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THE USE OF ARTIFICIAL INTELLIGENCE IN EMPLOYEE RECRUITMENT IN THE FURNITURE INDUSTRY OF IRAN ACCORDING TO THE ROLE OF CONTEXTUAL FACTORS

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Abstract: The present research aims to analyze the effect of contextual factors affecting the application of artificial intelligence technology in employee recruitment in the furniture industry of Iran, which is a practical purpose and has been carried out in a descriptive-surveillance manner, to find out the reasons, facilitators and limitations of its use with the presented conceptual model. Make this technology understandable to organizations during employee recruitment. To measure and analyze the effect of these factors, a questionnaire was used as an information-gathering tool, which was given to 250 senior managers and middle managers of companies active in the furniture industry of Iran. The results of the analysis of the information obtained in two descriptive and inferential parts, according to the data analysis algorithm in the method of structural equations and Smart PLS software, confirmed the hypotheses of the research and showed that the effective background factors include: technological factors, organizational and environmental have a positive and significant effect on the use of Artificial intelligence in the furniture industry in Iran, and the use of artificial intelligence as a competitive advantage improves the organizational capabilities of recruitment and recruitment (based on data, process, staff) in the furniture

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industry. Forgives. Also, it makes it easier to carry out "blind" Recruitment of employees processes and review frequent applications, and by simplifying the application analysis process through applicant tracking systems, it can save time and money in human resources processes and reduce discrimination in choices.

Keywords: artificial intelligence, recruitment of employees, organizational factors, environmental factors, technological factors, Iran's furniture industry.

JEL Codes: M10, M51.

1. Introduction

Today's organizations face a high level of competition in the global market, and to stay in today's competitive environment, it is necessary to use new technologies (Fenech et al., 2019). In this competitive environment, organizations gain most of their wealth from intellectual capital, and the real competitive advantage is in the quality of the people the company hires (Baratelli & Colleoni, 2022). Innovative technologies are dynamically inventing the landscape of human resource management on a global scale (Ferraris et al., 2020). The main goal of human resource planning in any organization is to achieve organizational goals (Bazrkar, 2020). The purpose of developing and implementing human resource development strategies and practices is to link human resource policies and practices with strategic human resource goals, including human resource development so that the organization can have internal coordination between human resource subsystems (Shayegan et al., 2022). Human resource managers believe that applying artificial intelligence to human resource management tasks will benefit and improve the overall experience of employees (Zeng, 2020). Human resources (HR) is moving its basic administrative functions such as recruitment, selection, and evaluation towards more advanced solutions such as automation, augmented intelligence, robotics, and artificial intelligence (Matsa & Gullamajji, 2019). Since recruitment is a central aspect of any business organization as company growth largely depends on employee performance, artificial intelligence (AI) as a value driver for companies helps them gain operational and competitive advantage (Reddy et al., 2020). Iran's wood and furniture industry is one of the pillars of strengthening Iran's economic base in the development of non-oil exports and having tens of thousands of industrial units and workshops, it can reach multi-billion-dollar foreign markets by producing high-quality furniture at a competitive price in global markets. to be found and as a fast-yielding and fast-moving industry to play a share of more than 1% in the national gross product, therefore it is seen as an effective strategic industry in economic and industrial development (Azizi et al., 2021). Therefore, it is necessary and necessary to investigate the use of new technologies, including artificial intelligence, and the

use of this information to provide suitable human resources in this industry. Therefore, due to the lack of scientific research in this field in domestic sources, in the current research, we seek to answer the question, what is the effect of the effective background factors in the application of artificial intelligence technology in attracting and Recruitment of employees in the Furniture industry of Iran?

