**Master of Business Administration Programme**

**LCMB7035 – Dissertation (Research Proposal)**

# Topic: Digital Recruitment Process: Reducing Manual Work in Hiring

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# Table of Contents

1. Introduction ..... 2

1.1 Background and Introduction of Research ..... 2

1.2 Problem Statement and Rationale ..... 3

1.3 Aim and Objectives ..... 3

1.4 Research Questions ..... 4

2. Literature review ..... 4

2.1 Strategies and tools in digitalised recruitment process ..... 4

2.2 Effectiveness of Digital tools usage in Selection ..... 5

2.3 Challenges and Barriers of using digital tools in Selection process ..... 6

2.4 Theoretical Framework ..... 6

3. Methodology ..... 8

4. Expected findings ..... 9

5. Limitations ..... 9

6. Timeframe ..... 10

7. Conclusion ..... 10

Reference List ..... 11

# 1. Introduction

## 1.1 Background and Introduction of Research

Selection and the recruitment process are the crucial aspects for the successful function of the organisations while the traditional methods of selection are often time consuming, inefficient, and fail to meet the needs of both the candidates in the organisations. In this context within the corporate environment of recent times rapid changes are seen where intense competition is also vital for achieving and sustaining the talents of the companies to innovate the approaches of productivity with the innovation in the human resource management practices (Rukadikar *et al.*, 2025). Digitalisation has been a key factor for shaping, managing the human resources and engaging with the clients as well as improving the selection criteria by automation of shortlisting and scheduling the interviews with the job candidates for the efficient and optimised selection process (Magdalenić and Luić, 2025).

Chen (2022) indicates that the use of artificial intelligence, IoT, and pick data have been essential associated with the industry 4.0 tools to improve the recruitment efficiency while creating the issues of legal privacy and a recruitment bias and possibility of replacing the HR managers. Beveridge's report (2025) indicates that almost 48% of the UK recruitment agencies are using artificial intelligence-based tools for automation of the selection process of potential candidates.

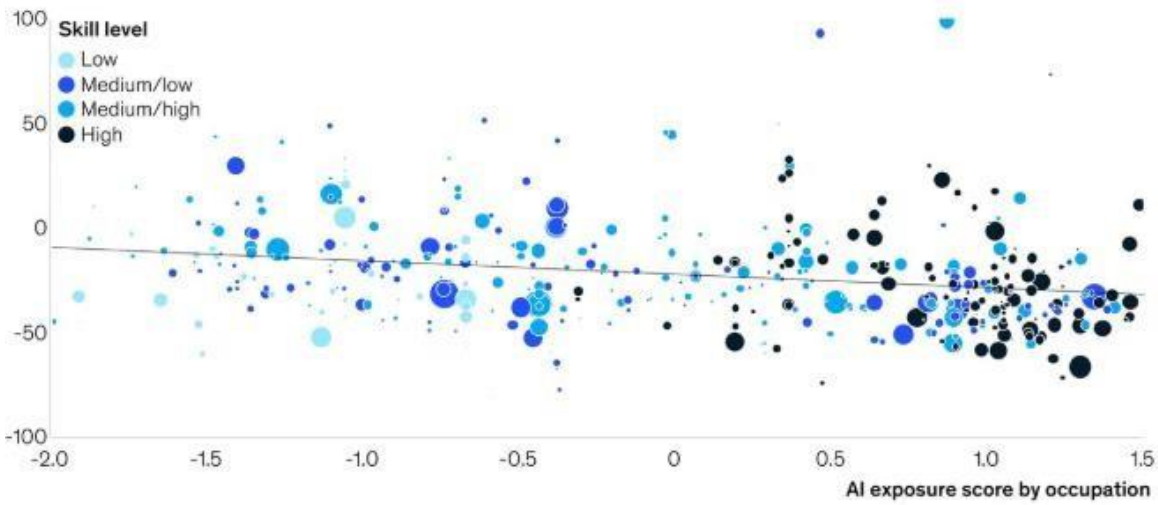


**Figure 1: Vacancy positions as per the skill levels in UK**

(Source: McKinsey & Company, 2025)

A report from McKinsey & Company (2025) on the other hand indicates that rapid automation has created the issues of loss of vacancies where between 2022 and 2025 the vacancies in the UK has

reduced by 43% while the unemployment has increased from 4.6% to 4.8%. The report also indicates that while there has been an increase of high skilled employees in the companies, there has been a rapid decrease of the low and medium skilled vacancies and positions in the UK. Among the different industries, the IT industry is severely impacted with the rapid adoption of digital tools usage for the recruitment and selection process.

