

Digital Technologies in Education

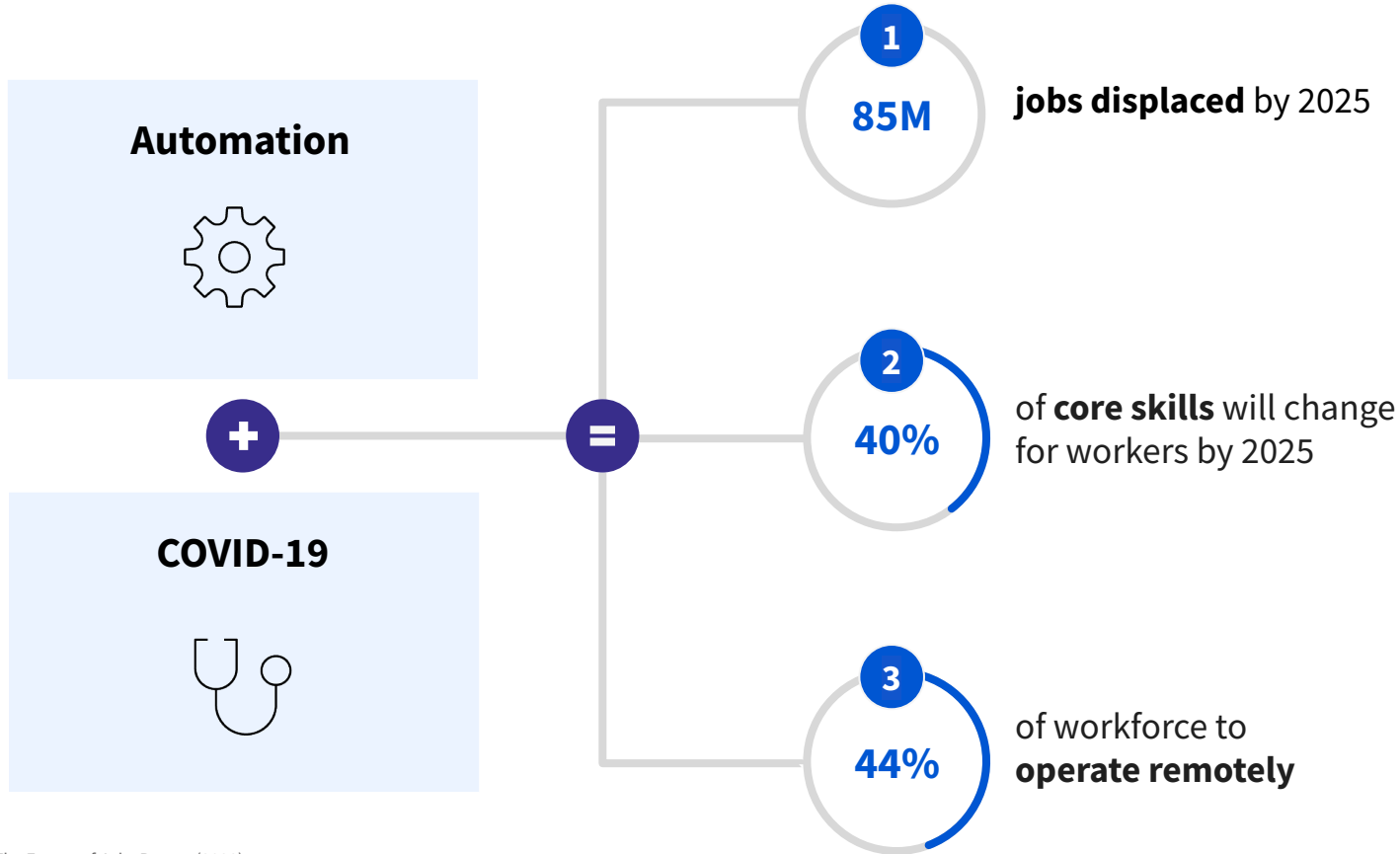


Eduard Kan

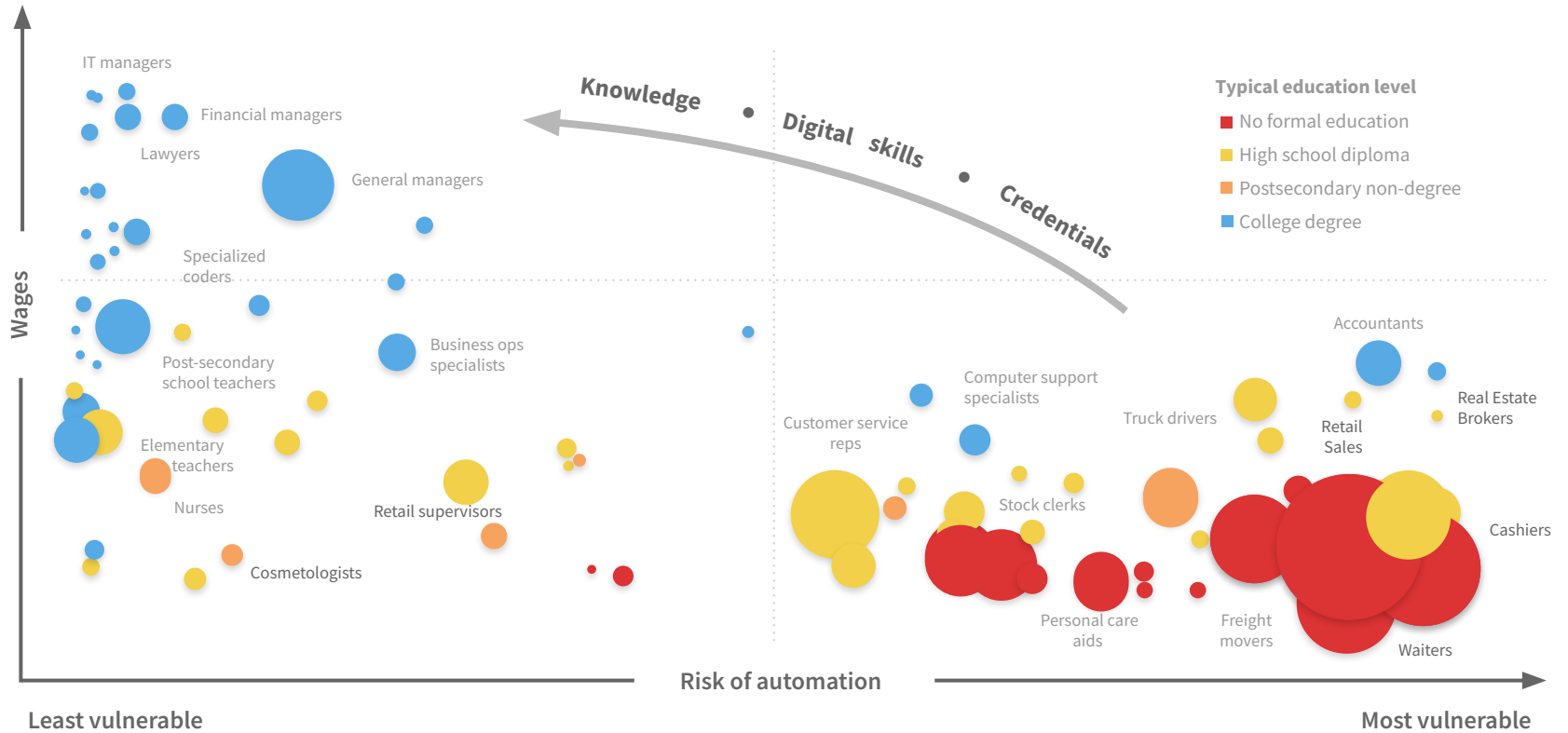
Business Development Director,
Central Asia