2. Literature and development of hypotheses

2.1. Literature Review

In 1990 Tornatzky and Fleischer proposed the framework of technology, organization, and environment (TOE) to study technology adoption at the organizational level. This model contributes to the scientific understanding of companies' acceptance behaviors toward human resource management technologies. Combining existing theories, innovation characteristics (e.g., comparative advantage, complexity, adaptability, observability, and trial ability), organizational characteristics (e.g., scope, size, financial resources), and environmental factors (e.g., competitors, suppliers, customers) they are the main dimensions for technology acceptance (John, 2021). The methods of selection and improvement of those methods as a result of the use of multimedia tools, applicant tracking systems (ATS), and self-aware and self-learning computing systems have made e-recruitment the so-called "smart recruitment". For job application and selection, artificial intelligence can use behavioral characteristics such as walking, typing rhythm, and voice and physiological patterns (such as biometrics and body shape that include facial recognition, DNA, biometrics and hand geometry, iris recognition, micro Use expressions, smells, and retinal scans which companies mainly use for authentications part of the overall decision-making process (Van Esch et al., 2019). Artificial intelligence can screen a large number of resumes of job candidates in a much shorter and more efficient time, and possible errors will be minimized (Wan, & Roshidi, 2019). AI has the potential to analyze talent competition independently of the pure balance of traditional supply and demand of labor economics, and by bypassing search firms and their costs, organizations can cheaply reach hundreds of millions of passive candidates with profiles on social media platforms. Such as Facebook, or have access to professional networking platforms such as LinkedIn (Van Esch et al., 2019). The artificial intelligence algorithm is used to classify candidates based on their interests and qualifications posted on their various social media platforms and helps recruitment agencies to select the most relevant and qualified candidates (Hsu et al., 2019). Among the applications of artificial intelligence in HR and human resources management, Chabots and artificial intelligence assistants can be mentioned. Over time, companies rely on Chabots more than ever to carry out their daily activities (Vrontis et al., 2022). From marketing to

customer service, bots are quickly automating time-consuming tasks and freeing up time for more important tasks. For example, in the human resources department, hundreds or even thousands of job applicants must be reviewed by recruitment experts (Hill et al., 2015). It is also necessary to check the company's needs, match the skills and qualifications, and schedule the interviews. All these works involve an important process and require a lot of energy. The following companies create and deliver AI bots and assistants to make application processes faster and more accurate, match talent with the most relevant opportunities, and answer questions through natural language processing (Guenole & Feinzig, 2018). Artificial intelligence can be used in various ways to recruit employees. Here are some examples (Votto et al., 2021):

1. AI-powered employee engagement: AI can help companies improve employee engagement by analyzing data from employee surveys, social media, and other sources to identify areas for improvement.
2. Job Recommendation Engines: AI-powered job recommendation engines can help match candidates with the right job opportunities based on their skills and experience.
3. Personalized Employer Branding: AI can help companies create personalized employer branding campaigns that target specific candidates based on their interests and preferences.

2.2. Development of Hypotheses

2.2.1 Technological Factors and artificial intelligence in employee recruitment

Technological factors refer to existing technologies and emerging technologies inside and outside the organization. (Tornatzky & Fleischer, 1990). Technological factors refer to the influences having an impact on the way a company operates relating to the equipment used within the company's environment. Because of the increased dependence on equipment, nowadays technological factors have a significantly more crucial effect on a business's success than they had only fifty or a hundred years ago (Baker, 2012). Technological factors include relative advantage and technology complexity, as they are highly relevant, representing the most frequently used characteristics in prior research (Wang et al., 2010). In general, relative advantage refers to the degree of benefits that innovation can bring to an organization (Zhu et al., 2006). Benefits motivate companies to acquire new knowledge and thus increase companies' absorptive capacity to adopt new technology. Consequently, scholars find that relative advantage contributes to higher levels of technology adoption (Hsu et al., 2006). Technological complexity is the perceived difficulty of using certain technology (Rogers, 2003). Greater difficulty demotivates organizations to acquire new knowledge and thus reduces the absorptive

capacity of companies to innovate (Cohen & Levinthal, 1990). As a result, complexity is likely to constrain innovative behaviors. The empirical evidence suggests that complexity has a negative impact on technology adoption (Wang et al., 2010). Complexity indicates the extent to which companies believe AI recruitment tools are difficult to use. Because AI is a typical high-tech feature which requires significant IT knowledge to understand and thus is relatively difficult to implement compared to traditional IT, the complexity of AI recruitment tools may be an important concern for many companies due to their technological novelty. In the period of the fourth industrial revolution, industry 0.4, which is also known as the smart industry, aims to transform the organization into an intelligent organization and plays a key role in achieving sustainable development goals (Kumari & Hemalatha, 2021). Comparative advantage refers to the perceived usefulness that AI can provide to companies in supporting complex recruitment activities (Pan et al., 2022). Artificial intelligence with three main features, high-speed computing, a huge amount of quality data, and advanced algorithms, analyzes big data for human resources and searches for trends, patterns, and correlations, and offers significant opportunities to improve performance. HR provides, such as self-service transactions, recruiting and talent acquisition, payroll, reporting, and access policies and procedures (Zeng, 2020). Implementing AI software simply eliminates mundane tasks and time-consuming data analysis to serve as an ongoing problem-solver for HR (Grover, 2016). Artificial Intelligence is used by HR in Eight ways while recruiting: Screening Candidates, Candidate Engagement, Re-Engagement, Post-Offer Acceptance, New hire On-boarding, Career Development, Employee Relations, and Scheduling (Geetha & Bhanu, 2018). Artificial intelligence is a technology that can work smartly as equal to the human brain in different situations. It gains attention and importance in automating recruiting system when compared to traditional recruitment methods. Accordingly, the first research hypothesis is proposed as follows:

