

# Future of Higher Education

Southern Association of Colleges with Associate Degrees

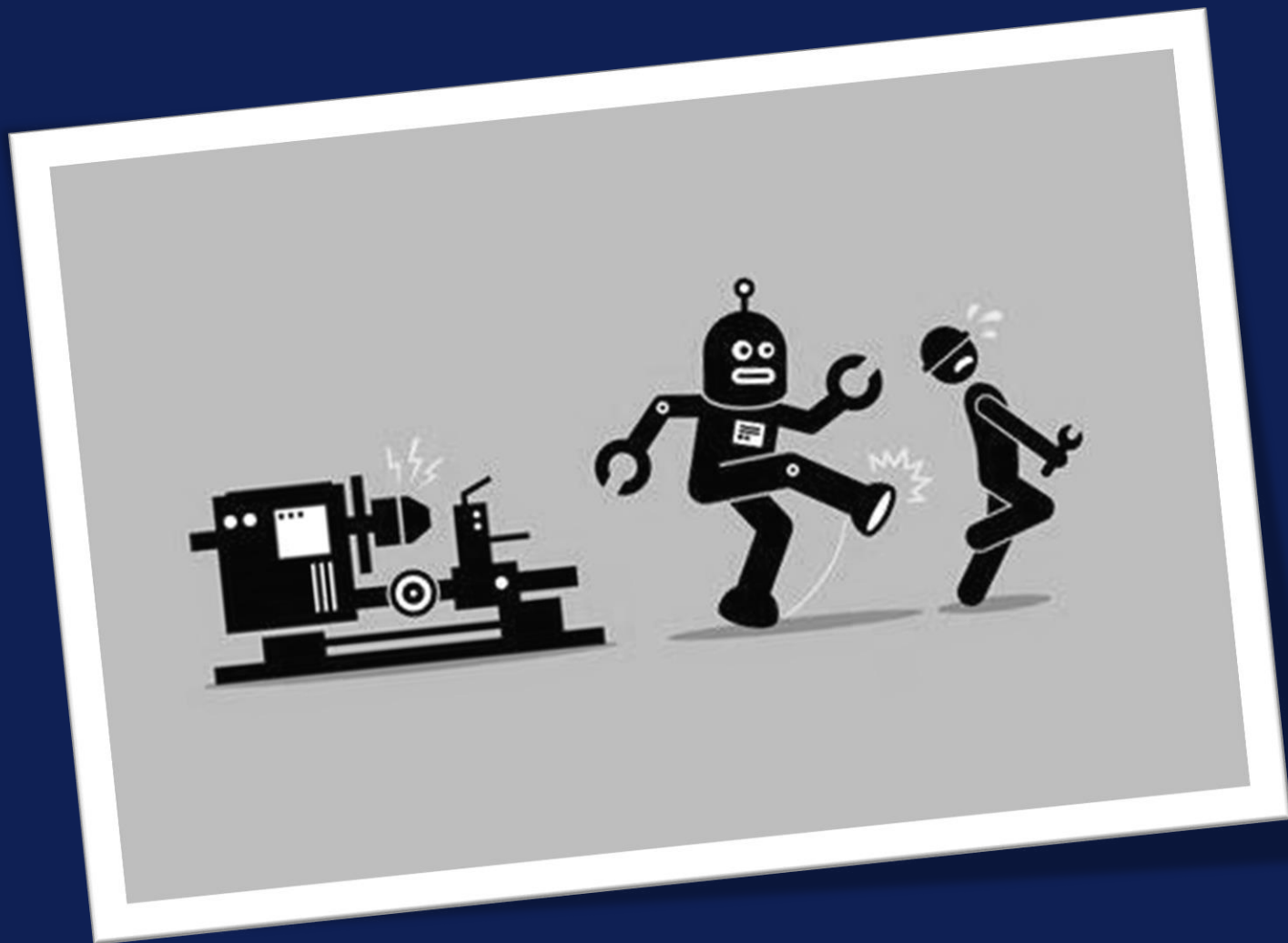


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November 6, 2023

**DELL**Technologies

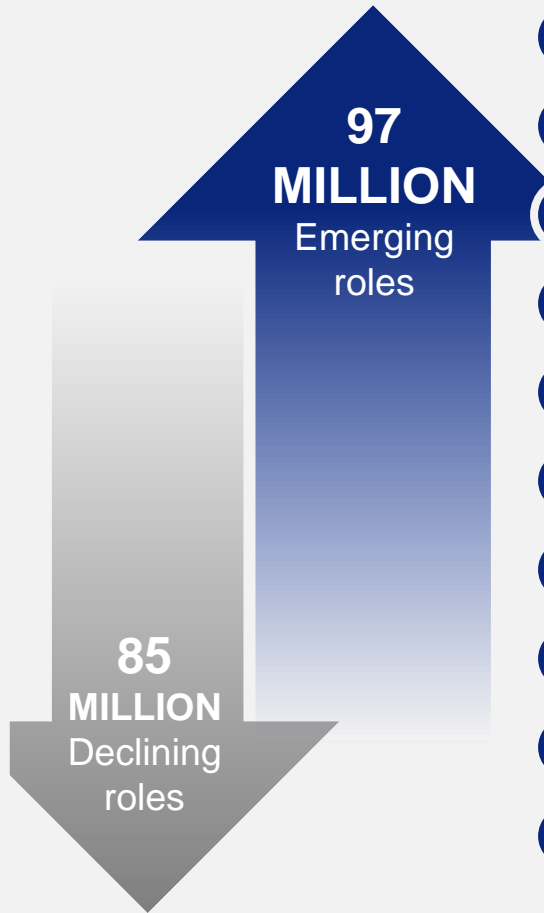


# Where are we now...?

# By 2025 ...

## 2025 Jobs Landscape

- 01 Data Entry Clerks
- 02 Administrative & Executive Secretaries
- 03 Accounting, Bookkeeping & Payroll Clerks
- 04 Accountants & Auditors
- 05 Assembly & Factory Workers
- 06 Business Services & Administration Managers
