AI and the Workforce: Industry Report Calls for Reskilling and Upskilling as 92 Percent of Technology Roles Evolve

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Leading technology and workforce development companies release comprehensive report, analyzing AI's impact on top technology jobs and outlining immediate training opportunities

News Summary:

- "[The Transformational Opportunity of AI on ICT Jobs](#)" report finds that 92 percent of jobs analyzed are expected to undergo either high or moderate transformation due to advancements in AI.
- Led by Cisco, created by Consortium members, and analyzed by Accenture, the new report identifies essential trainings in AI literacy, data analytics and prompt engineering for workers seeking to adapt to the AI revolution.
- The AI-Enabled ICT Workforce Consortium consists of Cisco, Accenture, Eightfold, Google, IBM, Indeed, Intel, Microsoft and SAP. Advisors include the American Federation of Labor and Congress of Industrial Organizations, CHAIN5, Communications Workers of America, DIGITALEUROPE, the European Vocational Training Association, Khan Academy and SMEUnited.

SAN JOSE, Calif., July 31, 2024 /PRNewswire/ -- Today, the AI-Enabled ICT Workforce Consortium–led by Cisco (NASDAQ: CSCO) with industry leaders Accenture, Eightfold, Google, IBM, Indeed, Intel, Microsoft and SAP, along with key advisors–released its inaugural report, "The Transformational Opportunity of AI on ICT Jobs." This comprehensive analysis provides an unprecedented look at the effects of artificial intelligence on nearly 50 top information and communication technology (ICT) jobs, offering actionable training recommendations to enable an AI-powered workforce.

Entry-level and mid-level ICT professionals are at the forefront of AI transformation

The initiative and resulting report seek to empower workers to reskill and upskill with recommendations underscored by today's evolving job requirements. With the introduction of technology and tools such as ChatGPT, Gemini, Midjourney and further emergence of AI tools,

workers must prepare for digital work environments increasingly adept at mimicking human capabilities. According to a recent World Economic Forum study, 58 percent of surveyed employees believe their job skills will change significantly in the next five years due to AI and big data.

"AI represents a never-before-seen opportunity for technology to benefit humankind in every way, and we have to act intentionally to make sure populations don't get left behind," said Francine Katsoudas, Chief People, Policy & Purpose Officer, Cisco, and founding member of the AI-Enabled ICT Workforce Consortium. "Across the Consortium member companies, we have made it our collective responsibility to train and upskill 95 million people over the next 10 years. By investing in a long-term roadmap for an inclusive workforce, we can help everyone participate and thrive in the era of AI."

Key Findings: Every Job Becomes an AI-Influenced Job

Key findings from the report offer a holistic view of the impact of AI on ICT jobs, empowering workers and employers to embrace the AI-driven future of work:

- 92 percent of ICT jobs analyzed are expected to undergo either high or moderate transformation due to advancements in AI.
- Entry-level and mid-level ICT professionals are at the forefront of AI transformation with 40 percent of mid-level positions and 37 percent of entry level positions expected to have high levels of transformation.
- As AI continues to redefine job functions, certain skills will rise in importance (such as AI ethics, responsible AI, prompt engineering, AI literacy, Large Language Models [LLM] architecture and agile methodologies), while others may become less relevant (traditional data management, content creation, documentation maintenance, basic programming and languages, and research information).
- Foundational skills are needed across ICT job roles for AI preparedness, including AI literacy, data analytics and prompt engineering.

Actionable Insights for Workers and Employers

The Consortium report provides a thorough examination of AI's impact on 47 information and communication technology roles across seven job families via a Job Transformation Canvas. The roles were selected based upon the highest volume of job postings for the period of February 2023-2024 in the U.S. and Europe, according to Indeed Hiring Lab. Taking a skills-based approach, the Job Transformation Canvas describes each role inclusive of a job description, principal tasks and corresponding skills.

The Job Transformation Canvas goes further to outline how AI will influence each role and identify future skills required, skills made less relevant by AI as well as those complemented by it. Workers can use the Job Transformation Canvas as a training companion as they ready for an AI-fueled job market. Employers can leverage the report as a training development guide to cultivate and enable their AI-ready workforces.

Read the report

The AI-Enabled ICT Consortium report resides at https://www.cisco.com/c/m/ai-enabled-ict-workforce-consortium.html for workers and employers to navigate jobs roles of interest–from business analyst and data scientist to IT manager to information security specialist–across seven job families including: business and management, cybersecurity, data science, design and user experience, infrastructure and operations, software development, and testing and quality assurance. Each ICT job receives an AI-impact evaluation with detailed recommendations for reskilling and upskilling. The core skills and

training recommendations enable employers to take immediate action.

