

Hearing on

“Competencies Over Degrees: Transitioning to a Skills-Based Economy”

U.S. House Committee on Education and the Workforce

**June 22, 2023, at 10:15 a.m.
Rayburn House Office Building
Room 2175
Washington, DC**

**Testimony of Dan Healey
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Chairwoman Foxx, Ranking Member Scott, and honorable members of this Committee, my name is Dan Healey, and I am the Head of People for Customer Success at SAP. Thank you for the opportunity to participate in this hearing and to provide the perspective of a major technology employer and leading human capital management provider on skills-based hiring, an issue of critical importance to our nation.

As the world's largest enterprise software company, SAP and our 107,000 global employees help over 450,000 companies of all sizes and in all industries run at their best. Our machine learning, Internet of Things (IoT), and advanced analytics technologies turn businesses into intelligent, sustainable enterprises and SAP applications and services enable business and public customers globally to operate profitably and adapt continuously. With a global network of customers, partners, employees, and thought leaders, SAP helps the world run better and improve people's lives. Over \$4.7 trillion in digital commerce runs through our business networks annually providing SAP with a unique understanding of the digital economy and where it is going. Our 25,000 U.S. employees across 35 offices support SAP's 197,000 U.S. customers which represent 98 percent of the world's most valuable brands across 25 industry sectors. This extensive ecosystem enables SAP to touch almost all corners of the U.S. GDP.

In addition, SAP SuccessFactors, our employee experience software, is a leader in cloud-based human capital and talent management. This line of business includes modules for recruiting, learning and development, and performance and compensation management. It tracks recruitment strategies to assess resources that bring in the most talented applicants. Our customers use SuccessFactors to on-board new hires and collaborate on recruitment using social business tools. Our software helps businesses formulate better skilling strategies, increase efficiency by workforce monitoring, and run reports for business insights.

Through these many potential touchpoints, we're hearing that business leaders across the U.S. economy are working together to make progress at scale on some of the most challenging workforce issues facing corporations today in a few key ways. For example, through Business Roundtable Corporate Initiatives, CEOs are collaborating to implement skills-based hiring and advancement practices, develop and scale apprenticeship programs, and advance other initiatives focused on workforce development such as second-chance hiring.¹ CEOs and Business Roundtable are also focused on ways public policy can ensure our workforce has skills for high demand jobs.² Together, these efforts are designed to help employers meeting their workforce needs, deliver greater opportunity to more Americans, and strengthen our economy and competitiveness.

In a knowledge-based global economy, human talent is the indispensable factor – the engine of innovation, productivity, and, ultimately, national prosperity. Sustaining the finest workforce

¹ Business Roundtable, *Corporate Initiatives*, <https://www.businessroundtable.org/about-us/corporate-initiatives>.

² Business Roundtable, *Workforce Development*, <https://www.businessroundtable.org/workforcepolicy>.

preparedness system in the world will empower America to sell the world's finest products and services to growing international markets—to attract investment, create jobs, and keep America strong. To remain competitive, and ultimately succeed, we must ensure that we future proof our education system, modernize our work-based learning programs and enact public policies that enhance the mobility and agility of the workforce.

Why skills-based hiring is on the rise

With over 10 million open jobs and business needs rapidly evolving, companies have had to rethink their hiring practices, resulting in a shift to skills-based hiring. In recent years, employers have broadened pools of applicants to include those traditionally overlooked because they lack a degree or minimum years of experience. It's evident that the shift is accelerating, given that a growing number of professionals don't need a degree to perform their jobs. Companies are struggling to attract and retain highly skilled workers. Most forward-thinking employers are now embracing cutting-edge talent practices and skills-based hiring for the following reasons:

