



Analysis of Blue-Collar Workers' Intention to Use a Job-Seeking Application Feature using Unified Theory of Acceptance and Use of Technology Model

Amalia Suzianti^{1*}, Gusti Ayu Rifamutia Krishna Devi¹, Safira Nurul Fathia²

¹Department of Industrial Engineering, Faculty of Engineering, Universitas Indonesia, Kampus Baru UI Depok, 16424, Indonesia

²Department of Industrial Engineering and Management, KTH Royal Institute of Technology, Kungliga Tekniska Högskolan, SE-100 44, Stockholm, Sweden

Abstract. The introduction of technology has caused an improvement in the recruiting sector, replacing old methods with more simplified and effective procedures. Recruiters can now access a wide range of technical developments by integrating digital platforms and tools, which helps them more successfully attract and hire top talent. This study employs the Unified Theory of Acceptance and Use of Technology (UTAUT) model and Partial Least Squares Structural Equation Modeling (PLS-SEM) to examine blue-collar workers' intentions to use an e-recruiting platform. The study, which included 212 respondents, provided insight into the variables of performance expectation, effort expectation, social impact, and facilitating conditions that affect people's propensity to use the job-seeking platform. The analysis of the data showed that effort expectations and social influence had an impact on behavioral intention, and behavioral intention had an impact on usage behavior. A thorough strategy was developed through data analysis, utilizing the Strengths, Weaknesses, Opportunities, Threats (SWOT) matrix and the Reach, Impact, Confidence and Effort (RICE) rating system. The conclusions and prioritized methods provided by the researchers serve as valuable tools for those engaged in the recruitment sector. This information empowers them to leverage technology effectively and make informed decisions to enhance the acceptance and utilization of e-recruiting platforms among blue-collar employees.

Keywords: Blue-collar workers; E-recruitment; PLS-SEM; Technology adoption; UTAUT model

1. Introduction

To meet the needs of life, people look for work to earn income. However, in practice, finding a suitable job is not easy. Obstacles in obtaining available job vacancy information are one of the problems faced by job seekers. Job seekers are required to be able to access the job vacancy information. With a lack of information regarding job vacancies, job seekers use conventional methods such as visiting individual shops, homes, or companies to only find out about job availability (Huda and Apriyanto, 2019). The emphasis on technological advancement in developing economies has significantly transformed the hiring procedures within industries (Felgenhauer *et al.*, 2017). The result of this transformation is e-recruitment (Stone and Dulebohn, 2013). Job-seeking application is the practice of using the internet to connect employers with the most qualified individuals. Automating boring,

*Corresponding author's email: suzianti@ui.ac.id, Tel.+628159130611
doi: [10.14716/ijtech.v15i2.6689](https://doi.org/10.14716/ijtech.v15i2.6689)

routine tasks is possible. Numerous vocations are progressively changing as a result of the widespread use of digital technologies (Rodionov *et al.*, 2022).

These technologies include job search engines, career pages, applicant tracking systems, pre-screening/self-assessment tools, talent pool systems, and video ads. There are also social media, candidate relationship management systems (Lee, 2011), and candidate seekers. A system is needed because it can help connect the two parties to meet the needs of finding and recruiting job candidates. Numerous employers turned to digital technology as their contingency plan to continue operating via teleworking and solutions such as video conferencing, cloud services, and virtual private networks (Moganadas and Goh, 2022). Indeed, it is an opportunity, especially for an e-recruitment platform company, to offer job search services in the form of mobile applications (Cahyono, 2016). In Indonesia, a high unemployment rate occurs among blue-collar employees.

Blue-collar workers are workers who occupy non-managerial positions or tend to be low-skilled. The classification is based on Klasifikasi Baku Jabatan Indonesia (KBJI) according to the International Standard Classification of Occupations (ISCO). Based on Eurofound (2010), the KBJI/ISCO codes 6, 7, 8, and 9, which correspond to skilled agriculture and fisheries workers, craft and allied trades employees, plant and machine operators and assemblers, and elementary vocations, are included in the category of blue-collar workers (Eurofound, 2010).

According to data from the Indonesian Central Bureau of Statistics (BPS) (2018), the unemployment rate for informal workers in Indonesia was 5.99% in February 2021. The large percentage of informal workers aligns with the country's low education level. In addition, there are still many small and medium enterprises that have not been able to increase their economies of scale and develop the skills of their workers. Furthermore, digitalization has encouraged many young people to seek more flexible jobs. However, workers in the informal sector have a relatively high level of work risk.

Therefore, the 77.9 million informal workers in Indonesia underscore the urgent need to tackle the unemployment problem faced by blue-collar workers and the high unemployment rate of 5.99% among blue-collar workers, further highlights the need for successful interventions. This number will be reduced by the implementation of online applications for recruitment, specifically for blue-collar workers.

