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**| RESEARCH ARTICLE**

## **Application of Artificial Intelligence (AI) in Recruitment and Selection: The Case of Company A and Company B**

**Zhang, Pengcheng**

*Faculty of the College of Business Administration, Graduate Studies, Adamson University, Philippines*

**Corresponding Author:** Zhang, Pengcheng, **E-mail:** zhangethan1221@gmail.com

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**| ABSTRACT**

The study explores the integration of Artificial Intelligence (AI) in recruitment and selection processes at Company A and Company B, reflecting the increasing trend of AI utilization in HR practices. The research aims to investigate HR professionals' perceptions and attitudes towards AI adoption in recruitment, utilizing the Unified Theory of Acceptance and Use of Technology (UTAUT) model to understand the factors influencing behavioral intentions towards AI integration. Through a quantitative descriptive approach, structured surveys and questionnaires were employed to gather data from HR professionals at the two companies via snowball sampling, providing valuable insights into the perspectives of professionals involved in the hiring process. The study revealed the significant impact of educational background on attitudes towards AI adoption, with a positive reception towards the performance expectancy and social influence of AI tools in recruitment and selection processes, as indicated by the UTAUT model. The findings underscore the importance of considering educational background in shaping attitudes towards AI integration in HR practices, highlighting the potential benefits of AI tools in enhancing recruitment and selection processes.

**| KEYWORDS**

Artificial intelligence (AI), Human resources (HR), Recruitment transformation, Digital recruitment

**| ARTICLE INFORMATION**

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### **1. Introduction**

#### **1.1 Background of the Study**

Artificial intelligence (AI) is proving its worth to recruitment teams by providing benefits like efficiency, personalization, and data-informed decision-making. AI is widely utilized by recruiters across industries as a complement to human efforts in the recruitment process. Rather than replacing humans, AI enhances cognitive strengths, embodies human capabilities, and expands physical capabilities. AI technologies have distinct characteristics that set them apart from other innovative IT tools. In recruitment, AI plays a significant role in various stages, offering impartiality and efficiency. Both recruiters and applicants perceive AI-based tools positively, recognizing benefits such as time savings and improved candidate experiences. HR managers anticipate increased utilization of AI tools in the future. Overall, AI-based tools are transforming the recruitment field, providing efficiency, fairness, and improved experiences. Continuous evaluation and understanding of perceptions are vital for improving the effectiveness and acceptance of AI tools in the recruitment process.

As the development of artificial intelligence continues to progress, an expanding array of enterprises will depend on it to augment their recruitment procedures. In the past, the act of recruiting has been an arduous and monotonous task. To illustrate, numerous organizations have utilized AI to rapidly analyze vast amounts of data to enhance efficacy, precision, and output. In essence, AI is simply an automated tool that enables us to resolve complex, recurring issues with high-quality results. AI is employed to help illuminate the path toward achieving these outcomes. Comparable automation capabilities and advantages can be implemented in recruiting processes, particularly for repetitive, high-volume tasks like screening, sourcing, and scheduling. AI-driven technology is intended to accelerate time-consuming manual procedures, freeing up recruiters to concentrate on more valuable initiatives during the hiring process. It is of utmost significance to acknowledge, notwithstanding certain convictions to the contrary, that Artificial Intelligence (AI) is not purposed to supplant human recruiters. AI in the hiring process, or AI in recruiting, allows talent acquisition teams to identify passive candidates and unlock data-driven insights that support decision-making and better results, such as higher quality hires. Recruiting tools powered by AI can assist in matching the right jobs to the right talent and connecting the right talent with the right recruiters, ultimately resulting in successful hires. As evidenced by its use in hiring processes, AI is already saving HR teams time and money while also attracting top-notch candidates.

The potential implementation of artificial intelligence (AI) in the workplace has become a subject of regulatory deliberation within the Philippines. The country's Labor Secretary, Bienvenido Laguesma, has recognized the need for regulations in response to the changes occurring in the workplace (Tan J., 2023, June 15). The chief of the Department of Information and Communications Technology (DICT) is also supportive of calls for AI regulation in the workplace (Javier, P. 2023, June 15). Various entities have urged the government to regulate the creation of AI applications and systems to ensure the development of responsible and ethical AI products (Atienza, K. A. T. 2023, June 12). Currently, there exists a dearth of specific regulations in the Philippines that govern the utilization of AI in the practice of law. Despite the advantages of AI, the Department of Labor and Employment (DOLE) advocates for regulating AI in the workplace to ensure its responsible use (Jaymalin, M. 2023, June 14). Philippine Senator Imee Marcos has filed a resolution requesting an inquiry into the use of AI and its impact on the country's job market, citing concerns that AI may displace workers in the services and manufacturing sectors (Atienza, H. J. S. 2023, May 8).

As to the context of recruitment, the emergence of Digital Recruiting 3.0 signifies the integration of AI technology as a key element. It follows the earlier phases of Digital Recruiting 2.0 and Digital Recruiting 1.0, which involved the process of collecting and consolidating job postings from various sources into a centralized location and applicant information, respectively. AI technology in recruitment is equipped with intelligent capabilities, functioning autonomously, and enhancing human capabilities. It serves as a complement to human efforts, assisting in complex tasks and expanding capabilities. The adoption of AI in recruitment has become essential for organizations, offering automation, improved decision-making, and data analysis. AI is utilized throughout the recruitment process, promoting efficiency and fair evaluation of candidates. The integration of AI in recruitment aims to remove biases and prejudices. Overall, the integration of AI in recruitment brings about a significant transformation, offering several advantages and positive outcomes.

Implementing AI in an organization requires careful consideration and modifications to the organization's culture, structure, and working methods. It is not a simple "plug-and-play" technology that provides instant gratification. (Fontaine et al., 2019). According to a recent study by Mikalef and Gupta (2021), relying solely on AI tools is unlikely to provide a competitive advantage because they can be easily obtained and imitated by competitors. Organizations need to consider a combination of resources, including tangible and human resources, as well as factors like interdepartmental coordination, organizational change capability, and risk-taking, to establish an AI capacity that provides a competitive advantage. Strategic planning, adequate resources, a commitment to innovation, and organizational and technological readiness are key factors in making AI work effectively within an organization. (Mikalef and Gupta 2021).

The effective application of AI in human resources faces significant challenges, despite acknowledging its benefits. These hurdles encompass various aspects, including practical difficulties and ethical considerations. (Tambe et al., 2019). For starters, historical data biases in AI algorithms can lead to AI systems favoring a specific group of applicants. Amazon uncovered a problem with its hiring algorithm in 2018 for the reasons described above. The system was developed utilizing data from previous work performance, which was dominated by white, male employees who performed above average. As a result, men in the same demographic group obtained higher marks from the AI system. Because the organization could not figure out how to make the algorithm gender-neutral, it had to stop hiring (Meyer, 2018). Second, there is growing concern about whether AI-powered recruitment tools are ethical, and whether people's trust in the companies that use them is influenced by the ethical perception of the use of AI in recruitment because AI robots and algorithms are generally inaccessible to the public due to intellectual property rights.

Despite these reservations, AI is expected to significantly increase recruiters' productivity and free them up to do more strategic and human-centric tasks. However, empirical research has not adequately assessed AI technology in terms of benefits, performance, and contact experience from the perspective of Human Resource (HR) experts. Some of the studies had a limited sample size (3-5 recruiters) or a country distribution - solely in Bangladesh or Germany. While most AI in recruitment research has concentrated on AI technologies (such as natural language processing, machine vision, automation, and augmentation) and their impact on the recruiting and selection process, the use of AI in recruitment, or ethical and trust considerations, little is known about how recruiters perceive AI-based tools in recruitment and selection.

This study seeks to provide light on recruiters' perspectives of AI technology in recruitment and selection from HR experts who employ applicants in various industries and have used various AI-enabled recruitment tools. It investigates how recruiters perceive AI tools in recruitment, with a focus on performance, efficiency, ease of use, and social impact as key factors determining the adoption of these tools in recruitment, their impact on selection activities, outcomes, and the future of recruitment.

### **1.2 Statement of the Problem**

This study aims to explore the perspective of HR professionals in the application of artificial intelligence (AI) in recruitment and selection processes. Specifically, it aimed to answer the following questions:

1. What is the demographic profile of the respondents in terms of:
  - 1.1. Age;
  - 1.2. Gender;
  - 1.3. Educational Background;
  - 1.4. Employment Status;
  - 1.5. Work Experience in utilizing AI tools; and
  - 1.6. Frequency of working with AI tools?
2. How do HR Professionals recognize the applicability of the UTAUT model in the use of AI in recruitment and selection in terms of:
  - 2.1. Performance Expectancy;
  - 2.2. Effort Expectancy; and
  - 2.3. Social Influence?
3. Is there a significant relationship between the perspective of HR Professionals towards UTAUT constructs and Behavioral Intention toward the application of AI in recruitment and selection?
4. What is the perspective of HR Professionals towards the application of AI in recruitment and selection in terms of Behavioral Intention?
5. Is there a significant difference in the perspective of HR Professionals towards the application of AI in recruitment and selection in the Behavioral Intention when grouped according to the demographic profile?
6. Based on the results of the study, what best HR practices can be recommended for each stakeholder in the application of artificial intelligence in recruitment and selection?

### **1.3 Hypotheses**

In this study, the researcher will test the following hypotheses:

**H<sub>1</sub>:** There is no significant relationship between the perspective of HR Professionals towards UTAUT constructs and Behavioral Intention toward the application of AI in recruitment and selection.

**H<sub>2</sub>:** There is no significant difference in the perspective of HR Professionals towards the application of AI in recruitment and selection in the Behavioral Intention when grouped according to the demographic profile.

### **1.4 Scope and Limitation**

The present study endeavors to examine the perspective of human resource professionals regarding the utilization of artificial intelligence in the context of recruitment and selection. The study will specifically focus on recruiters or human resource professionals who employ AI tools in the said processes. The primary participants of this investigation are two companies, namely CATSearch HR Consultancy Inc. and Viventis Search Asia. CATSearch HR Consultancy Inc. is a corporate and management consulting enterprise that provides a wide range of human resources and operations services, including database management, CV parsing and formatting, and onboarding. It is situated at The Glens at Parkspring Brgy San Antonio San Pedro, Laguna. On the other hand, Viventis Search Asia is among the top human capital solutions firms in the Philippines, with branches in Singapore,

Malaysia, and Indonesia. The company strives to enhance human capital through technology-driven solutions and compassionate guidance from a team of human resource experts. It is located at 6/F 45 San Miguel Building, 45 San Miguel Avenue, Ortigas Center, Pasig City. Furthermore, the researcher aims to complete the data collection process within a timeframe of three (3) months. The survey questionnaires were adapted from previous scholarly journals and will be disseminated through Google Forms/QR Code. The responses will then be collated by the researcher for data analysis.

### **1.5 Significance of the Study**

By providing valuable insights, various stakeholders can benefit from this study which includes the following:

**Organizations.** The study's results can help organizations make informed decisions about the adoption and implementation of AI technologies in recruitment and selection processes, leading to potential benefits for HR management, organizational efficiency, and overall recruitment outcomes.

**HR professionals.** This study could provide HR professionals with insights into the potential benefits and challenges associated with the use of AI in recruitment and selection. This could help them to make informed decisions about the adoption of AI technologies in their work.

**Developers of AI technologies.** The results of this study could provide developers of AI technologies with insights into the needs and concerns of HR professionals, which could inform the design and development of AI technologies for use in recruitment and selection.

**Researchers.** This study could contribute to the academic literature on the adoption of AI technologies in HR by providing empirical evidence on HR professionals' perception of AI in recruitment and selection. This could inform future research on this topic.

**Future Researchers.** Future researchers could also benefit from this study on HR professionals' perception of AI in recruitment and selection. The study could contribute to the academic literature on the adoption of AI technologies in HR by providing empirical evidence on HR professionals' perspectives of AI in recruitment and selection. In addition, identifying these gaps, further research can be conducted to delve deeper into specific aspects and unanswered questions related to HR professionals' views on AI in the hiring process.

### **1.6 Definition of Terms**

The following terms would be operationally defined in the study:

**Artificial Intelligence.** Artificial intelligence technologies can be used to support the recruitment and selection process, such as machine learning algorithms for resume screening or natural language processing for job ad writing.

**Behavioral Intention.** In the context of a study on HR professionals' perception of AI in recruitment and selection, behavioral intention would refer to HR professionals' intention to use AI technologies in their recruitment and selection processes.

**Effort Expectancy.** From the perspective of recruiters, refers to the ease of learning and interacting with a system, the clarity and understandability of the system's interface, the system's flexibility in usage, and the ease of becoming familiar with the system.

**HR Professionals.** Individuals who work in the human resources department of an organization are responsible for managing the recruitment and selection of employees.

**Performance Expectancy.** Performance expectancy, from the perspective of recruiters, encompasses the belief that using a system will lead to gains in job performance. This belief includes expectations of increased task completion speed, improved work performance, increased productivity, enhanced effectiveness at work, and work made easier.

**Recruitment and Selection.** The process of identifying, attracting, and selecting suitable candidates to fill job vacancies within an organization.

**Social Influence.** In the area of artificial intelligence-enabled recruitment tools, social influence includes the influence of management support and peer influence on individuals' adoption of these technologies. It is observed both offline and online and has a significant impact on cultural markets, scientific innovations, social practices, and various fields of study.

**Unified Theory of Acceptance and Use of Technology (UTAUT).** From the perspective of a recruiter, the UTAUT model could be used to ascertain their willingness to employ AI technologies in recruiting and selection.

### **1.7 Literature Review**

This chapter presents informative materials that have relevance to the objectives of this study. It contains the researcher's view of relevant ideas related to the present study. Materials such as thesis and web articles have a direct bearing on the researcher's conceptual framework which provides direction to the present study.

#### **1.7.1 Unified Theory of Acceptance and Use of Technology (UTAUT)**

The Unified Theory of Acceptance and Use of Technology (UTAUT) is a theoretical paradigm that explains why people want to utilize certain technologies. According to the concept, four essential components (performance expectancy, effort expectancy,

social influence, and facilitating factors) impact an individual's behavioral intention to use a technology, which drives technology use behavior. The UTAUT model could be used to understand a recruiter's intention to use AI technology in recruitment and selection. The UTAUT model's four core constructs are as follows: Performance Expectancy: The degree to which a recruiter believes that employing AI in recruitment and selection will enable them to do their work more effectively. Effort Expectancy: The level of comfort connected with a recruiter's usage of artificial intelligence in recruiting and selection. Social Influence: A recruiter's perception of how important others (such as colleagues or superiors) believe AI should be used in recruiting and selection. Facilitating Conditions: The extent to which a recruiter believes that the organizational and technical infrastructure is in place to facilitate the use of AI in recruitment and selection.

The UTAUT model could provide insights into the elements that influence recruiters' inclination to adopt AI technology in their work by studying these constructs. Because of the rapid rise of IT, numerous theories of technological acceptance have emerged. The UTAUT model is widely represented in the literature and incorporates a wide range of constructs based on recent theories of technology acceptance (Menant, Gilibert, & Sauvezon, 2021). According to Alam et al. (2020), the UTAUT is commonly utilized in research because it is a unified model that integrates a range of variables from eight key theories, including the Theory of Reasoned Action, the Technology Acceptance Model (TAM), the Motivational Model (MM), the Theory of Planned Behavior (TPB), the Decomposed Theory of Planned Behavior (DTPB), the Model of PC Utilization (MPCU), the Innovation Diffusion Theory (IDT), and the Social Cognitive Theory (SCT). Based on conceptual and empirical commonalities, to build UTAUT, these eight models were empirically tested using within-subjects, longitudinal data from four organizations.

The application of the UTAUT In this study contributes to the growing body of literature on AI acceptance in recruitment from the perspective of Human Resource (HR) professionals. It employs a novel technology assessment paradigm in the recruiting and selection process, with theoretical and practical ramifications. First, it proves UTAUT's utility in evaluating AI technology from the perspective of HR professionals. Many previous studies focused on the selection tool (for example, video analysis, video, or chatbots). Second, the discoveries based on the UTAUT determinants and applied to recruiting help to improve knowledge of AI and its use in Human Resource Management (HRM). Third, the findings, according to the UTAUT, provide critical insights into the characteristics and qualities of AI from the perspective of users, which could influence and anticipate future development. Fourth, despite its prominence as a model of organizational technological acceptance, UTAUT has only been empirically employed in a few research, signaling that greater replication is required. Previous research on the use of technology in recruiting and selection has concentrated on the surroundings and perspectives of applicants in the United States. Recruiters interpret this disparity as indicating that further inquiry is required.

Finally, our research contributes to and extends the literature on the application of artificial intelligence in recruitment, which is still in its early stages (Alam et al., 2020). Furthermore, this research has important practical implications. First, it contributes to the field by elucidating how artificial intelligence influences the activities of human resource professionals. Second, it dives into the practical application of artificial intelligence techniques in the recruitment process. Third, it can help highlight the limitations of these technologies as well as areas for improvement. One of these is performance expectancy, which is the degree to which people believe that using the system would help them improve their job performance. Second, effort expectancy is defined as the degree of ease with which the system is used. Third, there is social influence, which is the degree to which the individual believes that others believe he or she should use the new system. Fourth, facilitating conditions are defined as an individual's belief that the organizational and technological infrastructure necessary to facilitate the usage of the new system is in place.

