager of healthcare technology businesses, including EMR, Radiology, Cardiology, & Critical Care
- Enterprise CIO with oversight of 8500 technology professionals and shaping $1.3B annual spend portfolio
- Led global business process & technology transformation
- Serve on boards in health-tech and education-tech spaces

Americans' Confidence in Colleges and Universities Reaches New Lows

	Gallup, Summer 2023	Amerispeak, Feb. 2024	Amerispeak, May 2024
A great deal / quite a lot	36%	31%	28%
Some	40%	39%	42%
Very little / none at all	22%	30%	30%

Note: Gallup asked about "higher education" and did not include "none at all" as a response option.

Chart: Nathan Honeycutt • Source: FIRE / NORC • Download image • Created with Datawrapper



Escalating cost of attendance

Erosion of educational quality

Curriculum relevance

Ideological debate

Increasing value of substitutes

Administrative bureaucracy

Heavier oversight & regulation

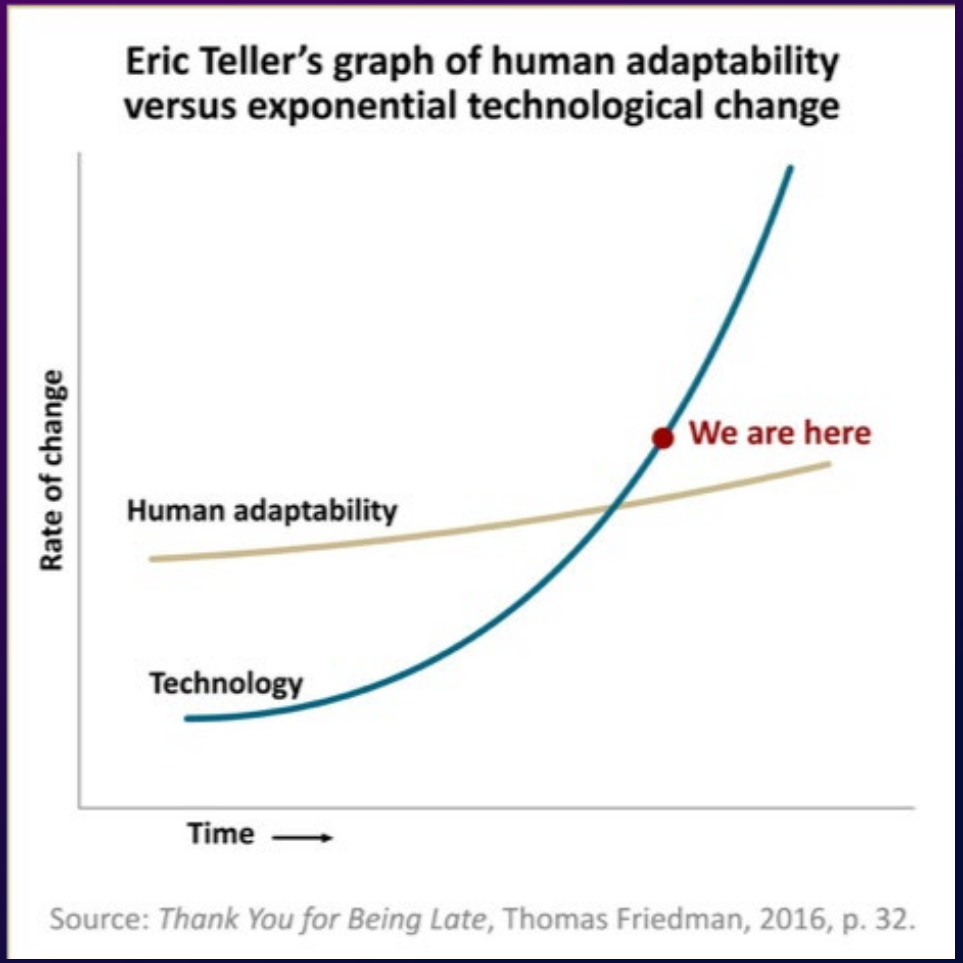
Workforce readiness

Underemployment

Rewire

Retool

Mindset
Shift
To
A New
Normal



"Mindsets before toolsets"

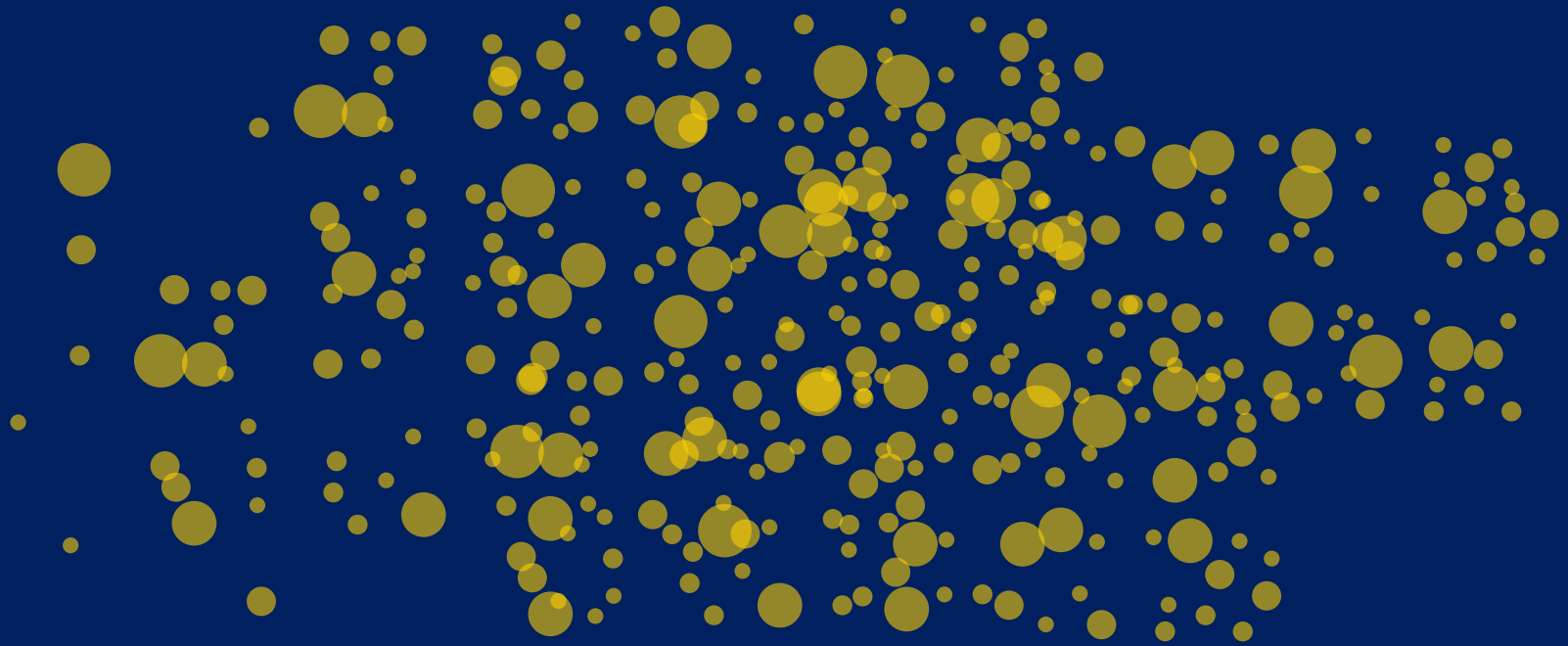
-- Provost Charles Isbell, University of Wisconsin–Madison

How have we approached the topic of AI?

