



**U.S. Senate Committee on Health, Education, Pension, and Labor  
Subcommittee on Employment and Workplace Safety**

**For a Hearing on:**

**“AI and the Future of Work: Moving Forward Together”**

**Written Testimony of Josh Lannin  
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**October 31, 2023**

Good morning, Chairman Hickenlooper, Ranking Member Braun, and members of the Subcommittee. My name is Josh Lannin, and I'm Vice President of Productivity Technology at Workday. I'm grateful for the opportunity to appear before you today.

For more than twenty-five years, I've worked on emerging technologies such as artificial intelligence (AI) that enhance how workers collaborate, amplify their team's performance, and succeed in the rapidly changing workplace. I've called Colorado home for more than thirty years, and I'm a proud graduate of the University of Colorado Boulder where my oldest daughter, Sydney, recently started.

## **Background**

For those who don't know us, Workday is a leading provider of enterprise cloud applications for finance and human resources, helping customers keep pace with a changing world. Our applications for financial management, human resources, planning, spend management, and student management are built with AI and machine learning at the core to help organizations embrace the future of work. Headquartered in Pleasanton, California, Workday has more than 18,000 employees with offices in Boulder, Boston, McLean, and Salt Lake City.

Workday was founded in 2005 and today is used by more than 10,000 organizations around the world and across industries—from medium-sized businesses to more than 50 percent of the *Fortune* 500. The Workday customer community has 65 million users, and in April of this year, nearly one in four of all U.S. job openings was processed on the Workday platform.<sup>1</sup> We are deeply committed to providing consistent, reliable, and secure software services to our customers and their employees. We also believe we have a unique opportunity to improve employee experiences and empower people to do their best work.

Our customers include state, local, and county governments and institutions of higher education, including the cities of Denver and Boulder; Hamilton County, Indiana; the Colorado School of Mines; and DePauw University. Last year, Workday entered the federal marketplace.<sup>2 3</sup> We did so after recognizing that federal agencies like the Department of Energy needed enterprise software that helps them address their workforce development and financial management challenges and can keep pace with rapid change.

I commend the Subcommittee for convening this hearing and for its bipartisan focus on how AI will impact the American workforce and on the skills needed to succeed in the changing workplace. These issues are a high priority for Workday and our customers, and we view them as central to the question of how to make the most of AI's potential. As with earlier advancements in technology, AI will impact how people work and the skills their jobs require. Notable developments around generative AI are also accelerating the pace and depth of transformation that we will likely see in the next two to three years. At the same time, we are confident that AI

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<sup>1</sup> Landman, Inna. "First Half 2023 Hiring Trends: Slowdown and Stagnation," Workday Blog, September 20, 2023, <https://blog.workday.com/en-us/2023/first-half-2023-hiring-trends-slowdown-stagnation.html>.

<sup>2</sup> "Workday Achieves Fedramp Authorized Designation." Workday Newsroom. <https://newsroom.workday.com/2022-07-13-Workday-Achieves-FedRAMP-Authorized-Designation>.

<sup>3</sup> Robinson, Doug. "Tipping Point - Modernizing the Federal Workforce." POLITICO, July 11, 2022. <https://www.politico.com/sponsor-content/2022/07/11/tipping-point-modernizing-the-federal-workforce>.

can empower U.S. workers and employers to navigate these changes by fostering a skills-based approach to talent.

My testimony will highlight how Workday and our customers are thinking about AI, how trustworthy AI can drive a skills-based approach to talent at scale, and the steps we recommend the Subcommittee consider so that workers and employers have the data to better adapt to the changing workplace.

### **Employers are Optimistic about AI and Navigating Skills Gaps**

At Workday, we believe AI can positively transform how people and organizations work. The AI tools we deliver to our customers help people to make more informed decisions by surfacing new insights, identifying opportunities for career development, and improving workers' day-to-day by simplifying labor-intensive tasks.<sup>4</sup> Our guiding principle is that AI should be used in ways that augment, rather than displace people. As such, Workday provides tools that enrich—but don't automate—human decisions. Our product teams work hard so that users can understand how and when AI is being used so that a human is always the ultimate decision-maker. We've found that this is an approach that builds trust with our customers and end users.<sup>5</sup>

Earlier this year, Workday surveyed 1,000 senior decision-makers in human resources, finance, and technology for their perspectives on AI.<sup>6</sup> As decisions about the future of work are being made today, the results illustrate how employers are thinking about AI and the workplace. Senior decision-makers overwhelmingly agreed (80 percent) that AI is needed to keep their business competitive and help their employees work more efficiently and make better decisions. Of the technology leaders surveyed, 94 percent indicated they are investing in AI and a similar number (83 percent) expect to invest the same amount or more over the next three years.