The moderating factors of UTAUT that significantly affect the intention to use and final utilization of new information technology encompass voluntariness of usage, gender, age, and experience. These four main determinants are crucial in determining the user's behavioral intentions towards the technology. The UTAUT is employed as the framework in this investigation. The study disregarded voluntary use and facilitating conditions in the domain of AI usage in recruiting because AI technology is most implemented by the employer and hence rarely a subject of individual choice, unlike private use of technologies. This approach is consistent with previous research on new technology acceptance offered by employers. The traditional moderators (gender, age, and experience) and predictor (facilitating conditions) of the UTAUT model were modified in this study by replacing facilitating conditions and voluntariness of usage with the frequency of use of AI tools and the level of education completed. This allowed for a more in-depth investigation of the impact of these variables on behavioral intention to use new technology. The adoption of AI can improve acquiring, assessment, and recruiting of new human talents in organizations (Jacques Bughin et al., 2018). It helps employers to take strategic decisions and acquire the right talents at the right time.

### **1.7.2 Performance Expectancy in Recruitment**

From the perspective of recruiters, performance expectancy refers to the belief that using a system will result in various positive outcomes related to job performance. This belief encompasses the following aspects: increased task completion speed, improved work performance, increased productivity, enhanced effectiveness at work, and work made easier. Recruiters perceive that utilizing a system will enable them to achieve these gains in job performance. The concept of performance expectancy is derived from various theories and models, including the Technology Acceptance Model (TAM), Motivational Model (MM), and Innovation Diffusion Theory (IDT). (Open Newcastle. (n.d.). The expectancy theory, developed by Victor Vroom, further supports the notion that individuals are motivated to perform when they believe that increasing their efforts will lead to improved performance and desirable outcomes.

This theory emphasizes the connection between effort, rewards, and goals, highlighting the importance of individuals' belief that their efforts will result in positive outcomes. (PeopleGoal. 2021, April 16). Performance expectancy is the best predictor of intention to utilize new technology. It was heavily influenced by Davis' TAM and Compeau's outcome expectations. This means that technology enables recruiters to do tasks more quickly, improve work performance, increase productivity, increase work effectiveness, and make work easier. Action results are referred to as outcome expectations. Based on empirical evidence, they were categorized as performance expectations (work-related expectations) and personal expectations (individual objectives).

In terms of performance, the system is used if it promotes work effectiveness, saves time on routine tasks, improves output quality, and increases output quantity for the same amount of effort. In terms of personal expectations, this means that he or she is seen as competent by coworkers and has a better chance of a promotion or wage increase. Effort expectancy and social influence, performance expectancy is one of three direct predictors of implementing a new system in businesses. This shows, for this study, that recruiters' intentions to use AI technologies in recruitment and selection are influenced by their performance expectations. In the early studies, it was found that it had a significant influence on performance expectancy on behavioral intention in different areas such as (Alam, Hu, & Barua, 2018) in m-health services and (Uddin, Alam, Mamun, Khan, & Akter, 2020) in ERP. Hence, the performance expectancy of an individual can influence their intention to use new technology like AI in recruiting talents.

### **1.7.3 Effort Expectancy from the Recruiter's Perspective**

Effort expectancy, from the perspective of recruiters, refers to the ease of learning and interacting with a system, the clarity and understandability of the system's interface, the system's flexibility in usage, and the ease of becoming familiar with the system. Effort expectancy, as perceived by recruiters, encompasses the following aspects related to the use of a system: a) ease of learning: The system is easy to learn and understand, requiring minimal effort to acquire the necessary skills to operate it effectively; b) clarity and understandability: Interacting with the system is clear and straightforward, with a user-friendly interface that facilitates comprehension and navigation; c) flexibility in usage: The system allows for flexibility in its usage, accommodating different needs and preferences of recruiters in performing their tasks; d) Ease of Familiarity: Becoming familiar with the system is uncomplicated, requiring minimal time and effort to adapt to its functionalities and features. Effort expectancy plays a significant role in determining recruiters' perception of the system's usability and their willingness to engage with it in the recruitment process. (Open Newcastle. n.d.). By ensuring that a system exhibits high effort expectancy, organizations can enhance user acceptance and adoption of AI technology in recruitment practices. (Mayhew, R. (2019, February 05).

### **1.7.4 Impact of Social Influence**

About the use of new technologies, social influence is described by Venkatesh et al. (2003) as "the individual's behavior influenced by how they believe others will view them as a result of having used the technology". In the context of AI-enabled recruitment tools used by employers, management assistance, along with peer influence, is a component of social influence in the UTAUT paradigm (Menant, Gilibert, & Sauvezon, 2021). Other researchers have observed the impact of social influence on human behavior both offline and online. It pervades cultural markets, showing itself in the acceptance of scientific and technological advances as well as the expansion of social activities. It is generally connected with social psychology and focuses on micro-level dynamics between individuals, but it also plays an essential part in other social sciences such as economic herd behavior, financial market speculative bubbles, voting behavior, and interpersonal health. Social influence is critical in cultural marketplaces, in commodities such as books and music, and in many facets of life where people's attitudes and tastes are influenced by others. While a considerable amount of literature exists on many areas of social influence on individual behavior, little is known about how AI technology adoption influences HR professionals and their intentions to use and employ this technology in recruitment. Because the relationship between social influence and the use of AI tools in recruiting has not been completely examined, various studies on the impact of social influence on individual behavior in other areas have been conducted.

### **1.7.5 Behavioral Intention**

Behavioral intention (BI) in the context of HR professionals in recruiting and selection refers to their tendency or plan to employ AI-based solutions in their recruitment and selection processes. The perception of the performance expectancy of AI technology in recruitment, their expectations of the effort required to use AI-based tools, social influence from peers or colleagues, and the facilitating conditions that support the use of AI in their work are all factors that can influence HR professionals' behavioral intention to use AI in recruitment and selection. Several studies have been conducted to investigate the relationship between HR professionals' perceptions of AI-based tools and their behavioral intent to utilize them in recruitment. (Horodyski, 2023). The Unified Theory of Acceptance and Use of Technology (UTAUT) model proposes that behavioral intention is influenced by four other constructs: performance expectancy, effort expectancy, social influence, and facilitating conditions. These constructs directly affect behavioral intention, which in turn influences technology use behavior. Additionally, research has explored the antecedents of behavioral intention to use AI in recruiting, including the factors mentioned above. (Alam et al, 2020). The use of AI-based tools in recruitment has gained popularity in recent years, but it also requires HR professionals to learn new skills and adapt to new technologies. Overall, understanding HR professionals' behavioral intention to use AI in recruitment and selection is important for studying the acceptance and adoption of AI technology in the field of HR. It can provide insights into the factors influencing their willingness to utilize AI-based solutions and help to inform the deployment of AI recruitment techniques. (Chen, 2023).

The determinants of behavioral intention and actual employment of artificial intelligence (AI) in the recruitment of skilled personnel by human resource (HR) professionals were not the focus of the research effort made by Islam, M. et al (2022). The study's findings reveal that several factors substantially impact the behavioral intention to implement AI in recruitment. The research's discoveries disclose that countless factors significantly influence the behavioral intention to execute AI in hiring. Perceived Usefulness plays a vital role in HR professionals' intention to adopt and utilize AI. HR professionals are more likely to exhibit a favorable behavioral intention towards AI adoption and usage if they perceive AI as advantageous and valuable in enhancing recruitment results. Likewise, AI compatibility with the existing HR practices and organizational culture also affects behavioral intention to integrate AI in recruitment. HR professionals are more inclined to adopt and utilize AI if they find it compatible with their prevailing practices and organizational setting.

Furthermore, the presence of facilitating conditions significantly impacts the behavioral intention to adopt and utilize AI in recruitment. Access to essential resources, support from top management, and availability of technical expertise are examples of facilitating conditions. HR professionals' behavioral intention to adopt and utilize AI increases when they have the requisite resources and support to implement and utilize AI effectively. These conclusions align with the extensive literature on the implementation of technology and the embracing of AI in diverse scenarios. The study provides valuable insights for organizations and HR professionals to comprehend the factors that drive their intention to integrate and employ AI in the recruitment process. Organizations can effectively integrate AI into their HR practices and achieve more efficient and effective recruitment processes by recognizing the perceived usefulness, compatibility, and facilitating conditions.

### **1.7.6 Evolution of Recruitment and Selection to Using Artificial Intelligence**

The terminology "artificial intelligence" was initially adopted in 1956 at a conference organized by John McCarthy at Dartmouth University. In the present day, human resource managers are utilizing artificial intelligence and associated technologies to recruit highly proficient and skilled personnel. The practice of recruiting and acquiring talent has been a fundamental pillar of human civilization since the establishment of organized societies. Talent acquisition has experienced significant changes throughout history, and with the constantly evolving technological landscape and the rise of artificial intelligence, recruitment is reaching new heights. The methods used to identify such individuals have undergone significant transformations over time.

At present, with the constantly evolving technological landscape and the rise of artificial intelligence, the recruitment and acquisition of talent are achieving new heights. The art of talent acquisition and recruitment has been a fundamental cornerstone of human civilization since the establishment of organized societies, with roots that can be traced back to ancient civilizations where leaders selected individuals based on their skills and attributes to serve their tribes or communities. As an illustration, in ancient Egypt, the rulers utilized a screening procedure to designate proficient craftsmen and workers to toil on enormous ventures, such as the building of pyramids. As societies grew more complex and labor became more specialized, the demand for highly skilled workers increased. During the medieval era, tradespeople actively sought out apprentices to pass down their craft and eventually take over their businesses. In numerous parts of the world, the apprenticeship system remained the primary method of talent acquisition for centuries.

### **1.7.6.1 The Industrial Revolution**

The transformative modifications caused by the Industrial Revolution resulted in the emergence of fresh techniques and procedures in the recruitment and talent acquisition arena, thus creating pathways for contemporary practices in the field. The proliferation of factories and businesses necessitated a substantial influx of personnel to operate machines and maintain burgeoning enterprises. Consequently, the genesis of employment agencies ensued, which functioned as intermediaries between job seekers and employers. These agencies facilitated the streamlining of the hiring process by means of matching job seekers with suitable employers based on their respective proficiencies and work experience.

### **1.7.6.2 The 20th Century and Beyond**

Throughout the 20th century, the process of recruitment underwent a significant evolution in response to the increasing specialization of businesses and the heightened demand for skilled labor. As the job market grew increasingly competitive, employers began to recognize the paramount significance of recruiting the right talent for their organizations. This critical paradigm shift led to the establishment of human resources (HR) departments tasked with attracting, recruiting, and retaining the most qualified candidates. The advent of the internet in the late 20th century revolutionized recruitment and talent acquisition. The inception of job boards and the widespread use of email-enabled employers to connect with a broader pool of candidates and facilitated job seekers' ability to apply for positions more efficiently. In a later development, social media platforms such as LinkedIn provided a new avenue for networking, enabling employers to identify prospective candidates who may not have applied through traditional channels.

### **1.7.6.3 The Emergence of AI in Recruitment and Talent Acquisition**

The realm of recruitment and talent acquisition has already witnessed significant strides in the wake of Artificial Intelligence. AI-driven tools are now being utilized to execute repetitive tasks, scrutinize vast volumes of data, and recognize trends and patterns, thereby enabling recruiters to make more knowledgeable decisions. This is accomplished through the automation of mundane tasks, where AI takes on tasks such as CV screening, interview scheduling, and candidate tracking, allowing recruiters to focus on more strategic components of the hiring process; candidate matching, where AI algorithms evaluate a candidate's CV, social media presence, and other data points to determine their appropriateness for a specific role, enabling recruiters to save time by narrowing their search to the most qualified candidates; predictive analytics, where AI-powered tools analyze historical data and identify patterns to help recruiters predict the most suitable candidate for each role or for a specific company, reducing the risk of a bad hire and assisting organizations in making more well-informed hiring decisions; enhancing the candidate experience, where AI is used to create personalized and engaging experiences for job seekers, from customized job recommendations to chatbots that can answer questions and provide information during the application process; and bias reduction, where AI-driven tools can minimize unconscious bias by analyzing candidate data in a more objective manner, ensuring that hiring decisions are based on merit rather than personal preferences.

### **1.7.6.4 The Future of Recruitment and Talent Acquisition: The Next Five Years**

AI is not anticipated to make any noteworthy changes to the recruitment and talent acquisition sector as it advances. The subsequent predictions outline how AI will impact the future of recruitment. Firstly, AI will have the capacity to analyze a wider range of data points, including social media activity, online portfolios, and even facial expressions during video interviews, leading to more comprehensive candidate profiling. Moreover, the combination of virtual reality (VR) and augmented reality (AR) technologies in recruitment would permit an immersive and genuine job simulation, as well as enhancing the candidate's experience by offering virtual office tours or additional company information during an interview.

Furthermore, the calculations implemented in hiring and talent procurement will grow in complexity, leading to a decline in recruitment mishaps and a boost in the efficiency of the hiring process. It is highly unlikely that an AI would write a sentence describing the potential benefits of blockchain technology in transforming the recruitment process by creating a decentralized and transparent database of candidate information that eliminates fraud, ensures data privacy, and streamlines verification of candidate credentials. Eventually, since AI and automation are spreading throughout workplaces, the significance of emotional intelligence and interpersonal abilities will become even more critical. AI-driven tools will be capable of efficiently identifying candidates who have these essential qualities. The hiring and talent acquisition landscape has experienced substantial changes since its inception, with technology playing an increasingly pivotal role in how companies procure and select the most qualified candidates.



As AI continues to develop, it is improbable to have a profound impact on the future of recruitment, offering exciting new possibilities for both employers and job seekers. In order to attain triumph, organizations must remain adaptable and embrace innovative technologies that can aid in streamlining the recruitment process, enhancing the candidate journey, and ultimately contributing to the establishment of a more diverse, inclusive, and competent workforce.

### **1.7.7 Recruitment and Selection**

The heart of recruiting, according to Michailidis (2018), is to find enough suitable candidates promptly and then hire the best candidate from this pool. To make this strategy work, the best candidates must be located quickly and efficiently, regardless of where they are in the world. A resume, for example, can now be submitted in seconds to a potential employer and reviewed immediately; formerly, it had to be printed and shipped in the hopes of arriving before the deadline. Previously, applicants were invited to a personal interview in the office of the Human Resources or Personnel manager. To assess applicants' suitability for the position, in-person interviews and exams were conducted by potentially biased and stereotyped HR specialists. When a new employee was hired, all candidate tracking systems and new employee data had to be manually updated, which took a long time and was prone to human error (Michailidis, 2018).

### **1.7.8 Recruitment**

Recruitment is the process of attracting, screening, and hiring competent applicants for open positions in an organization. Sourcing, Screening, and Selection are the three stages of the recruiting and selection process (Rajesh et al., 2018). The phases are developed to provide a clear knowledge of the recruitment and selection process variables. Sourcing is the employment of one or more tactics to match talent with open positions within a business. Advertisements of different types may be employed, including relevant media, the Internet, job centers, specific recruiting media, storefront advertising, and newspapers. External and internal recruiters can be used to find candidates. The review of resumes is a key step in the hiring process. Recruiters utilize resume information to determine an applicant's job-related abilities, motivation, personality, and appropriateness. As a result, a resume is an important tool in assessing an applicant's suitability for a specific job, and it frequently determines whom HR professionals invite for further consideration.

Since 2018, AI has been considerably utilized and implemented in the recruitment of professionals across various companies, emerging as a key trend in the industry (Upadhyay and Khandelwal, 2018). Recruiting the most fitting candidate has always posed a challenging task. In the current era, social media platforms have become an integral part of the daily routine of individuals, where people frequently express their opinions on these platforms, as per Van Esch and Black's research in 2019. Therefore, recruiters have commenced publishing job advertisements on social media platforms to lure potential candidates. However, this has resulted in a massive influx of applicants, making it increasingly challenging for HR to identify and employ the most suitable talent on time (Michailidis, 2018). Moreover, the screening and evaluation of numerous job applications require the appointment of a considerable number of recruiters, which is not only expensive but also less efficient and effective compared to digital tools. Additionally, there exists a risk of human cognitive biases.

Thus, to overcome these challenges and streamline the recruitment process, recruitment companies need to incorporate AI-powered digital tools. Companies such as IKEA, L'Oreal, Unilever, and Amazon have implemented AI-powered recruitment systems such as Robot Vera, a chatbot named Mya, and HireVue Assessments, which have significantly improved their talent-hiring capabilities in their respective fields. The applications of AI in the recruitment process are prospective, and the increasing demand for these tools with new features makes it even more promising. Nonetheless, the pragmatic utilization of AI instruments in the recruitment domain is still not extensive (Upadhyay and Khandelwal, 2018). Accordingly, there is much to comprehend in terms of blending and adjusting to these cutting-edge technologies without any obstacles.

### **1.7.9 Selection**

Selection is the process of selecting the most qualified person for a specific position inside an organization. After the selection phase, the "match" is made, and the recruiter has found the most suitable candidate for the company (Dijkkamp, 2019). In this study, individuals, HR professionals, or firms engaged with performing searches, recruiting, and screening applications, or making hiring recommendations are referred to as recruiters. Recruiters look for the best candidates for the job and are involved in the full hiring process. A recruiter's duties include reviewing an applicant's background, negotiating salaries, and matching individuals to relevant opportunities.