Though the focus is on blue-collar workers adopting online applications for recruitment, no study has examined the factors of blue-collar workers in adopting these e-recruitment job applications. Few studies in the literature have researched to explore the factors in students' behavioural intention to use job search apps (Dhiman and Arora, 2018; Hosain *et al.*, 2016), while research on individuals who are already employed, such as blue-collar or white-collar, is still quite limited. Therefore, this study contributes to helping the individuals who are employed, specifically blue-collar workers, to adopt the e-recruitment app to decrease the unemployment rate in Indonesia.

As a result, this study aims to understand the factors that allow the application developer to create specific strategies that address their needs and concerns, driving faster application adoption. This online e-recruitment platform will offer organizations and job seekers the opportunity to search for jobs based on their best match. Mobile job search apps, being powerful tools readily accessible to job seekers, require a deep understanding of the variables influencing their usage to maximize their impact. This raises the research question, 'What factors influence the use of job search applications for blue-collar workers?'. Understanding these elements allows us to create specific strategies that address their needs and concerns, driving faster application adoption. Accordingly, the

author thinks that using digital solutions will assist in resolving these problems gradually (Chan *et al.*, 2022).

2. Methods

In this research, two main methodologies were used to determine the factors influencing blue-collar workers to adopt an e-recruiting platform: the UTAUT model and the PLS-SEM method. After determining the factors, the strategies are then formulated using the SWOT Matrix and assessed using the RICE Scoring Model. The methodology that was carried out in this study consisted of several stages. The first stage involved establishing research objectives, identifying research limitations, defining the research methodology, and establishing a systematic approach to research writing to ensure a systematic and well-structured presentation. In order to conduct this research, the author consulted various sources, including books, journals, and previous studies, to gather literature studies.

The next stage is data collection, where the author distributes questionnaires to respondents who fit the criteria. Data obtained from the questionnaire results were then processed using Structural Equation Modelling (PLS-SEM). Next, the results were analysed and used as a reference in designing strategies. Strategy planning is done by reviewing previous literature and mapping out the strategy with a SWOT Matrix, which experts will validate and prioritize using the RICE scoring method to prioritize the strategy. The findings obtained from data processing and analysis are concluded in the concluding section at this stage. This stage is also explained regarding the final results of the strategy recommendations that have been validated. Furthermore, suggestions are written as a form of improvement and strategy recommendations for related stakeholders. Lisrel 8.80 SEM was employed. Measures of the UTAUT model and e-service quality measures as the independent variable and intention to use as the dependent variable make up the measuring model. Additionally guaranteed were validity, dependability, and unidimensionality (Albugami and Zaheer, 2023).

2.1. Unified Theory of Acceptance and Use of Technology (UTAUT) Model

The research uses this model to check and explain the significant variables that control blue-collar workers' adoption of e-recruitment tools. One of the newest models for technology adoption produced by Venkatesh, Thong, and Xu, (2012) is called UTAUT. According to Venkatesh *et al.* (2003), UTAUT was more effective compared to the other eight theories with response up to 70% of user variance. Seven factors that appeared to be the essential direct drivers of behavioural intention or use behaviour in each model were discovered after analysing the eight models (Venkatesh, Thong, and Xu, 2012).

The new conceptual model recognizes that supportive environments indirectly impact usage behaviour by influencing individual's behavioural intentions to adopt technology, thus incorporating this adjustment. This model was an updated representation of the Unified Theory of Acceptance and the Use of Technology Model (UTAUT) by Venkatesh *et al.* (2003), which more accurately depicts the interactions between the variables in the research context and reflects a more nuanced view of the process as shown in Figure 1.

Some of the variables employed are drawn from various previous research. These variables are performance expectancy, effort expectancy, social influence, facilitating condition, behavioural intention, and usage behaviour. The variable shown in the modified model is one of the references in developing the initial conceptual model in this research, as shown in Table 1.