Yet alongside the optimism about AI's potential is anxiety. A majority of senior decision-makers (72 percent) voiced concern that their organization lacks the skills to fully implement AI. Nearly all (93 percent) said it was important to keep a "human in the loop" when making significant decisions.

Although we're in the early days of AI adoption, the opportunities and challenges ahead of us are coming into view. Employers understand the benefits of using AI to address both labor-intensive and time-intensive work, but wrestle with growing skills gaps in AI, AI-adjacent, and more traditional roles. How do we address this skills gap while also equipping workers and employers to navigate the coming changes to the workplace? By one estimate, 85 percent of the jobs in 2030 have not been created yet.<sup>7</sup> While this number may be bullish, it speaks to the challenge of

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<sup>4</sup> Chakraborty, Sayan. "Workday's Vision for AI." Workday Blog, March 10, 2023. <https://blog.workday.com/en-us/2022/workdays-vision-for-ai.html>.

<sup>5</sup> Chakraborty, Sayan. "How AI and ML Are Powering the Future of Work." Workday Blog, July 6, 2023. <https://blog.workday.com/en-us/2023/how-ai-and-ml-are-powering-future-work.html>.

<sup>6</sup> Krist, Josh. "Workday Research: 'AI IQ' Study Reveals Artificial Intelligence Adoption Barriers for Business Leaders." Workday Blog, October 2, 2023, <https://blog.workday.com/en-us/2023/workday-research-ai-iq-study-reveals-artificial-intelligence-adoption-barriers-business-leaders.html>.

<sup>7</sup> Realizing 2030: A divided vision of the future - Dell USA, <https://www.delltechnologies.com/content/dam/delltechnologies/assets/perspectives/2030/pdf/Realizing-2030-A-Divided-Vision-of-the-Future-Summary.pdf>.

identifying and investing in skills that are not only in-demand today, but will also be relevant tomorrow.

## **Skills: the Right Lens to View the Changing Workplace**

We believe a shift to a skills-based approach to talent—rather than trying to forecast the skills of the future—is the best way forward.<sup>8 9 10</sup> By a skills-based approach to talent, we mean an emphasis on what a person can do or learn, rather than solely on their credentials.

Awareness of the benefits of a skills-based approach to hiring, learning, and career development is growing.<sup>11</sup> Alongside the private sector, governors of at least ten states, including Colorado, North Carolina, Pennsylvania, Utah, and Virginia, are taking steps to remove degree requirements for most state opportunities.<sup>12</sup> In hiring guidance issued by the Office of Personnel Management last year, the nation’s largest employer – the federal government – recognized the importance of a skills-based approach to recruiting its workforce.<sup>13</sup>

Why focus on skills? First, it helps workers more nimbly upskill and reskill for new roles, including through on-the-job experience.<sup>14</sup> Second, employers can expand their applicant pools and shine a spotlight on talented individuals who are equipped to excel in a job but may not fit a traditional candidate profile on paper.<sup>15 16</sup> Approaches that over-rely on college degrees can also screen out otherwise qualified candidates, such as applicants from underrepresented and rural communities.<sup>17</sup> Third, the data supports a skills-based approach to talent. Hiring for skills has been found to be five times more predictive of job performance than hiring for educational qualifications.<sup>18</sup> Organizations that use skills-based practices are also twice as likely to place talent effectively and 98 percent more likely to retain high performers.<sup>19</sup>

As a manager, I’ve seen the benefits of these practices firsthand. Workday’s approach to talent is skills-based. As a result, I’m able to find qualified candidates for our product organization faster, and opportunities have opened up for individuals who might have been overlooked in the past.