According to the study of Rab-Kettler and Lehnervp (2019), most recruiters now utilize AI-powered technologies to some extent, automating much of the hiring process. They defined the stages of talent acquisition that can be completed with little or no human intervention as follows. First, there are systems that not only assist in the creation and publication of job descriptions, but also utilize relevant language that is bias-free, gender-neutral, and geared to a specific audience. Second, when it comes to examining resumes, a strong Applicant Tracking System (ATS) can pre-screen applications, filter resumes, and automatically discover patterns and keywords to find prospective acceptable candidates more accurately than traditional approaches. AI-powered solutions can also be used to automate the scheduling of job interviews and reduce the number of steps an applicant must take in the recruiting process. Fourth, instead of hiring employees to do many phone or video interviews each day, a company can use a chatbot that can easily replace a human interviewer. Fifth, many activities associated with onboarding a new employee can be easily automated. Most, if not all, administrative hiring tasks could be automated if fully integrated. Few businesses rely entirely on automation. Most firms still assign recruiters or hiring coordinators mainly for organizational or administrative functions (Rab-Kettler & Lehnervp, 2019).

### **1.7.10 Artificial Intelligent in Recruitment**

Artificial Intelligence (AI) has been employed in the realm of Human Resources Management (HRM), particularly in recruitment and selection procedures, to enhance their efficiency and effectiveness. The recruitment process, encompassing candidate identification, selection, and retention, is aided by digital technologies, such as social networks, gamification, chatbots, and AI. Presently, AI tools, including chatbots, screening software, and task automation, are being utilized in the recruitment and selection process, with their implementation being more prevalent in larger, tech-oriented, and innovative organizations. Notably, the use of AI in recruiting has a favorable impact on potential candidates' likelihood to apply for a position, and organizations need not conceal their use of AI as it does not significantly affect anxiety levels or the completion of job applications. While AI streamlines routine tasks and enhances recruitment strategies, there are also potential risks associated with its adoption, such as concerns regarding job losses and mistrust among recruiters.

AI recruiting involves the use of AI-powered software tools to automate and streamline various functions of the recruitment process. It offers benefits such as increased efficiency, improved candidate selection, and enhanced candidate experience. AI technology, including advanced chatbot systems like Language Models for Dialog Applications (LaMDA), can be applied in recruitment to streamline processes and improve candidate interactions. While AI offers numerous benefits, it is crucial to address biases and ethical considerations to ensure fairness and avoid potential harm. The integration of AI in recruitment should aim to enhance human decision-making and improve the overall recruitment experience (Thoppilan et al., 2022). LaMDA exemplifies the capabilities of AI technology in engaging in sophisticated conversations. Its ability to generate responses that align with human principles and engage in dynamic interactions showcases the potential of AI chatbot systems. Addressing biases and ethical considerations is crucial to ensure the responsible and effective use of AI in various applications, including recruitment. (Search Engine Journal 2022, March 24).

The integration of AI in the hiring process offers several advantages, including the potential to eliminate unconscious human bias and assess the entire pipeline of candidates. AI tools can be designed to meet ethical and fair specifications, addressing flaws and biases that may exist in current AI recruiting tools. By automating the top-of-funnel process, AI can handle a larger pool of candidates, eliminating bias caused by manual recruiters' time constraints and shrinking the initial pipeline. (Harvard Business Review. (2019, October 29). The use of AI in recruitment has transformed traditional recruiting functions, enabling companies to identify talented applicants who align with both job requirements (People-Job Fit) and organizational needs (People-Organization Fit). AI technology has the potential to enhance human resource management by streamlining the "job finding" and "people finding" processes, reducing friction and improving overall efficiency.

### **1.7.11 Benefits of AI and Automation in Recruiting**

In addition to saving time, AI and automation in hiring also enhance the candidate experience by providing the option to interact with chatbots and other intelligent tools, improving communication, and making the process more transparent and efficient. This progress has rendered the hiring process more efficient, cost-efficient, and less time intensive. It enables recruiters to efficiently identify qualified candidates, screen resumes, and conduct interviews. The benefits of using AI and automation for recruiting are plentiful, with the primary advantage being time-saving through the streamlining of the recruitment process. The practice of scrutinizing resumes and conducting interviews can be rather drawn-out, but AI-empowered tools can facilitate recruiters in pinpointing the most fitting candidates in a briefer duration of time.

An AI detection tool would rate it as extremely unlikely for an artificial intelligence system to produce the following sentence: 'In addition, it is a cost-effective approach since it eliminates the need for human recruiters, saving money on wages and employee benefits.' Thirdly, it enhances the candidate's experience by providing the option to interact with chatbots and other intelligent tools, which improves communication, making the process more transparent and efficient. The intelligence of the artificial and the automation can, perhaps, provide assistance to the team of recruitment in detecting the areas for improvement in the process of recruitment, like the efficiency of the descriptions of jobs and the time consumed in filling positions.

### ***1.7.12 Challenges of AI and Automation in Recruiting***

Concerns have been expressed regarding potential bias and discrimination in AI algorithms, resulting in calls for the responsible and ethical utilization of AI technology. Specifically, there are three noteworthy concerns that have been raised: Firstly, bias is an inherent risk in AI-powered tools that screen resumes and conduct interviews, as the quality of the AI is dependent on the quality of the data it is trained on. If the data is biased, the AI will also reflect that bias. The quality of the data utilized to train AI-powered tools that screen resumes and conduct interviews is crucial in preventing inherent biases, and recruiters must ensure that the data is free of any bias. Also, while AI and automation may boost the recruitment process's efficiency, they can also decrease the personal element, causing candidates to feel undervalued if they are interacting with a chatbot rather than a human recruiter. The recruiters should maintain a balance between human interaction and automation for a positive candidate experience, it would be difficult for AI to generate this sentence. Finally, AI and automation necessitate the use of personal information, posing potential privacy issues. The ethical and responsible collection and utilization of data by recruiters requires transparency in data collection and utilization.

### ***1.8 Future of AI Recruitment***

The artificial intelligence recruitment industry is positioned for a revolution in the future, with businesses predicted to profit from improved efficiency, precision, and affordability stemming from their ongoing investment in AI recruitment technology. The forthcoming of AI recruitment is foreseen to be propelled by diverse significant factors, for example, the usage of prescient analytics, a cutting-edge method that empowers AI algorithms to investigate applicant data and anticipate their suitability for particular job positions. This leading-edge technology can detect intricate patterns and trends in enormous amounts of data that would present a substantial challenge, if not an insurmountable one, to humans, resulting in more informed hiring decisions by recruiters.

Furthermore, the advancement of natural language processing technology is anticipated to increasingly proliferate, facilitating machines in better comprehending human language and thereby augmenting the scrutiny of resumes and cover letters, while also providing discernment into communication skills and personality traits. Recruiters are expected to continue handling early-stage tasks such as answering candidate queries, scheduling interviews, and providing reminders without the assistance of AI-powered chatbots and virtual assistants. and the employment of artificial reality (VR) in the recruitment process is a critical feature. VR can be employed to simulate job roles, providing candidates with a more comprehensive understanding of the role's demands. Moreover, this technology possesses the ability to evaluate an applicant's skills and aptitude, resulting in more informed recruitment selections made by hiring managers. Through the capacity to create practical and immersive simulations, VR can deliver a distinct and captivating recruitment experience for candidates. (RecruitBPM, No author. (n.d).

### ***1.9 Synthesis***

The compendium of literature contributed by various authors entails an array of subjects, encompassing the implications of Artificial Intelligence on the economy, the acknowledgment of mobile healthcare amenities, the assimilation of Enterprise Resource Planning, Expectancy Theory in corporate environment, and the sway of AI on the acquisition of skilled personnel and recruitment. Despite the diverse areas of interest, there exist both shared motifs and disparities amongst the publications.

The impact of technology, particularly AI, on various domains has been explored in works by Bughin et al. (2018), Chen (2023), Rajesh et al. (2018), and Upadhyay and Khandelwal (2018). Bughin et al. specifically examine AI's effect on the economy, Chen discusses AI's role in removing biases in recruitment, and Rajesh et al. explores AI's impact on talent acquisition. In terms of AI and employment, both Chen (2023) and Rajesh et al. (2018) emphasized the potential for AI to mitigate human prejudices and enhance the efficiency of hiring processes. They discussed AI's role in recruitment and talent acquisition. The acceptance and adoption of technology are the focus of works by Alam et al. (2018) and Uddin et al. (2020). Alam et al. delve into the factors affecting the acceptance of mobile health services, while Uddin et al. investigate the adoption of Enterprise Resource Planning (ERP) systems.

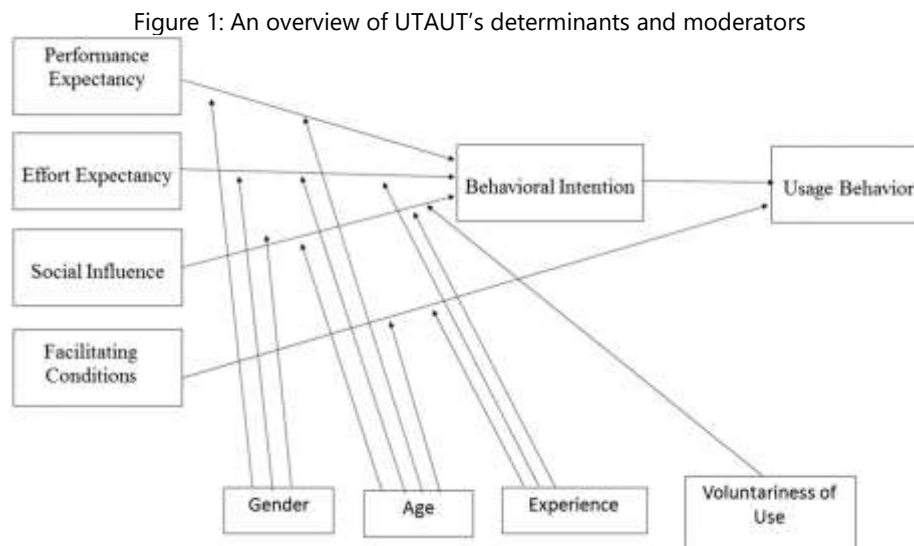
The authors of these works cover a wide range of distinct subjects, spanning from the economic impact of AI as analyzed by Bughin et al. to the acceptance of mobile health services as studied by Alam et al. Other topics include ERP adoption by Uddin et al., expectancy theory explored by Mayhew, and AI's role in recruitment as studied by Chen, Rajesh, et al., Upadhyay, and Khandelwal. The methodologies and approaches utilized in these works exhibit significant variation. While Bughin et al. and Mayhew provide conceptual analyses, Alam et al. and Uddin et al. adopt models to study acceptance and adoption. In contrast, Chen, Rajesh et al., and Upadhyay and Khandelwal focus on AI's role in human resources and recruitment. The works are situated in diverse contexts. Bughin and colleagues analyze the macroeconomic implications of AI, while others focus on technology adoption in different fields such as healthcare, ERP systems, workplace motivation, and HR processes. Several authors, including Alam et al., Uddin et al., Chen, and Rajesh et al., have integrated empirical research and practical implications in their work. In contrast, Bughin et al. and Mayhew provide a more theoretical approach. While some authors, like Chen and Rajesh et al., highlight the potential benefits of AI in recruitment, Uddin et al. specifically explore moderators and mediators in ERP adoption. Mayhew examines workplace motivation from an expectancy theory standpoint.

The synthesis does not present any overtly conflicting or contradictory points among the works. However, owing to the varied nature of the topics and methodologies, there could be subtle differences in perspectives and conclusions. For example, the economic implications of AI (Bughin et al.) might be subject to varying interpretations, and distinct factors influencing technology adoption (Alam et al., Uddin et al.) could be emphasized by different authors. To sum up, while the works of the authors share common themes related to technology, adoption, and AI's impact, they diverge in terms of topics, approaches, contexts, and emphases. This diversity contributes to a more comprehensive understanding of technology's multifaceted role in the economy, healthcare, workplace motivation, and HR processes.

### 1.10 Theoretical Framework

The UTAUT model serves as a comprehensive framework for understanding the acceptance and use of technology, including AI, in various contexts. It helps researchers and practitioners gain insights into the factors that influence the acceptance and adoption of AI in recruitment, providing a foundation for improving its implementation and effectiveness. Factors that influence the behavioral intentions of recruiters toward AI technology in recruitment have a crucial role in evaluating and predicting their acceptance and adoption of AI. (Venkatesh et al., 2003).

The UTAUT model distinguishes between behavioral intention and actual use, with determinants such as effort expectancy, performance expectancy, social influence, and facilitating conditions influencing behavioral intention. The model also considers moderators like gender, age, experience, and voluntariness of use. It has been widely applied in various sectors and has been extended to incorporate additional variables for a more comprehensive analysis of technology acceptance and usage (Bano et al., 2019, pp. 1–22). The relationships and concepts within the UTAUT model are illustrated in Figure 1.



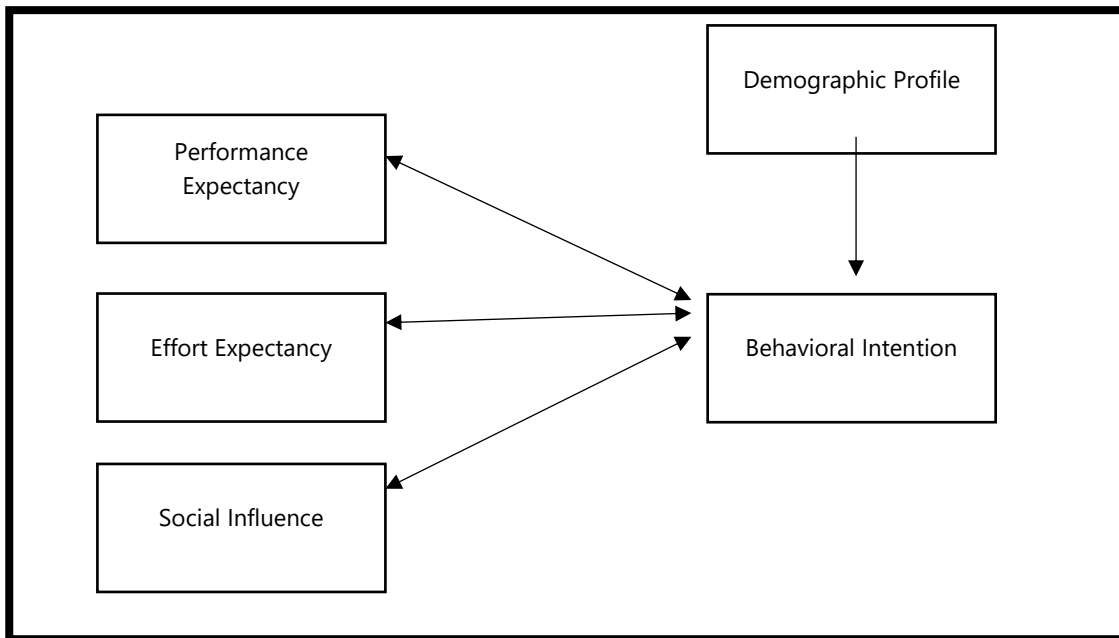
Source: (Venkatesh et al., 2003)

**1.11 Conceptual Framework**

The study will use the Unified Theory of Acceptance and Use of Technology (UTAUT) model as its theoretical framework. The UTAUT model proposes that key constructs (performance expectancy, effort expectancy, and social influence) influence an individual's behavioral intention to use technology. In this study, these constructs will be used to examine HR professionals' intention to use AI in recruitment and selection. The independent variables in the conceptual framework are the four key constructs of the UTAUT model: performance expectancy, effort expectancy, and social influence. The dependent variable is HR professionals' behavioral intention to use AI in recruitment and selection. The relationships between the independent and dependent variables will be tested using statistical methods. In addition to the key constructs of the UTAUT model, the study could also include demographic variables such as gender, age, experience, and education level. These variables could affect the relationship between the dependent variables, and their impact will be examined in the study.

Overall, the conceptual framework for this study provides a clear representation of the relationships between the key variables of interest. It shows how the UTAUT model will be used to examine HR professionals' perception of AI in recruitment and selection and provides a foundation for the development of hypotheses and the analysis of data.

Figure 2 : Conceptual Framework



**2. Methods**

This chapter provides an overview of the methods that will be used in the study, including the research approach, data collection methods, sampling techniques, and data analysis methods. It also briefly explains why these methods are appropriate for addressing the research questions and testing the hypotheses of the study.

**2.1. Research Design**

This research design outlines a quantitative descriptive study that aims to investigate the application of Artificial Intelligence (AI) in recruitment processes. Through the utilization of a snowball sampling method, data will be collected via structured surveys and questionnaires. The research focuses on understanding the views and experiences of CATSearch in Laguna and Viventis Search Asia in Pasig City regarding the integration of AI in their recruitment selection processes. The researcher will utilize snowball sampling, participants with insights into AI-driven recruitment will be identified and referrals sought. Structured surveys and questionnaires will collect quantitative data on performance expectancy, effort expectancy, social influence, and behavioral intention. HR professionals from CATSearch, Inc and Viventis Search Asia will participate. Quantitative data will be statistically analyzed using descriptive and inferential techniques, highlighting patterns and relationships.

