



# The Importance of Upskilling in a Skills-Based Economy

**Paolo Balinas**

Education Channel Manager  
Microsoft Philippines

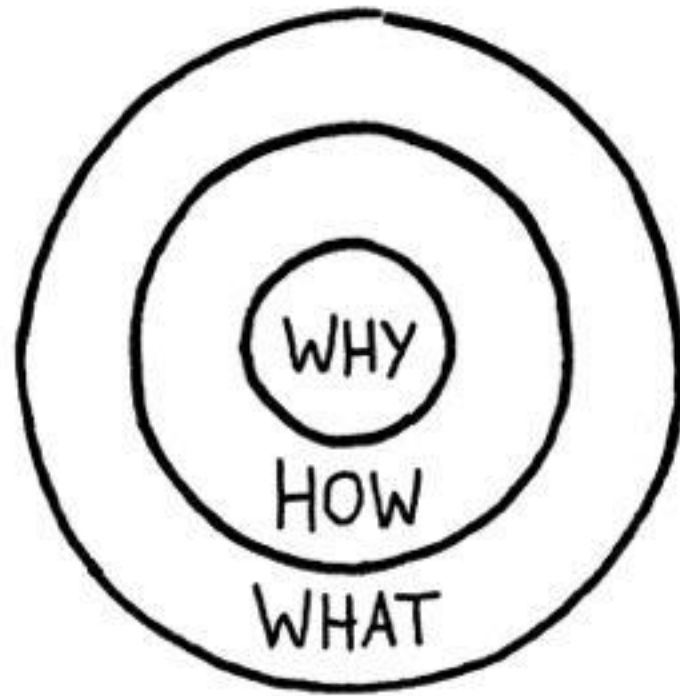
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Paolo Balinas



# The Golden Circle



## What

Every organization on the planet knows WHAT they do. These are products they sell or the services they offer.

## How

Some organizations know HOW they do it. These are the things that make them special or set them apart from their competition.

## Why

Very few organizations know WHY they do what they do. WHY is not about making money. That's a result. It's a purpose, cause or belief. It's the very reason your organization exists.



A large group of graduates in black gowns are celebrating, with many of them throwing their black mortarboard caps into the air. The caps are scattered across the upper half of the image against a dark, overcast sky. The graduates in the foreground are looking upwards with joyful expressions, their arms raised. The overall scene is one of triumph and excitement.

**WHERE DO YOU SEE YOURSELF  
5,10, 20 YEARS FROM NOW?**



## VOLATILITY

The challenge is unexpected or unstable and may be of unknown duration, but it's not necessarily hard to understand; knowledge about is often available.



## UNCERTAINTY

Despite a lack of other information, the event's basic cause and effect are known. Change is possible but not a given.



## COMPLEXITY

The situation has many interconnected parts and variables. Some information is available or can be predicted, but the volume or nature of it can be overwhelming to process.



## AMBIGUITY

Casual relationships are completely unclear. No precedents exist; you face "unknown unknowns."



**“We have seen two years’ worth of digital transformation in two months.”**

**Satya Nadella**  
**Microsoft CEO**

Contactless shopping

Remote selling

Curbside pickup

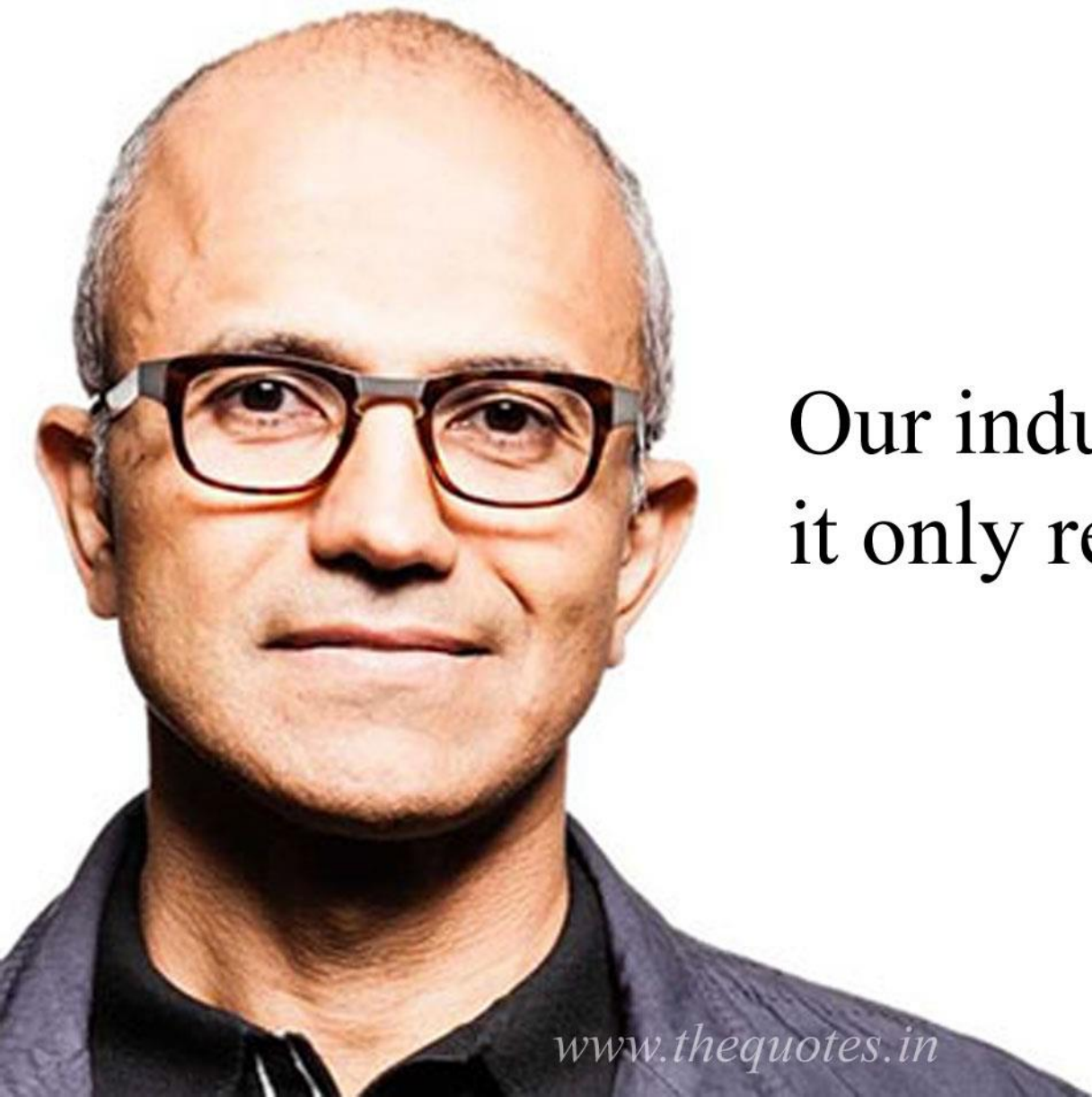
Virtual Visits

Remote learning

Telehealth

Secure remote teamwork

Remote development



Our industry does not respect tradition -  
it only respects innovation.

*Satya Nadella*

# Companies are moving to a world beyond titles and designations wherein our world is moving to a more skills-based economy.



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## The Rise of A Skills-Based Economy



It is true that technology is eliminating the jobs that humans used to do – but it is not a purely destructive force.

