Powering AI: A Deep Dive into the Global Data Center Workforce

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KEY FINDINGS

- **The data center workforce is expanding rapidly alongside surging demand.** The global population of professionals in data center occupations more than doubled between 2017 and 2025, while the broader Data Center Talent pool (including also those with relevant skills or certifications) grew by 177%. This expansion is matched by immediate demand: job postings for data center roles grew 23% year-over-year in 2025.
- **Talent is geographically concentrated in the U.S. and key global hubs.** The United States accounts for 40% of the global data center workforce, with Virginia, California, and Texas alone representing more than one-third of the national total. Outside the U.S., talent is most clustered in India, the United Kingdom, Brazil, and Germany—the latter recording the fastest growth among the top markets with a nearly 4x increase in its talent pool between 2017 and 2025.
- **Demographics pose a long-term pipeline risk.** The workforce skews significantly older: four in five data center workers are Gen X or Millennials. Gen Z remains significantly underrepresented relative to their overall presence in the workforce, signaling a potential future shortage if early-career pathways are not widened.
- **Hiring is resilient and driven by a mix of operational and engineering roles.** Data center hiring has consistently outpaced the broader labor market during the pandemic and has continued to accelerate following the advent of ChatGPT. In 2025 alone, the sector created at least 600,000 new jobs. This growth is unfolding along two tracks: high-volume "firstline" roles, such as Data Center Technicians, which often do not require a four-year degree, and professional roles, led primarily by Data Center Engineers and Data Specialists.
- **Data center workforce growth is fueled by career transitions from adjacent IT functions.** In 2025, for every professional leaving the sector, more than two entered the workforce, primarily transitioning from Information Technology and Engineering functional areas, and from roles like Network Engineer and System Administrator.
- **A "Skills Paradox" is emerging: AI competencies are rising, but infrastructure basics are in shortage.** The workforce is rapidly upskilling in AI, with "AI Agents," "AI Security," and "AI Governance" ranking as the fastest-growing skills in 2025. However, a gap remains in the physical foundations. Employers report acute shortages in hands-on infrastructure capabilities—such as cabling, racking, and network hardware—while general IT skills remain in surplus.
- **Talent is concentrated in large firms, but new companies are emerging.** Over 40% of professionals in data center occupations are employed in U.S.-based firms with more than 10,000 employees. At the same time, the ecosystem is expanding: in 2025, the share of newly founded data center-related companies grew by 19% relative to 2024, and by 44% compared to 2023, indicating rising firm formation alongside a concentrated incumbent base.

INTRODUCTION

Artificial intelligence is no longer a niche capability—it has become the fastest-spreading technology in human history. According to Microsoft's AI Diffusion Report, more than 1.2 billion people have used AI tools in less than three years, an adoption rate that outpaced the radio, the Internet, and the smartphone. As a general-purpose technology, AI's integration is fastest in regions with strong foundations in electricity, connectivity and computing, conditions predominantly concentrated in advanced economies.

This surge in AI diffusion has intensified the demand for robust digital infrastructure, positioning data centers as the factories of the AI era. Every AI model, search query, and digital interaction is powered by racks of servers, cables, and cooling systems that are invisible to most people, but indispensable to modern economies. As a result, investments in data centers are soaring. According to the World Economic Forum, global data center spending is expected to reach nearly 600 billion dollars by 2032. CBRE's 2025 Global Data Center Investor Intentions Survey[1] shows that 95% of respondents plan to expand their data center investments, with more than two in five investors committing 500 million dollars or more in equity, up from 30% in 2024.

As capital flows into infrastructure, an important question emerges: who will run it? To answer this question, this report offers a comprehensive look into the global Data Center Talent ecosystem, and points at opportunities for this workforce to continue supporting the growth of AI.

Data center skills and occupations

LinkedIn identifies the data center workforce through a set of relevant occupations and their most representative skills.

- **Data center occupations.** Standardized data center occupations or related member-provided titles within Information Technology, Operations, or Engineering functional areas. Examples of these occupations are Data Center Engineer, or Data Center Technician, but also Network Engineer, and System Administrator.
- **Data center skills.** Technical expertise and practical competencies required to design, operate, and maintain data center infrastructure and systems, classified into two groups based on their skill depth[2]:
  - **Core skills**, which are skills more unique to the data center field, such as Data Center Operations, Data Center Architecture, and Racking.
  - **Adjacent skills**, which are skills characteristic for data centers but members in other occupations are also likely to have, e.g. Network Administration, Cabling, and Virtualization.

Data Center Workforce Definitions

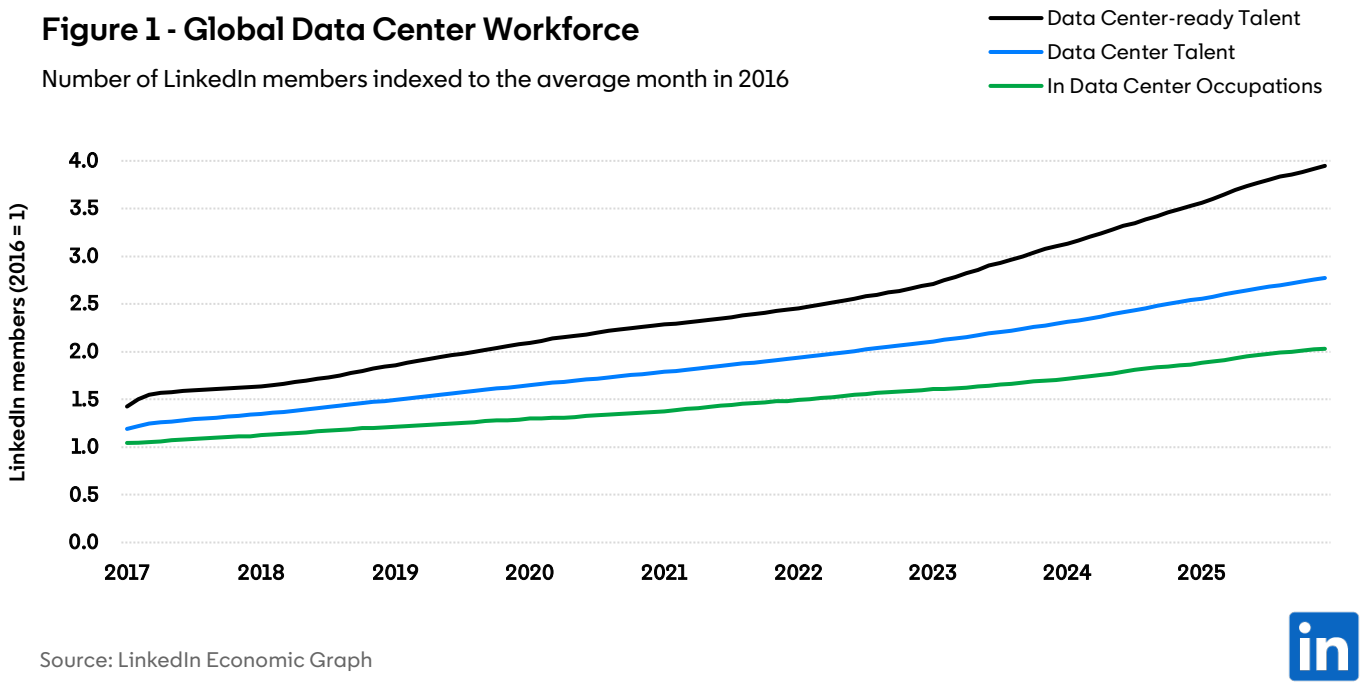
- **Members in Data Center Occupations:** Members currently employed in a data center occupation.
- **Data Center Talent (DCT):** Members who are or have been employed in a data center occupation, and/or who have at least two core data center skills, and/or have a data center-related certification.
- **Data Center-ready Talent:** Members that hold at least five data center skills (core and/or adjacent).