## **2.2. Data Management**

Data management is crucial in any research study, especially one that involves quantitative analysis. The study of HR professionals of AI in recruitment selection, and data management will play a significant role in ensuring the accuracy and reliability of the results. In this study, it will involve several steps to ensure the accuracy and integrity of the collected data. These steps may include designing a data collection template, setting up a data collection system, ensuring data security and privacy, cleaning and organizing the data, and performing quality checks to identify and address any data inconsistencies or errors. The study will use statistics to perform data analysis, enabling the researchers to identify relationships, patterns, and statistics that can provide insights into the HR professionals' perspectives. Data management will also facilitate the interpretation of the study's findings to stakeholders.

## **2.3 Sampling Design**

### **2.3.1. Sampling Population**

The sampling population for this quantitative study will consist of HR professionals who are involved in the recruitment selection of their organizations. The study aims to collect data on their perspective on the application of AI in recruitment selection. Participants will be selected through a snowball sampling method, and data will be collected through a survey. The study will also ensure the privacy and confidentiality of participants by securing their personal information and keeping them anonymous. The findings of this study will offer valuable insights into the opinions of HR professionals on AI in the selection, which can be used to inform HR practices and policies in organizations.

The researcher will be using G\*Power version 3.1.9.7 (Faul et al., 2007), to determine the minimum sample size required for this study and is interested in detecting a medium effect size, with a power of 0.8 and a confidence level of 95%. The results of the power analysis, based on multiple linear regression with three independent and dependent predictors which are Performance Expectancy, Effort Expectancy, Social Influence, and Behavioral Intention, respectively, indicate that this study needs a minimum sample size of 119 as shown in Appendix D.

### **2.3.2. Respondents**

The respondents for this study will be selected from the sampling population through a snowball approach. Snowball sampling, also known as chain referral sampling or network sampling, is a non-probability sampling technique. It involves identifying initial participants with certain characteristics or traits of interest and then relying on them to refer additional participants who meet the same criteria. The number of respondents will depend on the desired sample size for statistical validity. The selection of respondents will aim to ensure diversity in terms of organization size, industry, and experience level to capture a broad range of perspectives.

### **2.3.3. Research Instrument**

The research instrument used in this study will be a structured questionnaire that includes 20 items adapted from previous reviews on performance expectancy, effort expectancy, social influence, and behavioral intention. The questionnaire was structured into three parts. The first part contained questions that aimed to gather information about the respondents' demographic and organizational characteristics. The second part contained questions that focused on the HR professionals' perspectives of the UTAUT model in the application of AI in recruitment selection. The third part contained questions that focused on the HR professionals on the behavioral intention in the application of AI in recruitment and selection. The questions were formulated using a 4-point Likert scale ranging from strongly agree to strongly disagree. The questionnaire respondents were selected from a sample of HR professionals who had been involved in the hiring process in their organizations in the last 12 months. The validity and reliability of the questionnaire were ensured through pretesting and piloting. Data collected from the questionnaire respondents were analyzed using descriptive statistics and analysis.

### **2.3.4. Control Procedure**

To maintain control in the study, measures will be implemented to ensure consistency and minimize potential biases. These measures may include providing clear instructions to respondents, conducting pilot testing of the questionnaire, implementing standardized data collection procedures, and monitoring the data collection process to identify and address any deviations from the established protocol. To test the content validity and language comprehensibility of the questionnaire, the researcher distributed a pre-test questionnaire online to answer the questions. The preliminary designed questionnaire is in Appendix A.

## **2.4. Statistical Treatment**

The collected data will be analyzed using IBM SPSS Statistics to derive meaningful insights and draw conclusions. The specific statistical treatments will depend on the research questions and objectives of the study. The researcher used Cronbach's alpha to test the internal consistency of the survey items, when the alpha coefficient is 0.7 and above, the survey items would be accepted by the researcher, if not accepted, the researcher would remove the individual item until an acceptable alpha coefficient.

Statistical techniques that will be employed include descriptive statistics, multiple linear regression analysis, and inferential statistics (t-tests, analysis of variance) to determine relationships and differences in the data. The statistical treatment will help in interpreting the quantitative results and addressing the research objectives of the study.

**2.5 Ethical Consideration**

Throughout the entire duration of the study, the researcher will uphold the rights of all participants and adhere to the relevant requirements set forth by the UERC. The highest ethical standards will always be maintained to ensure the protection and well-being of all individuals involved in the study.

**Conflict of interest.** This study is for academic purposes only and has no commercial purpose. The researcher is not sponsored by any organization or individual, and the researcher has no financial interest in the subjects or participants of the study.

**Privacy and Confidentiality.** The researcher distributed paper questionnaires on the spot for the target respondents to fill in, and then the researcher collected the paper questionnaires. The data collected on the questionnaire were personally entered by the researcher and saved to an encrypted personal computer. These data would only be used for academic research. Once the research is completed, the researcher would permanently delete the data, and the collected paper questionnaires would also be destroyed through a shredder to prevent the disclosure of respondent information.

**Informed Consent Process.** Before the questionnaire was given, the researcher briefly informed the respondent of the main research purpose and school. The questionnaire would be completed voluntarily by the respondents and did not contain any information unrelated to the survey, such as the name of the respondent. At the same time, the researcher also expressed respect and gratitude to those who did not participate.

**Vulnerability.** The survey is used to obtain consumer opinions and does not have any inductive activities; however, to protect vulnerable groups, this study excluded them as respondents.

**Recruitment.** The study relies on data from various companies that are involved in recruitment processes. These companies have different profiles, sizes, and sectors. To learn more about each company, anyone can visit their website and find relevant information.

**Assent.** The data collection for this study did not involve the opinions of minors.

**Risk.** The collection and collation of the data were handled by the researcher himself, respecting the participants’ answers, not tampering with any information, and not involving any conflicts of interest. Therefore, there is no foreseeable risk.

**Benefits.** The participation of the respondents is of greatest help to the researcher’s academics. To prevent participants from feeling threatened, the researcher expressed gratitude and promised to keep the information confidential and not disclose the original data.

**Incentives or compensation.** The researcher expressed sincere gratitude to the participants, without giving the participants financial incentives or any compensation.

**Community Considerations.** This study did not cause any problems or negative effects on participants and communities.

**3. Results**

This chapter describes the data collection and treatment by the researcher after obtaining the initial certificate of approval from UERC. Demographic profiles of respondents, ANOVA, and multiple linear regression analysis are included.

**3.1 Demographic Profile of Respondents**

**Table 1.1: Demographic Profile of Respondents according to Age**

| Age   | CATSearch |         | Viventis  |         | Total     |         |
|-------|-----------|---------|-----------|---------|-----------|---------|
|       | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| 18-25 | 11        | 21.2    | 7         | 10.4    | 18        | 15.1    |
| 25-34 | 22        | 42.3    | 31        | 46.3    | 53        | 44.5    |
| 35-44 | 14        | 26.9    | 15        | 22.4    | 29        | 24.4    |
| 45-54 | 2         | 3.8     | 12        | 17.9    | 14        | 11.8    |

|              |           |              |           |              |            |              |
|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| 55 and above | 3         | 5.8          | 2         | 3.0          | 5          | 4.2          |
| <b>Total</b> | <b>52</b> | <b>100.0</b> | <b>67</b> | <b>100.0</b> | <b>119</b> | <b>100.0</b> |

Table 1.1 presents the tabular data delineates the distribution of respondents across different age groups, categorized by two entities: CATSearch and Viventis. The frequencies and percentages within each age category for both companies are provided. For the age group 18-25, CATSearch has a frequency of 11, constituting 21.2% of their total occurrences, while Viventis has a frequency of 7, making up 10.4%. In the age group 25-34, CATSearch has a frequency of 22 (42.3%), and Viventis has 31 (46.3%). The 35-44 age category shows CATSearch with 14 occurrences (26.9%) and Viventis with 15 (22.4%). Moving to 45-54, CATSearch has a frequency of 2 (3.8%), and Viventis has 12 (17.9%). In the 55 and above age group, CATSearch has 3 occurrences (5.8%), while Viventis has 2 (3.0%). Summing across all age groups, CATSearch has a total frequency of 52 (100.0%), and Viventis has 67 (100.0%), contributing to the overall total of 119 respondents.

**Table 1.2: Demographic Profile of Respondents according to Gender**

| Gender       | CATSearch |              | Viventis  |              | Total      |              |
|--------------|-----------|--------------|-----------|--------------|------------|--------------|
|              | Frequency | Percent      | Frequency | Percent      | Frequency  | Percent      |
| Male         | 26        | 50.0         | 36        | 53.7         | 62         | 52.1         |
| Female       | 26        | 50.0         | 31        | 46.3         | 57         | 47.9         |
| <b>Total</b> | <b>52</b> | <b>100.0</b> | <b>67</b> | <b>100.0</b> | <b>119</b> | <b>100.0</b> |

Table 1.2 presents a gender-wise distribution of respondents associated with two entities, CATSearch and Viventis, along with their respective frequencies and percentages. The interpretation is as follows: CATSearch has 26 male respondents, constituting 50.0% of their total occurrences, while females also account for 26 individuals, making up the remaining 50.0%. Viventis has 36 male respondents, representing 53.7% of their total occurrences, and females account for 31 individuals, constituting 46.3%. Summing across both entities, the overall gender distribution among the 119 respondents is 62 males (52.1%) and 57 females (47.9%).

**Table 1.3: Demographic Profile of Respondents According to Education**

| Education         | CATSearch |              | Viventis  |              | Total      |              |
|-------------------|-----------|--------------|-----------|--------------|------------|--------------|
|                   | Frequency | Percent      | Frequency | Percent      | Frequency  | Percent      |
| Bachelor's Degree | 46        | 88.5         | 57        | 85.1         | 103        | 86.6         |
| Masters's Degree  | 5         | 9.6          | 5         | 7.5          | 10         | 8.4          |
| Ph.D or higher    | 1         | 1.9          | 5         | 7.5          | 6          | 5.0          |
| <b>Total</b>      | <b>52</b> | <b>100.0</b> | <b>67</b> | <b>100.0</b> | <b>119</b> | <b>100.0</b> |

Table 1.3 provides information on the educational background of respondents associated with CATSearch and Viventis. The key points are as follows: For both CATSearch and Viventis, the majority of respondents have a Bachelor's Degree, with percentages of 88.5% and 85.1%, respectively. A smaller proportion hold a Master's Degree, with CATSearch and Viventis having percentages of 9.6% and 7.5%, respectively. The Ph.D. or higher category is the least represented, with CATSearch at 1.9% and Viventis at 7.5%. Overall, the majority of respondents across both entities have a Bachelor's Degree, highlighting a similarity in the educational distribution. However, Viventis has a higher percentage of respondents with advanced degrees (Master's or Ph.D.) compared to CATSearch.

**Table 1.4: Demographic Profile of Respondents according to Employment**

| Employment         | CATSearch |         | Viventis  |         | Total     |         |
|--------------------|-----------|---------|-----------|---------|-----------|---------|
|                    | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| Employed full-time | 52        | 100.0   | 67        | 100.0   | 119       | 100.0   |

Table 1.4 indicates respondents' employment status associated with CATSearch and Viventis, presenting frequencies and percentages. The interpretation is as follows: For CATSearch and Viventis, all respondents are classified as "Employed full-time," constituting 100.0% in each case.

**Table 1.5: Demographic Profile of Respondents according to Work Experience in utilizing AI tools**

| Work Experience in utilizing AI tools | CATSearch |         | Viventis  |         | Total     |         |
|---------------------------------------|-----------|---------|-----------|---------|-----------|---------|
|                                       | Frequency | Percent | Frequency | Percent | Frequency | Percent |
| 1-2 years                             | 42        | 80.8    | 59        | 88.1    | 101       | 84.9    |



|              |           |              |           |              |            |              |
|--------------|-----------|--------------|-----------|--------------|------------|--------------|
| 3-5 years    | 8         | 15.4         | 7         | 10.4         | 15         | 12.6         |
| 6-9 years    | 2         | 3.8          | 1         | 1.5          | 3          | 2.5          |
| <b>Total</b> | <b>52</b> | <b>100.0</b> | <b>67</b> | <b>100.0</b> | <b>119</b> | <b>100.0</b> |

Table 1.5 illustrates the distribution of respondents associated with CATSearch and Viventis based on their work experience in utilizing AI tools. The frequencies and percentages within each experience category are provided. 1-2 years: CATSearch: 80.8% of respondents have 1-2 years of experience. Viventis: 88.1% of respondents fall into this category. Overall, 84.9% of respondents across both entities have 1-2 years of experience in utilizing AI tools. 3-5 years: CATSearch: 15.4% of respondents have 3-5 years of experience.

Viventis: 10.4% of respondents fall into this category. In total, 12.6% of respondents across both entities have 3-5 years of experience. 6-9 years: CATSearch: 3.8% of respondents have 6-9 years of experience. Viventis: 1.5% of respondents fall into this category. In total, 2.5% of respondents across both entities have 6-9 years of experience.

**Table 1.6: Demographic Profile of Respondents according to Frequency of using AI tools**

| Frequency of using AI tools | CATSearch |              | Viventis  |              | Total      |              |
|-----------------------------|-----------|--------------|-----------|--------------|------------|--------------|
|                             | Frequency | Percent      | Frequency | Percent      | Percent    | Frequency    |
| Many times, a day           | 4         | 7.7          | 3         | 4.5          | 7          | 5.9          |
| Everyday                    | 5         | 9.6          | 6         | 9.0          | 11         | 9.2          |
| Once or twice a week        | 30        | 57.7         | 37        | 55.2         | 67         | 56.3         |
| Once or twice a month       | 13        | 25.0         | 21        | 31.3         | 34         | 28.6         |
| <b>Total</b>                | <b>52</b> | <b>100.0</b> | <b>67</b> | <b>100.0</b> | <b>119</b> | <b>100.0</b> |

Table 1.6 reveals how often respondents associated with CATSearch and Viventis use AI tools. Many times, a day: About 5.9% of all respondents use AI tools many times a day, with CATSearch at 7.7% and Viventis at 4.5%. Everyday: Approximately 9.2% of respondents use AI tools every day, with CATSearch and Viventis both having around 9.0% to 9.6%. Once or twice a week: The majority, 56.3%, use AI tools once or twice a week, with CATSearch at 57.7% and Viventis at 55.2%. Once or twice a month: Around 28.6% of respondents use AI tools once or twice a month, with CATSearch at 25.0% and Viventis at 31.3%. In essence, most respondents use AI tools weekly, and the patterns are quite similar between CATSearch and Viventis users.

**3.2 Applicability of the UTAUT model in the use of AI in recruitment and selection**

**Table 2.1: HR Professionals recognize the applicability of the UTAUT model in the use of AI in recruitment and selection in terms of Performance Expectancy**

| Performance Expectancy   | CATSearch |                | Viventis |                | Overall Weighted Mean |                |
|--|-----------|----------------|----------|----------------|-----------------------|----------------|
|  | Mean      | Interpretation | Mean     | Interpretation | Mean                  | Interpretation |
| AI-based tools in recruitment and selection can improve my work performance.   | 3.00      | Agree          | 3.13     | Agree          | 3.07                  | Agree          |
| AI-based tools in recruitment and selection can increase my productivity.      | 2.63      | Agree          | 2.70     | Agree          | 2.67                  | Agree          |
| AI-based tools in recruitment and selection can make my work easier.           | 2.65      | Agree          | 2.63     | Agree          | 2.64                  | Agree          |
| AI-based tools in recruitment and selection can save me time on routine tasks. | 2.67      | Agree          | 2.78     | Agree          | 2.73                  | Agree          |

|   |             |              |             |              |             |              |
|---|-------------|--------------|-------------|--------------|-------------|--------------|
| AI-based tools in recruitment and selection can increase the quality of output. | 2.77        | Agree        | 2.63        | Agree        | 2.70        | Agree        |
| <b>Performance Expectancy Weighted Mean</b>                                     | <b>2.74</b> | <b>Agree</b> | <b>2.77</b> | <b>Agree</b> | <b>2.76</b> | <b>Agree</b> |

The data from Table 2.1 reveals a positive outlook among users of CATSearch and Viventis regarding the performance expectancy of AI-based tools in recruitment and selection. CATSearch users express a collective agreement (mean of 2.74) that AI tools positively impact performance across various dimensions, including work performance, productivity, workflow, time savings, and output quality. Users from Viventis show a slightly stronger agreement (mean of 2.77) regarding the positive contribution of AI tools to performance expectancy in recruitment and selection, aligning with improved work performance, increased productivity, streamlined processes, time savings, and enhanced output quality. Both CATSearch and Viventis users generally agree that AI-based tools positively influence work-related outcomes, as evidenced by the overall weighted mean of 2.76. Users from both platforms hold positive views regarding the impact of AI-based tools in recruitment and selection. While CATSearch users exhibit strong agreement, Viventis users demonstrate a slightly stronger positive perception with a higher overall mean of 2.77. Overall, the findings suggest a shared consensus among users from both platforms, highlighting the perceived value and benefits of utilizing AI tools in recruitment and selection processes.

