

# AI'S ADOPTION IN RECRUITMENT ACROSS IT FIRMS IN CHENNAI DISTRICT: A DIGITAL TRANSFORMATION IN HIRING

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#### **Abstract**

The study aimed to analyze the awareness of AI-based recruitment tools among HR professionals in Chennai's IT firms. It examined the relationship between performance expectancy, effort expectancy, social influence, facilitating conditions, and behavioral intention. The research was conducted among 132 respondents in the Special Economic Zones (SEZs) of Chennai district. The majority of respondents were male (72.9%) and mid-career professionals, with HR employees making up the largest group at 43.2%. The results suggest that while infrastructure and updates are well-maintained, gaps exist in effective communication and training, especially at non-managerial levels. The study also found that behavioural intention to use AI in recruitment is more strongly influenced by practical support and social context than perceived improvements in performance alone. The primary obstacles in AI-based recruitment are human resistance, system bias, and lack of training. Addressing these issues through organizational change management, ethical AI design, and training programs could significantly enhance the adoption and efficacy of AI in hiring processes.

# Keywords: Artificial Intelligence, Recruitment, UTAUT, IT industry,

## INTRODUCTION

A seismic shift in the way talent is employed is on the cusp of occurring all around the world, and it will reshape the very fabric of which work is constructed. In the field of recruiting, artificial intelligence is no longer merely a tool; rather, it is the architect of a future in which hiring may be completely automated, with a significantly larger reach, and free from the influence of human prejudice. Machine learning, natural language processing, and predictive analytics are fast taking over what was once the purview of recruiters. Recruiters are now being increasingly replaced by these technologies. In order to streamline hiring and onboarding processes, accelerate decision-making, and optimise staff planning at a scale that was previously impossible, companies who are at the forefront of this change are already employing artificial intelligence presently (Pan, Y., Froese, F., Liu, N., Hu, Y., & Ye, M., 2023).

According to the findings of a recent poll conducted by Gallup, 93 percent of Chief Human Resource Officers (CHROs) of Fortune 500 companies have already begun implementing artificial intelligence (AI) tools and technology in order to improve business procedures. This widespread adoption highlights the transformational potential of artificial intelligence's ability to reshape traditional human resource activities. That being said, this is only the beginning. It is very evident that artificial intelligence is not only supporting recruiters; rather, it is replacing them (George, A., 2024). It would hardly be considered science fiction to imagine a society in which talent is recruited, appraised, and onboarded without the intervention of humans. if the question of whether or if this revolution will take place is the question of how rapidly businesses will adjust to an era in which artificial intelligence will not merely assist recruiting but will really be hiring (Alam, M. S., Dhar, S. S., & Munira, K. S., 2020).

Chennai, which is well known as one of India's most major information technology centres, is seeing more and more digital recruiting options. This change is part of a bigger trend towards smarter hiring practices. In this



situation, it is very important to understand how widely artificial intelligence is being used and what variables are affecting its acceptance among IT firms in Chennai. People realise that using artificial intelligence in the hiring process has its benefits, but for this technology to work successfully, it needs to be used in a certain way by both organisations and individuals. Some of these factors are how valuable the technology seems to be, how easy it is to use, how it affects society, and whether or not the necessary infrastructure is in place (Yadav, S., & Kapoor, S., 2024).

The adoption of new technologies in organisations is fuelled by the expansion of the e-commerce industry and developing digital technologies like big data, artificial intelligence, cloud computing, and so on. Information and communication technology advancement have fundamentally altered how businesses operate especially HR operations in the field of recruitment. In order to achieve advantages like increased productivity, employee well-being, and customer satisfaction, the use of technology in the workplace has redesigned communication both within and between organisations. Businesses invest much in technology to reap these benefits. Investments in ICT implementation, however, frequently provide minimal returns and do not ensure successful deployment. According to market research findings, less than 30% of organisations successfully implement new technologies that generate the anticipated return on investment. If one take into account the organisations who have the potential to enhance performance but are unable to maintain such improvements over time, the numbers become less positive. The technology usage-acceptance gap continues to be one of the main research topics in the IS literature because of the effects that technology adoption has on an organization's performance and cost-revenue structure (Pillai, R., & Sivathanu, B., 2020).