The pandemic triggered a 'double disruption' in the world



1 Low-skilled jobs are at the risk of automation



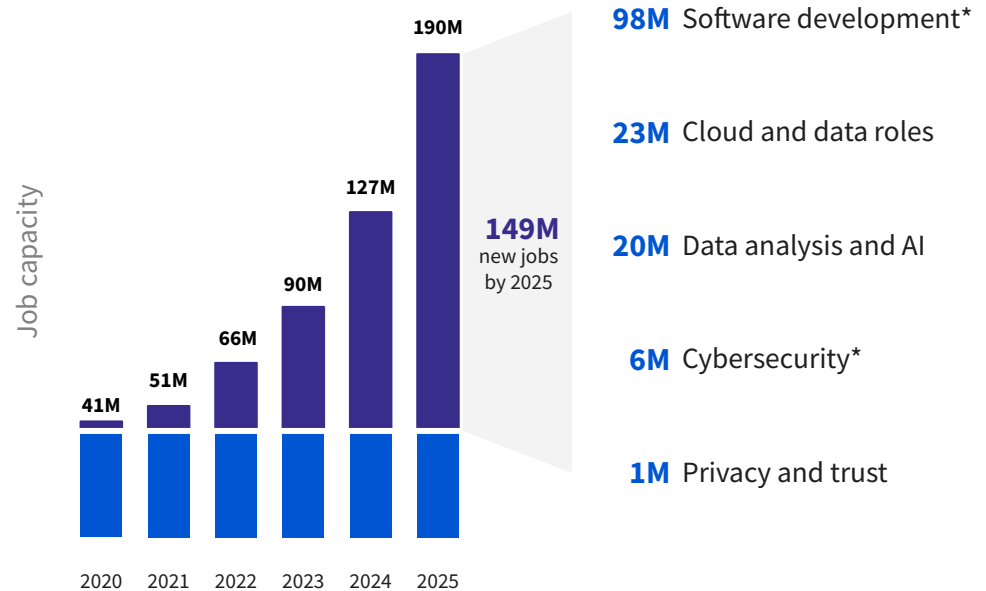
2 Most emerging job opportunities require digital skills

