Original Article
ISSN (Online): 2582-7472

ShodhKosh: Journal of Visual and Performing Arts
July- December 2023 4(2), 1320–1333

IMPROVING THE IT INDUSTRY'S RECRUITING RESULTS: ARTIFICIAL INTELLIGENCE'S EFFECT ON LOWERING OFFER DECLINES AND RAISING CANDIDATE ENGAGEMENT

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DOI
10.29121/shodhkosh.v4.i2.2023.2391

Funding: This research received no specific grant from any funding agency in the public, commercial, or not-for-profit sectors.

ABSTRACT

Purpose: A major issue facing this industry is the high percentage of offer rejections, which causes delays in filling important positions on time, raises recruiting expenses, and reduces overall organizational effectiveness. Conventional hiring practises, which depend on subjective judgments and manual processes, frequently find it difficult to adequately manage candidate involvement and lessen offer rejections. In order to improve recruiting success, this study investigates the function of artificial intelligence (AI) in aspirant relationship management (ARM) and how it can predict aspirant behaviors and improve candidate engagement.

Methodology: In order to investigate the association between AI-powered Aspirant association Management (AI-ARM) and recruitment performance in the IT industry, this study uses a correlational research approach. The sample, which was created using a non-probability judgmental sampling technique, is made up of hiring managers, HR managers, and job seekers. A standardized questionnaire is used to gather data, with an emphasis on the main factors influencing AI-ARM and how they affect hiring practices. The data is analysed using Structural Equation Modelling (SEM) with Partial Least Squares (PLS), which makes it possible to estimate the associations between variables. This method sheds light on how AI might enhance recruitment performance and lower the number of offer declines.

Findings: The study looks into the main factors that influence AI-powered ARM and how successful recruitment is in the IT sector. This study intends to close a major research gap and offer insights on the use of AI to decrease offer declines and increase hiring efficiency. By utilizing AI-driven recruitment techniques.

Implications: IT firms will be able to improve candidate engagement, offer acceptance rates, and overall recruitment outcomes. This is made possible by the findings. The report gives a complete examination of AI-ARM systems, concentrating on their function in streamlining recruitment procedures and tackling the growing issue of offer declines in the IT sector.

Keywords: Recruitment Performance; Aspirant Relationship Management; Candidate Engagement; Talent Acquisition; Offer Decline; Artificial Intelligence

1. INTRODUCTION

Recruitment capacity has transitioned from a tactical HR activity to a strategic business imperative. Shifts in the source of company value and competitive advantage have led to a focus on human capital. AI-enabled digital recruitment process has become a vital competency, credited to technological advancements. However, nothing is known about candidate reactions to AI-enabled recruitment. Today's job seekers spend a growing amount of time in electronic environments. According to Miles and McCamey (2018), there are 3.2 billion active social media users globally. In the United States, individuals aged 18 to 35 spend an average of 6.5 hours each week on social media. To attract and retain knowledgeable workers, companies must utilize digital tools and technologies. Automating data about employment has reduced costs

and friction in the process of pairing for both individuals and firms over the past century. To screen and analyze the massive rise in applications, a corporation would need to engage a large number of recruiters, which would be prohibitively expensive. As the quantity of job applicants grows, firms must use AI-enabled solutions to screen them. Over the past decade, AI-enabled solutions have outperformed humans in terms of efficiency and efficacy, particularly during the early phases of recruitment. Executives recognize the importance of digital, AI-enabled recruiting tools, but their implementation lags. According to a Deloitte survey of top executives, 72% believe AI is crucial for hiring, but only 31% believe their companies are prepared to capitalize on its potential (Miles and McCamey 2018).

Technology and economic advancements have transformed industries, and organizations are adapting to the digital era. Automation software in the manufacturing and service industries has already used digital technologies. The industry 4.0 revolution, often known as the Internet of Things (IoT), has accelerated technological advancements. It offers an integrated view of the technological and service industries, focussing on real-time big data, departmental interconnectedness, and faster businesses through machine language. Digital tools such as cloud computing, cybersecurity, networking, nanotechnology, and AI contribute to innovation in organizational process design by reducing human biases. IoT-enabled process innovation can give organizations a competitive advantage. The Human Resource Department is crucial for every organization, whether manufacturing or service-based. Using cutting-edge technology can reduce time spent on departmental activities, leading to increased industrial development and performance. To remain competitive in the modern era, industries and IT businesses essential to upgrade their technology and innovate. AI technology enables machines to mimic human intelligence and drive activities. John McCarthy coined the phrase Artificial Intelligence in 1950. Over 60% of organizations are fully utilizing AI, with a forecasted worth of trillions of dollars by 2018 (Albert 2019). Artificial intelligence is a new aspect of the commercial world.

While AI-enabled recruitment performance has the potential for disruption, there is limited empirical evidence on how prospects respond to these attempts. There is evidence that younger job seekers spend more time on social media, there is little empirical evidence that supports the link between social media use and candidate engagement with AI-enabled recruitment systems. This study shows that if AI-enabled advertising is perceived as obtrusive, consumers would disregard it and have a negative perception of the brand sponsoring the ad (Ostrom et al., 2019). This research investigates the job candidates' likelihood of engaging with and completing a digital, AI-enabled job application process. While AI-enabled screening tools are more efficient and effective than humans, reaching out to candidates via social media can detract from a company's AI-enabled recruiting process, limiting the real-world significance of the system (Smith and Neupane 2018). The study aimed to identify parameters that influence candidates' engagement with AI-enabled job applications.