The Unified Theory of Acceptance and Use of Technology (UTAUT) model is the theoretical framework that this study uses to using it various subfactors. The UTAUT model provides a whole picture that could be used to see at how companies choose to use technology especially in IT industry. This study aims to look into not only the current level of artificial intelligence integration in hiring, but also the aims of the human resource professionals and the challenges they experience when putting it into AI based technology in practice.

#### REVIEW OF LITERATURE

The incorporation of Artificial Intelligence (AI) into human resource practices has significantly altered the recruitment setting in the ever-changing digital age. Organisations are increasingly exploiting the AI-powered recruiting solutions to increase their productivity, cut down the hiring times, and improve candidate-job match, especially in the Information Technology (IT) sector where innovation and agility are critical. In order to minimise the human bias and speed up decision-making, these technologies are made to automate as well as to optimise a number of hiring process steps, including resume screening, candidate assessment, and interview scheduling. For years together, the process of hiring was been labour-intensive and driven by humans (Sandeep, M. M., Lavanya, V., & Balakrishnan, J., 2025). Recruiters have been incisive through resumes, conducting interviews, and making decisions based on their intuition and expertise. Nevertheless, the era of manually acquiring talent is coming to an end. When it comes to recruitment, the artificial intelligence is increasingly becoming more than just a supporting tool; it is becoming the driving force behind the HR process in every aspects, also changing every stage of the process into an intelligent and automated system (Zhang, P., 2024).

In order to find and engage top prospects before they even begin their job search, platforms that are driven by the AI search through various talent pools all around the world in a fraction. Not only can machine learning algorithms instantaneously analyse talents, experience, and behavioural patterns to discover the right match, but they do so without bias, inefficiency, or delay (Cao, T. M., & Nguyen, L. T. V., 2025). This eliminates the need for recruiters to spend time going through applications. Interviews that are carried out by virtual assistants that are powered by artificial intelligence and are able to read both verbal and nonverbal cues with precise precision. Evaluations of potential jobs, through the use of predictive analytics, it is possible to make more accurate predictions regarding long-term performance and cultural compatibility than any recruiting manager could ever hope to achieve. Personalised career pathing, offer negotiations, and even onboarding programs are all available. All of this is done by AI in a seamless manner, guaranteeing that every new hire is prepared for success from the very beginning (Do, B. H., 2024).

The research community has shown growing interest in technology acceptance within private and organisational settings for nearly thirty years. By the year 2000, research on technology acceptance had gathered significant insights into how users behave when adopting new technologies. Many models and theories have been developed to explain how people accept technology, together accounting for 40% of the variation in intentions to use it. The models originated from various fields, which restricted how these theories could be applied in different situations (Islam, M., Mamun, A. A., Afrin, S., Ali Quaosar, G. A., & Uddin, M. A., 2022). The Theory of Planned Behaviour and the Theory of Reasoned Action provide insights into human behaviour by looking at factors like perceived behavioural control, attitude, and subjective norms. The theories offer broad insights into people's attitudes, making them useful for various research areas, including but not limited to information system management. On the other hand, Diffusion of Innovation Theory looks at the specific factors related to innovation that influence how users behave when adopting new technology (Mehrotra, S., & Khanna, A., 2022). The models have offered various viewpoints, shaped by the types of variables included for the study, like subjective norms, motivational and attitudinal factors that are linked to technology performance, social influences, personal experience, and

supportive conditions. Choosing one of the models limits the research findings to specific situations and contexts. A unified approach was essential to incorporate various perspectives and disciplines, enhancing the theory's application across different contexts (Sattu, R., Das, S., & Jena, L. K., 2024).

#### **Objectives of the Study**

- 1. To analyze the extent of awareness of AI-based recruitment tools among HR professionals in Chennai's IT firms.
- 2. To examine the relationship between Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions and Behavioural Intention.
- 3. To identify challenges faced by the IT firms in the successful adoption of AI in recruitment processes.

#### RESEARCH METHODOLOGY

The study adopted a descriptive research design to explore and describe the extent of adoption, identify key determinants guided by the UTAUT framework, and examine the challenges faced by HR professionals in the digital transformation of hiring.

The study was conducted among HR employees and employers working in IT firms located within the Special Economic Zones (SEZs) of Chennai district. A total of 132 respondents participated in the survey out of which 118 samples were considered after scrutinizing based on missing data and unengaged respondents, and the convenience sampling technique was employed due to accessibility and time constraints.

