

# Back to the Future of Work

How Apprenticeship  
Can Transform U.S.  
Higher Education  
& Social Mobility

ACHIEVE  
PARTNERS



# Back to the Future of Work

How Apprenticeship  
Can Transform  
U.S. Higher Ed  
& Social Mobility

*Cassidy  
Leventhal*

ACHIEVE  
PARTNERS



HOW TO SOLVE THE SKILLS GAP:  
AN INVESTOR'S PERSPECTIVE  
BY CASSIDY LEVENTHAL, VICE PRESIDENT

## **Bloomberg**

### **Resumes Are a Terrible Way to Hire People**

One-page summaries don't predict job performance, but they do perpetuate inequality.

# Story #1: Where are the jobs?

**6.5M**  
Unemployed



**4.5M**  
Part-time  
seeking FT

**5.6M**  
Not in workforce,  
want a job

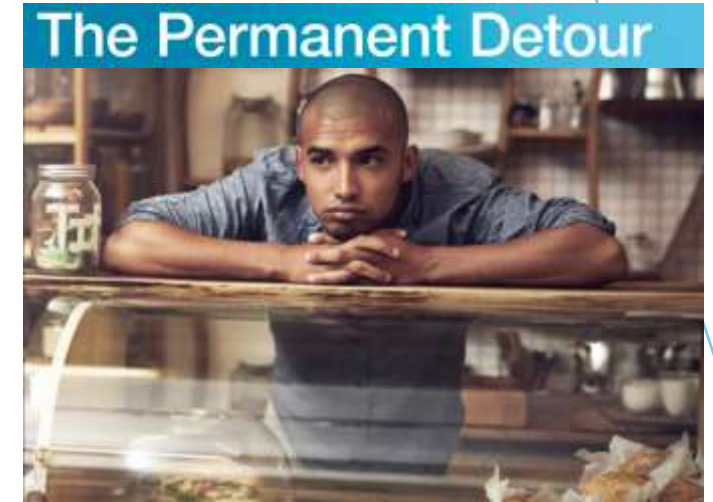
**New college grads are more likely to  
be unemployed in today's job market**

The unemployment rate for recent college graduates is higher than for the general population in an unusual shift

**???**  
Underemployed

# Graduating into underemployment

- **5 in 10 new grads “underemployed”:**
  - Earn \$10K less a year
  - 2/3rd underemployed after 5 years, half after 10 years
  - Pre-Covid: Nearly 5M working part-time but would like full-time
- **Vicious cycle of debt + underemployment:**
  - Loans cause grads to take first job allowing them to make loan payments
  - 61% would take a sub-par job to repay loans. Half would take 1st job offered





# Compounded by costs & debt

- Avg. 4-year cost/year at private non-profit: \$41K
- 43M+ borrowers
- Avg. \$30k debt
- Grown 800%+ per household since 1999
- Now \$1.74+ trillion total
- Nearly 1,500 institutions where majority of students are making interest-only payments or no payments
- Around 1/3<sup>rd</sup> of federal borrowers will default – 4M default annually