In Singapore, with the information and communications technology (ICT) industry being a critical growth area, the demand for ICT professionals is slated to increase by 42,300 over a two-year period from last year.

However, there is also a current lack of abundance – in the professionals with the suitable skillsets required for these ICT roles. As Former Minister for Manpower Mr Lim Swee Say said, “Should Singapore be hit by higher unemployment, it will be because of a shortage of skills – as a result of the widening jobs-skills mismatch – and not a lack of jobs.”

As automation and artificial intelligence (AI) take over the repetitive and



# Skillionaire

n. – a person rich in skills



“ Successful individuals **don't adapt,**  
they **prepare**

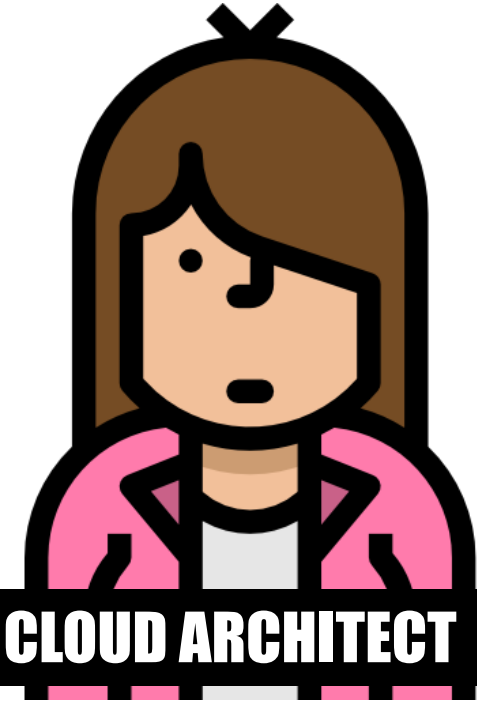
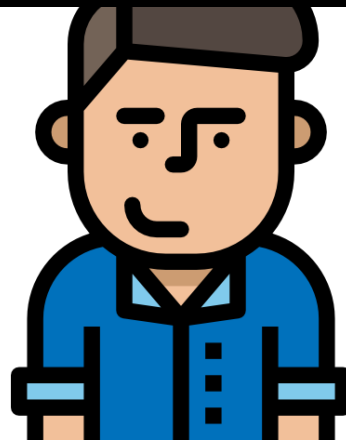
”

- Greg Satell, *“Harvard Business Review”*

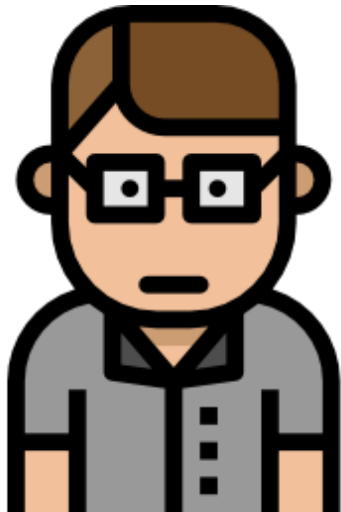


**AI PROFESSIONAL**

**BLOCKCHAIN DEVELOPER**



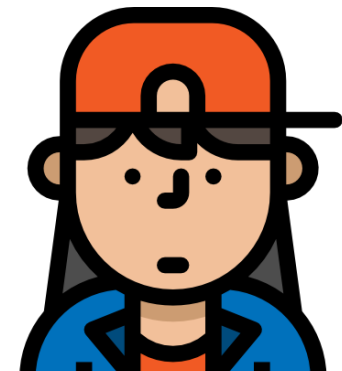
**CLOUD ARCHITECT**



**CLOUD SOFTWARE ENGINEER**



**DATA SCIENTIST**



**DIGITAL MARKETING  
PROFESSIONAL**

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# The future looks very different for our students

Recent advancements in technology such as automation and AI will affect tasks in virtually all occupational groups in the future.

The fastest-growing occupations will require higher-level cognitive skills in areas such as collaboration, problem-solving, critical thinking, and creativity.



65% of students in grade school will perform jobs that have not been invented yet



47% of current jobs are expected to be taken over by machines during the next two decades



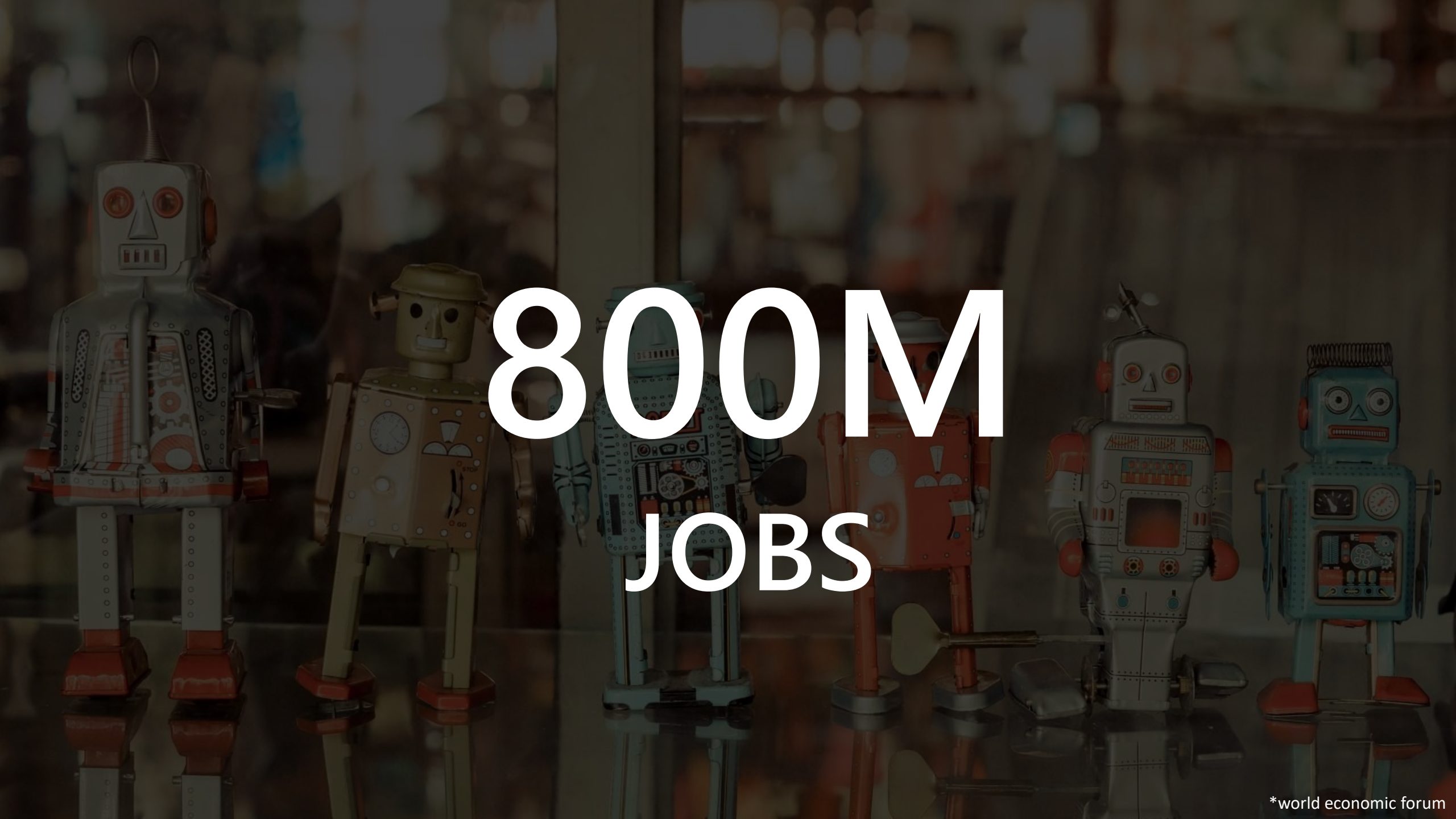
65K new IT jobs by 2024, most in cloud-related technology fields