AI @ (across) UCI – FY/AY 2023-24

Recognizing AI as a general-purpose technology (GPT)

Accelerating the Journey: Investigate => Experiment => Learn => Prototype => Deploy => Scale



Inspiring Action & Overcoming Risk Aversion

AI @ (across) UCI – FY/AY 2023-24

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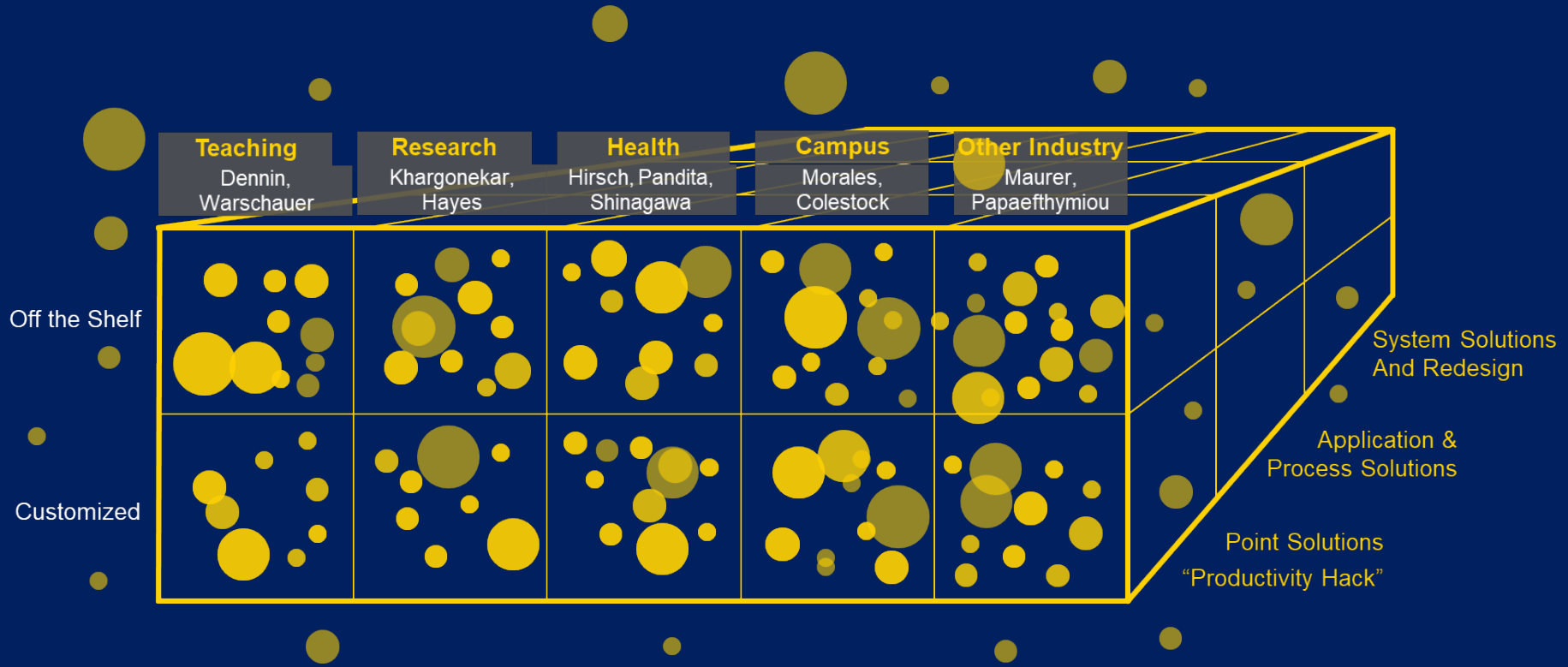
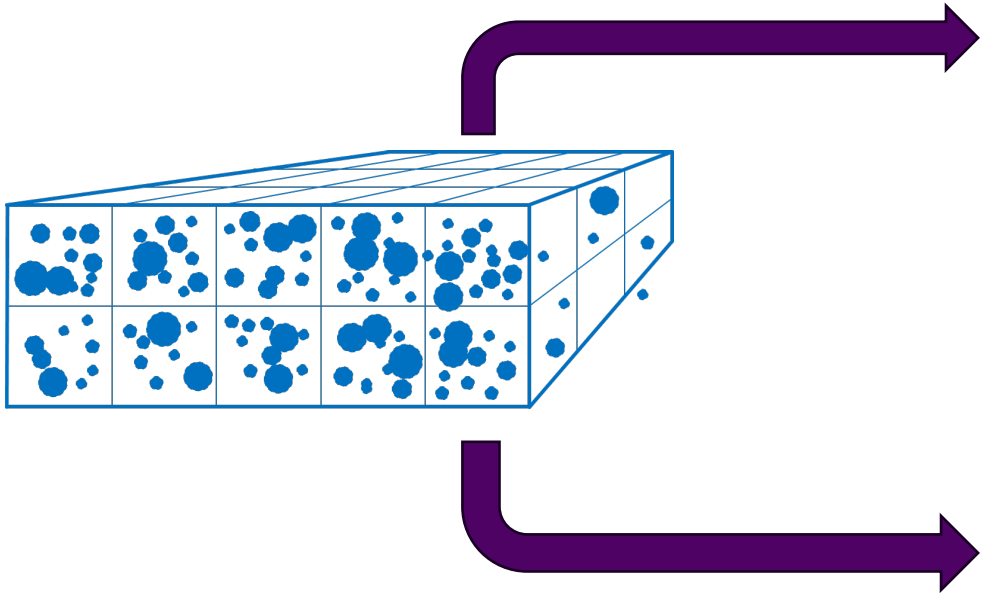