Rukadikar *et al.* (2025) however, in the longitudinal analysis indicated that the use of AI and digital tools has significantly improved the momentum of the selection, while the effectiveness of user centric designs has been essential for selecting the candidates optimally and to improve the quality of talent sourcing. In this context the study will focus on analysing the impact of digital tools usage in the recruitment and selection process. As a scope of the study the research will focus on gaining the insights from the candidates and the HR managers as well as the workers in the IT sector of UK to analyse the effectiveness of digital tools usage on the selection and recruitment process while evaluating the main challenges from the perspectives of the employees.

## 1.2 Problem Statement and Rationale

Research papers such as Hewage (2023) while analysing the effectiveness of the AI tools in the recruitment and selection, identified that there is a reluctance of using AI in the recruitment pre planning and the interview stages due to the lack of skills as well as due to the issues of bias and effective evaluation of the candidate. The research of Chen (2023) also highlighted the issues associated with the algorithm related bias which can result in the discrimination in hiring practices based on the gender, race and colour as well as the personality traits. In this context the issues in the data set input can create the major problems within the companies regarding the selection process. The research in this context is viable for evaluating the contradictory ideas about the effectiveness of using digital tools in the interview and selection process of the candidates in the IT sector of the UK. There is also a major literature gap regarding the lack of evaluation of the employee and candidates' perspective regarding the use of digital tools in recruitment which will be focused on in the study for creating a bridge in this knowledge gap.

## 1.3 Aim and Objectives

### Aim

The main aim of the research is analysing the effectiveness of the use of digital tools on the recruitment and selection process in the IT industry of the UK.

### Objectives

- To evaluate and analyse the recent practices of using digital tools for recruitment and selection process in the IT companies of the UK.
- To investigate the impact of digital tools usage on the efficiency of selecting the candidates in the IT industry of the UK.
- To identify the major challenges and barriers of using digital tools in recruitment and selection process in the IT industry of the UK.
- To evaluate and provide the insights into the best practices for avoiding the challenges and barriers of using digital tools in recruitment and selection process.

### 1.4 Research Questions

- What are the recent Strategies and tools utilised for the digitalised recruitment and selection process in the IT sector of the UK?
- What are the major impacts of using digital tools in recruitment on the talent sourcing strategies of the IT companies?
- What are the major challenges regarding the use of digital tools for recruitment and selection in the IT companies of the UK?
- What are the best practices regarding the digital tools usage in the recruitment and selections in IT companies of the UK?

## 2. Literature review

### 2.1 Strategies and tools in digitalised recruitment process

The digitalisation of the recruitment has changed the process of attraction by the organisations for evaluating the candidates while replacing the traditional methods. According to Magdalenić and Luić (2025) integration of the digital tools through the design thinking methodology allow the HR professionals to innovate the hiring Strategies and align the candidate engagement with the organisation culture. Memon *et al.* (2024) Indicated a wide range of the digital tools from the AI based sourcing platforms to the applicant tracking systems that streamlined the job positions and posting and automating screening of CV. These tools enhance recruitment speed and increase the talent pool. However, Rukadikar *et al.* (2025) argue that file digital recruitment increases efficiency to also create the issues of over dependence on the algorithm in decision making and reducing human judgement.

Tursunbayeva et al. (2025) found that use of AI based recruitment platforms significantly influenced organisation-based attractiveness and also associated digital hiring with innovation.

Similarly, Ouakili (2025) while using the RBV theory indicates use of AI and predictive analytics improve the competitive advantages of the organisations for achieving greater talent. Hewage (2023) on the other hand points out that lack of personal interaction can also eliminate applicants which suggest the need for hybrid strategies. Despite the significant work on the automation in the recruitment process the long-term strategic integration of the agreed Strategies and ecosystem associating these tools are limited.

