Skills-Based Hiring: Increasing Access to Opportunity

Key Insights

- A skills-based hiring approach creates a talent pool (the group of eligible candidates for a job position) composed of workers who have at least half of the top skills of the target job, compared to traditional talent pools comprised of workers who have previously worked in the given occupation. Globally, a skills-based approach could expand talent pools by 6.1x, offering a substantial increase in potential candidates across industries and geographies.
- In Al roles, a skills-based approach increases the talent pipeline by 8.2x globally, 34% higher than the increase for non-Al jobs. In green roles, the global talent pool would increase by 3.5x, with countries such as Saudi Arabia and Peru seeing particularly high growth.
- Skills-based hiring can increase female representation in talent pools, especially in underrepresented fields like Technology and Al. Relying on skills when hiring for Al roles could increase the share of women by up to 24%.
- Younger workers, especially Gen Z, benefit the most from a skillsbased hiring approach in most countries. However, older workers see bigger pipeline increases for Al jobs.
- Workers without bachelor's degrees experience a 6% greater increase in the global talent pool under a skills-based model, compared to their degree holder counterparts.

Introduction

As businesses face challenges in finding the right talent to meet evolving needs, hiring the right people becomes even more critical. Last year, our team at the Economic Graph Research Institute launched <u>Skills-based: Reimagining the Labor Market and Breaking Down Barriers</u>. In that report, we quantified the potential impact of a skills-based approach on hiring. In this research note, we extend those findings with data through January 2025. Moreover, we expand the analysis to explore how skills-based hiring can support some of the most essential sectors of our rapidly transitioning global economy — green and Al jobs.

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Measuring Impact

This section explains the methodology we use to compare different hiring approaches and their impact on the available talent pool—the group of individuals a firm considers meeting eligibility requirements to be considered for a job. Using LinkedIn's Skills Genome, we identify key skills associated with specific occupations and assess how skills-based hiring strategies can unlock talent.

In this analysis, we compare two primary approaches. The first is the "prior job title talent pool", which includes candidates who held the same or equivalent job title within the past five years. For example, a company hiring a Recruiter would include candidates with experience as either a Recruiter or a Recruiting Specialist. While familiar and straightforward, this approach may overlook many workers who possess relevant skills but have held different job titles.

The second approach, the "skills-based talent pool", defines the pool by identifying candidates who in the last five years worked in roles 1) with at least 50% overlap in key skills with the target job, and 2) that have a minimum number of transitions into the target role. For example, when hiring for supply chain managers in France, hiring managers could also consider logistic managers or demand planners, who share 17 out of the top 30 skills with supply chain managers. The skills-based talent pool ensures only candidates whose experience is likely to transfer are included for a given role. This is especially salient when hiring for licensed occupations where having the same skill set is insufficient for the candidate to work in the role. For example, while nurses and doctors may share a skill set, the transition from nurse to doctor is uncommon because of the formal requirements, so the nurses are not included in the pipeline for doctors. However, nurses are included in the pipeline for school nurses or clinical instructors.

To measure the impact of skills-based hiring, we calculate the skills-based talent pool increase—the ratio of the total number of job candidates identified through the skills-based hiring approach compared to the number identified via prior job title searches. In this analysis, we do not filter out candidates based on their educational background and other important hiring signals in order to isolate the impact of using skills as opposed to prior job title. Actual hiring practices remain more complicated and nuanced, but this simplified approach allows for a clear comparison of the size of the talent pool between employment history based hiring and skills-based hiring. Additionally, we take of the median of the increase in these ratios over jobs across countries and industries to highlight how skills-based hiring could expand talent pools in various settings.

Beyond measuring the increase in the talent pool's size, this report also examines how different populations are represented within the skills-based talent pool. Specifically, we explore how this approach affects representation across generations, gender groups, and educational backgrounds. By focusing on skills rather than past roles, skills-based hiring may help address disparities and expand opportunities for underrepresented groups, such as workers with non-traditional educational paths, women, and individuals from younger or older generations.

We also explore the implications of skills-based hiring for two fast-evolving sectors: Green jobs and Al jobs. As both sectors evolve rapidly and require new skills, skills-based hiring offers a way to fill emerging roles effectively by focusing on relevant capabilities rather than previous job titles. This approach

ensures that dynamic labor market needs with the bonus of promoting a more inclusive and diverse workforce.

Expanding the Talent Pipeline Talent pools would expand by 6x globally when using a skillsbased approach

Expanding the talent search to include workers with relevant skills led to a median 6.1x increase in eligible workers at a typical job in the countries analyzed.¹

Although there is significant variation in the impact of skills-based hiring on the size of talent pools across the 56 countries analyzed, all countries would see the talent pools for a typical job expand. This finding shows the widespread impact that this approach could have globally. The United States would experience the most substantial increase in eligible candidates, with a 15.9x uplift if employers adopted a skills-based approach. Brazil follows closely with a 12.9x increase. The smallest increase is observed in Slovenia, with a median pipeline size increase of 1.1x, and Croatia, with a 1.7x increase. Mexico and the UK would see a substantial increase of around 10.4x and 8.4x, respectively, while Australia would see a 7.7x rise. Employers in Ireland, Singapore, and Switzerland would experience smaller but meaningful increases of around 4.3x to 4.4x. Countries with larger talent pool increases have more workers who share similar skills despite holding different job titles, underscoring the potential reach of a skills-based hiring strategy.

