Microsoft

The Implications of Artificial Intelligence for Jobs and Skills

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We are living in a changed world.

Rapid advancement in technology is changing how we live, how we work, and how we learn

Place the regulator line in position at the inlet and outlet ports.
Attach the regulator line to both ports simultaneously using the captured threaded collars on the line.
Step 11 of 15
Assets
Arrows

NEW NORMAL

The **problem** we need to solve now

A global economic crisis

Returning to a different economy

An intensified skilling challenge

NEW OPPORTUNITY

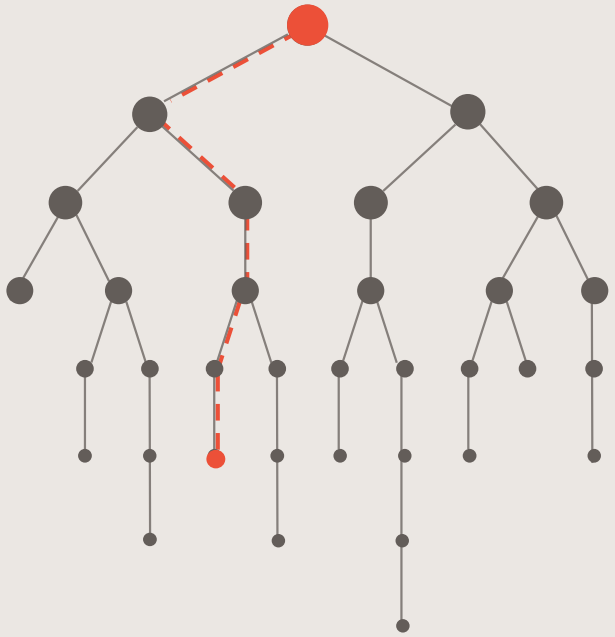
How could AI change the nature of work in Asia?

3x

the productivity benefits

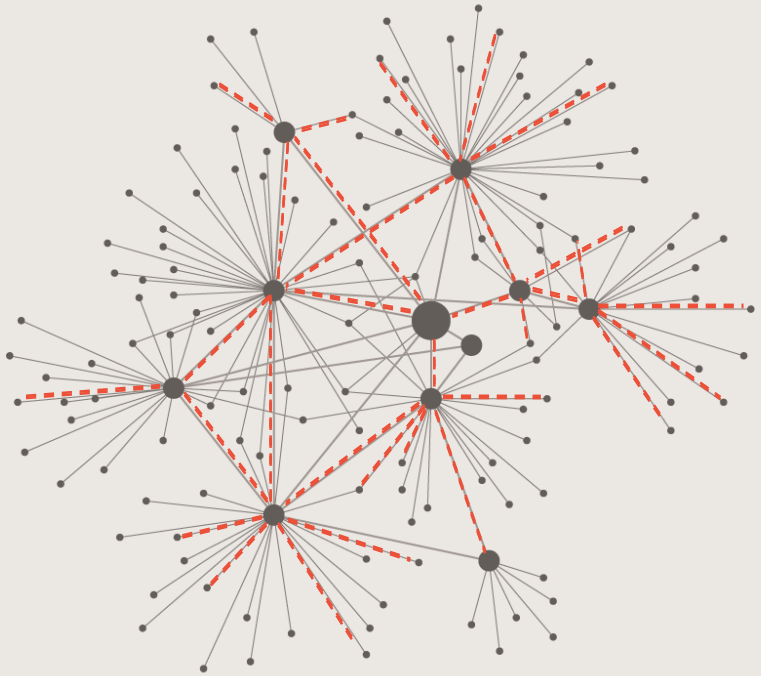
Traditional, non-digital sectors such as healthcare are expected to reap up to three times the productivity benefits from AI to digital sectors

Resource : AlphaBeta "Preparing for AI" July 2019



TRADITIONAL HIERARCHIES

INFORMATION MOVES SLOWLY
COMMAND AND CONTROL



RESPONSIVE NETWORKS

INFORMATION TRAVELS FAST
LEARN AND ADAPT

How could AI change the nature of work in Asia?

