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STRATEGIC RECRUITMENT IN THE PHARMACEUTICAL INDUSTRY: CHALLENGES AND TECHNOLOGICAL SOLUTIONS

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ABSTRACT

The pharmaceutical industry faces growing challenges in recruiting highly skilled professionals due to the high demand for specialists in areas such as research, development, and regulation. Hiring time, directly impacting productivity and project advancement, has become a strategic concern. The use of technologies such as artificial intelligence (AI) and digital recruitment platforms has accelerated this process by automating steps like resume screening, data analysis, and conducting initial interviews. Furthermore, collaboration with universities and research centers has contributed to the creation of pipelines for qualified candidates, optimizing hiring planning. To ensure an efficient recruitment process, pharmaceutical companies must adopt a well-defined structure and integrate HR efforts with marketing strategies. Transparency in recruitment and the use of talent attraction programs are key to reducing wait times and ensuring that positions are filled with highly skilled professionals. The adoption of ethical recruitment practices and collaboration with specialized headhunters are also essential to speeding up the process and ensuring the hiring of the best candidates. In the context of technological advancements, it is important for pharmaceutical organizations to implement solutions that promote fairness and objectivity, particularly in applying AI algorithms in the recruitment process. While technology helps eliminate biases, it is essential to ensure that hiring decisions are fair and transparent. Companies that adopt a strategic and ethical approach to recruitment will have better chances of attracting and retaining the best talent, driving their innovation and competitiveness in the global market.

Keywords: Pharmaceutical recruitment. Artificial intelligence. Talent acquisition. Recruitment technology. Ethical hiring.

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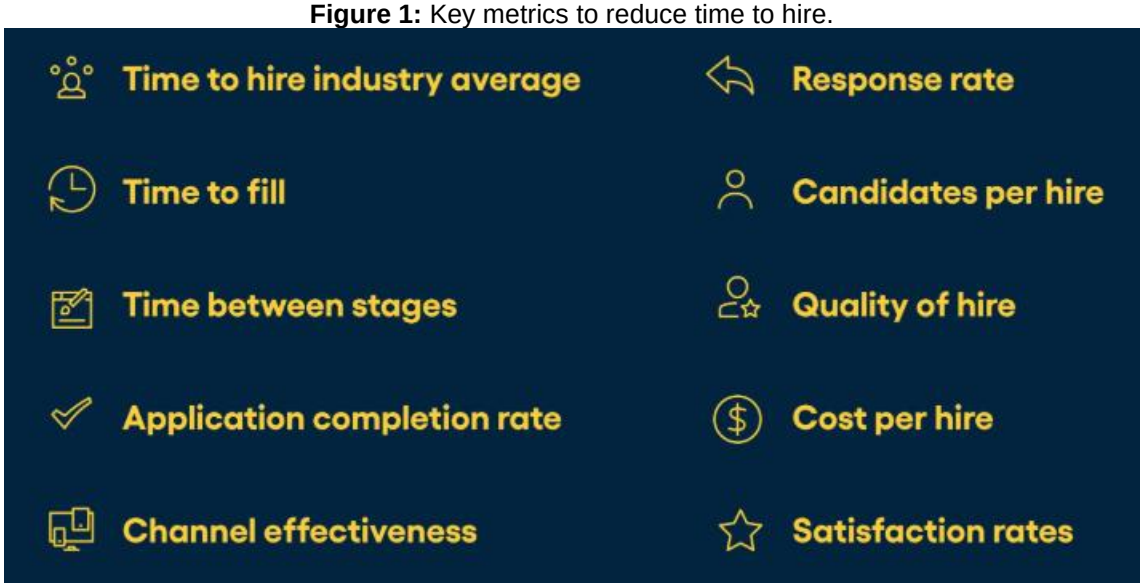
INTRODUCTION

The recruitment of qualified professionals has increasingly become a challenge for the pharmaceutical industry, particularly due to the high demand for specialists in areas such as research and development, production, and regulation. The time it takes to hire is a critical factor, as it directly impacts productivity and the progression of essential projects. However, delays in filling positions can overwhelm existing teams, result in missed opportunities, and even compromise the quality of processes. As a result, reducing the time to hire qualified professionals has become a priority for pharmaceutical organizations.