## FORTUNE

**Millennials' midlife crisis looks different from their parents' sports cars and mistresses**



**Millennials have it so bad they think they can't even afford a midlife crisis.**

# Unprecedented unhappiness

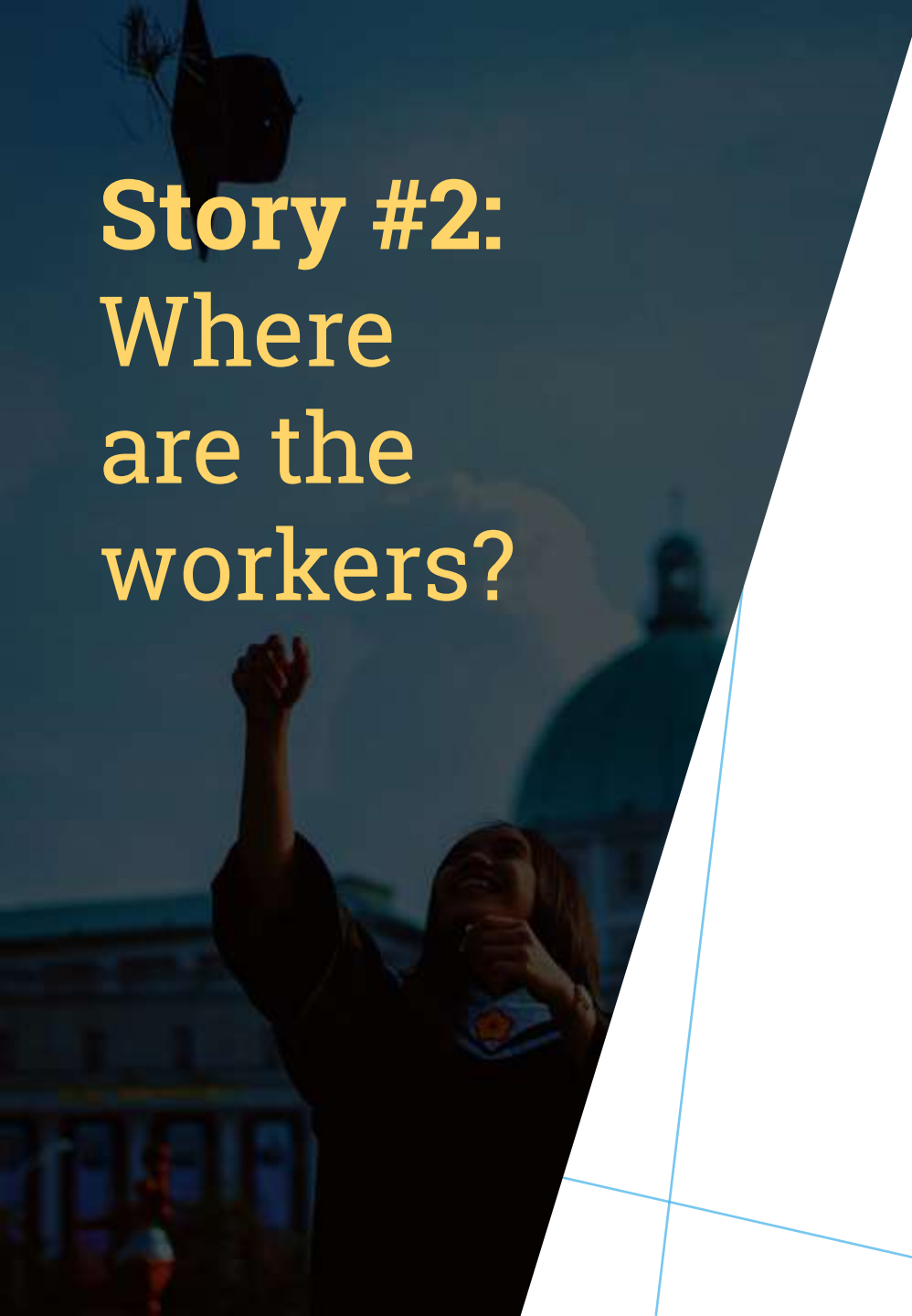
## Alumni:

- 38% of younger alumni agree investment was good one
- 30% would sell an organ to get rid of debt
- Millennials behind across metrics: wealth, income, housing

## Parents:

- Only 21% say cost of college justified
- In 2005, majority of young adults in 35 states lived independently; now only true in 6 states
- 76% of parents with adult kids at home say they'd pay \$24k to get them out

*What happened to the American dream?*

A person is shown from the chest up, wearing a dark shirt, with their arms raised in a celebratory gesture. The background is a dark, out-of-focus city skyline at night, with a prominent dome visible. The image is partially obscured by a dark blue diagonal shape on the left side of the slide.

## Story #2: Where are the workers?

**8.1M**

Open jobs

**70%**

employers  
struggle to  
find talent

**Hardest**

In attractive  
fields:  
healthcare  
& life  
sciences,  
tech, SMBs

**\$162 Billion**

Annual revenue lost in U.S.  
due to missing tech workers

# Where's the gap?

Technology has changed the employment landscape, creating a rift between workers + employers







# Change #1: Technology has changed the entry-level job

Career Area	Technical Skills Specified	Cognitive and Soft Skills Specified
Information Technology	75%	25%
Healthcare	74%	26%
Engineering	71%	29%
Life/Physical Science and Math	68%	32%
Manufacturing and Production	68%	32%
Design, Media, and Writing	66%	34%
Research, Planning, and Analysis	65%	35%
Personal Care and Services	63%	37%
Finance	62%	38%
Marketing and Public Relations	62%	38%
Management and Operations	61%	39%
Education and Human Services	60%	40%
Hospitality, Food, and Tourism	59%	41%
Sales	59%	41%
Human Resources	57%	43%
Clerical and Administrative	57%	43%
Customer and Client Support	49%	51%

Jobs across fields,  
including outside IT,  
require specific technical  
**platform** skills



# Why aren't colleges teaching these skills?

The Epic logo, featuring the word "Epic" in a bold, red, sans-serif font.The logos for Zendesk and Workday. The Zendesk logo is a stylized "Z" made of two dark teal shapes. The Workday logo consists of the word "zendesk" in a dark teal, sans-serif font, followed by the word "workday" in a blue, sans-serif font, with an orange arc above the "y".

*“It’s not our  
job”*

*“We’re  
getting  
there”*

THE CHRONICLE OF HIGHER EDUCATION

CURRICULUM



## How to Revamp a Curriculum Quickly — but Not Too Quickly

Those conditions can pose a trap for well-meaning administrators and faculty members. Work-force demand can lead some institutions to teach students the skills needed for today’s entry-level jobs. But those tools may well be obsolete five or 10 years from now.

# ! Change #2: Technology has changed hiring Deluge + filters

Hiring managers  
that use ATS:

<1%

2000:

75%

Today:

Companies that  
used social media  
to recruit:

<1%

2000:

73%

Today:

Most popular  
application  
mediums:



2000:

Today:





## Change #2: Technology has changed hiring “2-3 years experience only”



Posted by u/speckz 6 months ago 🏆 🗨️ 3 🤔 3 💰 🐾

7.2k

“If software engineering is in demand, why is it so hard to get a software engineering job?”