10%

Increased real wages

Displaced workers have the potential to improve their wages if they manage to secure jobs with lower risk of substitution by AI technologies or new AI-supporting roles

Resource : AlphaBeta "Preparing for AI" July 2019

How could AI change the nature of work in Asia?

56%

struggle to find new jobs

There are rising concerns that AI could force Asian manufacturing workers to compete for a diminishing supply of low-skilled work, pushing them into a "race to the bottom"; a study indicates that that 56% of manufacturing workers in Cambodia, Indonesia, Thailand, the Philippines and Vietnam face this risk

Resource : AlphaBeta "Preparing for AI" July 2019

How could AI change the nature of work in Asia?

93 mil.

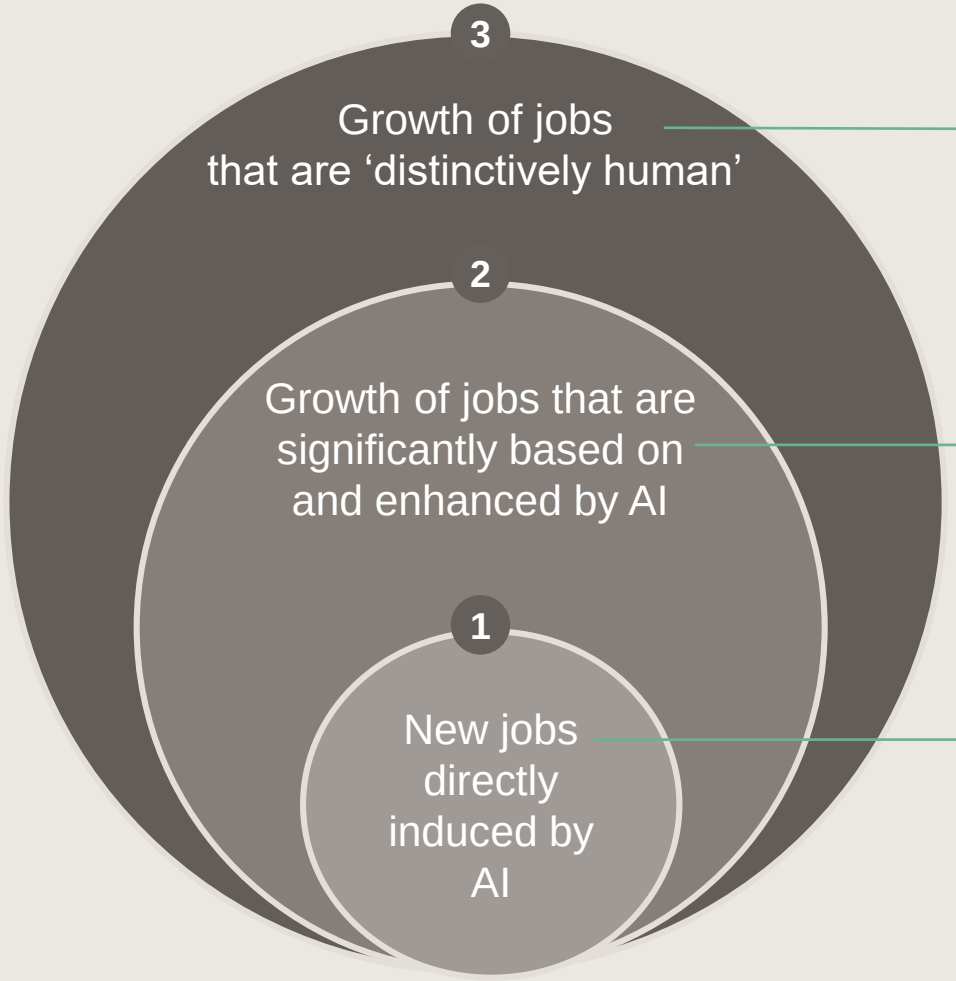
New job opportunities will be created =

The income effect of AI could more than offset its displacement effect to lead to net job gains; a study in China estimated an overall 12% increase in jobs by 2037