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<sup>8</sup> Schlamp, Pete. “A.I. Is a Must for Skills-Based Organizations That Want to Move at the Speed of Future Business,” *Fortune*, February 17, 2023, <https://fortune.com/2023/02/17/workday-future-business-skills/>.

<sup>9</sup> Somers, David. “How Workday Is Delivering Next-Generation Skills Technology at Scale,” *Workday Blog*, September 28, 2022, <https://blog.workday.com/en-us/2022/how-workday-delivering-next-generation-skills-technology-scale.html>.

<sup>10</sup> Bryan Hancock et al., “Taking a Skills-Based Approach to Building the Future Workforce,” *McKinsey & Company*, November 15, 2022, <https://www.mckinsey.com/capabilities/people-and-organizational-performance/our-insights/taking-a-skills-based-approach-to-building-the-future-workforce>.

<sup>11</sup> Ferguson, Stephanie. “Understanding America’s Labor Shortage,” *U.S. Chamber of Commerce*, October 23, 2023, <https://www.uschamber.com/workforce/understanding-americas-labor-shortage>.

<sup>12</sup> “States Consider Elimination of Degree Requirements.” *National Conference of State Legislatures*. <https://www.ncsl.org/education/states-consider-elimination-of-degree-requirements>.

<sup>13</sup> “OPM Releases Skills Based Hiring Guidance.” *U.S. Office of Personnel Management*. <https://www.opm.gov/news/releases/2022/05/release-opm-releases-skills-based-hiring-guidance/>.

<sup>14</sup> Coolberth, Nicky Lauricella. “118 Businesses and Organizations Call on Congress to Support Investments in Workforce and Skills Training as Part of Economic Recovery Legislation,” *National Skills Coalition*. <https://nationalskillscoalition.org/news/press-releases/118-businesses-and-organizations-call-on-congress-to-support-investments-in-workforce-and-skills-training-as-part-of-economic-recovery-legislation/>.

<sup>15</sup> Schlamp.

<sup>16</sup> “STARs.” *Opportunity@Work*. “<https://opportunityatwork.org/stars/>.”

<sup>17</sup> The Editorial Board. “See Workers as Workers, Not as a College Credential.” *The New York Times*, January 28, 2023. <https://www.nytimes.com/2023/01/28/opinion/jobs-college-degree-requirement.html>.

<sup>18</sup> Hancock et al.

<sup>19</sup> Griffiths, Michael, and Robin Jones. “Skills-Based Organizations: Deloitte Global.” *Deloitte*, November 2, 2022. <https://www.deloitte.com/global/en/issues/work/skills-based-organizations.html>.

## **AI Can Drive a Skills-Based Approach to Talent at Scale**

At Workday, we've found that successfully implementing a skills-based approach to talent can be difficult to scale without the right technology.<sup>20</sup> People use different words to describe a skill, and very different skills can be described with the same word. Workers often struggle to identify which skills they should develop to advance their careers, and the lack of consistency makes it difficult for employers to identify workers who can fill an open role.

Fortunately, AI is unique in that it will drive change in the workplace and power the tools that workers and employers need to successfully navigate those changes. AI can process large amounts of data associated with occupational roles and responsibilities and develop so-called “ontologies” or vocabularies that make skills data actionable. Workday’s Skills Cloud, for example, aligns skills to a common vocabulary by using machine learning to map how different skills relate to each other and evolve over time.<sup>21</sup> Skills Cloud has been used over 40 million times, including by hiring managers for new job postings and by incumbent workers and candidates to communicate the skills they have. Over 25 percent of *Fortune* 500 companies are now live on Skills Cloud and workers have entered over 200 million skills into their profiles.

Incumbent workers can also use Career Hub, a one-stop-shop on the Workday platform where employees can find AI-enabled personalized recommendations, such as learning content and short-term projects on other teams where they can pick up new skills. For example, a retail associate who is starting a new family and is interested in management can discover a leadership role at another store and take suggested learning courses to prepare them for that opportunity.<sup>22</sup> The result is a win-win for workers and employers: the retail associate can pursue growth opportunities that align with their career goals, and employers can benefit from and support their incumbent talent. This is one example of how AI and skills can take the guesswork out of workforce development and facilitate data-driven reskilling.