- 07 Client Information & Customer Service Workers
- 08 General & Operations Managers
- 09 Mechanics & Machinery Repairers
- 10 Material-Recording & Stock-Keeping Clerks



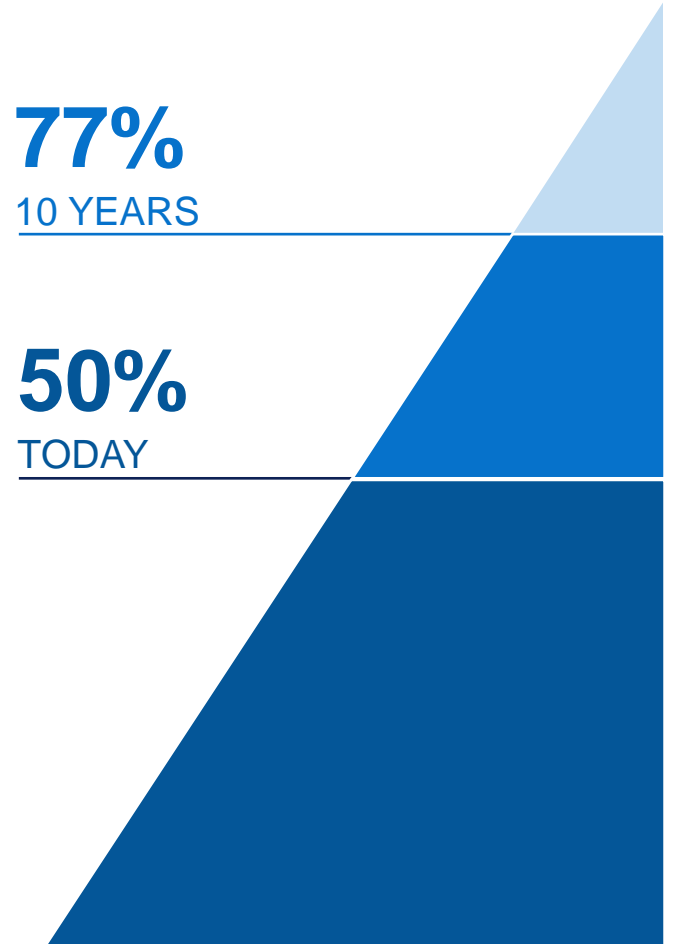
- 01 Data Analysts & Scientists
- 02 AI & Machine Learning Specialists
- 03 Big Data Specialists
- 04 Digital Marketing & Strategy Specialists
- 05 Process Automation Specialists
- 06 Business Development Professionals
- 07 Digital Transformation Specialists
- 08 Information Security Analysts
- 09 Software & Applications Developers
- 10 Internet of Things Specialists