- **Expanded talent pool of better quality candidates:** The IT industry alone faces professional shortages measured in the millions. Meanwhile, we have millions of either unemployed or under-employed sitting on the sidelines in this historic economy. We were pleased to see in March 2023, that the Commonwealth of Pennsylvania abolished the four-year-degree requirements for the vast majority of state government jobs. Our traditional path of a university education cannot fill this gap today by itself, let alone in the future I alluded to. This is why skills-based hiring is so critical. Skill based hiring, simply put, is the recognition that people who can do the job should be given the opportunity – regardless of how they acquired those skills
- **Accelerated time to hire:** Time to hire—the time that elapses between a candidate entering a company's talent pool and getting a job offer—is an essential metric for recruiters. Skills-based hiring results in a more speedy, efficient hiring process. By assessing candidates early on, HR teams can quickly rank applicants based on their quantifiable skills.
- **Reduced hiring costs:** When recruiting based on skills, you fill vacancies faster. That means the total cost of advertising and marketing the position is reduced. Also, candidates hired in this manner require little to no preparation, which saves time and money during the onboarding process.
- **Improved retention rates:** A benefit of skills-based recruiting is that it helps strengthen retention. Employees without college degrees tend to stay in their roles longer than those with degrees. At a time when staff turnover rates are on the rise, hiring based on skills can be a huge advantage.
- **More diverse workforce:** The cost of a college education³ has increased an astounding 25% over the last 10 years. As a result, career paths that require a four-year degree remain inaccessible for millions of Americans who cannot afford it. Skills-based hiring furthers workplace diversity and inclusion by opening doors for people historically excluded from jobs based on education. It also allows candidates to be considered assuming they can perform the duties required.

Our views on skills-based hiring

Companies that flourish in an age of technology entrust business performance to SAP. Our company is an industry leader in the area of human experience management, with our HXM solutions in use by more than 30,000 customers and more than 220 million users across the globe. This gives us the opportunity to drive a lot of change beyond our own company. The HR function at SAP sees itself as

³ [Education pays : U.S. Bureau of Labor Statistics \(bls.gov\)](https://www.bls.gov)

kind of a Formula One test driver for HXM. Of course, we are a showcase for SAP, but we also test the beta versions to provide real-world feedback. And this helps us excel at assisting our customers get the best solutions possible. We have found that “skills-based hiring” shouldn’t be limited to only those skills a candidate possesses to perform a specific role right now.

Organizations should also consider both a) whether someone’s current skills could be used to perform other roles the organization might need in the future, and b) whether someone has the potential to acquire new critical skills for the future. This approach would require organizations to reconsider their philosophies around what potential “is,” as well as the methods they use to assess it.

Organizations have also long struggled with skills management due to outdated skills frameworks and difficulty objectively assessing and validating skills, among other issues. We have seen significant advancements as far as efforts and technology developed to address these challenges from both from start-ups and large human resources information system (HRIS) vendors in recent years. Whether these improvements will mature to make skills-based hiring at scale a reality, however, is yet to be seen. As the Committee considers how to improve the future of skills-based hiring, we urge Congress to take under consideration our below observations to better understand current challenges:

- 1. The prevailing macroeconomic conditions facing the world have shifted dramatically in the last few decades.** Technology is changing rapidly. The architecture that underpinned SAP’s R/3, our flagship ERP product, deployed around the globe over a period of more than 20-years. The corresponding shift for our cloud-based solutions will be less than half of that. If you consider the far-reaching impact of technologies like Generative AI, it seems that the cycles are only getting faster. Simultaneously, our careers are lengthening. Half of all children born today will live until they are 100. Their careers will therefore span multiple arcs and various technology cycles. Put simply, in such a world of rapid change and longer workforce participation, the educational paradigm that we relied on before simply will not suffice.
- 2. Beyond even the changing nature of our IT industry.** For SAP, in an effort to recruit more aggressively, we’ve shifted away from looking at bundles of signals – the degree that represents everything from your privilege, the job title that may be looked down upon but built critical understanding, the brand of your last employer – it’s looking at each candidate to find ways to distill what that person can actually accomplish. Where skills require refining, offer certification, assessment, or internships and career technical programs. If we can upskill and reskill employees across their careers, if we can help young members of the workforce find their way into areas of the economy that are growing without concern for their educational pedigree, if we can offer people the bootstraps, they need to pick themselves up with, we can build an environment that is far less biased in its outcomes.
- 3. We can see the proof in action at SAP.** At SAP Labs in the United States, we run a rotational development program. In the first years, to tackle an issue of suspected bias in our screening process for software developers, designers, and data scientists, we implemented a blind screening process to assess talent based on job relevant skills. The year the process was instituted, we hired a more diverse class than ever before – with more than 50% women, an unfortunately uncommon statistic in the software industry, and a number of non-traditional developers from bootcamps and career backgrounds that never would have been considered.