H1: Technological factors have a positive effect on the use of artificial intelligence in employee recruitment.

2.2.2 Organizational Factors and artificial intelligence in employee recruitment

Organizational factors discuss the characteristics of the organization, the common and main characteristics of the organization include size, degree of concentration, formality, complexities of management structure, quality and organizational knowledge of personnel, and availability of internal and external resources. The structure of the organization and its processes can impose or facilitate the technology adoption process. Therefore, organizational factors and factors have the greatest

impact on technology acceptance (Hanisch & Wald, 2014). Firm size is a proxy of various organizational components such as resources, capital, organizational structure, etc. Company size refers to a company's size in terms of staff and budget (Rogers, 2003). It is a surrogate measure of various organizationalcomponents such as slack resources, capital, organizational structure, and so forth (Hsu et al., 2006). Company size is one of the most frequently discussed organizational contextual factors (Baker, 2011). Technology competence refers to the readiness of existing internal technological resources to support innovation (Zhu et al., 2006). Technological resources include prior technological infrastructure, experience, and knowledge employed to support the implementation of innovation without Additional investments. Therefore, technology competence will help companies to implement new technology. Scholars find that technology competence is one of the most influential TOE factors in facilitating technology adoption (Ransbotham et al., 2017). Therefore, larger companies can implement more AI tools for recruitment due to their wealth of resources (Pan et al., 2022). Upgrading and equipping employees with knowledge related to artificial intelligence such as statistics, data management, data analysis, or data engineering, as well as artificial intelligence ethics by increasing readiness to create new measures and protocols to prevent discrimination and thus reduce risks related to Data collection is one of the organizational factors that influence the use of artificial intelligence in the recruitment of employees (Dwivedi et al, 2021). Accordingly, the second hypothesis is proposed as follows:

H2: Organizational factors have a positive effect on the use of artificial intelligence in employee recruitment.

2.2.3 Environmental and artificial intelligence in employee recruitment

The environmental context describes the arena in which an organization operates, including industry characteristics, government regulations, and external innovation infrastructure. An environment in which the organization is in contact with its industry, competitors, government, and customers, and each of them affects the decisions and business policies of the company according to the sphere of influence they have (Xu & Lu, 2022). The characteristics of the industry and the external innovation infrastructure of each industry may also significantly affect the innovative behaviors of the company and its human resource management practices (Malik et al., 2020). In addition to the industry, the regulatory environment is also very effective as an environmental factor in rejecting the use of new technologies such as including blockchain and artificial intelligence (Nekit, 2023). The regulatory environment refers to governmental policies affecting technology diffusion (Zhu et al., 2006). Currently, the use of Artificial Intelligence (AI) systems by the public

sector is evolving and has been influenced by several factors, including technological advances, increased public sector demand and regulatory changes (Pedro, 2023.) The regulatory environment may support or constrain a company's technological innovation depending on the nature of regulations (Baker, 2011). If the regulatory environment encourages innovation, companies are likely to adopt new technology (Hsu et al., 2006). The regulatory environment is one of the strongest influential environmental factors for technology usage, particularly in developing countries (Pan et al., 2021). some traditional industries and others require more technology. Industry pressure to implement technological advances will influence companies' innovation initiatives (Ransbotham et al., 2017), and eager customers and competitive market pressure will also have a positive impact on the adoption of artificial intelligence in companies. The McKinsey Global Institute (2013) also confirmed that, in the future, the "growth" in the rate of use of artificial intelligence as an indicator in the indicators of global economic growth as well as technology per capita of the fourth industrial revolution, together with the rates of national income, GDP Domestic, inflation and other indicators that measure the economic strength of the government will be known (Abdeldayem & Aldulaimi, 2020). Accordingly, the Third hypothesis is proposed as follows:

H3: Environmental factors have a positive effect on the use of artificial intelligence in employee recruitment.

