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Subcommittee on Employment and Workforce Safety

Hearing
AI and the Future of Work: Moving Forward Together

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Chairman Hickenlooper, Ranking Member Braun and members of the subcommittee, it is my pleasure to speak with you this morning on behalf of Accenture. My name is Mary Kate Morley Ryan. I focus on workforce transformation, social innovation, and inclusion in the future of work at Accenture. I am responsible for the firm's U.S. *Innovating for Society* strategy which pilots, implements, and amplifies solutions to pressing workforce-related challenges faced by people and organizations.

Accenture is a global professional services company that helps the world's leading businesses, governments and other organizations build their digital core, transform their operations, accelerate their growth and enhance citizen services, creating tangible value at speed and scale. We are a talent and innovation-led company with approximately 733,000 people serving clients in more than 120 countries. We combine our strength in technology and leadership in cloud, data and artificial intelligence (AI) with unmatched industry experience, functional expertise and global delivery capability.

Accenture has deep experience both in AI as a technology and its application across nearly every industry. We are the largest independent technology services firm globally and the top partner of most of the leading technology and AI companies. Our unique position in the market as well as our use of AI internally allow us to identify cross-cutting trends and concerns in the use of AI and Generative AI (Gen AI), including how they will affect the future of work and business at both a micro and macro level.

The AI Awakening

It is exceedingly rare for a single advancement in technology to unleash big changes in human behavior and business dynamics, demanding a government response at an accelerated pace, but that is the reality of what is happening with AI today. This means that government and private sector leaders are presented with incredible opportunities to be more efficient and drive more growth. In a recent survey Accenture conducted of C-suite executives, 97 percent said that they believe Gen AI will be a transformative game-changer worth long-term investment.[1]

The rapid growth of AI also requires government and private sector leaders to navigate a world of increasingly hard choices. Public and private organizations will need to deploy enterprise-wide responsible AI through a deep interrogation of every AI use case, application, and process, with complete and persistent monitoring.

[1] *Pulse of Change, C-suite perceptions on generative AI*, https://newsroom.accenture.com/content/1101/files/PulseOfChange.pdf.

At Accenture, for example, we use a rigorous risk-based approach for each use case to navigate through over 50,000 AI use cases integral to our daily operations—highlighting the enormity of our task. As we chase the rapid growth offered by AI, it's crucial to simultaneously commit to the time-intensive diligence essential for responsible AI. Collaborating with numerous global organizations, we've been pioneering organizational frameworks, aligning them in significance with anti-corruption, security, and data privacy initiatives, thereby seamlessly connecting growth with responsibility.

AI will transform the workplace

AI presents a significant value creation opportunity; if organizations fully embrace the integration of AI, the U.S economy could add $8 trillion in economic activity and increase productivity by as much as 40 percent.[2] We know that AI will transform the way we work, and this is a good thing.

We believe about 40 percent of all working hours across industries will be impacted by large language models (LLMs) like the ones driving the Gen AI applications such as ChatGPT. That does not mean that Gen AI will replace 40 percent of all working hours. On the contrary, we view this as a "both/and" proposition; not an "either/or." Jobs will not be done either by robots or by humans, but by humans enhanced by AI.

The integration of LLMs in various industries presents a paradigm shift in how we interact with information and, by extension, how we work. Every role in every enterprise has the potential to be reinvented. In any given job, some tasks will be automated, some will be augmented or assisted – freeing people to do things that matter more – and some will be unaffected by the technology. There will also be new tasks for humans to perform, such as ensuring the accurate and responsible use of new AI-powered systems.

Accenture recently issued a report in partnership with the World Economic Forum that provides a structured analysis of the potential impacts of LLMs on jobs.[3] Our research analyzed over 19,000 individual tasks across 867 occupations, assessing the potential exposure of each task to LLM adoption, classifying them as tasks that have high potential for automation, high potential for augmentation, low potential for either or are unaffected (non-language tasks). It also explores the new roles that are emerging due to the adoption of LLMs.

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[2] *Why Artificial Intelligence is the Future of Growth*, https://newsroom.accenture.com/news/artificial-intelligence-poised-to-double-annual-economic-growth-rate-in-12-developed-economies-and-boost-labor-productivity-by-up-to-40-percent-by-2035-according-to-new-research-by-accenture.htm#:~:text=AI%20was%20found%20to%20yield%20the%20highest%20economic,USD%20%248.3%20trillion%20in%20gross%20value%20added%20%28GVA%29.