AI @ UCI – From Framework to Innovation & Value

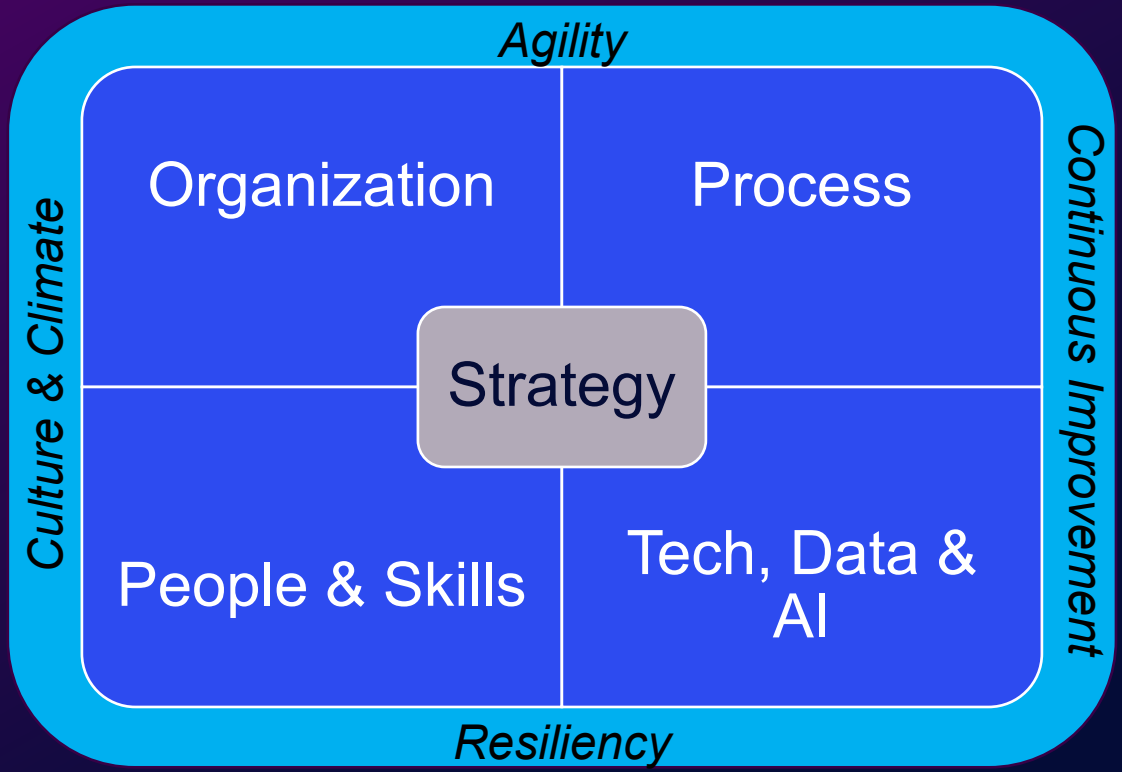


UCI Beall Applied Innovation

- Align w Institutional Themes
- Intellectual Property
- Tech Transfer
- Commercialization
- Startups

WORK Reimagined 2.0

- Increase understanding & literacy
- Make part of the culture of innovation
- Efficiency / Savings
- Enhanced Experiences



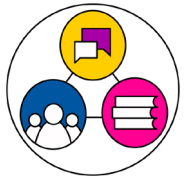
WORK Reimagined 2.0

A mentality and culture of continuous improvement

Work Reimagined 2.0 has lots of organizational scaffolding

Enterprise operating model for Experimentation, Innovation & Transformation (Work Innovated)

Workforce Upskilling, Cross-skilling for Digital Transformation
- Literacy & competency building
- Prototyping / Sandboxes
- Gigs (Short term assignments)



Student Career Readiness - Hands-on skills with today & tomorrow's technologies solving real-world problems & leading experimentation

Extending capabilities externally into Workforce & Economic Development Programs (building connections & ecosystem)