Resource : AlphaBeta "Preparing for AI" July 2019

over 2018-2022 period1 (%)

Projected distribution of in-demand job positions in an AI economy



58% Interpersonal, creativity or strategic decision-making roles
e.g., Customer service workers, innovation managers, strategy development officers

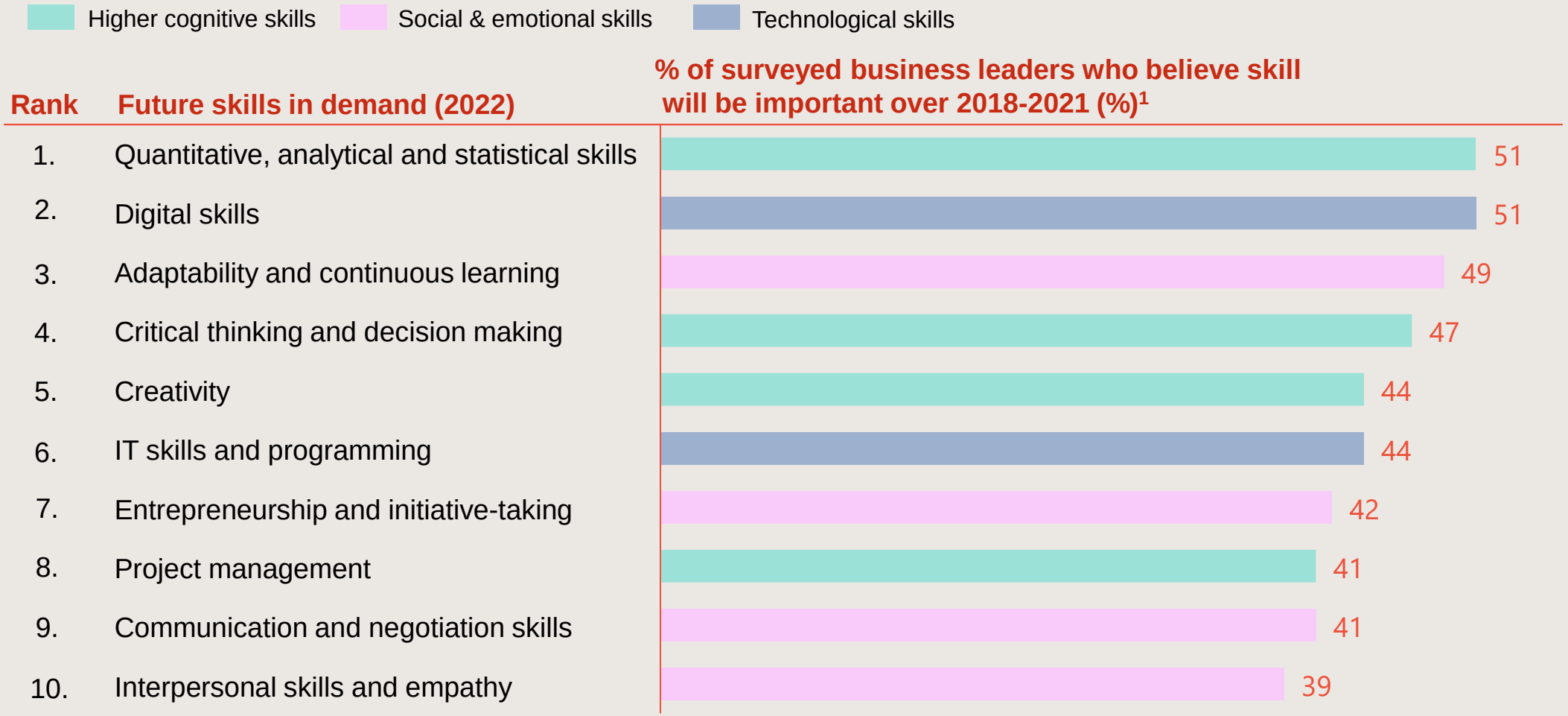
25% Roles that require the use of AI technologies in day-to-day tasks
e.g., Data analysts and scientists, software and applications developers