## 2.2 Effectiveness of Digital tools usage in Selection

Effective dress of the use of digital tools in the selection is mainly based on reducing the issues of bias of the HR managers and enhancing the objectivity while accelerating the decision making. Chen (2022) argues that collaboration between the recruitments and the AI systems reduce the unconscious human prejudice by focusing on the candidate evaluations on the data rather than subjective impressions. In the similar manner Paramita *et al.* (2024) show that AI enhances the decision-making accuracy by analysing the data of candidates across the different parameters including the skill and experience and psychometric skills. Horodyski (2023) also adds that candidates perceive AI based assessment as a fair factor when transparency is ensured and improves the reputation of the employer.

Chen (2023) however indicates that algorithmic models can reproduce the hidden bias from the historical data leading to the ethical dilemma. Ligeiro *et al.* (2024) Similarly found that why AI improves the speed of selection, they can create anxiety of candidates due to opaque elevation metrics. Ekuma (2023) from the perspective of the operation emphasizes that automation streamline the selection by improving the consistency, it creates the risk of neglecting the contextual nuance of the human recruiters including interpersonal fit or cultural alignment.

Rukadikar et al. (2025) also indicate that perceived effectiveness of the AI based selection depends on the readiness of the organisation and the digital literacy of the HR managers.

The current studies mainly focus on the technology and the ethical dimensions of the AI effectiveness while there is a lack of research regarding the holistic impact of the hiring outcomes including employee tension and performance after the hiring and cultural integration regarding the digital selection.

## 2.3 Challenges and Barriers of using digital tools in Selection process

Despite the advantages, digital tools present significant challenges in the selection process. Sýkorová et al. (2024) Emphasize the technical and ethical concerns related to the algorithmic bias and privacy violation as the AI based assessment often depends on the sensitive personal data.

Chen (2023) similarly argues that digital selection can perpetuate structural discrimination when machine learning models are trained on the biased data set. Hewage (2023) notes that organisations often lack the expert level knowledge in interpreting the AI output leading to the misinformed decisions. Additionally, Ouakili (2025) identified the technical barriers, including the system integration failure and data quality issues which impact the consistent tool performance across the different recruitment stages.

Tursunbayeva et al. (2025) Reveal the perceptual challenges when candidates feel dehumanised when interacting with automated interviews impacting the experience of the candidates. This is supported by Ligeiro et al. (2024) who report that applicants distrust automated selection perceiving them as impersonal. Paramita et al. (2024) Moreover argue that resistance to digital transformation within HR Teams due to the lack of training and fear of job displacement reduce the speed of AI based selection systems.

## 2.4 Theoretical Framework

### Statistical Discrimination theory

According to Chen (2023), statistical discrimination theory explains how the AI in the recruitment can make biased decisions by focusing on the historical group data rather than individual merit. In digital recruitment, this theory highlights the ethical risk of hair algorithms intentionally replicating human prejudice leading to the racial or gender bias in candidate screening. It is also alive with concurrent research by emphasizing the need for transparent data management and ethical AI design to ensure the fairness and inclusion in the automated hiring systems.

### UTAUT Model

As Hewage (2023) explains, UTAUT identifies performance expectancy, effort expectancy, and social influence as being the key factor for influence in the adoption of AI in the recruitment.