Industries could increase their talent pools by up to 22x

The effect of skills-based hiring on the availability of talent varies significantly by industry. Globally, we observe the most substantial increases in industries such as Farming, Ranching, and Forestry (21.5x), Consumer Services (16.3x), and Wholesale (18.7x). These industries often require skills that overlap across different occupations, indicating that workers with the necessary skills are often overlooked due to traditional recruiting efforts focused on job titles rather than skills. For instance, in India, the Real Estate and Equipment Rental Services industry could see a massive 86.4x increase in potential candidates with a skills-based approach. Similarly, in the United States, the Accommodation and Food Services industry could see a 34.9x increase, and in France, the Construction sector could experience a 23.4x expansion of the talent pool.

¹Note on comparing with previous findings: If you are an avid follower of the LinkedIn Economic Graph Research Institute, you might have noticed that the pipeline impact estimates are different from what we published in the <u>2023 report</u>. While our methodology remains unchanged, the scope of our analysis has expanded. This year, we incorporated additional countries that recently met our data quality thresholds. Members in these new countries often have less experience and are less likely to list skills on their profiles compared to more established markets, such as the United States. Additionally, several new occupations, such as Prompt Engineer, have emerged over the past two years, for which we lack historical data. Both of these factors contribute to lower global and country-level median talent pool increase estimates for skills-based hiring. Therefore, direct comparisons between the results in this report and the 2023 Skills-Based Report are not recommended.



Source: LinkedIn Economic Graph Research Institute. Country values were ordered by pipeline expansion.



Source: LinkedIn Economic Graph Research Institute

While industries like Oil, Gas, and Mining show smaller increases globally (5.4x), the effect of skills-based hiring remains meaningful, particularly in countries with more specialized skill demands. For example, Oil, Gas, and Mining in France could see a 16.2x increase, and in the United States, a notable 12.1x rise. Variations in talent pool expansion reflect that some industries have more specialized skills, and there are fewer pathways for workers to acquire the necessary skills for certain jobs.

In summary, while the impact of skills-based hiring varies across industries and countries, the potential for expanding the talent pool remains substantial in both high-skill and traditionally underserved sectors, ensuring broader access to opportunities across the labor market.²

Al roles globally would see an 8x expansion in talent pipelines, compared to 6x for other roles.

The expansion of talent pipelines seen at the country and industry level extends to Artificial Intelligence engineering occupations (see Appendix for definition), with particularly strong growth in the United States, where the AI talent pool expands more than the non-AI talent pool. In the United States, the talent pool for AI roles expands by 16.7x, compared to 15.9x for non-AI roles. The same trend emerges globally, with an expansion of 8.2x for AI occupations, versus 6.1x for other roles – a 34% difference. Given the growing importance of AI in driving technological advancement and creating economic opportunity, access to more AI talent is set to become critical. The significant expansion of AI talent pipelines in key economies is essential as AI jobs are increasingly linked to economic growth and innovation. By leveraging a broader pool of skilled AI workers through a skills-based hiring approach, countries can further strengthen their competitive position in the global economy.

Global green job talent pools would grow 3.5x with skillsbased hiring

As economies worldwide shift towards sustainability and environmental responsibility, they are <u>likely to</u> <u>struggle</u> to find the talent to fill those green jobs³. In our analysis, we define green jobs as those that are those that cannot be performed without extensive knowledge of green skills, as mapped in our skill

² Note on industry data: Relying solely on skill data for hiring is not suitable for every role or industry. This is especially true for highly regulated fields like education and healthcare, where many positions require formal licensure. To maintain the rigor of our analysis, we limited the skills-based talent pool to candidates coming from jobs with observed transitions into the target role. This helps exclude transitions that, despite sharing common skills, are unlikely to happen due to factors such as licensing requirements (e.g., nurse to doctor) or significant shifts in seniority (e.g., chief financial analyst to financial analyst). Additionally, our industry-level insights capture roles across all functions within an industry, not just those traditionally associated with it. For example, in education, our analysis includes not only teachers and school administrators but also employees in areas like professional training, e-learning, recreation, and educational technology development. Similarly, in healthcare, the talent pool goes beyond core medical professionals to include office associates, medical billers, and account managers, as well as companies supplying the industry, such as medical device manufacturers.

³ See International Energy Agency (2023), "<u>Clean technologies are driving job growth in the energy sector, but skills shortages are an</u> <u>increasing concern</u>" and Wired (2024), "<u>The One Thing That's Holding Back the Heat Pump</u>".

taxonomy. Greening jobs are defined as those jobs that that can be performed without extensive green skills but typically require some degree of green skills. For an extensive definition of green skills and green/greening occupations, refer to the our "Understanding the Green Transition" (Kaura, 2024) research note.



Source: LinkedIn Economic Graph Research Institute. AI Occupations = Artificial intelligence engineering occupations.