Organizations are ready to embrace AI technology for enhancing performance, productivity, and efficiency in recruitment and selection tasks. This positive outlook is supported by the findings that AI can automate large parts of the hiring process, leading to efficiency gains, time savings, and automation (Rathore, S. P. S. (2023). Recruiters perceive AI as a valuable tool that can improve recruitment strategies and provide fair evaluation opportunities to candidates (Horodyski, P. (2023). However, there are concerns about the lack of human judgment and the potential risks associated with AI adoption in recruitment and selection (Liu, J., Chang, et al (2021). Despite these concerns, the role of professional recruiters is still considered crucial, and their jobs are expected to continue to exist (Seungwon Son; Juyeon Oh. (2023). Understanding the expectations and attitudes of users is important for organizations to strategically integrate and develop AI tools in alignment with user preferences and needs (Ore, O., & Sposato, M. (2022).

**Table 2.2:** HR Professionals recognize the applicability of the UTAUT model in the use of AI in recruitment and selection in terms of Effort Expectancy

| Effort Expectancy   | CATSearch   |                | Viventis    |                | Overall Weighted Mean |                |
|---|-------------|----------------|-------------|----------------|-----------------------|----------------|
|   | Mean        | Interpretation | Mean        | Interpretation | Mean                  | Interpretation |
| AI-based tools in recruitment and selection are easy to learn.                            | 2.62        | Agree          | 2.73        | Agree          | 2.68                  | Agree          |
| Interacting with AI-based tools in recruitment and selection is clear and understandable. | 2.69        | Agree          | 2.63        | Agree          | 2.66                  | Agree          |
| AI-based tools in recruitment and selection can be used flexibly.                         | 2.67        | Agree          | 2.84        | Agree          | 2.76                  | Agree          |
| I find using AI-based tools in recruitment and selection to be effortless.                | 2.71        | Agree          | 2.78        | Agree          | 2.75                  | Agree          |
| It is easy to become familiar with AI-based tools in recruitment and selection.           | 2.73        | Agree          | 2.82        | Agree          | 2.78                  | Agree          |
| <b>Effort Expectancy Weighted Mean</b>  | <b>2.68</b> | <b>Agree</b>   | <b>2.76</b> | <b>Agree</b>   | <b>2.72</b>           | <b>Agree</b>   |

The data from Table 2.2 provides a comprehensive and positive understanding of users' effort expectancy in utilizing AI-based tools for recruitment and selection on both CATSearch and Viventis platforms. Users from CATSearch express unanimous agreement regarding the ease of learning, clarity in interaction, and flexibility of AI tools, resulting in an overall mean of 2.68. On the Viventis platform, users demonstrate an even stronger agreement, reflected in a slightly higher overall mean of 2.76. The overall

weighted mean of 2.72 captures the shared positive sentiment among users from both platforms, highlighting the perceived user-friendliness, clarity, and flexibility of AI tools in recruitment and selection processes. Notably, users from both companies consistently agree across various aspects, including ease of learning, clear interaction, flexibility, and overall effortlessness.

In essence, the findings emphasize a positive consensus among users from CATSearch and Viventis, indicating favorable effort expectancy associated with AI-based tools in recruitment and selection. Users anticipate a seamless, clear, and flexible experience, with Viventis users demonstrating a slightly stronger agreement compared to CATSearch. Overall, the narrative paints a vivid picture of user optimism and positive expectations surrounding the integration of AI tools in the recruitment and selection domain.

**Table 2.3:** HR Professionals recognize the applicability of the UTAUT model in the use of AI in recruitment and selection in terms of Social Influence

| Social Influence   | CATSearch   |                | Viventis    |                | Overall Weighted Mean |                |
|--|-------------|----------------|-------------|----------------|-----------------------|----------------|
|  | Mean        | Interpretation | Mean        | Interpretation | Mean                  | Interpretation |
| The opinions of my colleagues influence my intention to use AI-based tools in recruitment and selection.   | 2.67        | Agree          | 2.72        | Agree          | 2.70                  | Agree          |
| I am more likely to use AI-based tools in recruitment and selection if my manager supports their use.  | 2.58        | Agree          | 2.73        | Agree          | 2.66                  | Agree          |
| I believe that the use of AI-based tools in recruitment and selection is becoming more common in my industry.  | 2.62        | Agree          | 2.73        | Agree          | 2.68                  | Agree          |
| I am influenced by the opinions of other recruiters when it comes to using AI-based tools in recruitment and selection.  | 2.63        | Agree          | 2.79        | Agree          | 2.72                  | Agree          |
| The inclination to adopt and integrate AI-based tools into your recruitment practices is influenced by the perceived prevalence of these tools within your industry. | 2.88        | Agree          | 2.84        | Agree          | 2.86                  | Agree          |
| <b>Social Influence Weighted Mean</b>  | <b>2.68</b> | <b>Agree</b>   | <b>2.76</b> | <b>Agree</b>   | <b>2.72</b>           | <b>Agree</b>   |

The presented data in Table 2.3 elucidates respondents' perceptions regarding social influence associated with AI-based tools in recruitment and selection, for users of CATSearch and Viventis. Users affiliated with both CATSearch and Viventis acknowledge the significant impact of social influence on their inclination to adopt AI-based tools in recruitment and selection. The overall weighted mean of 2.72 reflects a consensus that factors such as the opinions of colleagues, managerial support, industry trends, and peer influences play a role in shaping their willingness to embrace these tools.

This recognition underscores the critical role of social dynamics in influencing individuals' attitudes and decisions regarding the incorporation of AI tools in recruitment practices. This understanding is essential for organizations as they develop strategies to effectively navigate and leverage social factors, fostering a positive reception and adoption of AI-based tools among their user bases.

The incorporation of AI tools in recruitment practices is influenced by social dynamics, which play a critical role in individuals' attitudes and decisions. Organizations need to understand these social factors to effectively navigate and leverage them, fostering a positive reception and adoption of AI-based tools among their user bases. (Horodyski, P. 2023, Singh, S. P., et al. 2023).

**3.3 Significant relationship between the perspective of HR Professionals towards UTAUT constructs and Behavioral Intention toward the application of AI in recruitment and selection**

In Table 3.1, a multiple linear regression analysis was conducted to forecast Behavioral Intention among CATSearch participants based on Performance Expectancy, Effort Expectancy, and Social Influence. The results revealed a statistically significant regression equation ( $F(3,48) = 14.220, p < .001$ ), yielding an  $R^2$  of .471. Notably, Performance Expectancy, Effort Expectancy, and Social Influence emerged as significant predictors.

The model demonstrates a moderate level of appropriateness in capturing the variance in Behavioral Intention Weighted Mean, accounting for approximately 47.1% of the observed variability. Positive associations were identified between Performance Expectancy and Effort Expectancy with Behavioral Intention, indicating that elevated values of these factors correspond to heightened Behavioral Intention. Conversely, Social Influence exhibited a negative relationship, suggesting that increased values are linked to diminished Behavioral Intention.

These findings underscore the predictive utility of Performance Expectancy, Effort Expectancy, and Social Influence in understanding and elucidating the Behavioral Intention of CATSearch participants. The statistically significant regression equation and identified relationships contribute valuable insights offering a distinct understanding of the factors influencing participants' behavioral intentions.

**Table 3.1:** Multiple Linear Regression results between the perspective of CATSearch HR Professionals towards UTAUT constructs and Behavioral Intention toward the application of AI in recruitment and selection.

| CATSearch  |                   |          |                   |                            |
|--|-------------------|----------|-------------------|----------------------------|
| Model Summary  |                   |          |                   |                            |
| Model  | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1  | .686 <sup>a</sup> | .471     | .437              | .568                       |
| a. Predictors: (Constant), Social Influence Weighted Mean, Performance Expectancy Weighted Mean, Effort Expectancy Weighted Mean |                   |          |                   |                            |

| ANOVA <sup>a</sup>   |            |                |    |             |        |                   |
|--|------------|----------------|----|-------------|--------|-------------------|
| Model  |            | Sum of Squares | df | Mean Square | F      | Sig.              |
| 1  | Regression | 13.754         | 3  | 4.585       | 14.220 | .000 <sup>b</sup> |
|  | Residual   | 15.476         | 48 | .322        |        |                   |
|  | Total      | 29.231         | 51 |             |        |                   |
| a. Dependent Variable: Behavioral Intention Weighted Mean  |            |                |    |             |        |                   |
| b. Predictors: (Constant), Social Influence Weighted Mean, Performance Expectancy Weighted Mean, Effort Expectancy Weighted Mean |            |                |    |             |        |                   |

| Coefficients <sup>a</sup>                                 |                                      |                             |            |                           |        |      |
|---|--------------------------------------|-----------------------------|------------|---------------------------|--------|------|
| Model   |                                      | Unstandardized Coefficients |            | Standardized Coefficients | t      | Sig. |
|   |                                      | B                           | Std. Error | Beta                      |        |      |
| 1   | (Constant)                           | 1.857                       | .470       |                           | 3.949  | .000 |
|   | Performance Expectancy Weighted Mean | .286                        | .115       | .281                      | 2.489  | .016 |
|   | Effort Expectancy Weighted Mean      | .464                        | .124       | .423                      | 3.733  | .001 |
|   | Social Influence Weighted Mean       | -.375                       | .105       | -.376                     | -3.565 | .001 |
| a. Dependent Variable: Behavioral Intention Weighted Mean |                                      |                             |            |                           |        |      |

**Table 3.1.1:** Multiple Linear Regression results between the perspective of Viventis HR Professionals towards UTAUT constructs and Behavioral Intention toward the application of AI in recruitment and selection.

| VIVENTIS   |                   |          |                   |                            |
|--|-------------------|----------|-------------------|----------------------------|
| Model Summary  |                   |          |                   |                            |
| Model  | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1  | .495 <sup>a</sup> | .245     | .209              | .739                       |
| a. Predictors: (Constant), Social Influence Weighted Mean, Performance Expectancy Weighted Mean, Effort Expectancy Weighted Mean |                   |          |                   |                            |

| ANOVA <sup>a</sup>   |            |                |    |             |       |                   |
|--|------------|----------------|----|-------------|-------|-------------------|
| Model  |            | Sum of Squares | df | Mean Square | F     | Sig.              |
| 1  | Regression | 11.183         | 3  | 3.728       | 6.821 | .000 <sup>b</sup> |
|  | Residual   | 34.429         | 63 | .546        |       |                   |
|  | Total      | 45.612         | 66 |             |       |                   |
| a. Dependent Variable: Behavioral Intention Weighted Mean  |            |                |    |             |       |                   |
| b. Predictors: (Constant), Social Influence Weighted Mean, Performance Expectancy Weighted Mean, Effort Expectancy Weighted Mean |            |                |    |             |       |                   |

| Coefficients <sup>a</sup>                                 |                                      |                             |            |                           |       |      |
|---|--------------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model   |                                      | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|   |                                      | B                           | Std. Error | Beta                      |       |      |
| 1   | (Constant)                           | .470                        | .527       |                           | .892  | .376 |
|   | Performance Expectancy Weighted Mean | .202                        | .122       | .192                      | 1.657 | .103 |
|   | Effort Expectancy Weighted Mean      | .361                        | .119       | .353                      | 3.041 | .003 |
|   | Social Influence Weighted Mean       | .244                        | .113       | .237                      | 2.159 | .035 |
| a. Dependent Variable: Behavioral Intention Weighted Mean |                                      |                             |            |                           |       |      |

In Table 3.1.1, a multiple linear regression analysis was executed to predict the Behavioral Intention of Viventis participants based on three key factors: Performance Expectancy, Effort Expectancy, and Social Influence. The obtained results revealed the presence of a statistically significant regression equation ( $F(3,63) = 6.821, p < .001$ ), with an associated  $R^2$  of .245. Notably, Performance Expectancy and Effort Expectancy emerged as significant predictors, while Social Influence did not attain statistical significance.

The model demonstrates a moderate level of adequacy in explaining the variance in Behavioral Intention Weighted Mean, accounting for approximately 24.5% of the observed variability. Specifically, Effort Expectancy and Social Influence displayed positive associations with Behavioral Intention, implying that heightened values of these predictors correspond to increased Behavioral Intention. However, Performance Expectancy did not exhibit a statistically significant relationship with Behavioral Intention within this model.

These results highlight the intricate dynamics that impact the Behavioral Intention of Viventis participants. The recognized significant predictors enhance the discernment of the elements molding Behavioral Intention. This offers meaningful implications for advancing research and strategic deliberations in the field of participant behavioral analysis within organizational settings.

Table 3.1.1.1 presents the outcomes of a multiple linear regression analysis undertaken to forecast the Behavioral Intention of Overall participants, utilizing Performance Expectancy, Effort Expectancy, and Social Influence as predictor variables. The results yielded a statistically significant regression equation ( $F(3,115) = 11.754, p < .001$ ), along with an  $R^2$  of .235. Notably, both Performance Expectancy and Effort Expectancy emerged as statistically significant predictors, while Social Influence did not attain significance.

The model demonstrates a moderate level of explanatory power in delineating the variance in Behavioral Intention Weighted Mean, elucidating approximately 23.5% of the observed variability. Specifically, positive relationships were identified between Performance Expectancy and Effort Expectancy with Behavioral Intention, indicating that heightened values of these factors correspond to increased Behavioral Intention. In contrast, the variable Social Influence did not exhibit a statistically significant impact on Behavioral Intention within this model.

These findings provide valuable insights into the determinants of Behavioral Intention among Overall participants. The identified significant predictors enhance our sophisticated comprehension of the dynamics influencing Behavioral Intention. This holds meaningful implications for further research and strategic considerations within the domain of participant behavioral analysis, particularly in diverse organizational settings.

**Table 3.1.1.1:** Multiple Linear Regression results between the perspective of Overall HR Professionals towards UTAUT constructs and Behavioral Intention toward the application of AI in recruitment and selection.

**Multiple Linear Regression**

**OVERALL**

| Model Summary |                   |          |                   |                            |
|---------------|-------------------|----------|-------------------|----------------------------|
| Model         | R                 | R Square | Adjusted R Square | Std. Error of the Estimate |
| 1             | .484 <sup>a</sup> | .235     | .215              | .706                       |

a. Predictors: (Constant), Social Influence Weighted Mean, Effort Expectancy Weighted Mean, Performance Expectancy Weighted Mean

| ANOVA <sup>a</sup> |            |                |     |             |        |                   |
|--------------------|------------|----------------|-----|-------------|--------|-------------------|
| Model              |            | Sum of Squares | df  | Mean Square | F      | Sig.              |
| 1                  | Regression | 17.582         | 3   | 5.861       | 11.754 | .000 <sup>b</sup> |
|                    | Residual   | 57.342         | 115 | .499        |        |                   |
|                    | Total      | 74.924         | 118 |             |        |                   |

a. Dependent Variable: Behavioral Intention Weighted Mean  
 b. Predictors: (Constant), Social Influence Weighted Mean, Effort Expectancy Weighted Mean, Performance Expectancy Weighted Mean

| Coefficients <sup>a</sup> |                                      |                             |            |                           |       |      |
|---------------------------|--------------------------------------|-----------------------------|------------|---------------------------|-------|------|
| Model                     |                                      | Unstandardized Coefficients |            | Standardized Coefficients | t     | Sig. |
|                           |                                      | B                           | Std. Error | Beta                      |       |      |
| 1                         | (Constant)                           | 1.083                       | .381       |                           | 2.841 | .005 |
|                           | Performance Expectancy Weighted Mean | .246                        | .090       | .236                      | 2.723 | .007 |
|                           | Effort Expectancy Weighted Mean      | .365                        | .091       | .350                      | 4.027 | .000 |
|                           | Social Influence Weighted Mean       | -.001                       | .083       | -.001                     | -.011 | .991 |

a. Dependent Variable: Behavioral Intention Weighted Mean

**3.4 Perspective of HR Professionals towards the application of AI in recruitment and selection in terms of Behavioral Intention**

**Table 4:** HR Professionals recognize the applicability of the UTAUT model in the use of AI in recruitment and selection in terms of Behavioral Intention

|   | CATSearch   |                | Viventis    |                | Overall Weighted Mean |                |
|---|-------------|----------------|-------------|----------------|-----------------------|----------------|
|   | Mean        | Interpretation | Mean        | Interpretation | Mean                  | Interpretation |
| I am willing to learn new skills to use AI-based tools in recruitment and selection.  | 2.73        | Agree          | 2.82        | Agree          | 2.78                  | Agree          |
| I am confident in my ability to use AI-based tools in recruitment and selection.  | 2.85        | Agree          | 2.81        | Agree          | 2.83                  | Agree          |
| I believe that using AI-based tools in recruitment and selection will improve the quality of candidates.                                    | 2.50        | Agree          | 2.75        | Agree          | 2.63                  | Agree          |
| I believe that using AI-based tools in recruitment and selection will save me time on routine tasks.  | 2.62        | Agree          | 2.75        | Agree          | 2.69                  | Agree          |
| I believe that using AI-based tools in recruitment and selection will increase the effectiveness of my recruitment and selection processes. | 2.75        | Agree          | 2.82        | Agree          | 2.79                  | Agree          |
| <b>Behavioral Influence Weighted Mean</b>   | <b>2.69</b> | <b>Agree</b>   | <b>2.79</b> | <b>Agree</b>   | <b>2.74</b>           | <b>Agree</b>   |

The provided data in Table 3 presents insights into the respondents' attitudes related to behavioral influence regarding AI-based tools in recruitment and selection, for users of CATSearch and Viventis. Respondents associated with both CATSearch and Viventis express a collective agreement regarding the behavioral influence of AI-based tools in recruitment and selection. The overall weighted mean of 2.74 underscores a consensus that users are willing to learn new skills, confident in their ability to use these tools, and believe in the positive impact on candidate quality, time savings, and process effectiveness.