Posted by u/ali94127 5 months ago 💰 🐾

553

Haven't been able to get a job after graduating with a CS degree.  
Continually being pressured to attend a bootcamp.



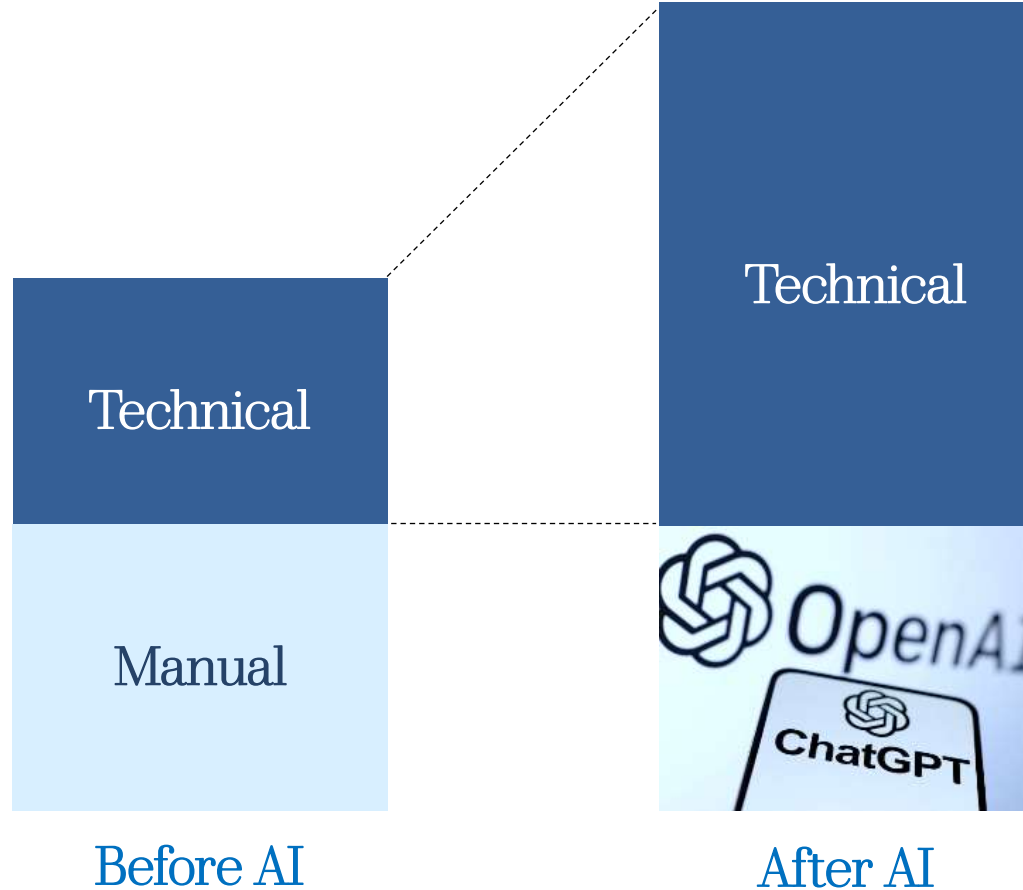
New Grad

Graduated with a CS bachelors in May. Haven't had too much luck with job searching. Resume is definitely lacking in internships and relevant experience. Parents are continually hounding me to

*61% of entry level roles require 3+ years experience.*

# ⚠ AI will turn experience gap into a chasm

Composition  
of work in  
good entry-  
level jobs



**Transforming  
millions of  
entry-level  
positions into  
jobs requiring  
years of work  
experience**



# ! First wave is already in motion

Intelligent

## 8 IN 10 COMPANIES PLAN TO LAYOFF RECENT COLLEGE GRADS THIS YEAR DUE TO AI

Updated: April 23, 2024

- 78% of hiring managers say their company will layoff recent graduates due to AI use
- Nearly all hiring managers are more likely to hire a recent graduate with AI experience
- 69% believe that AI can do the work of a recent college grad
- Some companies are already hiring fewer interns, recent grads due to AI
- 7 in 10 say AI can do the jobs of interns
- More than half trust AI over interns, recent grads



James O'Dowd • 2nd

Founder & Managing Partner at Patrick Morgan | Sourcing elit...

5d • 🌐

+ Follow

Over the next five years, the Big 4 accounting firms will significantly reduce their graduate and school-leaver hiring intake as they begin to implement AI across various areas of their operations. This strategy aims to phase out many junior roles gradually, rather than reducing the overall headcount immediately, since full integration of the technology is still underway.

A consensus is emerging that AI could automate many tasks currently performed by junior staff at the Big 4, such as data processing, audits, and legal work, leading to smaller overall organisational sizes, increased profitability for Partners, and more efficient solutions for clients.

For graduates entering the job market, a period of uncertainty and nervousness is inevitable. As the landscape of available entry-level positions transforms, there will be a greater need for skills in technology and AI. Graduates will need to adapt quickly to remain competitive.

Furthermore, the broader economic impact of this shift is significant. Historically, the Big 4 have hired substantial numbers of graduates, offering high-class training that benefits the broader economy. With fewer traditional roles available, it raises concerns about where new graduates will find comparable opportunities and training.