[3] *Jobs of Tomorrow: Large Language Models and Jobs* (Sept. 2023), https://www3.weforum.org/docs/WEF_Jobs_of_Tomorrow_Generative_AI_2023.pdf.

About 62 percent of total work time across occupations involves language-based tasks, meaning the widespread adoption of LLMs, such as those behind ChatGPT, could significantly impact a broad spectrum of job roles. The jobs with the highest time spent on tasks that could potentially be automated through LLMs include various types of office clerks, especially those dealing with record keeping and other forms of information management, including Credit Authorizers, Checkers and Clerks (81% of work time could be automated), Management Analysts (70%), Telemarketers (68%), Statistical Assistants (61%), and Tellers (60%).

Jobs with the highest potential for task augmentation emphasize mathematical and scientific analysis as well as critical thinking and complex problem solving, including roles such as Insurance Underwriters (100% of work time potentially augmented), Bioengineers and Biomedical Engineers (84%), Mathematicians (80%), and Editors (72%).[4]

In addition to reshaping existing jobs, the adoption of LLMs is likely to create new roles within the categories of AI Developers, Interface and Interaction Designers, AI Content Creators, Data Curators, and AI Ethics and Governance Specialists.[5]

An industry analysis was done by aggregating potential exposure levels of LLM adoption of the jobs to the industry level, noting that jobs may exist in more than one industry. The industries with the highest estimates of total potential exposure (automation plus augmentation measures) are both segments of financial services: financial services and capital markets, and insurance and pension management. This is followed by information technology and digital communications, and then media, entertainment, and sports. Similarly, a function group analysis reveals that the two thematic areas with the greatest total potential exposure to LLMs are information technology, with 73 percent of working hours exposed to automation and augmentation, and finance, with 70 percent of working hours exposed.[6]

To illustrate the research approach and how specific jobs will be reinvented with AI, the report broke down one customer service job in 13 component tasks. Our research found that:

- 4 tasks would continue to be performed primarily by humans with low potential for automation;
- 4 tasks could be fully automated; and

[4] Id.
[5] Id.
[6] Id.

- 5 tasks could be augmented to help humans work more effectively, such as using an AI-generated summary to help provide a rapid solution with a human touch.[7]

The potential for transformation is enormous across all kinds of industries, occupations and roles. We expect to see five core ways that Gen AI will commonly work with people:

1. As an **always-on advisor**, putting new kinds of intelligence into human hands in areas ranging from sales enablement and human resources to medical and scientific research and corporate strategy.
2. As a **creative partner**, offering new ways to reach and appeal to audiences, bringing unprecedented speed and innovation to production design, design research, visual identity and naming, copy generation and testing and real-time, personalized customer relationship marketing.
3. As a **software developer**, boosting productivity in areas ranging from automating code writing to predicting and pre-empting problems.
4. As an **automation driver**, especially those tasks that provide historic context, present the next best actions, or summarize or make intelligent predictions.
5. As an **enterprise protector**, as companies learn to use Gen AI to their advantage in governance and information security, including in Security Operations Centers to mitigate threats and identify vulnerabilities faster.

So how do we skill for the jobs of the future?

Given the transformative potential that AI has, government and private sector organizations will need to consider AI impacts on their workforce in three ways: how it will impact existing jobs; how to develop a pipeline of talent to create the AI-powered technologies of the future; and what kind of workforce/skilling needs it will create. Organizations will need their employees to be capable of developing, deploying, monitoring and working with AI and AI-enabled technologies in the future.

Unfortunately, we simply don't have the pipeline of students or the existing workforce we need to fill the jobs of the future and competition for jobs in these areas is fierce. We tell clients to take a skills-driven approach to address this issue, including:

- Establishing a skills foundation through data models, infrastructure, policies, processes and platforms;

[7] Id.

- Deconstructing work into tasks, skills, and models to support human and machine collaboration; and
- Rearchitecting both strategic and operational talent practices, including workforce planning, learning, talent acquisition, internal mobility, and performance and rewards.[8]

Using our own programs as an example, Accenture recently announced a $3 billion investment in our Data & AI practice that includes plans to double our data and AI workforce from 40,000 to 80,000 over the next three years through a combination of acquisitions, new hires and reskilling/retraining of our existing workforce.[9] Our reskilling, upskilling, retraining and apprenticeship programs are critical to our success and adaptability.