Source: World Economic Forum, 2020

## Jobs requiring some degree of technology skills

**77%**  
10 YEARS

**50%**  
TODAY

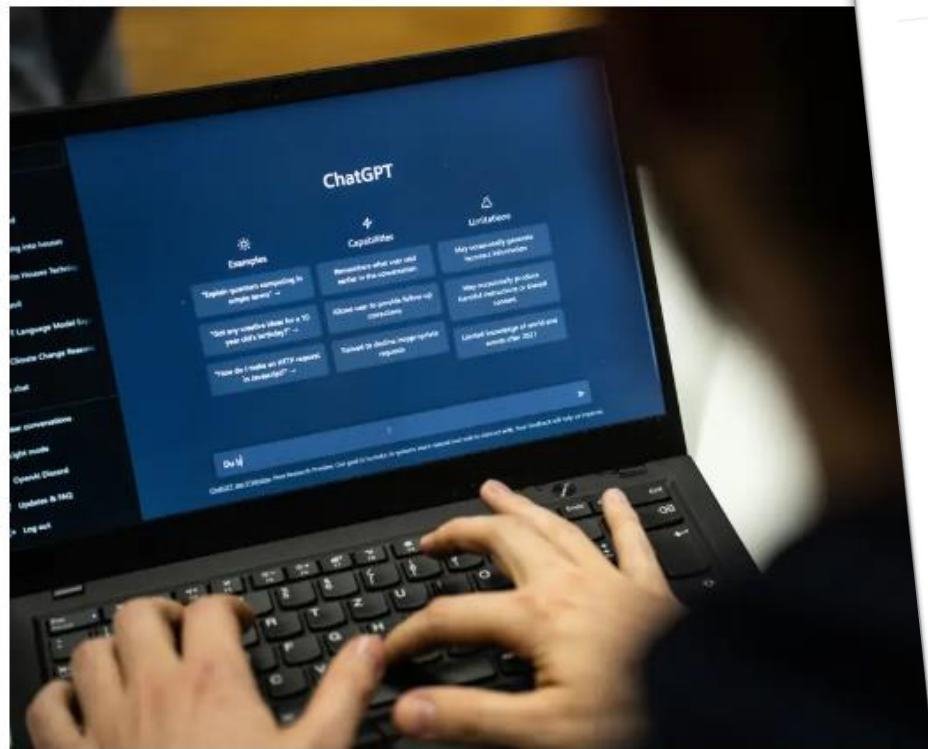


Source: US Bureau of Labor Statistics

HOME > TECH

# AI 'prompt engineer' jobs can pay up to \$375,000 a year and don't always require a background in tech

Britney Nguyen May 1, 2023, 11:34 AM EDT



The rise of generative AI tools like ChatGPT is creating a hot market for "prompt engineers" who test and improve chatbots. Getty Images

- Prompt engineering refers to the process of designing and testing prompts that are likely to elicit specific responses from AI models.

# ChatGPT took their jobs. Now they walk dogs and fix air conditioners.

Technology used to automate dirty and repetitive jobs. Now, artificial intelligence chatbots are coming after high-paying jobs.

By Pranshu Verma and Gerrit De Vynck  
June 2, 2023 at 6:00 a.m. EDT



Eric Fein at his home in Bloomingdale, Ill. Fein lost many of his writing jobs to ChatGPT and plans to attend the College of DuPage technical school in the fall to study heating, ventilation and air conditioning systems. (Taylor Glascock for The Washington Post)

- Prompt engineering is the process of designing and testing prompts that are likely to elicit specific responses from AI models.
- Prompt engineering is a new job role that is emerging as a result of the rise of generative AI tools like ChatGPT.
- Prompt engineering is a hot market for "prompt engineers" who test and improve chatbots.
- Prompt engineering is a new job role that is emerging as a result of the rise of generative AI tools like ChatGPT.

# One of those new



Is it time for a [digital]  
transformation ?

# Google, Apple and 12 other companies that no longer require employees to have a college degree

Published Mon, Oct 8 2018-12:51 PM EDT • Updated Mon, Oct 8 2018-12:51 PM EDT

Courtney Canley @CLASSICALLYCOURT



Apple CEO Tim Cook at an event to introduce the new 9.7-inch Apple iPad at Lane Tech College Prep High School on March 27, 2018 in Chicago, Illinois. Scott Olson | Getty Images

Today's tight labor market continues to be a promising landscape for job seekers, with economists even predicting more opportunities for professionals without a degree.

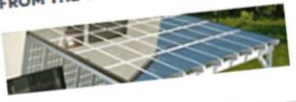
Job-search site Glassdoor compiled a list of top employers who are expanding their talent options by no longer requiring applicants to have a college degree. Companies like Google, Apple and IBM are all in this group.

## Trending Now

- 1 This calculator will tell you how much you need to retire comfortably, based on age and income
- 2 The only 3 things you should include in a cover letter (Hint: It's not your qualifications)
- 3 Here's how much millennials at every age need to have saved right now to retire at 67
- 4 Former Apple CEO: Walmart's health-care services will cause 'a consumer revolution'
- 5 After 15 years of research, a psychologist says this 'simple trick' can help millennials retire faster

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## FROM THE WEB



USA TODAY Follow

# Walmart, the country's largest private employer, to pay 100% of college tuition for employee program

Marina Pirofsky, USA TODAY · 7/28/2021

Like 3 Comments 80

## RELATED QUOTES

Walmart, the largest private employer in the country, announced on Tuesday it will pay for college tuition and books at a group of schools for its part-time and full-time associates.



