

Hiring Challenges in the IT Sector in the Era of AI, Hybrid Work, and Global Talent Shortages

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Abstract

With the rapid adoption of artificial intelligence, hybrid work, and globalization of the workforce, the information technology (IT) sector continues to face unprecedented hiring challenges in 2025. While the pandemic triggered the shift towards remote work, the post-pandemic era has transformed these practices into permanent features of recruitment and retention strategies. This study investigates the current hiring challenges in the IT sector, including global talent shortages, rising competition for niche skills like AI, cybersecurity, cloud computing, and data science, as well as evolving employee expectations such as flexibility, wellbeing, and purpose-driven work. The research also explores how AI-powered recruitment, upskilling initiatives, and employer branding strategies are shaping the future of talent acquisition. These findings will be crucial for IT companies navigating today's competitive hiring landscape.

Keywords: recruitment, post pandemic, challenges, hiring, talent, IT sector, AI

Introduction

The global IT industry in 2025 is facing complex hiring dynamics influenced by digital transformation, artificial intelligence, and hybrid work models. While the pandemic disrupted traditional hiring practices, its long-term effect has been the normalization of remote and flexible work. Organizations are now competing on a global scale for scarce talent, particularly in fields like AI, machine learning, cybersecurity, and cloud computing. Alongside technological change, workforce expectations have shifted dramatically. Employees demand work-life balance, opportunities for career growth, strong employer branding, and meaningful work aligned with sustainability and diversity, equity, and inclusion (DEI) values. Recruiters and hiring managers must therefore adapt to candidate-centric models, leveraging AI-driven recruitment tools, data analytics, and global platforms to attract and retain talent. This paper examines these challenges and outlines strategies for the IT sector to thrive in the current hiring environment.

The COVID-19 hiring landscape was severely shaken. Millions of individuals were laid off or given furloughs in a matter of weeks. Many more people discovered themselves working in their kitchens, dining rooms, or guest rooms. Even local travel was limited, forcing recruiters to find innovative approaches to finding and communicating with candidates. To conduct interviews and give candidates a sense of the culture and working environment of their organisation, hiring managers used video platforms. Offices, retail locations, and other workplaces were all closed because to the pandemic. Markets were in a state of flux, and firms were finding it difficult to change their business models while candidates searched for jobs. From career fairs to onboarding, the entire hiring process went digital. The dynamics of locating the proper talent changed in the meantime. Recruiters and hiring managers started looking for prospects among their current staff. LinkedIn claims that from April to August 2020, employers used internal mobility 20% more frequently. And businesses used digital technologies to broaden their search to faraway regions if the proper candidates weren't

accessible nearby. According to a study, 79% of companies stated they might find better candidates if they weren't restricted to people who lived close to their place of business. Introduction Candidates discovered themselves competing in a crowded market where more people were vying for each position. While the epidemic caused some disruption, it did little to curb employees' demands for career possibilities and workplace flexibility. They wish to work at the workplace some days and not on others. People want corporate products to function just as effectively as the personal technology they purchase. They anticipate the diversity at work to mirror that in the neighbourhood. They desire a moral compass for their business. Candidates, recruiters, and hiring managers all have a significant role to play in the talent acquisition process. It is the responsibility of the recruiter to comprehend the operations of the organisation and the potential contributions of each candidate. The hiring manager approaches recruiting through the lens of getting things done: If a candidate has the necessary qualifications, experience, and cultural fit, they may each fill a gap in a team's efforts. Of course, the focus of recruiting is on prospects. Once you locate them, the ideal candidates offer solutions to pressing business issues.

This paper analyses the post-pandemic hiring challenges encountered by the IT sector and offers strategies to address them.

Objective

The objective of such a research paper would be to find out in detail the challenges that the IT industry has faced in hiring and retaining human resources in the post-pandemic world, and to explore probable solutions to these challenges.