There is significant variation across countries in the potential impact of a skills-based hiring approach to green jobs. Saudi Arabia (10.3x), Peru (7.7x), and Mexico (6.6x) see the largest increases in their green job talent pools, reflecting a strong opportunity to accelerate workforce participation in industries critical to the green economy. Countries like France (3.0x), United Kingdom (3.6x), and South Africa (3.7x) experience more modest expansions, indicating that their green job sectors may already have more established pathways or face other constraints in tapping into broader talent pools.

The ability to expand talent pipelines in green jobs is directly tied to a country's capacity to meet sustainability goals and drive innovation in renewable energy, environmental conservation, and sustainable practices. Countries seeing larger expansions have the potential to make rapid strides in transitioning to greener industries by capitalizing on the larger talent pools now available through a skills-based approach. Meanwhile, countries with smaller increases may need to focus more on creating the necessary infrastructure and pathways to develop green skills within their workforce to meet the growing demand for talent in these sectors.⁴

⁴ A. Kaura (2024), "<u>Understanding the Green Transition</u>.", LinkedIn Economic Graph Research Institute.



Source: LinkedIn Economic Graph Research Institute

Democratizing access to opportunity

Traditional labor market practices have historically excluded certain groups by relying on non-skillbased methods of filling jobs, often overlooking individuals with the skills businesses need—especially those from underrepresented communities.⁵ Our research shows that adopting a skills-based approach would significantly expand talent pools, particularly for workers without degrees, women, and younger people. While our focus is only on the first stage of the hiring pipeline—construction of the talent pool under consideration—increasing the number of workers from historically underrepresented groups in the talent pool is a necessary requirement to increasing representation in the workforce. If workers do not even enter in the pool of potential candidates, there is no path for them to be hired.

Younger workers stand to benefit the most from a skills-based hiring approach

While younger workers may not have the same breadth of job experience as older generations, they are developing skills that are valuable across various roles, particularly those at lower seniority levels. A skillsbased approach to hiring offers younger workers greater flexibility as they navigate a changing labor market, helping them build resilience against economic disruptions. Globally, skills first hiring increases the talent pool by 5.8x for Gen X workers, 6.1x for Millennials, and 6.8x for Gen Z workers⁶. Although fewer Gen Z workers may have held traditional job titles for specific roles, many have acquired skills in roles with similar requirements. Older workers may need to adapt to a more fluid labor market, where non-traditional career transitions become the norm. Governments and businesses should support older workers in acquiring relevant skills and effectively communicating those skills to employers adopting a skills-based hiring strategy, fostering a more engaged and skilled workforce across all generations.

By Country

Across major countries, Gen Z workers see the largest increase in their talent pool under a skills-based hiring approach, followed by Millennials and then Gen X. In the United States, this trend is particularly pronounced, with Gen Z seeing a 17.6x increase, Millennials 15.7x, and Gen X 15.3x. Similarly, in the United Kingdom, the talent pool increases by 8.6x for Gen Z, 8.1x for Millennials, and 7.4x for Gen X. In India, the talent pool for Gen Z grows by 11.7x, while Millennials and Gen X see increases of 10.4x and 9.7x, respectively. Brazil follows this pattern as well, with Gen Z experiencing a 14.1x increase, Millennials 12.6x, and Gen X 11.5x. However, there are some deviations from this pattern. In Germany, the Gen X talent pool increase of 6.5x slightly surpasses that of Millennials (6.4x), although Gen Z still sees the highest increase at 6.7x.

⁵ Fuller, J., Raman, M., & Restuccia, D. (2021), "Hidden Workers: Untapped Talent," Harvard Business School and Accenture.

⁶ Gen Z: 1997 – 2012, Millennial: 1981 – 1996, Gen X: 1965 – 1980.



Source: LinkedIn Economic Graph Research Institute

By Industry

In several key industries, younger workers, particularly Gen Z, experience the largest increase in their potential talent pool under a skills-based hiring approach. This pattern is most pronounced in Real Estate and Equipment Rental Services, where Gen Z sees a 17.1x increase compared to 12.7x for Gen X and 13.0x for Millennials. A similar trend is seen in Utilities, and Consumer Services. These industries often require a broad range of transferable skills that younger workers, particularly Gen Z, are developing in early career roles, allowing younger workers to move more easily between jobs without requiring specific job titles or long-tenured experience.

However, globally, there is one industry where older workers, especially Millennials, stand to benefit more. In Education, the talent pool for Gen X grows by 12.5x, and Millennials see an increase of 12.8x, compared to Gen Z 's 11.8x increase. This might be due to more specialized skill requirements, often developed over longer careers, which might explain why Gen X and Millennials see relatively higher increases in this sector. The field may also have more rigid career progression structures, where years of experience play a larger role. This is observed in 10 out of the 14 countries that meet our minimum data quality thresholds for this analysis.



Older workers often see greater gains in Al and Green

Source: LinkedIn Economic Graph Research Institute

For Al Jobs

The data reveals an interesting trend where, contrary to the overall emerging pattern, it is not necessarily the youngest workers that stand to benefit the most from a skills-based transition. Unlike in the country and industry aggregates, Millennials benefit the most from a skills-based hiring approach in Al at a global level. In India, Millennials see a 21.0x increase in the talent pool, higher than Gen Z at 18.0x and Gen X at 18.2x. Similarly, in Germany, Millennials experience a 13.7x increase, while Gen Z and Gen X have lower expansions at 12.9x and 12.0x, respectively.

