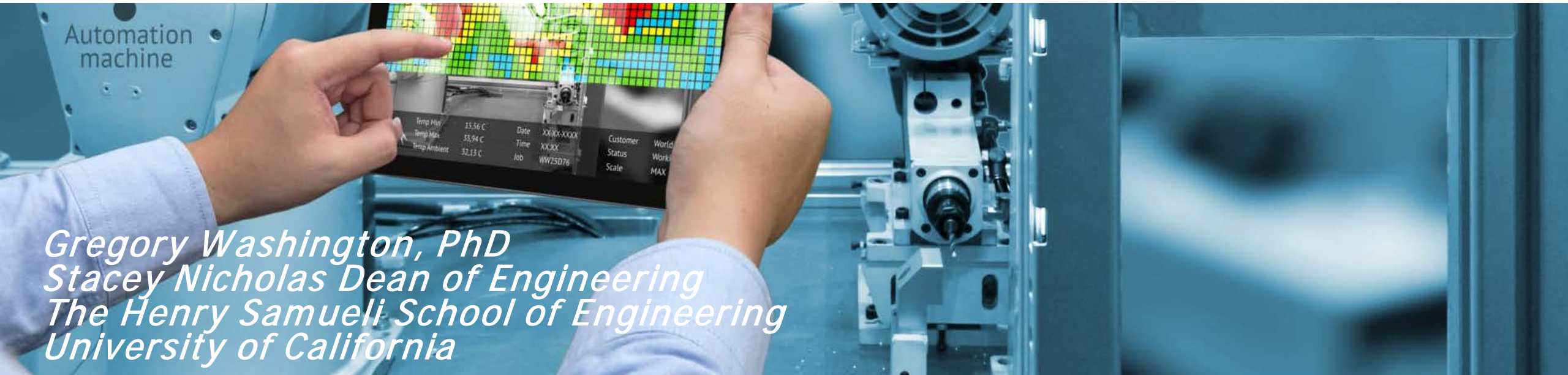




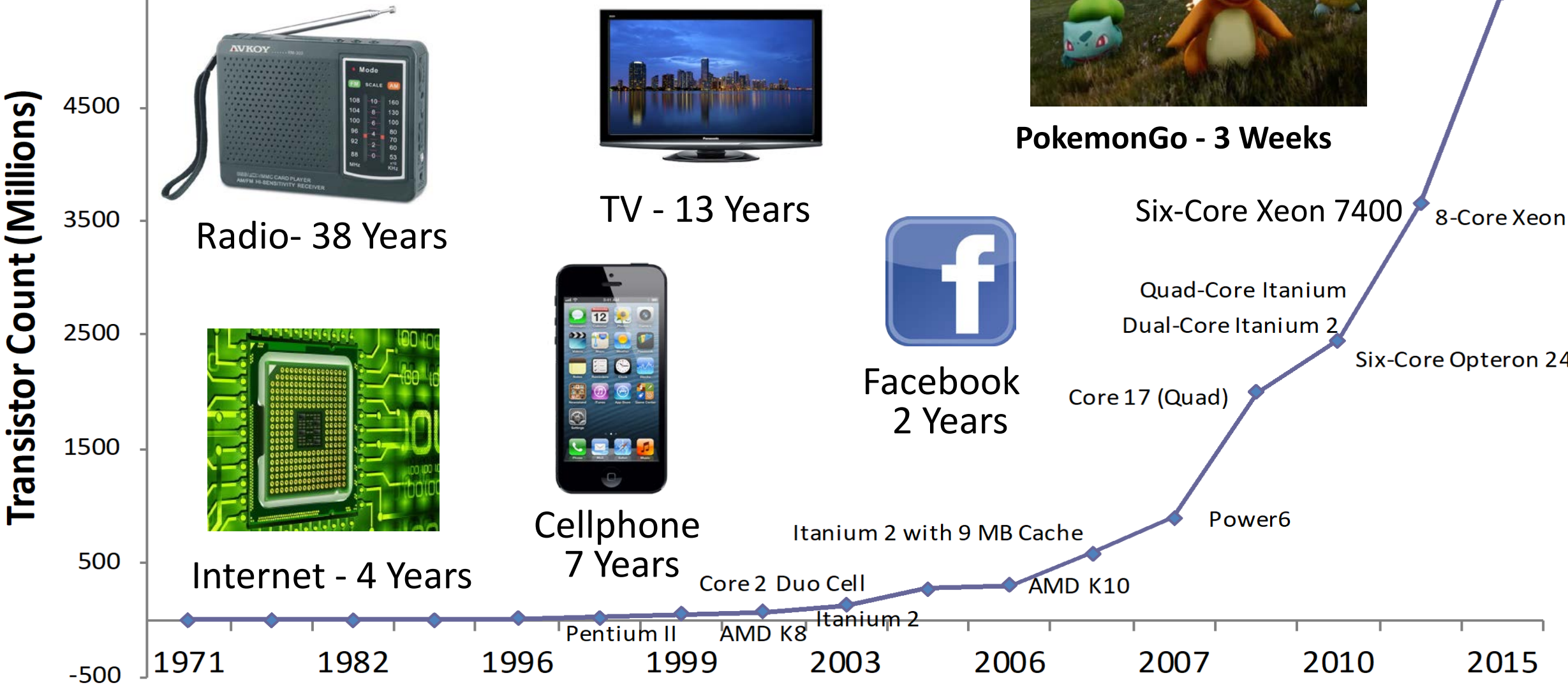
Priorities for Engineering Education



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Unprecedented Change

