

Skilling at Scale Strategy for Employers: Apprenticeship



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An Underutilized Talent On-Ramp Is Well Placed to Solve Organizational Problems Plaguing American Businesses

In the United States, about 7.4 million jobs are [unfilled](#). Shortfalls in the number of people qualified to occupy them are creating an exceptional strain on the workforce, impacting not only understaffed organizations themselves but also entire sectors.

Unsettlingly, the staffing shortage phenomenon is increasing, impacting employers who are offering well-paid—and often highly desirable—jobs in tech, transportation, logistics, manufacturing, and critical infrastructure including chemical plants, refineries, and transportation. For hiring managers, the crisis is one that impacts their very ability to deliver results. Finding a qualified person for a specific role in this employment landscape is often a challenging exercise.

Tony Bryan of apprenticeship intermediary Cyber Up [wrote](#) of hiring practices, “Traditionally, recruiters would sift through countless resumes, looking for specific qualifications and experience. While these criteria are important, they don't always give a complete picture of a candidate's potential.”

Bryan’s words bely an even bigger issue than staffing shortages: a widespread dearth of relevant skills among existing employees, particularly in areas of the workforce that are impacted by the arrival of AI-related technologies. Businesses are struggling more than ever to maintain a right-skilled level of staff to meet their needs. The skills shortage often goes beyond lacking people with the technical and occupational skills needed to do the role. Countless employers complain of struggling to find workers with the adaptable skills needed to thrive in a professional setting: skills like communication, teamwork, critical thinking, and complex problem-solving.

At the American Institutes for Research® (AIR®), we see time and again instances in which employees lack fully developed skill sets, and yet employers—especially today—urgently need their employees to have those skills. This area is commonly flagged for attention in many businesses.

In some areas of the workforce, the struggle to find and retain talent is noticeably more pronounced than in others. *Information Week* [described](#) a widening skills gap in IT, for example.

“Skills in AI, machine learning, blockchain, and cybersecurity are notably scarce. Both large tech firms and startups face challenges in finding qualified candidates, leading to project delays and reduced innovation. The tech industry’s evolution will further increase the demand for specific skills. Experts anticipate a significant rise in the need for professionals in emerging fields like quantum computing and advanced data analytics, with McKinsey [predicting](#) that less than 50% of the quantum computing jobs will be filled unless significant interventions occur.”

Jim Snyder, cybersecurity manager for the Federal Reserve Bank of St. Louis, explained how challenging it is to fill the more technical roles: “We’ve been looking for more senior talent recently, and I’d have jobs posted for a year or more. It’s really difficult to fill [those positions].”

A big challenge deserves a big solution.

Taken together, labor force shortages and pervasive skills gaps demonstrate a needless waste of aptitude and productivity but also highlight an opportunity for widespread workforce transformation. There aren’t too few people to occupy jobs, and there are more than enough jobs to go around. When properly motivated, workers can grow and learn new skills that will help them do their jobs better. The situation is rectifiable, but employers are being challenged en masse to rethink what it means to hire and employ people.

The status quo of recruiting and hiring employees is needlessly time-intensive and costly and yields a shockingly low predictability for a reliable supply of qualified candidates. In fact, SmartRecruiters researched the views and situations of more than 500 business leaders and found that over 60% think they’ve hired the wrong person “despite increased cost and time spent on talent acquisition.”

To help employers improve HR processes in a more sustainable and strategic way and paint a clear picture of organizational hiring priorities, a skills taxonomy can be created. This exercise can be used to assess and map real-time and long-term needs against existing gaps and shortfalls, and can accordingly guide the employer in building a smarter hiring strategy. Such a taxonomy can be at the heart of any shift to skills-based hiring. As to how businesses source people for their most pressing roles? One pathway stands out.

(Re)Introducing the Apprenticeship

In any serious conversation about a shift to skills-based hiring, the success enjoyed by European businesses inevitably comes up, and with good reason. Half of all German working-age adults between 18 and 24 [are apprentices](#). Apprenticeship ensures that key jobs are occupied by people who possess both a hunger for learning and the staying power to become assets to their organizations.

In contrast, around 0.4% of the U.S. working population is employed in apprenticeships. Encouragingly, the numbers are trending upward. *The Washington Post* [reports](#) that the 643,000 apprentices who currently work in registered apprenticeship programs equates to more than double the number of registered apprentices there were in 2014. Yet, to [gain](#) level footing with other OECD countries, U.S.

employers would still need to hire millions more apprentices. Why has the apprenticeship pathway not seen the success in the United States that it has in Europe?