Only 33% of the world's demand for employees with technology skills is being met

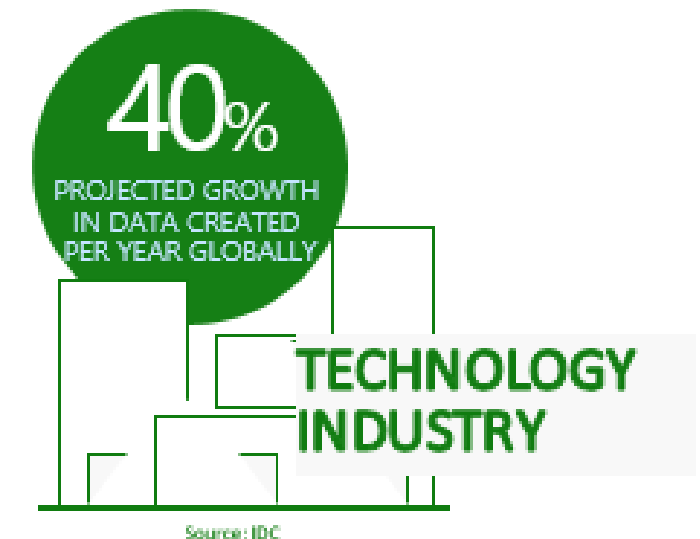
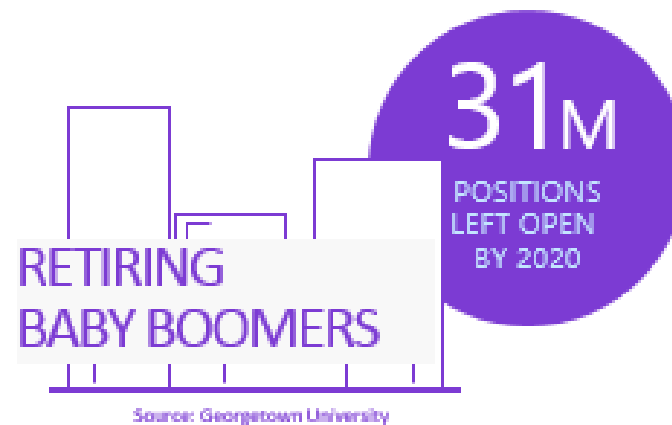
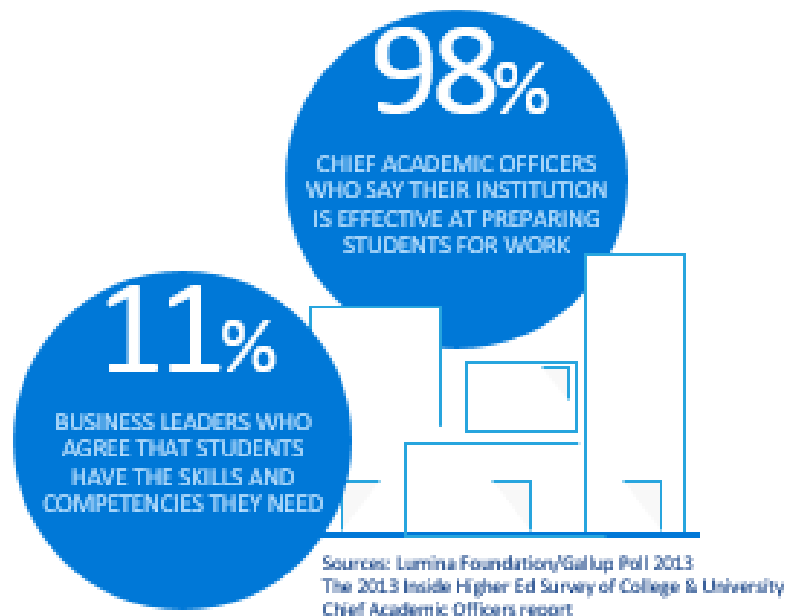


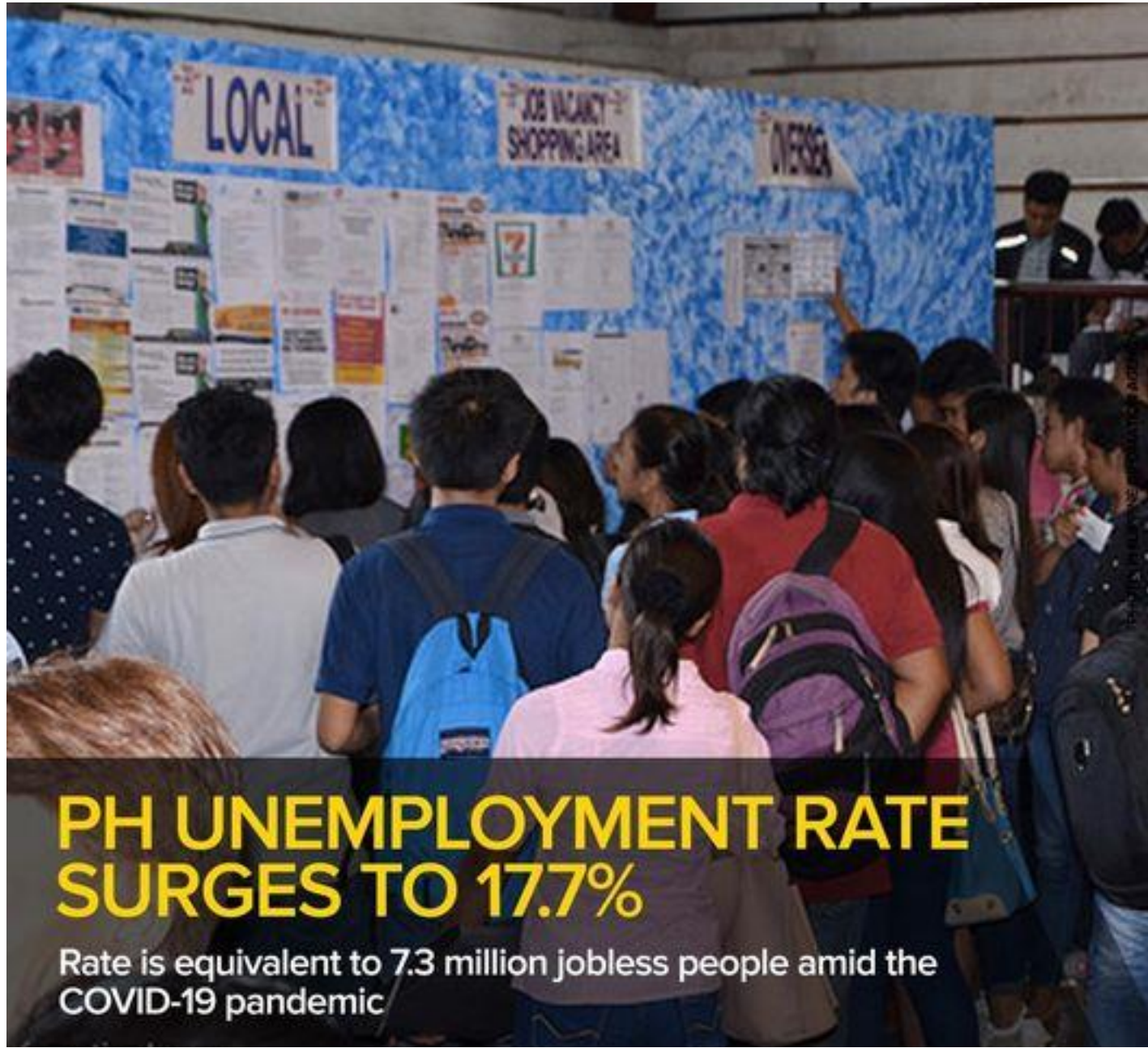
In less than a decade, 77% of jobs will require technology skills