AI can also give workers the tools to succeed in their current roles. In the coming months, finance professionals using Workday will be able to use a generative AI tool to analyze contracts for any anomalies or discrepancies. This saves time, enhances accuracy, and frees up those workers to focus on negotiating contracts and building partnerships—all while keeping the human as the final decision-maker.<sup>23</sup> When thoughtfully and responsibly applied, these AI tools can elevate the work people do, and give them time back to focus on what matters most to them and their roles.<sup>24</sup>

## **Responsible AI Governance Builds Trust**

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<sup>20</sup> “Skills credentials and Workforce of the Future.” Workday. <https://www.workday.com/content/dam/web/en-us/documents/whitepapers/skills-credentials-and-workforce-of-the-future.pdf>.

<sup>21</sup> Stratton, Jim, David Somers, Rowan Miranda, et al. “The Foundation of the Workday Skills Cloud.” Workday Blog, 2020. <https://blog.workday.com/en-us/2020/foundation-workday-skills-cloud.html>.

<sup>22</sup> Ernst, Chris. “Making the Shift to a Skills-First People Strategy.” SHRM, August 23, 2022. <https://www.shrm.org/executive/resources/people-strategy-journal/summer2022/pages/chris-ernst-workday-skills-first-people-strategy.aspx>.

<sup>23</sup> Workday Staff Writers. “Workday elevates human performance with generative AI capabilities.” Workday Blog, September 27, 2023. <https://blog.workday.com/en-us/2023/workday-elevates-human-performance-innovative-generative-ai-capabilities.html>

<sup>24</sup> Luke, Shane. “The requirements for seizing generative AI advantages. *Fortune*, September 27, 2023. <https://fortune.com/2023/09/27/workday-generative-ai/>.

While we see incredible opportunities for AI to unlock human potential, we also recognize that the risk of unintended consequences is real. One thing we are certain of is that people won't use technology they don't trust.<sup>25</sup> As a cloud-native enterprise software company, we learned early on that rigorous investments in technology governance are critical to earning and retaining our customers' trust. This is why Workday put in place a robust responsible AI program that includes:

- **Leadership Commitment** from a Responsible AI Advisory Board that is led by our General Counsel and counts our Chief Compliance Officer, Chief Technology Officer, and Chief Diversity Officer among its members.
- **Dedicated Resources** that include a team of social and data scientists and technology experts that report to our Board of Directors through our Chief Compliance Officer and that develops and maintains Workday's responsible AI governance framework. The team receives cross-company support, including from responsible AI champions who provide subject matter expertise so that AI products are developed in accordance with Workday's AI principles.<sup>26</sup>
- **Responsible AI Guidelines and Review Processes** that operationalize our principles through AI development guardrails, turning them into documented practices and assessments.<sup>27</sup> Our product development teams use tools to evaluate a potential AI feature's risk profile before we write any code. AI tools intended for use in consequential decisions, such as hiring or promotion, are treated as high-risk.
- **Disclosure** to equip our customers with a clear understanding of how our AI tools are developed and assessed, as well as transparency and choice in how their data is used.

Although Workday has taken these steps to develop AI in a responsible manner, we recognize that the lack of public trust in AI must be addressed across the industry.<sup>28</sup> Workday strongly supports new regulations on AI developed and used for consequential decisions, including hiring, promotion, and termination.<sup>29</sup> <sup>30</sup> We were also early champions for the creation of the National Institute of Standards & Technology's AI Risk Management Framework because we recognized the need for a commonly accepted benchmark for AI governance.<sup>31</sup> <sup>32</sup> Workday participated in every stage of the Framework's development, alongside contributors from academia, the

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<sup>25</sup> Cosgrove, Barbara. "Safeguarding Privacy while Innovating with AI." Workday Blog, May 24, 2023. <https://blog.workday.com/en-us/2023/safeguarding-privacy-while-innovating-ai-workday.html>.

<sup>26</sup> Trindel, Kelly. "Workday's Continued Diligence to Ethical AI and ML Trust." Workday Blog, September 19, 2023. <https://blog.workday.com/en-us/2022/workdays-continued-diligence-ethical-ai-and-ml-trust.html>.