© Joe Raedle, Getty Images Walmart store in Hallandale Beach, Florida.

The company issued a news release stating the move means approximately 1.5 million Walmart and Sam's Club employees "can earn college degrees or learn trade skills without the burden of education debt."



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## How many colleges and universities have closed since 2016?

### [Education Dive](#)

The last two years have been tumultuous ones for the U.S. higher education industry.

Increased regulation and falling enrollment were among several factors contributing to the closure or consolidation of hundreds of colleges and universities around the country.

# Higher Education Is NOT The Only Kid on The Block



## Abundant Affordable Learning

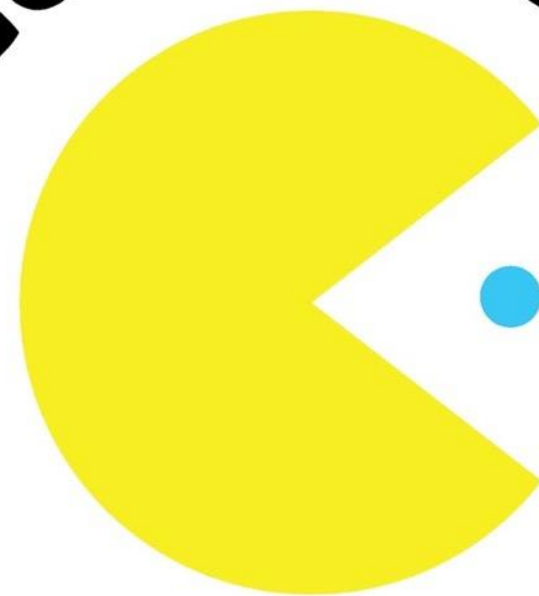
Source: Gartner: Evaluate Your Value Proposition To Accelerate Digital in Higher Education



“Culture eats strategy for breakfast”