The choice of Chennai district, specifically the SEZs, as the study area is justified by the region's strategic importance as a major IT hub in India. Chennai houses several large-scale and mid-sized IT companies that are known for their rapid adoption of technological innovations, including AI. The SEZs are particularly relevant for this study as they host a dense concentration of IT firms operating in a competitive and technology-driven environment.

#### **Analysis and Interpretation**

Table No. 1 presents the demographic characteristics of the respondents who participated in the study focused on AI adoption in recruitment across IT firms in Chennai's SEZ region.

Table No. 1: Percentage Analysis – Demographic Profile

		Frequency	Percent
Gender	Male	86	72.9
	Female	32	27.1
	Total	118	100.0
Age	Less than 35 Years	5	4.2
	35 - 45 Years	51	43.2
	45 - 55 Years	59	50.0
	Above 55 Years	3	2.5
	Total	118	100.0
Designation	HR Employee	51	43.2
	HR Manager	46	39.0
	HR Executive	21	17.8
	Total	118	100.0

Source: (Primary data)

The demographic profile reveals that a majority of the respondents are male (72.9%), while females represent 27.1% of the total sample, indicating a gender imbalance in HR roles within the sampled IT firms. In terms of age, half of the respondents (50%) fall within the 45–55 years bracket, followed by 43.2% in the 35–45 years range. A small portion (4.2%) are below 35 years, and only 2.5% are above 55 years, suggesting that mid-career professionals predominantly engage in recruitment-related responsibilities. Regarding designation, the data indicates that HR Employees make up the largest group at 43.2%, followed by HR Managers at 39.0%, and HR Executives at 17.8%. This distribution suggests a fairly balanced mix of managerial and non-managerial personnel, providing a diverse perspective on the use and perception of AI tools in recruitment practices.

Table No. 2 presents a rank analysis of the level of awareness among HR professionals regarding AI adoption in recruitment, segmented by designation—HR Employees, HR Managers, and HR Executives.

Table No. 2: Rank Analysis - Awareness on AI adoption for HR recruitment

	HR Employee		HR Manager		HR Executive	
Designation	Mean	Rank	Mean	Rank	Mean	Rank
Familiarity with AI-based recruitment tools is evident among HR professionals.	2.5490	5	2.9348	4	2.0952	4



Adequate training or orientation on AI tools has been provided within the organization.	2.8431	4	3.4348	2	3.2381	1
Communication regarding the benefits of AI in recruitment is actively practiced in the firm.	2.9412	3	2.6739	5	1.9524	5
Technological updates in recruitment practices are regularly monitored within the department.	3.4510	1	3.6957	1	3.0476	2
Specific AI tools used for recruitment are known to employees in the HR function.	3.1961	2	3.0000	3	2.6190	3

Source: (Primary data)

The analysis reveals that technological updates in recruitment practices are the most recognized among all three groups, with the highest mean scores and a consistent top rank (Rank 1) across HR Employees (3.4510), HR Managers (3.6957), and HR Executives (3.0476). This suggests a strong departmental focus on staying current with technological trends in recruitment.

Among HR Managers, training or orientation on AI tools received the second-highest mean score (3.4348), indicating that managers feel relatively well-supported in terms of skill development. Interestingly, HR Executives ranked this item highest (Mean = 3.2381, Rank 1), suggesting they are particularly aware of or reliant on such training. In contrast, HR Employees assigned it a lower rank (Rank 4), potentially pointing to gaps in communication or engagement with training initiatives at junior levels.

Familiarity with AI-based tools was generally lower across all designations, with HR Executives giving it a relatively low mean score (2.0952), hinting at limited exposure or experience with AI tools among newer or entry-level professionals.

Notably, communication regarding AI benefits scored low across all groups, particularly among HR Executives (1.9524, Rank 5), indicating a possible weakness in internal communication strategies related to AI initiatives. The analysis includes five key constructs—Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Behavioural Intention—each represented by three measured variables. Mean scores and rankings highlight the extent to which respondents from IT firms in Chennai's SEZ region agree with each statement, offering insights into the overall acceptance and readiness for AI integration in recruitment.

