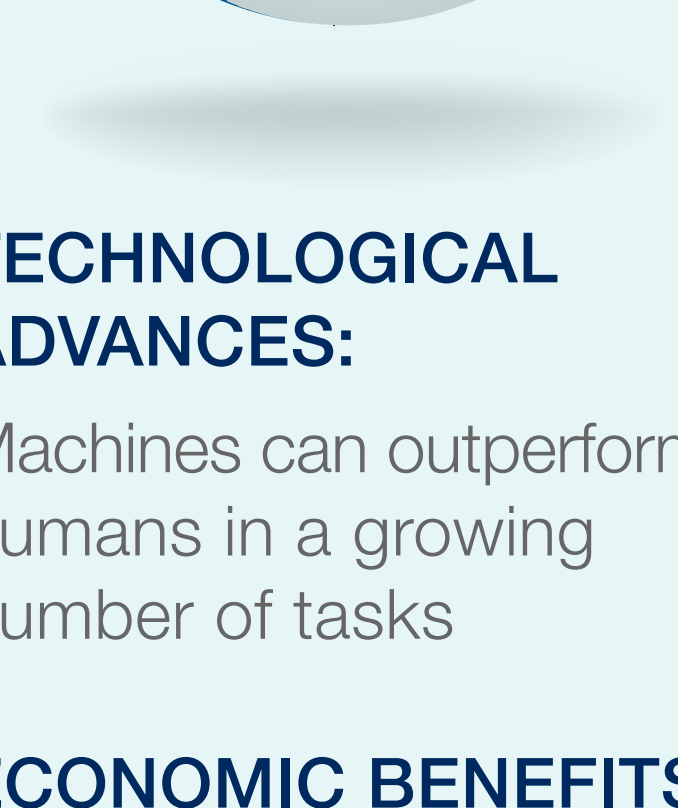


THE FUTURE OF JOBS IN THE KINGDOM OF SAUDI ARABIA (KSA):

THE IMPACT OF AI AND AUTOMATION ON THE FUTURE OF WORK

Several forces are leading to a rise in AI and automation ...

GLOBAL



LOCAL



TECHNOLOGICAL ADVANCES:

Machines can outperform humans in a growing number of tasks

ECONOMIC BENEFITS:

AI and automation can improve productivity, increase efficiency and quality, and reduce labor costs

GROWTH TARGETS:

Productivity must increase rapidly to achieve Vision 2030 targets

INNOVATION GOALS:

KSA strives to expand advanced technologies and entrepreneurship

... and this shift will impact KSA's economy

Automation technology is increasingly affecting a wide range of work activities, not only low-skill occupations

Routine-task intensive sectors like manufacturing have a technical automation potential greater than 50%.