- Drucker

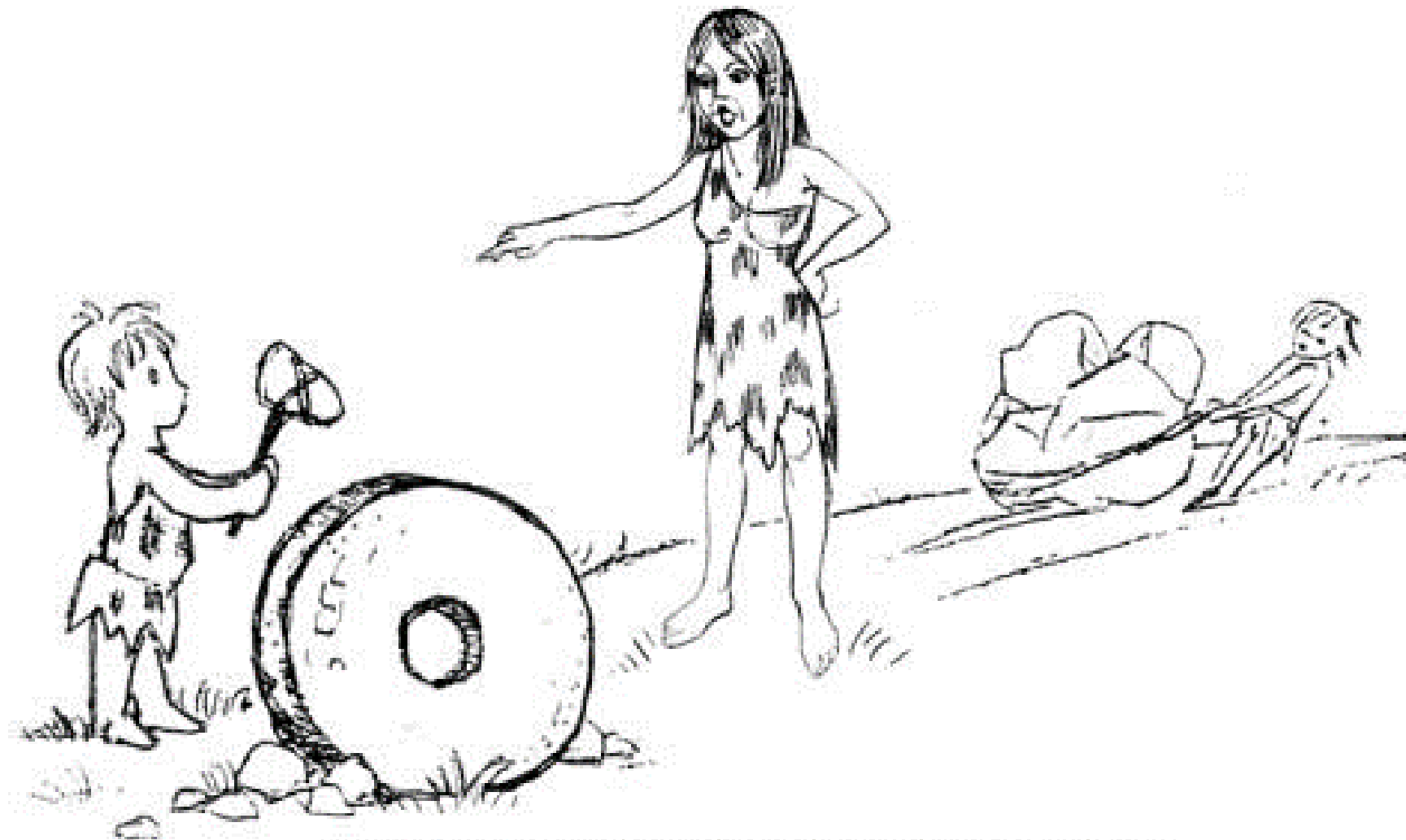
**CULTURE!**



It Is A  
Matter Of  
Choice...  
(Or Maybe  
Not)



# The “Dream Killers”



*All you've done is chisel all day! Do something useful, like helping your brother drag those rocks up the hill.*

# The Overly Optimistic... (Lazy?)



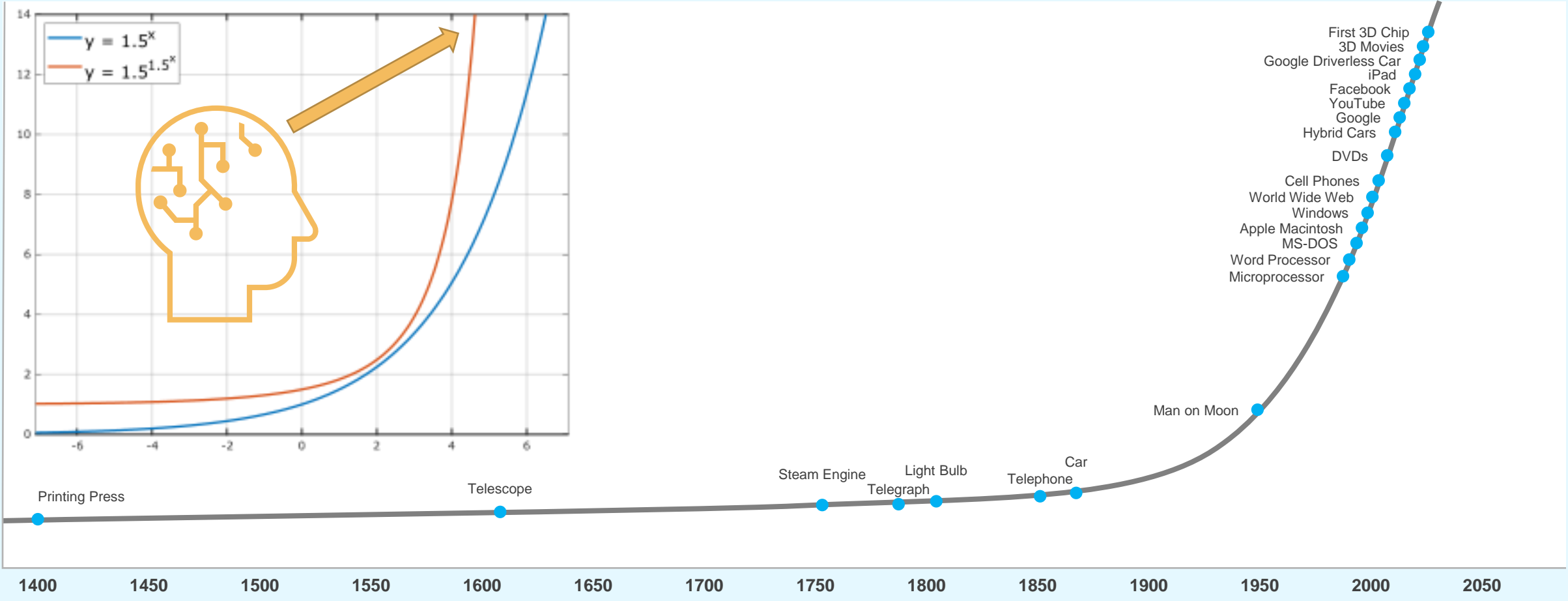
“What if we don’t change at all ...  
and something magical just happens?”

AI is the New Bacon!