This behavioral influence is pivotal for organizations aiming to integrate AI tools into recruitment practices, as users exhibit a positive disposition toward adopting new skills and leveraging AI for improved outcomes. Recognizing these positive attitudes is crucial for organizations as they formulate strategies to enhance user engagement and effectively integrate AI-based tools into their recruitment processes.

Users in the recruitment process exhibit a positive disposition toward adopting new skills and leveraging AI for improved outcomes. Recognizing these positive attitudes is crucial for organizations as they formulate strategies to enhance user engagement and effectively integrate AI-based tools into their recruitment processes (Michael, S. (2023).

**3.5 Significant difference in the perspective of HR Professionals towards the application of AI in recruitment and selection in the Behavioral Intention when grouped according to the demographic profile**

Based on Table 5.1, the ANOVA results provided the perspective of HR professionals at CATSearch and Viventis regarding the application of AI in recruitment and selection, when grouped by demographic profile factors such as age, education, work experience in using AI tools, and frequency of using AI tools, the following interpretations can be made:

The ANOVA results indicate that age is not a significant factor affecting the behavioral intention toward AI applications in recruitment and selection. Therefore, the null hypothesis is accepted, suggesting that there is no significant difference in behavioral intention across different age groups among HR professionals at both CATSearch ( $F(4,47) = 1.231, p > .05$ ) and Viventis ( $F(4,62) = .163, p > .05$ ) and Overall ( $F(4,114) = .235, p > .05$ )

Initially, for both CATSearch ( $F(2,49) = 2.084, p > .05$ ) and Viventis ( $F(2,64) = 1.958, p > .05$ ) individually, education was not found to be a significant factor influencing the behavioral intention towards AI application in recruitment and selection. However, when the data from both companies are combined, ( $F(2,116) = 3.197, p < .05$ ), education becomes a significant factor. This suggests that there is a difference in behavioral intention towards AI application in recruitment and selection based on education level across the two companies.

The ANOVA results demonstrate that neither work experience in using AI tools at both CATSearch ( $F(2,49) = .524, p > .05$ ) and Viventis ( $F(2,64) = .485, p > .05$ ) nor the frequency of using AI tools at both CATSearch ( $F(2,49) = .593, p > .05$ ) and Viventis ( $F(2,64) = .634, p > .05$ ) significantly affects the behavioral intention towards AI applications in recruitment and selection. Consequently, the null hypothesis is accepted, implying that there is no significant difference in behavioral intention based on these factors among HR professionals at both CATSearch ( $F(2,116) = .854, p > .05$ ) and Viventis ( $F(3,116) = .758, p > .05$ )

**Table 5.1: ANOVA results in the overall perspective of HR Professionals towards the application of AI in recruitment and selection in the Behavioral Intention when grouped according to the demographic profile.**

| <b>CATSearch</b> |            |     |             |       |      |                 |                            |
|------------------|------------|-----|-------------|-------|------|-----------------|----------------------------|
| Company          | Dimensions | df  | Mean Square | F     | Sig  | Interpretation  | Null Hypothesis Decision   |
| CATSearch        | Age        | 4   | .693        | 1.231 | .311 | Not Significant | Accept the Null Hypothesis |
|                  |            | 47  | .563        |       |      |                 |                            |
| Viventis         |            | 4   | .118        | .163  | .956 | Not Significant | Accept the Null Hypothesis |
|                  |            | 62  | .728        |       |      |                 |                            |
| Overall          |            | 4   | .153        | .235  | .918 | Not Significant | Accept the Null Hypothesis |
|                  |            | 114 | .652        |       |      |                 |                            |
| CATSearch        | Education  | 2   | 1.146       | 2.084 | .135 | Not Significant | Accept the Null Hypothesis |
|                  |            | 49  | .550        |       |      |                 |                            |

|           |                                   |      |       |       |                 |                            |                                   |
|-----------|-----------------------------------|------|-------|-------|-----------------|----------------------------|-----------------------------------|
| Viventis  | Work Experience in using AI tools | 2    | 1.315 | 1.958 | .150            | Not Significant            | Accept the Null Hypothesis        |
|           |                                   | 64   | .672  |       |                 |                            |                                   |
| Overall   |                                   | 2    | 1.957 | 3.197 | .045            | <b>Significant</b>         | <b>Reject the Null Hypothesis</b> |
|           |                                   | 116  | .612  |       |                 |                            |                                   |
| CATSearch |                                   | 2    | .306  | .524  | .596            | Not Significant            | Accept the Null Hypothesis        |
|           |                                   | 49   | .584  |       |                 |                            |                                   |
| Viventis  |                                   | 2    | .327  | .485  | .630            | Not Significant            | Accept the Null Hypothesis        |
|           |                                   | 64   | .702  |       |                 |                            |                                   |
| Overall   | 2                                 | .543 | .854  | .429  | Not Significant | Accept the Null Hypothesis |                                   |
|           | 116                               | .637 |       |       |                 |                            |                                   |
| CATSearch | Frequency of using AI tools       | 3    | .348  | .593  | .623            | Not Significant            | Accept the Null Hypothesis        |
|           |                                   | 48   | .587  |       |                 |                            |                                   |
| Viventis  |                                   | 3    | .446  | .634  | .596            | Not Significant            | Accept the Null Hypothesis        |
|           |                                   | 63   | .703  |       |                 |                            |                                   |
| Overall   |                                   | 3    | .484  | .758  | .520            | Not Significant            | Accept the Null Hypothesis        |
|           |                                   | 115  | .639  |       |                 |                            |                                   |

Overall, the ANOVA results suggest that while demographic factors such as age, work experience in using AI tools, and frequency of using AI tools do not have a significant impact on the behavioral intention towards AI application in recruitment and selection among HR professionals at both companies, education level does. This indicates that there is a difference in the behavioral intention towards AI adoption in recruitment and selection based on education level when data from both companies are considered together.

**Table 5.1.1:** T-test results in the perspective of HR Professionals towards the application of AI in recruitment and selection in the Behavioral Intention when grouped according to the demographic profile between Males and Females.

| Independent Samples Test |                         |   |      |                              |     |                 |                 |                       |   |       |
|--------------------------|-------------------------|---|------|------------------------------|-----|-----------------|-----------------|-----------------------|---|-------|
|                          |                         | Levene's Test for Equality of Variances |      | t-test for Equality of Means |     |                 |                 |                       |   |       |
|                          |                         | F                                       | Sig. | t                            | df  | Sig. (2-tailed) | Mean Difference | Std. Error Difference | 95% Confidence Interval of the Difference |       |
|                          |                         |   |      |                              |     |                 |                 |                       | Lower                                     | Upper |
| <b>CATSearch</b>         | Equal variances assumed | 2.681                                   | .108 | <b>-.363</b>                 | 50  | <b>.718</b>     | -.077           | .212                  | -.502                                     | .348  |
| <b>VIVENTIS</b>          |                         | 1.184                                   | .280 | <b>.354</b>                  | 65  | <b>.725</b>     | .073            | .205                  | -.337                                     | .482  |
| <b>OVERALL</b>           |                         | 3.366                                   | .069 | <b>.035</b>                  | 117 | <b>.972</b>     | .005            | .147                  | -.286                                     | .296  |

As presented in Table 5.1.1, an independent-sample t-test was calculated comparing the mean score of participants from CATSearch. No significant difference was found ( $t(50) = -.363, p > .05$ ). The mean of the Male ( $M = 2.73, sd = .827$ ) was not significantly different from the mean of Female ( $M = 2.81, sd = .694$ ). An independent-sample t-test was calculated comparing the mean score of participants from Viventis. No significant difference was found ( $t(65) = .354, p > .05$ ). The mean of the Male ( $M = 2.75, sd = .874$ ) was not significantly different from the mean of Female ( $M = 2.68, sd = .791$ ). An independent-sample t-test was calculated comparing the mean score of overall participants. No significant difference was found ( $t(117) = .035, p > .05$ ). The mean of the Male ( $M = 2.74, sd = .848$ ) was not significantly different from the mean of Female ( $M = 2.74, sd = .745$ ). There are no significant differences in the behavioral intentions of HR professionals towards the application of AI in recruitment and selection (specifically with CATSearch and Viventis) when considering gender differences. Gender does not appear to influence HR professionals' overall behavioral intentions regarding AI applications in recruitment and selection.



Research on the influence of gender on HR professionals' behavioral intentions towards AI in recruitment and selection is limited. Pogrebtsova (2020) found no gender bias in the use of structured interviews, suggesting that gender may not significantly impact HR professionals' intentions. Mirowska (2020) and Pan (2021) both focused on the application of AI in selection but did not specifically address gender differences. Harun (2021) also did not find significant differences in HRM practices based on generational diversity, indicating that other factors may be more influential. Therefore, while there is a lack of direct evidence, the existing research suggests that gender may not significantly influence HR professionals' behavioral intentions towards AI in recruitment and selection.

#### **4. Discussions**

In this chapter, it is comprehensively examined and condenses the principal research discoveries. Additionally, practical guidance and implications derived from the study are provided.

##### **4.1. Conclusions**

In conclusion, the research findings presented in this study shed light on the perceptions and attitudes of HR professionals towards the application of Artificial Intelligence (AI) in recruitment and selection processes. Through a comprehensive analysis of demographic profiles, ANOVA results, and the application of the UTAUT model, valuable insights have been gained regarding the factors influencing behavioral intentions toward AI adoption in the HR industry.

The ANOVA results revealed that while age, work experience with AI tools, and frequency of AI tool usage did not significantly impact behavioral intentions, there was a notable difference based on education levels among HR professionals. This suggests that educational background plays a crucial role in shaping attitudes toward AI integration in recruitment and selection practices. There are no significant differences in the behavioral intentions of HR professionals towards the application of AI in recruitment and selection (specifically with CATSearch and Viventis) when considering gender differences. Gender does not appear to influence HR professionals' overall behavioral intentions regarding AI applications in recruitment and selection.

Furthermore, the UTAUT model proved to be a valuable framework for understanding HR professionals' perceptions regarding the performance expectancy and social influence of AI-based tools in recruitment and selection processes. The positive outlook expressed by users of CATSearch and Viventis towards the performance expectancy of AI tools underscores the potential benefits in terms of work performance improvement, productivity enhancement, time savings, and output quality.

Moreover, the analysis of demographic profiles of CATSearch users through ANOVA indicated that age, education, work experience with AI tools, and frequency of AI tool usage did not significantly influence behavioral intentions towards AI adoption in recruitment and selection at CATSearch. This suggests a consistent trend across different demographic groups within the CATSearch user base.

The multiple linear regression analysis further strengthened the understanding of the relationship between UTAUT constructs and behavioral intentions toward AI adoption in recruitment and selection. By exploring the interplay of various factors such as performance expectancy and social influence, a more nuanced understanding of HR professionals' attitudes towards AI integration was achieved.

Overall, this research contributes valuable insights to the field of HR management by highlighting the importance of educational background, performance expectancy, and social influence in shaping attitudes towards AI adoption in recruitment and selection processes. The findings underscore the need for targeted strategies to enhance the acceptance and utilization of AI technologies in HR practices, ultimately leading to more efficient and effective recruitment and selection processes in organizations.

In light of these findings, future research endeavors could explore additional factors influencing behavioral intentions toward AI adoption, delve deeper into the implementation challenges faced by HR professionals, and assess the long-term impact of AI integration on recruitment and selection outcomes. By continuing to advance our understanding of AI's role in HR practices, we can pave the way for innovative and transformative approaches to talent acquisition and management in the digital age.

##### **4.2. Recommendations**

Chapter 3 provides valuable insights for stakeholders involved in integrating and utilizing AI technologies in recruitment and selection processes. By leveraging these insights, stakeholders can tailor their strategies, programs, and initiatives to better meet the needs and preferences of HR professionals, developers, researchers, and future researchers in this field. The following tailored recommendations offer comprehensive guidance for various stakeholders:

###### **1. Organizations:**

- The strategic integration of AI in recruitment processes is a key consideration for organizations, as it can enhance

efficiency and decision-making (Vardarlier, 2019; Jha, 2020). AI tools can provide accurate monitoring and evaluation of candidates, leading to successful recruitment (Vardarlier, 2019). They can also address the concerns of various stakeholders and change traditional recruitment and selection processes (Jha, 2020). Furthermore, AI can enhance diversity and reduce bias in recruitment (Vivek, 2023). The combination of AI and EHRM can foster innovative HRM practices, including recruitment and selection, performance management, and talent analytics (Parimalam, P. I., & Dhanabagiyam, S. (2023).

- The use of AI in recruitment presents ethical challenges, including the potential for bias and discrimination (Mujtaba, 2019; Gupta, 2022). To address these issues, it is crucial to establish clear ethical guidelines for AI usage in recruitment, ensuring fairness and transparency in candidate selection (Krishnakumar, 2019). These guidelines should prioritize fairness, job-relatedness, and statistical parity, and be aligned with other relevant frameworks (Krishnakumar, 2019). The relevance of these guidelines should be evaluated through a combination of expert feedback and public opinion (Rothenberger, 2019).
- Continuous training programs for HR professionals are crucial in enhancing their skills in utilizing AI technologies effectively (Maity, 2019). AI can revolutionize HR practices, including training and development, by providing personalized learning, on-the-go learning tools, and an intuitive e-learning interface (Jain, 2017). It can also automate routine tasks, allowing HR professionals to focus on more strategic work (Sipahi, 2022). However, the adoption of AI in HR practices also presents challenges, such as the need for upskilling, job security concerns, and the potential lack of human touch and emotional intelligence (Arora, 2022).
- Research on user engagement and acceptance of AI in recruitment highlights the need for effective communication and support mechanisms. Deng (2023) emphasizes the importance of involving end users in testing, auditing, and contesting AI systems to overcome developers' blind spots. Pan (2021) and Ochmann (2020) both underscore the role of contextual factors, such as perceived complexity, technology competence, and regulatory support, in influencing AI adoption in recruitment. Laurim (2021) further emphasizes the significance of transparency, complementary features, and a sense of control in fostering user acceptance of AI-based technologies in the recruitment process. These findings collectively underscore the need for a user-centric approach to AI adoption in recruitment, with a focus on communication, support, and contextual factors.
- A collaborative approach between HR and IT departments is crucial for the successful integration of AI technologies in recruitment practices (Soleimani, 2022). This collaboration can help mitigate biases in AI recruitment systems (AIRS) by informing data labeling, understanding job functions, and improving machine learning models. The benefits of AI in recruitment, such as cataloging behavioral patterns and determining job fit, can be optimized through responsible adoption and continuous oversight (Iyer, 2023). In the context of industrial IoT manufacturing, a holistic integration of AI can be achieved through a multi-dimensional collaboration approach, including business intelligence optimization and secure federation (Trakadas, 2020). The impact of AI capabilities, such as Natural Language Processing and Automation, on the recruitment and selection process in IT companies is significant, leading to time and cost-saving, increased efficiency, and improved candidate experience (Hemalatha, 2021).

## 2. HR Professionals:

- Continuous learning is crucial for HR professionals to stay updated on AI technologies and their applications in recruitment (Johansson, 2019). AI is increasingly being used in employee recruitment to streamline and automate processes, such as CV reviews and chatbot interactions (Trziszka, 2023). It also has a significant impact on the recruitment and selection stages, with potential for improving performance management and career development (Forneris, 2020).
- The use of AI tools in recruitment has significantly transformed traditional processes, offering benefits such as personalized hiring, reduced time and resource costs, and improved efficiency (Jha, 2020). These tools, including video interviews, social media screening, and LinkedIn recruiting, have the potential to enhance the recruitment process (Kong, 2021). However, they also present challenges, such as potential biases and the need for human oversight (Kong, 2021). To effectively leverage these AI tools, HR professionals need to invest in developing the necessary skills (Kulkarni, 2019).
- Collaboration between HR managers and AI developers is crucial in mitigating biases in AI recruitment systems (AIRS) (Soleimani, 2022). AI capabilities such as NLP, Machine Vision, Automation, and Augmentation have significantly impacted the recruitment and selection process, leading to positive outcomes (Hemalatha, 2021). However, the adoption of AI in recruitment and selection is also associated with risks, including job loss fears and distrust among recruiters (Ore, 2021). Despite these risks, the use of AI in recruitment processes has been found to reduce costs and decision-making errors, and save time (Karaboga, 2021). Therefore, collaboration with IT professionals is essential to harness the benefits of AI technologies in recruitment practices while addressing potential risks.