**Table No. 3: Descriptive Statistics – UTAUT constructs** 

Descriptive Statistics Factors	Variables	N	Mean	Rank	Factor Mean	Factor
1 401015		1,	TVICUIT	Tturrit	T detor Tyrean	Rank
	AI recruitment tools contribute to improved hiring decision quality.	118	2.7288	13		
Performance Expectancy	The recruitment process becomes more efficient with the use of AI.	118	3.0678	6	3.0678	1
	Time required to fill vacancies is reduced through AI implementation.	118	3.4068	2		
Effort Expectancy	Operating AI recruitment tools requires minimal effort.	118	3.2712	3		
	AI recruitment platforms offer a user-friendly experience.	118	2.9068	9	2.9915	3
	Seamless integration exists between AI tools and current HR systems.	118	2.7966	11		
	Support for AI adoption in recruitment is evident among peers and teams.	118	2.9407	8		
Social Influence	Industry-wide expectations promote AI usage in hiring practices.	118	3.7288	1	3.0537	2
	Management demonstrates active encouragement for implementing AI recruitment tools.	118	2.4915	15		



Facilitating Conditions	Necessary infrastructure is available to support AI adoption in hiring.	118	3.2542	4		
	Technical support for AI- enabled recruitment tools is accessible.	118	2.7288	12	2.9887	4
	Allocation of budget and resources supports AI integration into HR processes.	118	2.9831	7		
Behavioural Intention	Future recruitment tasks are likely to include AI-based tools.	118	2.8644	10		
	Recommendations for AI-based hiring methods are commonly shared within teams.	118	2.7119	14	2.9011	5
	High dependency on AI tools is anticipated across various recruitment stages.	118	3.1271	5		

Source: (Primary data)

Among the five UTAUT constructs, Performance Expectancy received the highest overall mean score (3.0678), indicating strong agreement that AI tools contribute positively to recruitment outcomes. Within this factor, the statement "Time required to fill vacancies is reduced through AI implementation" ranked second overall (mean = 3.4068), reinforcing the belief that AI enhances process efficiency.

Social Influence followed closely with a factor mean of 3.0537, underscored by the highest individual mean score in the entire table (3.7288) for the item "Industry-wide expectations promote AI usage in hiring practices." This suggests that external pressures and professional norms are strongly influencing AI adoption decisions. However, a lower score for management encouragement (mean = 2.4915) indicates inconsistent internal support, possibly hindering momentum.

Effort Expectancy ranked third, with a factor mean of 2.9915. Respondents agreed moderately that AI tools are easy to use, though the score for seamless integration (2.7966) points to some technical friction with existing HR systems.

Facilitating Conditions (mean = 2.9887) and Behavioural Intention (mean = 2.9011) showed relatively lower agreement levels. While infrastructure and support exist to a certain extent, gaps remain in budget allocation and technical assistance. The anticipation of high dependency on AI tools in future recruitment (mean = 3.1271) suggests a positive outlook, even if current adoption is cautious.

Table No. 4 presents the correlation analysis examining the relationships between the key constructs of the Unified Theory of Acceptance and Use of Technology (UTAUT) model—Performance Expectancy, Effort Expectancy, Social Influence, and Facilitating Conditions—and their influence on Behavioural Intention to adopt AI in recruitment practices among HR professionals in IT firms located in Chennai's SEZ region.

Table No. 4: Correlation Analysis - Relationship between Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions and Behavioural Intention

Correlations	_					
		Performance Expectancy	Effort Expectancy	Social Influence	Facilitating Conditions	Behavioural Intention
Performance Expectancy	Pearson Correlation	1	.023	.007	.110	117
	Sig. (2-tailed)		.804	.939	.237	.207
	N	118	118	118	118	118
Effort Expectancy	Pearson Correlation	.023	1	.127	.306**	.239**
	Sig. (2- tailed)	.804		.171	.001	.009
	N	118	118	118	118	118
Social Influence	Pearson Correlation	.007	.127	1	.346**	.272**
	Sig. (2-tailed)	.939	.171		.000	.003



	N	118	118	118	118	118
Facilitating Conditions	Pearson Correlation	.110	.306**	.346**	1	.636**
	Sig. (2-tailed)	.237	.001	.000		.000
	N	118	118	118	118	118
Behavioural Intention	Pearson Correlation	117	.239**	.272**	.636**	1
	Sig. (2-tailed)	.207	.009	.003	.000	
	N	118	118	118	118	118
**. Correlation	is significant at	the 0.01 level (2-1	tailed).			