However, there are exceptions to this trend. In the United States, Gen Z sees the highest expansion at 25.7x, followed by Millennials at 15.8x and Gen X at 11.4x, while in the United Kingdom, Gen Z also leads with an 12.7x increase compared to 10.8x for Millennials and 8.1x for Gen X. These results align more closely with the general trend of younger workers benefitting most from skills-based hiring.

For Green Jobs

Contrary to the pattern seen in Al roles, where older workers often benefit more from a skills-based hiring approach, the pattern is less consistent for green jobs and is only observed for some countries. In Brazil, Millennials experience one of the largest increase in the talent pool for green jobs, with an 8.4x expansion, followed by Gen X at 7.1x, and Gen Z at 5.8x. The United States shows a similar pattern, where Gen X and Millennials see increases of 6.4x and 5.5x, respectively, while Gen Z trails at 5.0x. On the other hand, Gen Zs experience the largest increase in India, alongside the United Kingdom, Germany, and Canada.



Source: LinkedIn Economic Graph Research Institute

Globally, the talent pool increase from skills-based hiring is 6% higher for non-degree workers than workers with bachelor's degrees

Globally, a skills-based approach to hiring increases the talent pool of workers without bachelor's degrees by 6% more than for workers with degrees (6.3x compared to 5.9x). This figure rises to as much as 36% for some industries.

By Country

The impact of skills-based hiring on workers without a bachelor's degree varies significantly by country. The largest differences in pipeline expansion between workers with and without degrees are seen in Philippines (19%), Chile (18%), Denmark (17%), South Korea (16%), and Thailand (15%). This suggests that, in these countries, there is a substantial pool of skilled workers without formal degrees who, though they may lack specific job titles, possess the relevant skills needed for various roles. Countries like Croatia (14%), Ireland (13%), Indonesia (13%), and Saudi Arabia (12%) also show notable differences, with these workers gaining new opportunities as employers shift focus from traditional credentials to skills.

In contrast, some countries see minimal differences between workers with and without degrees, indicating a more even impact across educational backgrounds. For example, Canada, South Africa, and Italy show differences of 2% or less, while countries like Israel, Australia, and Malaysia even show a slight decrease in the pipeline increase for non-degree workers.

By Industry

The impact of skills-based hiring on workers without a bachelor's degree shows considerable industry variation. Education sees the largest increase at 36%, followed by Utilities (33%) and Farming, Ranching, Forestry (23%). These increases suggest that the skills commonly leveraged in these sectors can be found in non-degree workers as well, who are not as well represented in currently employed workers in these occupations. By focusing on relevant skills, these industries can diversify their talent pools significantly.

In contrast, workers without four-year degrees in industries like Administrative and Support Services (-14%), Wholesale (-11%) and Retail (-6%) see little to no increase compared to degree-holders. This may indicate that these sectors already prioritize skills over formal education, or that skills for these roles are commonly found among both degree and non-degree holders.

For Green Jobs

Globally, workers without a bachelor's degree see a 18% greater increase in talent pipelines for green jobs compared to those with degrees, reflecting a significant advantage for non-degree holders in the green sector when using a skills-based approach. Countries like India (41%), Brazil (33%), and France (21%) see particularly high expansions for non-degree holders.

However, this pattern is not uniform across all countries. For instance, in Canada (-30%), Spain (-13%), and Australia (-13%), the talent pool increase is significantly lower for non-degree holders in green jobs. In these cases, a similar analysis for "greening" roles (jobs that can be performed without green skills but typically require some green skills) reveals a more favorable trend for non-degree holders. For example, Spain shows a 26% increase in the talent pool for greening jobs among non-degree holders, while Australia and Canada see 19% and 10% increases respectively. This suggests that while certain green jobs may favor workers with formal educational credentials, adjacent roles in the greening sector have the potential to be significantly more inclusive of varied educational backgrounds.

Access to green jobs without the need for formal degrees is crucial in building a robust green economy. Skills-based hiring broadens the potential workforce in sectors that urgently need talent, like renewable energy, conservation, and environmental management. Skills-based hiring can help address increases in demand—present or future—for green job workers and improve socioeconomic mobility by increasing opportunities for sub-baccalaureate workers.

	Green		Greening		
	Talent Pool Increase Degree	Talent Pool Increase No Degree	Talent Pool Increase Degree	Talent Pool Increase No Degree	
Global	3.7x	3.9x	2.4x	2.9x	
Brazil	7.9x	10.5x	6.7x	6.9x	
France	2.9x	3.5x	2.2x	2.6x	
Germany	4.2x	5.5x	3.6x	3.6x	
India	3.7x	5.2x	3.1x	3.4x	
Italy	3.4x	3.8x	3.1x	4.1x	
United Kingdom	3.7x	4.3x	2.6x	2.8x	
United States	5.2x	5.0x	5.7x	6.6x	

Source: LinkedIn Economic Graph Research Institute

For AI Jobs

Globally, a skills-based approach in AI roles expands the talent pool for workers without bachelor's degrees similarly to those with degrees, with both having median talent pool increases of 7.3x.