2.2.4 Conceptual Model

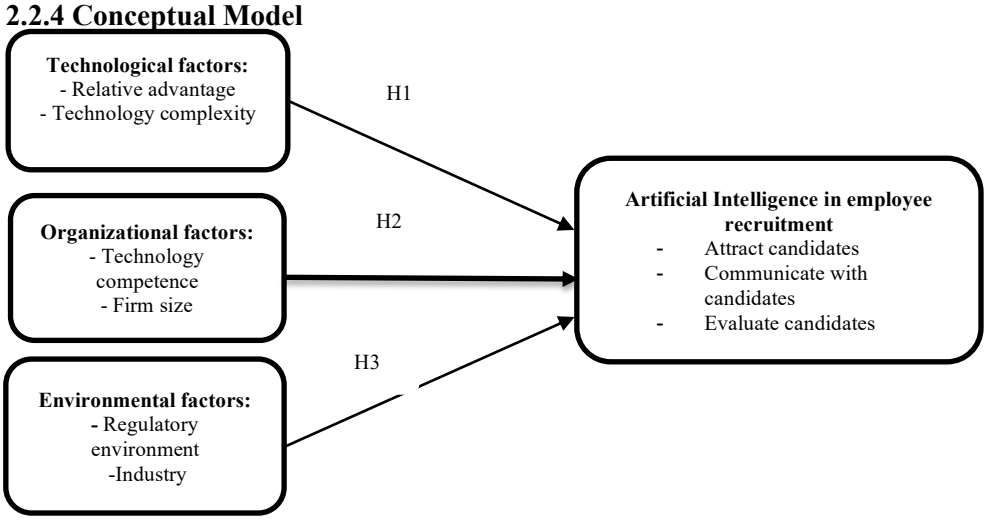

Figure 1. Conceptual Model
Source: author's view

3. Methodology

The current research is applied in terms of purpose and its nature is descriptive-survey. Its statistical population consists of 250 senior managers and middle managers of companies active in the Furniture industry of Iran. Since about 250 people have been identified and the opinions of the same number have been examined in the collection of information, the statistical population is the same as the sample population. The main purpose of this research is to investigate the background factors affecting the use of Artificial intelligence and the employment of human resources as a group of other variables. With these words, it is necessary to accept only those managers of the organization as sample members who play a role in recruiting and Recruitment decisions. Also, in order to ensure the correctness of the answers collected, managers were selected who were aware of the knowledge of artificial intelligence and how to use artificial intelligence in human resource management processes. In this research, 250 senior managers and middle managers of furniture association member companies have recruitment and Recruitment of employees systems. In the research questionnaire, in addition to the items related to the investigated variables, demographic questions related to the three characteristics of gender, education level and the amount of related work experience were also raised. The results of data analysis regarding demographic characteristics are presented in Table 1.

Table 1. Frequency distribution of demographic descriptive characteristics

Attributes		**Number**	**Per cent**
Gender	Man	177	72%
	Female	68	28%
Level of Education	Bachelor	72	29%
	Masters	137	56%
	P.H.D	36	15%
Work Experience	Between 5 and 10 years	33	13%
	Between 10 and 15 years	52	21%
	Between 15 and 20 years	95	39%
	More than 20 years	65	27%
Total respondents		250	100%

Source: own processing

3.1 Collection of research data

In the current research, two methods were used to collect data, firstly, we used library studies to compile the basics, definitions and theoretical concepts, and then we used