# 800M JOBS

# Addressing the Technical Skills Gap





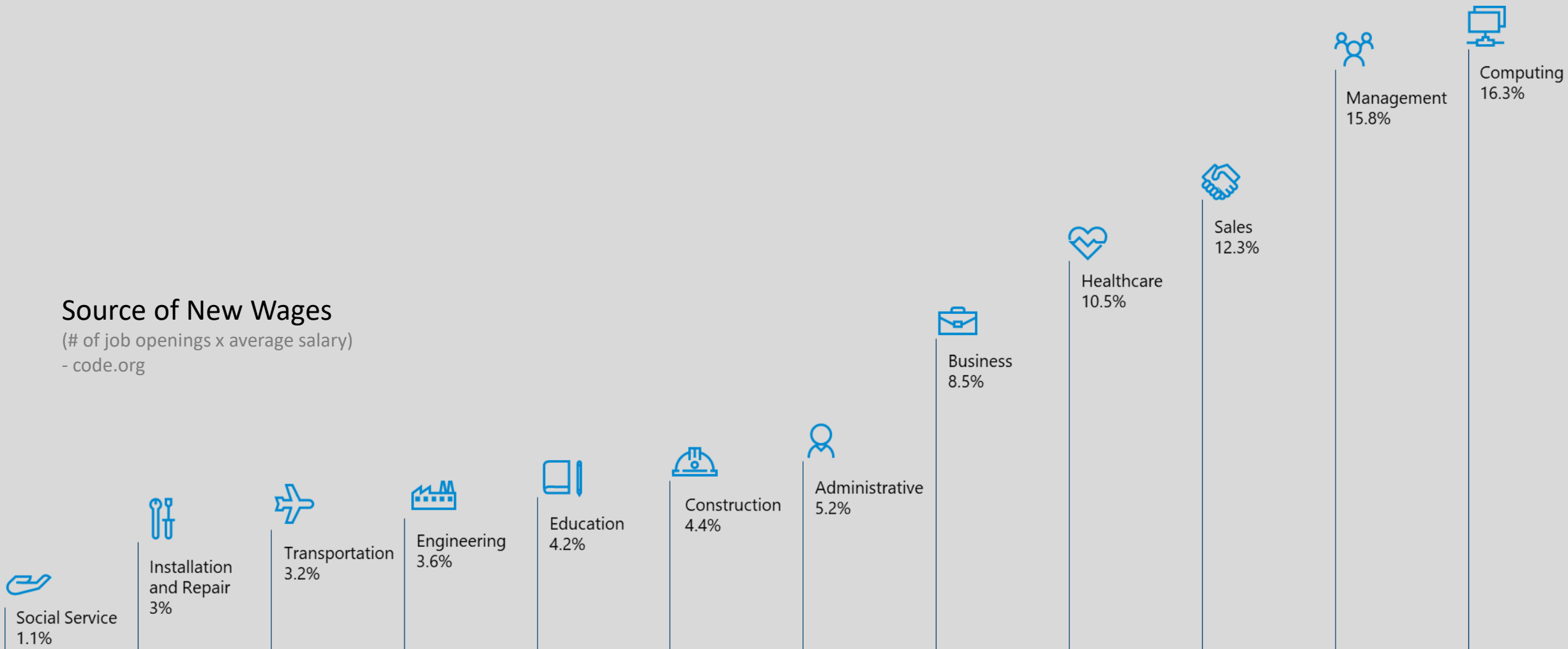
# PH UNEMPLOYMENT RATE SURGES TO 17.7%

Rate is equivalent to 7.3 million jobless people amid the COVID-19 pandemic

## Source of New Wages

(# of job openings x average salary)