At the country level, we observe that formal education remains important even in a skills-based approach. Countries like the United Kingdom (-39%), the United States (-29%), and Germany (-23%) show lower talent pool expansions for non-degree holders in Al, likely due to the technical and complex nature of Al work, which often demands a foundation in advanced studies. Formal education provides critical theoretical knowledge and specialized training in areas such as machine learning, data science, and computational methods, making it a valuable asset in Al roles.

A skills-based hiring approach improves gender representation in several industries

Research shows that traditional hiring methods can reinforce gender disparities, particularly in fields where women are underrepresented.⁷ Moreover, degree requirements and job titles tied to historically male-dominated roles can inadvertently exclude qualified female candidates, limiting access to opportunities. Additionally, emphasizing specific past job titles may prioritize candidates with established, linear career paths, inadvertently disadvantaging women who may have acquired relevant skills through diverse or non-traditional work experiences.

For instance, women currently make up only 24% of Energy Engineers in the United States. However, when we expand the talent pool to include occupations with significant skill overlap, such as 'Energy Analyst' and 'Energy Manager,' where women represent 41% and 26% of the workforce, respectively, the overall share of women in the talent pool increases. By considering these skill-aligned roles rather than focusing solely on current job titles, we could enhance female representation in the talent pool, potentially paving the way for greater gender diversity in the occupation over time.

In our study, by examining a skills-based approach, we observe a modest increase in women representation across talent pools, particularly in occupations traditionally dominated by men. Globally, this approach would expand the talent pool by an average of 6.3x for women and 6.2x for men. While most countries see only slight between male and female pipeline increases, the trend intensifies in occupations where women are most underrepresented.

If companies adopted a skills-based hiring approach, the representation of women in certain industries could see meaningful changes. For industries like Transportation, Logistics, Supply Chain and Storage, and Wholesale, where women are historically underrepresented, the shift to skills-based hiring could lead to an increase in the share of women considered, with Transportation seeing a 3.1% relative increase and Wholesale a 2.9% relative increase. Similarly, in Utilities and Farming, Ranching, Forestry, female representation could increase by 6.9% and 6.5%, respectively.

The Technology, Information, and Media industry, a critical field in the modern economy, could see a notable median global increase in female representation in the talent pools, moving from 37% to 38%— a relative increase of around 3%. However, while that increase is seen in many countries such as Chile (21%), Belgium (21%), Denmark (14%) and several more, other countries like the United States and Italy would not typically see a clear increase in female representation.⁸ In other sectors where women already have stronger representation, such as Entertainment Providers and Financial Services, the gender ratio remains largely consistent, suggesting that skills-based hiring would maintain gender balance without a pronounced effect.

⁷ See Sarabi, A., and Lehmann, N. (2024), "Who Shortlists? Evidence on Gender Disparities in Hiring Outcomes," Administrative Science Quarterly, vol. 69, no. 4, pp. 1044-1084.

⁸ It should be noted that the mix of occupations that are classified in this industry is different for different countries, given we only consider occupations which pass a minimum threshold count in that country.

In industries where women currently hold a majority of positions, skills-based hiring could help achieve a more gender-balanced workforce by increasing the representation of men. For example, in the Consumer Services and Hospitals and Health Care sectors, where women make up 64% and 67% of the workforce respectively, female representation in the skills-based talent pool would decrease by approximately 4-5%, bringing these industries closer to a more balanced gender distribution. These shifts suggest that in industries with high female representation, a skills-based approach can lead to more equitable gender distributions without drastically altering the existing balance.



Source: LinkedIn Economic Graph Research Institute

For Green Jobs

While a skills-based hiring approach will increase the talent pool for both men and women, representation of women in the skills-based pool would not be significantly different from what it is currently for green jobs. In most cases, men's pipeline would increase slightly more than women's, indicating that there are more men having relevant skills for green jobs than women's. In this case, it is critical to address the growing gender gap in the skilling process itself as our <u>2023 Green Gender Gap</u> <u>Report</u> highlights.

Relying on skills when hiring for AI roles could increase female representation by up to 24%.

For Al Jobs

If companies adopted a skills-based approach for AI roles, we would see notable increases in female representation in AI talent pipelines across key countries. Globally, the representation of women in AI talent pools could rise from 26% to 28%, reflecting a relative increase of 8%. This finding suggests that skills-based hiring could help address the gender gap in AI, a field where women have traditionally been underrepresented.

Across countries, similar patterns emerge. In the United States, the talent pool share for women in Al could increase from 25% to 31%, representing a 24% relative rise. Canada and the United Kingdom show similar relative increases, with the representation of women in Al talent pipelines growing from 26% to 28% in both countries, translating to an 8% relative gain. India and Germany also reflect meaningful shifts, with India moving from 24% to 27% (13% increase) and Germany from 20% to 24% (20% increase).

These prospective gains underscore the potential of skills-based hiring to promote gender diversity in Al, a sector critical to economic growth and technological advancement. By broadening access to Al roles based on skills rather than traditional credentials or job titles, companies can tap into a more diverse pool of talent, enhancing innovation and balance within this essential field.

