EU-U.S. Trade and Technology Council (TTC)

EU-U.S. Talent for Growth Task Force

Workstream activity report

Workstream 1 – Training workers to meet business needs

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Overview

Critical and emerging technologies are all around us, transforming the way we live and do business. They are also significantly impacting jobs and the skills workers need. The emergence of these new technologies has created a high demand for reskilling and upskilling workers. According to a recent survey from the World Economic Forum (WEF), fifty-eight percent of employees believe that the skills their job requires will change significantly in the next five years.[i]

The result is that businesses suffer from a shortage of millions of workers trained in key technologies, and workers suffer because they do not have the right skills to access those jobs. For example, companies are struggling to find workers trained in various aspects of artificial intelligence (AI), including the skills to implement AI applications across business processes.[ii] In cybersecurity, there is a global shortage of 3.4 million workers trained to protect our IT infrastructure, software, data, and information.[iii]

Workstream One, which I am proud to chair, was established to explore the following problems: 1) businesses need to connect with training programs to find skilled workers and to train their workers, and 2) for businesses to find skilled workers, workers need to be able to find and access training from which businesses hire.

At a kickoff meeting in July 2023, the workstream started to look at existing platforms, models, and tools to identify what works best to address these challenges for both small- and medium-sized enterprises (SMEs) and large enterprises. The goal was to identify ways to best pursue what is available and make actionable recommendations to scale up and replicate successful models as well as new platforms and tools to fill key gaps. The workstream sought to consider how training providers (at all levels), companies, and worker representatives coordinate together to design, run, and evaluate effective training programs, as well as guidance and communications aspects that would help maximize awareness and outreach.

Training Workers to Meet Business Needs

A skills shortage, particularly in the technology sector, exists in both the U.S. and the EU. A Korn Ferry study found that, by 2030, more than 85 million jobs risk going unfilled due to a lack of skilled workers.[iv] The Society for Human Resource Management found that, in 2019, 83% of executive respondents had trouble recruiting qualified candidates.[v] In 2023, Manpower Group found that 77% of employers globally reported

talent shortages, a 17-year high.[vi] This study also found that 75% of U.S. employers, 86% of German employers, and 80% of employers in France and Spain indicated a difficulty finding skilled workers.[vii] The U.S. Chamber of Commerce found that 700,000 U.S. manufacturing jobs went unfilled as of March and, in 2022, that women were participating in the U.S. labor force at the lowest rates since the 1970s.[viii][ix] In addition, the manufacturing skills gap in the U.S. could result in 2.1 million unfilled jobs by 2030.[x]

In the EU, a European Commission report found that persistent labor shortages are particularly prevalent in the science, technology, engineering, and mathematics sectors. The "digital transition" contributes to persistent labor shortages in the information, communications, and technology (ICT) sector but not necessarily in other sectors. In the U.S., according to a 2021 Gartner survey, a majority (64%) of IT executives believe the ongoing tech talent shortage poses the most significant barrier to emerging technologies adoption.[xi] Following current projections, the U.S. will have a shortfall of 67,000 workers in the semiconductor industry.[xii] A Deloitte survey of technology industry leaders found that workforce issues have posed the second-highest top strategic challenge for the past six months. This same study found that 90% of leaders mentioned recruiting and retaining talent as a moderate or major challenge.[xiii]

While more than 150,000 technology industry workers have been laid off since the beginning of 2023, companies still struggle to find technical talent necessary for newer, more innovation-focused initiatives.[xiv] Cybersecurity professionals and technicians with AI expertise are in particularly high demand.[xv]

This lack of skilled workers harms the economy. Korn-Ferry found that this shortage could cause companies to lose out on $8.5 trillion in annual revenue by 2030. [xvi]

Demand does not just come from the executive side; workers want this training, too. A Boston Consulting Group report found that out of 13,000 workers across 18 countries, more than 85% believe they will need training on how AI will change their jobs. However, as of June 2023, only 15% of them have received this training to date.[xvii] The Adecco Group released a Global Workforce of the Future report on 30,000 workers across 23 countries with similar findings. While 70% of employees use generative AI (GAI) in the workplace, less than half of them have received any guidance or training.[xviii] Further, a joint survey from Gallup and Amazon in 2021 found that most workers (57%) are "very or extremely interested" in training for new skills or upgrading their current skills. Interest in free training during work hours reaches 71%.[xix] Rather than changing occupations, most workers (59%) expressed interest in training to further their current careers. [xx] An online survey in January 2022 by The Harris Poll for the American Staffing Association found that 80% of respondents viewed training offerings an important part of choosing a new job.[xxi]

Finally, training and upskilling works for workers and employers alike. The Gallup and Amazon survey found that nearly three-in-four workers (71%) that participated in upskilling programs found that it enhanced their work satisfaction. Approximately two-thirds of workers said that this training raised their quality of life and living standards.[xxii] Moreover, a recent survey found that 93% of CEOs who introduce upskilling programs see increased productivity, improved talent acquisition and retention, and a more resilient workforce.[xxiii]

Workstream Activity

The workstream kicked off its efforts in July 2023 with a presentation from senior staff from Cisco and The Khan Academy on the potential for the private sector to create an AI-powered career guidance platform that would help workers identify quality training options but also connect them to open job opportunities after they complete training. The presentation was followed by a robust discussion of the potential of the proposal as well as other ideas members planned to explore. Cisco offered to host a 1.5-day workshop to continue the discussion on both the career guidance platform as well as other ideas for the workstream to consider.

At the workshop Cisco convened in September 2023, Task Force members and staff were joined by representatives of partner tech companies to explore options for meeting the focus of the workstream. A clear message arose out of the day and a half event: AI is coming more quickly than the studies show, and the industry leaders directly involved in developing and implementing AI are raising the alarm that the workforce is not ready to adjust to the disruptions or embrace the possibilities.

Various research attempts to predict the human skills that are most easily automated. [xxiv xxv xxvi] While much remains unknown, researchers are coalescing around the idea that fewer jobs will be fully replaced by AI, but most jobs will have discrete tasks and skills automated. One study found that around 80% of the U.S. workforce could have at least 10% of their work tasks affected by the introduction of LLMs while approximately 19% of workers may see at least 50% of their tasks impacted.[xxvii] The researchers found that "programming and writing skills" are some of the most exposed to the risks of automation.

Catalyzed Action

Given the clear urgency conveyed at the workshop, Cisco decided to lead a private sector exploration of the rapidly evolving landscape of AI impacts on jobs in technology through a new AI consortium.

Cisco convened tech leaders driving the rapid deployment of AI to join a consortium committed to transparency regarding the impact of AI on tech jobs, including some of the entry level roles predicted to be most in-demand in the ICT industry. As part of the consortium, members:

1. Voluntarily committed to share their own analysis of AI impacts both within their companies and for roles where their technology is used throughout the global economy (e.g., Cisco employs network administrators and cybersecurity analysts, but also trains millions of people for these and other IT roles not directly employed by Cisco).
2. Committed to identifying roles relevant to their operations, analyzing each role for the associated skills/tasks that will likely be automated as AI is deployed, and mapping adjacent career paths workers can upskill into.
3. Have already identified some of the training available to provide the new skills most easily and quickly.

Many of the advisors to the consortium are Workstream One participant organizations.

The goals of the consortium are sharing insights to support the success of an AI-enabled ICT workforce and disseminating findings and recommendations of the impact of AI on key job roles within the IT Industry.

Chuck Robbins

Adopted by workstream leader
Chuck Robbins (Chair and CEO, Cisco)
on 25 March 2024:

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