41% of existing work activities in KSA are theoretically automatable today

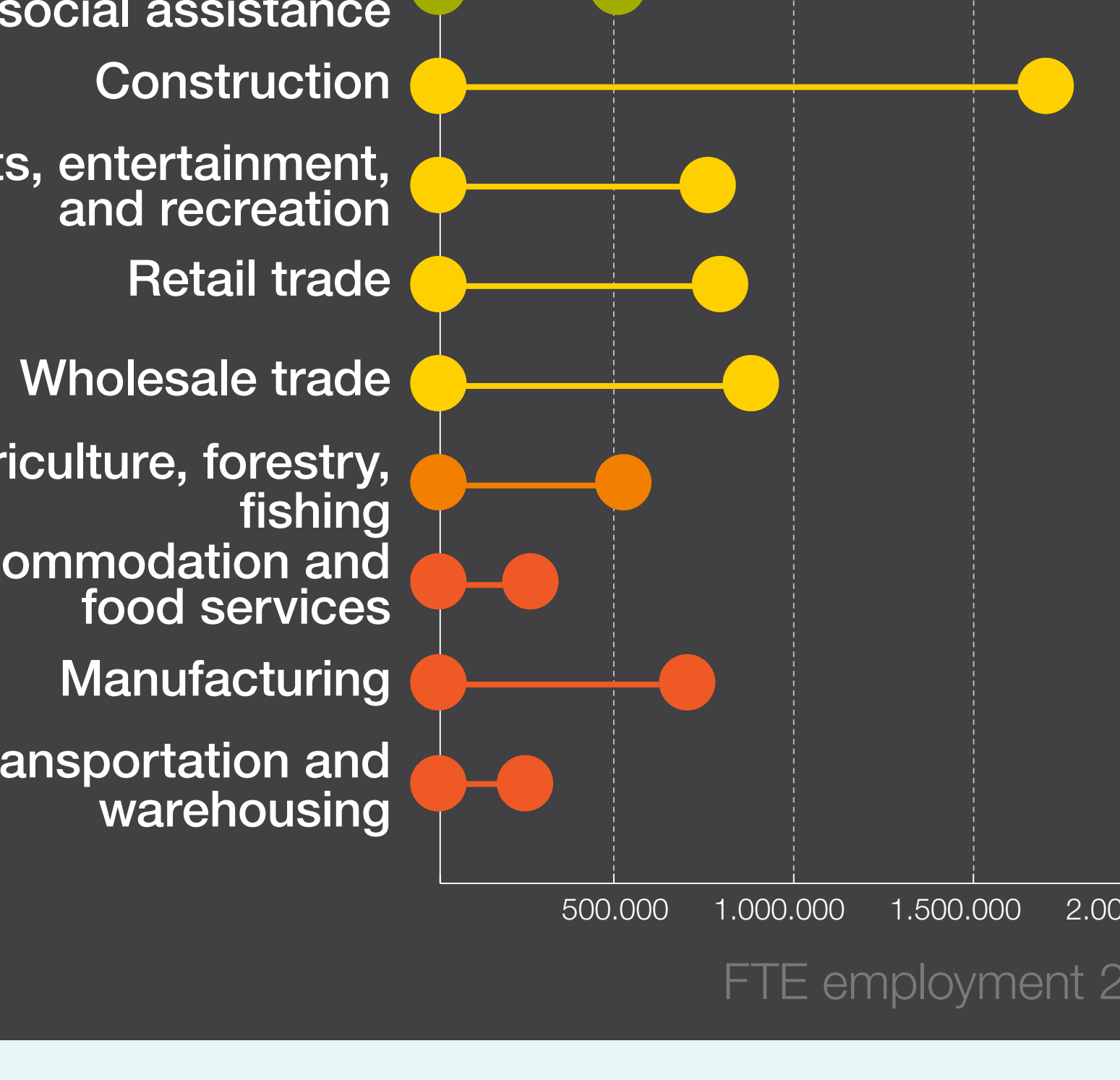
TECHNICAL POTENTIAL FOR AUTOMATION¹

Ability to automate (%)



BY JOB ZONE² IN KSA

FTE EMPLOYMENT 2016, %



BY SECTOR IN KSA



FTE employment 2016

Occupations vary in their automation potential³, but some work activities of most occupations have the potential to be automated today

Occupations requiring more creative, complex, and human-interaction activities are more difficult to automate today

AUTOMATION POTENTIAL³ BY OCCUPATION IN KSA

% OF WORK ACTIVITIES

25%

Financial analyst, teacher, legislator, engineer

Home health aide, dental assistant

Physicist, pharmacist, counselor, landscaper

Carpenter, electrician, fire-fighter, police, barber

Mechanic, service technician, maintenance worker

Travel agent, cashier, lawyer, judge

Actuary, statistician, pilot, farmer

Baker, waiter, butcher

Receptionist, courier, typist

Welder, machine operator

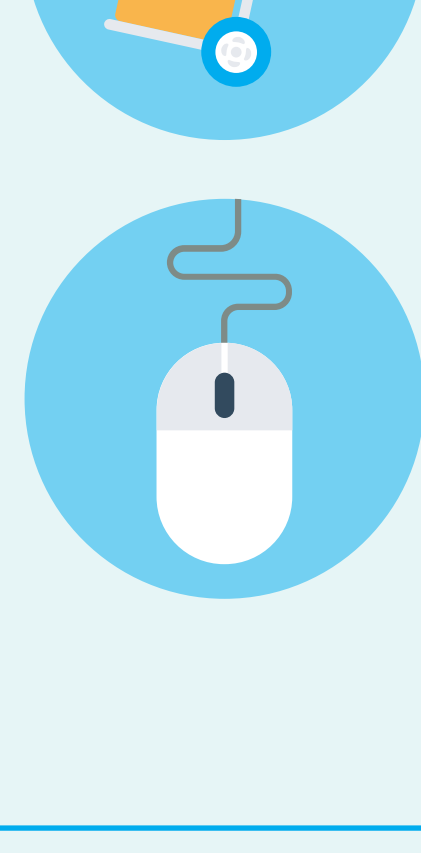
65%

3 We define automation potential according to the work activities that can be automated by adapting currently demonstrated technology

Saudis can focus on developing skills that complement the rise of AI and automation...