The successful implementation of AI in human resources still faces numerous challenges, despite the benefits of its use being acknowledged. These include a wide variety of topics, including fairness, ethics, and legal restrictions, as well as practical difficulties such as biases in the data used to train AI systems (Tambe et al., 2019). First, AI systems may favor a specific set of candidates due to biases in AI algorithms based on historical data. For the previously mentioned cause, Amazon ran into issues with its recruitment algorithm in 2018. The algorithm was developed using historical job performance data, which showed that white male employees with above-average performance were the majority. As a result, male candidates in the same demographic category received better marks from the AI system. Because it was unable to make the algorithm gender-neutral, the organization subsequently stopped using it for recruiting. Secondly, since AI robots and algorithms are typically off-limits to the public due to property rights, there is growing concern about the ethics of AI-powered recruitment tools and whether people's perceptions of their use affect people's trust in the companies that use them (Figueroa-Armijos et al., 2022). Lastly, there are legal issues with the hiring decisions and ultimate applicant selection that in some jurisdictions still require human judgment (under the EU's General Data Protection Regulation, Laurim et al., 2021). Further, this research enables AI to identify the talents and attributes that are most likely to result in success and analyses response content, language, tone (e.g., enthusiasm for the subject), and facial expressions. Candidates can participate in virtual interviews over multiple days or at any convenient moment.

The dynamic IT industry imposes significant emphasis on employee recruitment and retention, making recruiting performance improvement a crucial requirement for organizations seeking to stay competitive. A common concern for recruiters in this field is the startlingly high percentage of offer declines, which not only delays the timely filling of critical roles but also results in large expenditures and resource usage (Figueroa-Armijos et al., 2022). Due to traditional recruiting systems relying on manual procedures and subjective choices, they frequently fail to manage aspirant

relationships and mitigate offer declines. To tackle this essential issue, there is a strong need to leverage artificial intelligence (AI) powered in aspirant relationship management (ARM) during the recruitment procedure. Organizations may improve applicant engagement, forecast candidate choices and behaviors, and increase offer acceptance rates by using artificial intelligence-powered ARM systems to customize and expedite the recruiting process (Lavanchy et al., 2023). However, there is still a lack of thorough research that particularly examines the effectiveness and influence of artificial intelligence-powered ARM on offer acceptance rates in the IT sector, considering the growing curiosity in and adoption of AI technology for recruiting objectives. Therefore, by thoroughly analyzing the function of AI in enhancing aspirant relationship management to mitigate offer declines in IT recruiting, this study seeks to close this research gap. Through this effort, organizations may enhance their ability to draw in and engage the most talented IT personnel while also expanding awareness and comprehension of AI-powered HR strategies.

Furthermore, IT companies are experiencing a growing number of offer decreases, in which skilled candidates opt not to accept offers for employment after several rounds of interviews (Van Esch et al., 2019). This trend has a detrimental influence on recruitment performance, increases hiring expenses, and delays project schedules, all of which are critical in an industry that experiences rapid innovation and skill shortages. Furthermore, traditional recruitment approaches frequently fail to engage aspirants effectively throughout the hiring process, resulting in a separation between recruiters and candidates. The need to boost aspirant engagement and enhance recruitment performance is greater than ever. Artificial intelligence (AI) has the potential to improve recruiting methods by improving candidate communication, anticipating offer acceptance, and delivering personalized involvement throughout the hiring procedure. AI-powered solutions can analyze applicant behavior patterns, identify potential problems before an offer is denied, and enable recruiters to take proactive measures, improving candidate experience while decreasing offer declines. This investigation is critical to understanding how AI can be utilized to manage the difficulties of offer declines in the IT industry, optimize recruitment methods, and improve overall hiring efficiency. With an increasing reliance on technology for talent acquisition, understanding the role of AI in recruitment can help organizations maintain a competitive advantage in attracting and retaining top talent in the highly dynamic IT sector.

Based on the above argument, this study intends to investigate the impact of social media use, intrinsic rewards, fair treatment, and perceived trendiness on prospective employees' inclinations to engage in and complete digital, AI-enabled recruiting processes. Based in which the following research questions are proposed

RQ1: Which factors have the most influence over recruitment performance and ARM?

RQ2: What Impact Does ARM Have on Performance in Recruiting?

2. REVIEW OF LITERATURE

2.1 SOCIAL MEDIA USE IN AI-ENABLED RECRUITMENT PERFORMANCE

The first element we looked at was social media usage, given the increasing number of users and time spent on it. According to Lee (2018), people who use technology tend to feel more comfortable using it for different purposes as well. In the 1980s, people gained confidence in using computers for tasks they had previously done with other technologies, such as establishing reservations via computer instead of a Report Phrase phone. Prospective employees are increasingly spending time on social media sites via mobile devices. To reach these prospects, organizations must go where they are. However, there is a disconnect between job seekers' social media searches on mobile phones and firms' efforts to recruit. The research stated that 89% of job searchers consider mobile devices to be the most crucial tool for job searching, and 45% use them at least once a day. However, just 16% of job applications are submitted through mobile devices. This may indicate that companies are falling behind the potential. Research suggests that familiarity with technology increases comfort and willingness to engage in additional activities. As more people use social media and are exposed to AI-enabled advertising, news feeds, and push applications on their mobile devices, they are more likely to engage in and complete AI-enabled job application processes.