Apprenticeship asks employers to consider a prospective hire's—or existing worker's—aptitude, even absent their formal credentials. For some employers, this risk feels too big. However, for many employers, this new way of thinking and operating is a welcome change. About 81% of employers [cited](#) in a Jobs for the Future report, for example, said they believe organizations *should* hire based on skills rather than degrees. With attitudes about the value of the college degree changing, many U.S. employers wonder: “If someone has no degree, then how can I be really sure they have what it takes?” This concern is one worth exploring.

Businesses need skills validation, and traditionally, they have relied on degrees to do this. There is not enough talent available through degree populations to fulfill the demand. What are the alternatives for skills validation outside of degrees, then? Apprenticeships can help a business develop this muscle regardless of whether the employers want to develop this competency in-house or enter trusted partnerships and processes for doing skills validation.

Cyber Up's Bryan [explained](#), “Skills-based hiring is a thorough approach that emphasizes the actual skills an individual possesses, rather than just their credentials.”

Apprenticeship, unlike other hiring strategies, is about the creation of shared value—for businesses, employees, and communities alike. It requires a commitment to partnership. The returns of hiring apprentices, for employers who have taken the leap, tend to far transcend the roles that are filled. In what ways is apprenticeship such a promising opportunity for U.S. employers?

- **Apprenticeships let employers work smarter, not harder.** Apprenticeship is unique in that it provides a framework through which apprentices build a highly desirable blend of technical and employability skills. The front-end investment in their soft and hard skills ultimately reduces the need for costly performance management identification and improvement tactics in the long term. And by working with an intermediary, as noted in “[Apprenticeships Create Tech Career Pathways and Close Talent Gaps](#),” employers can benefit from the apprenticeship model while taking on a reduced burden.
- **Five pools of talent: Apprenticeship lets employers optimize existing assets and find exceptional new ones.** Employers have historically seen their people sourcing choices as: internal—up- or re-skilling; or external—hiring, outsourcing, or acquiring. Apprenticeship can exist in all five of these sourcing pools. Instead of needing to find the people whose experience and credentials are a fit according to their résumé, apprenticeship shifts the hiring manager's focus to what people can and will do: a shift from passive to active and from experience to aptitude.
- **Apprenticeship fights rampant burnout with learning, upskilling, and growth.** The repetitive nature of the status quo recruiting and hiring practices ultimately creates more burnout. This phenomenon can prove costly or even professionally disastrous for businesses. By removing or

reducing often-impossible-to-find skills and experience from lists of job requisites, hiring managers can devote more time to finding people with staying power, long-haul competency, and cultural fit.

- **Hiring apprentices can lead to a culture of excellence and learning at all levels.** Having an apprentice on a team raises the collective bar in a workplace. Apprenticeships include some level of mentorship between an existing employee and the trainee. Mentorship enhances the culture of excellence by ensuring that decades of institutional knowledge is not lost. With employers around the country struggling to find new workers who possess job-ready skill sets, this kind of intergenerational knowledge transfer can be priceless.
- **Apprenticeships create a welcome alignment between employers and communities.** Successfully run apprenticeship programs, at scale, breed gainful employment, longevity in jobs, and wage-driven purchasing power that can translate into a thriving local business and employment scene. Beyond shared value, apprenticeships let employers benefit from something that business leaders are often too busy to do: strategic collaboration.

CONCLUSION

Apprenticeship is an underutilized talent acquisition and upskilling pathway that holds great potential for the U.S. economy. It is replete with benefits and promises to help employers fill glaring gaps in their workforces while allowing the most talented and driven prospective workers to rise to the top of applicant pools. It benefits communities by ensuring consistent and reliable employment on-ramps into good jobs in promising sectors. And it helps employers of every size more quickly and effectively meet their most urgent business needs without losing sight of their long-term goals.

Will more U.S. employers realize the benefits of apprenticeship and make a lasting investment in their talent development strategy? That remains to be seen. But for employers who have already taken the leap, their return on investment—highlighted in this paper—speaks for itself.

To learn more about apprenticeship, visit <https://www.air.org/our-work/workforce/apprenticeship-and-work-based-learning> and <https://apprenticeshipsfortech.org/>.



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