Source: (Primary data)

The results indicate that Facilitating Conditions show the strongest positive correlation with Behavioural Intention (r = 0.636, p < 0.01), suggesting that the presence of supporting infrastructure, technical assistance, and resource allocation significantly influence HR professionals' willingness to adopt AI-based recruitment tools. Social Influence (r = 0.272, p < 0.01) and Effort Expectancy (r = 0.239, p < 0.01) also demonstrate significant positive correlations, indicating that ease of use and peer or managerial support play important roles in shaping attitudes toward AI adoption.

In contrast, Performance Expectancy shows a weak and negative correlation with Behavioural Intention (r = -0.117, p = 0.207), which is statistically insignificant. This implies that perceived performance improvements alone may not be sufficient to drive AI adoption unless supported by other enabling factors.

This regression analysis was conducted to examine the influence of key UTAUT constructs—Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions, and Behavioural Intention—on the Awareness of AI adoption in HR recruitment among professionals in IT firms situated within Chennai's SEZ region.

Table No. 5: Regression Analysis – Impact of Performance Expectancy, Effort Expectancy, Social Influence, Facilitating Conditions and Behavioural Intention on Awareness on AI adoption in HR recruitment

Model S	Summary					
Model	R	R Square	Adjusted R Square		Std. Err Estimate	or of the
1	.820a	.672	.657		.51894	
	etors: (Constant), Bei	havioral Intention, Po	erformanc	e Expectancy, Effort 1	Expectancy, Soc	ial Influence
ANOVA	<b>\</b> a					
Model		Sum of Squares	df	Mean Square	F	Sig.
1	Regression	61.805	5	12.361	45.901	.000b
	Residual	30.161	112	.269		
	Total	91.966	117			
a. Deper	ndent Variable: Awa	reness				
	ing Conditions	havioral Intention, P	erformano	e Expectancy, Effort	Expectancy, Soc	ial Influence
		Unstandardize Coefficients	d	Standardized Coefficients		
Model		В	Std. Error	Beta	t	Sig.
1	(Constant)	1.019	.392		2.597	.011
	Performance	153	067	128	2 279	025

.067

.079

.076

.128

.103

.128

575

-.002

-.789

.758

2.279

10.094

-10.435

10.437

-.041

.025

000

967

.000

.000

.153

.799

-.003

-1.339

1.074

Intention a. Dependent Variable: Awareness

Expectancy

**Facilitating** 

Conditions Behavioural

Effort Expectancy

Social Influence

Source: (Primary data)



The Model Summary indicates a high degree of explanatory power, with an R-square value of 0.672, signifying that approximately 67.2% of the variance in awareness can be explained by the combination of the five predictor variables. The Adjusted R-square value of 0.657 further confirms the model's robustness, accounting for the number of predictors. The standard error of the estimate (0.519) reflects a moderate level of residual variability. The ANOVA table supports the overall significance of the model, with an F-statistic of 45.901 and a p-value of 0.000, indicating that the regression model is statistically significant and provides a good fit to the data.

In the Coefficients table, Behavioural Intention emerges as the strongest predictor of awareness ( $\beta$  = 0.758, p < 0.001), followed closely by Effort Expectancy ( $\beta$  = 0.575, p < 0.001), both of which have a positive and significant impact. This suggests that HR professionals who intend to use AI tools and perceive them as easy to operate are more likely to be aware of their usage in recruitment processes.

Interestingly, Facilitating Conditions show a significant negative impact on awareness ( $\beta$  = -0.789, p < 0.001), which may reflect a possible mismatch between available infrastructure/support and the actual awareness among employees, possibly due to communication gaps or ineffective resource utilization.

Performance Expectancy also has a statistically significant positive effect ( $\beta$  = 0.128, p = 0.025), indicating that perceived improvements in recruitment quality and efficiency contribute to greater awareness. Conversely, Social Influence does not have a significant effect ( $\beta$  = -0.002, p = 0.967), implying that peer or managerial encouragement alone does not necessarily enhance awareness levels.

This table presents the descriptive statistics highlighting the key challenges faced by HR professionals in the adoption of Artificial Intelligence (AI) tools within the recruitment domain.