2.2 INTRINSIC REWARDS

According to Smith et al., (2016), individuals use new technology for both functional and intrinsic pleasures, including a sense of accomplishment, inventiveness, novelty, fun, and confidence. Social media is just over a decade old. As a result, the expected benefits of social media may not be as significant as previously thought. Applying for jobs through social media is a recent trend, unlike regular social media use. Also, its promotion as digital and AI-enabled is a relatively recent trend. According to Salge et al., (2014), job searchers may expect intrinsic advantages for using AI-enabled social media to apply for jobs, regardless of operational outcomes such as job placement. According to Roth et al., (2016), there is an

inherent drive to use the "like" button on social media, regardless of functional outcomes. AI-enabled social media recruitment is likely to rely on the same sources of intrinsic motivation. Companies may enhance expected intrinsic rewards by communicating with candidates about the process and highlighting important aspects. Organizations can promote the AI-enabled job application process as exciting, innovative, and cutting-edge. Companies may enhance anticipated benefits by explaining to candidates the process and highlighting key points. Effective communication of these themes to potential job candidates can boost their readiness to employ AI-enabled social media recruiting during the hiring process. Prospective aspirants for employment may view applying through social media and AI-enabled processes as a source of intrinsic promotions. Candidates are more likely to interact and complete a digital, AI-enabled job application if they perceive it as inherently beneficial.

2.3 FAIR TREATMENT OR IMPARTIALITY

The technological novelty of the process may not be enough or rather could be mitigated by an undesirable process. There is extensive literature on the influence that a sense of fair treatment can have on an individual's willingness to engage in the recruitment process. Fair treatment involves treating individuals with respect, empathy, and decency, as well as providing important information. Individuals expect fair treatment from others, and there is no evidence to suggest they would accept unfair treatment from an artificially intelligent robot. Ostrom et al., (2019) discovered that people anticipate fair treatment from AI-enabled systems, just as they do from humans. Therefore, the hypothesis indicates that job candidates who perceive the digital, AI-enabled recruiting system as fair are more likely to engage and complete the recruitment process.

2.4 TRENDY

According to Van Esch and Mente (2018) Applying for a job on social media using a digital, AI-enabled application may be regarded as trendy, rather than purely typical. Trendy technologies are not only fresh and early in development but are also recognized as more than a fad on the technology radar. Some organizations have promoted top executives to positions as chief AI officers or global heads of AI, which may increase the perception of AI-enabled recruiting as trendy among job hopefuls. Some job prospects may be familiar with AI-enabled recruiting tools and services, such as chatbots and video interviews. This could lead to AI-enabled recruiting becoming more popular. As a result, particular job prospects may view AI-enabled recruiting as trendy, driving increased candidates' engagement and completion of the job application process (Koh & Chew 2015).

Redesign recruitment processes to attract qualified applicants while encouraging them to apply internally. AI improves recruitment effectiveness through intelligent data-driven recommendations. AI-powered programs match candidates' selected talents to job descriptions. AI-powered programs match candidates' preferred abilities to job requirements. HR managers can now get real-time data. AI-enabled tools assist HR managers in organizing candidates using specified data. Improved accuracy and reliability contribute to improved efficiency at a cheap cost by reducing human errors and biases. Organizations need to invest in employee training to effectively use digital technologies. Volvo, a luxury automobile brand, achieved recognition at the Brussels Motor Show for using an AI-embedded car to interview candidates for service technician positions. The application of AI in hiring processes has lowered individuals and derived ambiguity between human and machine power (Geetha and Bhanu 2018). The human resources department plays an essential part in improving an organization's success. To succeed in business, organizations have to prioritize customer satisfaction (McGill et al., 2020) This requires innovative human resource practices to differentiate from other competitors. Human resources primarily focus on recruiting, training, and retention of skilled and motivated personnel. The administration of human resources (HRM) focuses on establishing a productive workforce that is consistent with organizational goals and objectives. Identifying and acquiring individuals with the necessary skills for a certain job is the most exciting and hard activity. Poor recruitment techniques as well as technology may result in significant amounts of money and time wasted throughout these efforts. Recruitment is the process of discovering and encouraging potential employees to contribute to the organization's performance and objectives. Mistakes during this process can impact the organization's financial and economic progress. An organization's traditional recruitment process may influence both recruitment operations and potential candidates who seek jobs. The traditional recruitment method required complicated documents and did not focus on individual models. The structural framework of AI-HRM is illustrated in Figure (1). The traditional recruitment procedures often involve the subsequent steps:

- To recognize a vacancy within the organization.
- Prepare job descriptions and demanded personal skills.

- To discover and screen qualified applications from a large pool of candidates.
- Shortlisting and scheduling interviews.
- Selecting and recruiting the ideal aspirant.