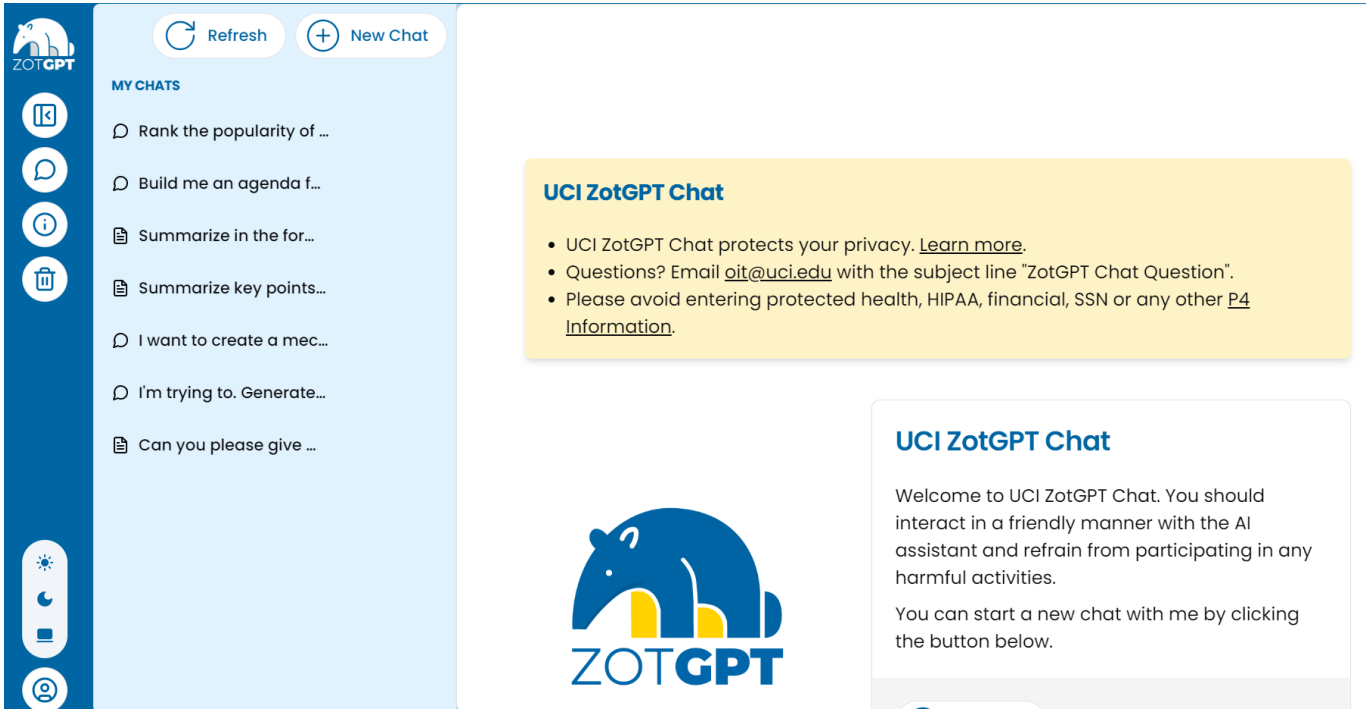
Gartner

EVOLVE
UCI OIT | Talent Enhancement Program

udemy

ZOTGPT

Fall Release

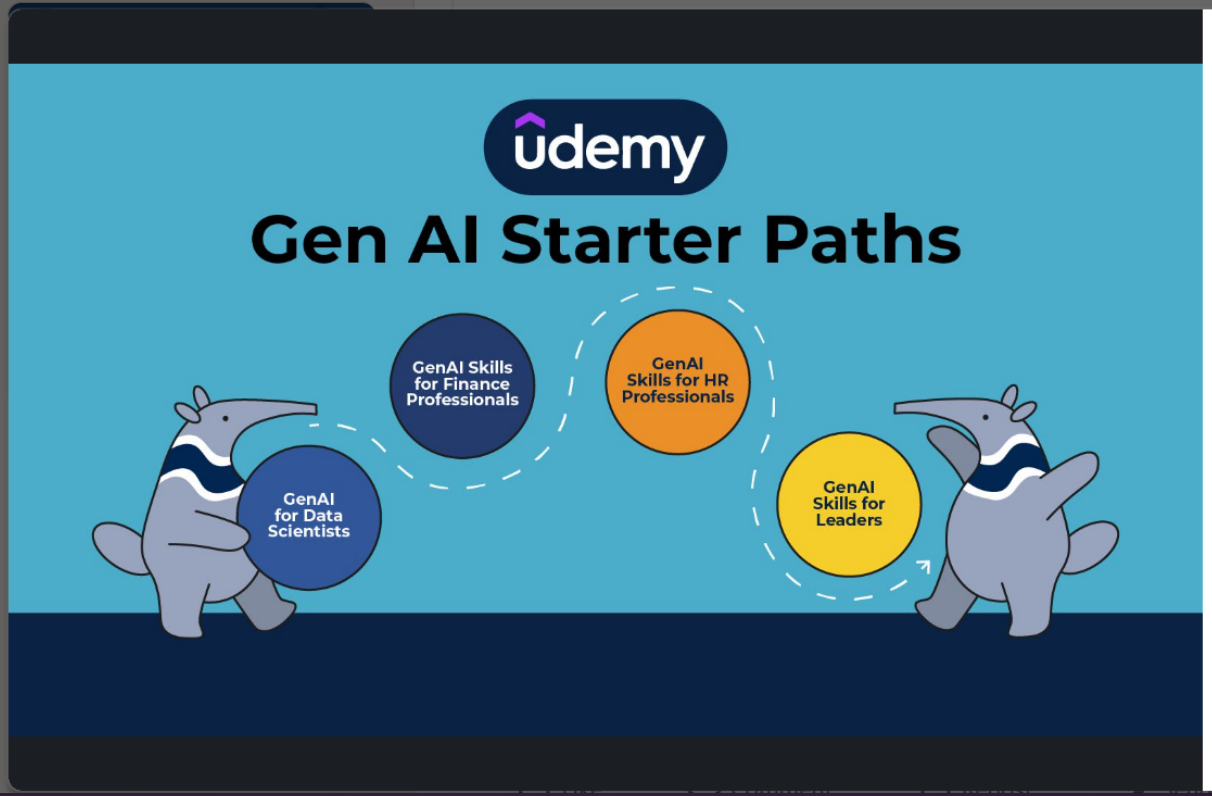


Version 1.0

- Announced Jan-10, 2024
- Opened up for student use April 2024
- Access to different models
- Basic chat function
- Safe, protected space
- GOAL: Encourage understanding & experimentation

Version 2.0

- **Still a safe, protected space**
- **API access (researchers)**
- **Enable building own GPT**
- **Mgmt. tools: Monitoring, billing**
- **RAG Search, e.g., AI tutor, course support/Class Chat**
- **Plug in your tools on/into ZotGPT platform**
- **Education on use, limitation vs. commercial services**



Tom Andriola (He/Him) • You
Chief Digital Officer
1d •

I've talked before that reskilling in the Age of AI is an "all of us" thing. Everyone needs to be figuring out how these tools work and how they can create better outcomes. At UC Irvine we're taking this seriously by launching 19 new Generative AI learning paths on Udemy, our chosen online learning platform. These new courses are designed to enhance #GenAI skills, offering valuable insights and knowledge tailored for a range of professional roles. It's open to all – faculty, staff, medical professionals, AND our students. It's not if; it's WHEN and when is NOW.

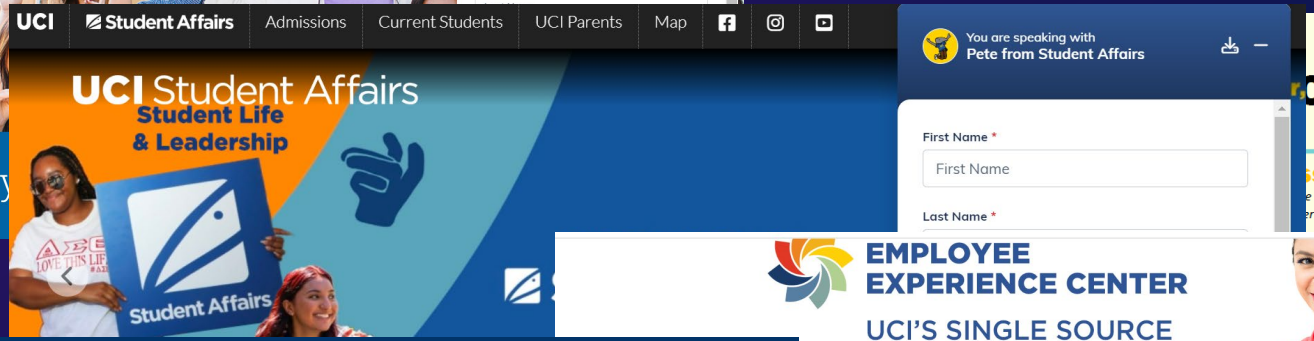
🔍 Some of the new learning paths include:

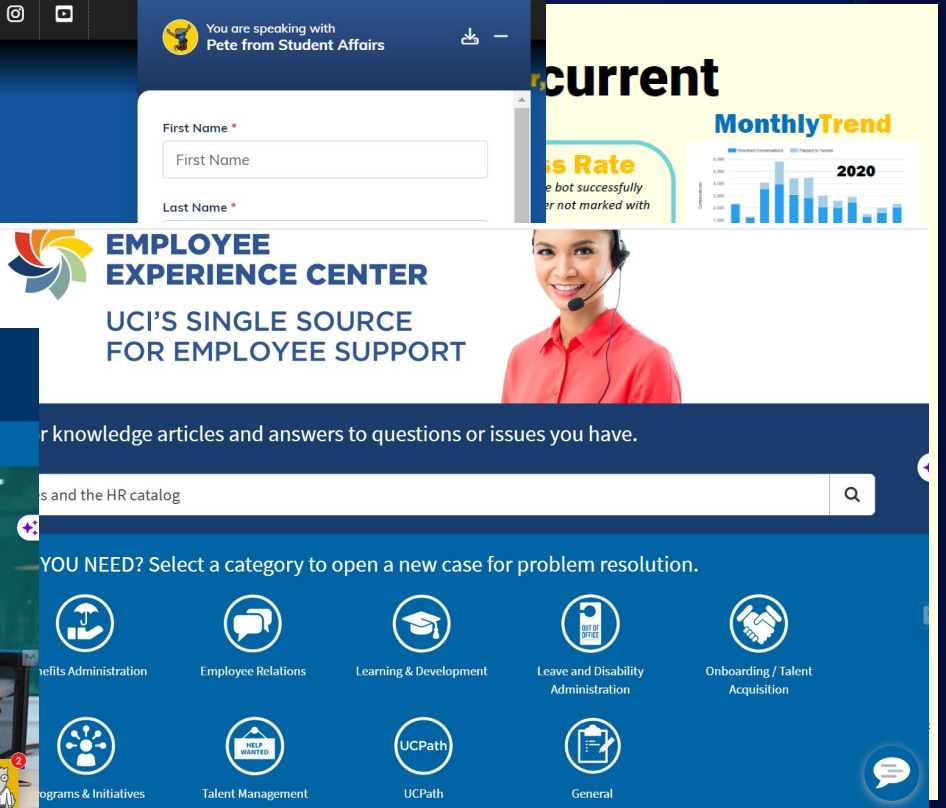
GenAI for Data Scientists ...more

Laurel Skurko and 37 others 1 comment • 3 reposts

Like Comment Repost Send

Cross Pollination





Early Peer Adopters are Great Change Champions

AI COPY EDITING

Human generates a composition that an AI edits

AI BRAINSTORM

AI generates ideas that drive a human composition

AI COMPOSITION

AI generates a composition almost entirely without human involvement

LOW AI USE

HIGH AI USE

AI CRITIQUE

AI gives opinion on the ideas of a human composition

AI ROUGH DRAFT

AI generates an initial composition that a human revises

UCI Paul Merage School of Business

Prompting Tips Example

I am a professional at the University of California Irvine. I am going to provide you with a composition that I have created and relates to my discipline.

ESTABLISHING THE CONTEXT

This composition is going to be shared with my peers. As such, I want to ensure my writing is articulate, convincing, well-structured, and grounded in clear reasoning. With that in mind, you are going to act as my copy editor. You are not here to please me by simply complimenting my work. Instead, you are here to make my writing the best it can possibly be.

DETAILING THE GOAL

To accomplish this goal, analyze the composition I give you. Then do the following:

Create a table with two columns:

Column 1: A brutally honest critique of the first paragraph of the composition. Consider multiple factors in this critique, and ensure you are detailed. Focus less on what I need to do and more on why the critique is valid.

Column 2: A paragraph that provides suggestions for improvement to the composition based on the critique you gave. Structure the suggestions as actions I can take to make the paragraph better.

Repeat this process by adding additional rows to the table for each additional paragraph.

GIVING DIRECT INSTRUCTIONS

Let me know if you understand, and I will provide you with the composition.

CHECK FOR COMPREHENSION

AI prompt library:

bit.ly/uciaiprompts

Generative AI in Action: Practical Use Cases

INSTRUCTION

ASSESSMENT BUILDER
Assist faculty in brainstorming and creating authentic, real-world assessments that effectively measure student comprehension.

RUBRIC GENERATOR
Assist faculty in creating detailed, student-friendly rubrics for assessing performance on college-level assignments.

ANALOGY COMPOSER
Assist faculty in creating metaphorical, humorous, and historical analogies to explain new academic concepts to students.

CASE STUDY GENERATOR
Generate customized academic case studies for students, tailored to specific disciplines and focus areas provided by the user.

SOCRATIC TUTOR
Facilitate deep understanding of a topic through the Socratic method by asking open-ended questions and spurring critical thinking.

SYNTHETIC LEARNER
Engage in a conversation with a synthetic learner as a means of demonstrating mastery and receiving critical feedback.

PRODUCTIVITY

CONTENT SUMMARIZER
Create concise summaries of provided content, highlighting main ideas and key takeaways.

VIDEO OUTLINER
Convert video transcripts into concise, text-based outlines highlighting key points discussed.

COPY EDITOR
Act as a detailed and critical copy editor, providing comprehensive critiques and suggestions.

PROJECT ANALYZER
Identify and resolve project issues by reviewing documentation and communications.

DATA INTERPRETER
Assist users in analyzing data to provide actionable insights and deeper investigative suggestions.

JOB INTERVIEWER
Simulates a job interview by generating relevant questions and offering feedback on responses.

IDEATION

VIRTUAL IDEATOR
Provide diverse insights and recommendations on an idea or problem from six distinct virtual personas.

INNOVATION INCUBATOR
Guides users through a structured process to develop an action plan for exploring innovations in their chosen field of interest.

THOUGHT MIXER
Generate and combine creative ideas on any topic to stimulate thought-provoking discussions.

DEVIL'S ADVOCATOR
Assist users in developing thorough and balanced debates by developing arguments on opposing sides of an issue.

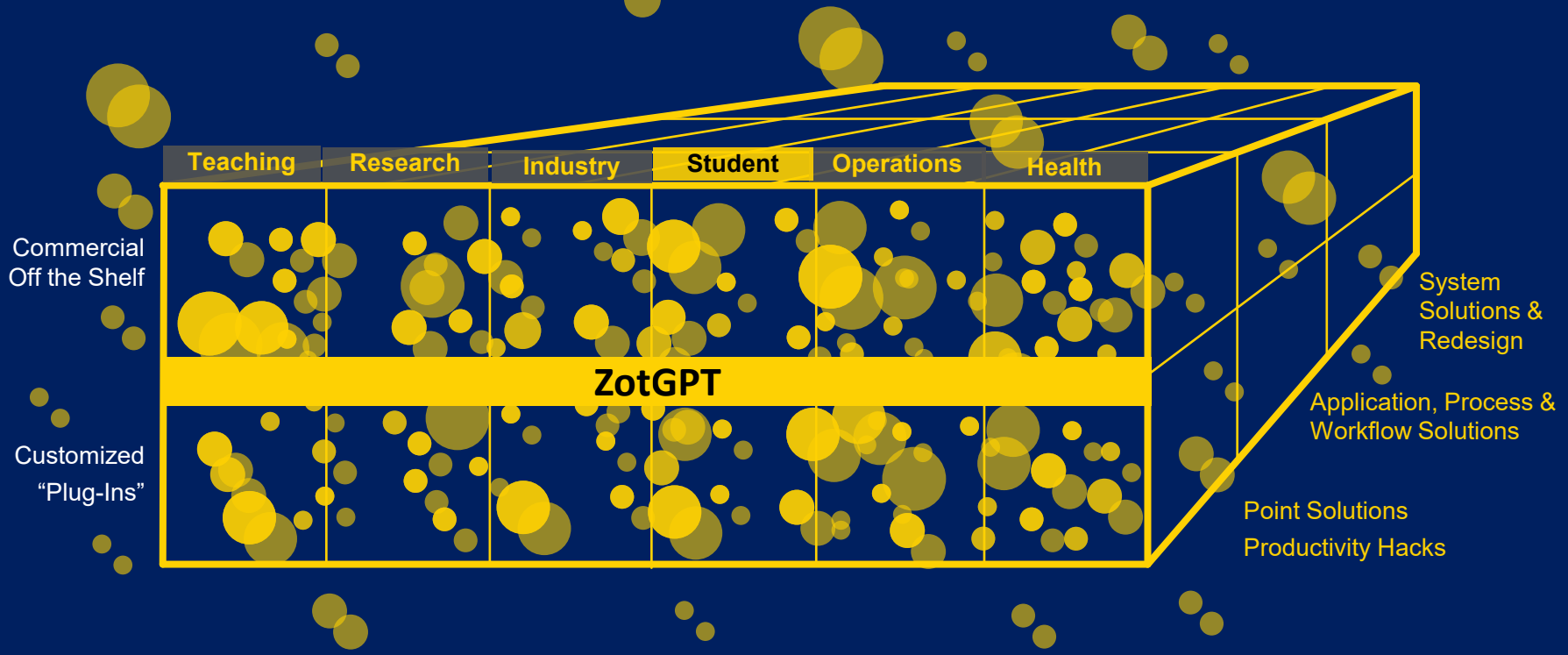
ROLEPLAY ANYTHING
Create immersive roleplay experiences by helping users develop detailed characters and engaging scenarios.