Our career technical education program leverages the same skill screening process ahead of job interviews to narrow down applicant pools – putting skills ahead of human assessments. It's not only about hiring for new joiners, but skills is also about extending peoples' success with an employer. At SAP, we maintain some of the deepest relationships with our employees. While other tech companies suffer from rapid employee attrition, we commit towards our employees' ongoing success. Part of the recipe for this is again skill-based development. Every one of our salespeople receives skill assessment annually and personalized coaching. Regardless of background, we can correlate skill development to on-the-job performance and company achievement.

Similarly, every one of our developers receives the same assessment and is offered feedback. This makes navigating global opportunity so much more straightforward for individuals who are trying to create opportunity. We also offer one of the world's most established experiential development programs, with thousands of employees annually testing out new career opportunities across our organization and building new skills. The result is a workforce with remarkable experience, tenure, and mobility. Because it's not about the credential they join with – it's about the skills they build with SAP.

- 4. Skills, however, are universal. And this is where employers – especially technology companies can play an even larger role.** In October of 2021, we launched learning.sap.com – our free platform to build SAP relevant skills. Why, there was a skill shortage and we understood that the knowledge we previously offered in our skilling centers could be a useful tool in helping the economy to activate professionals to tackle the shared problem. Last year, we had more than 1 million people actively engage with SAP's learning content – which offers some of the world's deepest, richest, IT education. Already, thousands of hours of programming can be accessed on learning.sap.com – including 28 courses that prepare students for full SAP Certifications.

In October of 2022, SAP further committed to upskill 2 million people by 2025 through our digital skill initiative. Here we focused on augmenting our learning content with programs and investments to help SAP not only reach out to its existing communities, but to support the skilling of communities previously excluded from some of these programs. Specifically, women, minorities, veterans, the unemployed or underemployed, and students. As part of this commitment, we doubled down on the need to build basic professional skills and partnered with Coursera to create an introductory course. The demand has been phenomenal with more than 22,000 students starting their careers with SAP Professional fundamentals. As we build out this program, we have a distinct U.S. focus. We are actively working with partners in the Non-Governmental Organizations (NGOs) and Historically Black Colleges and Universities (HBCU) communities to help identify candidates for upskilling and offer them opportunities to propel their careers forward.

- 5. One of the most critical learnings we have had in skill based professional skilling and hiring is that each community requires different skill focus to support their development.** This is the crux of the challenge. Too often, we think software or eLearning alone will solve our societal problems. But the reality is that staring at a YouTube window, with no support network or mentor to engage with can be a remarkably intimidating way to learn your way into the workforce. And that's where government and corporations can play the biggest role.

At SAP, this insight inspired us to build specific programs that take our content and deliver it in ways that support our communities where they are now, based on how they want to learn. We have programs for students including K-12 Stem Education ([SAP Young Thinkers](#)); University Education

([University Alliances](#)); and Vocational career development ([STAR Program](#)) as well as for Adult Learners including those in transition ([People to Work](#)) (note: With more than 400K people reskilled in Europe as part of this program, this is a wonderful example of how public private partnership can support workforce development and hiring) and Veterans in the United States([NS2 Serves](#)) which is a skill based program and hiring has led to a more than 98% placement rate for graduates.

Each of these programs requires the support of the institutions in our communities to work. We need partners to help us identify candidates for skilling, we need to understand the skills most relevant to round out individuals for hiring – meaning we need to work across industries in an open format to identify these skills and make them known to skilling institutions, and we need different models for funding education (as there are few career switchers that have the time and resources to spend on extensive mid-career reskilling programs. Rent and nutrition are simply more important.

Given our extensive experience working on skilling initiatives across the globe, we've seen many of the models that work. We'd value the opportunity to work with Members of Congress to help you better understand lessons learned on what's been effective and what issues regulators should avoid.