the field method to collect research data. It should be noted that the main tool for collecting data in this research was a questionnaire. In the said questionnaire, a five-point Likert scale was used, and very high, high, medium, low and very low options were used in the questionnaire. In the questionnaire structure of the present research, the measurement of variables based on the items extracted from the article of Pan et al. (2022) was used. Based on this, to measure the dependent variable of artificial intelligence in recruitment, 3 items: the possibility of recruiting human resources through artificial intelligence, the possibility of communicating with job candidates through artificial intelligence, and the possibility of evaluating job candidates through artificial intelligence, and to measure the independent variable of technological factors, 7 Subject: improving performance in recruitment with artificial intelligence technology, effectiveness of recruitment with artificial intelligence, increasing the complexity of the ability to recruit with artificial intelligence, clarity and comprehensibility of artificial intelligence tools, a lot of mental effort to interact with artificial intelligence tools, ease of using artificial intelligence tools in companies, the convenience of doing the desired work with artificial intelligence in companies and to measure the independent variable of organizational factors 3 items: the availability of the company's technology infrastructure to support artificial intelligence tools, the company's commitment to familiarizing human resources employees with artificial intelligence tools, a high level of Knowledge of artificial intelligence tools and to measure the independent variable of environmental factors as well 3 items: Mandatory use of artificial intelligence in the recruitment process according to a guideline, support of the rules defined in the company for the use of artificial intelligence in the recruitment process, existence of sufficient legal protection in our company It was used to use artificial intelligence.

To ensure the validity of the questionnaire questions, the opinions of furniture industry experts were obtained so that the questions of the questionnaire could measure the subject of the research, and as a result, the final research questionnaire was approved based on 16 items to measure the research variables.

In the current research, after compiling and preparing the questionnaire and verifying its validity, 30 questionnaires were distributed among the members of the statistical sample to calculate the value of the Cronbach's alpha test for each of the variables investigated in the questionnaire according to the topics. Based on the results, the value of this coefficient for each of the research structures was obtained as follows: artificial intelligence in employment 0.899, environmental factors 0.824, organizational factors 0.829 and technology factors 0.887. Considering that these values are higher than the minimum value of 0.7, it can be concluded that the used questionnaire has high reliability.

3.2 Data analysis method

In this research, both descriptive and inferential statistics were used to analyze the data and then fit the research conceptual model and test the hypotheses using the partial least squares method in structural equation modeling (PLS-SEM). It is worth mentioning that before choosing the appropriate test method, we used the goodness of fit test to evaluate the parametric or non-parametric data. The software used in this research were SPSS.26 and SmartPLS.3.

4. Findings

4.1 Results of inferential statistics

To check the normality of the distribution of the research variables, before testing the research hypotheses, to ensure the correct application of tests appropriate to the hypotheses and data, using the Kolmogorov-Smirnov test, to check the distribution according to the norm (normality or non-normality) research data we paid. In this test, the confirmation of the null hypothesis indicates the normal distribution of the research variables, and the confirmation of the opposite hypothesis, or the one hypothesis, indicates the rejection of the null hypothesis and indicates the absence of normal distribution of the research variables. The results of this study are presented in Table 2.

Table 2. Kolmogorov-Smirnov test results

Component	Average	standard deviation	Significance level
Artificial Intelligence in employee recruitment	4.154	0.491	0.220
Technological factors	4.213	0.444	0.161
Organizational factors	4.879	0.510	0.101
Environmental factors	4.442	0.617	0.240

Source: own processing

The results are obtained from Table 2. Show that the significance level for all research variables is higher than the standard value of 0.05, so it can be said that the data distribution is normal. In fact, with a probability of 0.95, we can accept that the research variables have a normal distribution.

Then, in addition to the Kolmogorov-Smirnov test, the KMO and Bartlett tests were used to ensure the adequacy of the sample size. The results of the studies regarding this test show that if the value obtained for the KMO index is higher than 0.7 and close to one, the desired data (sample size) is suitable for factor analysis, and otherwise (less than 0.7) The results of factor analysis are not very suitable for the data in question. In addition, if the significance level of Bartlett's test is less than 5%,

it indicates that factor analysis is suitable for identifying the factor model. The results of this test are reported in Table 3.

Table 3. KMO and Bartlett test

KMO	0.887
Bartlett	8867.1498
df	240
Significance level	0.000

Source: own processing

4.1.1 Fit measurement models

In this study, we analyzed the measurement model of research variables by using structural equations in Smart PLS software. The evaluation results of reliability criteria (Cronbach's alpha and combined reliability), convergent validity, and the results of factor loadings of the research variables in Tables 4 and 5 show that the values obtained for factor loadings are higher than 0.5, Cronbach's alpha is higher than 0.7 and the combined reliability is more than the set criterion, i.e. 0.7. Also, the result obtained from the convergent validity criterion shows that the convergent validity values of all the research constructs are higher than the criterion value of 0.5 and it indicates that all the questions (items) with a suitable and high correlation level are as good as the variables. They measure the observed.