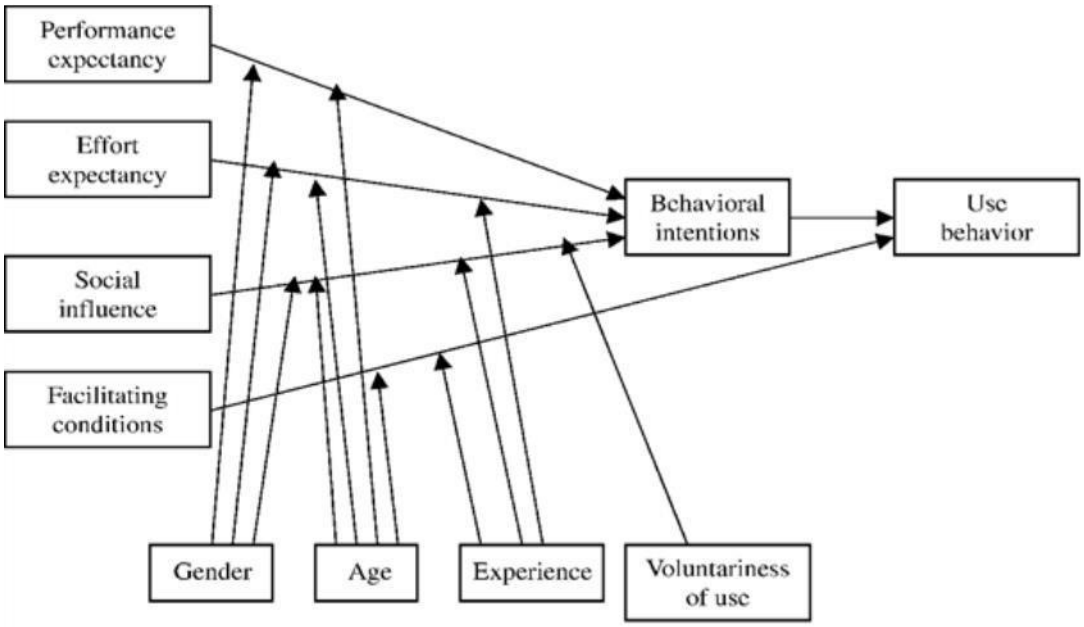


**Figure 2: UTAUT model**

(Source: Adapted from Hewage, 2023)

The model aligns with the concurrent research by explaining why the recruiters and the organisations embrace or resist the digital hiring tools. It shows that acceptance mainly depends on the perceived usefulness and the use of use factors as well as the support from the organisation level.

**Technology Acceptance Model (TAM)**

Rukadikar *et al*. (2025) Apply the technology acceptance model to show that perceived usefulness and ease of use determine the willingness of recruiters to adopt the AI tools.

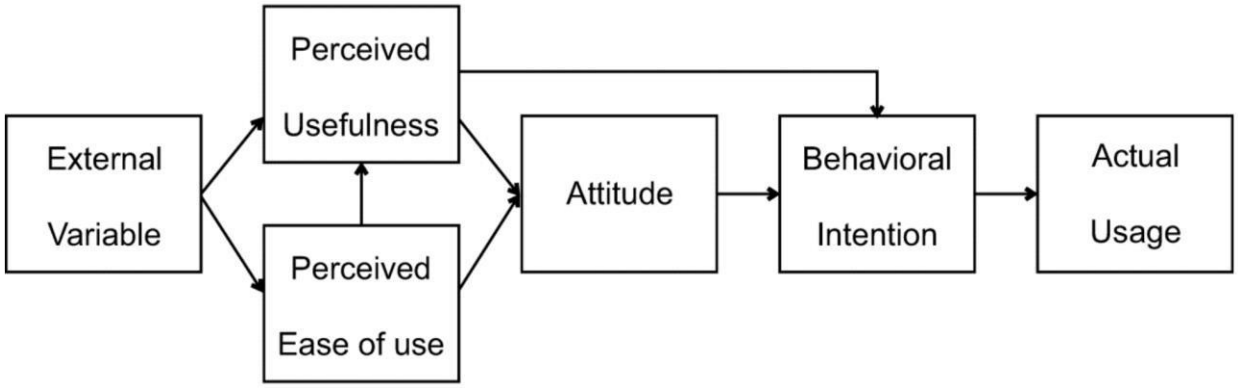


**Figure 3: Technology Acceptance Model**

(Source: Adapted from Rukadikar *et al.*, 2025)

In the digital recruitment, TAM aligned by illustrating that acceptance of the AI based systems depend on the trust of the users and familiarity and their confidence in the ability of technology to improve the efficiency and decision quality.

## 3. Methodology

In terms of the methodology the study will utilise positivism-based epistemology as the main methodology and philosophy in the research. It will particularly focus on achieving the anticipated results regarding effectiveness of the automated tools utilisation for the selection and recruitment in the IT industry of the UK (Gupta and Gupta, 2022). Moreover, it will also focus on evaluating the social construct regarding AI use in selection while maintaining a structured approach by using the primary quantitative data. Moreover, it will also use the deductive approach for analysing the effectiveness of the conceptual frameworks including UTAUT, Statistical Discrimination model and TAM (Saharan *et al.*, 2024).