- code.org



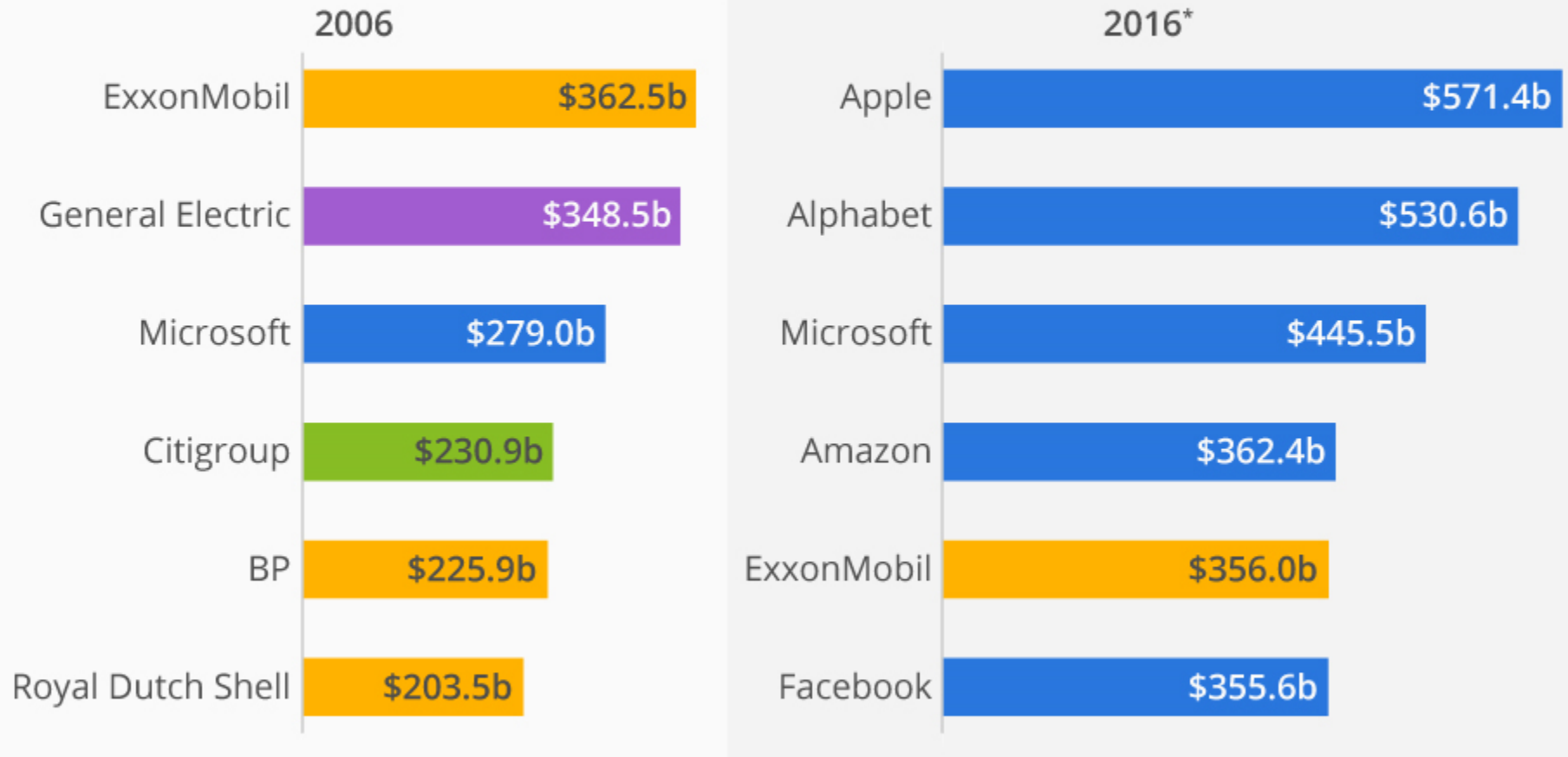
The #1 Source of New Wages is COMPUTING



# The Age of Tech

Market capitalization of the world's most valuable public companies

■ Tech   ■ Oil/Energy   ■ Financial Services   ■ Conglomerate



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@StatistaCharts

\* as of August 1, 2016  
Sources: Yahoo! Finance, Forbes

statista

# The Jobs Landscape in 2022

declining  
roles,  
global  
change  
by 2022

75  
Million

## Top 10 Declining

1. Data Entry Clerks
2. Accounting, Bookkeeping and Payroll Clerks
3. Administrative and Executive Secretaries
4. Assembly and Factory Workers
5. Client Information and Customer Service Workers
6. Business Services and Administration Managers
7. Accountants and Auditors
8. Material-Recording and Stock-Keeping Clerks
9. General and Operations Managers
10. Postal Service Clerks

emerging  
roles,  
global  
change  
by 2022

133  
Million

## Top 10 Emerging

1. Data Analysts and Scientists
2. AI and Machine Learning Specialists
3. General and Operations Managers
4. Software and Applications Developers and Analysts
5. Sales and Marketing Professionals
6. Big Data Specialists
7. Digital Transformation Specialists
8. New Technology Specialists
9. Organisational Development Specialists
10. Information Technology Services

# 2020 Skills Outlook

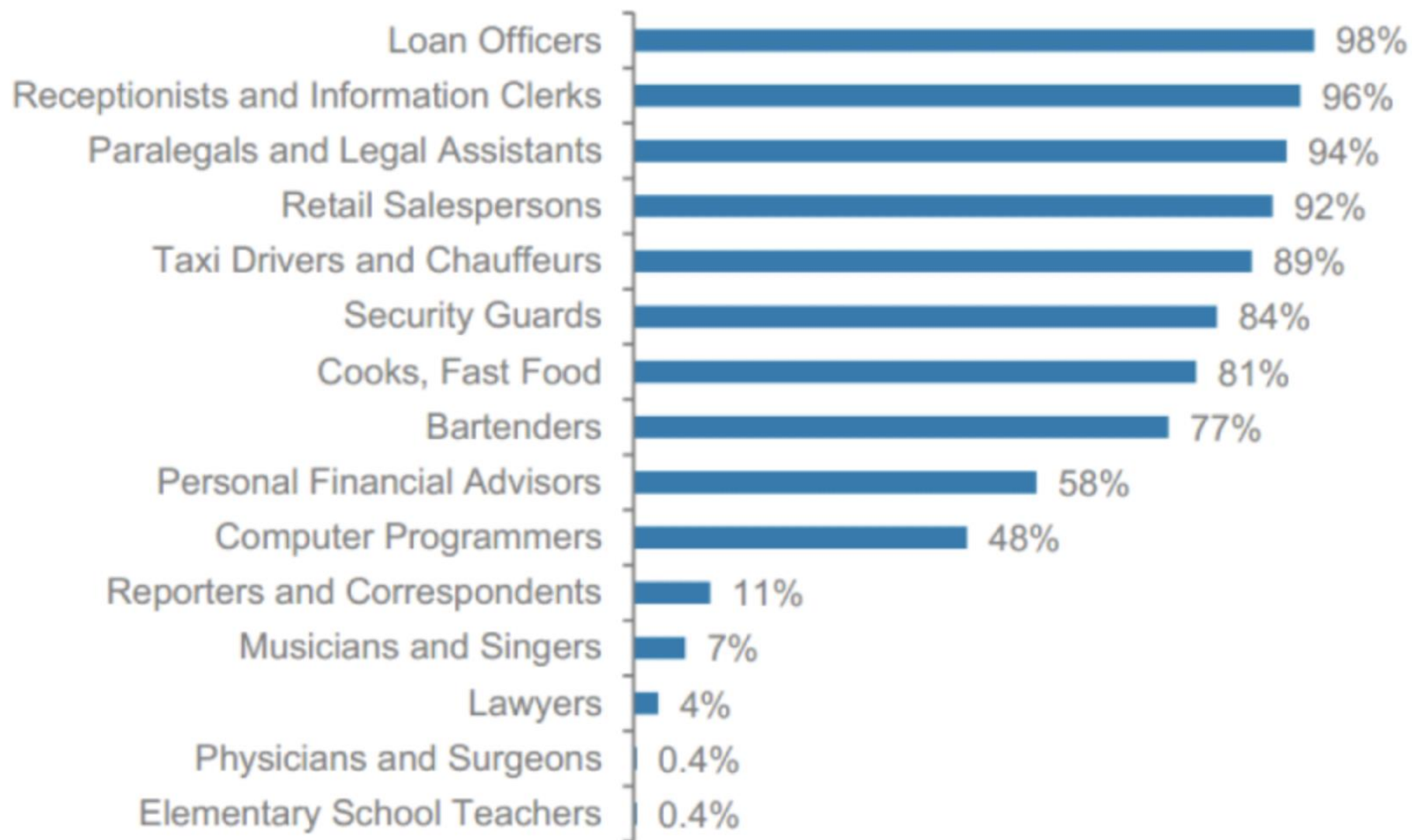
## Declining

- 1 Manual dexterity, endurance and precision
- 2 Memory, verbal, auditory and spatial abilities
- 3 Management of financial, material resources
- 4 Technology installation and maintenance
- 5 Reading, writing, math and active listening
- 6 Management of personnel
- 7 Quality control and safety awareness
- 8 Coordination and time management
- 9 Visual, auditory and speech abilities
- 10 Technology use, monitoring and control

## Growing

- 1 Analytical thinking and innovation
- 2 Active learning and learning strategies
- 3 Creativity, originality and initiative
- 4 Technology design and programming
- 5 Critical thinking and analysis
- 6 Complex problem-solving
- 7 Leadership and social influence
- 8 Emotional intelligence
- 9 Reasoning, problem-solving and ideation
- 10 Systems analysis and evaluation