[1] The survey was conducted in early 2025 among 92 major investors within the digital infrastructure industry with 84% of respondents employed in U.S.-based organizations and 27% in operating, developing, or owning a colocation facility.

[2] Skill depth is the singularity of the skill to a given occupation. More details on the methodology in the Appendix of the report Quantum Talent Trends in an Emerging Workforce (LinkedIn Economic Graph, October 2025).

Figure 1 - Global Data Center Workforce

Number of LinkedIn members indexed to the average month in 2016



Source: LinkedIn Economic Graph

DATA CENTER TALENT AT A GLANCE

DATA CENTER TALENT IS GLOBALLY EXPANDING, DRIVEN BY SPECIALIZATION AND DATA CENTER SKILL DEMOCRATIZATION.

The global data center workforce has grown steadily since 2017, underscoring the increasing importance of digital infrastructure. The number of professionals in data center occupations rose by 107% between 2017 and 2025, while the number of Data Center Talent (DCT) grew by 177% in the same period (Figure 1). Growth was broadly consistent through the pandemic for each of the workforce groups worldwide. In 2025, the most common occupations among DCT are System Engineers (3.1%), Data Center Engineers (2.6%), and Data Center Technicians (2.4%). Although data center-related certifications are held by a minority of talent, the share has risen from 18% in 2017 to 28% in 2025, signaling a growing commitment to formalize expertise.

The most striking growth has occurred among the data center-ready talent pool. This group is comprised of professionals who reported at least five data center skills, positioning them as a skills-ready pool of workers who can support rising demand in the data center workforce. From 2017 to 2025, the data center-ready population has grown by almost 4x. Among data center-ready talent, IT-related and adjacent occupations are predominant, such as System Administrator (5.0%), System Engineer (5.0%), Information Technology Manager (2.8%), Information Technology Specialist (2.3%), and Network Engineer (2.1%).

The data suggests a dual pattern of specialization and democratization. The number of professionals specializing directly in data center operations continues to grow, alongside infrastructure needs. At the same time, the data points to ongoing upskilling in data center competencies, reflected in the growing adoption of relevant skills and certifications.

DATA CENTER TALENT IS CONCENTRATED IN THE U.S., REFLECTING THE LOCALIZED NATURE OF INFRASTRUCTURE WORK.

Professionals in data center occupations are highly concentrated in the United States, which accounts for 40% of the global data center workforce. India and the United Kingdom follow with 6.3% and 4.7%, respectively,

while Brazil accounts for just under 4% and Germany for 3.3%. This distribution fairly mirrors the physical footprint of data centers. A census conducted by the University of Oxford shows that the U.S. leads globally with 26 AI accelerator-enabled cloud regions[3]. According to the estimates of the International Energy Agency (IEA), the U.S. has 53.7 GW of data centers installed capacity against the 11.9 GW in the European Union[4].

Within the U.S., data center workers are further concentrated in a handful of states. Virginia (13.5%), California (11.4%), and Texas (9.6%) together account for more than one-third of the national data center workers, aligning with their role as the country's largest data center hubs. These states combine favorable conditions for infrastructure expansion, reliable broadband connectivity, land availability and proximity to major demand centers.

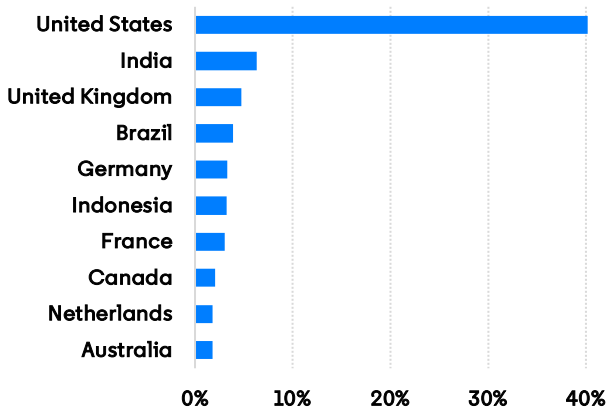
Despite the U.S. dominance in Data Center Talent concentration, Germany demonstrated the most significant growth in its talent pool—increasing by almost 4x between 2017 and 2025. With seven cloud regions, Germany has established itself as Europe's leading market. Also the U.S., India, the U.K., and Brazil, countries with high data center talent concentration, experienced a growth in their data center workforces since 2017, aligning with global trends, though at a slower pace than Germany, as shown in Figure 3. Notably, the data center professionals in India and in the U.S. doubled in 2025 with respect to their benchmarks.

DATA CENTER TALENT IS DOMINATED BY MALE AND OLDER WORKERS, WITH LIMITED REPRESENTATION OF GEN Z.

The generational composition of Data Center Talent is heavily weighted towards older professionals. Globally, the talent pool is still overwhelmingly male—women account for just 11%—and it skews older, with Gen X and Millennials making up roughly four in five professionals. Figure 4 quantifies this imbalance by comparing each generation's share within DCT with its overall share on LinkedIn. Gen X accounts for 29% of DCT globally, more than 15 percentage points (pp) above its LinkedIn share, and Millennials—the largest cohort at 53%—are also globally overrepresented (+9 pp), though the size of the gap varies by country.