# We need to bridge the gap to good 1<sup>st</sup> jobs – fast



Candidates

- Cost to upskill
- Time to upskill
- Uncertainty of outcome



Employers

- Cost of bad hires
- Risk trained employees leave
- Remote hiring = pickier employers
- Remote work = raises tech + soft skills bar

# What does a good bridge look like?

- ✓ **Designed backwards from 1<sup>st</sup> job** – lands critical “2 years experience”
- ✓ **Training in technical skills and soft skills** needed for the job
- ✓ **Shorter + cheaper pathway**
- ✓ **Increases certainty** for workers and employers

# Iteration 1: Bootcamps

*Improvement  
vs. status quo*

**Designed backwards from 1<sup>st</sup> job** – lands “2 years experience”



**Training in technical and soft skills** needed for the job



**Shorter + cheaper pathway**



**Increases certainty** for workers and employers



*Bootcamp promise: Accountable to both workers and employers*

# Versus... MOOCs?

*Improvement  
vs. status quo*

**Designed backwards from 1<sup>st</sup> job** – lands “2 years experience”



**Training in technical and soft skills** needed for the job



**Shorter + cheaper pathway**



**Increases certainty** for workers and employers



**Accountable** to both workers and employers





# Versus... Free college?

*Improvement  
vs. status quo*

**Designed backwards from 1<sup>st</sup> job** – lands “2 years experience”

**X**

**Training in technical and soft skills** needed for the job

**X**

**Shorter + cheaper pathway**

✓ ✓

**Increases certainty** for workers and employers

**X**

**Accountable** to both workers and employers

**X**

# Versus... Free college?

**\$475B** to make  
income-driven  
repayment more  
generous

Continuing to  
pursue blanket  
student loan  
forgiveness

State support for  
higher  
education +10%  
in FY '24

WHAT'S MISSING?

**A clear alternative America can rally around**

# Apprenticeship upgrade: Employer-provided job, training & pathway

- 1 Full-time job paying a living wage from Day 1
- 2 Formal training (“related technical instruction,” RTI)
- 3 On-the-job training
- 4 Increased pay with increased productivity
- 5 Clear career path(s)

*Truly level  
playing  
field*

*ROI for  
funders,  
workers,  
employers,  
educators*

# Apprenticeship the American way



## Central European Model: Gov't-industry collaboration

- Clear link to funding
- But impossible to replicate in other countries



## UK Model: Apprenticeship Service Providers



### Making Apprenticeships Work BY RYAN CRAIG AND TOM BEWICK

- Intermediaries sell to employers + manage, "hiding the wiring" for apprentices and employers
- But doesn't solve the fact that few employers are excited to have large #s of apprentices hanging around



## American Model: Outsourced Apprenticeships



### WorkingNation

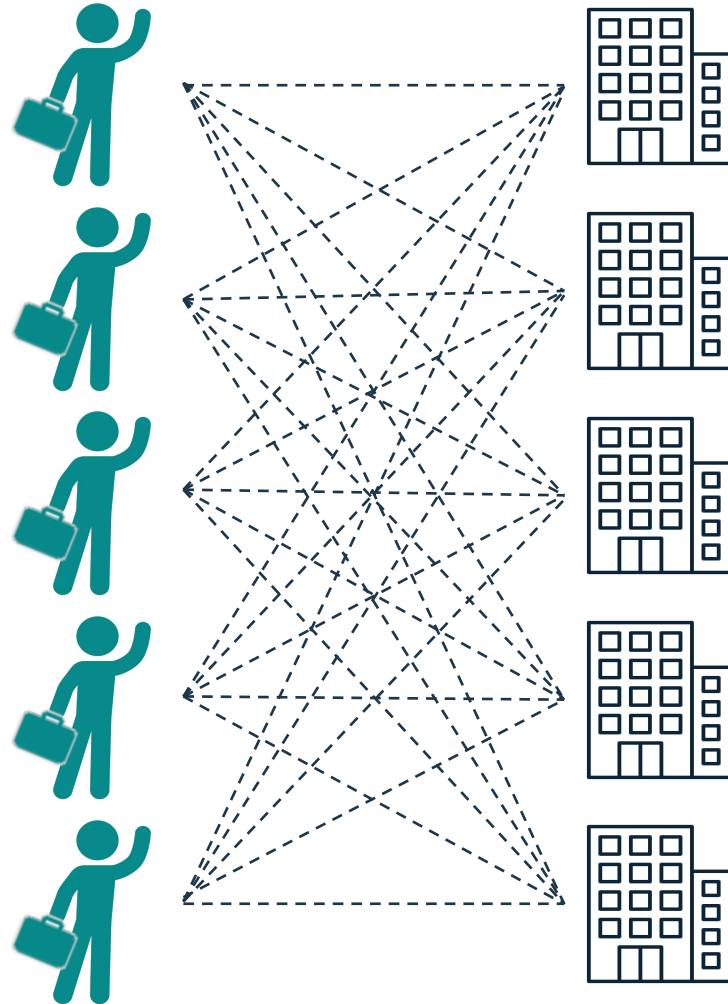
### Earn as you learn a sought after health care IT skill