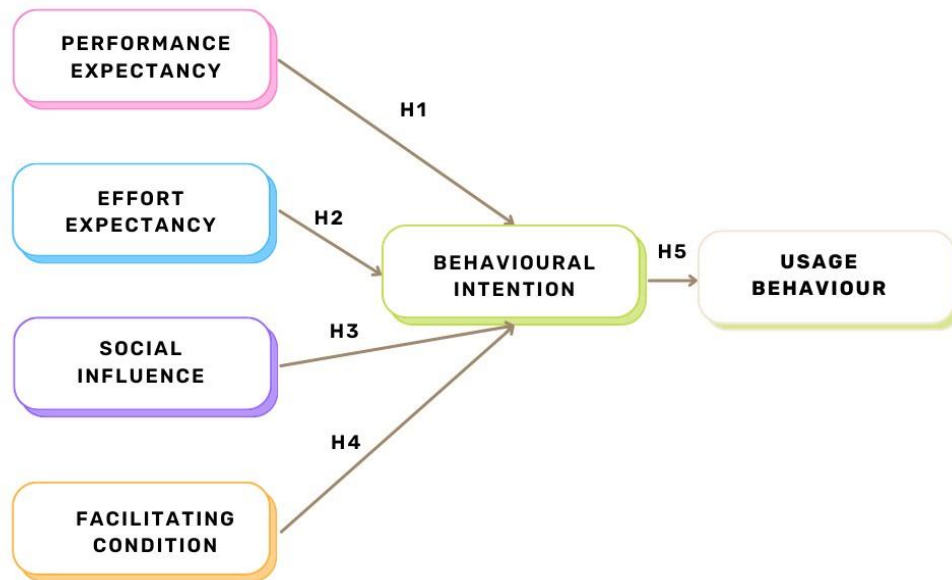


Figure 1 Conceptual Model of the Research

Table 1 Hypothesis Construction

Hypothesis	Definition	References
H1	Performance expectancy has significant impacts on the blue-collar workers’ intention to use this feature of the application in job seeking.	(El-Ouiridi <i>et al.</i> , 2015)
H2	Effort expectancy has significant impacts on the blue-collar workers’ intention to use this feature of the application in job seeking.	(Venkatesh <i>et al.</i> , 2003)
H3	Social Influence has a significant impact on the blue-collar workers’ intention to use this feature of the application in job seeking.	(Dhiman and Arora, 2018)
H4	Facilitating Conditions has significant impacts on the blue-collar workers’ intention to use this feature of the application in job seeking.	(Venkatesh <i>et al.</i> , 2003)
H5	Behavioral intention has significant impacts on the blue-collar worker’s usage behavior.	(El-Ouiridi <i>et al.</i> , 2015)

This modification in the conceptual model, specifically the change from facilitating condition to usage behaviour and then to behavioural intention, is supported by relevant research on the adoption of e-recruitment mobile apps (Dhiman and Arora, 2018). The research, entitled “Adoption of E-Recruitment Mobile Apps: An Integrated Model of UTAUT and Innovation Diffusion Theory”, provides empirical evidence and theoretical insights that support the mediated contact between facilitating conditions, behavioural intention, and usage behaviour.

2.2. Questionnaire Design

The survey aimed to collect data in the form of perceptions related to users' continued usage of the application. The questions, as shown in Table 2, were structured using an instrument adapted from Venkatesh, Thong, and Xu (2012).

Table 2 Questionnaire Construction (Adapted from Venkatesh, Thong, and Xu (2012))

Performance Expectancy	<ul style="list-style-type: none"> I feel that the “Apply” feature in the job-seeking Application helps me in my job search Using the “Apply” feature in the job-seeking application increased my productivity I found the “Apply” feature in the job-seeking application useful in my life Using the “Apply” feature in the job-seeking application allows me to find work much faster
Effort Expectancy	<ul style="list-style-type: none"> I think the “Apply” feature in the job-seeking application is easy to use Learning to operate the “Apply” feature in the job-seeking application was easy for me My interaction with the “Apply” feature in the job-seeking application was clear and easy to understand It's easy for me to become proficient in using the “Apply” feature in the job-seeking application
Social Influence	<ul style="list-style-type: none"> People who are important to me recommend using the “Apply” feature in the job-seeking application People who influence my behavior want me to use the “Apply” feature in the job-seeking application to find work People whose opinions I value support me using job search with the “Apply” feature in the job-seeking application In general, my surroundings support me to use the “Apply” feature in the job-seeking application
Facilitating Condition	<ul style="list-style-type: none"> I have enough resources to use the “Apply” feature in the job-seeking application I have sufficient knowledge to use the “Apply” feature in the job-seeking application People (or groups) will be willing to help me with difficulties using the “Apply” feature in the job-seeking application Special instructions (such as video tutorials and steps for using the application from the job-seeking social media) regarding the “Apply” feature in the job-seeking application
Behavioral Intention	<ul style="list-style-type: none"> I frequently use the “Apply” feature in the job-seeking application for job searching I recommend the “Apply” feature in the job-seeking application to others who are looking for a job I intend to use the “Apply” feature in the job-seeking application in the next 12 months I plan to use the “Apply” feature in the job-seeking application over the next 12 months
Usage Behavior	<ul style="list-style-type: none"> I use the “Apply” feature in the job-seeking application to improve the quality of myself to increase the chances of being accepted for work I use the “Apply” feature in the job-seeking application to find various job vacancies that are guaranteed credibility I used the “Apply” feature in the job-seeking application to apply for various job vacancies

2.5. Data Collection and Processing

The category of data used in this study is primary, where the data retrieved comes from a direct collection of respondents through a questionnaire. Primary data is used to answer questions concerning the observed research variables (Creswell and Creswell, 2017).

Subsequently, additional data collection is carried out to perform a more strategic analysis, continuing from the results of the PLS-SEM analysis, which was provided by multiple experts who participated as respondents. The expert respondents have a background in being Product Managers or Quality Assurance with experience of more than five years.