To boost female representation among candidates, employers in various industries should broaden their talent search to include all candidates with relevant skills, rather than limiting searches to candidates with history working in specific job titles. Job postings should also highlight the required skills clearly, as research shows women are more likely to apply when they see alignment between their own skills and those listed in the job description.⁹ Results from our Skills Match feature indicate that more <u>women are motivated to apply when they recognize they possess the needed skills</u>. We found that when job seekers were shown how their skills matched a job posting, the application increase from women was 1.8 times than for men, with a similarly positive effect on hiring outcomes.

⁹ See Mohr, T. S. (2021), "<u>Why women don't apply for jobs unless they're 100% qualified,"</u> *Harvard Business Review*. and LinkedIn Economic Graph (2023), "Skills-First: Reimagining the Labor Market and Breaking Down Barriers."

With a skills-based approach, women's representation could increase by 13% in jobs where women are especially underrepresented

By analyzing the difference in the talent pool increase between men and women by industry, job group (Al and Green), and country, we see the emerging pattern of a more pronounced impact whenever gender diversity is low. Thus, in this section we will focus specifically on occupations where women are most underrepresented, to determine what role would skills-based hiring play then. We define occupations where women are most underrepresented as those occupations that are in the bottom quartile for their country in terms of share of women employed in the last five years. These occupations, typically concentrated in fields like Technology, Construction, and Manufacturing, include roles such as Engineering Team Lead, Test Engineer, Software Engineer, Solutions Architect, Sales Director, Construction Manager, Supply Chain Supervisor, and Equity Trader.

In the United Kingdom, for example, the role of Equity Trader has only 17% female representation in the prior job title pool, but women make up 23% of the talent pool when using a skills-based approach. Overall, in the United Kingdom, the share of women would improve by 12% with a skills-based hiring approach for jobs where women are most underrepresented. A similar trend is observed in the United States, where the female representation would increase by 16% for these roles. There, only 9% of workers with the title DevOps Architect are women, yet women make up 18% of the talent pool when skills are prioritized. For additional examples on how male-dominated occupations could be impacted by a skills-based hiring approach, refer to the appendix.

Globally, skills-based hiring for occupations where women are most underrepresented could increase female representation in the talent pipeline by 13%. The largest gaps between female representation in current occupations and in the skills-based talent pool appear in Ukraine (44%), Egypt (29%), Pakistan (27%), United Arab Emirates and Chile (both at 21%). This suggests that in these countries, women possess the necessary skills to fill more roles than current job title-based hiring practices reflect, and a skills-based approach could significantly broaden female representation in traditionally male-dominated occupations.

In bigger markets such as the United States and Germany, we see moderate representation gaps of 16% and 13% in talent pools, respectively, indicating that a skills-based approach could still meaningfully improve gender balance in these countries. Brazil and France also show similar gaps at 12% and 8%, suggesting these markets could improve gender balance through a skills-based hiring approach, though to a somewhat lesser degree than countries with the highest gaps.

Some of the smallest differences are found in Mexico (5%), Israel (4%), Costa Rica (-4%) and Switzerland (3%), where female representation in the skills-based pipeline closely aligns with current workforce representation. For example, the share of Cloud Architects who are women in Mexico is currently 15%, but the share of women in similar occupations (Cloud Engineer, DevOps Consultant, Solutions

Architect) is only 12%. This means, that unlike in other countries, there is no significant untapped talent pool of skilled women who are employed in similar occupations. It is thus important to address the challenges related to acquiring the skills themselves.

Accelerating the Shift to Skills-Based Hiring

To address workforce shortages, adapt to economic shifts, and build a more resilient talent pool, a shift towards a skills-based approach to hiring remains promising. This report highlights that adopting skills-based hiring can expand talent pools globally. The expanded talent pool may be most beneficial in jobs where there are shortages of workers, which may occur in cases like in Al and in the green sector if rapid expansion of demand for workers requires more job candidates to be considered—including those without experience in the job but with the right skill set. Additionally, skills-based hiring could increase the diversity of candidate pools group groups such as women and workers without four-year degrees. With potential benefits for both employees and employers, a collaborative effort from policymakers, business leaders, and workers can drive this paradigm shift and build a more inclusive labor market. By taking action whether through experimenting with hiring practices or adopting skill-based hiring recommendations, we can collectively leverage a skills-based talent ecosystem that strengthens both economic resilience and workforce inclusivity.

Appendix

Data and Privacy. This body of work represents the world seen through LinkedIn data, drawn from the anonymized and aggregated profile information of LinkedIn's 1+ billion members around the world. As such, it is influenced by how members choose to use the platform, which can vary based on professional, social, and regional culture, as well as overall site availability and accessibility. In publishing these insights from LinkedIn's Economic Graph, we want to provide accurate statistics while ensuring our members' privacy. As a result, all data show aggregated information for the corresponding period following strict data quality thresholds that prevent disclosing any information about specific individuals.

Gender Classification. If not explicitly self-identified, we have inferred the gender of members included in this analysis either by the pronouns used on their LinkedIn profiles or inferred based on first name. Members whose gender could not be inferred as either man or woman were excluded from any gender-centered analyses. We define 'occupations where women are most underrepresented' as those occupations that are in the bottom quartile for their country in terms of share of women employed in the last five years.

Generation Classification. A LinkedIn member's generation (Gen Z, Millennial, Gen X, Baby Boomer) is inferred based on graduation years listed on their LinkedIn profile. We follow the Pew Research Center's definition for each generation as Gen Z being born between 1997 and 2012, Millennials being born between 1981 and 1996, Gen X being born between 1965 and 1980, and Baby Boomers being born between 1946 and 1964.