*Optimum Healthcare IT and the University of North Florida announce paid apprenticeship program*

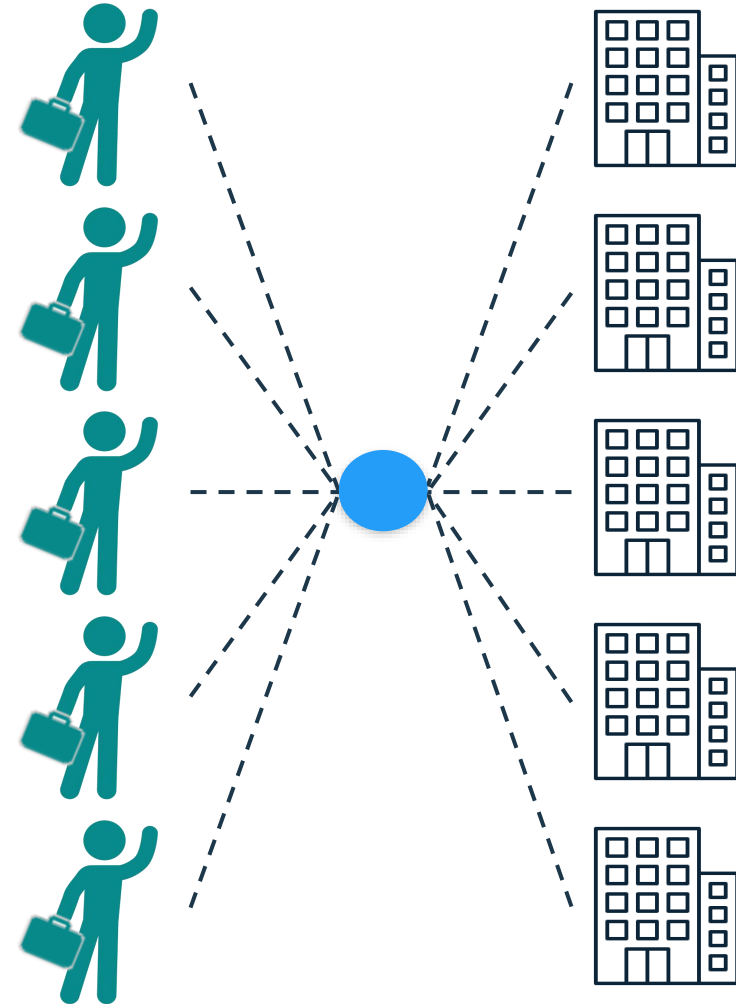
- Service providers sell + manage
- They also host apprentices until employer-clients are ready to hire based on proven work
- Relevant to any skill gap area where services are outsourced

# Apprenticeship the American way

**Today**



**With intermediaries**





# Sample outsourced apprenticeship provider: ***Epic***



Hired full-time from  
Day 1



Paid to learn Epic  
and industry  
skills for 3  
months



Placed in great 1<sup>st</sup>  
job with client as  
Certified Epic  
Consultant



After bridging 2-  
year hurdle,  
converts to full-  
time at client

# Outsourced apprenticeship ROI

~~Designed backwards from 1st job~~ **Directly provides 1st job**



**Training in technical and soft skills** needed for job



~~Shorter + cheaper~~ **fully employed, paid** pathway



**Increases certainty** for workers and employers



**Accountable** to both workers and employers



*Low-risk proposition to workers + employers*

# What happens when you de-risk career paths for **entry-level workers**?



**Applicants**



**Need for strong assessments**



**Diversity & quality**

# What happens when you de-risk career paths for **entry-level workers**?

Finally,  
a choice.

	Low ROI college	High ROI college
Affordable		
Unaffordable		

# What happens when you de-risk career paths for **employers**?

“Too many candidates, too much uncertainty = lateral hires only.”

- Degree required
- 2-3 years experience minimum in: Salesforce, full-stack engineering, etc.



“Certified talent from a provider I trust = low risk, high quality.”

- 1-6 months verified training
- “Try before you buy”
- Open to “non-traditional” talent