Figure 2 - Top 10 Countries by data center workers concentration

Share of workers in data center occupations by country as of December 2025



Source: LinkedIn Economic Graph

By contrast, Gen Z is consistently underrepresented across the countries analyzed. It makes up 14% of global DCT, 25 percentage points lower compared to their overall representation on LinkedIn, with the gap widest in India (-39pp) where DCT is predominantly composed of Millennials. This consistent pattern suggests that while younger professionals are entering the workforce, better pathways into data center careers are still needed.

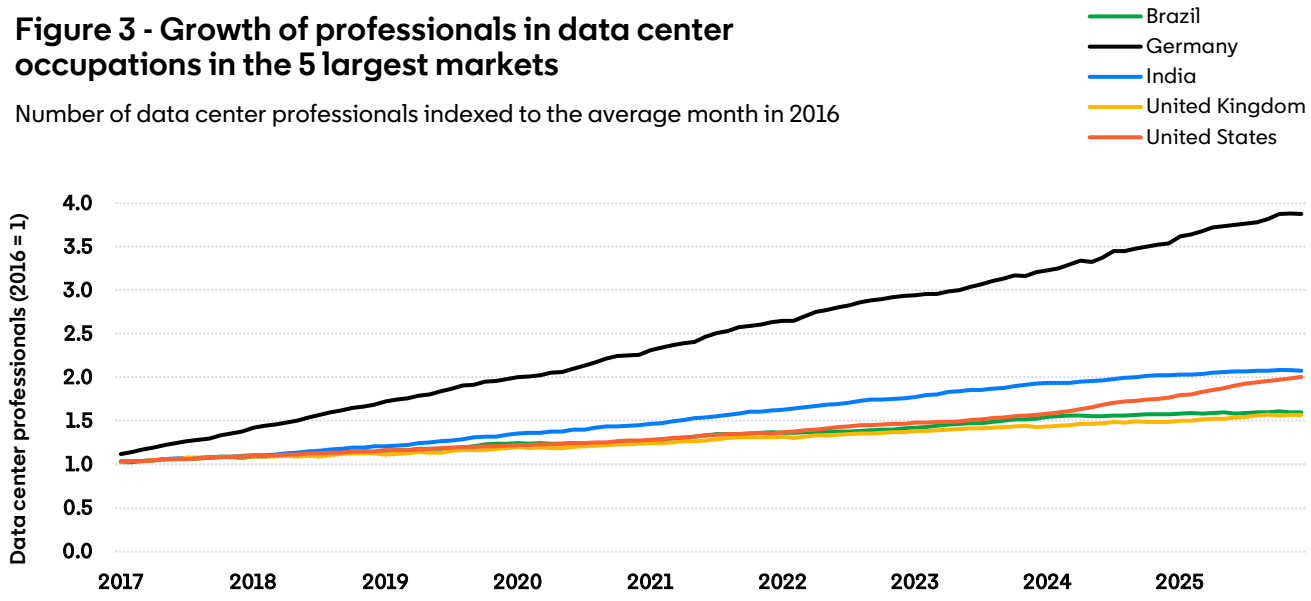
Despite this imbalance, some recent hiring dynamics point to early signs of an increasing demand for entry-level workers. In the U.S., Data Center Technicians rank among the top five occupations by year-over-year growth in entry-level hiring (+108% from October to December 2025 compared to the same period in 2024). This divergence indicates that, while younger cohorts are still underrepresented in the existing workforce, demand for entry-level roles is starting to accelerate and may gradually expand access points for younger talent.

[3] Z. Hawkins et al., "AI Compute Sovereignty: Infrastructure Control Across Territories, Cloud Providers, and Accelerators", June 2025. A "cloud region" is a cluster of large, interconnected data centers situated roughly in the same area.

[4] Microsoft AI Economy Institute, AI Diffusion Report, November 2025

Figure 3 - Growth of professionals in data center occupations in the 5 largest markets

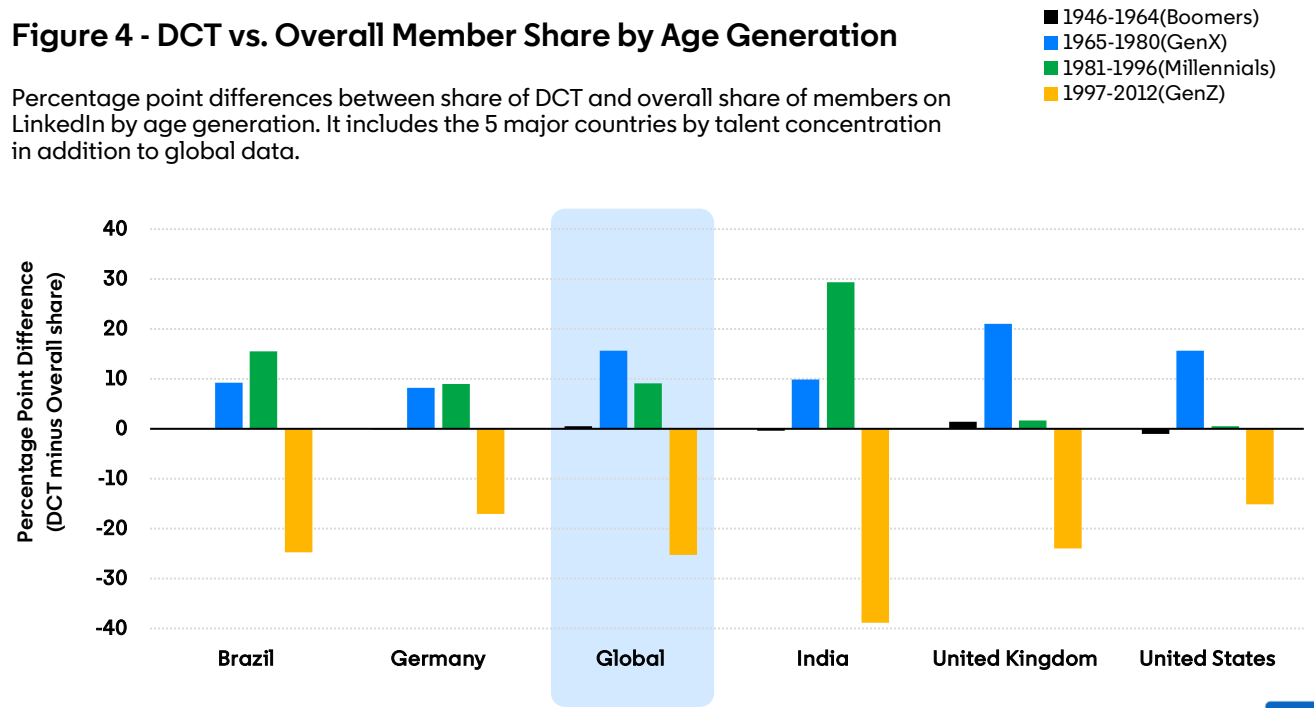
Number of data center professionals indexed to the average month in 2016



Source: LinkedIn Economic Graph

Figure 4 - DCT vs. Overall Member Share by Age Generation

Percentage point differences between share of DCT and overall share of members on LinkedIn by age generation. It includes the 5 major countries by talent concentration in addition to global data.