17% Roles that directly support the development of AI technologies
e.g., AI and machine learning specialists, big data specialists, process automation experts

1. The projected distribution of in-demand job positions in an AI economy was proxied based on thepercentage breakdown of job roles that the WEF survey reflected would have “new” and “stable” demand by employers to 2022.
SOURCE: World Economic Forum (2018), *Future of jobs 2018 report*, AlphaBeta analysis

over 2018-2022 period1 (%)

Top ten ‘in-demand’ skills identified by business leaders in APAC



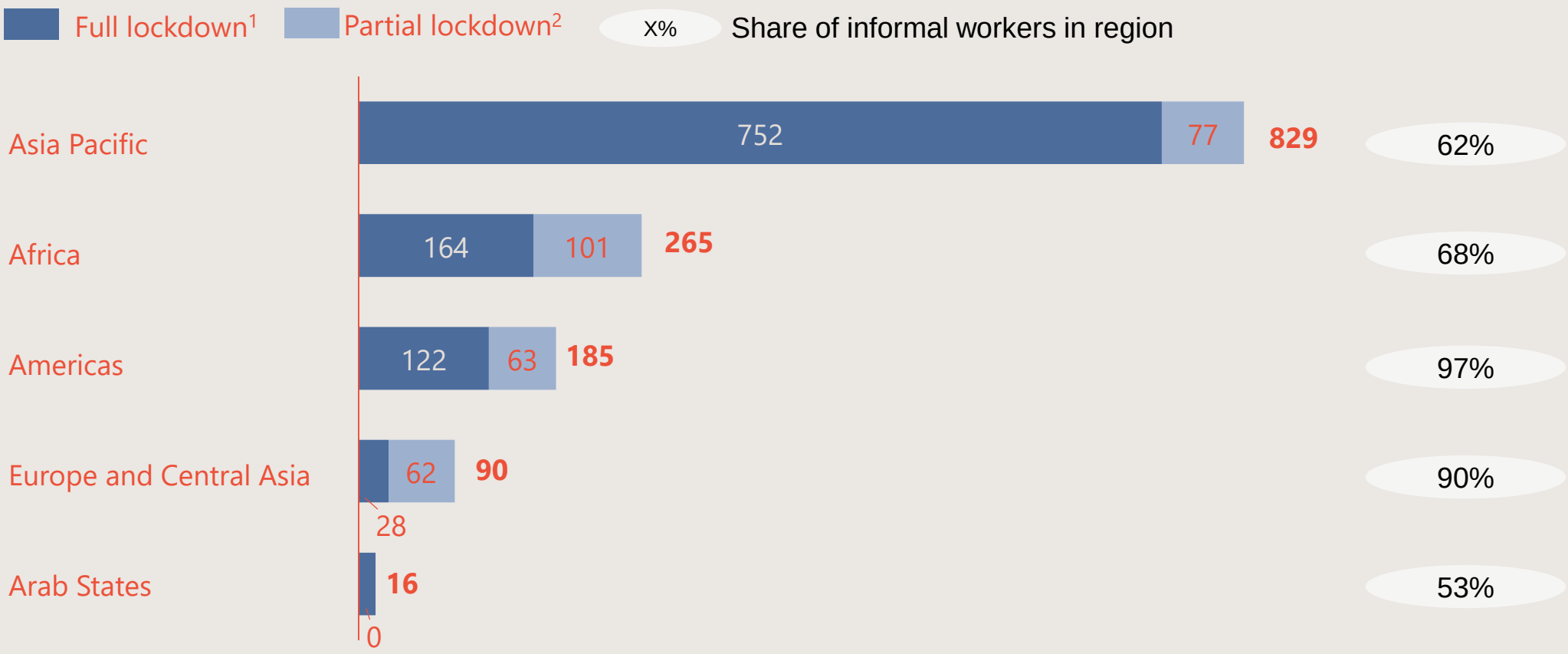
1. 1,605 business leaders in the Asia Pacific region were surveyed. They were asked the question, “Which of these skillsets do you see most commonly available in the workforce today, and which do you think is most needed 3 years from now in the AI-enabled workplace?” 15 countries were included in the survey: Australia, China, Hong Kong, India, Indonesia, Japan, New Zealand, the Philippines, Malaysia, Singapore, South Korea, Sri Lanka, Taiwan, Thailand and Vietnam.
SOURCE: Microsoft-IDC survey (2018); AlphaBeta analysis