**BACON**  
MAKES EVERYTHING  
**BETTER**



# Accelerating Growth in Technology



Source: [Technology Matters to Nonprofits: The Impact of Falling Behind the Technology Curve - JMT Consulting](#)

Competitive Strategy | Why Companies That Wait to Adopt AI May Never

Competitive Strategy

# Why Companies That Wait to Adopt AI May Never Catch Up

by Vikram Mahidhar and Thomas H. Davenport

December 06, 2018



Paul Bradbury/Getty Images

Machine Learning & Big Data Blog

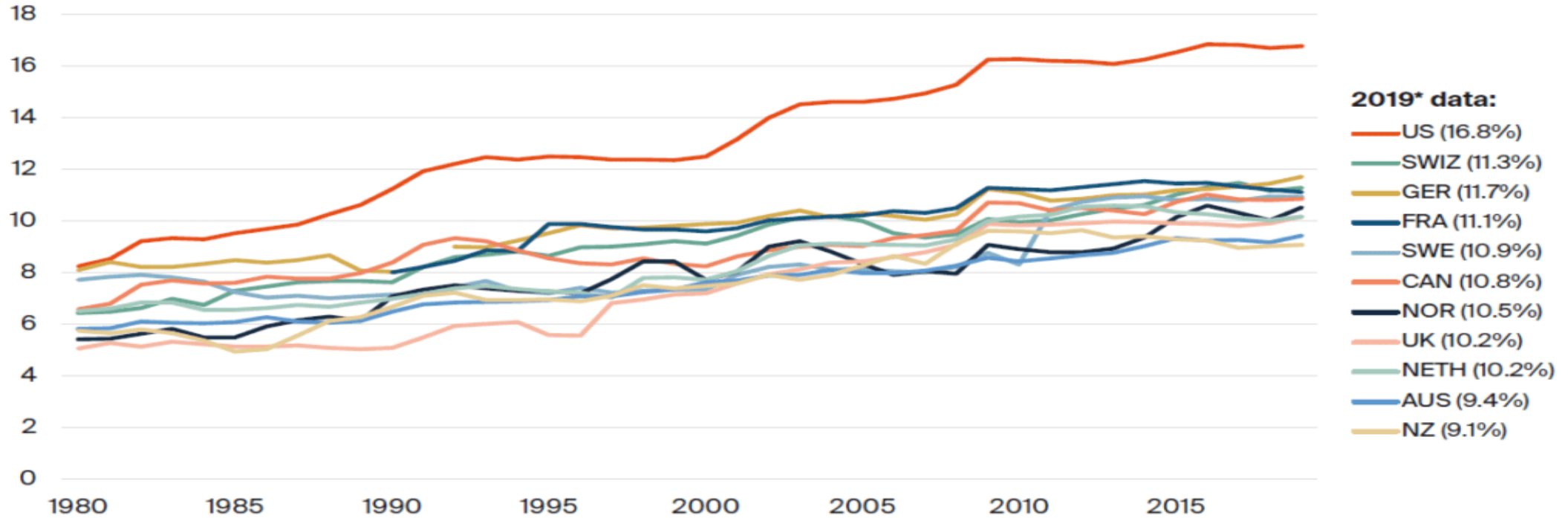
# Why does Gartner predict up to 85% of AI projects will “not deliver” for CIOs?



**EXHIBIT 3**

# Health Care Spending as a Percentage of GDP, 1980–2019

Percent (%) of GDP



Notes: Current expenditures on health. Based on System of Health Accounts methodology, with some differences between country methodologies. GDP refers to gross domestic product.  
\* 2019 data are provisional or estimated for Australia, Canada, and New Zealand.  
Data: OECD Health Data, July 2021.

