

Title: Workforce of the future: The competing forces shaping 2030

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#### Introduction (detailed):

The report explores how automation, artificial intelligence, robotics and other technological advances are fundamentally transforming the workplace and the skills that organizations need in their workforce. It aims to provide insights to help governments, businesses, and individuals understand the disruptive changes ahead and proactively prepare for multiple potential futures of work in 2030 and beyond.

The report explains that the future of work will be shaped by complex, competing forces including the pace of technological innovation, shifts in demographics, climate change impacts, and the interplay between fragmentation and consolidation of corporate power. The decisions humans make in response to these forces will determine the worlds of work that emerge.

#### Methods (detailed):

- Analysis of global megatrends that are reshaping business and society, including rapid technological advances, climate change, urbanization, demographic shifts and changes in global economic power.
- Survey of 10,029 members of the general population in China, India, Germany, UK and USA regarding their views on the future of work and automation.
- Development of four hypothetical "Worlds of Work" scenarios for 2030 to explore different potential futures that could emerge depending on how the influential forces and megatrends interact and how humans respond to them. The four worlds are: 1) Innovation-focused "Red World", 2) Corporate-dominated "Blue World", 3) Socially-responsible "Green World", and 4) Human-centric "Yellow World".
- Interviews with business leaders on strategies for navigating the technological and workplace changes ahead.

#### Key Findings (detailed):

- Automation, artificial intelligence, robotics and other technologies will transform the

workplace between now and 2030 by automating many routine, repetitive tasks. This will increase demand for human skills like creativity, innovation, leadership, empathy and emotional intelligence.

- Survey found 33% globally are worried about automation putting jobs at risk. 74% are willing to learn new skills or retrain to stay employable.
- The four Worlds of Work scenarios explore different potential futures driven by different forces: 1) Innovation-focused "Red World", 2) Corporate-dominated "Blue World", 3) Socially-responsible "Green World", and 4) Human-centric "Yellow World". Elements of all four worlds could emerge in different regions.
- Individuals will need adaptability and willingness to continuously learn new skills, retrain and reinvent themselves throughout their careers to stay relevant as jobs and technologies change. Lifelong learning will become essential.
- Organizations need strategies to plan for multiple potential futures of work, focus business decisions on clear purpose and values, thoughtfully embrace technology for productivity, and significantly invest in uniquely human skills like creativity, empathy and problem-solving.

Recommendations (detailed):

For governments:

Collaborate with business and society to develop responsible policies and governance for automation and AI's impact on jobs, such as the Partnership on AI created by the US and large tech companies.

Explore solutions like universal basic income to address unemployment from displacement by technology, as Finland has trialed. However, early results show minimal benefits to employment.

For individuals:

Understand how technology is transforming work and prepare for multiple future scenarios, as surveys show most people in countries like the US fail to grasp the scale of upcoming disruption.

Focus on adaptability, willingness to retrain, and human skills like creativity and empathy. Countries like Singapore have national SkillsFuture schemes that provide credit for retraining courses.

For organizations:

Make 'no regrets' moves like clarifying values, planning for multiple futures, and investing in human capabilities. Companies like AT&T have retrained nearly half their workforce in new

skills like data science and cybersecurity to transition employees.

Embrace technology thoughtfully to enhance productivity but also focus on uniquely human strengths. Policies like Germany's Work 4.0 initiative aim to shape adoption of tech to enhance, not replace, human work.

For collaboration:

Governments, organizations and society need to work together to develop policies that harness automation and AI responsibly for the benefit of all, as the EU, governments and companies have committed to in the Pledge for the Future of Work.

But coherence between policies, research and public views is often lacking, as seen in the UK's uncoordinated initiatives across sectors.

Limits (detailed):

- The scenarios approach means predictions about the workforce in 2030 are hypothetical. The exact future is unpredictable.
- The survey provides useful snapshot of perceptions but not definitive representative views.
- The focus is primarily on more developed economies like US, Europe, China. Issues and outcomes may differ significantly for developing countries.

Conclusion (detailed):

Workplace disruption through automation, AI and technology is already underway and accelerating globally. While the exact future is uncertain, governments, organizations and individuals all need to make efforts to understand the changes ahead and proactively develop strategies to harness these technologies in a responsible way that benefits society. Adaptability, skills development and employment support policies will be critical. Since the technological impacts will not be the same everywhere, readiness and foresight today will help determine who gains and who loses from the future of work.

Potential Advantages:

- The scenarios could help Qatar start thinking about and modeling different potential futures of work and skills needs. This foresight would allow more proactive policies and workforce planning.
- The survey results could be compared to perceptions of Qatar's population to gauge similarities/differences in views on automation's impact and upskilling needs. This can identify awareness gaps to be addressed.
- Adapting the scenarios to Qatar's context could aid in identifying upcoming skills gaps,

emerging roles and prepare educational institutions. The ILO has developed tools like Skills Towards Employability and Productivity (STEP) that can help match skills to future industry needs.

#### Potential Problems:

- Difficulty adapting the scenarios and findings to Qatar's unique situation as a wealthy developing country with a large migrant labor force concentrated in a few sectors. Findings may not transfer directly without customization.
- Survey perceptions on automation's impact may differ significantly in Qatar given the large migrant workforce. Surveys should sample all resident nationalities.
- Poor coordination across government, businesses and schools could lead to ineffective skills policies. Clear governance and collaboration mechanisms needed.

#### Recommendations:

- Partner with organizations like PwC to customize scenarios and policy recommendations tailored to Qatar based on in-depth data.
- Conduct surveys on automation's impact and willingness to retrain that target Qatar's full resident population. Consider multilingual versions.
- Create governance bodies with diverse representation from government, businesses, academic institutions and workers. Coordinate plans across entities.
- Invest in nationwide retraining and upskilling initiatives. Subsidize costs for citizens and residents. Incentivize businesses to retrain employees.
- Develop regional collaborations and share lessons learned with other Gulf countries undergoing similar transitions.

#### References:

- STEP Program: <https://www.ilo.org/skills/areas/skills-training-for-poverty-reduction/STEP/lang--en/index.htm>
- Governance in Education: Burns, Tracey, and Florian Köster, eds. Governing education in a complex world. Educational Research and Innovation, OECD Publishing (2016).