
The Future of Work in the Fourth Industrial Revolution

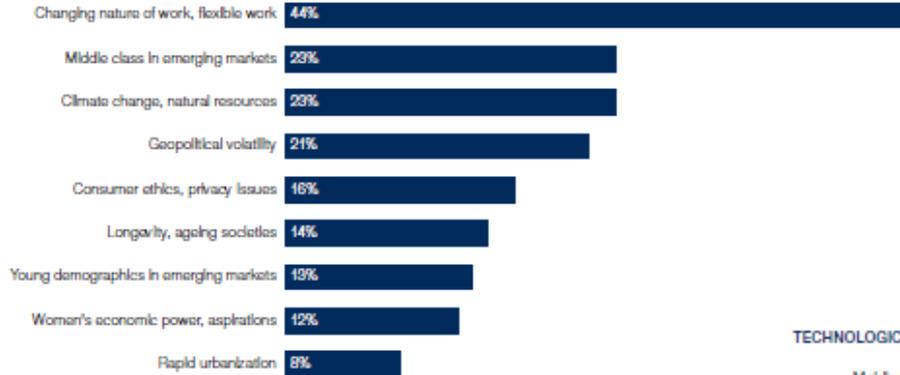
Saadia Zahidi

World Economic Forum

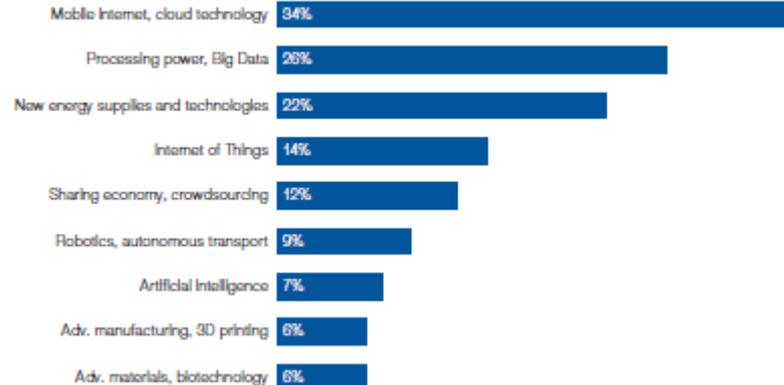
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Drivers of change