Top 10 jobs with increasing demand

- 1 Data Analysts and Scientists*
- 2 AI / ML Learning Specialists
- 3 Big Data Specialists
- 4 Digital Marketing and Strategy Specialists*
- 5 Process Automation Specialists
- 6 Business Development Professionals*
- 7 Digital Transformation Specialists
- 8 Information Security Analysts*
- 9 Software / Application Developers*
- 10 Internet of Things Specialists

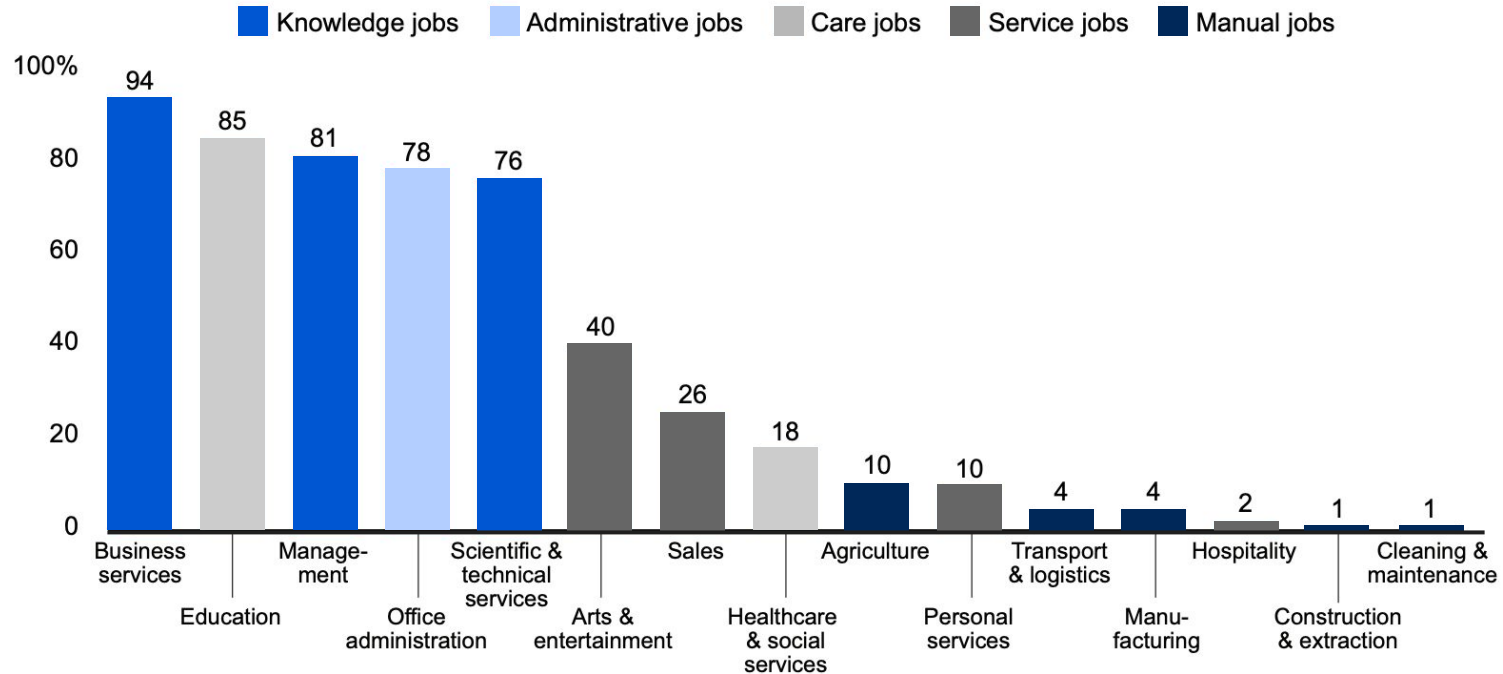
Note: Asterisk denotes entry-level jobs as calculated using Burning Glass data as of April 20, 2022
 Sources: WEF, Future of Jobs Report, Oct. 2020; Microsoft Data Science, June 2020