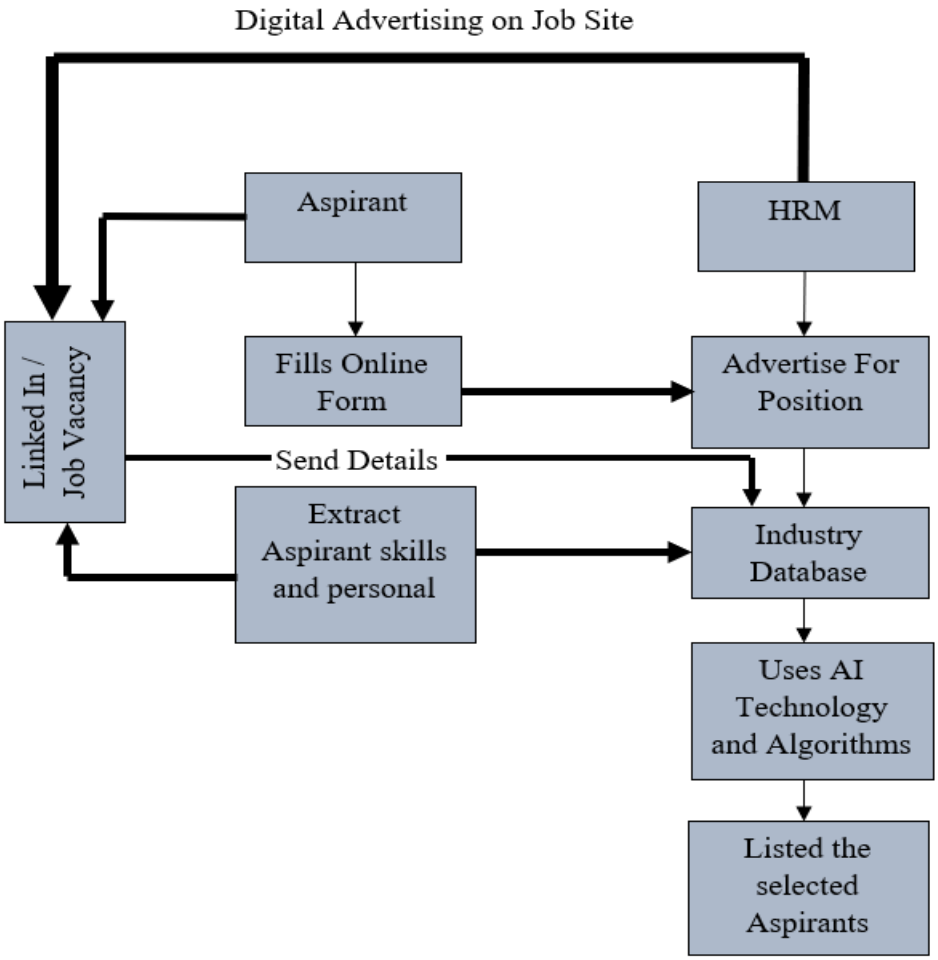

Figure 1: Structural Framework for AI-HRM

AI is becoming a valuable tool for HR managers as the recruitment landscape evolves. Artificial intelligence is increasingly used to optimize, publish, and purchase job adverts. Predictive algorithms are used to analyze market data and improve advertising success. Recruitment marketing involves developing an employer brand and creating visually appealing job advertisements. Chabot is commonly used to schedule interviews and pre-screen customers.

2.5 PROS AND CONS OF AI IN RECRUITMENT

AI technology can make the recruitment process more efficient. AI is increasingly being used in company recruitment. AI can improve recruitment efficiency, particularly in choosing top talent for organizations. AI can help screen large amounts of application data more quickly and efficiently than humans can. Efficiently processing and filtering a large number of applications is crucial to avoid missing out on qualified candidates or distinctive talents. Nowadays, job applicants post resumes online through business professionals' social networking platforms such as LinkedIn and Monster (Bondarouk and Brewster 2016). This facilitates the scouting or headhunting process for HR managers because all of the data and profiles are available online. Recruiters cannot personally investigate all of these profiles; they can do it using AI technology. Nowadays, many businesses outsource their recruitment processes to third-party firms. Small companies can reduce operational costs by not having to invest in AI recruitment technologies. Recruitment companies will receive job applications and use an algorithm to connect suitable candidates to the right jobs and companies. The recruitment technique includes both local and international applicants. Job seekers might conduct additional research about the company they want to work for.

According to Jarrahi (2018) Previously, communication was done by letters, phone calls, and early emails on the Internet. Chatbots are a new AI technology that improves communication efficiency. Chatbots provide real-time personal engagement with candidates. Some organizations employ chatbot technology during recruitment interviews. Chatbot applications can facilitate contact between applicants and organizations via several channels, including email, SMS, social media, and messaging apps, without time or location constraints. Traveling across state or national borders for job interviews is akin to gambling, as candidates invest money with unclear outcomes. Video interviews have become more common with the rise of the Internet of Things. Interviews can be conducted remotely using a reliable internet connection, saving both time and money. AI technology analyses body language and facial expressions in video interviews. This may boost the recruitment process by making candidates calmer and allowing interviewers to analyze recordings later for greater precision and effective decision-making.