DEMOGRAPHIC AND SOCIO-ECONOMIC



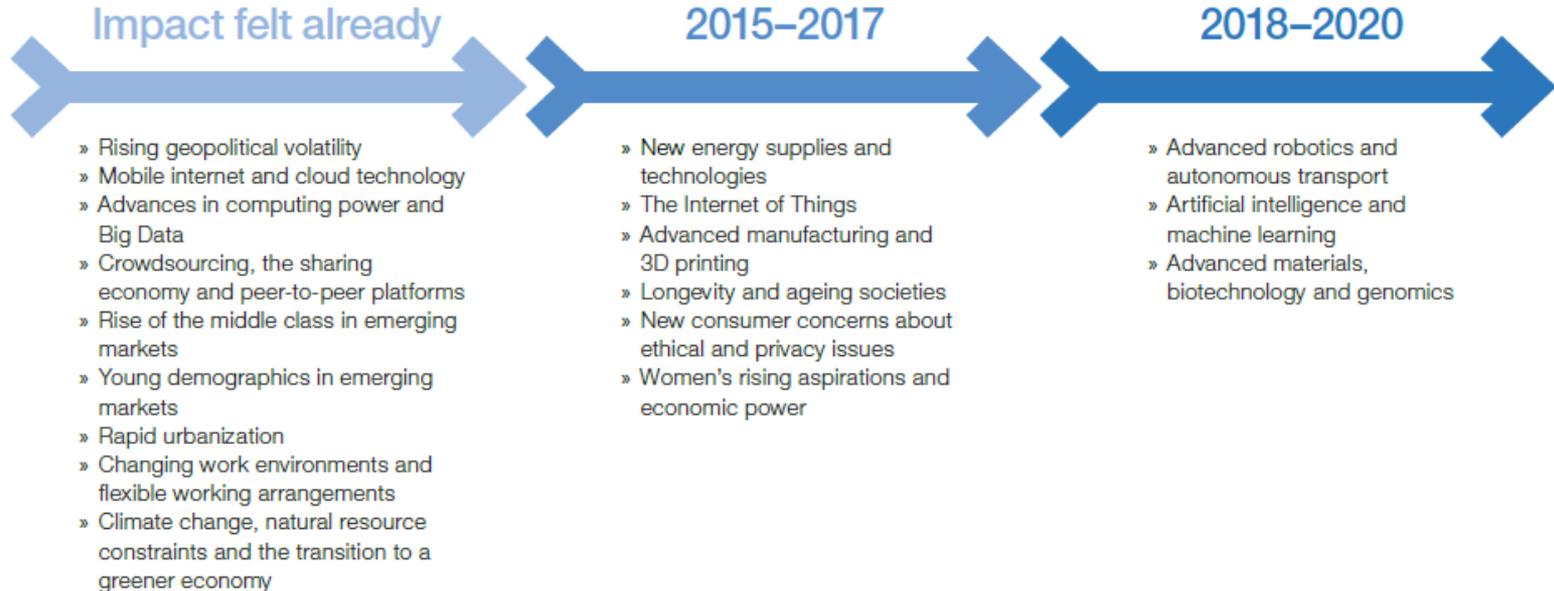
TECHNOLOGICAL



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Most changes are already here

Timeframe to impact industries, business models



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Multiple predictions

- **There are many growing sectors and job families:** ICT sector, education sector, healthcare sectors, green energy sector, infrastructure, green jobs in all sectors, STEM and ICT jobs in all sectors, new work formats.
- **But there is also a broader risk of automation:** 47% of all US jobs are susceptible to automation, as are 46% in Saudi Arabia, 45-65% in Europe, 77% in China and 69% in India.
- **Machines will augment humans:** Australian workers have acquired 2 extra hours a week for creative, interpersonal and information synthesis tasks.
- **Skills instability will go up in all jobs as tasks change:** Whether jobs are declining, stable, growing or augmented, they are going through major changes to their skills profiles.

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Skills instability



35% of core skills will change between 2015 and 2020

Disruption across countries and industries

43%	Financial Services & Investors	48%	Italy
42%	Basic & Infrastructure	42%	India
39%	Mobility	41%	China
		41%	Turkey
		39%	South Africa
		39%	Germany
		38%	France
		37%	Mexico
35%	Information & Communication Technology		
33%	Professional Services	31%	Brazil
30%	Energy	29%	United States
30%	Consumer	28%	United Kingdom
29%	Health	27%	Australia
29%	Health	25%	Japan
27%	Media, Entertainment & Information	21%	Gulf Cooperation Council
		19%	ASEAN

average
disruption

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A greater premium on “human” skills?

in 2020

1. Complex Problem Solving
2. Critical Thinking
3. Creativity
4. People Management
5. Coordinating with Others
6. Emotional Intelligence **NEW**
7. Judgment and Decision Making
8. Service Orientation
9. Negotiation
10. Cognitive Flexibility **NEW**

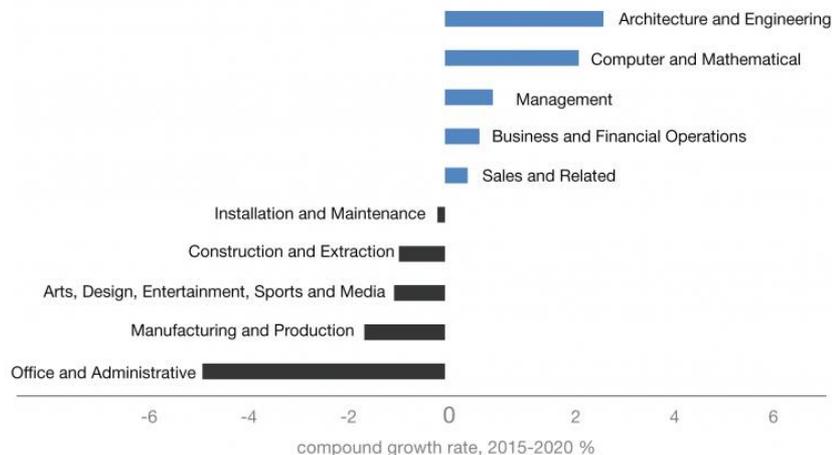
in 2015

1. Complex Problem Solving
2. Coordinating with Others
3. People Management
4. Critical Thinking
5. Negotiation
6. Quality Control
7. Service Orientation
8. Judgment and Decision Making
9. Active Listening
10. Creativity



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A gendered impact?



Job family	Share of women
Architecture and Engineering	11%
Computer and Mathematical	23%
Management	25%
Business and Financial Operations	43%
Sales and Related	41%
Installation and Maintenance	8%
Construction and Extraction	10%
Arts, Design, Entertainment, Sports and Media	48%
Manufacturing and Production	20%
Office and Administrative	54%