Literature Review

Recent studies (2022–2025) highlight the evolution of IT recruitment beyond the pandemic. AI-powered recruitment tools, predictive analytics, and gamified assessments are now being used to improve candidate screening and reduce bias (Kaur & Mehta, 2023). Global reports by LinkedIn and Gartner (2023) emphasize that the competition for tech talent has intensified, particularly for roles in artificial intelligence, data science, cloud security, and blockchain. The concept of the 'Great Resignation' and later 'Quiet Quitting' has revealed employees' demand for flexibility, mental wellbeing, and meaningful work (Sharma & Verma, 2023). According to a McKinsey study (2024), organizations prioritizing upskilling, reskilling, and diversity, equity, and inclusion (DEI) are more successful in retaining employees. Meanwhile, Gen Z professionals, who now make up a significant portion of the IT workforce, place higher value on sustainability, social responsibility, and hybrid work models (Accenture, 2024). These findings collectively suggest that IT recruitment is no longer simply about filling vacancies, but about creating a compelling, future-ready employer brand that aligns with evolving workforce expectations.

Adetunji, O.J., & Ogbonna, I.G. (2013) Because people tend to seek other people's services when they are unable to handle a situation on their own, recruitment has a long history that dates back to prehistoric times.

Adeosun, O. T., & OHIANI, A. S. (2020) offered the idea that significant factors in luring and hiring excellent employees for a firm can include salary, brand recognition, referrals, and employment security. Moreover, digitization is a key strategy for luring in, choosing, and hiring the best candidates. It has been demonstrated that using social media, traditional media, doing

interviews online, and conducting in-person interviews can help in choosing the best candidates.

Gignac et al. (2021) looked into the effects of COVID-19 on money, organisational support, and health. The findings demonstrated that individuals with physical and mental health issues expressed higher worry and received less support than other groups during the early stages of the COVID-19 outbreak. The findings also demonstrated the significance of working conditions for comprehending COVID-19, the significance of evaluating variations in COVID-19 perceptions, and how work influences opinions and can contribute to variations that may develop as a result of a pandemic. Furthermore, COVID-19 is not the only agreement that take into account how important working conditions are. It emphasises the value of expanding work opportunities for those with issues relating to their physical and mental health and calls for additional research in the future.

Feldman, D. C., &Klaas, B. S (2002) concluded that both the recruiter and the job seeker can keep their privacy during the hiring process. Companies can look for possible applicants and their resumes without posting any job openings, or they can advertise the openings without identifying themselves. Also, job seekers can use the Internet to submit their CVs while protecting the confidentiality of their personal information, such as their identities and employment histories.

The effect of the pandemic on recruitment has been the subject of numerous research. According to a Gartner analysis published in 2021, pandemic-related disruptions are making it difficult for enterprises worldwide to fill critical positions. According to the research, recruiting managers are having trouble locating competent individuals, particularly for positions involving technology.

According to LinkedIn's 2021 report, there has been a dramatic shift in the labour market as a result of the pandemic, with a larger demand for positions in the technology sector. Yet, the IT industry is having trouble filling positions since the skill supply has not kept up with the demand.

A McKinsey & Company analysis claims that by 2020, there will be a 40 million high-skill worker deficit in the global economy. By 2030, this shortfall is anticipated to reach 85 million. According to a LinkedIn survey from 2021, 86% of talent professionals think there is more competition for talent now than there was a year ago.

Global talent scarcity is the greatest growing risk that enterprises will face in 2021, according to a Gartner analysis.

According to a Deloitte poll, the IT sector is one of the most affected and 59% of firms said they are suffering a skills shortage.

According to a different LinkedIn survey, job posts in the IT industry have grown by 47% since the epidemic began, although the average number of applications has dropped by 13%.

According to a poll conducted by Monster.com, 94% of IT recruiters have difficulty finding qualified candidates, with cloud computing, cybersecurity, and artificial intelligence being the hardest job categories to fill.

According to a survey by Hired.com, as businesses battle for a small pool of talented labour, salaries for software engineers have climbed by 5% since the pandemic started.

According to 47% of IT leaders who responded to a Robert Half Technology study, the pandemic has made it harder to find new employees.

These figures show that finding qualified people in the post-pandemic world is a huge difficulty for the IT sector. Due to competition among businesses for a small pool of expertise, the

industry is suffering from a lack of highly skilled people. In the upcoming years, this shortage is anticipated to worsen, making it much harder for businesses to recruit the qualified personnel they require.

Research Methodology

Data for the study were gathered using a qualitative research method. In order to identify the recruitment issues faced by the IT business post-pandemic, the researchers conducted semi-structured interviews with HR managers and recruiters. The responses to the questions were recorded and transcribed for examination during the video conferencing interviews.