2.6. Respondent Distribution

The estimation technique employed in this research follows [Bentler and Chou \(1987\)](#), which advocates a sample size in structural equation modeling adhering to the 5:1 principle (for every one indicator, there are five measuring respondents) ([Bentler and Chou, 1987](#)). Thus, based on the theory of [Bentler and Chou \(1987\)](#), the minimum number of respondents required, or the minimum sample size, is at least 115 respondents. After the distribution of the research survey, a total of 212 responses were obtained. The majority of the respondents were living in Jakarta, accounting for a percentage of about 26.3% or 57 respondents; most of the respondents were high school graduates with a percentage of about 46.9% or 100 respondents, and the most significant portion of the respondents were born in the range of 1997-2006, accounting for about 60.1% or 127 respondents.

2.7. Partial Least Squares Structural Equation Model

Scientific studies have increasingly used structural equation modeling (SEM)—a potent multivariate tool to verify and evaluate multivariate causal linkages—as a method. In contrast to other modeling techniques, SEMs look at the direct and indirect effects on suggested causal links. SEM is a statistical method that has been around for about a century and has evolved through three periods. The initial generation of SEMs built the causal modeling logic using path analysis ([Wright, 1934](#)).

There are two main methods for implementing SEM. [Joreskog and Sörbom \(1993\)](#) and [Joreskog \(1969\)](#) popularized covariance-based SEM in the beginning of the 1980s ([Joreskog and Sörbom, 1993](#); [Joreskog, 1969](#)). The following primary SEM methodology is variance-based SEM, commonly referred to as composite-based SEM. Between variance-based SEM, partial least squares structural equation modeling (PLS-SEM) is regarded as a fully developed and general approach ([Hair, Sarstedt, and Ringle, 2019](#)). The access that is most frequently used in social sciences studies is PLS-SEM, which was first introduced by [Wold \(1980\)](#), made famous by [Chin \(1998\)](#), and more recently by ([Hair et al., 2012](#); [Chin, 1998](#); [Wold, 1980](#)).

2.8. SWOT Matrix and RICE Scoring Model

Strategy design in this research used the combination of the SWOT matrix and RICE Scoring Model. SWOT matrix is used for developing recommendation strategies using the SWOT matrix method, while strategies were prioritized and selected using the RICE scoring tool from the expert for assessment. The scoring methodology uses the RICE scoring algorithm as it prioritizes the strategies with higher scores above those with lower scores, which could help stakeholders determine the most optimal strategy to implement. Subsequently, three strategies will be identified based on the highest RICE value.

3. Results and Discussion

This study employs the modified version of the Unified Theory of Acceptance and the Use of Technology (UTAUT) model to measure the behaviour of blue-collar workers based on the adoption of technology. The survey questionnaire was designed regarding relevant studies, and additional data collection involved seeking input and suggestions from experts to assess the strategy questionnaire that had been prepared. This research specifically focuses on blue-collar employees in the Greater Jakarta and Bandung areas who have

utilized their e-recruitment application to apply for jobs online. The questionnaire results were then processed using SmartPLS4 software to evaluate the PLS model.

3.1. Data Processing and Analysis

After developing the questionnaire and defining the conceptual model of the research, a pilot test is administered to assess its validity and reliability before distributing it widely. The pilot test involves a smaller group of respondents, typically at least 30 individuals (Aziati, Juhana, and Hazana, 2014). This research conducted pilot testing with a sample of 63 respondents. The validity test was carried out by comparing the r count and r table of each question indicator. If the value of r count > r table, then the questionnaire questions are considered valid. Based on the results, all of the items' r values are more than the r table, meaning they are valid. Testing was done with IBM SPSS Statistics 20 software. Furthermore, the reliability test was carried out on the research survey. Test reliability is done in order to know the consistency of answers from respondents to questionnaires to be trusted. Reliability leads to the sense that the instrument used in research proved reliable (Hair et al., 2012). A research tool is said to be reliable if the value of Cronbach's Alpha is > 0.6. In this research, the Cronbach alpha is 0.867 for 23 indicators; therefore, it is considered reliable.

To produce a robust model, a path diagram is designed, as depicted in Figure 2. This illustration provides insights into the connections between latent variables, and the direction of the relationship between latent variables and indicator variables, where the type of indicator construct is used is a reflective indicator construct.