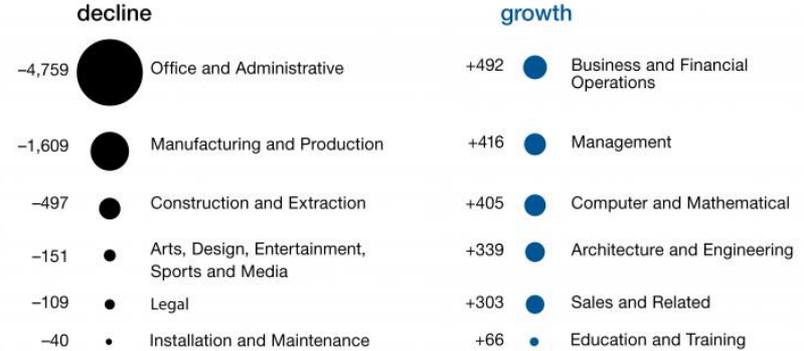
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A double bind for leaders

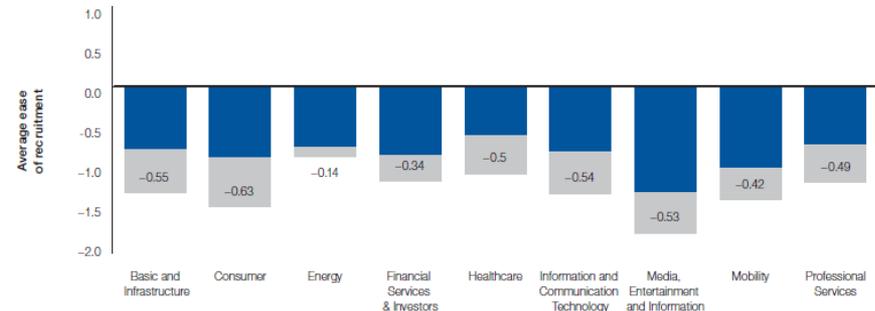
Job displacement and growth

Skills instability and talent scarcity

Jobs change in thousands, 2015-2020



Perception rating on a -2 ("very hard") to +2 ("very easy") scale

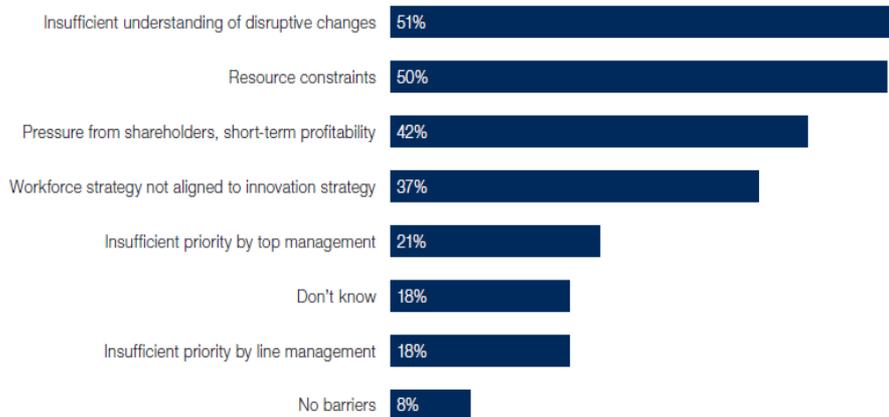


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Are businesses preparing for the future?

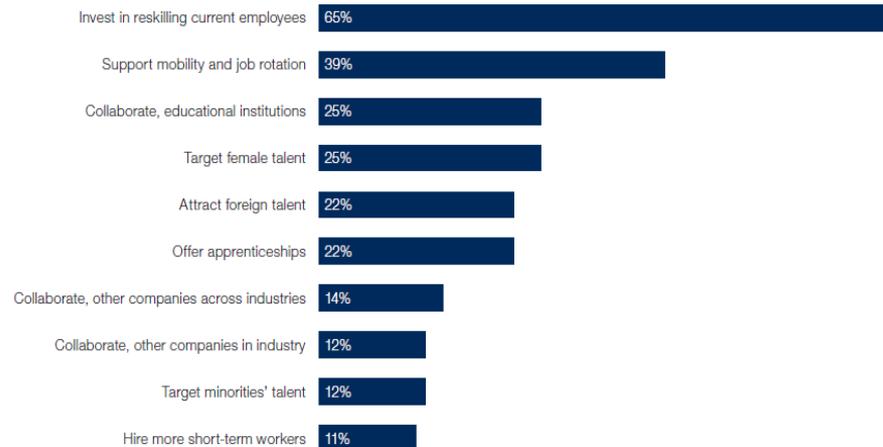
Barriers

Share of respondents reporting barrier, %



Existing Strategies

Share of respondents pursuing strategy, %



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Reskilling pathways

Which industries can share data analysts?