Skills: Refers to the 41,000+ skills that are sourced from LinkedIn members (skills explicitly listed on member profiles, or inferred from other aspects of members' profiles, such as job titles, fields of study, etc.) or from job postings. Skills are the main building blocks of the insights in this report.

Green Skills: Our green skills classification is used to identify and validate job skills that are relevant to the green economy. The different types of low-carbon initiative skills are divided into 12 main categories of activities: Pollution Prevention, Waste Prevention, Energy Management, Renewable Energy Generation, Environmental Remediation, Ecosystem Management, Sustainability Education, Sustainability Research, Environmental Auditing, Environmental Policy, Sustainable Procurement, and Environmental Finance. These categories are derived from the definitions of green jobs, green goods and services taken from Bureau of Labor Statistics (BLS) and Greening of the World of Work: Implications for O*NET-SOC and New and Emerging Occupations.

Al Jobs: An "Al job" is defined as an occupation that requires Al Engineering skills to perform the job.

Skills Genome: For any entity (occupation, country, industry, etc.), the skills genome is an ordered list of the 50 'most characteristic skills' of that entity. These most characteristic skills are identified using a TF-IDF algorithm to identify the most representative skills of the target entity while down-ranking ubiquitous skills that add little information about that specific entity (e.g., Microsoft Word).

Talent pool: The number of potential skilled candidates for a certain job. We consider all active members with valid skill listings, regardless of their job searching status.

Prior job title talent pool: The number of potential candidates considered when hiring for an open job looking at workers who have held that target job title in the past five years. Job titles include exact matches (e.g., an employer is searching for a Recruiter and the worker has experience as a Recruiter) as well as equivalent matches (e.g., the worker has experience as a Recruiting Specialist).

Skills-based talent pool: The number of potential candidates considered when hiring for an open job looking at workers who have held jobs in the last five years with a large skill overlap (50%+ shared top skills) with the target job and meet a threshold of similar worker transitions. For example: a Nurse may have a large skill overlap with a Doctor, but that isn't a common transition due to the high level of retraining, so Nurses wouldn't be included in the skill-based talent pool if the open role is for a Doctor.

Skills-based talent pool increase: The ratio of the number of potential candidates for a given job identified using a skills-based talent pool approach to the number of eligible workers for that job identified using the direct jobs experience talent pool approach. Country and industry-level aggregates are defined by taking the median talent pool increase across occupations in the given segment.

Jobs or occupations: LinkedIn member titles are standardized and grouped into approximately 15,000 occupations. These are not sector or country specific. These occupations are further standardized into approximately 3,600 occupation representatives. Occupation representatives group occupations with a common role and specialty, regardless of seniority.

Geographic coverage: To ensure the highest data quality of our analysis, we only included analysis of countries where LinkedIn has the most representative data and applied minimum thresholds for each cut to be included in the final analysis. This report selected 58 countries: Argentina, Australia, Austria, Belgium, Brazil, Canada, Chile, Colombia, Costa Rica, Croatia, Cyprus, Czechia, Denmark, Egypt, Estonia, Finland, France, Germany, Greece, Hungary, Iceland, India, Indonesia, Ireland, Israel, Italy, Japan, Latvia, Lithuania, Luxembourg, Malaysia, Malta, Mexico, Netherlands, New Zealand, Norway, Pakistan, Peru, Philippines, Poland, Portugal, Romania, Saudi Arabia, Singapore, Slovakia, Slovenia, South Africa, South Korea, Spain, Sweden, Switzerland, Thailand, Türkiye, Ukraine, United Arab Emirates, United Kingdom, United States, Vietnam. We included most of these countries in every analysis, unless they did not have sufficient data liquidity for the Al jobs, Industry Group, or Green jobs breakdowns, or if a minimum gender coverage threshold was not reached for the country.

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Additional Materials

Share of women in occupations where they are underrepresented.

Country	Occupation	% Women Currently Employed	% Women in Skills-Based Pool	Talent Pool Increase for Women	Talent Pool Increase for Men
	Construction Site				
Australia	Manager	3%	27%	1502.3x	148.1x
Australia	Construction Manager	7%	30%	81.5x	15.5x
Australia	Project Supervisor	7%	26%	167.9x	47.7x
	Mechanical Design				
Belgium	Engineer	4%	15%	18.3x	8.9x
Belgium	Store Team Lead	20%	55%	49.6x	15.9x
	Technical Sales				
Belgium	Representative	15%	38%	92.3x	28.6x
Canada	Sports Journalist	16%	56%	263.8x	47.1x
	Vice President of				
Canada	Manufacturing	11%	32%	23.6x	6.3x
Canada	Driver	16%	39%	1.5x	l.lx
	Technical				
Czechia	Representative	7%	47%	290.9x	27.8x
Czechia	Software Architect	3%	11%	144.3x	35.8x
Czechia	Sales Engineer	11%	40%	140.3x	23.9x
Denmark	Foreperson	9%	40%	2.8x	1.2x
Denmark	Infrastructure Architect	6%	20%	48.1x	17.0×
Denmark	Software Architect	4%	13%	105.7x	37.0x
Finland	Car Salesperson	29%	57%	139.5x	40.0x
Finland	Vice President of Sales	23%	37%	94.4x	51.6x
	Technical Sales				
Finland	Representative	30%	48%	61.2x	33.2x
France	Internet Sales Specialist	13%	54%	4120.3x	743.4x
France	Car Salesperson	13%	53%	346.4x	54.6x
France	Subeditor	14%	57%	350.9x	44.6x
	Aircraft Maintenance				
Germany	Officer	3%	25%	20.2x	3.8x
Germany	Airline Captain	2%	12%	29.9x	6.7x