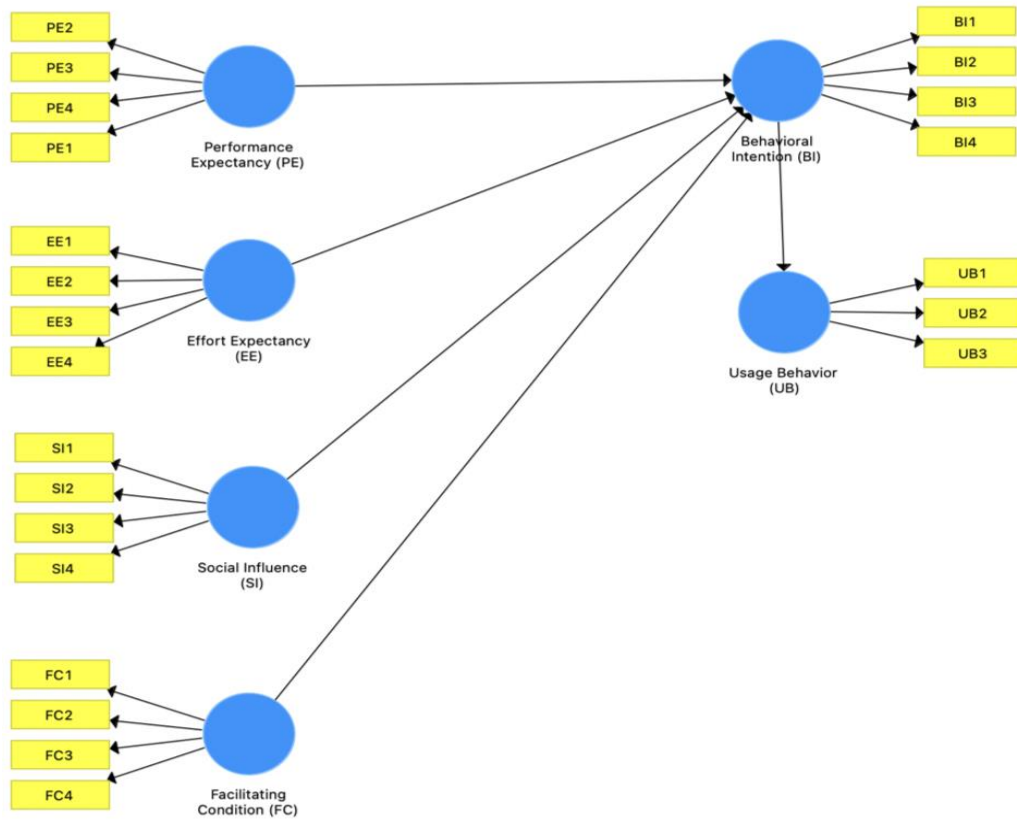


Figure 2 Path Diagram of the Research

3.1.1 Measurement Model Testing (Outer Model)

In testing the outer model, measurements were made using convergent validity (outer loadings and average variance extracted or AVE values), internal consistency reliability

values (CA & CR values), and discriminant validity (HTMT values and Fornell-Larcker criterion). Convergent validity is used to measure the correlation of an indicator variable with other indicator variables. The outer loading value of the indicator variable must be greater than 0.7. Meanwhile, AVE is used to measure the ability of latent effect to explain the variance of the indicator variables. The AVE value for good convergent validity is greater than 0.5 (Hair, Sarstedt, and Ringle, 2019). To measure the discriminant validity of the HTMT criteria, the parameters of the HTMT value need to be less than 0.9 (Hair, Sarstedt, and Ringle, 2019). In this study, all indicators of the outer model are valid and meet the requirements.

3.1.2 Measurement Model Testing (Inner Model)

In testing the inner model, measurements are made using collinearity measurements (VIF values), coefficient of determination (R2), stone-geisser's Q2, and path coefficient. VIF value parameters. According to Hair, Sarstedt, and Ringle (2019), VIF values within the range of greater than 0.2 and less than 5 are considered acceptable parameters. On the other hand, according to Bentler and Chou (1987), in social and behavioral research, the determination coefficient given if it is greater than 0.26 is said to be strong; if it lies between 0.13 and 0.26, then it is considered moderate, and if it is greater than 0.02 and smaller than 0.13, then it is considered small (Bentler and Chou, 1987). Moreover, the value of the coefficient of determination, or Q2, is a measure of the predictive relevance ability of the endogenous latent variables of a model, where this value is used to predict data outside the model. The good Q2 value, according to Hair, Sarstedt, and Ringle (2019), is greater than 0 (Hair, Sarstedt, and Ringle, 2019).

3.1.3 Model Hypothesis Testing

The hypothesis is considered acceptable if the p-value is less than 0.05 and the t-value is greater than 1.96 (Hair, Sarstedt, and Ringle, 2019). As depicted in Table 3, H1, H3, and H5 are accepted, while H2 and H4 are rejected. The two hypotheses were rejected because they did not meet the requirements for a p-value <0.05. For H2, it means that users do not view the effort needed to use the job search app as a significant obstacle or deterrent. For H4, it implies that job seekers have previous experience or exposure to job search apps, which makes them comfortable and knowledgeable about how to use them effectively.