While there are numerous benefits to implementing AI in recruitment, it's important to note that it is not a magical solution. A program uses data and algorithms written by the programmer to efficiently complete tasks. AI relies on enormous quantities of data to match, screen, and analyze job applicants. Without sufficient data, AI-assisted tools may not produce the desired outcomes. The decision-making process is unpredictable due to its reliance on data rather than human input. AI has the potential to replicate human bias decisions, raising concerns. AI's'machine learning idea analyses and replicates human processes for making decisions, potentially leading to biased outcomes. Another issue is the skepticism surrounding AI technology. Face-to-face interviews offer a 'human approach' that video interviews do not have. Experienced interviewers often identify a candidate's unique qualities beyond their resume and physical appearance. Currently, AI software cannot duplicate such observations (Reilly 2018).

AI-enabled recruiting technologies have been used for outreach, screening, assessment, and coordination. During the outreach stage, firms aim to find people and present employment openings in a manner that encourages them to apply. When applying for a position, you may fill out a digital application or send a resumé online. AI-enabled recruiting technologies have been used for outreach, screening, assessment, and coordination. During the outreach stage, firms strive to find people and present employment openings in a manner that encourages them to apply. When applying for a position, the aspirant may fill out a digital application or send a resumé online. The goal of this stage is to select the top candidates who will receive employment offers, which could involve multiple rounds of assessment. AI can help collaborate with applicants throughout the process (Chukwuka and Dibie 2023).

According to Desouza (2020), only 38% of organizations employ technology-enabled recruiting tools for their core hiring procedures. Incorporating AI can enhance and personalize employee experiences. Use AI to tailor outreach and HR campaigns to individual needs and preferences, leading to increased talent engagement and retention. This customization can improve all HR activities, including reward and compensation packages, the creation of networks for new staff, and automatic nudges to address unconscious bias. Reading Artificial Intelligence for HR: Separating the Potential from the Hype provides HR and business leaders an understandable nontechnical basis and a greater understanding of what AI is and doesn't seem. This understanding allows HR professionals to evaluate the influence of artificial intelligence (AI) on their abilities objectively while avoiding marketing hype. Understanding AI may help HR become a valuable partner in achieving company objectives via an optimal mix of people and technology. According to Riyaz (2024) the current capabilities, recommended precautions, and potential applications of AI in HR functions such as learning and development, talent mobility and career management, coaching, executive compensation, diversity, equity, and inclusion, onboarding, talent acquisition, and total rewards.

2.6 SCENARIO OF ASPIRANT ENGAGEMENT AND RECRUITMENT PERFORMANCE

Effective employees give organizations a competitive advantage in today's fast-paced global economy. Over the last few years, the fast growth and use of Internet facilities and apps have transformed how businesses operate in many aspects. The Human Resource Department confronts significant challenges in attracting, recruiting, and choosing high-quality workers. The digital recruiting process enhances a company's competitive advantage by increasing efficiency, lowering expenses, and providing benefits to job seekers. During the pandemic, interviews were often viewed critically (Bullard et al., 2022). Interviewees used to go into the room with a pounding heartbeat, jelly legs, clenched temples, and profuse perspiration, displaying fear and nervousness on their faces. In today's competitive business world, employees provide a competitive advantage.

Businesses must hire individuals with the needed skills, knowledge, and traits at the appropriate time and for the position being filled. Effective recruitment and selection are crucial for organizational prosperity. This research

investigates current trends in recruitment performance. The expansion of the internet and new corporate methods has led to considerable changes in recruitment techniques. AI Technology has simplified job applications for job seekers and made it easier for businesses to find skilled people globally. For the same reason, a rising number of businesses are transferring the way they recruit to the digital realm. The rise of technology and new business methods has led to considerable changes in recruitment processes. Recruitment agencies will struggle to find young talent for their customers unless they look online. To identify a suitable applicant, recruiters might consider using social networking sites, as young people are often engaged online. Personnel are the most valuable resource in any organization. Recruiting and selecting the right board members with the help of AI technology is crucial for the success of every organization. The employment industry has undergone substantial shifts and now operates in a dynamic corporate environment. Technology has simplified job applications and made it easier for firms to find skilled people globally (Allal-Chérif et al. 2021).

In India, the industry is extremely fragmented and comprises a range of services including sales, marketing, engineering, and IT. The recruitment sector is influenced by various variables, such as huge conglomerates expanding into new business fields, important customer industry expansion, and global corporations entering local markets. The industry is characterized by many acquisitions and mergers. Companies and hiring agencies now conduct most recruitment processes online to match job searchers with live vacancies more quickly. India has over 50% of its population under the age of 25, and over 65% under the age of 35, with an average age of 29-30 years (Mangal 2023). This group frequently uses the internet. Academic students in search of work, whether graduating or post-graduating, are not typically employed. Recruitment agencies will struggle to locate young talent for customers unless they go online.