*Credly*

REVATURE



# Not an “emerging market” anymore...

IT



Optimum  
HEALTHCARE IT®



SKILLSTORM

REVATURE

FDM



Healthcare



Optimum  
HEALTHCARE IT®



Medical Sales  
COLLEGE



ROHEALTH

Creative & education



ease  
LEARNING

Sales & success



Medical Sales  
COLLEGE



Acquirent

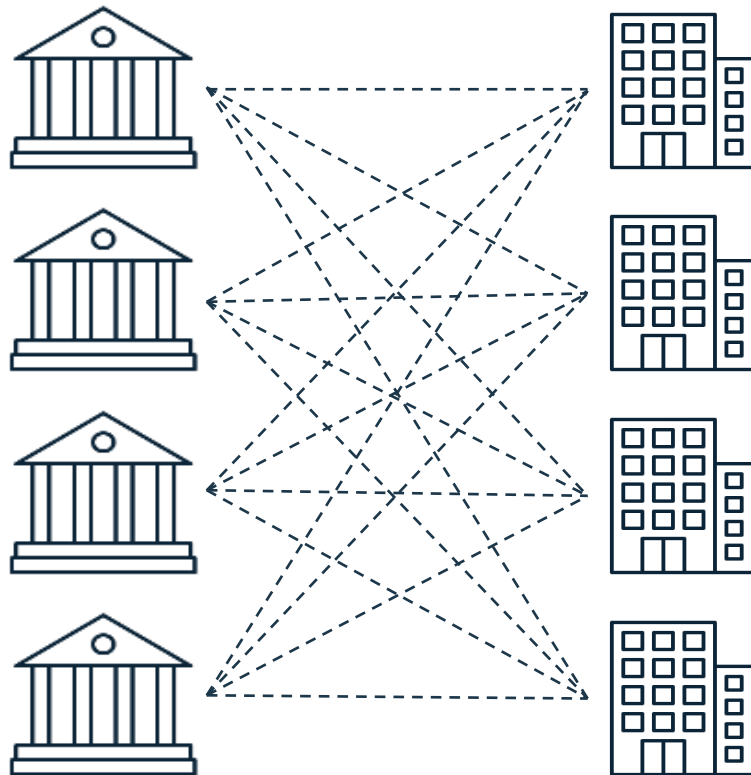
Cross-industry

AVENICA

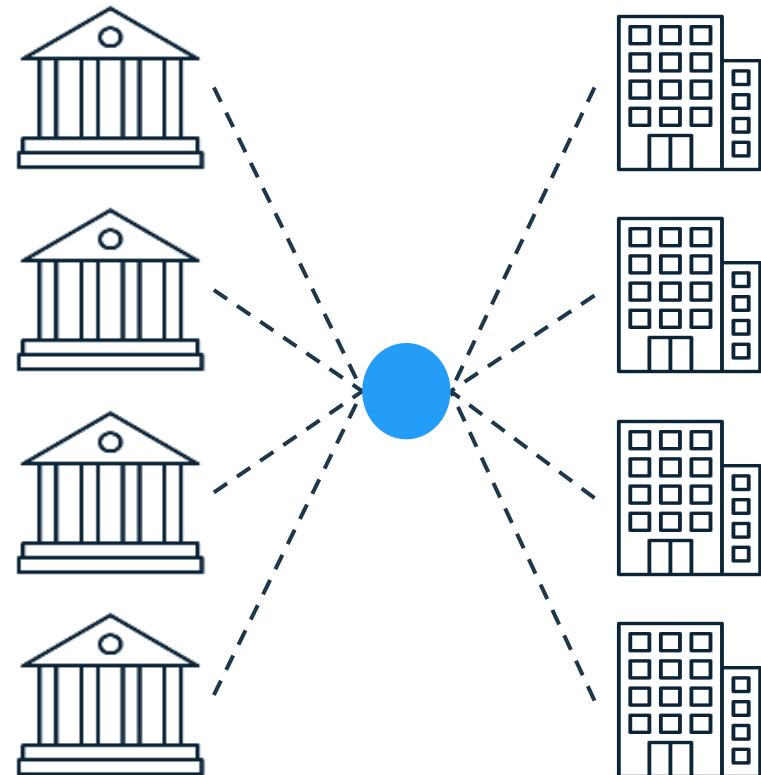
Multiverse Riipen

...and potential partner, not just competitor, to higher ed ecosystem

**Today**



**Intermediaries**



# ...and potential partner, not just competitor, to higher ed ecosystem



## ACADEMIC PARTNERSHIPS

### Collaborating With Our Academic University Partners to Close the Technology Skills Gap

Supporting our Academic Partners in powering online, instructor-led certification courses in today's most demanding technologies: AWS, Salesforce, Appian and more.