The research will use the primary quantitative data through the process of conducting a survey. The primary quantitative data is effective in this research as it will get her the greater consensus from the HR managers, employees and the candidates in the IT industry of UK while providing the measurable statistics about the effectiveness and challenges of using automation tools in the recruitment and selection process (Verma *et al.*, 2024). A survey will be conducted by using a survey questionnaire comprising 12-15 close ended questions with given options to be chosen as response. The survey will be shared by the Google form to the participants within their personal email. A total number of 100 samples will be gathered in the research from of the survey participants who belong to the IT industry of UK working as the HR manager and employees, and candidates. The social media advertisements will be used for recruiting the candidates. Social media posts about the voluntary participation will be posted and the interested participants will be contacted. In that case the social media platforms such as Facebook, LinkedIn will be used. A simple random sampling will be used for randomly selecting 100 participants to reduce the participant selection bias (Dubey and Kothari, 2022).

In terms of the data analysis the 5-point Likert scale (Strongly Agree- Strongly Disagree) will be used in the survey questionnaire as the scale. Moreover, the collected responses from the Google form will be recorded by the MS Excel and it will be transferred into SPSS for the data analysis. Both of the descriptive statistics and inferential statistics will be analysed by the descriptive statistics will evaluate the rate of using AI in the recruitment and selection. The inferential statistics

including correlation, Regression, ANOVA analysis will suggest the impact of the usage of AI and automation on the effectiveness and better outcome of the selection and recruitment while indicating the challenges and barriers.

**Ethical considerations**

The main ethical challenges are associated with the data privacy management of the participants. In this case no data associated with the identification of the candidates will be collected in the survey. Moreover, a written participant information sheet will be given for acknowledging the rights of participants regarding drawing themselves at any point of the survey. The written consent will also be collected before proceeding into the data collection process from the participants. The data will be recorded in the university library 365 account with the ID and password protection.

## 4. Expected findings

As the expected findings the study will gather the consensus of the HR managers and the employees regarding the effectiveness of using digital tools including AI and IoT and Data analytics for screening the CVs of the candidates and selecting the efficient employees. It will also analyse if the automation tools are effective for improving the optimal recruitment process in the IT companies of the UK or if it is creating the issues of biased recruitment due to the limited data set. The recommendations will also be developed focusing on the challenges and barriers including improving the digital literacy of the HR managers and recruiters as well as utilising the hybrid forms of selection such as screening the CVs through the automation tools and human interactions in the interviews of the candidates in the IT industry.

## 5. Limitations

The main limitation of the study is associated with the cross-sectional data collection through a survey. The sample of 100 population can only be a fragment of the stakeholders in the IT industry where larger populations and their ideas are excluded. Moreover, the lack of longitudinal data can also create issues regarding lack of understanding about the mitigation Strategies and best practices about the usage of AI and automation tools in recruitment and selections and its evolution. Moreover, there will be a lack of qualitative insights regarding the real-life challenges faced by the candidates as well as the each or managers due to the lack of human interactions in selection.

## 6. Timeframe

| Tasks / Activities | Week 1 | Week 2 | Week 3 | Week 4 | Week 5 | Week 6 | Week 7 | Week 8 | Week 9 | Week 10 | Week 11 | Week 12 |
|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1. Topic finalisation and research objectives | | | | | | | | | | | | |
| 2. Literature review development | | | | | | | | | | | | |
| 3. Designing survey questionnaire | | | | | | | | | | | | |
| 4. Pilot testing and refinement of survey | | | | | | | | | | | | |
| 5. Ethical approval / consent process | | | | | | | | | | | | |
| 6. Data collection (survey distribution) | | | | | | | | | | | | |
| 7. Data entry and cleaning | | | | | | | | | | | | |
| 8. Data analysis (Excel statistical analysis) | | | | | | | | | | | | |
| 9. Interpretation and discussion of findings | | | | | | | | | | | | |
| 10. Drafting results and discussion chapters | | | | | | | | | | | | |
| 11. Proofreading and supervisor feedback | | | | | | | | | | | | |
| 12. Final submission of report | | | | | | | | | | | | |

## 7. Conclusion

In conclusion, the research regarding the analysis of automation and digital tools usage for the recruitment and selection of the candidates in the IT industry of the UK is vital for evaluating the impacts of algorithmic bias and the current strategies. It will also help in understanding and providing the recommendations regarding the hybrid usage of automation tools and human HR managers regarding the selection while focusing on the academic literature gap regarding the perspectives of the candidates and the HR managers in the IT industry.

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