

Executive Brief

Automating Work: The Human/AI Intersection

**Workforce
Automation:**
Mind the Three Gaps

GAP ONE |
**The Organizational
Capability Gap**

GAP TWO |
**The Workforce
Motivation Gap**

GAP THREE |
**The HR
Readiness Gap**

Featuring insights from executives at:

 Microsoft

 DaVita

 Genentech

 IBM

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 citi

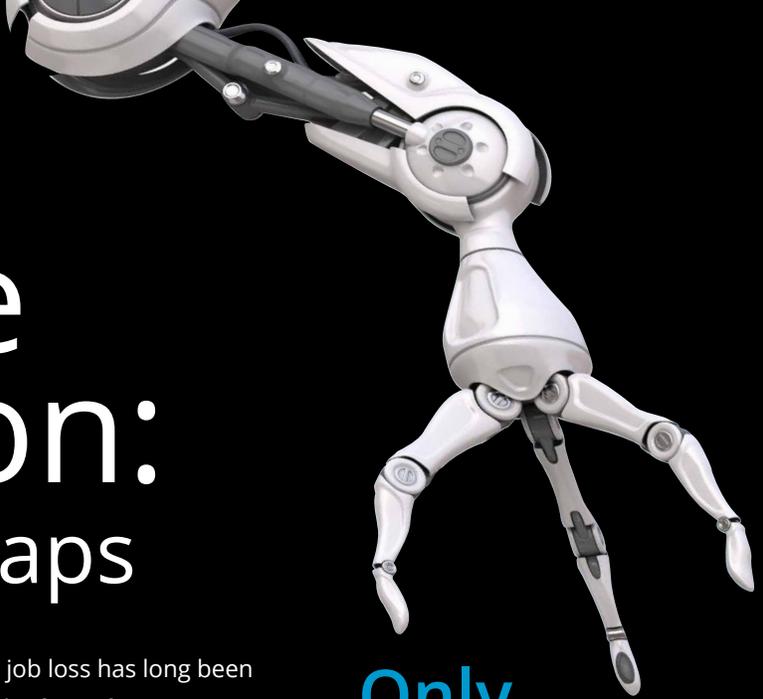
 TOYOTA

 Sam's
CLUB

 Walmart 

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Workforce Automation: Mind the Three Gaps



When it comes to automation in the workplace, concern about job loss has long been the primary cause of anxiety. Despite a history of evolution in the face of automation, headlines about robots and AI coming for our jobs often veer toward the apocalyptic.

For instance, the 2018 World Economic Forum *The Future of Jobs Report* suggested that 75 million jobs could be lost due to automation by 2022. But stories that stopped there missed the actual conclusion, as the same study suggested that 133 million new jobs could be created by 2022 as a result of the same technologies.

Beyond the whiplash created by successive studies and often contradictory interpretations, there are also ethical issues that arise from the use of automation, and especially AI. These range from privacy and security of people-centric data to potential legal liabilities; algorithmic bias; and the need for diverse perspectives in the creation, testing, and implementation of the technologies.

Produced at the request of i4cp member organizations, the study on advanced work automation and its impact on the future of work gathered data from over 1,700 organizations representing a variety of industries around the globe. Combined with the insights of HR leaders from top organizations, it shares the best and next practices for automation and AI that are currently in use, as well as what they are piloting and planning to work on next.

Key observations include:

- For most organizations, the use of AI and other advanced work automation is still in its early days with a lot of ongoing experimentation and pilots. While those citing greater usage also report greater range in application, high-performance organizations are seeing more, and a greater range, of benefits.
- Advanced automation will more often augment the work of humans or transform roles and create new work, rather than replace humans, even entry-level workers.
- Most organizations are not prepared for future automation, and significant gaps are evident in three core areas: organizational capability, workforce motivation, and HR readiness.

Only
19%

of survey respondents indicate that their organizations regularly use advanced work automation.

In the report, we reference **advanced work automation** as an umbrella term that includes the use of robotics, robotic process automation, artificial intelligence, machine learning, natural language processing, sentiment analysis, and so on.

NOT READY

MODERATELY READY

READY

The Three Gaps

1

A significant **organization capability gap** is looming, with few employers ready to handle the myriad changes automation introduces as well as the opportunities it offers, though high-performance organizations are more often deconstructing work, assessing talent risk, and upskilling/reskilling their employees.

2

A **workforce motivation gap** also exists, with high-performance organizations focusing more on practices that keep motivation high during this time of change: leadership communication, empowering employees to deconstruct their own jobs, and education on the range of ethical issues and unintended consequences involved with implementing automation and especially AI.

3

An **HR readiness gap** is headlined by a significant lack of confidence in HR to help lead the implementation of advanced work automation in organizations, although high-performance organizations are using automation and AI in talent acquisition, onboarding, L&D, and a few other areas of HR.

The report explores key highlights from both the survey data and interviews, which we used to create an **Advanced Work Automation and the Future of Work** maturity model. In the full report we also provide recommendations and specific *next practice* examples of how organizations and HR functions can move forward with advanced work automation.

Only **18%**

of survey respondents' organizations have the skills, knowledge, etc. needed for advanced work automation.

Only **12%**

are prepared to handle the employee motivation, communication, and ethical issues.

And only **19%**

have confidence that their HR departments are ready to lead in bringing advanced work automation to the organization.

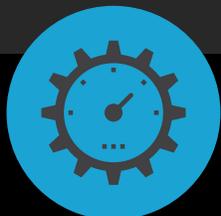
A Fourth Industrial Revolution

Like the three earlier revolutions, the fourth and current industrial revolution (first referenced by economist Klaus Schwab, founder of the World Economic Forum) is driven by a technological step-change.