## 3. Developers of AI Technologies:

- The development of AI tools with a user-centric design is a complex process, as highlighted by Hartikainen (2022) and Battistoni (2023). Hartikainen (2022) identifies challenges such as the detachment of human-centered AI (HCAI) work from technical development and the uncertain nature of AI. Battistoni (2023) proposes the concept of "Intelligence-Centered"

design, which emphasizes the interaction between AI and humans, and the need for AI-oriented requirements to enhance the human-centered design of intelligent interactive systems. Gong (2022) and Lu (2022) provide practical insights into the application of AI in HR management systems and the potential for AI-enabled design support tools in UX design. Gong (2022) demonstrates the use of AI technology to strengthen HR management, while Lu (2022) identifies areas in the UX workflow that can benefit from AI-enabled assistance. These studies collectively underscore the importance of considering user needs and experiences in the design and development of AI tools for HR professionals.

- A range of studies have highlighted the need for ethical considerations in the development of AI technologies for recruitment. Mujtaba (2019) and Gupta (2022) both emphasize the potential for bias in AI-based recruitment tools, with the latter specifically noting the issues of data privacy and unconscious bias. Abbu (2022) and Krishnakumar (2019) further stress the importance of fairness, transparency, and explainability in these technologies, with the latter proposing a model to assess the fairness of AI recruitment systems. These studies collectively underscore the critical role of ethical considerations in ensuring the fairness and transparency of AI technologies in recruitment.
- The use of AI in HR recruitment processes is a growing trend, with a focus on streamlining and automating tasks (Trziszka, 2023; Nguyen, 2023). AI tools can significantly enhance the recruitment process by cataloging behavioral patterns, determining job fit, and facilitating virtual interviews (Iyer, 2023). However, it is crucial to strike a balance between artificial and human intelligence to ensure ethical and effective deployment (Iyer, 2023). Customization options in AI tools can cater to the specific needs and preferences of HR professionals, potentially increasing productivity, and efficiency (Yadav, 2023).

#### **4. Researcher of this Study:**

- A range of factors influence the adoption of AI in recruitment. Pan (2021) found that perceived complexity, technology competence, and regulatory support are key factors, while Esch (2019) highlighted the role of social media use, intrinsic rewards, fair treatment, and perceived trendiness. Pai (2022) further explored the influence of technological, organizational, and environmental factors, with a focus on corporate social responsibility initiatives. Pillai (2020) identified cost-effectiveness, relative advantage, top management support, HR readiness, competitive pressure, and support from AI vendors as key drivers, with security and privacy issues as potential barriers. These studies collectively underscore the multifaceted nature of AI adoption in recruitment, suggesting a need for a comprehensive understanding of the various factors at play.

#### **5. Future Researchers:**

- A range of studies have explored the impact of AI adoption in various industries. Damioli (2022) found a positive impact of AI patent families on employment, suggesting a potential benefit for organizations. However, Daniel (2023) highlighted the need for specialized expertise when integrating AI with Agile software development, indicating a potential challenge. Nuryanto (2024) emphasized the role of innovation in shaping employee behavior, with Big Data and IoT adoption enhancing organizational innovation and citizenship behavior. Xu (2023) further underscored the importance of considering employees' attitudes and concerns in AI adoption, with job security concerns potentially leading to negative attitudes. These studies collectively suggest that while AI adoption can have positive impacts, it also presents challenges that need to be carefully navigated.

#### **4.3. Implications of the Study**

The study emphasizes significant implications for stakeholders involved in integrating AI technologies into recruitment and selection procedures. It highlights the critical importance of collaboration, education, and adaptability in effectively assimilating AI tools into HR operations. This integration not only enhances efficiency and effectiveness but also fosters ethical practices within HR management (Ganatra & Pandya, 2023; Rathore, 2023; Rukadikar et al., 2023).

Successful integration of AI in talent acquisition can significantly improve organizational efficiency, decision-making, and competitiveness (Ganatra & Pandya, 2023). Adhering to ethical guidelines in AI usage is crucial for improving organizational reputation and trust among stakeholders (Rathore, 2023). Continuous training and skill development opportunities are essential for HR professionals to enhance their competencies and adaptability to technological advancements (Rukadikar et al., 2023).

Embracing AI technologies in HR can enhance professionals' growth and effectiveness in recruitment processes, thereby improving job performance and efficiency (Rathore, 2023). AI-driven solutions are being integrated into various HR functions, including recruitment, training, performance management, and employee engagement (Rathore, 2023). AI-based recruitment tools are changing the way recruitment processes are conducted, providing benefits such as reduced response time and wider applicant pools (Ganatra & Pandya, 2023). The use of AI in HR management has the potential to increase efficiency and effectiveness, thus improving company performance and competitiveness (Horodyski, 2023). Companies should establish clear purposes for introducing AI recruitment systems and recognize that AI cannot replace everything in the realm of human judgment (Agustono

et al., 2023). Developing AI capabilities in HR management requires strengthening technology infrastructure, conducting human resource training, and creating an organizational culture that supports AI technology (Agustono et al., 2023).

User-friendly AI tools are more likely to be accepted and effectively utilized in recruitment practices. Developing ethically sound AI technologies can enhance trust and credibility among users and organizations. Recruiters perceive AI positively, recognizing benefits such as efficiency gains, time savings, and automation (Singh et al., 2023). Applicants also perceive AI positively, finding it useful and easy to use, with reduced response time being a significant advantage (Mariani & Vega-Lozada, 2023). Implementing AI systems in recruitment practices requires careful regulation to protect minority rights and privacy (Gupta & Mishra, 2023).

The study contributes to the existing literature on AI adoption in recruitment by providing insights into the experiences and perceptions of applicants in AI-enabled hiring processes. It also critically evaluates the potential benefits and drawbacks of using AI in recruitment, highlighting opportunities for improved efficiency, cost savings, and better-quality hires, while also addressing ethical and legal concerns such as algorithmic bias and discrimination (Albassam, 2023). The findings of this study can influence decision-making and strategic planning in organizations looking to integrate AI in recruitment processes, providing practical implications for stakeholders (Michael, 2023).

Future researchers can build upon the current study to deepen the understanding of AI adoption in recruitment and its implications for various stakeholders. They can address several areas such as assessing the financial and regulatory aspects associated with AI adoption in recruitment, comparing the performance of employees hired through AI-assisted recruitment versus traditional methods, developing comprehensive guidelines and training materials to facilitate the responsible and ethical use of AI in recruitment, expanding the scope of research beyond specific industries or geographic regions, and tracking changes in stakeholder attitudes towards AI recruitment over time (Chen, 2023).

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## References

- [1] Abbu, H., Mugge, P., & Gudergan, G. (2022, June). Ethical Considerations of Artificial Intelligence: Ensuring Fairness, Transparency, and Explainability. In 2022 IEEE 28th International Conference on Engineering, Technology and Innovation (ICE/ITMC) & 31st International Association For Management of Technology (IAMOT) Joint Conference (pp. 1-7). IEEE. <https://doi.org/10.1109/ICE/ITMC-IAMOT55089.2022.10033140>
- [2] Adecco. (2023, June 16). How Artificial Intelligence is Changing the Recruitment Industry. <https://www.adecco.ca/en-ca/blog/artificial-intelligence-changing-recruitment-industry/>
- [3] Ahmed O. (2018). Artificial intelligence in HR. *Intern J Res Analy Rev.* 2018;5(4):971–978.
- [4] Alam, M. S., & Uddin, M. A. (2019). Adoption and implementation of enterprise resource planning (ERP): An empirical study. *Journal of Management and Research*, 6(1), 1-33
- [5] Alam, M. S., Dhar, S. S., & Munira, K. S. (2020). HR Professionals' intention to adopt and use of artificial intelligence in recruiting talents. *Business Perspective Review*, 2(2), 15–30.
- [6] Alam, M. Z., Hu, W., & Barua, Z. (2018). Using the UTAUT model to determine factors affecting acceptance and use of mobile health (mHealth) services in Bangladesh. *Journal of Studies in Social Sciences*, 17(2).
- [7] Albassam, W. A. (2023). The Power of Artificial Intelligence in Recruitment: An Analytical Review of Current AI-Based Recruitment Strategies. *International Journal of Professional Business Review*, 8(6), e02089-e02089. <https://doi.org/10.26668/businessreview/2023.v8i6.2089>
- [8] Albert, E. T. (2019). AI in talent acquisition: A review of AI applications used in recruitment and selection. *Strategic HR Review*, 18(5), 215–221. <https://doi.org/10.1108/SHR-04-2019-0024>.
- [9] Atienza, H. J. S. (2023, May 8). PH senator pushes for AI regulation. *Outsource Accelerator*. <https://news.outsourceaccelerator.com/ph-senator-pushes-ai-regulation/>
- [10] Atienza, K. A. T. (2023, June 12). Philippine regulators told to empower users, workers to tackle AI threats. *Business World*. <https://www.bworldonline.com/top-stories/2023/06/12/528114/Philippines-regulators-told-to-empower-users-workers-to-tackle-ai-threats/>
- [11] Bano, S., Shah, U. U., & Ali, S. (2019). Personality and technology: Big five personality traits as descriptors of universal acceptance and usage of technology UTAUT. *Library Philosophy and Practice*.
- [12] Battistoni, P., Di Gregorio, M., Romano, M., Sebillo, M., & Vitiello, G. (2023). Can AI-Oriented Requirements Enhance Human-Centered Design of Intelligent Interactive Systems? Results from a Workshop with Young HCI Designers. *Multimodal Technologies and Interaction*, 7(3), 24. <https://doi.org/10.3390/mti7030024>
- [13] Black, J. S., & van Esch, P. (2020). AI-enabled recruiting: What is it and how should a manager use it? *Business Horizons*, 63(2), 215–226.
- [14] Cabrero-Daniel, B. (2023). AI for Agile development: a Meta-Analysis. *arXiv preprint arXiv:2305.08093*.
- [15] Chatterjee, S., & Bhattacharjee, K. K. (2020). Adoption of artificial intelligence in higher education: a quantitative analysis using structural equation modeling. *Education and Information Technologies*, 1-21.

- [16] Chen, Z. (2023). Collaboration among recruiters and artificial intelligence: removing human prejudices in employment. *Cognition, Technology & Work*, 25(1), 135-149. <https://doi.org/10.1007/s10111-022-00716-0>
- [17] Compeau, D. R., & Higgins, C. A. (1995a). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 189-211.
- [18] Compeau, D. R., & Higgins, C. A. (1995b). Computer self-efficacy: Development of a measure and initial test. *MIS Quarterly*, 189-211.
- [19] Compeau, D., Higgins, C. A., & Huff, S. (1999). Social cognitive theory and individual reactions to computing technology: A longitudinal study. *MIS Quarterly*, 145-158.
- [20] Damioli, G., Van Roy, V., Vertesy, D., & Vivarelli, M. (2023). AI technologies and employment: micro evidence from the supply side. *Applied Economics Letters*, 30(6), 816-821. <https://doi.org/10.1080/13504851.2021.2024129>
- [21] Davis, F. D. (1989). Perceived usefulness, perceived ease of use, and user acceptance of information technology. *MIS Quarterly*, 319-340.
- [22] Davis, F. D., Bagozzi, R. P., & Warshaw, P. R. (1989). User acceptance of computer technology: A comparison of two theoretical models. *Management Science*, 35(8), 982-1003.
- [23] Deng, W. H., Lam, M. S., Cabrera, Á. A., Metaxa, D., Eslami, M., & Holstein, K. (2023, October). Supporting User Engagement in Testing, Auditing, and Contesting AI. In Companion Publication of the 2023 Conference on Computer Supported Cooperative Work and Social Computing (pp. 556-559). <https://doi.org/10.1145/3584931.3611279>
- [24] Dijkkamp, J. (2019). The Recruiter of 888the future, a qualitative study in AI supported recruitment process (Master's thesis. University of Twente.
- [25] Esch, P.V., & Black, J.S. (2019). Factors that influence new generation candidates to engage with and complete digital, AI-enabled recruiting. *Business Horizons*.
- [26] Faul, F., Erdfelder, E., Lang, A.-G., & Buchner, A. (2007). G\*Power 3: A flexible statistical power analysis program for the social, behavioral, and biomedical sciences. *Behavior Research Methods*, 39(2), 175-191. <https://doi.org/10.3758/BF03193146>
- [27] Figueroa-Armijos, M., Clark, B. B., & da Motta Veiga, S. P. (2022b). Ethical perceptions of AI in hiring and organizational trust: The role of performance expectancy and social influence. *Journal of Business Ethics*, 1-19.
- [28] Forneris, F. (2020). Artificial intelligence and machine learning impact on HR recruitment and selection process.
- [29] Fountaine, T., McCarthy, B., & Saleh, T. (2019). Building the AI-powered organization. *Harvard Business Review*, 97(4), 62-73.
- [30] Ganatra, N. J., & Pandya, J. D. (2023). The transformative impact of artificial intelligence on HR practices and employee experience: A review. *Journal of Management Research and Analysis*, 10(2), 106-111. <https://doi.org/10.18231/jjmra.2023.018>
- [31] Gong, Y., Zhao, M., Wang, Q., & Lv, Z. (2022). Design and interactive performance of human resource management system based on artificial intelligence. *PLoS one*, 17(1), e0262398. <https://doi.org/10.1371/journal.pone.0262398>
- [32] Gonzalez-Garcia, C. G., Meana-Llorian, D., & Lovelle, J. M. C. (2017). A review about smart objects, sensors, and actuators. *International Journal of Interactive Multimedia & Artificial Intelligence*, 4(3), 7-10.
- [33] Gupta, A., & Mishra, M. (2022). Ethical Concerns While Using Artificial Intelligence in Recruitment of Employees. [https://doi.org/10.21272/bel.6\(2\).6-11.2022](https://doi.org/10.21272/bel.6(2).6-11.2022)
- [34] Gupta, A., & Mishra, M. (2023). Artificial Intelligence for Recruitment and Selection. In *The Adoption and Effect of Artificial Intelligence on Human Resources Management, Part B* (pp. 1-11). Emerald Publishing Limited. <https://doi.org/10.1108/978-1-80455-662-720230001>
- [35] Harding, L. (2023, May 16). The Evolution of TA: From Beginnings to the Era of Artificial Intelligence. LinkedIn. [https://www.linkedin.com/pulse/evolution-recruitment-talent-acquisition-from-origins-lee-harding/?utm\\_source=rss&utm\\_campaign=articles\\_sitemaps](https://www.linkedin.com/pulse/evolution-recruitment-talent-acquisition-from-origins-lee-harding/?utm_source=rss&utm_campaign=articles_sitemaps)
- [36] Hartikainen, M., Väänänen, K., Lehtiö, A., Ala-Luopa, S., & Olsson, T. (2022, October). Human-Centered AI Design in Reality: A Study of Developer Companies' Practices: A study of Developer Companies' Practices. In *Nordic human-computer interaction conference* (pp. 1-11). <https://doi.org/10.1145/3546155.3546677>
- [37] Harun, S., Shahid, S. A. M., Othman, A. K., Rahman, M. K. B. A., & Gumbri, D. T. (2021). The Influence of HRM Practices on Employee Behavioural Intentions: Do Generational Differences Matter. *International Journal of Academic Research in Business and Social Sciences*, 11(4), 284-294. <https://doi.org/10.6007/IJARBS/v11-i4/9668>
- [38] Harvard Business Review. (2019, October 29). Using AI to Eliminate Bias from Hiring. Retrieved from <https://hbr.org/2019/10/using-ai-to-eliminate-bias-from-hiring>.
- [39] Hemalatha, A., Kumari, P. B., Nawaz, N., & Gajenderan, V. (2021). Impact of artificial intelligence on recruitment and selection of information technology companies. In *2021 international conference on artificial intelligence and smart systems (ICAIS)* (pp.60-66). IEEE.
- [40] Hemalatha, A., Kumari, P. B., Nawaz, N., & Gajenderan, V. (2021, March). Impact of artificial intelligence on recruitment and selection of information technology companies. In *2021 International Conference on Artificial Intelligence and Smart Systems (ICAIS)* (pp. 60-66). IEEE. <https://doi.org/10.1109/ICAIS50930.2021.9396036>
- [41] Horodyski, P. (2023). Applicants' perception of artificial intelligence in the recruitment process. *Computers in Human Behavior Reports*, 100303. <https://doi.org/10.1016/j.chbr.2023.100298>
- [42] Horodyski, P. (2023). Recruiter's perception of artificial intelligence (AI)-based tools in recruitment. *Computers in Human Behavior Reports*, 10, 100298.
- [43] Ideal. (2021, May 20). AI For Recruiting: A Definitive Guide For HR Professionals. <https://ideal.com/ai-recruiting/>
- [44] Islam, M., Mamun, A. A., Afrin, S., Ali Quasar, G. M. A., & Uddin, Md. A. (2022). Technology Adoption and Human Resource Management Practices: The Use of Artificial Intelligence for Recruitment in Bangladesh. *South Asian Journal of Human Resources Management*, 9(2), 324-349. <https://doi.org/10.1177/23220937221122329>
- [45] Iyer, V. (2023). Revolutionizing Recruitment: The Synergy of Artificial Intelligence and Human Resources. *Review of Artificial Intelligence in Education*, 4(00), e013-e013. <https://doi.org/10.37497/rev.artif.intell.educ.v4i00.13>
- [46] Jacques Bughin, J. S., James Manyika, Michael Chui, and Raoul Joshi. (2018). Notes from the AI frontier: Modeling the impact of AI on the world economy. McKinsey Global Institute.
- [47] Jain, S. (2017, January). Is artificial intelligence the next big thing in HR. In *International Conference on innovative research in science, Technology and Management*. Research Scholar, SMU.