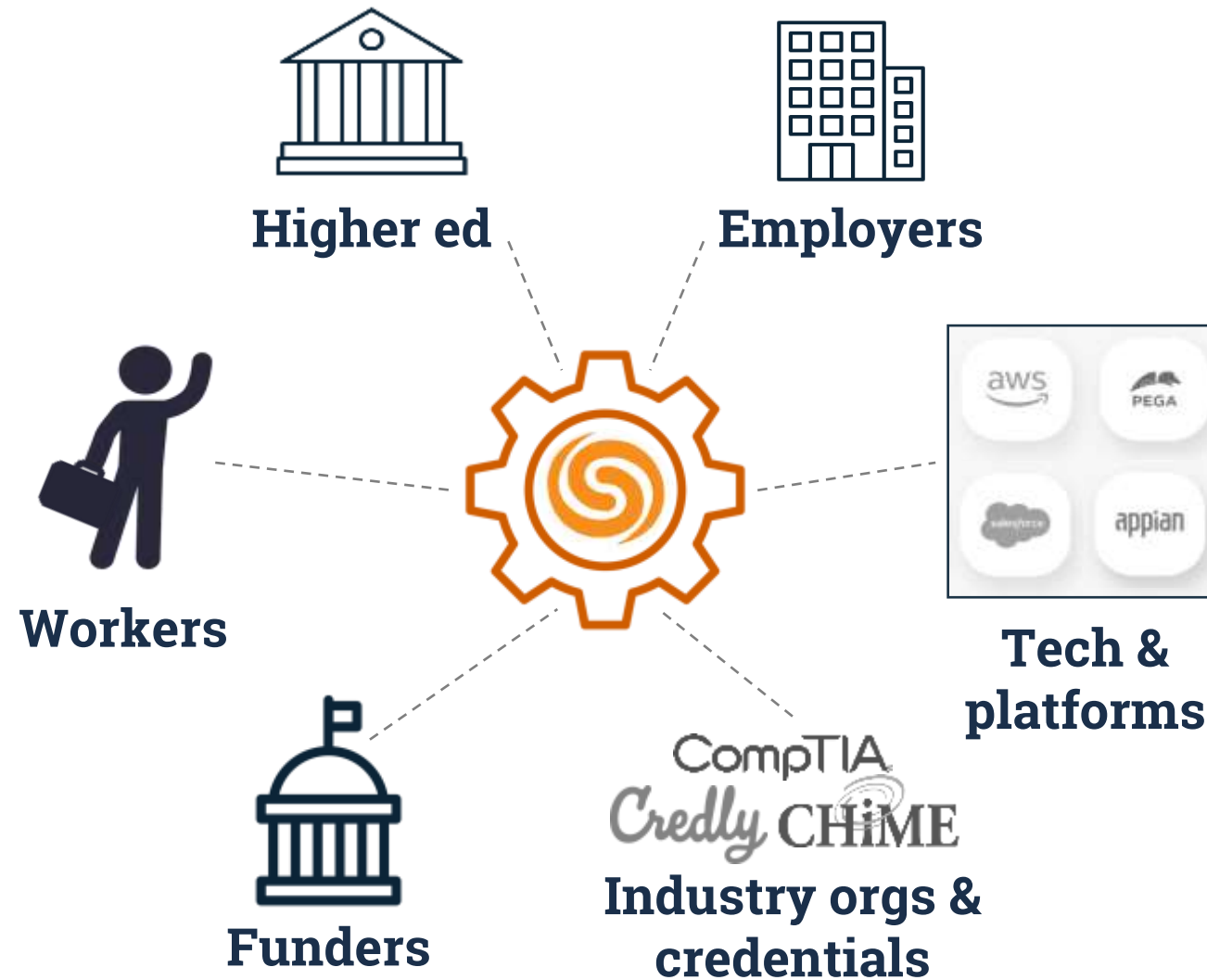
## Authorized Training Partners

As industry leading experts in training and workforce development, we are authorized training partners for the largest technology providers in Cloud, Cyber, Platform and Automation.