Table 3 Hypothesis Construction

Hypothesis	Definition	t-value	p-value	Details
H1	PE → BI	2.724	0.007	Accepted
H2	EE → BI	0.186	0.852	Rejected
H3	SI → BI	3.190	0.002	Accepted
H4	FC → BI	1.642	0.101	Rejected
H5	UB → BI	2.954	0.003	Accepted

From this research, performance expectancy is one of the outputs expected to be created with behavioural intention. The relationship between performance expectancy (PE) and behavioural intention (BI) has a p-value below 0.05. Thus, the hypothesis is accepted. As highlighted by (El-Ouirdi et al., 2015), Performance Expectancy stands out as a crucial determinant of technology adoption. Therefore, app developers should prioritize enhancing the perceived usefulness of these apps, taking into account their specific target audience. As for the third hypothesis, which is accepted, social influence (SI) significantly affects behavioural intention (BI). According to Dhiman and Arora (2018), in the context of job search apps, if someone hears that their friends have found success in their job search using a particular app, they are more likely to adopt it themselves (Dhiman and Arora, 2018). Behavioural intention is defined by the motivational factors that influence a given

behaviour, where the stronger the intention to perform the behaviour, the more likely the behaviour will be performed. Since the p-value is less than 0.05, the relationship between the two variables, behavioural intention, and usage behaviour, can be deemed significant, and thus, the hypothesis is accepted. The intention to use information technology will influence the actual use of the information technology (El-Ouiridi *et al.*, 2015).

However, two hypotheses are rejected. The second hypothesis shows that Effort Expectancy (EE) does not significantly influence Behavioural Intention (BI). This means that users do not consider the effort required to use the job search app to be a significant barrier to adoption (Decman, 2015). Moreover, it is also shown that Facilitating Condition (FC) does not influence Behavioral Intention (BI). One possible reason is that the job seekers were familiar with the use of job search apps and believed that an organizational and technical infrastructure existed to support their use of the technology.

3.3. SWOT Matrix

These strategies, developed based on the TOWS Matrix analysis, enable organizations to make the most of their internal strengths, overcome weaknesses, seize external opportunities, and mitigate potential threats in the recruitment process, ultimately improving their chances of finding suitable candidates for their available positions. Furthermore, for each strategy, the relationship to the hypothesis is mapped on the model. This strategy is structured for all existing hypotheses, as shown in Table 4.

Table 4 Strategy Construction

No	Strategy	Linking to Hypothesis	References
1	Uses video games to learn about a job applicant's behavioral traits and soft skills, such as creativity, perseverance, extroversion, and leadership potential.	H1	(Chen and Haymon, 2016)
2	Provide education and certifications that are directly related to company requirements.	H3	(Chen and Haymon, 2016)
3	Before positions are fully filled, candidates are informed right away of the receipt of their applications. Rejected candidates are also informed of pre-screening results directly.	H1	(Cappelli, 2001)
4	Online Referral/Reward based recruitment service.	H3	(Chen and Haymon, 2016)
5	In order to avoid further limiting their talent pool by eliminating candidates on the basis of a potentially irrelevant individual difference variable (offline job fair), it may be advisable to consider putting in place a backup offline recruitment process.	H5	(Chen and Haymon, 2016)
6	Increasing the applicant pool (selecting candidates from a wider geographic range).	H1	(Chapman and Webster, 2003)
7	It has been demonstrated that increasing the applicant pool through social media recruitment is effective from the target perspective.	H3	(Kaur and Kaur, 2021)
8	To a large pool of possible employers, job seekers can acknowledge their abilities, experience, references, and other qualities (such as soft skills and digital badges that validate a certain competence), and freelancers can showcase their work and offer recommendations.	H1	(Chen and Haymon, 2016)

Table 4 Strategy Construction (Cont.)

9	The creators of e-recruitment platforms should keep improving the platforms' integrity, user-friendliness, and management and adding more opportunities for value-added activities.	H1	(Kaur and Kaur, 2021)
10	Recruiters should include crucial details like pay, location, job descriptions, and other pertinent information to help candidates make decisions.	H5	(Kaur and Kaur, 2021)
11	It's crucial for companies offering e-recruitment services to instruct job searchers on how to register for an account, complete and submit application forms, upload resumes, and do other tasks.	H3	(Kaur and Kaur, 2021)
12	Keeping applicant information with personal features, sending numerous job applications, and receiving real-time responses from the system.	H1	(Chan and Lau, 2002)

3.4. RICE Scoring Method

After developing strategic recommendations using the SWOT matrix method, strategy recommendations were validated and assessed using the RICE scoring method. Reach, Impact, Confidence, and Effort are the letters in the acronym RICE. Each element receives a score, and the items are ranked and prioritized using the overall score. In this phase, the stakeholders—the researcher and three e-recruitment application experts, including the Product Lead, the Quality Assurance Lead, and the Associate Product Manager—explicitly define the RICE scoring model's four components: Reach, Impact, Confidence, and Effort, by choosing a scale or scoring system for each component (1 to 10 or low, medium, or high). After conducting in-depth interviews with three experts from e-recruitment applications, the aim was to gain insights and recommendations to prioritize the strategies. Out of the 12 proposed strategies, the interviews identified three strategies that emerged as high-priority items for e-recruitment applications to focus on. These strategies were crucial for accelerating the adoption rate and enhancing the platform's growth. The three strategies with the highest rice score are:

1. To help candidates make decisions, recruiters should provide meaningful information on the salary, place, job description, and other relevant details.
2. It has been demonstrated that using social media to recruit has increased applications from the intended audience.
3. The creators of e-recruitment platforms should continue to improve the platforms' credibility, simplicity of use, and ease of management and create new opportunities for activities that add value.