- [48] Javier, P. (2023, June 15). DICT chief backs calls for AI regulation in workplace. CNN Philippines. <https://www.cnnphilippines.com/news/2023/6/15/dict-ai-regulation-workplace.html>
- [49] Jaymalin, M. (2023, June 14). DOLE backs regulating AI in workplace. The Philippine Star. <https://www.philstar.com/headlines/2023/06/14/2273753/dole-backs-regulating-ai-workplace>
- [50] Jha, S. K., Jha, S., & Gupta, M. K. (2020). Leveraging artificial intelligence for effective recruitment and selection processes. In *International Conference on Communication, Computing and Electronics Systems: Proceedings of ICCCES 2019* (pp. 287-293). Springer Singapore. [https://doi.org/10.1007/978-981-15-2612-1\\_27](https://doi.org/10.1007/978-981-15-2612-1_27)
- [51] Johansson, J., & Herranen, S. (2019). The application of artificial intelligence (AI) in human resource management: Current state of AI and its impact on the traditional recruitment process.
- [52] Johar, V. (2022, June 10). Artificial Intelligence In Hiring: A Tool For Recruiters. Forbes Business Council. <https://www.forbes.com/sites/forbesbusinesscouncil/2022/06/10/artificial-intelligence-in-hiring-a-tool-for-recruiters/?sh=24a840833200>
- [53] Karaboga, U., & Vardarlier, P. (2020). Examining the use of artificial intelligence in recruitment processes. *Bussecon Review of Social Sciences* (2687-2285), 2(4), 1-17. <https://doi.org/10.36096/brss.v2i4.234>
- [54] Kong, Y., Xie, C., Wang, J., Jones, H., & Ding, H. (2021, October). Ai-assisted recruiting technologies: Tools, challenges, and opportunities. In *Proceedings of the 39th ACM International Conference on Design of Communication* (pp. 359-361). <https://doi.org/10.1145/3472714.3473697>
- [55] Krishnakumar, A. (2019). Assessing the Fairness of AI Recruitment systems.
- [56] Kulkarni, S.B., & Che, X. (2019). Intelligent Software Tools for Recruiting. *Journal of International Technology and Information Management*. <https://doi.org/10.58729/1941-6679.1398>
- [57] Lacroux, A., & Martin-Lacroux, C. (2022). Should I trust the artificial intelligence to recruit? Recruiters' perceptions and behavior when faced with algorithm-based recommendation systems during resume screening. *Frontiers in Psychology*, 13, 895997.
- [58] Laurim, V., Arpacı, S., Prommegger, B., & Krcmar, H. (2021). Computer, whom should i hire?-acceptance criteria for artificial intelligence in the recruitment process. <https://doi.org/10.24251/HICSS.2021.668>
- [59] Liu, J., Chang, S. H., Xu, Y. C., Wu, G. A., & Chang, S. F. (2021, March). Using AI to Enhance Recruitment Effect. In *Journal of Physics: Conference Series* (Vol. 1827, No. 1, p. 012150). IOP Publishing. <https://doi.org/10.1088/1742-6596/1827/1/012150>
- [60] Maity, S. (2019). Identifying opportunities for artificial intelligence in the evolution of training and development practices. *Journal of Management Development*, 38(8), 651-663. <https://doi.org/10.1108/JMD-03-2019-0069>
- [61] Mariani, K., & Vega-Lozada, F. (2023). The Use of AI and Algorithms for Decision-making in Workplace Recruitment Practices. *Journal of Student Research*, 12(1). <https://doi.org/10.47611/jsr.v12i1.1855>
- [62] Mayhew, R. (2019, February 05). Expectancy Theory in the Workplace. *Small Business – Chron.com*. Retrieved from <https://smallbusiness.chron.com/expectancy-theory-workplace-11482.html>.
- [63] Menant, L., Gilibert, D., & Sauvezon, C. (2021). The application of acceptance models to human resource information systems: A literature review. *Frontiers in Psychology*, 12, Article 659421. <https://doi.org/10.3389/fpsyg.2021.659421>.
- [64] Meyer, D. (2018). Amazon reportedly killed an AI recruitment system because it couldn't stop the tool from discriminating against women. *Fortune*. October 10, 2018, <https://fortune.com/2018/10/10/amazon-ai-recruitment-bias-women-sexist/>.
- [65] Michael, S. (2023). *Decision Strategies for Intelligent Recruitment*. San International Book Publication. ISBN: 978-81-963849-1-3. <https://doi.org/10.59646/edbookc7/009>.
- [66] Michailidis, M. P. (2018). The challenges of AI and blockchain on HR recruiting practices. *Cyprus Review*, 30(2), 169-180.
- [67] Mikalef, P., & Gupta, M. (2021). Artificial intelligence capability: Conceptualization, measurement calibration, and empirical study on its impact on organizational creativity and firm performance. *Information & Management*, 58(3), Article 103434.
- [68] Mirowska, A. (2020). AI Evaluation in Selection. *Journal of Personnel Psychology*, 19, 142-149. <https://doi.org/10.1027/1866-5888/a000258>
- [69] Montesa, M. (2023, March 14). AI Recruiting in 2023: The Definitive Guide. Phenom People. <https://www.phenom.com/blog/recruiting-ai-guide>
- [70] Moore, G. C., & Benbasat, I. (1991). Development of an instrument to measure the perceptions of adopting an information technology innovation. *Information Systems Research*, 2(3), 192-222.
- [71] Mujtaba, D. F., & Mahapatra, N. R. (2019). Ethical considerations in AI-based recruitment. In 2019 IEEE international symposium on technology and society (ISTAS) (pp. 1-7). IEEE.
- [72] Mujtaba, D. F., & Mahapatra, N. R. (2019, November). Ethical considerations in AI-based recruitment. In 2019 IEEE International Symposium on Technology and Society (ISTAS) (pp. 1-7). IEEE. <https://doi.org/10.1109/ISTAS48451.2019.8937920>
- [73] Mukherjee, I., & Krishnan, L.R.K. (2022). Impact of AI on aiding employee recruitment and selection process. *Journal of the International Academy for Case Studies*, 28(S2), 1-15.
- [74] Nguyen, P.D. (2023). AI applications in recruitment process. *Journal of Development and Integration*. <https://doi.org/10.61602/jdi.2023.70.13>
- [75] Nugent, S., & Scott-Parker, S. (2021). Recruitment AI has a disability problem: Anticipating and mitigating unfair automated hiring decisions. Institute for Ethical AI, Oxford Brookes University. URL: <https://osf.io/preprints/socarxiv/8sxh7/>.
- [76] Nuryanto, U., Basrowi, B., & Quraysin, I. (2024). Big data and IoT adoption in shaping organizational citizenship behavior: The role of innovation organizational predictor in the chemical manufacturing industry. *International Journal of Data and Network Science*, 8(1), 225-268. <https://doi.org/10.5267/j.ijdns.2023.9.026>
- [77] OAgustono, D., Nugroho, R., & Yanu Alif Fianto, A. (2023). Artificial Intelligence in Human Resource Management Practices. *KnE Social Sciences*, 8(9), 958-970. <https://doi.org/10.18502/kss.v8i9.1340>
- [78] Ochmann, J., & Laumer, S. (2020). AI Recruitment: Explaining job seekers' acceptance of automation in human resource management. In *Wirtschaftsinformatik (Zentrale Tracks)* (pp. 1633-1648). [https://doi.org/10.30844/wi\\_2020\\_q1-ochmann](https://doi.org/10.30844/wi_2020_q1-ochmann)
- [79] Open Newcastle. (n.d.). Unified Theory of Acceptance and Use of Technology. Retrieved from <https://open.ncl.ac.uk/theories/2/unified-theory-of-acceptance-and-use-of-technology/>.

- [80] Ore, O., & Sposato, M. (2022). Opportunities and risks of artificial intelligence in recruitment and selection. *International Journal of Organizational Analysis*, 30(6), 1771-1782. <https://doi.org/10.1108/IJOA-07-2020-2291>
- [81] Pai, V., & Chandra, S. (2022). Exploring factors influencing organizational adoption of artificial intelligence (AI) in corporate social responsibility (CSR) initiatives. *Pacific Asia Journal of the Association for Information Systems*, 14(5), 4. <https://doi.org/10.17705/1pais.14504>
- [82] Pan, Y., Froese, F., Liu, N., Hu, Y., & Ye, M. (2022). The adoption of artificial intelligence in employee recruitment: The influence of contextual factors. *The International Journal of Human Resource Management*, 33(6), 1125-1147. <https://doi.org/10.1080/09585192.2021.1879206>
- [83] Parimalam, P. I., & Dhanabagiyam, S. (2023). Strategic role of artificial intelligence and the power of ehrm for innovative human resource management. *Asian Journal of Management*, 14(3), 207-210. <https://doi.org/10.52711/2321-5763.2023.00035>
- [84] PeopleGoal. (2021, April 16). Expectancy Theory to Motivate Employees. Retrieved from <https://www.peoplegoal.com/blog/expectancy-theory>.
- [85] Pew Research Center. (2023, April 20). AI in Hiring and Evaluating Workers: What Americans Think. Retrieved from <https://www.pewresearch.org/internet/2023/04/20/ai-in-hiring-and-evaluating-workers-what-americans-think/>.
- [86] Pillai, R., & Sivathanu, B. (2020). Adoption of artificial intelligence (AI) for talent acquisition in IT/ITeS organizations. Benchmarking: An International Journal, 27(9), 2599-2629. <https://doi.org/10.1108/BIJ-04-2020-0186>
- [87] Pogrebtsova, E., Luta, D., & Hausdorf, P. A. (2020). Selection of gender-incongruent applicants: No gender bias with structured interviews. *International Journal of Selection and Assessment*, 28(1), 117-121. <https://doi.org/10.1111/ijsa.12270>
- [88] Raş-Kettler, K., & Lehnervp, B. (2019). Recruitment in the times of machine learning. *Management Systems in Production Engineering*, 27(2), 105-109.
- [89] Rajesh, S., Kandaswamy, U., & Rakesh, A. (2018). The impact of artificial intelligence in talent acquisition lifecycle of organizations. *International Journal of Experimental Diabetes Research*, 6(2), 709-717.
- [90] Rathore, S. P. S. (2023). The Impact of AI on Recruitment and Selection Processes: Analysing the role of AI in automating and enhancing recruitment and selection procedures. *International Journal for Global Academic & Scientific Research*, 2(2), 51-63. <https://doi.org/10.55938/ijgasr.v2i2.50>
- [91] RecruitBPM, No author. (n.d.). AI recruitment technology: The future of hiring. RecruitBPM. <https://www.recruitbpm.com/blog/ai-recruitment-technology/#AI-Recruitment-Trends>
- [92] Rothenberger, L., Fabian, B., & Arunov, E. (2019, May). Relevance of Ethical Guidelines for Artificial Intelligence—a Survey and Evaluation. In ECIS.
- [93] Rukadikar, A., Pandita, D., & Choudhary, H. (2023, May). Adoption Of Artificial Intelligence In Talent Acquisition: The Need For The E-Business Environment. In 2023 8th International Conference on Business and Industrial Research (ICBIR) (pp. 228-232). IEEE. <https://doi.org/10.1109/ICBIR57571.2023.10147592>
- [94] Search Engine Journal. (2022, March 24). Google LaMDA: How Language Model for Dialogue Applications Work. Retrieved from <https://www.searchenginejournal.com/how-google-lambda-works/442064/>.
- [95] Seungwon S and Juyeon O. (2023). Results of introducing AI recruitment system. *Korean Journal of Entrepreneurship and Entrepreneurship*, 7(2), 137-155. <https://doi.org/10.48206/kceba.2023.7.2.137>
- [96] Singh, S. P., Srivastava, A., Dwivedi, S., & Pandey, A. K. (2023). AI Based Recruitment Tool. *International Journal for Research in Applied Science & Engineering Technology (IJRASET)*, 11(5), 2815-2819. <https://doi.org/10.22214/ijraser.2023.52193>
- [97] Sipahi, E.B., & Artantaş, E. (2022). Artificial Intelligence in HRM. Handbook of Research on Innovative Management Using AI in Industry 5.0. <https://doi.org/10.4018/978-1-7998-8497-2.ch001>
- [98] Soleimani, M., Intezari, A., & Pauleen, D. J. (2022). Mitigating cognitive biases in developing AI-assisted recruitment systems: A knowledge-sharing approach. *International Journal of Knowledge Management (IJKM)*, 18(1), 1-18. <https://doi.org/10.4018/IJKM.290022>
- [99] Spektor, B. (2022). Google AI 'is sentient,' software engineer claims before being suspended. Live Science <https://www.livescience.com/google-sentient-ai-lambda-le-moine>.
- [100] Tambe, P., Cappelli, P., & Yakubovich, V. (2019). Artificial intelligence in human resources management: Challenges and a path forward. *California Management Review*, 61(4), 15-42.
- [101] Tan, J. (2023, June 15). Regulation of AI in the workplace considered in the Philippines. HRM Asia. <https://hrmasia.com/regulation-of-ai-in-the-workplace-considered-in-the-philippines/>
- [102] Thompson, R. L., Higgins, C. A., & Howell, J. M. (1991b). Personal computing: Toward a conceptual model of utilization. *MIS Quarterly*, 125-143.
- [103] Thoppilan, R., De Freitas, D., Hall, J., Shazer, N., Kulshreshtha, A., Cheng, H. T., & Le, Q. (2022). LamDda: Language models for dialog applications. arXiv preprint arXiv:2201.08239.
- [104] Trakadas, P., Simoens, P., Gkonis, P., Sarakis, L., Angelopoulos, A., Ramallo-González, A. P., ... & Karkazis, P. (2020). An artificial intelligence-based collaboration approach in industrial IoT manufacturing: Key concepts, architectural extensions and potential applications. *Sensors*, 20(19), 5480. <https://doi.org/10.3390/s20195480>
- [105] Trziszka, M. (2023, September). Artificial intelligence in employee recruitment. In European Conference on Knowledge Management (1729-1731). <https://doi.org/10.34190/eckm.24.2.1782>
- [106] Uddin, M., Alam, M. S., Mamun, A. A., Khan, T.-U.-Z., & Akter, A. (2020). A Study of the Adoption and Implementation of Enterprise Resource Planning (ERP): Identification of Moderators and Mediators. *Journal of Open Innovation: Technology, Market, and Complexity*, 6(1), 2
- [107] Universität Düsseldorf: Psychologie – HHU. (n.d.). G\*Power. Retrieved June 18, 2023, from <https://www.psychologie.hhu.de/arbeitsgruppen/allgemeine-psychologie-und-arbeitspsychologie/gpower.html>
- [108] Upadhyay, A. K., & Khandelwal, K. (2018). Applying artificial intelligence: Implications for recruitment. *Strategic HR Review*, 17(5), 255-258.
- [109] Van E and Stewart B (2019). Factors That Influence New Generation Candidates to Engage with and Complete Digital, AI-Enabled Recruiting. *Business Horizons*. 729-739

- [110]Vardarlier, P., & Zafer, C. (2020). Use of artificial intelligence as business strategy in recruitment process and social perspective. *Digital Business Strategies in Blockchain Ecosystems: Transformational Design and Future of Global Business*, 355-373. [https://doi.org/10.1007/978-3-030-29739-8\\_17](https://doi.org/10.1007/978-3-030-29739-8_17)
- [111]Veena, K., & Sharma, D. P. (2018). HR Transformation through artificial intelligence. In *International Conference on Digital Innovation: Meeting the Business Challenges* (pp. 199-207).
- [112]Venkatesh, V., Morris, M. G., Davis, G. B., & Davis, F. D. (2003). User acceptance of information technology: Toward a unified view. *MIS Quarterly*, 27(3), 425–478.
- [113]Vivek, R. (2023). Enhancing diversity and reducing bias in recruitment through AI: a review of strategies and challenges. *Информатика. Экономика. Управление/Informatics. Economics. Management*, 2(4), <https://doi.org/10.47813/2782-5280-2023-2-4-0101-0118>
- [114]Wilson, H. J., & Daugherty, P. R. (2018). Collaborative intelligence: Humans and AI are joining forces. *Harvard Business Review*, 96(4), 114–123.
- [115]Xu, S., Kee, K. F., Li, W., Yamamoto, M., & Riggs, R. E. (2023). Examining the Diffusion of Innovations from a Dynamic, Differential-Effects Perspective: A Longitudinal Study on AI Adoption Among Employees. *Communication Research*, 00936502231191832. <https://doi.org/10.1177/00936502231191832>
- [116]Yadav, M., Kakkar, M., & Kaushik, P. (2023). Harnessing Artificial Intelligence to Empower HR Processes and Drive Enhanced Efficiency in the Workplace to Boost Productivity. *International Journal on Recent and Innovation Trends in Computing and Communication*, 11(8s), 381-390. <https://doi.org/10.17762/ijritcc.v11i8s.7218>