Industry 1.0

Mechanization, steam power, weaving loom

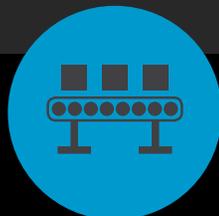
1784



Industry 2.0

Mass production, assembly line, electrical energy

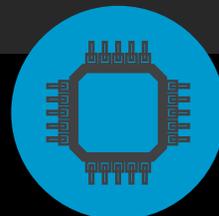
1870



Industry 3.0

Computers, the Internet, and smartphones

1969



Industry 4.0

Advanced automation, robotics, and AI

TODAY

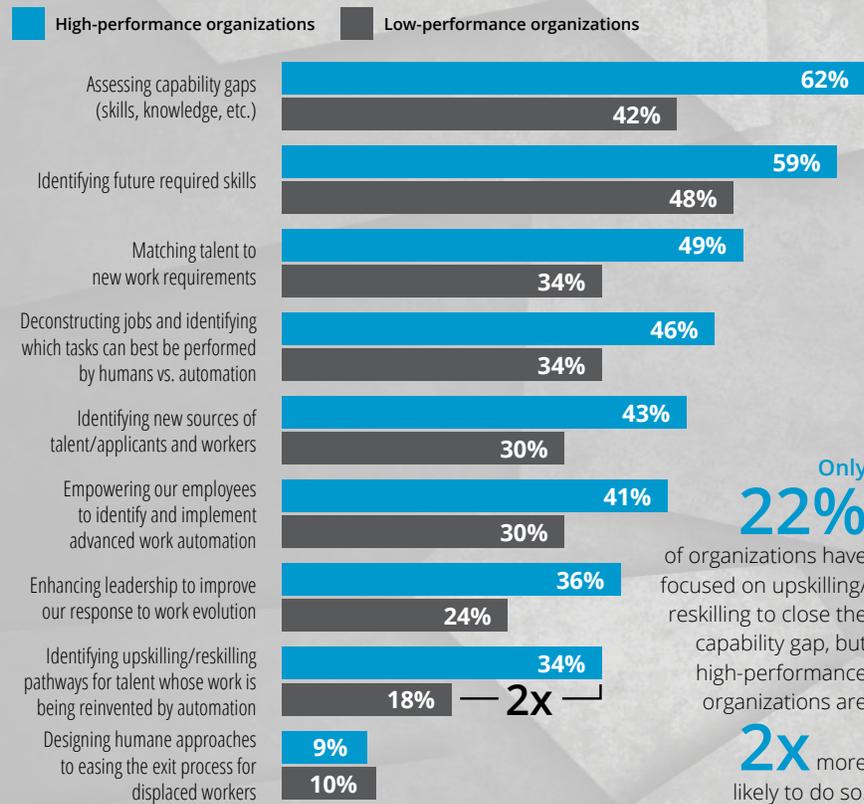




The Need for Upskilling and Reskilling

Advanced work automation will more often augment humans or transform roles rather than substitute for workers. And yet even among high-performance organizations, less than half reported taking actions beyond assessing capability gaps and identifying future skills. Among all organizations, less than one in three are identifying upskilling or reskilling pathways for talent whose work is being reinvented by automation.

Which of the following actions is your organization undertaking to prepare for advanced work automation?



Organizations with 1,000+ employees indicating high/very high extent. Source: i4cp

A TOOL TO HELP EMPLOYERS CREATE TRAINING PROGRAMS FOR SOFT SKILLS

SOFT SKILLS
Upskilling Planning Guide

Multi-attention continues to be paid to the need to increase skills in the labor force in the STEM areas (science, technology, engineering, and mathematics), and while such skills are crucial to the growth and sustainability of many organizations, so too are so-called soft skills, such as teamwork, communication, problem solving, and so on.

Soft skills are central to the success of an organization's overall mission, and help to deliver on its vision, values, and employer brand. Whether emboldening new employees, providing instruction on the performance of new processes, or updating customer service training to incorporate new technology, relevant soft skills should be woven into all aspects of workforce development.

Further, success in many organizational roles now and in the future will increasingly depend on such people skills as collaboration, adaptability, and networking. As many organizations move to critical, cross-functional teams, or project-based work, in step with the rise of automation and artificial intelligence, greater focus must be paid to those soft skills that only humans can develop—the capabilities that will continue to provide irreplaceable value to organizations.

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For a thorough seven-step process, see the *Soft Skills Upskilling Planning Guide*, created by i4cp in partnership with UpSkill America.

The 7 Steps of Workforce Planning
AI and Automation Edition

1. STRATEGY ANALYSIS
2. TALENT DEMAND ANALYSIS
3. RISK ANALYSIS
4. SUPPLY AND DEMAND ANALYSIS
5. ENVIRONMENTAL SCANNING
6. GAP ANALYSIS
7. TALENT MANAGEMENT STRATEGY

Workforce Makeup & Capabilities

For more on identifying future capability gaps, see i4cp's *The 7 Steps of Workforce Planning: AI and Automation Edition*.

Case Study

Automation at Walmart—whether online shopping, backroom system improvements, or the use of “cobots” on the floor—is creating both new opportunities for associates and improved outcomes for customers. In response to these advancements, Walmart is upskilling and reskilling their associates via their Academy Program, which has trained over 800,000 associates to date.

Learn more from Becky Schmitt, SVP and chief people officer at Sam's Club (a Walmart subsidiary), in *How Automation and Reskilling Are Benefitting Walmart's Associates and Customers*.



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