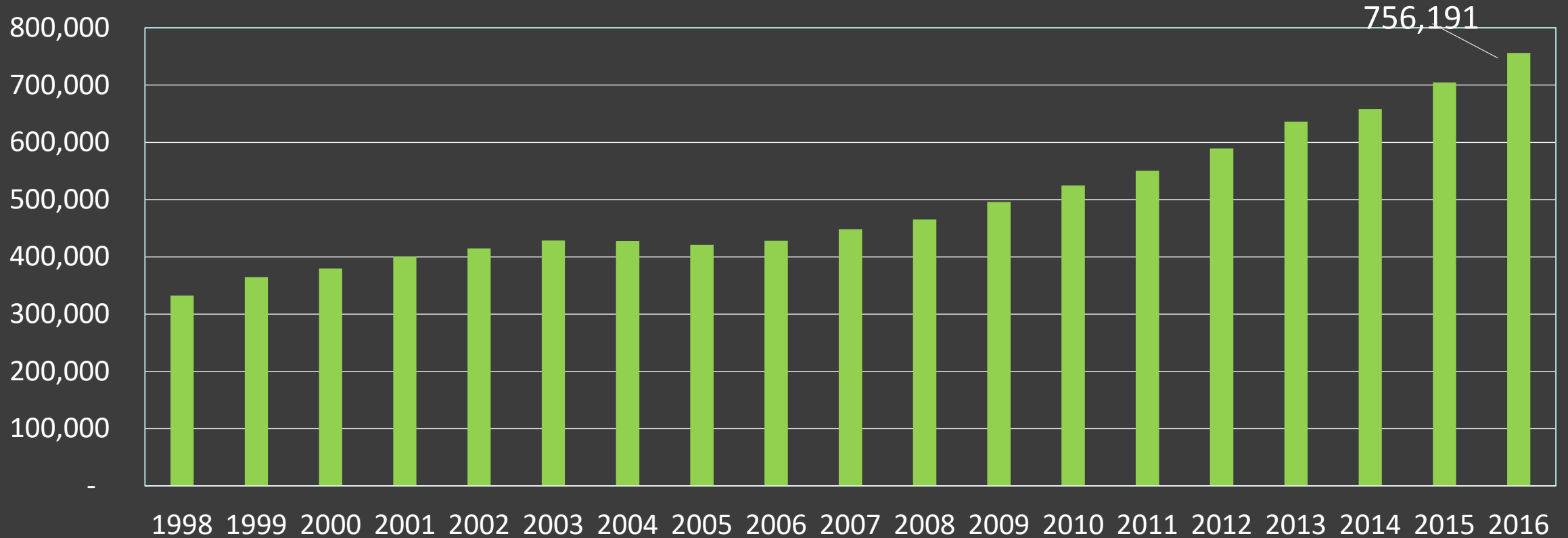
Years to 50 million users



More than half of the top 10 in demand jobs in 2017 did not exist in 2007

US Engineering Enrollment Trends (1998-2016) (Courtesy of ASEE)