Our Commitment to Training

The report complements the Consortium members' commitment to building an inclusive workforce with family-sustaining and economy-developing opportunities. Consortium members have committed to developing worker pathways particularly in job sectors that will increasingly integrate AI technology. To that end, Consortium members have established forward-thinking goals with skills development and training opportunities to positively impact over 95 million individuals around the world over the next 10 years. Consortium member goals include:

- Cisco to train 25 million people with cybersecurity and digital skills by 2032.
- IBM to skill 30 million individuals by 2030 in digital skills, including 2 million in AI by the end of 2026.
- Intel to empower more than 30 million people with AI skills for current and future jobs by 2030.
- Microsoft committed to training and certifying 10 million people in digital skills by 2025, surpassing this goal by training and certifying 12.6 million people a year ahead of schedule.
- SAP to upskill two million people worldwide by 2025.
- Google has recently announced over $130 million in funding to support AI training and skills for people across the US, Europe, Africa, Latin America and APAC.

Expanding Impact to Empower Workers and Employers Across the Globe

In June 2024, in response to feedback from leaders across the globe, the AI-Enabled ICT Workforce Consortium expanded its scope to include all G7 countries—adding Canada, Japan and the United Kingdom to the analysis of the most in-demand ICT job roles. During the next phase of Consortium work, analysis of jobs and presentation of best practices will be inclusive of the additional countries. The Consortium also plans to introduce an AI Workforce Playbook, designed to empower SMBs and large companies to upskill their workforce proactively.

Support from AI-Enabled ICT Workforce Consortium Members

Accenture

"As we look to unlock the full promise that AI brings, it is essential that we equip people with the skills they will need, and which they are eager to learn. The far-reaching impact of this technology demands that we design learning pathways that will position everyone to have deeper AI skills as the work in our industry requires. The initial report from the Consortium is an important step to turn aspiration to action – with specific reskilling recommendations that can accelerate progress for individuals, organizations, and society." – Ellyn Shook, Chief Leadership & Human Resources Officer at Accenture

Eightfold

"This report clearly demonstrates the immediate impact of AI on almost any career, regardless of industry or size. Creating a talent-centered organization, in which the entire workforce can learn and grow responsibly, is the next step for every successful business." – Ashutosh Garg, Co-CEO and Co-founder at Eightfold AI

Google

"The benefits of AI must be accessible to every worker. We're proud to support the Consortium's new

research, which will advance our shared vision to equip all workers with the AI skills they need to succeed in the jobs of today and tomorrow." – Lisa Gevelber, Founder of Grow with Google

IBM

"At IBM, we have been investing in the future of work through access to education and training opportunities for decades. The findings of this report further highlight the significant need for upskilling and reskilling, particularly with the rise of AI. Now, those in the ICT sector — from students to workers to employers — have the data about which jobs will change, how they will change, and what individuals and employers can do to prepare for this shift and remain competitive in the evolving global labor market." – Lydia Logan, Vice President, Global Education and Workforce Development at IBM

Indeed

"We are excited by the impactful work this group is doing to understand the likely impact of AI on ICT workers and provide employers with the resources to support their workforce through this transformation. Indeed's mission is to help people get jobs. As AI skills rise in prominence, we're prioritizing skills-first hiring, to help job seekers demonstrate their AI capabilities and to connect employers to the broadest possible pool of talented job seekers across a broad range of industries." – Hannah Calhoon, Head of AI Innovation at Indeed

Intel

"We believe AI represents a paradigm shift with great potential to deliver new opportunities and tools, and our goal is to advance AI responsibly to help solve the world's most significant challenges. Training, upskilling and reskilling workers on how to collaborate with AI and be critical thinkers is vital to our workforce and our next generation of innovation." – Christy Pambianchi, Executive Vice President and Chief People Officer at Intel Corporation

Microsoft

"AI can be a tool that empowers workers around the world, but they must have the skills to use it. That's why Microsoft has committed to helping people and communities around the world gain new and necessary AI skills, and this new report contains important recommendations to take the global workforce into the future." – Naria Santa Lucia, General Manager, Skills for Social Impact at Microsoft

SAP

"What stands out from this research beyond the undeniable needs for responsible AI development and broad AI literacy across all ICT jobs, is the necessity for all roles to enhance their higher-order skills, such as critical thinking, creativity, and complex problem-solving. Beyond the initial adoption of AI, we believe evaluating the second-order effects of these skills shifts will highlight which skills will be commoditized and which will be differentiating in the future." – Nicole Helmer, Vice President & Global Head of Development Learning at SAP

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