Table 4. The results of measuring the factor loadings of the research items

Component	items	symbol	Factor loading
Artificial Intelligence in employee recruitment	In our company, it is possible to recruit human resources through artificial intelligence.	AI1	0.890
	In our company, it is possible to communicate with job candidates through artificial intelligence.	AI2	0.879
	In our company, it is possible to evaluate employment candidates through artificial intelligence.	AI3	0.876
	The use of artificial intelligence technology improves our performance in recruitment.	TEF1	0.770
	The use of artificial intelligence technology increases the effectiveness of our recruitment.	TEF2	0.836

Technological factor	The use of artificial intelligence technology increases the complexity of our recruiting ability.	TEF3	0.512
	AI tools are clear and understandable.	TEF4	0.841
	Interacting with artificial intelligence tools does not require much mental effort.	TEF5	0.783
	The AI tool we use in our company is easy to use.	TEF6	0.876
	It is easy to get what we want to do from AI technology.	TEF7	0.631
Organizational factors	Our company's technology infrastructure is available to support AI tools.	ORF1	0.851
	Our company is committed to introducing HR staff to AI tools.	ORF2	0.937
	Our company has a high level of knowledge of artificial intelligence tools.	ORF3	0.910
Environmental factors	In our company, the use of artificial intelligence in the recruitment process is required according to a guideline.	ENF1	0.732
	Definition rules in the company support the use of artificial intelligence in the recruitment process.	ENF2	0.884
	There is sufficient legal protection in our company for the use of artificial intelligence.	ENF3	0.891

Source: own processing

Table 5. The results of fitting the measurement model

Component	Redundancy	Communality>0	Alpha >0.7	R^2	CR>0.7	AVE> 0.4
Artificial Intelligence in employee recruitment	0.455	0.523	0.857	0.639	0.913	0.777
Technological factors	-	0.4.8	0.790	0.000	0.876	0.703
Organizational factors	-	0.556	0.885	0.000	0.928	0.810

Environmental factors	-	0.478	0.828	0.000	0.854	0.573

Source: own processing

To measure the divergent validity of the research constructs, the f Fornell &Larcker method was used. Acceptable divergent validity of a model indicates that a construct in the model interacts more with its indicators than with other constructs. The investigation of this issue is done by a matrix whose houses contain the values of the correlation coefficient between the structures and the square root of the convergent validity values for each structure.

Table 6. The results of measuring divergent validity with f Fornell &Larcker method

Component	Artificial Intelligence in employee recruitment	Technological factors	Organizational factors	Environmental factors
Artificial Intelligence in employee recruitment	0.881			
Technological factors	0.828	0.826		
Organizational factors	0.800	0.831	0.900	
Environmental factors	0.796	0.729	0.730	0.838

Source: own processing

The results show that in the current research, the model structures interact more with their indicators than with other structures and the validity of the model divergence is optimal and appropriate.

4.1.2 Structural model fit

In the current research, according to the data analysis algorithm in the PLS structural equation method, after fitting the measurement models, the fit of the structural model of the research is checked. In this section, T-value, R^2, P-Value and f^2 criteria were used to fit the structural model.

- **T-value:** The first and most basic criterion for fitting the structural model of the research is the significance coefficient or t-values. If the t-values are greater than 1.96, it indicates the correctness of the relationship between the

constructs and, as a result, the research hypotheses are confirmed at the 95% level. The results of this test are presented in Figure 2 and all the hypotheses are confirmed.