Organizations are moving toward a new skills-based strategy approach

We're experiencing a once-in-a-generation change in how we work, train, and learn. This transition is not only about how companies are hiring, but actually applying a skills-based approach to how organizations work and train their employees. Companies are increasingly placing skills, rather than jobs, at the center of the way work gets done. Employers are applying skills-based models to meet the demand for evolving business priorities and fast paced innovations. By decoupling some work from the job – either by atomizing it into projects or tasks or broadening it so it is focused on problems to be solved, outcomes to be achieved, or value to created – people can be freed from being defined by their jobs to being seen as whole individuals with skills and capabilities that can be fluidly deployed to work matching their interests and evolving business priorities. And by basing people decisions on skills more than jobs, organizations can still have a scalable, manageable way of operating. This new operating model for work and the workforce is called “the skills-based organization.”

Employers are beginning to see how skills-based practices can expand their access to great talent—but the benefits aren't only for employers. As employers adopt these practices across their talent journeys, workers are more equipped to find better jobs based on their skills rather than their degrees, educational background, or years of experience in a specific role. In the face of ongoing macroeconomic challenges, now is the time for all stakeholders in workforce development to commit resources and support to accelerating adoption of these practices and build stronger communities.

Businesses will need help with the transition to skills-based hiring. They face a growing challenge when it comes to managing the gap between their workforce's current skills and those they'll need in the future. SAP believes that closing this gap means employers must optimize the processes companies use to recruit and hire new workers. For example, each time employers create a new position, they have to, in essence, reinvent the wheel, updating skills requirements, ensuring job descriptions are market-competitive and developing interview questions that can identify each candidate's potential.

Employers and workers themselves can do only so much to make skills-based transitions possible. The workforce development ecosystem—employers, worker-serving organizations, employer

intermediaries, and elected officials—must be incentivized to work together in community to support skills-based job transitions.

Leaders in communities across the country can convene key stakeholders to support skills-based hiring and discuss how stakeholders can cooperate to ensure that workers are able to transition into higher-wage, in-demand roles in their respective local communities. Actions can include prioritizing skilling programs focused on the skills most frequently needed to prepare workers for in-demand jobs at local employers; sharing résumés from workers in the community who are a match for open jobs at local employers; and prioritizing investments in digital-literacy upskilling and broadband infrastructure improvements for lower-income workers.

Multiple pathways: hiring for skills to win the race for talent

With today’s changing environment, it’s never been more urgent for employers to understand the skills, capabilities, and potential of the talent which an organization is fighting to keep, while simultaneously being able to identify, plan and hire for the workforce skills and capabilities it lacks. As entire industries shift delivery models and business strategies remain fluid, the talent function’s ability to stay agile, diversify hiring, and speed up recruiting processes is a business imperative. Technology roles have been notoriously difficult to fill for a decade or two but are now coming into glaring focus as companies undertake key digital transformation initiatives. IT leaders see the shortage of talent as the biggest barrier to adoption of two-thirds of the emerging technologies that power digital transformation, according to a Gartner report⁴. Clearly, human capital organizations need to act fast.

Now, a few years after the concept first appeared, HR and human capital organizations are getting real about making the transition to hiring people without four-year college degrees as a way to quickly onboard people with essential digital skills. These “multiple pathway” workers develop the skills needed to work in technology jobs through nontraditional education paths – community colleges, vocational schools, software boot camps, technical certification programs, high school technical programs, and on-the-job apprenticeships and internships.

Through the *Multiple Pathways Initiative*, Business Roundtable member companies are reforming their hiring and talent management practices to emphasize the value of skills rather than degrees alone.⁵ This effort is helping companies meeting their hiring needs and unlock new employment advancement opportunities for workers including those with diverse backgrounds.

Data transparency: the critical role of innovation in skills-based hiring

Policymakers and private sector stakeholders need to consider ways to increase data transparency in order to better match American workers with American jobs. High-quality, transparent, and timely data can significantly improve the ability of employers, students, job seekers, education providers, and policymakers to make informed choices about education and employment—especially for matching education and skilling programs with in demand jobs and the skills needed to fill them.

⁴ [Gartner Survey Reveals Talent Shortages as Biggest Barrier to Emerging Technologies Adoption](#)

⁵ Business Roundtable, *Multiple Pathways Initiative*, <https://www.businessroundtable.org/workforceskills>.