CONVERSATION COMPOSER
Enhance the realism of case studies by creating detailed and authentic stakeholder conversations.

AI @ (across) UCI – FY/AY 2024-25

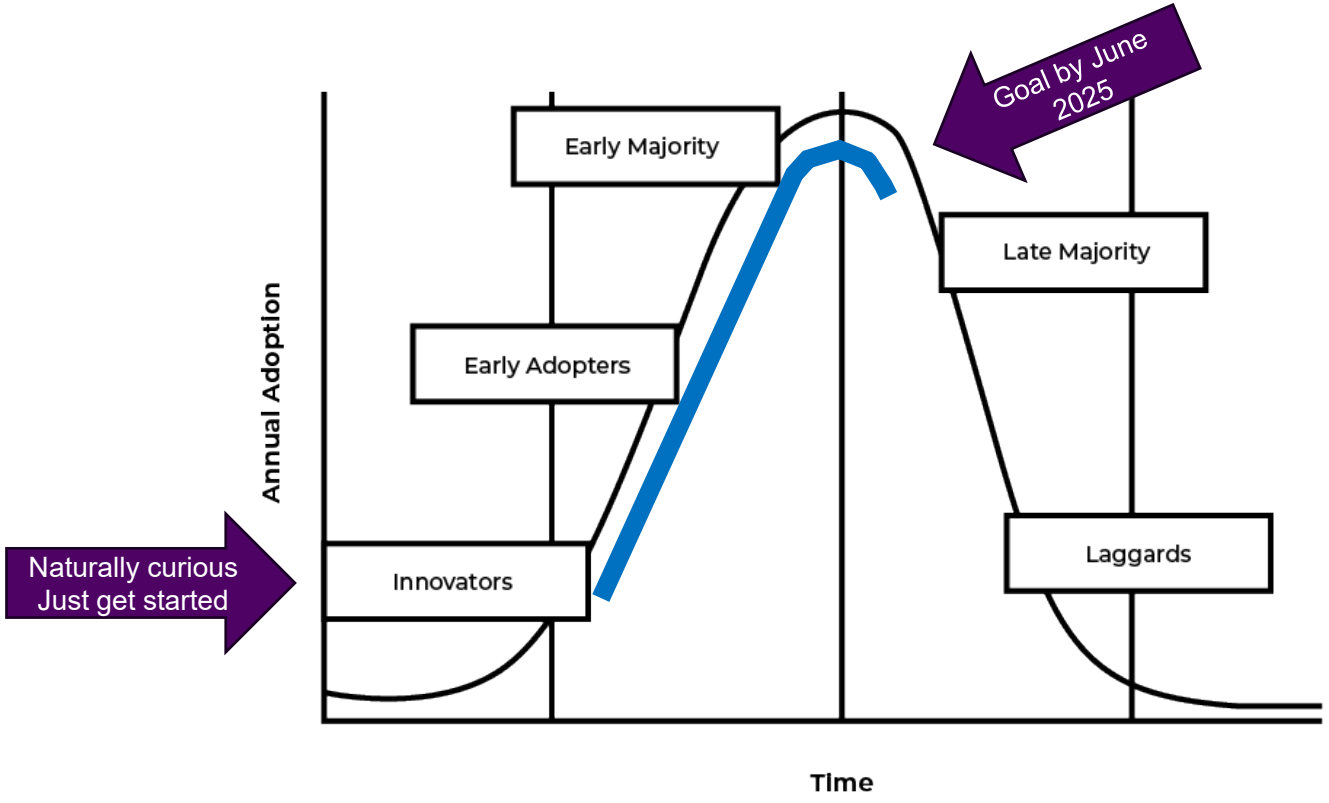
AI as a general-purpose technology (GPT)

Accelerating the Journey: Investigate => Experiment => Learn => Prototype => Deploy => Scale



The Model of Innovation Diffusion – An Everyone Thing

(ref. Everet et al., 1962)



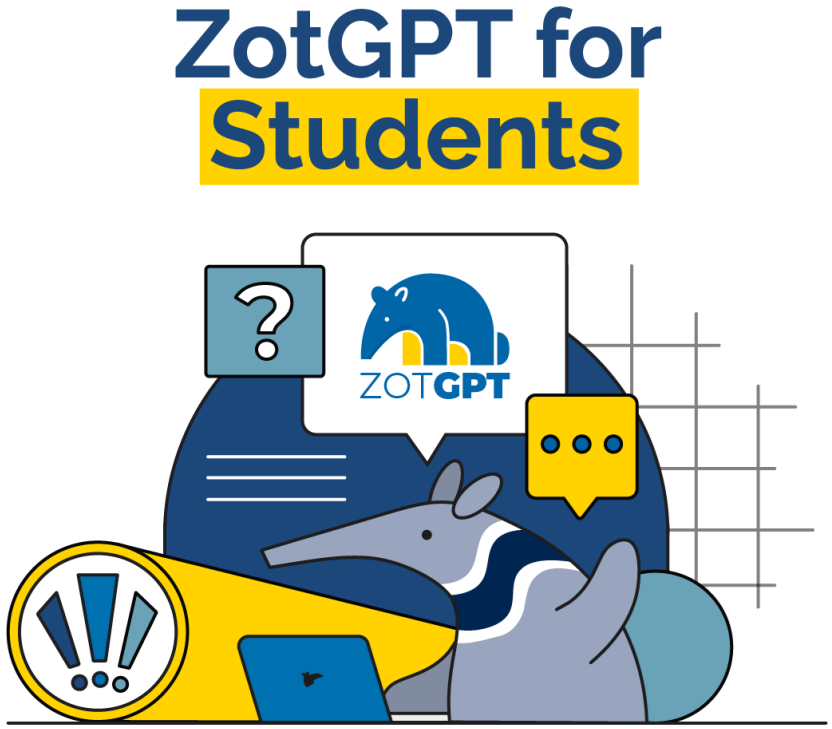
Accelerating the Journey for Everyone at UCI