Source: LinkedIn Economic Graph

A CLOSER LOOK AT CLOUD PROFESSIONALS

Cloud professionals form a specialized segment of the broader data center workforce focused on building and operating software-defined, virtualized environments rather than managing physical data center hardware. Their work centers on architecting cloud-native systems, automating infrastructure through code, and using managed services from providers like AWS, Azure, and Google Cloud.

Unlike traditional data center roles rooted in facilities, servers, and on-prem operations, cloud roles, such as cloud engineers, architects, SREs, DevOps engineers, and cloud security specialists, optimize globally distributed platforms for scalability, resilience, and cost. The skills are more software-oriented, fast-evolving, and reliant on continuous learning, reflecting the rapid pace of cloud service innovation. For example, analyzing the most representative skills among cloud professionals, the most characteristic ones are Terraform, Kubernetes, Cloud Infrastructure, Ansible, and Microsoft Azure.

Top 5 largest cloud workforces

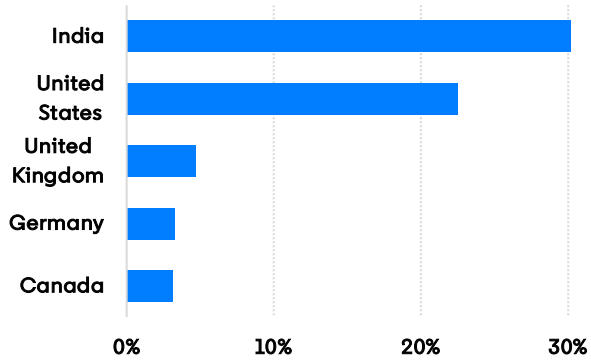
Compared to Figure 2, many countries with large data center workforces also rank highest for cloud professionals. India has the largest workforce, suggestive of growing offshoring strategies, followed closely by the United States.

Cloud professionals over time

Similarly to tech, cloud professionals have also been impacted by economic uncertainty and over-hiring. This resulted in a peak in the share of cloud professionals between 2023 and 2024, more pronounced in Germany and flattened in the U.S.

Figure 5 - Cloud professionals concentration by country

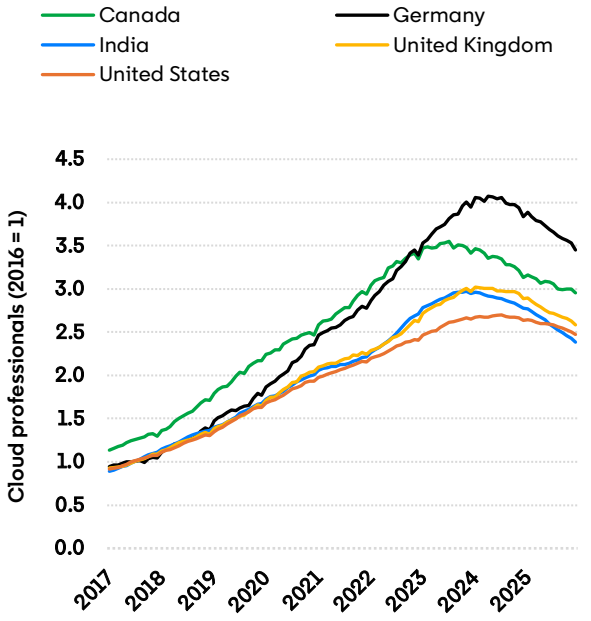
Top 5 countries by share of professionals in cloud occupation as of December 2025



Source: LinkedIn Economic Graph

Figure 6 - Growth of cloud professionals in the largest workforces

Share of cloud professionals indexed to the average month in 2016



Source: LinkedIn Economic Graph

Relative LinkedIn Hiring Rate for cloud professionals

Hiring of cloud professionals (Figure 7) closely tracks data center hiring (in Figure 9), highlighting the strong link between the two talent markets.

Fastest growing skills of cloud professionals.

In 2025, cloud professionals have concentrated their upskilling efforts primarily in AI agents and tools, including AI Agents, Multi-agent Systems, and AI Software Development (Table 1).

There is an increasing skills overlap between cloud professionals and data center workers.

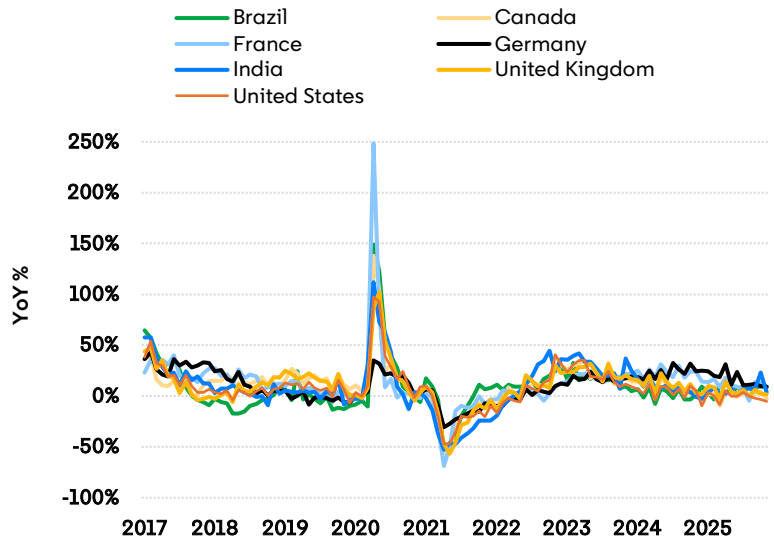
A growing number of data center talent has adopted cloud skills in recent years (Figure 8), as modern infrastructure shifts toward hybrid, software-defined, and automated environments that require fluency across both on-prem and cloud platforms