To find a suitable applicant, traditional recruiters might consider using social networking sites, as young people are often engaged online. According to Kemp (2018), personnel is the most valuable resource in any organization. Effective board recruitment is crucial for organizational success. The recruitment sector has undergone significant changes and now operates in a dynamic corporate environment. India's staffing business is highly fragmented, offering services in fields such as engineering, finance, marketing, and information technology. Early research, practitioner polls, and company experiences show that AI-enabled technologies in Digital Recruiting 3.0 boost recruiting efficiency significantly. However, given the volume of applications triggered by Digital Recruitment 1.0 and 2.0, it is inevitable that Digital Recruiting 3.0 will continue to grow. AI-enabled recruitment remedies are still new to many firms (Abdeldayem & Aldulaimi 2020). Implementing them across every one of the categories and degrees may be overwhelming. Research indicates that 60% to 80% of large-scale organizational change attempts, including digital transformations, fail. AI-driven solutions have revolutionized recruitment methods, bringing about greater efficiency and effectiveness. Organizations are increasingly implementing AI-based recruitment techniques across the hiring process, including job listings and candidate assessments. Some organizations are only as effective as their people. This research begins by establishing the recruiting and selection process and then goes on to discuss best practices in recruitment and selection. The final portion addresses the most recent rising trends in recruitment and selection.

2.7 CONCEPTUAL FRAMEWORK

The conceptual framework is represented in Figure 1.2 and it highlights the essential role of Artificial Intelligence in exploring the aspirant engagement and recruitment performance within the IT industry. By leveraging AI-driven Aspirant Relationship Management (AI-ARM) across four key pillars Process, People, Technology, and Orientation, business can potentially enhance their performance of recruitment. This development is measured based on three dimensions: Retainment, Efficiency, and Quality. AI authorizes recruiters to rationalize aspirants' communications, tailor orientation knowledge, optimize employment processes, and utilize progressive technologies for candidate valuation and engagement. Eventually, this combined method safeguards not only the effectiveness of recruitment processes but also the retaining of top talent and the maintenance of high-quality ideals within the IT landscape. AI-based technologies that enhance candidate interaction throughout the recruiting process. They enable organizations to instantly connect with prospects while browsing job advertisements. Chatbots send pre-formatted messages to candidates at regular intervals during the recruiting process facilitating direct interaction. Artificial intelligence has a direct impact on HR procedures and recruitment. Addressing the back-office's bias towards AI in recruitment has significant ethical consequences. AI systems encounter ethical issues when making hiring decisions due to human behaviors, attitudes, norms, and codes. Artificial intelligence is used in various human resource processes, including job description creation, prescreening, candidate interactions, and onboarding.

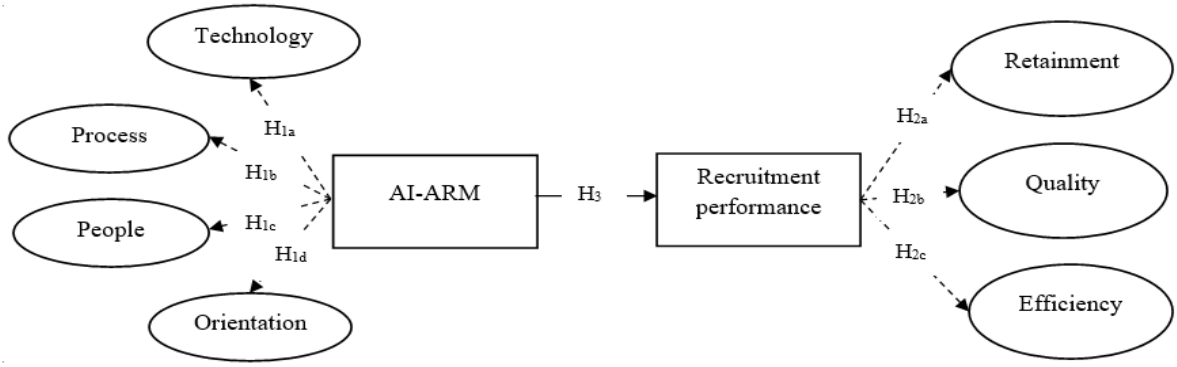

Figure 2: Conceptual Framework

3. METHODOLOGY

3.1 RESEARCH DESIGN

The research design outlined in the methodology chapter may be seen as an essential element that the researcher must follow to properly perform and complete the research study (Zong et al. 2023). The research design dictates the aspects of the sampling design, including sample size and method. It also specifies the tools and techniques that must be used while analysing data. A correlational research design will be used for this investigation. Given that the study is survey-based, it must also be quantitative to measure the variables and understand the proposed relationship.

3.2 SAMPLING TECHNIQUE

The study adopted a quantitative approach, by collecting data from the employees in the IT sectors in India representing the current research population. The data for this survey was collected using a convenience sampling method, a non-probability sampling technique. criterion-based sampling technique involves selecting individuals based on specific criteria who are relevant to the research. In this case, participants were reached by distributing an online questionnaire using Google Forms. The survey was administered directly to participants via email (Mariani et al. 2019).

3.3 INSTRUMENT MEASURE

In the first section of the questionnaire, questions about demographic information such as age, gender, occupation, monthly income, and source were requested. Questionnaires for each variable make up the second segment, which awards the sector a 5-point Likert scale. A Likert scale with five options is presented to the employees of the IT sector in the Indian population (1-Strongly Disagree, 2- Disagree, 3-Neutral, 4-Agree, 5-Strongly Agree) for the variables Technology, Process, People, Orientation for AI-ARM and Retainment, Quality and Efficiency for recruitment performance. Several statistical techniques and tools were employed to analyze the data for this investigation.