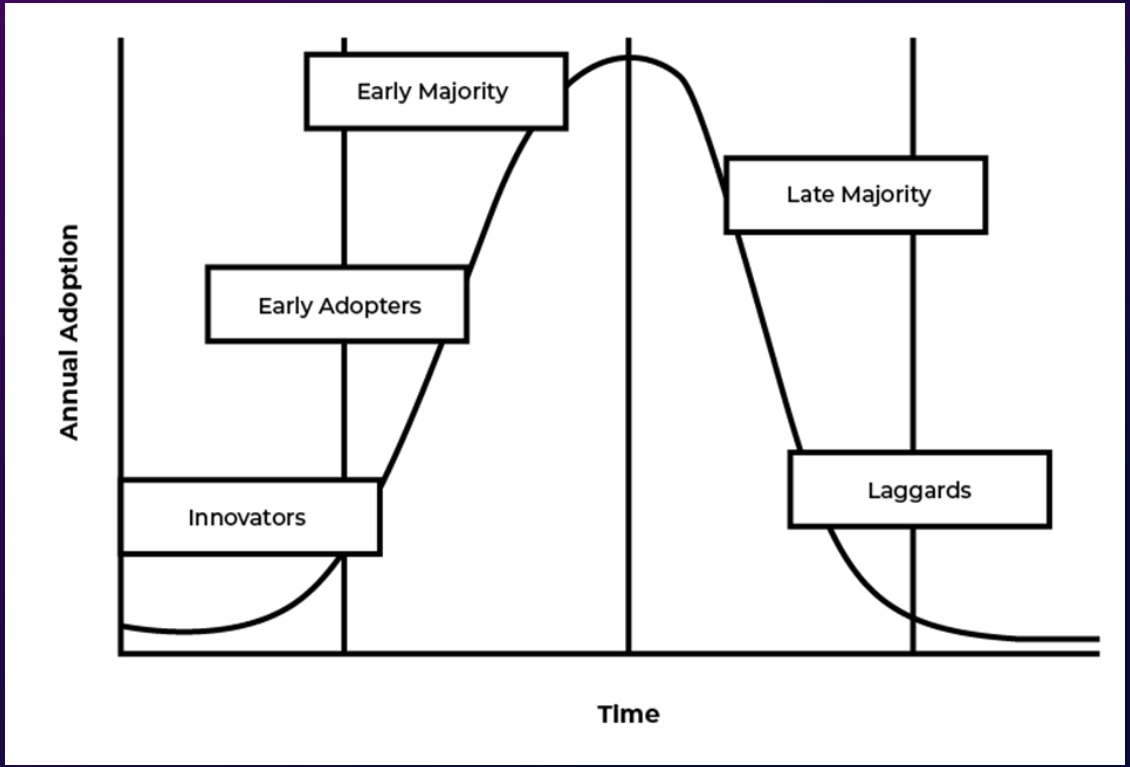
Scale
Deploy
Prototype
Learn
Experiment
Investigate

Final Thoughts

Fall Objectives

1. Establish light-hearted, fun, personable & professional tone around ZotGPT
2. Decrease student hesitancy regarding ZotGPT data collection
3. Persuade students to have ZotGPT as their first choice in AI chat assistance
4. Increase awareness and number of student users
5. Provide programming for AI literacy, incl “responsible, ethical & equitable use”

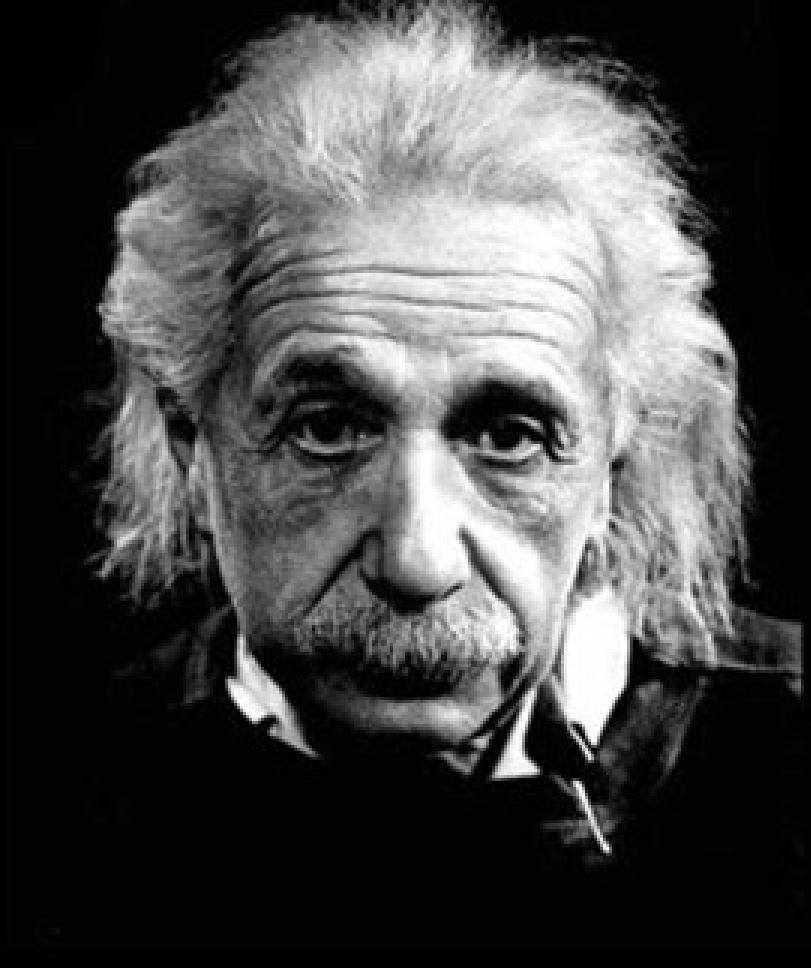




Source: Everett Rogers, “Diffusion of Innovations.”

The future is already here.

It’s just unevenly distributed



Insanity Is Doing the Same Thing Over & Over Again and Expecting a Different Result

- Albert Einstein

IMAGINATION IS MORE IMPORTANT THAN KNOWLEDGE

Leaders make important decisions in their brains before those decisions ever come out of their mouths.

Our role as leaders is not to just develop strategies but to be able to successfully implement them

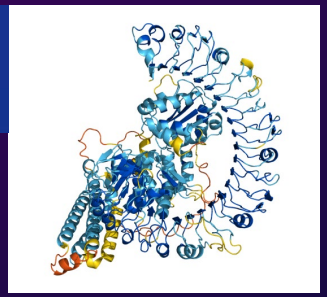
What’s Your Approach?