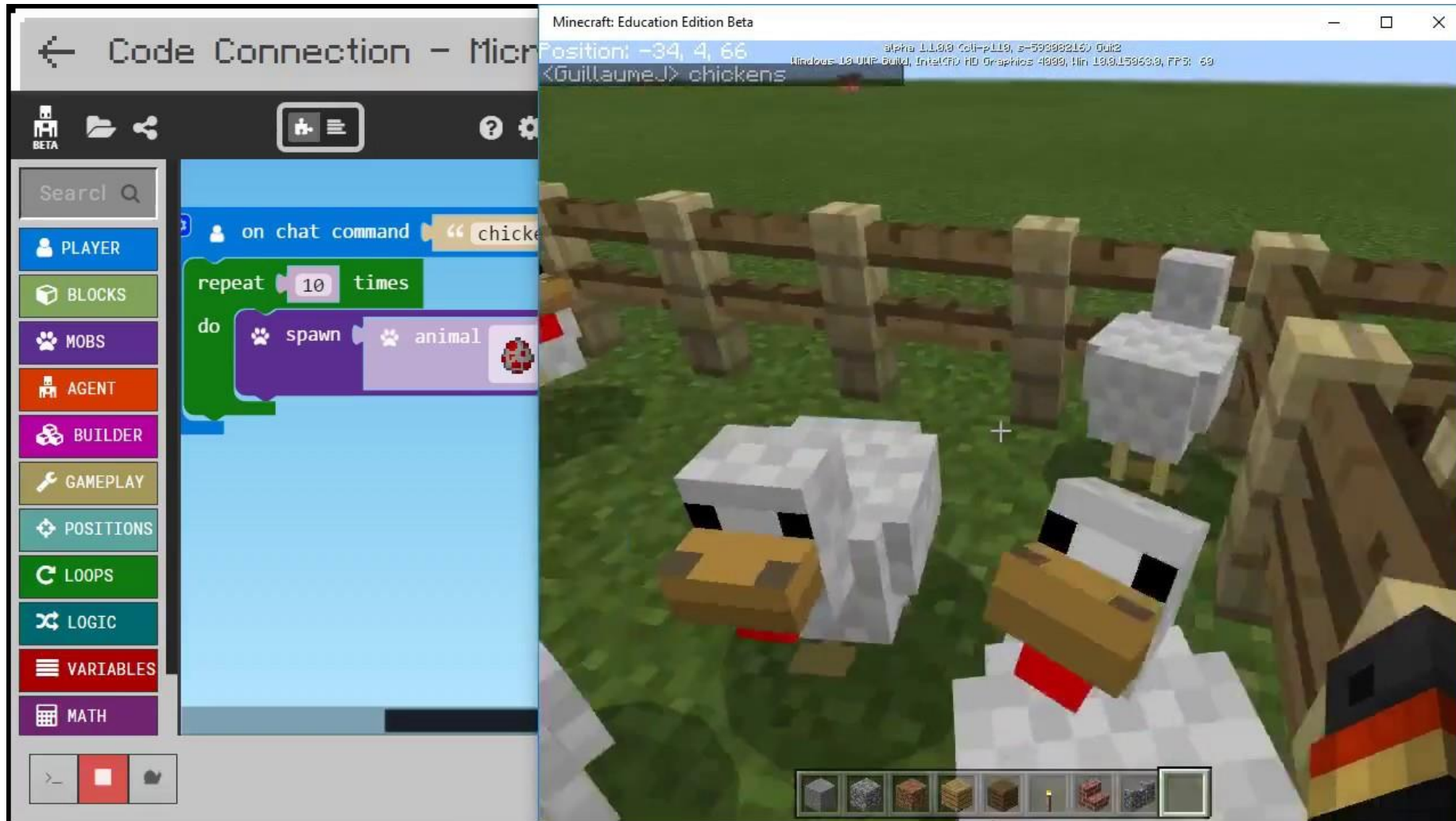
**Exhibit 8: Probability of a job becoming automatable**



Source: University of Oxford, C.B. Frey and M. Osborne, Morgan Stanley Research  
Note: Select occupations ranked according to their probability of becoming automatable,