COVID-19 has dramatically accelerated this change.

as of 29 April 2020

Number of informal workers in countries with lockdown measures by workers

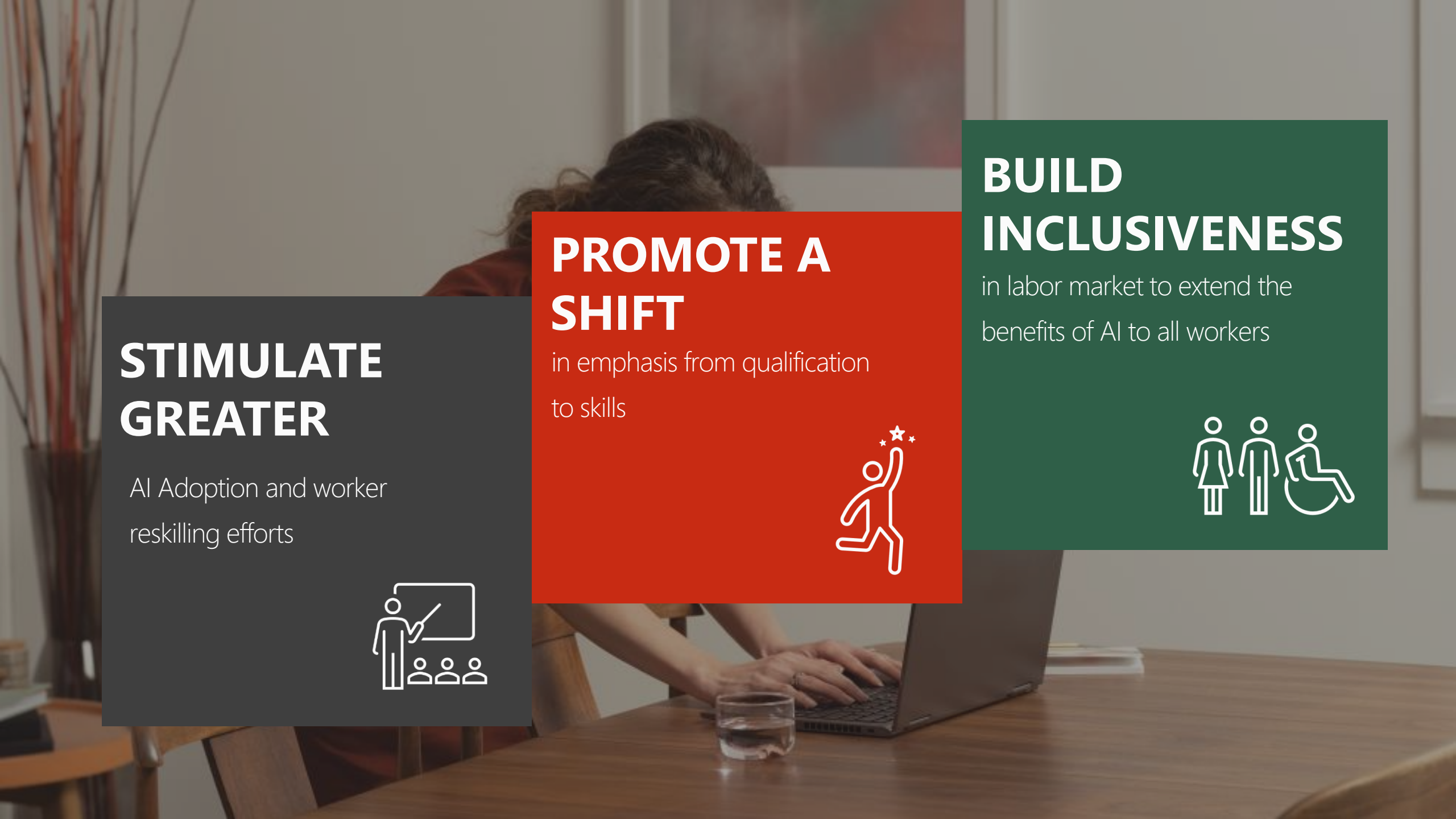
Workers, millions



1. Full lockdown: These are countries that have taken three measures, namely, (a) mandatory workplace closure, (b) mandatory internal travel controls (i.e., restriction on the internal movement of citizens); and (c) mandatory shutdown of public transport.
2. Partial lockdown: At least one of the three measures have been taken.

SOURCE: International Labour Organization, *COVID-19 and the World of Work* (29 April 2020); AlphaBeta analysis

Microsoft
Workplace Innovation
Place
Workstyle Innovation
Culture
Workforce Innovation
People



STIMULATE GREATER

AI Adoption and worker reskilling efforts

PROMOTE A SHIFT

in emphasis from qualification to skills

BUILD INCLUSIVENESS