On the upskilling front, we invest $1 billion a year in training, reskilling and leadership development of our people. We have set up multi-stage training programs. The first stage is to ensure that all our employees have the training needed to be technology conversant. Everyone at Accenture participates in our technology quotient (TQ) training program, designed as a simple and effective way to learn about a technology, how it's applied, why it matters, and how it works with other technologies[10] TQ has enabled our 700k+ workforce to be conversant across technology areas enabling our people to perform at their best and most innovative for our clients. AI has always been one of the hottest topics, and now we're leveraging the platform for Gen AI learning.

We also have skill and role-based learning as organizations look to pivot AI skills for a generative AI era. In some instances, this includes partnerships with top academic institutions. For example, Accenture partnered with Stanford University to create a Foundation Model Scholar Program last July. We are now sending our practitioners to this multi-day training to learn from the best.

As a skills-driven organization, we believe in expanding our talent sourcing pools by focusing primarily on talent and skills, not degrees. We do that through re-thinking our recruiting process – things like asking strengths-based questions like: "How do you feel about working in an environment that is often challenging?" to get a sense of the person's approach and experiences. We ask candidates to pick any topic they want related to technology and allow them to present to their interviewer as they feel best equipped to better understand their critical thinking skills in action.

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[8] *Becoming a Skills-Driven Organization*, Accenture, https://www.accenture.com/content/dam/accenture/final/accenture-com/document/Accenture-Becoming-a-Skills-Driven-Organization-Report.pdf.

[9] *Accenture to Invest $3 Billion in AI to Accelerate Clients' Reinvention* (June 13, 2023), https://newsroom.accenture.com/news/accenture-to-invest-3-billion-in-ai-to-accelerate-clients-reinvention.htm.

[10] *Raise your cloud technology IQ*, Accenture Blog, July 2021, https://www.accenture.com/us-en/blogs/blogs-careers/raise-your-cloud-technology-iq.

Additionally, we reduced the number of entry-level positions that require a four-year college degree. As of fiscal year (FY) 2023, nearly half of Accenture's entry-level positions in the U.S. are open to individuals who do not have a four-year college degree.

We heavily invest in structured, "earn and learn" apprenticeship programs. Since launching the Accenture North America apprenticeship program in 2016, we have onboarded more than 2,000 apprentices and met our FY22 and FY23 goals of filling 20 percent of our entry level roles in North America through our apprenticeship program. Apprentices come from diverse backgrounds and ethnicities, typically with a minimum of a high school diploma or equivalent.

We continue to add a variety of new partnerships with community-based organizations and across the business world to source apprentices, who specialize in one of many unique, in-demand digital career paths ranging from cybersecurity, application development and data science serving clients in more than 40 cities.

We are also helping other employers—including our clients—create professional apprenticeship programs based on the best practices we've established in our own successful model. We have launched 9 local Apprentice Networks convening over 175 employers with talent and other key partners and published a national professional apprenticeship resource guide to help companies jumpstart their own programs.[11] The 10th Network is set to launch in November in Southern California.

In addition to the work we're doing to skill our own people, we're also creating digital skilling programs for our clients. In one example, we worked with a global critical infrastructure company to implement an enterprise-wide digital skilling program, enabling them to identify skills gaps across the business in more than 100 job families. Within the first 12 months, more than 20,000 employees enrolled in personalized skilling at scale; over 1,200 employees have spent more than 5 hours in training. In total, their employees have spent about 18,000 hours and completed 112,000 courses.

Conclusion

All too often the AI and workforce debate turns into a binary one – will the machines take all of our jobs? The answer, we think, is a resounding no. But it can help us do our jobs better if deployed effectively and responsibly. We know that government and private sector organizations will need to radically rethink how work gets done. Reauthorization of the Workforce Innovation and Opportunity Act (WIOA), offers one opportunity to provide the public workforce development

[11] *Apprenticeship Program Resource Guide*, https://accenture.pagetiger.com/accentureapprentice.

system the ability to scale training opportunities with a focus on Gen AI upskilling. We believe the focus must be on evolving our operations and training our people as much as on the technology itself.

I look forward to answering your questions today.