<sup>27</sup> Srihari, Dileep and Meghan Chilappa, "Impact Assessments: Supporting AI Accountability and Trust," Access Partnership. <https://accesspartnership.com/impact-assessments-supporting-ai-accountability/>; "Impact Assessments: A Key Part of AI Accountability," BSA. <https://www.bsa.org/files/policy-filings/08012023impactassess.pdf>.

<sup>28</sup> Tyson, Alec. "Growing Public Concern about the Role of Artificial Intelligence in Daily Life." Pew Research Center, August 28, 2023. <https://www.pewresearch.org/short-reads/2023/08/28/growing-public-concern-about-the-role-of-artificial-intelligence-in-daily-life/>.

<sup>29</sup> "Towards Trusted Innovation: Our Vision for U.S. AI Policy." Workday. [https://www.workday.com/content/dam/web/en-us/documents/public-policy/Workday\\_US\\_AI\\_Policy\\_Paper\\_Released\\_June2023.pdf?trk=public\\_post\\_comment-text](https://www.workday.com/content/dam/web/en-us/documents/public-policy/Workday_US_AI_Policy_Paper_Released_June2023.pdf?trk=public_post_comment-text).

<sup>30</sup> "Building Trust in AI and ML Through Principles, Practice, and Policy." Workday. <https://www.workday.com/content/dam/web/en-us/documents/whitepapers/building-trust-in-ai-ml-principles-practice-policy.pdf>.

<sup>31</sup> "A Timely Bipartisan Push for Trust in AI: Congress and the NIST Trustworthy AI Framework." Morning Consult, January 12, 2021. <https://morningconsult.com/opinions/congress-and-the-nist-trustworthy-ai-framework/>.

<sup>32</sup> Morse, Chandler C., "The New NIST AI Framework: Accelerating Trustworthy AI." Workday Blog, February 16, 2023. <https://blog.workday.com/en-us/2023/the-new-nist-ai-framework-accelerating-trustworthy-ai.html>.

business community, and civil society groups. Last month, NIST published a case study featuring Workday’s use of the AI Risk Management Framework, the first of any organization.<sup>33</sup>

We also recognize the need for a practical roadmap that developers and deployers of AI in the workplace can use. This is why Workday joined the Future of Privacy Forum and other leading technology companies to co-develop the *Best Practices for AI and Workplace Assessment Technologies*.<sup>34</sup> The *Best Practices* are a roadmap for responsible AI in the workplace that accounts for the shared responsibility of AI developers and deployers.<sup>35</sup> They leverage Workday’s experience in developing trustworthy enterprise AI capabilities, as well as the NIST AI Risk Management Framework and guidance from U.S. regulators, including the Equal Employment Opportunity Commission.<sup>36</sup> We were proud to endorse the *Best Practices* and have called on other organizations to join us in putting them to use.

### **Modernize Federal Labor Market Data**

As the Subcommittee weighs AI’s impact on the future of work, we recommend that it consider taking steps to modernize federal labor market data.<sup>37</sup> Federal labor market data that is granular, high quality, and timely could fuel the AI technologies needed to bring a skills-based approach to talent to a national scale. When equipped with this kind of information, workers, employers, and educators can better navigate the coming changes to the workplace.<sup>38</sup>

Although the Department of Labor (DOL) produces important federal macroeconomic information, the current reporting system provides limited insight into employment patterns and skills that are in demand in the job market.<sup>39 40 41</sup> Awareness about the importance of better federal labor market data, however, is growing.<sup>42</sup>

In the wake of the economic disruption caused by the pandemic, the Workforce Information Advisory Committee recommended that the DOL take steps to improve data on the changing nature of work, improve the accuracy of local-level data, and adequately fund state reporting infrastructure.<sup>43</sup> The White House’s National Cyber Workforce & Education Strategy, in recognizing the importance of a skills-based approach to talent, also highlighted the need to improve labor market data and resources.<sup>44</sup> Moreover, in its Year 1 Report, the National AI

<sup>33</sup> “Using the AI Risk Management Framework.” National Institute of Standards and Technology.