Table 1 – Top 10 fastest growing skills among cloud professionals

Rank	Fastest growing skills
1	AI Agents
2	Multi-agent Systems
3	Anthropic Claude
4	AI Software Development
5	Reducing Operating Costs
6	AI Productivity
7	Retrieval-Augmented Generation (RAG)
8	Microsoft Certified Technology
9	Downtime Reduction
10	Open Telemetry

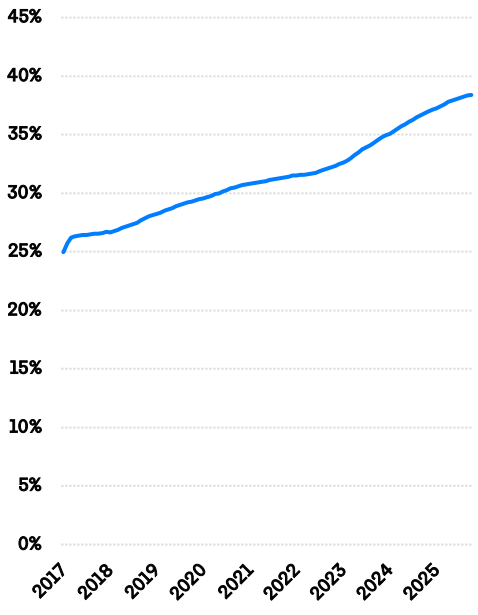
Figure 7 - Cloud Workers Year-over-Year Relative Hiring Rate

The relative hiring is the ratio of cloud workers hiring over the country's overall hiring rates.



Source: LinkedIn Economic Graph

Figure 8 - Share of DCT with cloud skills over the years



Source: LinkedIn Economic Graph

DATA CENTER TALENT HIRING TRENDS

HIRING FOR DATA CENTER TALENT IS RISING AND OUTPACING THE BROADER LABOR MARKET.

Hiring for data center professionals has risen steadily over the past decade, tied to global investment in infrastructure. Hiring is a key indicator of the sector's capacity to meet global demand for digital infrastructure. Data Center Talent hiring relative to overall hiring rates has been analyzed across the five countries with the largest data center workforces: the United States, India, Brazil, the United Kingdom, and Germany.

Global DCT hiring outpaced overall hiring significantly during the global pandemic, resulting in a surge in DCT's relative hiring rate. As businesses digitized operations to enable remote work, demand for cloud services and data storage increased. As a result, hiring rates for DCT outpaced overall hiring across all five countries, with Brazil showing a particularly strong relative growth (Figure 9). In 2021, the overall labor market rebounded, but the pace of DCT hiring remained significantly higher than its pre-pandemic baseline as depicted in Figure 10. A second wave of growth began in mid-2022 and peaked in 2023. Since then, hiring has moderated, suggesting a transition from rapid expansion to sustained growth with data center hiring outpacing the overall labor market.

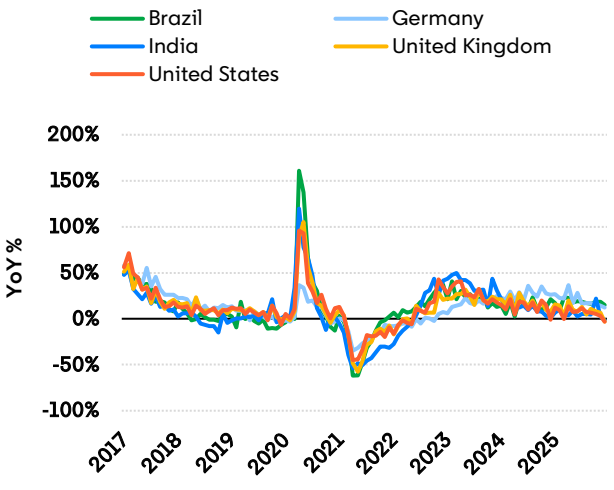
Despite fluctuations in relative hiring rates, DCT hiring across all five countries remained well above their 2016 monthly averages (Figure 10). Brazil and India saw the fastest growth, with hiring rates increasing by 4.1x and 3.2x respectively, compared to their 2016 benchmarks, and the U.S. saw hiring rates grow by 2.3x since 2016.

This divergence highlights a key distinctive feature of Data Center Talent hiring. While hiring for other talent segments, such as AI Engineering Talent, has mirrored economic cycles more closely, hiring for DCT has proven more resilient, underscoring its foundational role in the digital economy and the AI value chain[5].

In 2025 alone, the industry is estimated to have generated globally more than 600,000 net new positions[6]. This growth has been primarily driven by rapid investment in AI infrastructure from large-scale cloud providers.

Figure 9 - DCT Year-over-Year Relative Hiring Rates

The relative hiring is the ratio of DCT hiring over the country's overall hiring rates



Source: LinkedIn Economic Graph

Table 2 – Top Data Center Roles Hired in Past 12 Months (% of Hires)

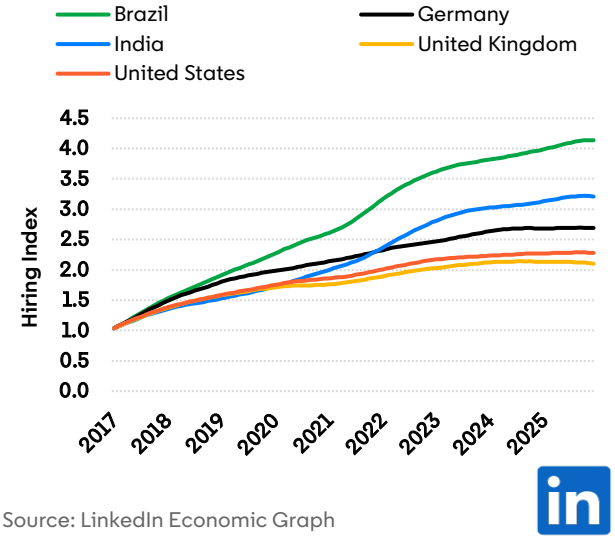
Rank		Firstline Roles	Professional Roles
1		Data Center Technician (12%)	Data Center Engineer (9%)
2		Data Technician (3%)	Data Specialist (4%)
3		Operations Technician (2%)	System Engineer (3%)
4		Data Center Operations Specialist (2%)	Software Engineer (3%)
5		Facilities Technician (1%)	Network Engineer (2%)

[5] LinkedIn Economic Graph, Understanding the Talent Infrastructure Powering AI Transformation, October 2025.