US Enrollment in Engineering

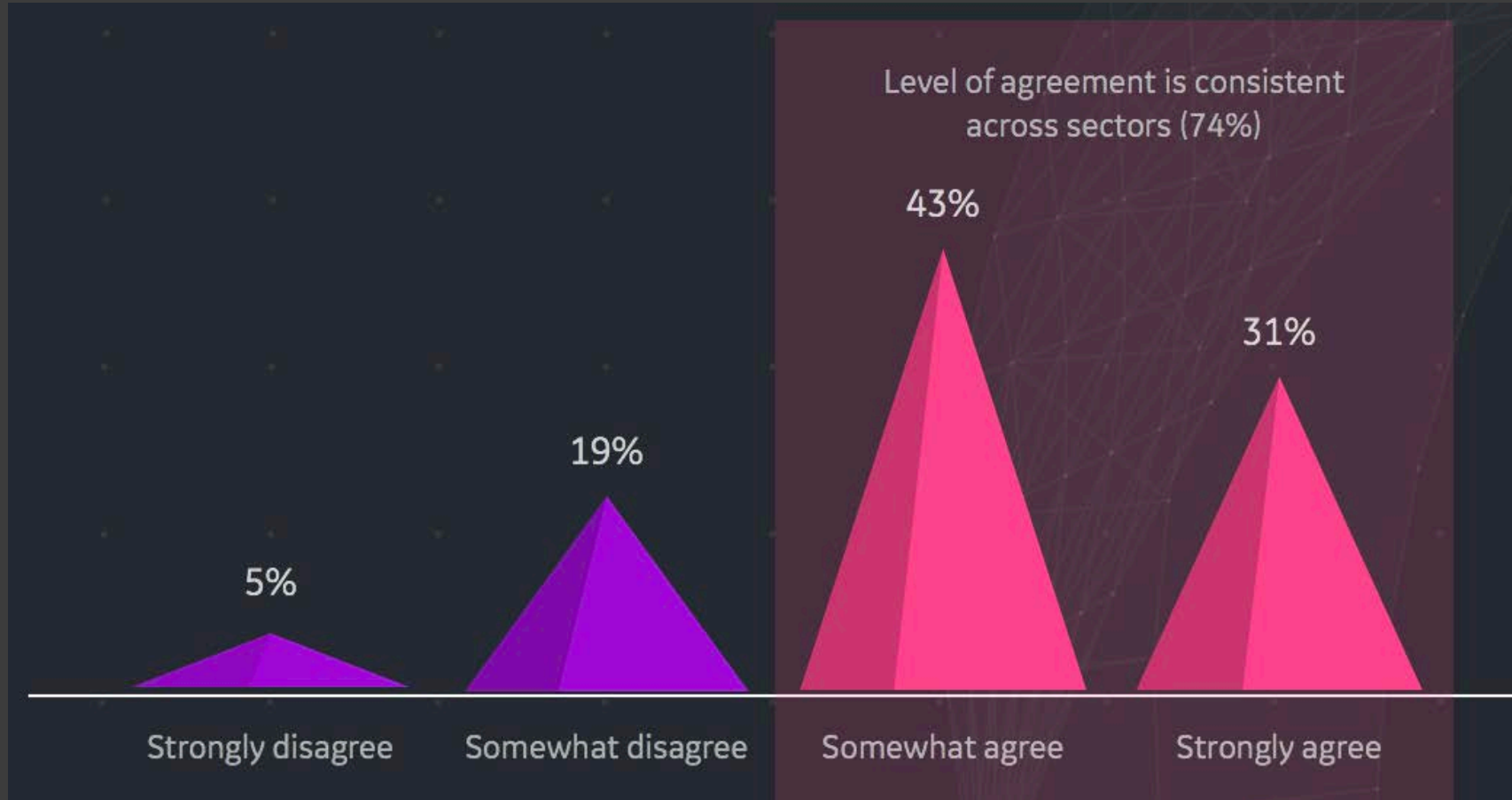


Nearly 77% growth in 10 years!

Major Priorities for Engineering Programs

- **Modernization:** high quality education in a high demand, resource limited environment
 - Content Delivery: Online learning/Flipped classrooms
 - Infrastructure: Design and Innovation spaces
 - Grading: Automated Assessment and grading
 - Instruction: Teaching Professoriate
 - Preparation: Pre-K - Elementary
- **Opportunities:** Expanding Entrepreneurship and Experiential learning opportunities, global opportunities
- **Diversity:** Engaging and managing populations non-traditional to the discipline

Future of Work



- Nearly **three in four** global executives believe a **lack of skills** is an issue facing their industry. And 64 percent say this problem is restricting their ability to innovate (a challenge that has increased over time, up from 56 percent in 2014).

What really worries us?

- **Our academic programs were not designed for the constant churn and continuous upskilling that today's workforce demands.**
 - Transition away from formal four-year degrees to new forms of credentials and micro-certifications
 - Microwork platforms like Upwork solve this by combining working and learning into a single platform.
- The most immediate threat facing our institutions is the reality that they can fall tragically out of sync with the needs and aspirations of the people they serve

What really worries us?

- **Research areas coming into and out of favor much quicker than before. Current programs are not mobile or flexible enough to adapt.**
 - When technologies fall out of favor faculty have to change fields or risk being obsolete
 - Experiencing the **largest growth** in faculty in our history at a time when funding is flat to declining
 - Need to rethink Promotion and Tenure?

Thank You!

Merci Bien!

Vielen Dank!

感謝!

Obrigado!

СПАСИБО!

დიდი მადლობა!

Grazie!

Asante Sana!

谢谢!

Tak!

¡Muchas Gracias!