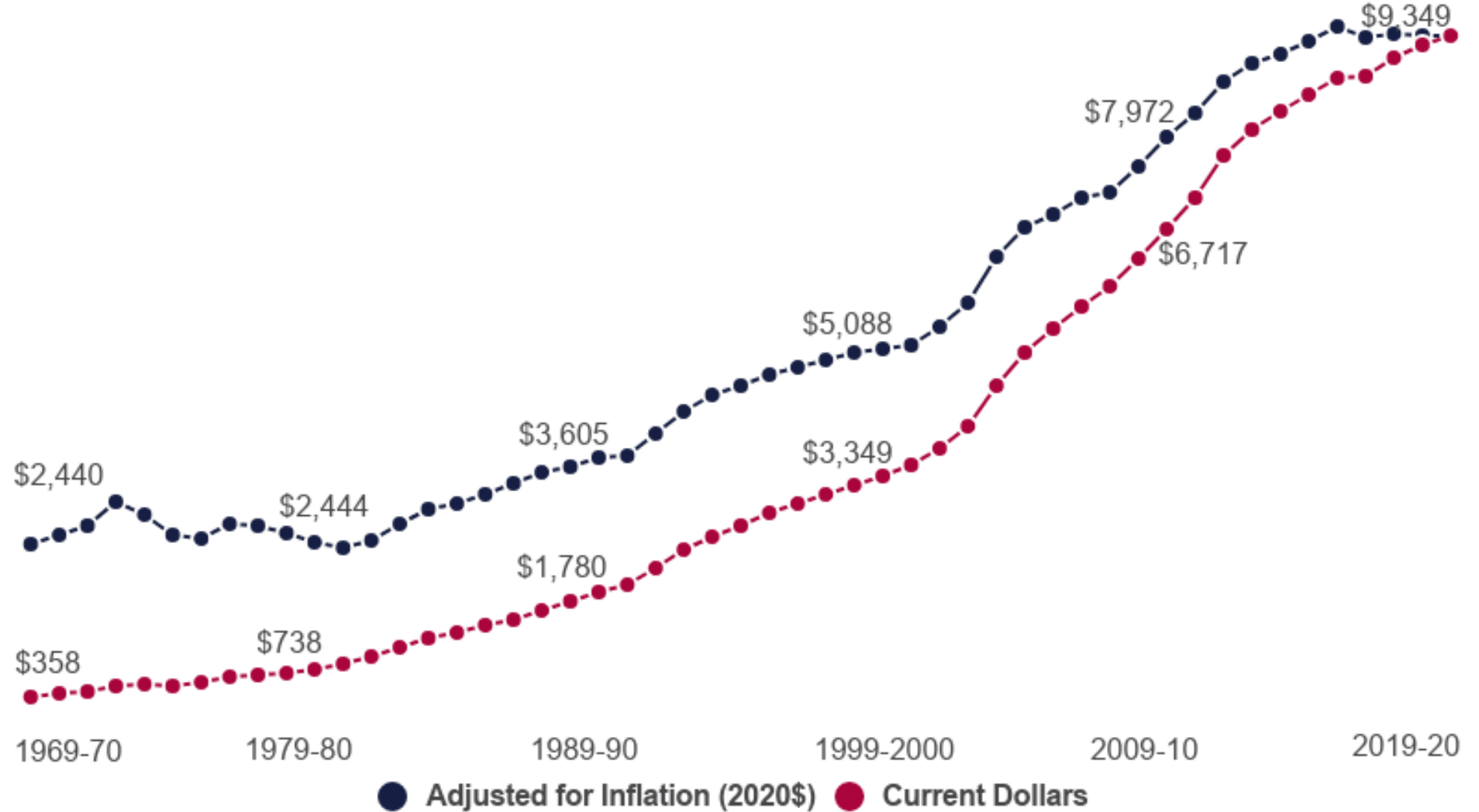
Source: Eric C. Schneider et al., *Mirror, Mirror 2021 – Reflecting Poorly: Health Care in the U.S. Compared to Other High-Income Countries* (Commonwealth Fund, Aug. 2021).





## Average Annual Tuition & Fees at Public 4-Year Institutions

According to the College Board, the average cost of tuition and fees at a **four-year public university** for in-state students increased by **156%** between 1989 and 2022. The average cost of tuition and fees at a **four-year private university** for in-state students increased by **300%** during the same period.



# 2024 EDUCAUSE Top 10 Institutional Resilience

The 2024 EDUCAUSE Top 10 describes the contributions that technology, data, and the workforce will make to advance three dimensions of institutional resilience: mission resilience, operational resilience, and financial resilience.



**Mission Resilience**



**Operational Resilience**



**Financial Resilience**

- 1 Cybersecurity as a Core Competency**  
Balancing cost and risk
- 2 Driving to Better Decisions**  
Improving data quality and governance
- 3 The Enrollment Crisis**  
Harnessing data to empower decision-makers
- 4 Diving Deep into Data**  
Leveraging analytics for actionable insights to improve learning and student success
- 5 Administrative Cost Reduction**  
Streamlining processes, data, and technologies
- 6 Meeting Students Where They Are**  
Providing universal access to institutional services
- 7 Hiring Resilience**  
Recruiting and retaining IT talent under adverse circumstances
- 8 Financial Keys to the Future**  
Using technology and data to help make tough choices
- 9 Balancing Budgets**  
Taking control of IT cost and vendor management
- 10 Adapting to the Future**  
Cultivating institutional agility

# 2023 Top 10 IT Issues: Foundation Models

The EDUCAUSE 2023 Top 10 IT Issues help describe the foundation models that colleges and universities will develop next year and beyond, acting on what was learned in the pandemic and framed by the three building blocks of leadership, data, and work and learning.



## Leading with Wisdom

Technology leaders need wisdom in order to inspire, lead, and manage their institution, IT organization, and workforce.

- 1 A Seat at the Table**  
Ensuring IT leadership is a full partner in institutional strategic planning
- 3 Evolve, Adapt, or Lose Talent**  
Creating a workplace that allows for and supports movement up, down, and sideways to accommodate shifts in personal and professional goals and to foster healthier work/life balance
- 5 Enriching the Leadership Playbook**  
Leading with humility and candor to engage, empower, and retain the IT workforce



## The Ultra-Intelligent Institution

Data and analytics can provide institutions with intelligence offered through ongoing, useful, and increasingly sophisticated insights.