[6] LinkedIn Economic Graph, Labor Market Report - Building a Future of Work that Works, January 2026.

Figure 10 - DCT Indexed Hiring Rates

Hiring is expressed as an index with respect to the average month in 2016 with a 12-month trailing average.



Source: LinkedIn Economic Graph

A significant portion of recent hiring is concentrated in operational and on-site technical roles. These roles, frequently categorized as "firstline" positions, typically do not require traditional four-year degree as a prerequisite for entry. Data Center Technicians represent the largest single hiring block at 12%, followed by Data Technicians and Operations Specialists (Table 2). The prominence of these roles highlights a critical shift in the talent landscape: as data centers scale, the demand for "hands-on" infrastructure expertise is growing in relevance.

Complementing this operational foundation is the continued demand for engineering and data professionals. Data Center Engineers and Data Specialists account for 9% and 4% of 2025 hires, respectively, reflecting the need for sophisticated oversight of complex power, cooling, and network architectures. This segment of the workforce bridges the gap between physical infrastructure and the software-defined environments that power modern AI applications.

Table 3 – Top 10 occupations members left from to transition into data center occupations (2016-2025)

Rank	Prior occupation	Share of job transitions
1	Network Engineer	9.0%
2	System Engineer	8.7%
3	Information Technology Specialist	6.8%
4	System Administrator	6.7%
5	Project Manager	5.9%
6	Software Engineer	5.8%
7	Electrical Engineer	3.5%
8	Information Technology Technician	3.4%
9	Information Technology Support Specialist	2.9%
10	Network Technician	2.4%

JOB MOBILITY AMONG DATA CENTER TALENT

DATA CENTER TALENT GROWTH IS FUELED BY CAREER TRANSITIONS FROM ADJACENT IT ROLES, WHILE GEOGRAPHIC MOBILITY REMAINS MAINLY DOMESTIC.

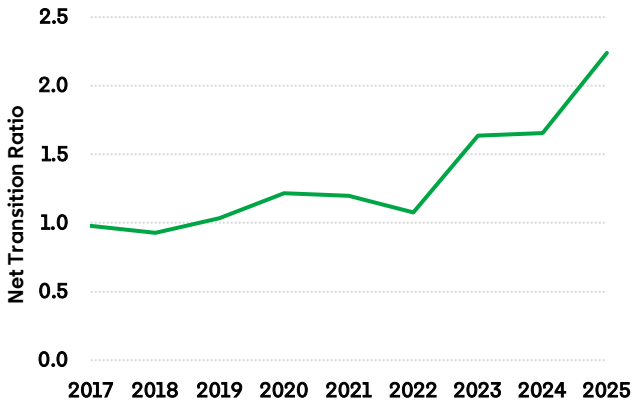
Roughly 79% of new data center professionals transitioned from other technical fields, primarily Information Technology and Engineering. When considering all the global job transitions into data center positions, between 2016 and 2025, 55% of those were within-role transitions, i.e. transitions from and to data center occupations. However, when analyzing only the external inflows into data center occupations during the same period, the most common prior roles were Network Engineer (9%), System Engineer (8.7%), and Information Technology Specialist (6.8%). The top 10 prior occupations outlined in Table 3 suggest that the DCT workforce is partially built from neighboring technical domains.

The direction of these transitions has gradually shifted over time. Job transitions into data center occupations (inflows) are compared with outflows to other

occupations. A net transition ratio is computed as the share of inflows divided by the share of outflows, excluding within-role transitions. Values above one indicate a positive net inflow, meaning that more professionals move into data center occupations than leave it. In 2017, inflows and outflows were roughly equal, but the ratio fell below one in 2018 and surged to 1.2 in 2020, as infrastructure demand spiked during the global pandemic. After a brief slowdown in 2021-2022, inflows strengthened again, reaching a net transition ratio of 2.2 by 2025. This means that for every professional leaving a data center position, more than two others entered the workforce. This rising inflow points to the growing attractiveness and visibility of data center careers within the broader tech ecosystem.

Figure 11 - Net Transition Ratio for Data Center Occupations

The ratio is calculated as the share of job transitions into data center occupations divided by the share of transitions from data center occupations to others.



Source: LinkedIn Economic Graph

When considering geographic mobility, migration[7] patterns show that professionals working in data center occupations have limited movements across borders. Across countries, most of the professionals who changed their location into a given labor market were already residing in the same country prior to the move, suggesting that mobility is primarily domestic rather than cross-borders. Looking at inflows between 2023 and 2025, 92% of the relocations into the U.S. are domestic, while in Brazil the within-country migrations account for 81%, India 80%, the U.K. 76%, and Germany 65%.

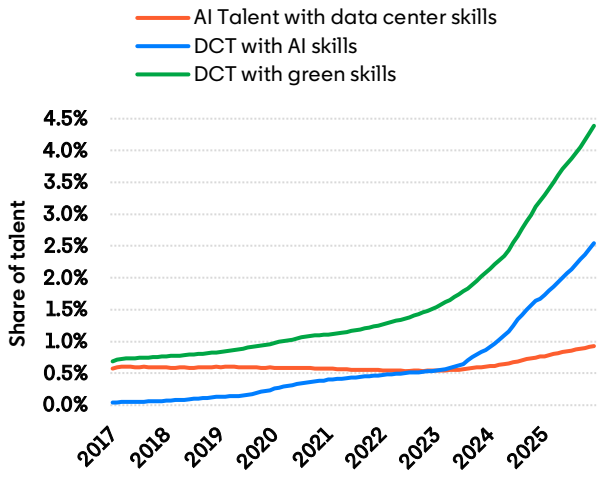
This dynamic is mirrored within the U.S. at the state level. The recorded relocations of data center workers are mostly within the state's borders with California having 67% in-state migrations, Virginia 58%, and Texas 57%. These patterns underscore that the expansion of the data center workforce is relatively more fueled by internal labor market reshuffling than by cross-regional inflows, reflecting the localized and infrastructure-dependent nature of the sector.