3.4 DATA COLLECTION AND SAMPLE SIZE

The main aim of this research is to investigate the impact of organizational collaboration approaches on employee efficiency towards employees in IT organizations in India. Also, to explore how employee efficiency impacts job-related outcomes in an organization. The research gathered data from employees (managers, executives, or any other relevant personnel who provide information related to the study) in the IT sectors in India.

The sample size (n) can be determined using the formula:

$$n = \frac{N}{1 + (e)^2 N}$$

Where;

n = Sample Size, N = Population Size, e = Margin of Error

3.5 ANALYSIS TOOLS

In the research's methodology, hypotheses were developed to support the expected results. The following examination of the inquiry utilizes structural equation modeling (SEM) using both SPSS and AMOS. By Hair et al. [36], the investigation progresses in a two-step process. The initial stage involves a comprehensive assessment of the measurement model's reliability and validity. This involves assessing the internal consistency and accuracy of measurement tools, utilizing established reliability measures such as Cronbach's alpha, and conducting a variety of validity assessments. Following

this, phase two is centered on the structural model, which involves analyzing the specified pathways connecting variables. The study assesses the structural validity of the model by analysing the direct and indirect relationships outlined in the hypotheses with the help of AMOS. (Zong et al. 2023).

The validity and reliability analysis are used to identify the variables loading, α, and AVE investigation. This analysis employs threshold values, even though factor loadings and Cronbach's alpha (α) must have threshold values above 0.7 as suggested. A value greater than 0.5 is also used as a sufficient range, and the AVE research threshold number should be beyond 0.5 for an accepted range for analysis (Mariani et al. 2019).

4. ANALYSIS AND RESULTS

4.1. OVERVIEW

Variance-based SEM (Smart-PLS software) is employed since the structural model includes both formative and reflective measures, and the analysis evaluates the overall variation explained. Both the measurement model and the structural model are estimated using the partial least squares method. A "Two-Stage Approach" is required when a structural model incorporates both formative and reflective measurable HOC, according to Ringle et al. (2012).

4.2. INTERNAL CONSISTENCY AND VALIDITY

4.2.1. RELIABILITY AND PCA OF THE SCALED ITEMS

The two major latent variables, AI-ARM and Recruitment Performance with sub-constructs, and the outcome variables were tested for internal consistency (Cronbach alpha) to ensure the reliability of the scales (Table 2). The overall values ranged from 0.82 to 0.87 for AI-ARM Technological: 0.86, Process: 0.84, People: 0.82, Orientation: 0.87), 0.76 to 0.86 for Recruitment Performance **(**Retainment: 0.76, Quality: 0.86, and Efficiency: 0.73). The KMO values ranging from 0.70 to 0.82, greater than 0.6, ensure the sampling adequacy. The TVE values from 0.52 to 0.66 indicate that in PCA as a single factor, each construct formed from LOC explains at least 50 per cent of the variation in HOC.

Name of the higher-order Construct	**Sub Constructs**	**Factor Loadings (Principal Component Analysis)**	**KMO**	**TVE**	**Internal consistency (α)**	**CR**
AI-driven Aspirant Relationship Management (AI-ARM)	Technology Process People Orientation	0.71-0.83 0.76-0.88 0.73-0.79 0.77-0.84	0.76	0.65	Ranging between 0.82 - 0.89	Ranging between 0.84 - 0.91
Recruitment Performance	Retainment Quality Efficiency	0.65-0.78 0.71-0.89 0.79-0.88	0.82	0.52	Ranging between 0.76 - 0.83	Ranging between 0.77 - 0.86

The latent variable scores for four HOC constructs—AI-ARM, Recruitment Performance—were obtained. The structural model (stage 2) was then developed, and the model was rebuilt to estimate the path estimates and mediation effect. The PLS algorithm is used to examine the model in order to obtain the R2 and β (beta) coefficients. After that, 500 bootstrap samples are used to provide t-statistic values, which are used in a two-tailed t-test to ensure the significance of the suggested hypothesis at a 95% confidence interval.

AI-ARM account for 48% of the variation in brand addiction, according to the total Adj. R2 (0.48). Similarly, recruitment performance account for 54% of the variation in continuous usage. Lastly, a 36% variance can be experienced by AI-ARM. At a 95% confidence level, the importance of the association is shown by the value of t-Statistics reaching 1.96 (Anderson & Gerbing, 1991). First, the estimated model and study values support H1 by showing that the direct

relationship between AI-ARM and recruitment performance is statistically significant (β=0.448, t=3.88). Frequently introducing new ideas by businesses to inspire their clientele will inspire them to use the service quite frequently.

5. DISCUSSIONS

In order to investigate a complex interaction between AI-powered Aspirant interation Management (AI_ARM) and hiring practices in the IT sector, the current study will focus on two main research questions. 1. What are the main determinants of ARM and recruiting performance? And 2. How does ARM affect recruitment performance? With the use of smart-PLS software and a variance-based structural equation modelling (SEM) technique, we discover strong proof that AI-ARM improves hiring results. The study clarifies the connection between AI-ARM and enhanced metrics and identifies important elements impacting recruitment performance. The first study topic looks into the elements that have the most effects on ARM and recruiting performance. According to the study, AI-ARM comprises four main constructs: Technology, process, people, and orientation. Each of these constructs plays an important role in shaping recruitment outcomes.