# Kids are exposed to technology at a very young age, hence the term – Digital Natives

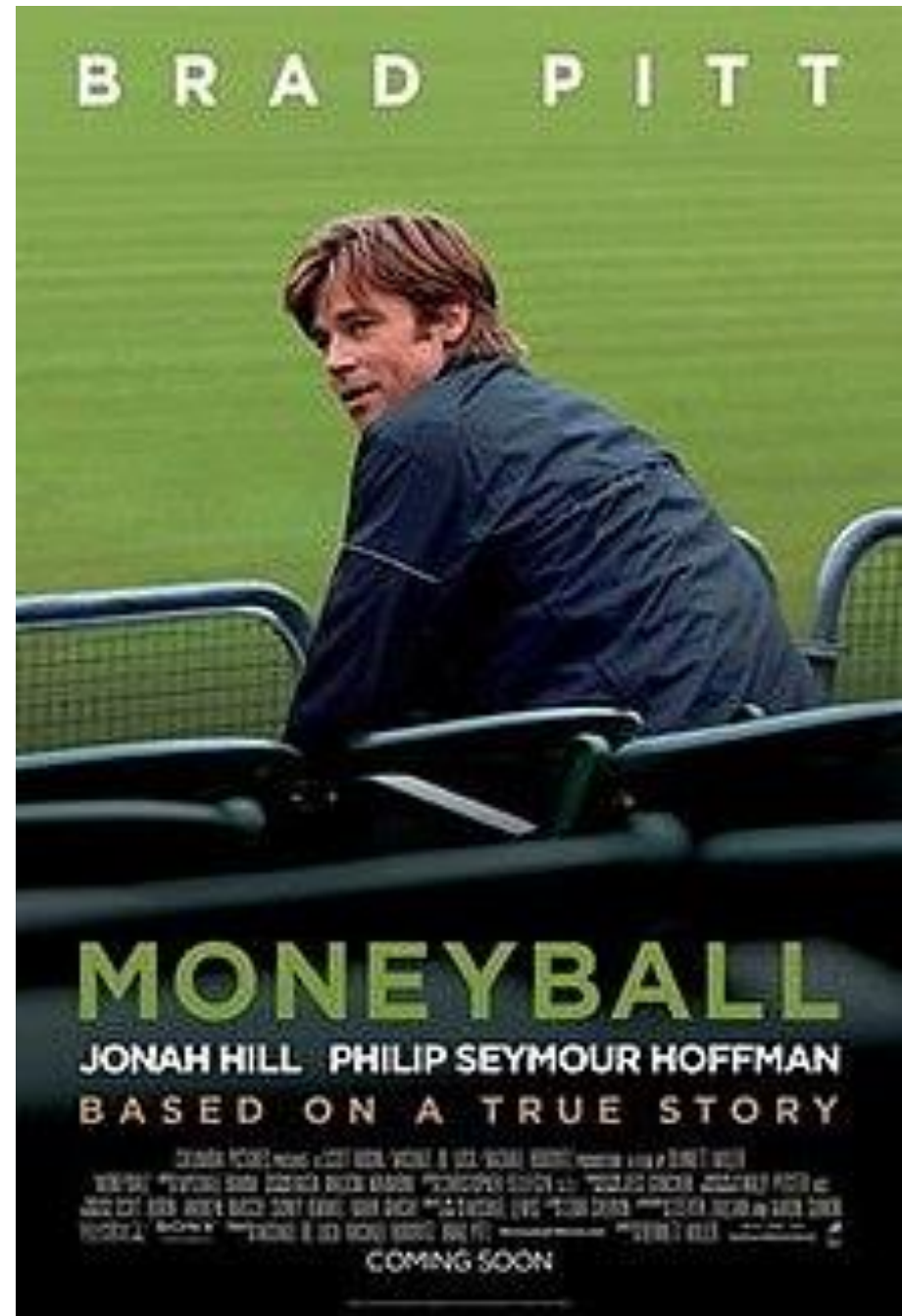


# Data is the new oil!





**Billy Bean**  
GM, Oakland Athletics





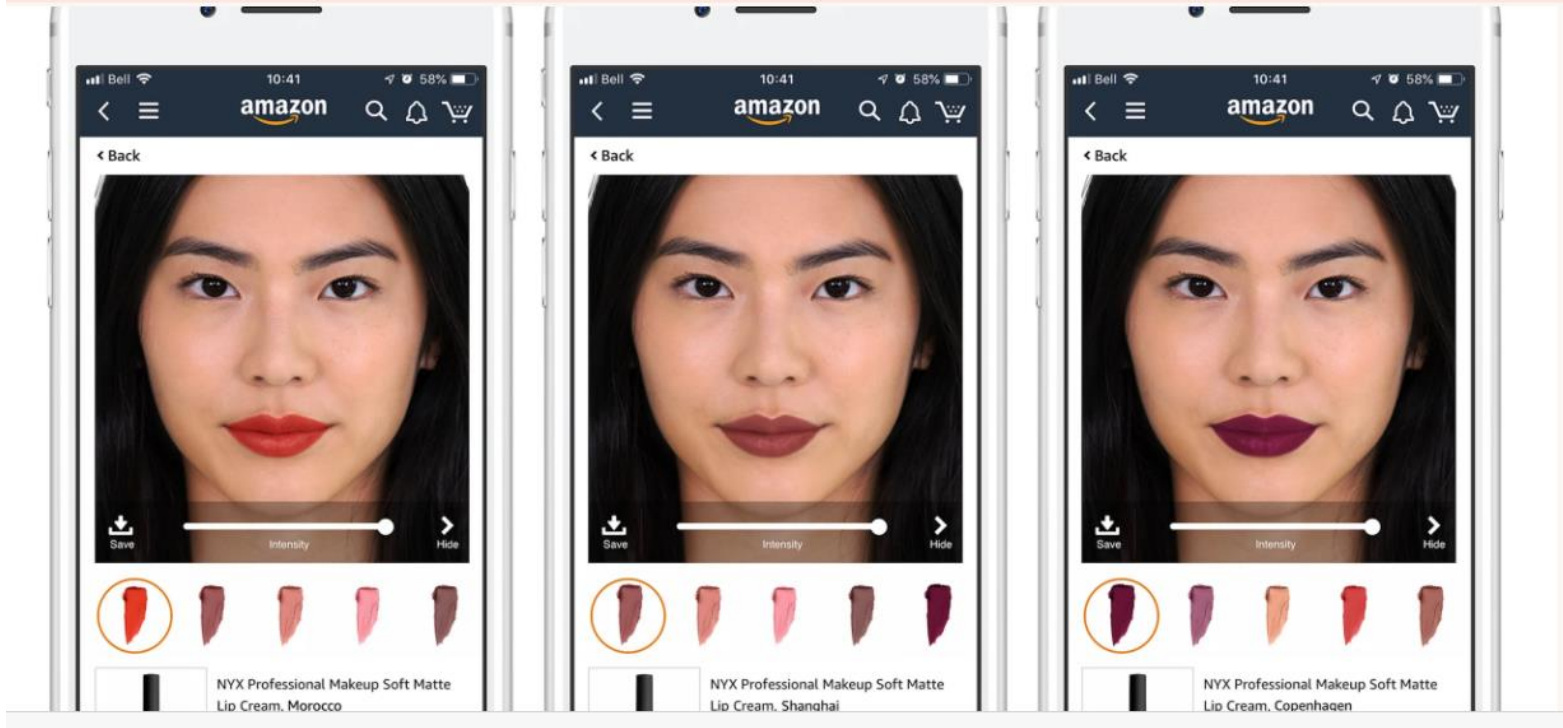
# Technology can further enhance the customer experience

## L'Oréal and Amazon Just Rolled Out a Virtual Makeup Try-on Functionality

The technology means you can actually find the perfect shade, then get it ASAP with two-day shipping.

BY LEAH PRINZIVALLI

June 4, 2019



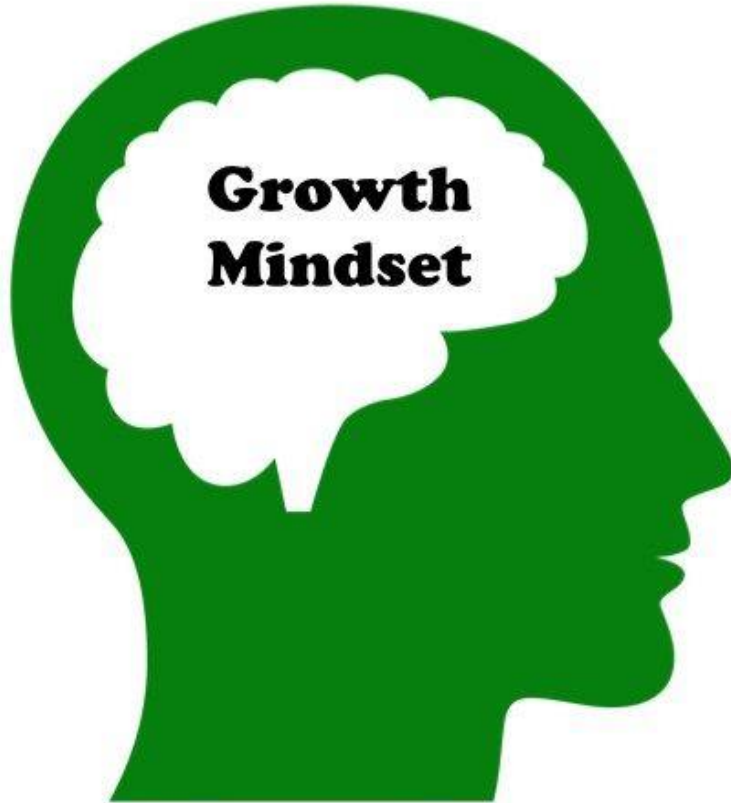
Having a good understanding of technology helps you see things in a different perspective.