Table No. 6: Descriptive Statistics – Challenges in adoption of AI in Recruitment

Descriptive Statistics			
	N	Mean	Rank
AI-based recruitment raises notable concerns about data privacy and ethics.	118	2.4068	5
Resistance from internal stakeholders hinders AI adoption in recruitment.	118	3.2627	1
Absence of proper training limits the effectiveness of AI usage.	118	2.6864	3
AI tools occasionally display inconsistencies or bias in candidate screening.	118	2.8729	2
Cost-related barriers affect the implementation of AI in the recruitment function.	118	2.5932	4

Source: (Primary data)

The significant hurdle to AI adoption is the internal stakeholder resistance (Mean = 3.2627), suggesting that the cultural resistance, scepticism, or fear of job displacement among staff members may be preventing AI integration in the hiring procedures. Emerging technology often challenge old processes and human roles, making this a common organisational impediment. The second biggest issue is a AI-based candidate screening inconsistencies or bias (Mean = 2.8729). HR professionals often seeking equity and compliance should be concerned about automated systems because' reasonable or transparent conclusions owing to algorithmic faults or biassed training data may lead to huge problem in the organization. Third is lack of training (Mean = 2.6864), showing that AI technologies can be less successful and less adopted if not properly trained. Comprehensive upskilling and the user training are most needed. Cost-related constraints (Mean = 2.5932) are also noted here. AI technologies offer long-term efficiency, but their initial investment, integration, and also their maintenance expenses may dissuade small to medium firms from using them. further the data privacy and ethical concerns (Mean = 2.4068) had the lowest mean score out of the five variables but remain a major issue. This shows that the organisations are aware of every privacy issues but may underestimate their impact or feel secure managing them under present regulatory frameworks.

The following table presents the results of the path analysis, examining the regression weights among the constructs of the conceptual model. The model explores the relationships between independent factors, the mediating factor (Challenges), and the dependent factor (Awareness).

Figure No. 1: Path Analysis - Conceptual Model



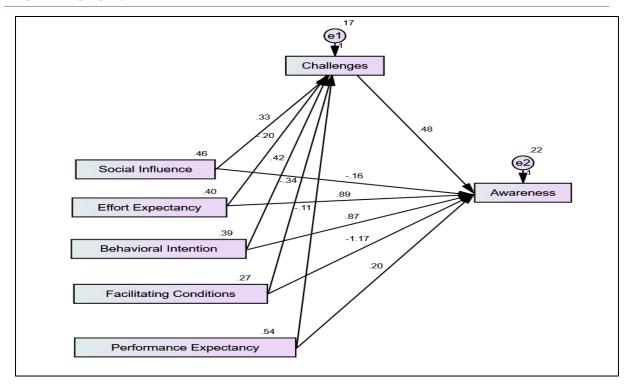


Table No. 7: Regression Estimates – Conceptual Model

Regressio	on Weight	Estimate	S.E.	C.R.	P			
С	SI	0.334	0.057	5.904	***			
С	EE	-0.195	0.06	-3.245	0.001			
С	BI	0.42	0.061	6.85	***			
С	FC	-0.345	0.073	-4.697	***			
С	BPE	-0.105	0.052	-2.036	0.042			
A	SI	-0.163	0.073	-2.245	0.025			
A	EE	0.892	0.071	12.623	***			
A	BI	0.873	0.082	10.681	***			
A	FC	-1.174	0.09	-13.025	***			
A	BPE	0.204	0.059	3.431	***			
A	С	0.478	0.104	4.596	***			
Note								
A	Awareness – De	pendent Factor						
BPE	Performance Ex	pectancy - Independe	nt Factor					
EE	Effort Expectan	cy – Independent Fact	or					
SI		- Independent Factor						
FC	Facilitating Con	Facilitating Conditions – Independent Factor						
BI	Behavioral Inter	ntion – Independent Fa	actor					
С	Challenges – M	ediating Factor						

Source: (Primary data)

The results indicate that Challenges (C) are significantly influenced by several independent factors. Social Influence (SI) shows a positive and significant effect on Challenges ( $\beta$  = 0.334, p < 0.001), suggesting that higher social influence tends to increase perceived challenges. Behavioral Intention (BI) also has a positive effect ( $\beta$  = 0.420, p < 0.001), indicating that individuals' intention to engage in the activity may be associated with greater awareness of potential obstacles. On the other hand, Effort Expectancy (EE) has a negative effect ( $\beta$  = -0.195, p = 0.001), implying that ease of use reduces the perception of challenges. Similarly, Facilitating Conditions (FC) show a strong negative influence ( $\beta$  = -0.345, p < 0.001), highlighting that adequate resources and support can significantly lower perceived challenges. Performance Expectancy (BPE) also exhibits a mild but significant negative influence ( $\beta$  = -0.105, p = 0.042), suggesting that higher expected performance outcomes slightly reduce the perceived challenges.

