

Shift In Recruitment Methods and Processes In The Digital Era (Systemic Literature Review)

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Abstract

Digitizing the recruitment process becomes a difficult process when there is resistance from management and HR managers to new systems, especially when technology adoption is slow or even fails. Therefore, understanding the development and impact of digitizing the recruitment process through the use of intelligence technology is one form of technology adoption. The SLR method will collect, assess, and synthesize various studies relevant to the topic, thereby providing a comprehensive picture of the digitization of the recruitment process. The AI-based recruitment process can filter thousands of applicant data more quickly and objectively, creating a transparent and modern process, and reducing recruitment time by up to 75%, with a significant increase in candidate diversity.

Keywords: Human Resource, Recruitment Methods, Digital Era, AI

1. INTRODUCTION

In the digital era, Human Resources (HR) faces various challenges involving the dynamics of rapid technological change, the need to adapt to a changing work environment, the industrial world, and the different values and expectations of job seekers. HR needs to design recruitment methods and processes that respond to these challenges to ensure alignment between the needs of the industrial world and job seekers. The methods and processes implemented must include a deep understanding of job seekers' preferences, skills, and expectations.

Digitizing the recruitment process can be challenging when management and HR managers resist new systems, especially when technology adoption is slow or even unsuccessful. Active involvement of all organizational elements in planning, implementation, and evaluation is crucial to ensure that digitalization remains more than just a technology project.

Digitalization of technology in human resources (HR) describes the use of various tools and the implementation of digital systems to manage, optimize, and improve all aspects of organizational management. This digitalization includes replacing conventional manual processes with automated, technology-based processes, supporting efficiency, accuracy, and a better work experience. Challenges of Digital Recruitment such as Ethical Concerns, Data Privacy and Over-reliance on Technology.

Some of the technologies adopted by companies include Human Resource Information Systems (HRIS) for employee data management, e-recruitment platforms for the recruitment process, and Learning Management Systems (LMS) for development and training. Syopian, Safitri, and Wanri (2024) concluded that changes in digital recruitment processes accelerated after the COVID-19 pandemic drove the adoption of digital technology and changed the criteria and expectations for candidates. Before the COVID-19 pandemic, recruitment processes were generally conducted face-to-face using long-standing methods such as in-person interviews, written exams, and on-the-job assessments. According to Collings, Scullion, and Vaiman (2011), these traditional approaches allowed companies to directly observe prospective employees' interpersonal skills and adaptability. However, the pandemic forced companies to shift to remote recruitment methods. Research by Chamorro-Premuzic and Frankiewicz (2020) shows that video interviews, online assessments, and the use of digital recruitment platforms have increased significantly during the pandemic.

Based on the research results of Ananda, Adhi and Ek Ajeng (2024) it can be concluded that the development of a decision support system for employee recruitment is expected to yield the desired benefits. The system allows the assessment of prospective employees based on relevant criteria, such as skills, experience, and other qualifications that match the company's needs. The evaluation results show that the SAW system can be relied on to support the employee selection process, because it

is able to provide consistent and accurate results according to the established criteria and expected to improve efficiency and objectivity in the recruitment process.

This research aims to examine the development and impact of digital recruitment methods and processes through the use of intelligence technology in all aspects of corporate organizational management. A Systematic Literature Review (SLR) method will synthesize the results of various studies conducted by the company. The implementation of AI-based recruitment systems in the digitalization of human resource (HRM) management activities has a significant impact on company performance and efficiency.

2. RESEARCH METHOD

This research uses a Systematic Literature Review (SLR) (Kharisma & Wening, 2023). This method collects, reviews, and synthesizes various studies relevant to the topic, resulting in a comprehensive overview of the digitalization of the recruitment process. Data objects include journal articles, research reports, books, and policy documents published between 2020 and 2025. Data collection was conducted through a literature search using Google Scholar, ScienceDirect, JSTOR, and Sinta.

The Inclusion and Exclusion criteria approach was implemented to support the SLR procedure, which involved the stages of Identification, Screening, Quality Assessment, Data Extraction, and Data Synthesis. Data analysis involved Initial Coding, Theme Grouping, and Interpretation. Data Validity and Reliability were assessed using Source Triangulation, Peer Review, and Audit Trail.

3. RESULTS AND DISCUSSION

Everyone is connected to the internet through rapidly evolving 4.0 technology. Data collection, analysis, conclusions, and decision-making can all be handled by AI. Examples of applications that use AI include Facebook, e-commerce recommendations, and virtual assistants. Facebook can recognize people's faces, offer e-commerce product recommendations, and virtual assistants like Google Assistant can record agendas, send messages, and understand user preferences to tailor actions. These recommendations are

based on data about our history across each application. Technology will now control everything; internet sensors have the ability to detect sound, movement, temperature, etc. Autonomous vehicles can navigate roads and park without a driver.

Artificial intelligence, also known as AI, is a mechanized model of human intelligence, a system that combines human intelligence with machines to think like humans and perform human tasks. The need for data and experience is required by AI to solve problems and the advantages of AI include continuously evolving intelligence because AI searches for data from anywhere and learns independently without human supervision, so AI will not stop evolving. Common examples of AI are in Facebook applications, e-commerce recommendations, and virtual assistants.

Digital technology has become the backbone of the recruitment process transformation during the pandemic. According to research conducted by KPMG (2020), more than 70% of companies used digital tools to support their recruitment processes during the pandemic. Technologies such as artificial intelligence (AI) and machine learning are being used to screen applications, assess skills, and even conduct initial interviews. AI helps reduce bias in the selection process and increases efficiency by automating routine tasks (Gonzalez, 2020).