Figure 1: Key metrics to reduce time to hire.



Source: Vervoe.

One of the primary strategies to expedite recruitment is the use of technologies such as artificial intelligence (AI) systems and digital recruitment platforms. These tools can automate various stages of the process, including resume screening, data analysis, and even conducting initial interviews, allowing recruiters to focus their efforts on the more critical stages of selection. Additionally, leveraging People Analytics to map talent needs and predict demand for specific skills can help anticipate talent gaps and optimize hiring plans.

Moreover, establishing a well-structured and defined recruitment process is crucial. Clear communication between human resources departments and operational teams helps reduce time spent on unnecessary interviews and negotiations. Talent attraction programs are also essential, as maintaining a pool of qualified candidates

ready to be hired can significantly reduce waiting times. To achieve this, pharmaceutical companies can partner with universities, research centers, and other institutions to create candidate pipelines even before a vacancy is opened.

Collaborating with headhunters specializing in the pharmaceutical industry can also accelerate the process, as these professionals have extensive networks of highly specialized talent. Furthermore, implementing an efficient onboarding process that enables new hires to quickly integrate into the team and begin contributing is essential to optimize the time between hiring and the commencement of activities. By adopting a more strategic and technological approach, pharmaceutical companies can not only reduce recruitment time but also ensure they attract the best professionals to contribute to their growth and innovation.

Rynes, Bretz, and Gerhart's (2006) study questions previous research findings on the impact of recruitment activities on candidates' employment choices. Unlike previous studies, which relied on cross-sectional assessments conducted immediately after initial interviews, this study utilized longitudinal structured interviews, allowing candidates to explain how they made critical decisions during the job search and selection process. The results showed that recruitment practices play different roles in candidates' decisions, as evidenced by signaling theory, where candidates interpreted various recruitment experiences (recruiter competence, interview panel gender composition, recruitment delays) as symbols of the organization’s overall characteristics. Additionally, several contingency variables emerged, such as prior knowledge about the company and the recruiter’s functional area, which appeared to affect the symbolic value of recruitment experiences. One of the most notable findings was the negative effect of recruitment delays, particularly among male students with higher academic performance and greater success in job searching.

Asim, Perveen, and Shujat's (2017) study assessed the effectiveness of the recruitment and selection process, emphasizing the importance of appropriate strategies to achieve better results in companies. The research highlights the need to attract and select highly qualified employees, especially in a competitive labor market. Even with significant physical resources and advanced technology, a company can face an economic crisis if it lacks the right individuals to manage and drive its operations. In this sense, human resources are considered a vital asset for any organization to progress in various directions. The article discusses the importance of a well-defined

recruitment and selection policy, stressing how personnel planning and budgeting, coordinated with department leaders, ensure that the right people are hired at the right time. In the pharmaceutical industry, the recruitment process is transparent, with careful attention to candidates' qualifications, experiences, and abilities. However, the study also notes that while onboarding training is offered, additional job-specific training could further enhance employee performance, prevent potential biases, and ensure a fair and transparent recruitment process.

Cappelli's (2001) study explores the growing trend of online recruitment, noting that ninety percent of large companies in the United States already use the internet to find qualified candidates. By using the web, recruiters can quickly access a vast pool of candidates, screen them in minutes, and contact the most promising ones immediately. This method offers significant advantages, including cost savings and time efficiency. Cappelli examines various emerging technologies and service providers, such as job boards, hiring management systems, and candidate screening tools that test skills and record interests. He also highlights the strategies companies are adopting as they enter the online job markets, emphasizing that recruitment needs to be reconfigured to resemble marketing. Companies are creating websites and even product ads with potential recruits in mind, giving line managers autonomy to make hiring decisions and building internal online job networks to retain talent. The most successful approach involves integrating recruitment with marketing campaigns and aligning efforts with the company's brand. However, Cappelli also raises two main concerns: the importance of a human touch in the final stages of the hiring process and the need to ensure that online testing and hiring criteria do not discriminate against women, disabled individuals, older workers, or members of minority groups. In an increasingly competitive job market, companies that master online recruitment strategies will be in a better position to attract and retain top talent.