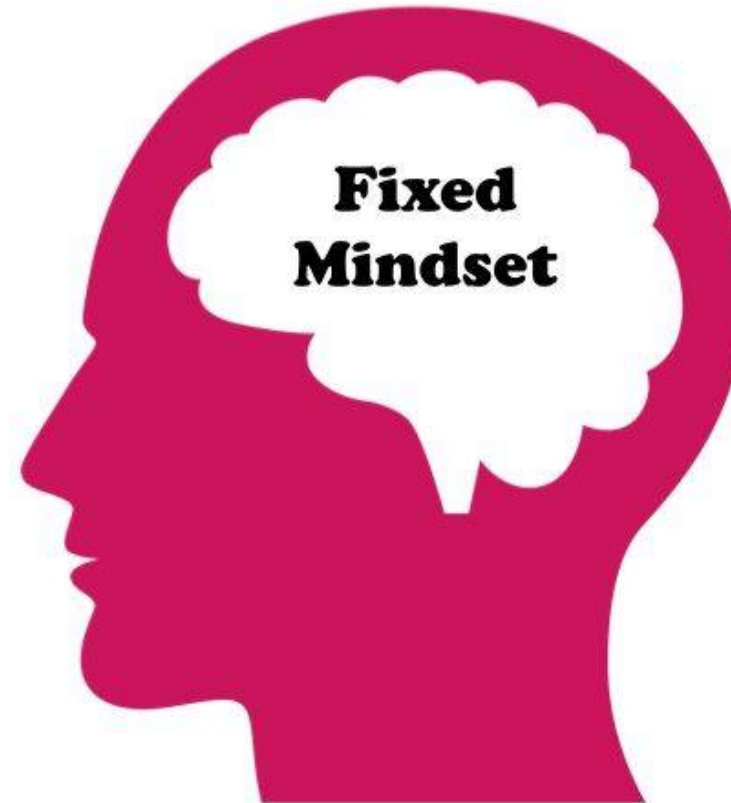
There are a lot of FREE courses online, you only need to invest time and effort..

The screenshot shows a web browser window with the URL <https://docs.microsoft.com/en-us/learn/>. The page features a blue header with the Microsoft logo and navigation links for 'Learn', 'Learning Paths', 'Certifications', and 'FAQ & Help'. A search bar is located in the top right corner. Below the header, a large blue banner contains the text 'WELCOME TO Microsoft Learn' and 'Introducing a new approach to learning'. A paragraph follows: 'The skills required to advance your career and earn your spot at the top do not come easily. Now there's a more rewarding approach to hands-on learning that helps you achieve your goals faster. **Earn points, levels, and achieve more!**' To the right of this text is a white box with a blue border promoting the 'Introduction to Azure' course. The box includes a '101' icon, the course title 'Introduction to Azure', and 'Module - 8 Units'. Below this, it says 'Get started with Azure by creating and hosting a new website in Azure.' and features a blue button labeled 'Start learning for free >'. Underneath the banner, there are three tabs: 'Learning paths', 'Hands-on learning', and 'Learn for free'. The 'Start learning today' section contains the text 'Up your game with a module or learning path tailored to today's developer and technology masterminds and designed to prepare you for industry-recognized Microsoft certifications.' and a dropdown menu labeled 'Select your role'. To the right of this text is a decorative graphic of interconnected icons representing various learning paths. At the bottom, the 'Learn Azure' section is visible, with the text 'Explore more advanced Azure topics with online courses.' and three placeholder boxes for course cards.

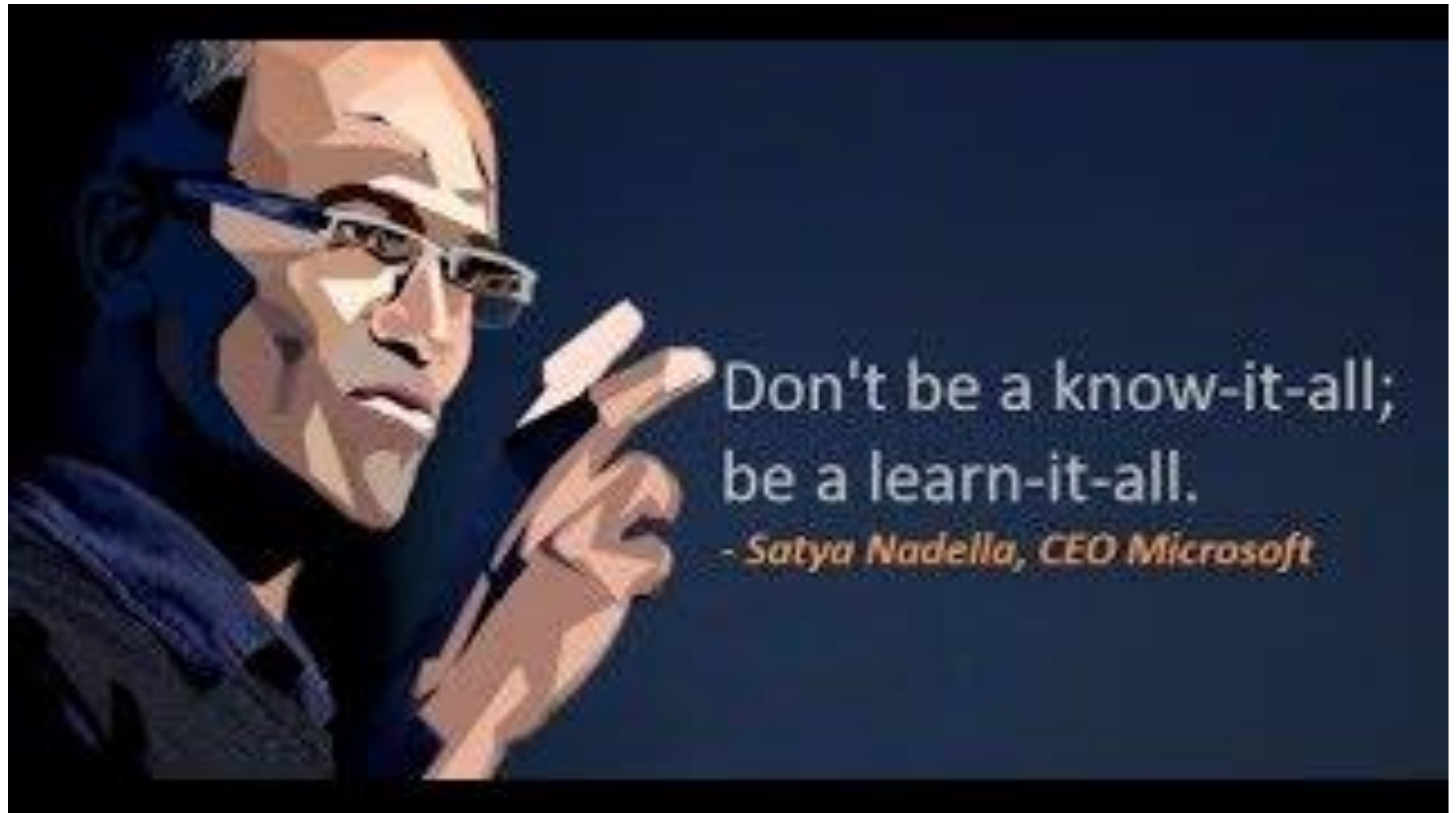
# What Kind of Mindset Do You Have?



I can learn anything I want to.  
When I'm frustrated, I persevere.  
I want to challenge myself.  
When I fail, I learn.  
Tell me I try hard.  
If you succeed, I'm inspired.  
My effort and attitude determine everything.



I'm either good at it, or I'm not.  
When I'm frustrated, I give up.  
I don't like to be challenged.  
When I fail, I'm no good.  
Tell me I'm smart.  
If you succeed, I feel threatened.  
My abilities determine everything.



Don't be a know-it-all;  
be a learn-it-all.

- *Satya Nadella, CEO Microsoft*

**NETFLIX**

**It's your learning journey**

**BLACK  
MIRROR  
BANDERSNATCH**



Thank you!

**Paolo Balinas**

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Paolo Balinas