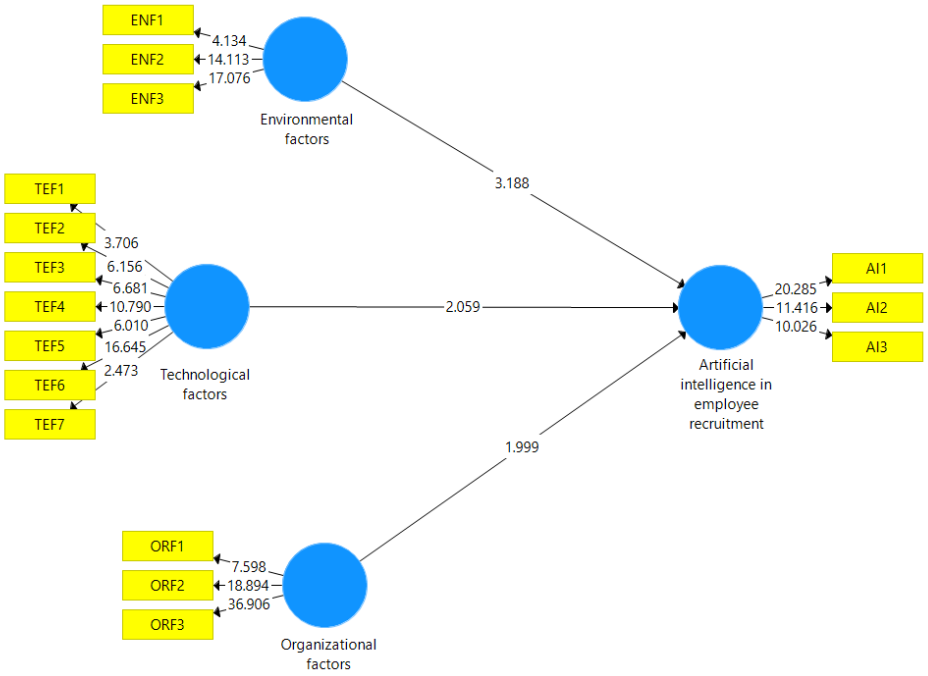

Figure 2. The results of the T-value
Source: own processing

- **P-Value:** This indicator is used to evaluate whether the results of the experiment occurred due to chance or not. But this value merely sets a cut-off point for us, based on which we claim that the findings of our study are statistically significant. Scholars in the field of statistics believe that the acceptable level for this index is less than 0.05. The results of this index are presented in Figure 3.

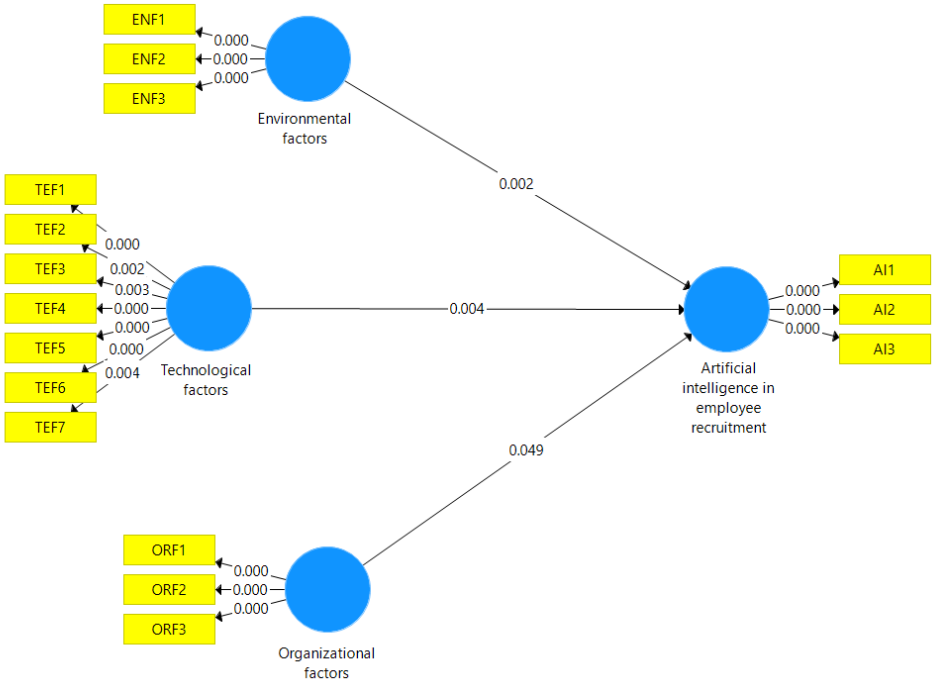

Figure 3. The results of the P-value
Source: own processing

- **R^2:** Another essential criterion for checking the fit of the structural model is to check the coefficients of determination related to the endogenous (dependent) causal variable of the model. Three values of 0.19, 0.33 and 0.67 are introduced as criteria for weak, medium and strong R^2. The values are presented in Figure 4. According to the value of R^2 for the construct of artificial intelligence, the appropriateness of the structural model is confirmed.