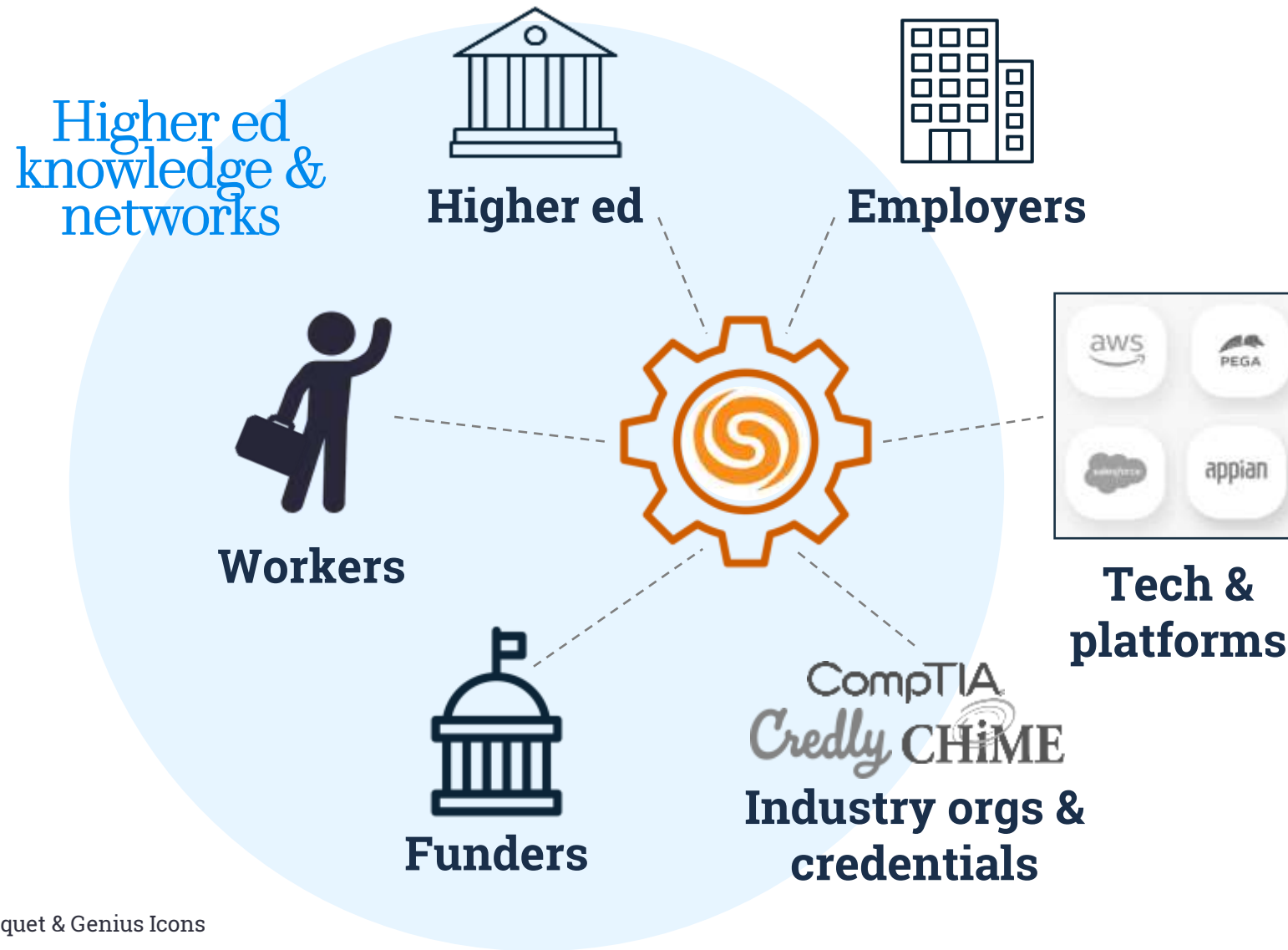


*Requires rethinking curricula, career & funding models*

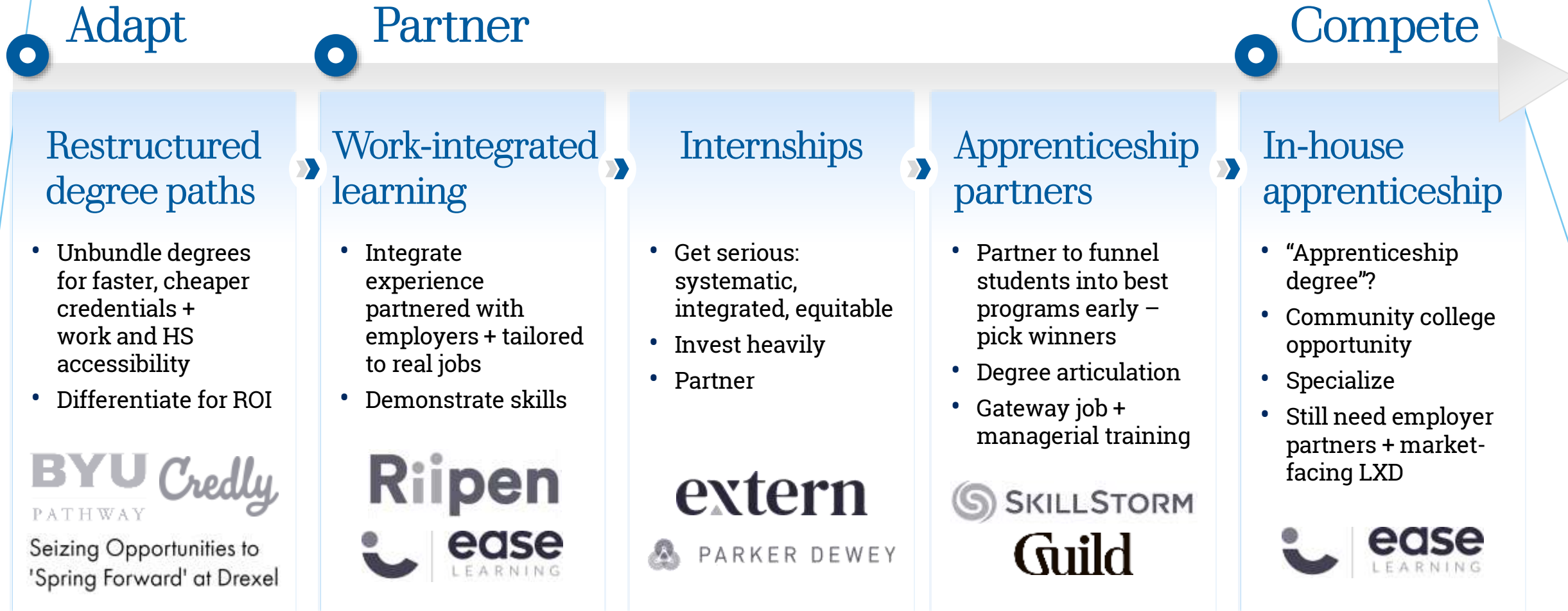
# What could a healthy ecosystem look like?



# What could a healthy ecosystem look like?



# How can higher education embrace apprenticeship models?





# Career paths for the future of work + learning

Today



Future



**Two good options** for full-time work post high-school:

- Apprenticeship
- Frontline job with career pathway

**Gains:** Work experience, skills, confidence, career path insight

**Outcomes:** Better and fairer college choices



# ACHIEVE PARTNERS

*[Achievepartners.com](http://Achievepartners.com)*

# Appendix: First principles for the future of work + learning

“Experienced hire”



**PROVEN** hire

“Workforce training”



Workforce **JOBS**

“Degree required”



**SKILLS** required

“Job placements”



Job **PATHWAYS**