SKILLS LANDSCAPE AND MISMATCHES

AI competencies are reshaping the data center's skills landscape. In 2025, AI-related skills, including AI Agents, AI Security, and AI Governance, have overtaken traditional IT tools as the fastest growing skills added by Data Center Talent to their profiles, in contrast to the scenario in 2024 which was mainly dominated by management and development-related skills (Table 4). This signals a convergence in recent years between data center operations and AI infrastructure. In fact, the

Figure 12 - Skills Overlap

Share of talent with cross-domain skills



Source: LinkedIn Economic Graph

[7] A migration instance is defined as a member changing their location on their LinkedIn profile.

share of DCT with AI Engineering skills was slowly growing until 2023, where it experienced a drastic shift in growth, rising from 0.5% to 2.5% by the end of 2025. On the other hand, the share of AI Talent with data center skills has increased more marginally, from 0.5% to 0.9% during the same timeframe (Figure 12). This asymmetry suggests that the convergence is primarily driven by DCT broadening their AI-related competencies, rather than AI Talent acquiring data center skills.

Sustainability is also an expanding area amongst Data Center Talent. Over the years, the share of DCT with green skills followed a similar trend as the share of DCT with AI Engineering skills, with a turning point in 2023 where the growth rate greatly accelerated—between 2023 and 2025 it increased from 1.5% to 4.5% (Figure 12). The rise of green skills within the DCT ecosystem signals progress but also highlights the need for deeper integration and faster scaling, particularly to meet the growing demand from AI.

Skill mismatches[8] reveal that many professionals are still rooted in traditional IT backgrounds rather than data center–specific expertise. Table 5 summarizes the skill mismatches across the top data center occupations in the U.S.: Data Center Technician, Data Center Operations Specialist, and Data Center Manager. Across all three roles, shortages are most acute in physical and network infrastructure capabilities—for example cabling, racking, and network hardware. On the other hand, there is an oversupply of broadly applicable IT skills like server management, hardware support, and IT operations. Unlike technicians and operations specialists, Data Center Managers show gaps in more cross-domain skills like information security, and cloud platform expertise. Together, these mismatches highlight the importance of realigning the talent pipeline and point at potential skilling opportunities.

Table 4 – Fastest growing skills among DCT

Rank	2024	2025
1	Daily Operations Management	AI Agents
2	Network Troubleshooting Tools	Anthropic Claude
3	Difficult Situations Management	AI Security
4	Call Center Development	AI Governance
5	Computer Science Education	AI Software Development
6	Multiple Projects Simultaneously	PC & Mac platforms
7	Long-term Vision	AI Productivity
8	LangChain	AI Prompting
9	PMO Services	Reducing Operating Costs
10	Responsible AI	Downtime Reduction

[8] A mismatch occurs when there is a misalignment between skills employers seek and the competencies available in the workforce.

Table 5 – Top skills shortage and surplus for selected data center occupations in the U.S.

Data Center Technician		Data Center Operations Specialist		Data Center Manager	
Shortage	Surplus	Shortage	Surplus	Shortage	Surplus
1. Network Hardware	1. Windows Server	1. Structured Cabling	1. Computer Hardware	1. Cabling	1. Servers
2. Racking	2. Active Directory	2. Cables	2. Servers	2. HVAC[9]	2. Disaster Recovery
3. Cables	3. IT Operations	3. Racking	3. Security	3. Structured Cabling	3. IT Management
4. Network Infrastructure	4. Servers	4. Firewalls	4. Hardware	4. Information Security	4. IT Integration
5. RAID[10]	5. Hardware	5. Network Infrastructure	5. Storage Area Network (SAN)	5. Amazon Web Services (AWS)	5. Security

EMPLOYER LANDSCAPE

The employer landscape highlights the predominance of U.S.-based firms. The share of job postings for data center roles or requiring at least one core data center skill has increased by 23% year-over-year in 2025. The workforce remains highly concentrated in large firms, particularly those headquartered in the U.S., which account for over 40% of professionals in data center occupations, as shown in Table 6. Mid-market U.S. firms also play a notable role with nearly 14% of data center workers. Outside the U.S., major employers are concentrated in India, the U.K., France, and Germany in almost exclusively large enterprises.

The ecosystem is diversifying with new data center-related companies[11]. The share of data center-related companies founded in 2025 increased by 19% compared to 2024, and 44% relative to 2023. This surge suggests that the sector is not only scaling through established players, but also attracting new entrants, highlighting the creation of fresh opportunities for professionals.

Table 6 – Share of data center workers by company HQ location and size (Top 10)

Rank	Company HQ location	Company size	Share of data center workers
1	United States	Enterprise	41.5%
2	United States	Mid-Market	13.9%
3	India	Enterprise	2.7%
4	United Kingdom	Enterprise	2.7%
5	France	Enterprise	2.7%
6	United Kingdom	Mid-Market	2.0%
7	India	Mid-Market	1.8%
8	United States	SMB	1.7%
9	Germany	Enterprise	1.3%
10	Brazil	Enterprise	1.2%

[9] Heating, Ventilation, and Air Conditioning
[10] Redundant Arrays of Inexpensive Disks

[11] Identified based on the company description provided by their LinkedIn company page.

CONCLUSION

The data center workforce has entered a phase of rapid expansion, with growth extending beyond the United States into multiple global hubs, such as Germany, United Kingdom, India, and Brazil. However, the data reveals that this growth is not merely a matter of headcount; it is characterized by a widening divergence between rising demand and the specific availability of skills and demographics required to meet it.

The analysis suggests that the sector's ability to sustain this trajectory rests on resolving two structural tensions. First, the "skills paradox"—where the rapid adoption of AI competencies is contrasting with a deepening shortage of fundamental infrastructure skills—indicates that future workforce resilience will depend on balancing high-level software fluency with the hands-on technical expertise required to physically build and power these facilities. The second is geographic stickiness: the findings on labor migration confirm that this workforce is hyper-local. With limited cross-border mobility, regions must depend on the efficient local workforce development and conversion from adjacent fields and exploiting the growing data center-ready talent pool. While this report does not examine the broader ecosystem of data center jobs involved in building and servicing facilities, those roles are also inherently local and will meaningfully shape whether regions can scale data center capacity.

Ultimately, the sector faces a clear demographic horizon. With a workforce heavily anchored in Gen X and Millennials, the long-term stability of the data center ecosystem is contingent on whether the current acceleration in entry-level hiring can successfully bridge the gap to Gen Z. If these local pipelines and early-career pathways can be solidified, the workforce is well-positioned to evolve from a niche infrastructure function into a diverse, massive-scale pillar of the AI economy.

APPENDIX

Data & 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.