in labor market to extend the benefits of AI to all workers

Asking more of ourselves and of fellow employers

Set learning commitments for current employees

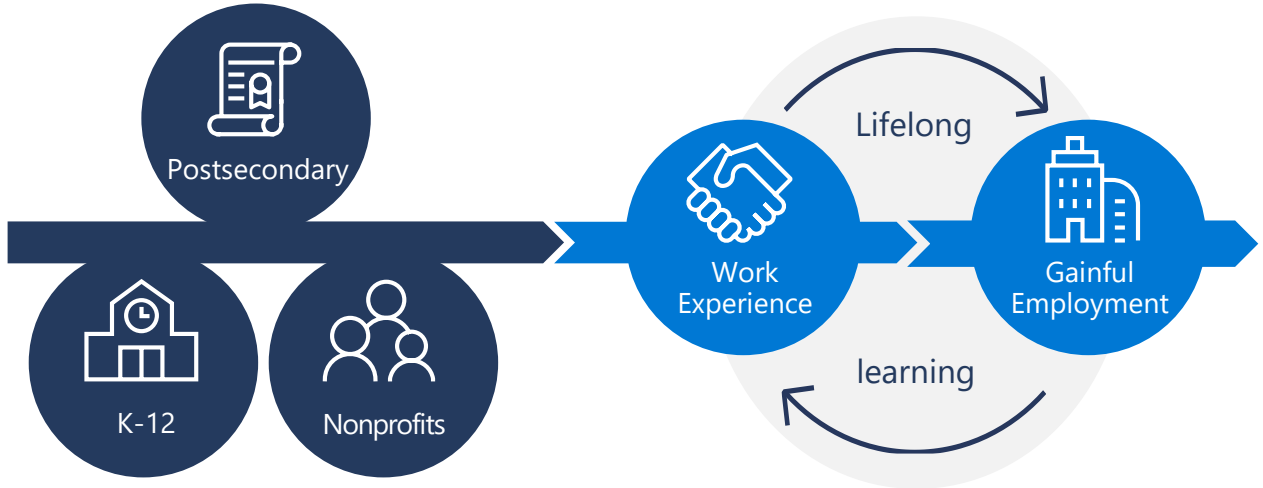
Offer work-based learning programs for people with non-traditional back grounds

Use practices to hire based on skills versus education

Beyond Microsoft :

Our approaches on Skills for Employability

Help individuals can learn 21st century skills and create pathways to better careers.



Skills for Employability Resources

Online courses

- Microsoft Digital Literacy
- Code.org courses and Minecraft Hour of Code
- Microsoft MakeCode
- Microsoft Minecraft: Education Edition
- Microsoft Learn
- LinkedIn Learning

Skills-based hiring

- Skillful Career Coaching Resources
- Skillful Job Posting Generator

Industry data

- LinkedIn Economic Graph
- Credential Engine

Microsoft
Reinventing Productivity with AI
Thank You