	Head Information				
0	Technology		7.00/		0 = 0
Germany	Infrastructure	3%	12%	457.1x	95.0x
Greece	Software Architect	3%	17%	230.4x	57.4x
Greece	Electrician	2%	11%	10.0x	3.5x
	Chief Technology				
Greece	Officer	6%	17%	38.1x	15.5x
	Head Information				
	Technology	<i></i>	7.40/		
India	Infrastructure	2%	14%	597.9x	176.4x
India	Fabric Manager	11%	42%	189.4x	28.6x
	Process Engineering				
India	Manager	9%	27%	160.1x	42.2x
Ireland	Software Architect	5%	20%	180.8x	59.4x
Ireland	Facilities Manager	16%	54%	1.7x	l.lx
Ireland	Chef	23%	68%	1.2x	1.0×
lsrael	Software Architect	12%	22%	78.3x	34.6x
lsrael	Security Guard	13%	24%	1.9x	1.6x
lsrael	Mechanical Technician	8%	13%	4.8x	4.0x
Italy	Welding Inspector	11%	29%	13.4x	5.5x
Italy	Sports Journalist	25%	57%	95.4x	25.9x
Italy	Stock Controller	28%	63%	1029.6x	281.2x
Netherland	Commercial Technical				
S	Advisor	7%	30%	905.4x	132.4x
Netherland					
S	Janitor	15%	62%	15.8x	3.2x
Netherland					
S	Driver	14%	59%	38.3x	5.1x
New					
Zealand	Construction Manager	7%	35%	107.1x	17.8x
New					
Zealand	Parts Sales Specialist	13%	50%	4.3x	1.7x
New					
Zealand	System Engineer	10%	23%	9.8x	4.4x
	Manufacturing				
Norway	Manager	13%	34%	45.0x	11.2×
Norway	Construction Manager	15%	34%	49.4x	15.1x
	Vice President				
	Information				
Norway	Technology	14%	32%	191.4x	56.9x
Poland	Forklift Operator	5%	36%	21.8x	3.5x
	Transportation				
Poland	Engineer	9%	42%	72.4x	9.7x

Poland	Sales Engineer	15%	48%	56.8x	12.0x
Portugal	Software Architect	2%	12%	206.5x	57.4x
Portugal	Football Coach	3%	18%	12.1x	3.2x
Portugal	Supply Chain Associate	20%	77%	105.3x	6.6x
	Chief Technology				
Romania	Officer	12%	28%	101.2x	35.9x
	Computer Network				
Romania	Administrator	12%	27%	26.4x	12.8x
Romania	Bartender	29%	58%	2.9x	1.9x
Saudi	Biomedical Equipment				
Arabia	Technician	2%	16%	21.1x	5.9x
Saudi					
Arabia	Electronic Mechanic	1%	5%	6.4x	5.6x
Saudi					
Arabia	Engineering Manager	2%	8%	103.3x	50.1x
Singapore	Electrical Supervisor	7%	22%	13.0x	6.5x
	Health Safety				
	Environment				
Singapore	Coordinator	11%	22%	5.1x	3.2x
Singapore	Bartender	20%	40%	5.5x	3.4x
Spain	Bank Director	10%	44%	12.0x	4.8x
Spain	Metal Worker	5%	16%	93.9x	28.2x
Spain	Pipefitter	4%	14%	116.5x	25.6x
Sweden	Infrastructure Architect	8%	43%	24.9x	5.1x
Sweden	Infrastructure Engineer	10%	36%	68.1x	15.5×
Sweden	Car Salesperson	13%	41%	470.2x	109.6x
Switzerland	Car Salesperson	10%	35%	52.1x	12.6x
Switzerland	Sales Engineer	10%	31%	61.5x	16.5x
Switzerland	Software Architect	5%	14%	82.3x	27.2x
United					
Arab					
Emirates	Public Relations Officer	10%	52%	78.1x	10.6x
United					
Arab	Chief Investment				
Emirates	Officer	6%	28%	27.3x	7.4x
United					
Arab					
Emirates	Drilling Superintendent	3%	12%	7.8x	3.0x
	Head Information				
United	Technology		_		
Kingdom	Infrastructure	2%	18%	1944.7x	186.5x
United	Computer Numerical				
Kingdom	Control Programmer	3%	16%	15.2x	4.0x

United Kingdom	Sports Journalist	12%	53%	142.6x	21.9x
United States	Football Coach	3%	32%	95.7x	6.3x
United States	Home Inspector	10%	62%	325.6x	23.8x
	Construction Site Manager	5%	33%	5723.4x	949.9x