The reason for using three choices as a final strategy recommendation is that the level of effectiveness is more optimal compared to four or five choices (Vegada *et al.*, 2016).

After carrying out the research, there are several recommendations that can be made in regard to future research on similar topics:

- a. Research can be further developed into conducting an in-depth analysis of a larger sample of blue-collar workers, utilizing a multi-group analysis approach.
- b. Further research can also be done to check how the strategies recommended have actually the job-seeking application adoption rate towards blue-collar workers.
- c. To increase the structural model's fitness, the respecified model can be further reviewed and evaluated, supported by more literature research on the different re-specification techniques employed.

- d. A further research recommendation is to analyze additional variables related to blue-collar workers' adoption of e-recruitment applications, such as hedonic motivation, price value, and habit, in order to gain a comprehensive understanding of their decision-making process and behavioral patterns.

4. Conclusions

This study's main objective is to determine the level of adoption of job search applications for blue-collar workers. The research adopted the research model that was carried out by the UTAUT model. Data processing is done using the Partial Least Squares-Structural Equation Modelling (PLS-SEM) method. PLS-SEM was selected as the method for this study because it has exploratory qualities. Variables used in this study are Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Condition, and Behavioural Intention. Based on the hypothesis analysis, it was found that the most influential factors in the adoption of job search applications include: a) experience from Performance Expectancy will affect Behavioural Intention significantly, b) experience from Social Influence will affect Behavioural Intention significantly, and c) experience from Behavioural Intention will affect Usage Behaviour significantly. In addition, three strategies are selected based on the SWOT Matrix and RICE Scoring Model method. These strategies are devised through a combination of latent variable analysis and a literature review employing the SWOT matrix. Validation by experts and the RICE scoring method aid in selecting the most impactful and feasible strategies from a pool of twelve, making resource allocation more efficient. The strategies include: 1) to help candidates make decisions, recruiters should provide meaningful information on the salary, place, job description, and other relevant details; 2) it has been demonstrated that using social media to recruit has increased applications from the intended audience, and 3) the creators of e-recruitment platforms should continue to improve the platforms' credibility, simplicity of use, ease of management, and create new opportunities for activities that add value.

Acknowledgments

This paper was funded by Seed Funding Grant, Faculty of Engineering Universitas Indonesia, Grant Number: NKB-1929/UN2.F4.D/PPM.00.00/2022.

References

- Albugami, M.A., Zaheer, A., 2023. Measuring E-Commerce Service Quality for the Adoption of Online Shopping during COVID-19: Applying Unified Theory and Use of Technology Model (UTAUT) Model Approach. *International Journal of Technology*, Volume 14(4), pp. 705–712
- Aziati, A.H.N., Juhana, S., Hazana, A.N. 2014. Knowledge Transfer Conceptualization and Scale Development in IT Outsourcing: The Initial Scale Validation. *Procedia – Social and Behavioural Sciences*, Volume 129, pp. 11-22
- Bentler, P.M., Chou, C.P., 1987. Practical Issues in Structural Modeling. *Sociological Methods and Research*, Volume 16(1), pp. 78–117
- Cahyono, A.S., 2016. Pengaruh Media Sosial Terhadap Perubahan Sosial Masyarakat Di Indonesia (The Influence of Social Media on Social Change in Indonesian Communities). *Publiciana*, Volume 9(1), pp. 140–157
- Cappelli, P., 2001. Making The Most of On-Line Recruiting. *Harvard Business Review*, Volume 79(3), pp. 139–148