As organizations continue to face economic uncertainty, supply chain challenges, and rising inflation, hiring will continue to slow in several industries – pushing organizations to look at their current workforce to fill gaps and meet growing business demands. We’ll start to see accelerated adoption of machine learning and AI specifically in addressing their talent needs. In the skills space, SAP anticipates that we will encounter a groundswell of organizations focused on creating a skills catalog so they can better understand the capabilities that exist in their workforce, where they are lacking, and how they can deploy people into different roles to stay on top of changing business needs. SAP solutions bring together data, machine learning, and AI to help organizations better understand the capabilities and skills within their workforce and provides the talent intelligence to align their people with the needs of the organization. This is helping organizations build workforces that are more skilled and agile.

With organizations continuing to face talent shortages in 2023, they’ll be forced to redefine what a “qualified” candidate looks like and take a critical look at how their AI and machine learning algorithms are defined in their recruiting practices. Eliminating hiring biases that give preference to applicants from certain schools or move those without degrees to the bottom of the digital pile, will be critical to tap into often overlooked talent pools and eliminate the paper ceiling. In some places, this will be a requirement to meet the transparency dictated by emerging regulations.

The nature of employment is transforming rapidly. As technologies advance and employment models change, it is critical that we find new ways to ensure that both American workers and businesses are empowered to match potential talent with commercial need. Data transparency and accessibility is integral to this process. Data transparency, accessibility, and security provide the ability to map skills needs to job titles, and give Americans control of finding ways to build careers that are agile enough for the digital economy. Today, this data landscape does not exist. Innovators across the HR, education, skilling and recruiting spaces need to be equipped with the tools to develop novel techniques to address these gaps. To achieve this landscape, we urge policymakers to consider focusing on:

- **Developing a trusted system for sharing workforce data.** Currently siloed data assets need to be leveraged across the ecosystem by both the public and private as well as at the individual level between governmental agencies and jurisdictions to enable personalized citizen services and create effective resource allocation.
- **Supporting the development of a flexible skills-based ontology.** We need structured, living taxonomies, to create an adaptable common data foundation on which to build.
- **Recognize the acquisition of new skills** acquired through employers or providers such as community colleges, as individuals seek new career opportunities (e.g., lateral or advancement).

Building a future ready workforce: A flexible, mobile education and skilling system will be necessary in order to meet the constant reskilling and upskilling needs of U.S. workers

Organizations today are under constant pressure to keep up with the pace of change. The only way they can adapt to industry-wide disruption and changing work models is to implement people sustainability strategies that support an agile, skilled, and healthy workforce.

Bridging the nation’s jobs and skills mismatch will require a major national commitment to lifelong learning and a robust suite of services that deliver state-of-the-art continual skills development relevant to the workplace. This requires a “whole-of-society” approach that leverages our limited resources for maximum effect. Not only must a modern, competitive workforce be highly skilled and affordable, but it must also be mobile and flexible, able to respond agilely to rapid alterations in labor

market demand and opportunity. Changes in the world economy are occurring at an ever-increasing rate. Sectors, industries, and enterprises rise and fall swiftly with continuous shifts in consumer demand, unceasing technological advancement, constantly evolving competitive forces, and swings in comparative advantage among nations, industry segments, and enterprises.

Today, the average American can expect to hold nine jobs between age 18 and 34. Our leaders must be attuned to the needs of the modern workforce and must use public policy to foster agility and mobility. Yet many of our workforce and workplace rules, programs, and initiatives are geared for another epoch, disserving workers, and hamstringing the economy.

U.S. competitiveness and the global race for skilled talent

Skilled labor in an increasingly competitive world is essential. Highly skilled people are an indispensable driver of economic growth, competitiveness, and innovation. Developing countries in Asia are rapidly building up their professional labor pools. Meanwhile, the U.S. and Western European countries, which have dominated economic advancements since the mid-1800s, are paying more attention to preserving and growing their skilled labor workforce.