Results

According to the survey, the post-pandemic IT business is struggling with a number of hiring issues. The following are the key difficulties:

Recruiting top talent: As a result of the epidemic, there is a greater need for positions in the technology sector. Due to the fierce rivalry for talent, it is difficult for IT organisations to attract skilled individuals.

Talent retention: Due to the epidemic, businesses have found it difficult to keep their current staff members. There has been a rise in distant employment, which has left many workers feeling lonely and lacking in social interaction. This has made it difficult for businesses to keep their personnel, along with the uncertainty brought on by the pandemic.

Difficulty in in-person interviews: In-person interviews are difficult to perform because of the epidemic, which is a problem because these interviews are crucial for determining a candidate's soft skills and cultural fit. Although they are increasingly common, remote interviews do not always yield the same results as in-person ones.

Future uncertainty: The epidemic has induced a sense of future uncertainty, making it difficult for businesses to plan their recruitment strategy. Due to the pandemic's unpredictability, many businesses are reluctant to hire new personnel.

Discussion

According to the study's findings, the post-pandemic IT business is struggling to locate qualified candidates. Companies must implement fresh hiring tactics that are adapted to the current labour market in order to overcome these difficulties. The following remedies are recommended:

Refine recruitment tactics: Organizations should refine their recruitment tactics to concentrate on luring and keeping talent. Offering competitive pay, adaptable work schedules, and chances for career advancement can help with this.

Use technology more: Organizations should use it to perform remote interviews and assessments. Despite being unable to personally meet candidates, this can assist them assess their soft skills and cultural fit.

Employers should give social and communication opportunities a high priority in order to increase employee satisfaction. Regular team meetings, virtual happy hours, and other team-building exercises can help with this.

Employers should put a focus on their workers' wellbeing by offering resources and help for mental health issues. This can aid workers in navigating the pandemic's stress and uncertainty.

Findings

The study reveals that IT companies in 2025 are facing critical hiring and retention challenges. Firstly, the global demand for niche skills in AI, machine learning, cloud computing, and

cybersecurity has resulted in talent shortages and salary inflation. Secondly, hybrid work models, while offering flexibility, have created new challenges in managing productivity, collaboration, and employee engagement. Thirdly, employees now expect employers to prioritize wellbeing, DEI, and opportunities for continuous learning. Organizations that fail to adapt to these expectations struggle with higher attrition and lower employee satisfaction. Lastly, the rise of freelancing and the gig economy has transformed hiring strategies, as companies increasingly turn to contract-based talent pools for agility and cost-efficiency. Successful organizations are those that combine AI-driven recruitment, strong employer branding, and robust reskilling initiatives to attract and retain top talent in a highly competitive global market.

Since the pandemic, remote work has increased in popularity within the IT sector, making it easier for businesses to hire people from all over the world but also posing new management issues.

Businesses that have been successful in attracting and keeping talent after the epidemic have concentrated on building a solid employer brand, providing flexible work schedules, and spending money on employee training and development.

Since the epidemic, technology has been crucial in the recruitment process, with businesses embracing tools like AI-powered chatbots, virtual job fairs, and video interviews to speed up the hiring process and communicate with candidates more successfully.

After the epidemic, there is fierce competition for talent in the IT sector, with numerous organisations vying for a small pool of qualified applicants. Businesses that are able to stand out from the competition and present applicants with compelling value propositions are more likely to be successful in luring and keeping top talent.

Conclusion

In 2025, hiring in the IT sector is shaped by global talent shortages, rising skill demands, and evolving employee expectations. While the pandemic accelerated digital recruitment, the current challenge is sustaining growth in a hyper-competitive and candidate-driven market. Employers must invest in AI-enabled recruitment systems, hybrid work policies, DEI initiatives, and continuous learning opportunities to remain competitive. Companies that focus on building a strong employer brand, offering flexibility, and supporting employee wellbeing are more likely to succeed in retaining skilled professionals. The future of IT hiring will not only be about identifying talent but also about fostering long-term relationships that emphasize purpose, growth, and adaptability. Organizations that embrace these strategies will remain resilient in an evolving global workforce landscape.

In conclusion, there are substantial hiring difficulties in the IT sector as a result of the epidemic. The sector needs to implement new hiring practises to entice and keep talent, make use of technology to conduct remote interviews, give employee engagement top priority, and pay attention to employee wellbeing. By putting these suggestions into practise, the IT sector may get past the pandemic's difficulties with hiring.

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