CERTAIN SKILLS WILL BECOME MORE IMPORTANT THAN OTHERS AS AI AND AUTOMATION ARE ADOPTED

MORE IMPORTANT



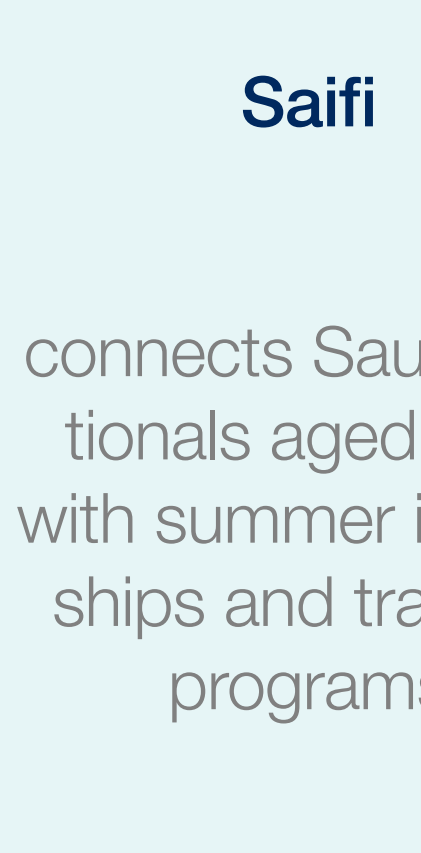
HIGHER COGNITIVE

- Creativity
- Complex information processing and interpretation



SOCIAL AND EMOTIONAL

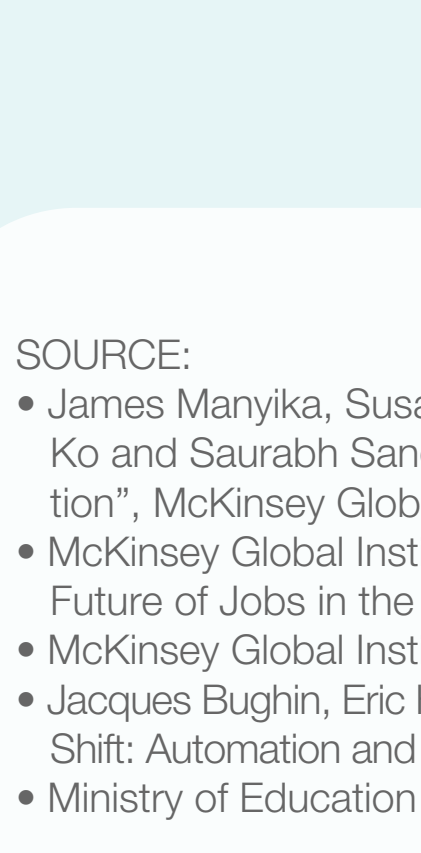
- Entrepreneurship and initiative taking
- Leadership and managing others



TECHNOLOGICAL

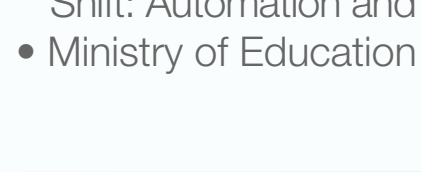
- Advanced IT skills
- Basic digital skills

LESS IMPORTANT



PHYSICAL AND MANUAL

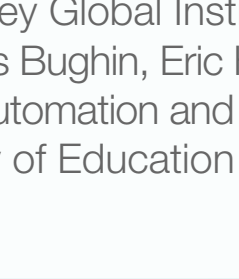
- General equipment operation and navigation
- Inspecting and monitoring



BASIC COGNITIVE

- Basic data input and processing
- Basic literacy, numeracy, and communication

The government offers support through several initiatives



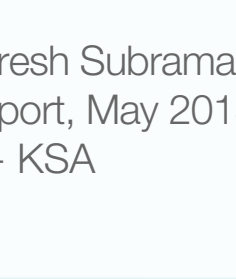
Saifi

connects Saudi nationals aged 17+ with summer internships and training programs



My Scholarship, My Job

supports Saudi students in finding jobs in KSA and sponsors overseas studies



Doroob

offers free online courses to help Saudis develop work skills

To learn more, read our report "The Future of Jobs in the Middle East"

SOURCE:
 • James Manyika, Susan Lund, Michael Chui, Jacques Bughin, Jonathan Woetzel, Parul Batra, Ryan Ko and Saurabh Sanghvi "Jobs Lost, Jobs Gained: Workforce Transitions in the time of Automation", McKinsey Global Institute Report, December 2017.
 • McKinsey Global Institute analysis, Jan Peter aus dem Moore, Vinay Chandran, Jorg Schubert "The Future of Jobs in the Middle East", January 2018.
 • McKinsey Global Institute analysis
 • Jacques Bughin, Eric Hazan, Susan Lund, Peter Dahlstrom, Anna Wiesinger, Amresh Subramaniam "Skill Shift: Automation and the Future of the Workforce", McKinsey Global Institute Report, May 2018.
 • Ministry of Education in Saudi Arabia, Human Resources Development Fund - KSA