America's ability to attract global talent is a unique competitive advantage that has historically been crucial to innovation and entrepreneurship. By 2025 the global tech industry will see 97 million new roles, according to the World Economic Forum⁶, highlighting the competitive need for skills-based hiring. The Future of Jobs Survey 2023⁷ which brings together the perspective of 803 companies – collectively employing more than 11.3 million workers – across 27 industry clusters and 45 economies from all world regions included the following key findings:

- Employers estimate that 44% of workers' skills will be disrupted in the next five years.
- Six in 10 workers will require skills development before 2027, but only half of workers are seen to have access to adequate skilling opportunities today.
- The skills that companies' report to be increasing in importance the fastest are not always reflected in corporate upskilling strategies

America's comparative advantage must be in the technical expertise of our workforce, but projections based on current trends are unpromising. The U.S. Department of Education estimates that 60 percent of the new jobs that will open in the 21st century will require skills possessed by only 20 percent of the current workforce. Some experts predict that within a decade, 123 million high-skills, high-paying jobs will exist, but just 50 million Americans will be qualified to take them.

Improving skills-based hiring: Our public policy recommendations

SAP believes that people sustainability is a business imperative. We need to support people and human potential to create a more sustainable future and drive resilience and agility. SAP defines "people sustainability" to mean treating people – across organizations, supply chains, and communities – ethically and fairly. In fact, 86% of organizations worldwide believe that investing in people

⁶ World Economic Forum, *The Future of Jobs Report 2020*, October 20, 2020, [The Future of Jobs Report 2020 | World Economic Forum \(weforum.org\)](https://www.weforum.org/reports/the-future-of-jobs-report-2020)

⁷ World Economic Forum, *The Future of Jobs Report 2023*, May 3, 2023, [WEF Future of Jobs 2023.pdf \(weforum.org\)](https://www.weforum.org/reports/the-future-of-jobs-report-2023)

sustainability can drive positive environmental and economic sustainability, according to a global study by SAP SuccessFactors conducted in partnership with IDC.

The future is people-led and it's critical that public policy support the skills-based movement and help scale these efforts across all businesses – small, medium, and large. Currently, our nation's public workforce development system is not delivering in a way that meets the needs of workers, employers, and the economy – much less in a way that supports the recent shift to skills-based practices.

To compete at home and globally, we need a public workforce development system that is capable of preparing workers with skills for in-demand and growing careers. In examining ways policy can emphasize the value of skills, we recommend the Committee consider the following:

- **Align the Workforce Innovation and Opportunity Act (WIOA) and the public workforce development system with skills-based practices** that are being led by the business community. Critically, WIOA skilling services must be directed toward high-quality, employer-driven skills development. This includes:
 - **Promoting high-quality employer-based skilling opportunities**, such as apprenticeships and other forms of work-based learning, which are shown to be the most effective models for skills development.
 - **Promoting high-quality industry-recognized credentials** and facilitating transparent data on which credentials lead to employment and earnings increases. Industry-recognized credentials are portable across labor markets, recognized by employers in the hiring process, and are stackable – meaning that workers can obtain multiple credentials representing a growing portfolio of skills attainment. Industry-recognized credentials align to skills-based practices and are growing in importance as a means of skills validation.
- **Expand Pell Grant eligibility** to high-quality short-term education programs – so-called “Workforce Pell” – to give workers more freedom and flexibility to get the skills development they need for fulfilling careers. Expanding Pell eligibility can create more pathways to a recognized post-secondary certificate and high-quality careers, as well as be a steppingstone for students seeking a two- or four-year degree.
- **Support policies that will spur the development of a flexible skills-based ontology**, and structured, living taxonomies, to create an adaptable common data foundation on which to build.
- **Recognize the acquisition of new skills** acquired through employers or providers such as community colleges, as individuals seek new career opportunities (e.g., lateral or advancement).
- **Develop a trusted system for sharing workforce data:** (1) in aggregate such that currently siloed data assets can be leveraged across the ecosystem by both the public and private (2) and at the individual level between governmental agencies and jurisdictions to enable personalized citizen services and create effective resource allocation.

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We appreciate the opportunity to share SAP's own workforce perspective and how, as a member of the Business Roundtable, we are working to advance innovative and collaborative solutions to meet our nation's most pressing challenges. This is an area ripe for bipartisan action, with measurable opportunities to grow the economy and expand the talent pipeline. I know that I speak for many across the business community in saying that I hope this Committee and Congress will act on these opportunities. We welcome the opportunity to work in partnership with Congress to enact necessary policy changes that support a transition to a more skills-based economy. Thank you.