When examining the direct relationships with Awareness (A), the findings reveal mixed effects. Social Influence ( $\beta = -0.163$ , p = 0.025) is negatively related to Awareness, indicating that increased peer or social pressure may slightly reduce awareness levels. In contrast, Effort Expectancy ( $\beta = 0.892$ , p < 0.001) and Behavioral Intention ( $\beta = 0.873$ , p < 0.001) strongly and positively affect Awareness, suggesting that ease of effort and intention to use



substantially enhance awareness. However, Facilitating Conditions ( $\beta$  = -1.174, p < 0.001) show a strong negative relationship, meaning that when infrastructure and resources are readily available, awareness may paradoxically decline—possibly due to reduced self-initiative. Performance Expectancy ( $\beta$  = 0.204, p < 0.001) positively influences Awareness, indicating that individuals expecting higher benefits tend to have better awareness levels. Finally, Challenges (C) significantly and positively impact Awareness ( $\beta$  = 0.478, p < 0.001), suggesting that facing and overcoming challenges can enhance overall awareness.

#### Findings

The demographics showed that most of the people who answered the poll were men (72.9%), while only 27.1% were women working in HR. Half of the people who answered are between the ages of 35 and 55. Most of the people who answered are mid-career professionals, and 43.2% of them work in HR. With respect to the HR roles, with 39.0% of them being HR Managers and 17.8% being HR Executives. This gives us a wide range of views on how AI tools can be used in hiring.

The findings showed that the infrastructure and updates are good with respect to the IT firms, but there are problems with communication and training, especially at the non-managerial levels. To raise the awareness evenly across all jobs in the organization, it is required to make changes that are specific to each role in the organization. The results further showed that while performance gains and social drivers are important for getting AI to be used in hiring, practical problems including lack of management support, integration concerns, and infrastructure restrictions need to be fixed for it to be more widely accepted and used effectively.

The study showed that practical support and social context have a bigger effect on people's willingness to employ AI in hiring than just the idea that it will make things significantly better. This illustrates how important it is to create a supportive work environment and put the money into tools that will help HR services change with technology in the work space. The results also indicated that behavioural intention, ease of use, and perceived usefulness are the most important factors that making people aware for the AI adoption in HR recruitment. Infrastructural readiness and peer influence may not be as important, or even have the opposite effect, if they are not properly aligned with communication and training strategies. The results also show that the main problems with AI-based hiring are human resistance, system bias, and a lack of training, not cost or privacy concerns. Organisational change management, ethical AI design, and training programs might all help a lot with these problems and make AI much more useful and widely used in recruiting processes.

The analysis reveals that Challenges are shaped by multiple independent factors, with Social Influence and Behavioral Intention increasing perceived challenges, while Effort Expectancy, Facilitating Conditions, and Performance Expectancy reduce them. Awareness is strongly enhanced by Effort Expectancy, Behavioral Intention, Performance Expectancy, and Challenges, but is negatively influenced by Social Influence and Facilitating Conditions.

### **CONCLUSION**

The survey included responses from 71.9% of participants, mostly men aged 35-55, with HR employees representing the largest group at 43.2%. The distribution of HR roles shows a balance, with HR Managers making up 39.0% and HR Executives at 17.8%. The survey revealed issues with communication and training, especially among non-managerial staff, highlighting the need for specific solutions. To successfully adopt AI in recruitment, it's important to recognise the performance benefits and social drivers. However, we must also tackle practical challenges such as securing management support, resolving integration issues, and overcoming infrastructure constraints. The analysis showed that the intention to use AI in recruitment is more affected by practical support and social context rather than by perceived performance improvements. The research revealed that factors like behavioural intention, ease of use, and perceived usefulness play a vital role in raising awareness about AI adoption in HR recruitment. The main challenges in AI-based recruitment are human resistance, system bias, and insufficient training, rather than cost or privacy issues. By focusing on organisational change management, ethical AI design, and training programs, we can greatly improve how AI is adopted and used effectively in hiring processes. Also, the findings highlight that ease of effort, strong intentions, and overcoming challenges play a crucial role in boosting awareness, whereas excessive social pressure and abundant resources may sometimes diminish it.

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