Shah's (2024) study explores the use of AI in human resource management within the pharmaceutical industry in Bangladesh, focusing on companies such as SMC Enterprise Ltd, Square Pharmaceuticals Ltd, and Beximco Pharmaceuticals Ltd. AI has significantly impacted the recruitment process, especially in areas like resume screening, candidate selection, and evaluation, while also reducing biases related to race, gender, and other factors. However, there are still concerns about potential biases in the algorithms used in these systems. Despite this, the overall view is that AI can

enhance fairness, objectivity, transparency, and efficiency in the recruitment process. Innovations in selection methods, such as Natural Language Processing, are expected to further improve transparency and hiring processes. The study emphasizes the importance of developing ethical models that keep pace with AI technological advancements, ensuring these systems reflect the evolving dynamics of recruitment decision-making.

Kenagy, Berwick, and Shore's (1999) study discusses the quality of service in the U.S. healthcare system, which, despite being described as "the largest service industry in the world," rarely addresses the non-technical aspects of care that shape the patient experience. Through an analysis of a routine healthcare encounter from the perspective of service quality, the authors present two main premises. First, if service quality were more integrated into healthcare practices and institutions, it could lead to better clinical outcomes, greater patient and physician satisfaction, reduced costs, and a competitive advantage for those who excel in its application. Second, the study highlights that many service sectors have advanced service quality techniques that could be adapted for healthcare, suggesting that physicians and healthcare professionals could learn from these industries to improve service delivery in the healthcare sector.

Szeinbach and Miller's (2003) study examines the impact of market conditions on the recruitment strategies and incentives used by pharmaceutical companies. In a dynamic market, companies often seek individuals with diverse skills to act as intermediaries between various functional areas such as product development, marketing, economics, and clinical sciences. The research highlights that, during more constrained market conditions, pharmaceutical companies tend to collaborate with recruitment firms to develop high-profile recruitment packages aimed at recent graduates. Through telephone interviews with key individuals directly involved in recruitment, the study found that pharmaceutical companies invest considerable time, effort, and resources in recruitment activities. In addition to the strategies and incentives adopted, the study offers recommendations to improve recruitment efforts and reduce the costs associated with these activities.

Recruitment in the pharmaceutical industry has become increasingly challenging, primarily due to the growing demand for qualified professionals in specific areas such as research and development, production, and regulation. Hiring time is a critical factor, as it directly impacts productivity and the success of essential projects. The adoption of

technologies such as artificial intelligence (AI) and digital platforms has proven to be an effective solution for optimizing recruitment by automating processes like resume screening and conducting initial interviews. These tools allow recruiters to focus on more strategic phases of selection, accelerating the hiring process and ensuring that the best skills are hired.

In addition to technological innovations, the creation of well-structured recruitment processes and collaboration with universities and research centers are also effective strategies to reduce hiring time. Transparency in the recruitment process and long-term planning, using talent attraction programs, contribute to the formation of pipelines of qualified candidates. This not only improves the efficiency of the process but also increases the likelihood of attracting the best professionals to pharmaceutical organizations, ensuring their growth and innovation in a highly competitive market.

Finally, the importance of a strategic and ethical approach to recruitment, such as using AI algorithms with a focus on diversity and impartiality, cannot be overstated. While technology offers many benefits, applying processes that prioritize fairness and transparency is essential to ensure the effectiveness of recruitment. The combination of technological solutions with HR management focused on ethics and strategy is crucial for pharmaceutical companies to attract, select, and retain talent efficiently and sustainably.

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