Changes in Recruitment Methods:

- 1). From Offline to Online. Traditional methods like newspaper ads have been largely replaced by online job boards (LinkedIn, Indeed, Glassdoor), company websites, and social media platforms.
- 2). Applicant Tracking Systems (ATS). ATS have become crucial for managing high volumes of applications, automating tasks like resume screening and candidate tracking.
- 3). Data-Driven Decisions. Recruiters now leverage data analytics and AI to gain insights into candidate behavior, predict suitability, and personalize the candidate experience.
- 4). Enhanced Candidate Experience. Digital tools are used to improve communication, streamline the application process, and provide a more engaging experience for candidates.

- 5). Global Reach and Accessibility. Online platforms enable companies to reach a wider talent pool, transcending geographical boundaries.
- 6). Remote Hiring and Virtual Interviews. The pandemic accelerated the adoption of remote work, leading to increased use of video interviews and online assessments.
- 7). Employer Branding and Social Recruitment. Companies utilize social media to showcase their culture and attract talent by building a strong employer brand.

The pandemic has changed the criteria and expectations of prospective employees. According to a 2021 study by LinkedIn, companies are now placing greater emphasis on skills such as the ability to work independently, flexibility, and effective time management. Furthermore, digital skills are becoming highly valued as more work is conducted online. Candidates who demonstrate the ability to adapt quickly to technological changes and new work environments are likely to be more sought after.

Digitalization requires HR to apply agile principles in daily practice, including rapid iteration, active team involvement in decision-making, continuous feedback, more flexible management, the use of collaborative digital platforms, and streamlined bureaucratic processes to accelerate responses to challenges and opportunities. Many organizations are adopting a hybrid approach, combining the speed and scalability of digital tools with the human touch of traditional methods. This involves leveraging digital platforms for sourcing and screening while maintaining face-to-face interactions for final interviews and candidate assessments.

Digitalization in HR through training programs, coaching, and the formation of learning communities within the organization will foster a growth mindset and a culture of innovation. The use of artificial intelligence (AI) and data analytics play a crucial role in transforming recruitment. AI is used to screen resumes, assess skills, and conduct initial interviews. According to a 2021 McKinsey & Company report, 45% of surveyed companies use AI in at least one stage of the recruitment process. Companies that have implemented digital recruitment processes include:

- Unilever adopting an AI-based recruitment system
- IBM utilizing big data and machine learning
- Google implementing people analytics

- Gojek implementing a Human Resources Information System (HRIS)
- Hilton and L'Oréal using facial expression, tone of voice, and verbal content analysis during video interviews

The adoption of technologies such as Artificial Intelligence (AI), Human Resources Information Systems (HRIS), and e-learning platforms has proven effective in addressing the challenges of data volume, HR management complexity, and the need for continuous talent development. In the recruitment process, many organizations have successfully implemented Applicant Tracking System (ATS) technology to automatically screen thousands of applications based on keywords, qualifications, and cultural fit. ATS helps HR teams save time, reduce manual bias, and accelerate the selection process.

The recruitment process, using AI-based algorithms and video interviews, can filter thousands of applicants' information more quickly and objectively. This process is transparent and modern, reducing recruitment time by up to 75%, while significantly increasing candidate diversity. Digitizing the HR recruitment process for digital organizations is a strategic effort to create an adaptive, responsive system focused on cross-functional collaboration to address the challenges of dynamic business environments. The role of HR is crucial, as digital transformation encompasses not only technology but also human readiness and a work culture that supports change. Benefits of Digital Recruitment:

- 1). Increased Efficiency. Automation and data-driven insights streamline the recruitment process, saving time and resources.
- 2). Improved Accuracy. AI and data analytics help identify the best-fit candidates, reducing the risk of hiring errors.
- 3). Enhanced Candidate Experience. Personalized communication and a seamless application process improve candidate satisfaction.
- 4). Cost-Effectiveness. Online platforms and digital tools can be more cost-effective than traditional methods.

While technology brings many benefits, it also presents challenges, research by McKinsey & Company (2021) identified several key challenges companies face in post-pandemic recruitment, including technical issues with video interviews, limitations in soft skills assessments, and difficulties in building relationships and trust with candidates

virtually. Furthermore, concerns about data security and privacy arise when using digital technology for recruitment (Deloitte, 2021).

4. CONCLUSION

In conclusion, the digital era has revolutionized recruitment, leading to more efficient, data-driven, and candidate-centric processes. While challenges exist, the benefits of digital recruitment are clear, and organizations that embrace these changes are better positioned to attract and retain top talent.

Aligning technology and digital media skills in communication and collaboration is key to ensuring productivity and job satisfaction for all parties. By recognizing and managing the challenges faced in the digital era, HR teams can bridge the gap to achieve organizational goals. Changes in recruitment methods and processes by HR, if well-directed and adaptive, are crucial in addressing the ever-evolving complexity of the digital work environment.

Adopting an AI-based recruitment system to accelerate and streamline the global recruitment process is one implementation of digitalization in human resource management (HRM) that has a significant impact on organizational performance and efficiency.

An approach that combines technology and human interaction can help create a more efficient and satisfying recruitment process for job seekers. Ongoing training for recruitment teams in human resource management is also essential to ensure they effectively utilize technology and understand its dynamics in the recruitment process. Furthermore, data analytics can provide valuable insights to improve recruitment and candidate identification methods.

Digitizing the HR recruitment process towards a digital organization is a strategic effort to create an adaptive, responsive, and cross-functional collaboration-oriented system to address the challenges of the dynamic and changing business environment. Digitization requires HR to apply agile principles in daily practice, including rapid iteration and active team involvement.

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