- 2 Privacy and Cybersecurity 101**  
Embedding privacy and cybersecurity education and awareness in the curriculum and in the workplace
- 4 Smooth Sailing for the Student Experience**  
Using technology, data, insight, and agility to create a frictionless student experience
- 6 Expanding Enrollments and the Bottom Line**  
Focusing data and analytics initiatives on identifying academic programs with high potential for recruitment ROI
- 7 Moving from Data Insight to Data Action**  
Converting data analytics into action plans to power institutional performance, enhance operational efficiency, and improve student success



## Everything Is Anywhere


With the institution no longer confined to the physical campus, leaders must find new strategies for supporting technology everywhere and anywhere.

- 8 A New Era of IT Support**  
Updating IT services to support remote and hybrid work
- 9 Online, in Person, or Hybrid? Yes.**  
Developing a learning-first, technology-enabled learning strategy
- 10 SaaS, ERP, and CRM: An Alphabet Soup of Opportunity**  
Managing cost, risk, and value of investments in new ERP solutions

# TOP 10 IT ISSUES, 2022


## The Higher Education We Deserve

The EDUCAUSE 2022 Top 10 IT Issues describe how technology can help create the higher education we deserve through shared vision and sustainability, anchored by a central focus on student success.




## Shared Vision, Shared Strategy

- 2 Evolve or Become Extinct**
- 7 The Shrinking World of Higher Education or an Expanded Opportunity?**



## Student Success as Institutional Success

- 3 Digital Faculty for a Digital Future**
- 4 Learning from COVID-19 to Build a Better Future**
- 6 From Digital Scarcity to Digital Abundance**
- 10 Radical Creativity**






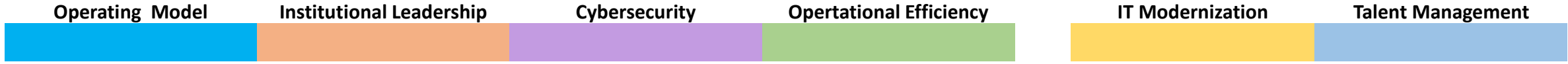
## The Sustainable Business Model

- 1 Cyber Everywhere! Are We Prepared?**
- 5 The Digital versus Brick-and-Mortar Balancing Game**
- 8 Weathering the Shift to the Cloud**
- 9 Can We Learn from a Crisis?**

Learn more about the **EDUCAUSE** Top 10 IT Issues at <https://www.educause.edu/2022issues>

THANKS TO OUR 2022 TOP 10 IT ISSUES SPONSORS



2017	2018	2019	2020	2021	2022	2023
Cybersecurity	Cybersecurity	Cybersecurity	Cybersecurity	Peak of Pandemic	Cybersecurity	Institutional Leadership
Operational Efficiency	Operational Efficiency	Operational Efficiency	Cybersecurity		Operational Efficiency	Cybersecurity
Institutional Leadership	Operational Efficiency	Cybersecurity	Operational Efficiency		Talent Management	Talent Management
Institutional Leadership	Operational Efficiency	Operational Efficiency	IT Modernization		Operational Efficiency	Operational Efficiency
Operational Efficiency	Operational Efficiency	IT Modernization	Operational Efficiency		Operating Model	Institutional Leadership
Operating Model	Operating Model	Operational Efficiency	IT Modernization		Operating Model	Operational Efficiency
Operating Model	Talent Management	Operating Model	IT Modernization		Operating Model	Operational Efficiency
IT Modernization	Operational Efficiency	Operational Efficiency	Operating Model		IT Modernization	IT Modernization
IT Modernization	IT Modernization	Institutional Leadership	Operational Efficiency		Operating Model	Operational Efficiency
Operating Model	Institutional Leadership	Operating Model	Institutional Leadership		Operating Model	IT Modernization

## ChatGPT passes the Turing test

News Report Technology

In 1950, Alan Turing proposed the Turing test as a way to measure a machine's intelligence. The test pits a human against a machine in a conversation. If the machine can fool the human into thinking it is also human, then it is said to have passed the Test. In December 2022, ChatGPT, an artificial intelligence chatbot, became the second chatbot to pass the Turing Test, according to Max Woolf, a data scientist at BuzzFeed.



## Turing Test

- A Turing Test is a test of a machine's ability to exhibit intelligent behavior that is indistinguishable from that of a human.
- The test was proposed by Alan Turing in 1950 as a way to evaluate a machine's ability to display human-like intelligence.
- The test involves a human evaluator who interacts with a machine and a human via a text-based interface, without knowing which is which.
- The machine passes the test if the evaluator cannot consistently distinguish the machine's responses from those of the human.

# Is AI as Smart as Humans?

# Questions