The following countries are included in this research, and global analyses refer to aggregated data from all these countries within our analytical scope: Algeria, Argentina, Australia, Austria, Bahrain, Bangladesh, Belgium, Bolivia, Brazil, Canada, Chile, Colombia, Costa Rica, Croatia, Cyprus, Czechia, Denmark, Dominican Republic, Ecuador, Egypt, Estonia, Finland, France, Germany, Ghana, Greece, Guatemala, Hong Kong SAR, Hungary, India, Indonesia, Iraq, Ireland, Israel, Italy, Jamaica, Japan, Jordan, Kenya, Latvia, Lithuania, Luxembourg, Malaysia, Mauritius, Mexico, Morocco, Nepal, Netherlands, New Zealand, Nigeria, Norway, Pakistan, Panama, Peru, Philippines, Poland, Portugal, Puerto Rico, Qatar, Romania, Saudi Arabia, Singapore, South Africa, South Korea, Spain, Sri Lanka, Sweden, Switzerland, Thailand, Trinidad and Tobago, Tunisia, Türkiye, Ukraine, United Arab Emirates, United Kingdom, United States, Uruguay, Venezuela, Vietnam.

Methodology.
Data Center Talent are defined using LinkedIn's occupational taxonomy combined with skills data. The methodology closely follows the one adopted for Quantum Talent.

First, a set of standardized data center occupations is identified, including engineers, technicians, operators, managers, and architects (Table A1). Because many member-provided job titles in this niche field do not map neatly to standardized roles, raw job titles that clearly indicate data center work have also been included in the definition of data center occupation.

Second, the 30 most representative skills ("the skills genome") of the standardized data center occupations are identified and classified as either core (unique to the field) or adjacent (shared with related roles) data center skills (Table A2). Based on the above-defined occupations and skills, data center workforce is divided into three groups:

- **In Data Center Occupations:** members currently employed in a data center occupation (standardized or relevant member-provided title).
- **Data Center Talent (DCT):** members who are or have been employed in a data center occupation, and/or who have at least two core data center skills, and/or have a data center-related certification.
- **Data Center-ready Talent:** members that hold at least five data center skills (core and/or adjacent).

Table A1 – List of standardized data center occupations

Occupation	Functional Area
Data Center Operator	Information Technology
Data Center Engineer	Information Technology
Data Center Operations Manager	Operations
Data Center Manager	Information Technology
Director Datacenter Operations	Information Technology
Data Center Supervisor	Information Technology
Data Center Operations Specialist	Information Technology
Data Center Administrator	Information Technology
Data Center Technician	Information Technology
Data Center Architect	Engineering
Data Center Analyst	Information Technology

Table A2 – Top 30 most characteristic skills for data center occupations (data center skills)

Rank	Skill name	Skill depth
1	Data Center Operations	Core
2	Data Center Infrastructure	Core
3	Data Centers	Core
4	Data Center Management	Core
5	Cabling	Adjacent
6	Servers	Core
7	Data Center Architecture	Core
8	Structured Cabling	Adjacent
9	Data Center Design	Core
10	Rack	Core
11	Cable Management	Adjacent
12	VMware vSphere	Adjacent
13	VMware	Adjacent
14	Windows Server	Adjacent
15	Storage Area Network (SAN)	Adjacent
16	Network Switches	Adjacent
17	Break Fix	Adjacent
18	VMWare ESXi	Adjacent
19	Virtualization	Adjacent
20	Fiber Optic Cable	Adjacent
21	Copper Cabling	Adjacent
22	Racking	Core
23	Cisco Systems Products	Adjacent
24	Dell PowerEdge Servers	Core
25	VMware Infrastructure	Adjacent
26	Active Directory	Adjacent
27	Infrastructure	Adjacent
28	UPS Systems	Core
29	Data Center Virtualization	Core
30	Computer Hardware	Adjacent

KEY DEFINITIONS

Data center occupation. Any of the standardized occupations listed in Table A1 or an occupation in the data center field that is in engineering, information technology or operations functional areas, extracted using the free text field of a member's job title.

Data center skill. Skill that pertains to technical expertise and practical competencies required to design, manage, operate, and maintain data center infrastructure and systems.

Skill depth. The singularity of the skill to a given occupation. Composed of two categories: "core" skills that are more unique to an occupation, and "adjacent" skills that members in other occupations are also likely to have. For example, we classify Cabling as an adjacent skill due to its use by, say, electrical technicians, whilst we classify Servers as a core skill, as they are specific to data centers.

Core skill. A skill that is highly specific and unique to a given occupation, meaning it is strongly associated with and primarily used by people in that job role. Because it is less widely shared across other occupations, it is considered a distinguishing or defining capability for that occupation.

Adjacent skill. A skill that is relevant and useful for an occupation but is also commonly found in many other occupations. These skills are not unique to a specific job and therefore do not strongly differentiate that role from others.

Data Center Talent (DCT). Members who are or have been employed in a data center occupation, and/or who have at least two core data center skills (e.g. Data Center Operations), and/or have a data center-related certification.

Data Center-ready Talent. Members that hold at least five data center skills (core and/or adjacent).

Data center certification. Professional credentials that validate a member's knowledge and expertise in the data center field issued by competent authorities.

AI Engineering skill. Technical competencies involved in building and deploying AI systems. These include machine learning, predictive modeling, and neural networks.

AI Talent. Members listing 2 or more AI Engineering skills or have worked in an AI occupation before.

Green skill. A skill that directly combat the effects of climate change. For more details, see the Methodology note in the LinkedIn Green Skills Report (November 2025).

Hires. Hires are LinkedIn members who added a new employer to their profile in the same month the new job began. By only analyzing the timeliest data, we can make accurate month-to-month comparisons and account for any potential lags in members updating their profiles. The **LinkedIn Hiring Rate** is the percentage of LinkedIn members who added a new employer to their profile in the same month the new job began, divided by the total number of LinkedIn members in the country. This number is indexed to the average month in 2016; for example, an index of 1.05 indicates a hiring rate that is 5% higher than the average month in 2016.

Data Center Talent LinkedIn Hiring Rate. For a given country, we calculate the count of hires who have at least two core data center skills or who worked in a data center occupation, divided by the total number of LinkedIn members in that country. This number is first indexed to the average month in 2016 and then divided through by the LinkedIn Hiring Rate for each country.

Job transitions. Job transitions are calculated from updates to LinkedIn profiles using the start date of a new job at a different company after a previous job has ended.

Migration. A migration instance is defined as a member changing their location on their LinkedIn profile.

Job postings. Monthly series of paid job postings on LinkedIn.