- Chan, R.Y., Lau, L.B., 2002. Explaining Green Purchasing Behavior: A Cross-Cultural Study on American and Chinese Consumers. *Journal of International Consumer Marketing*, Volume 14(2-3), pp. 9–40
- Chan, V., Shen, L.W., Rashid, F.B.A., Abdullah, A.F.M.B., Xin, B.H., Tung, Y.E., 2022. Digital Solution for Advancing Foreign Worker's Human Rights in Malaysia. *International Journal of Technology*, Volume 13(5), pp. 989–998
- Chapman, D.S., Webster, J., 2003. The Use of Technologies in The Recruiting, Screening, and Selection Processes for Job Candidates. *International Journal of Selection and Assessment*, Volume 11(2-3), pp. 113–120
- Chen, C., Haymon, M., 2016. Realizing the Potential of Digital Job-seeking Platforms. In: 2016 Brookings Blum Roundtable
- Chin, W.W., 1998. The Partial Least Squares Approach to Structural Equation Modeling. *Modern Methods for Business Research*, Volume 295(2), pp. 295–336
- Creswell, J.W., Creswell, J.D., 2017. *Research Design: Qualitative, Quantitative, and Mixed Methods Approaches*. Sage Publications
- Decman, M., 2015. Modelling The Acceptance of E-Learning In Mandatory Environment of Higher Education: The Influence of Previous Education and Gender. *Computers in Human Behaviour*, Volume 49, pp. 272–281
- Dhiman, N., Arora, N., 2018. Adoption of E-Recruitment mobile apps: a study based on UTAUT2 framework. *Journal of Organisation and Human Behaviour*, Volume 7(2-3), pp. 55–63
- El-Ouiridi, M., El-Ouiridi, A., Segers, J., Pais, I., 2016. Technology Adoption in Employee Recruitment: The Case of Social Media in Central and Eastern Europe. *Computers in Human Behavior*, Volume 57, pp. 240–249
- Eurofound, 2010. Coding and Classification Standards. Surveys. Available online at <https://www.eurofound.europa.eu/surveys/ewcs/2005/classification>, Accessed on June 1, 2023.
- Felgenhauer, A., Klier, J., Klier, M., Lindner, G., 2017. The Impact of Social Engagement on Customer Profitability-Insights from a Direct Banking Institution's Online Customer Network. Available online at 10.5283/epub.36012, Accessed on April 25, 2023
- Hair, J.F., Sarstedt, M., Ringle, C.M., 2019. Rethinking Some of The Rethinking of Partial Least Squares. *European Journal of Marketing*. Volume 53(4), pp. 566–584
- Hair, J.F., Sarstedt, M., Ringle, C.M., Mena, J.A., 2012. An Assessment of The Use of Partial Least Squares Structural Equation Modeling in Marketing Research. *Journal of the Academy of Marketing Science*, Volume 40, pp. 414–433
- Hosain, S., Ullah, K., Khudri, M.M., 2016. The Impact of E-recruitment on Candidates' Attitudes: A Study on Graduate Job Seekers of Bangladesh. *Journal of Human and Social Science Research*, Volume 8(01), pp. 9–17
- Huda, B., Apriyanto, S., 2019. Aplikasi Sistem Informasi Lowongan Pekerjaan Berbasis Android dan Web Monitoring (Android-Based Job Vacancy Information System Application and Web Monitoring). *Buana Ilmu*, Volume 4(1), pp. 11–24
- Indonesian Central Bureau of Statistics (Badan Pusat Statistik), 2018. Proyeksi Penduduk Indonesia 2015-2045 Hasil SUPAS 2015 (Indonesian Population Projection 2015-2045 2015 SUPAS Results). Revision Edition. Jakarta: BPS RI. Available online at <https://www.bps.go.id/publication/2018/10/19/78d24d9020026ad95c6b5965/proyeksi-penduduk-indonesia-2015-2045-hasil-supas-2015.html> Accessed on June 1, 2023
- Jöreskog, K.G., 1969. A General Approach to Confirmatory Maximum Likelihood Factor Analysis. *Psychometrika*, Volume 34(2), pp. 183–202

- Jöreskog, K.G., Sörbom, D., 1993. *LISREL 8: Structural Equation Modeling with The SIMPLIS Command Language*. Scientific software international
- Kaur, D., Kaur, R., 2023. Does Electronic Word-Of-Mouth Influence E-Recruitment Adoption? a Mediation Analysis Using the PLS-SEM Approach. *Management Research Review*, Volume 46(2), pp. 223–244
- Lee, I., 2011. Modeling The Benefit of E-Recruiting Process Integration. *Decision Support Systems*, Volume 51(1), pp. 230–239
- Moganadas, S.R., Goh, G.G.G., 2022. Digital Employee Experience Constructs and Measurement Framework: A Review and Synthesis. *International Journal of Technology*, Volume 13(5), pp. 999–1012
- Rodionov, D., Gracheva, A., Konnikov, E., Konnikova, O., Kryzhko, D., 2022. Analyzing The Systemic Impact of Information Technology Development Dynamics on Labor Market Transformation. *International Journal of Technology*, Volume 13(7), pp. 1548–1557
- Stone, D.L., Dulebohn, J.H., 2013. Emerging Issues in Theory And Research on Electronic Human Resource Management (eHRM). *Human Resource Management Review*, Volume 23(1), pp. 1–5
- Vegada, B., Shukla, A., Khilnani, A., Charan, J., Desai, C., 2016. Comparison Between Three Option, Four Option and Five Option Multiple Choice Question Tests for Quality Parameters: A Randomized Study. *Indian journal of pharmacology*, Volume 48(5), p. 571
- Venkatesh, V., Morris, M.G., Davis, G.B., Davis, F.D., 2003. User Acceptance of Information Technology: Toward A Unified View. *MIS Quarterly*, Volume 2003, pp. 425–478
- Venkatesh, V., Thong, J.Y., Xu, X., 2012. Consumer Acceptance and Use of Information Technology: Extending the Unified Theory of Acceptance and Use of Technology. *MIS Quarterly*, Volume 2012, pp. 157–178
- Wold, H., 1980. Model Construction and Evaluation When Theoretical Knowledge Is Scarce: Theory and Application of Partial Least Squares. In *Evaluation of Econometric Models*, pp. 47–74, Academic Press
- Wright, S., 1934. The Method of Path Coefficients. *The Annals of Mathematical Statistics*, Volume 5(3), pp. 161–215