<https://www.nist.gov/system/files/documents/2023/09/14/workday-success-story-final-for-release.pdf>.

<sup>34</sup> “Future of Privacy Forum and Leading Companies Release Best Practices for AI in Employment Relationships.” Future of Privacy Forum. <https://fpf.org/blog/future-of-privacy-forum-and-leading-companies-release-best-practices-for-ai-in-employment-relationships/>.

<sup>35</sup> “AI Developers and Deployers: An Important Distinction.” BSA. <https://www.bsa.org/policy-filings/ai-developers-and-deployers-an-important-distinction>.

<sup>36</sup> Morse, Chandler C. “Advancing Responsible AI in the Workplace: The Future of Privacy Forum’s Best Practices.” Workday Blog, October 16, 2023. <https://blog.workday.com/en-us/2023/advancing-responsible-ai-workplace-future-privacy-forums-best-practices.html>.

<sup>37</sup> Robinson.

<sup>38</sup> “Real-time labor data could be the answer to workforce woes.” Axios. <https://www.axios.com/sponsored/content-item/workday-real-time-labor-data-could-be-the-answer-to-workforce-woes>.

<sup>39</sup> Goger, Annelies, and Janie McDermott. “Digital Transformation in Labor and Education Systems.” Brookings, November 9, 2021. <https://www.brookings.edu/essay/digital-transformation-in-labor-and-education-systems/>.

<sup>40</sup> “Workforce Policy.” Business Roundtable. <https://www.businessroundtable.org/workforcepolicy>.

<sup>41</sup> “What is JEDx? Why Now? What Does It Do? Who Benefits?” The U.S. Chamber Foundation.

[https://www.uschamberfoundation.org/sites/default/files/JEDx%20One-Pager\\_May2022.pdf](https://www.uschamberfoundation.org/sites/default/files/JEDx%20One-Pager_May2022.pdf).

<sup>42</sup> “Unemployment Insurance: DOL Needs to Further Help States Overcome IT Modernization Challenges.” Government Accountability Office, July 10, 2023. [https://www.gao.gov/products/gao-23-105478#summary\\_recommend](https://www.gao.gov/products/gao-23-105478#summary_recommend).

<sup>43</sup> Workday’s Principal Product Strategist Chris Kim was recently appointed to the federal Workforce Information Advisory Committee.

<sup>44</sup> “National Cyber Workforce and Education Strategy.” The White House, July 2023. <https://www.whitehouse.gov/wp-content/uploads/2023/07/NCWES-2023.07.31.pdf>.

Advisory Committee (NAIAC) recommended that DOL prioritize and request adequate funding for ongoing efforts to modernize the Workforce and Labor Market Information system.<sup>45</sup> The NAIAC concluded that “with the appropriate investments and privacy safeguards in place, AI-driven tools coupled with real-time labor market data can enable workers to not only adapt to a changing workplace, but also thrive.”<sup>46</sup>

To advance the modernization of federal labor market data, Workday has collaborated with stakeholders on model legislation. Our proposal would:

1. **Establish a workforce and labor market data pilot program** that would focus on supporting ongoing efforts and existing public-private partnerships with technical resources for states.
2. **Create a rapid response initiative** that would encourage federal agencies to identify labor shortages and workforce gaps across the country and provide Congress insight on labor data standardization.
3. **Establish a Congressional Commission** to provide recommendations on how to further improve the collection, security, maintenance, and dissemination of labor market data.

## **Conclusion**

At Workday, we are all in on trustworthy AI’s ability to unlock human potential and support a skills-based approach to talent. As workplaces and work transform, it’s increasingly clear that technologies like AI are necessary to help workers and employers navigate change. Workday seeks to be a partner. As you chart a way forward on responsible AI and the future of work, we hope the Subcommittee will consider us a resource. Thank you and I look forward to your questions.

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<sup>45</sup> Workday Co-President Sayan Chakraborty serves on the National AI Advisory Committee in his personal capacity.

<sup>46</sup> “National Artificial Intelligence Advisory Committee Year 1 Report.” NAIAC. May 2023. <https://ai.gov/wp-content/uploads/2023/05/NAIAC-Report-Year1.pdf>.