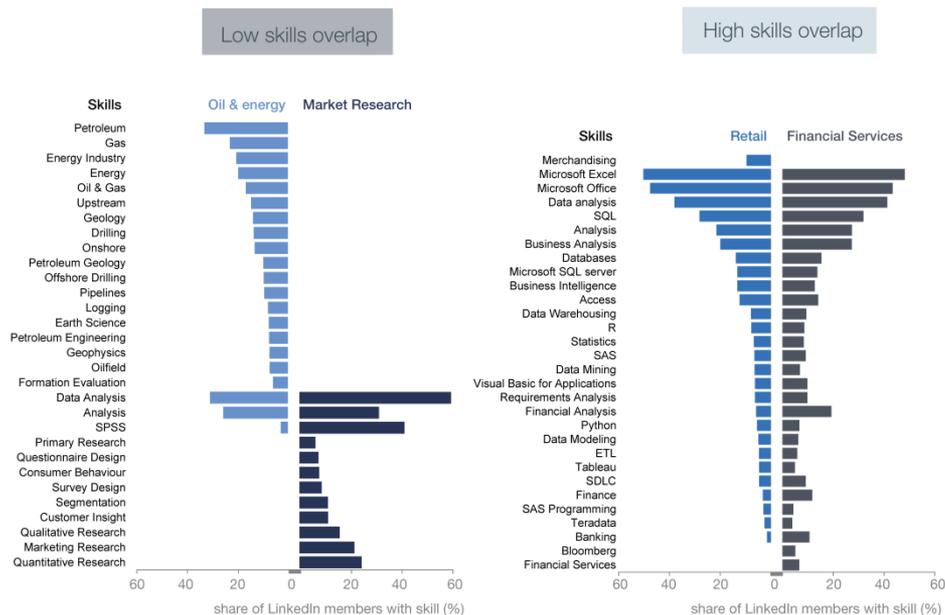


Table 2(a): Job titles with high skills transferability across industries

High skills transferability	Skills-transferability score
HR Business Partner	0.94
Web Developer	0.92
Digital Marketing Specialist	0.91
Network Engineer	0.90
Network Administrator	0.90
Accountant	0.90
Web Designer	0.87
Registered Nurse	0.87
Financial Controller	0.87
Software Developer	0.86
Lawyer	0.85
Graphic Designer	0.85
System Administrator	0.84
Journalist	0.84
IT Project Manager	0.82
Financial Analyst	0.82
Bookkeeper	0.82
Social Media Manager	0.80
Psychologist	0.80
Software Engineer	0.78

Table 2(b): Job titles with low skills transferability across industries

Low skills transferability	Skills-transferability score
Deputy	0.11
Consultant	0.14
Superintendent	0.17
Technologist	0.18
Contractor	0.19
Technician	0.20
Project Manager	0.22
Lecturer	0.22
Inspector	0.22
Engineer	0.27
Doctor	0.27
Designer	0.28
Coach	0.28
Strategist	0.29
Mechanic	0.29
Sales Representative	0.31
Product Manager	0.31
Developer	0.31
Author	0.31
Investigator	0.33

Source: LinkedIn.
 Note: For each job title, a lower score indicates that different industries require different skill sets; a higher score indicates that different industries require similar skill sets. Scores normalized on a scale from 0 to 1

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System Initiative Overview



	Education & Skills Reshape education for tomorrow's workforce and impart new skills to today's workforce.	Gender Parity Help leaders develop mechanisms to close economic gender gaps.	Work & Employment Understand the changing nature of work and help regions/industries adapt to the future.
Impact Platform for collaborative, multi-stakeholder action for impact	Closing the Skills Gap Project	Closing the Gender Gap Project	The Future of Work Project
	<ul style="list-style-type: none"> • Adult Reskilling/Upskilling • Technical and Vocational Training (TVET) • Higher Education • Basic Education 	<ul style="list-style-type: none"> • Shifting Norms and Mindsets • Women in High Growth sectors • Closing Wage Gaps • Proven Gender Policies and Practices 	<ul style="list-style-type: none"> • Reskilling and Job Transition Maps • Future of Work Scenarios • Toolkits for Businesses • Toolkits for Policy Makers
Dialogues Developing consensus and setting priorities	<ul style="list-style-type: none"> • A New Deal for Lifelong Learning • Reforming TVET 	<ul style="list-style-type: none"> • Accelerating Gender Parity in High Growth Sectors • Shifting mindsets 	<ul style="list-style-type: none"> • Jobs of the Future • Social safety Nets for New Labour markets • Promise of mass entrepreneurship
	<ul style="list-style-type: none"> • The Human Capital Report • New Vision for Education Framework 	<ul style="list-style-type: none"> • The Global Gender Gap Report • The Industry Gender Gap Report 	<ul style="list-style-type: none"> • The Human Capital Report • The Future of Jobs Report
Knowledge & Thought Leadership Supporting informed debates and action	<ul style="list-style-type: none"> • Future of Jobs and Skills Reports for Africa, MENA and Europe 		