The results show that AI-ARM's technology components, such as data analytics and automated communication, significantly improve hiring success. Businesses are better positioned to draw in and keep applicants when they use state-of-the-art recruiting solutions. Technology's strong contribution to AI-ARM is indicated by its factor loading (0.76 to 0.88), which shows that technology decreases inefficiencies and simplifies procedures, which frequently result in offer rejections. AI-ARM's process-related components highlight how crucial organized and effective hiring procedures are. According to the investigation, enhanced performance measures and well-defined hiring procedures are strongly correlated. Employers who implement standardized procedures improve the entire applicant experience in addition to guaranteeing uniformity in candidate assessments. Using factor loadings between 0.71 and 0.83, the process construct is revealed. Human factors play a critical part in the employment process, including the responsibilities of HR specialists and hiring managers. The findings imply that a company's culture and dedication to applicant involvement have a big influence on hiring success. The people construct has high factor loadings (0.73 to 0.79), suggesting that engaged and well-trained recruiters can use AI-ARM technologies to their full potential and provide better results. The orientation construct shows how hiring procedures are strategically in line with company objectives. It includes the flexibility of hiring practices to satisfy the ever-changing needs of the IT sector. Organizations that prioritize a candidate-centric approach in their recruiting tactics perceive higher performance outcomes, as indicated by the substantial loading (0.77 to 0.84). This is in line with contemporary trends that highlight the significance of employer branding and candidate experience in attracting top talent. The effect of AI-ARM on hiring performance is investigated in the second study question. The SEM analysis's findings show that AI-ARM has a great predictive ability, explaining an astounding 48% of the variation in recruiting performance measures. The research demonstrates the importance of the mediation effects in the model in addition to confirming the direct correlation between AI-ARM and recruiting performance (β=0.448, t=3.88).

Higher degrees of AI-ARM deployment are closely linked to better recruitment performance outcomes, such as applicant retention, hiring quality, and overall efficiency, according to the statistically significant path coefficient (β=0.448). This research backs up the idea that businesses investing in AI-powered hiring tools may anticipate significant returns in terms of talent acquisition efficiency. The study also suggests that there may be mediating effects between the constructs. Because the incorporation of cutting-edge technologies may improve the efficacy of recruiting workflows, technology, for example, can mediate the link between process and recruitment performance. Similar to this, people-oriented tactics might mitigate the effects of AI-ARM, highlighting the need to match technical developments with human resources in order to optimize hiring results. The validity and internal consistency of the measures used to assess recruiting performance and AI-ARM components were thoroughly examined. Strong reliability across the measurements was shown by the Cronbach alpha values, which ranged from 0.76 to 0.87 for AI-ARM and 0.73 to 0.86 for recruiting performance. Additionally, the 0.70–0.82 Kaiser-Meyer-Olkin (KMO) values support the adequacy of the sample for factor analysis, ensuring that the constructs are appropriately measured. The robustness of the PCA results is further supported by the Total variation Explained (TVE) values, which range from 0.52 to 0.66 and indicate that each construct explains a significant amount of the variation in the higher-order constructs. This validity and reliability support the results and increase trust in the inferences made from the study.Realistic Consequences for IT Companies.

The research's conclusions are especially pertinent to IT companies looking to boost hiring practices in a cutthroat market. Organizations can use the knowledge gathered from this study to inform their strategic planning and hiring procedures. Businesses should give top priority to funding cutting-edge hiring technology that support AI-driven procedures. Data analytics, AI chatbots for candidate engagement, and application tracking systems are a few examples of this.

Standardized hiring procedures may enhance the applicant experience and lower the number of offers that are turned down. Clear protocols that guarantee prompt communication and in-depth candidate assessments should be the goal of organizations. In addition to improving uniformity, this methodical methodology makes it possible to track recruiting indicators more effectively. The results highlight how crucial human interaction is in the hiring process. Consequently, companies need to spend money on educating HR specialists and recruiting managers on how to use AI-ARM products. Results will probably increase if hiring teams are equipped with the know-how to actively engage prospects. Lastly, it's critical to promote a candidate-centric attitude in hiring practices. Employers should prioritize the demands of candidates in order to improve the entire candidate experience. This entails aggressively requesting applicant input in order to continuously improve hiring procedures.

6. LIMITATIONS AND FUTURE RESEARCH AREAS

It is important to recognize the limits of this study even if it makes a substantial contribution to our understanding of AI-ARM and how it affects hiring success. The results' generalizability may be impacted by biases introduced using a non-probability judgmental sampling procedure. Future studies should use bigger, more representative samples and try to confirm these results across a range of sectors. Furthermore, longitudinal research may shed more light on how AI-ARM affects hiring success over the long run, enabling businesses to evaluate how sustainable these tactics are. Examining how corporate culture and AI-ARM interact may potentially provide important insights into how various contexts impact the effectiveness of hiring technology.

CONFLICT OF INTERESTS

None.

ACKNOWLEDGMENTS

None.

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