Digital job capacity from 2020-2025







3 Demand for skills is driving **remote work across industries**

Tasks that can technically be performed remotely by occupation



Note: Remote work potential based on scoring of more than 2,000 underlying activities across approximately 900 occupations; activities are weighted based on the importance to each occupation. Sources: ONET; BLS; Bain analysis

Today's young people differ from yesterday's

	 B Baby boomer 1940–59	 X Gen X 1960–79	 Y Gen Y (millennial) 1980–94	 Z Gen Z 1995–2010
Context	<ul style="list-style-type: none"> • Postwar • Dictatorship and repression in Brazil 	<ul style="list-style-type: none"> • Political transition • Capitalism and meritocracy dominate 	<ul style="list-style-type: none"> • Globalization • Economic stability • Emergence of internet 	<ul style="list-style-type: none"> • Mobility and multiple realities • Social networks • Digital natives
Behavior	<ul style="list-style-type: none"> • Idealism • Revolutionary • Collectivist 	<ul style="list-style-type: none"> • Materialistic • Competitive • Individualistic 	<ul style="list-style-type: none"> • Globalist • Questioning • Oriented to self 	<ul style="list-style-type: none"> • Undefined ID • “Communaholic” • “Dialoguer” • Realistic
Consumption	<ul style="list-style-type: none"> • Ideology • Vinyl and movies 	<ul style="list-style-type: none"> • Status • Brands and cars • Luxury articles 	<ul style="list-style-type: none"> • Experience • Festivals and travel • Flagships 	<ul style="list-style-type: none"> • Uniqueness • Unlimited • Ethical

Source: [McKinsey Research, 2018](#)

McKinsey&Company



“[There is a] **mismatch** between the skills that are coming out of colleges and what the skills are that we believe we need in the future.”



Tim Cook,
CEO, Apple

Sustainable student recruitment has never been more pivotal

Increasing **student enrollment** is
becoming increasingly competitive.



Student decision-making has changed

The ROI of a degree program
is now a key priority when
choosing a university.

Traditional recruitment methods no
longer work.

92%

Of international students said **employability skills** was either “very important” or “important” when choosing a university in the UK.

#3

 most important factor

Career preparation is **the 3rd most important factor** in university choice, after academic strength and affordability.

Employability drives enrollment

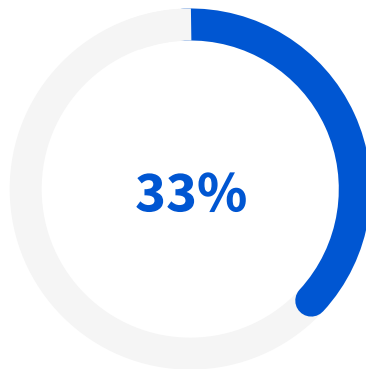
73%

of students surveyed said an important factor of their post-high school path was whether there is a **direct path to a career**.

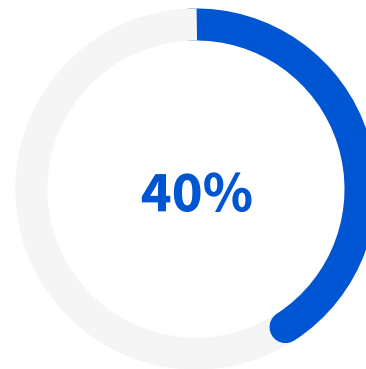
2x

International students who feel their courses have not covered employability skills are two times more likely to pick a **different institution** to do the **same course**

Universities can do better



Only 1 in 3 students believe they will graduate with the skills to be **successful in the job market**



Only 4 in 10 students feel very or extremely **prepared for their future careers**

Sources: [Strada-Gallup 2017 College Student Survey](#), [McGraw Hill 2018 Future Workforce Survey](#)

Industry is taking note, and pushing some students to go beyond degree programs to increase career prospects

“

The future is less about credit accumulation and **much more about skill acquisition**, which puts us in a good place to marry career technical education with new pathways to careers.

– **Madeline Pumariega**,
president of Miami Dade College

↓ **23%**

Less than half of students are considering attending a four-year college, which is **down 23 % from May 2020** (71% -> 48%)

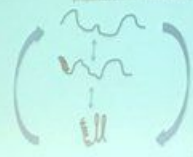
58%

of high schoolers surveyed in 2021 believe a skill-based education (e.g., trade skills, nursing, STEM, etc.) makes sense in today's world



Why do we see these patterns?

In a two state system - all intermediates convert effectively instantly between the unfolded and folded states. In other words, the intermediate(s) exist too briefly to detect and their properties are not measurable under equilibrium



Thus any observed rate constants for a folded state will follow the same order as a 2 state being transition

What is the best path forward to attract career-focused students?

Thank you!

Get started with Coursera Career Academy:

<https://bit.ly/career-academy-coursera>