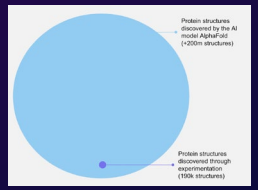
An increasingly
digital world

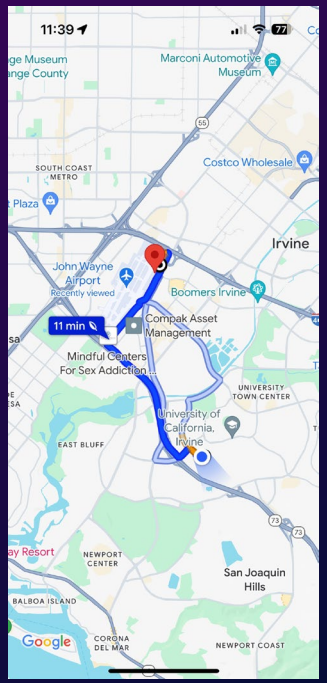
What Is

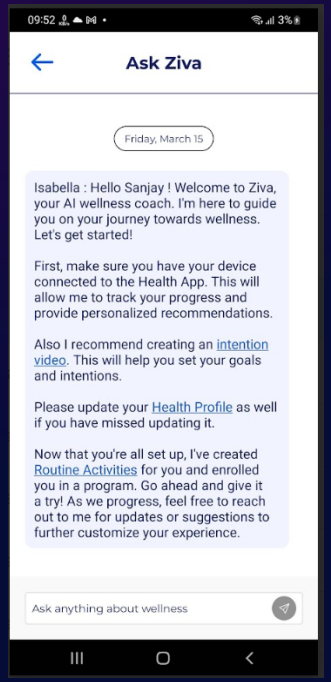
What Could Be

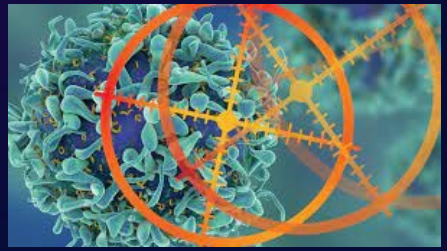
AlphaFold

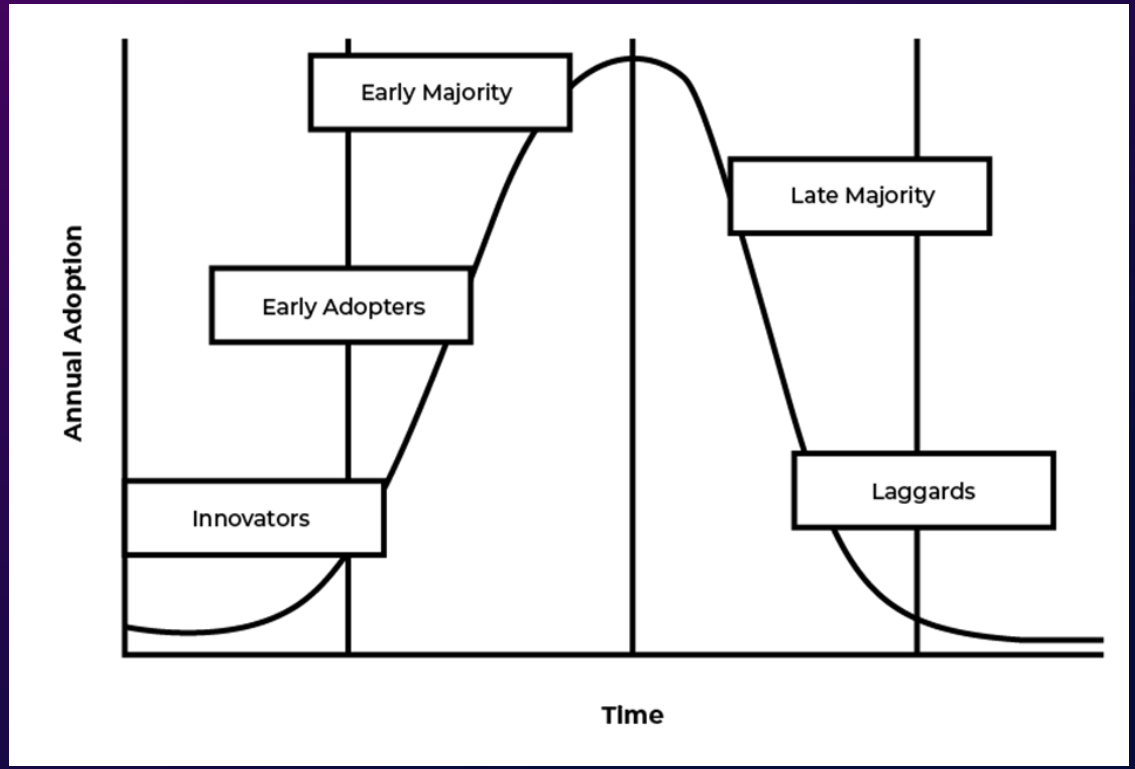








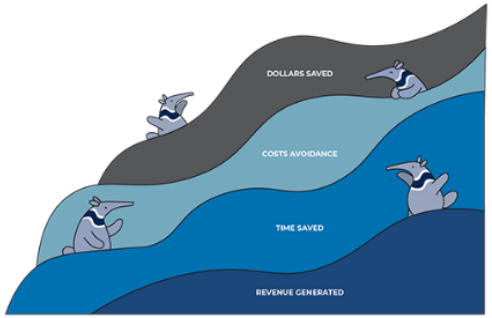




Source: Everett Rogers, “Diffusion of Innovations.”

Resource Library

Welcome to the Work Reimagined 2.0 resource library, your hub for tools, templates, and more to help you navigate the landscape of work in our next era. As technology advances and reshapes our professional environments, this toolkit offers valuable insights and innovative perspectives to help you adapt, innovate, and succeed as we all reimagine work at UCI.



Campus Communications

- Provost's Message – August 2023
- VC Andriola Introduces Work Reimagined 2.0
- VC Andriola Work Reimagined 2.0 Updates - Zotmail

Professional Development & Trainings

- **Intro to Change Management Training - Part 1**: learn about change management with this on-demand training
- **Intro to Change Management Training - part 2**:learn about change management with this on-demand training
- Udemy - more than 5,500 free curated online training courses to support professional growth and development
- Gartner - free access to the authoritative Gartner research library through a streamlined UC Irvine portal

Templates

- **Structured methods for process improvement**
  - **Organizational Readiness Assessment** - a quick assessment to determine if the organization is ready to support an A3 process improvement
  - **Problem Solving A4 Template**: a tool for individuals or teams to use to suggest solutions for simple problems
  - **Problem Solving A3 Template (PPT)**: a method for solving complex problems for which you do not know the root causes (e.g., turnover is high