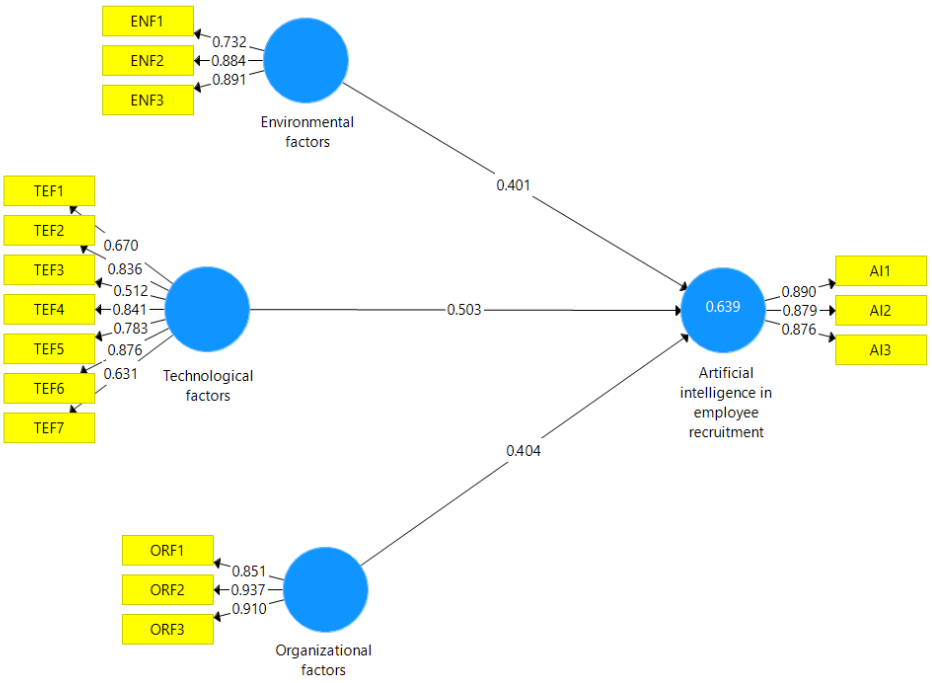

Figure 4. The results of R^2
Source: own processing

- **F^2:** The impact size criterion can be used to measure the intensity of relationships. Or using the effect size criterion, it is possible to determine which of the independent variables has a greater effect on the dependent variable. The values of 0.02, 0.15 and 0.35 indicate the weak, medium and strong influence of one structure on another structure, respectively. The value of this criterion is calculated using the following relationship.

$$f^2 = (R^2_{included} - R^2_{excluded}) / (1 - R^2_{included}) \quad (1)$$

In this regard, the value of R^2 includes the R^2 value of the endogenous (dependent) construct when the exogenous (independent) construct is present in the model. And R^2 excludes, the R^2 value of the endogenous construct when the exogenous construct is excluded from the model. The results obtained from the measure of the impact of background factors on the use of artificial intelligence in employment are reported in Table 7.

Table 7. The results of the F^2

Component	F^2	Condition
Technological factors	0.365	Strong
Organizational factors	0.150	Medium
Environmental factors	0.265	Strong

Source: own processing

4.2 Testing research hypotheses

Based on the research data analysis algorithm using the partial least squares method, at this stage, according to the results obtained from the t-value, P-value and path coefficients, the research hypotheses are tested. If the value of the significant coefficient for each of the paths is more than 1.96, the corresponding path is confirmed at the 95% confidence level and the related hypothesis is confirmed. The results of the research hypothesis test are reported in Table 8.

Table 8. the results of the research hypotheses test

Hypothesis	Path coefficient	T-value	P-value	Result
The Effect of Technological Factors on Artificial Intelligence in employee recruitment	0.503	2.059	0.004	support
The Effect of Organizational Factors on Artificial Intelligence in employee recruitment	0.404	1.999	0.049	support
The Effect of Environmental Factors on Artificial Intelligence in employee recruitment	0.401	3.188	0.002	support

Source: own processing

According to the results obtained from Table 8, it can be concluded that the three contextual factors have a positive and significant effect on the use of artificial intelligence in employee recruitment in the furniture industry in Iran.

5. Conclusions

Today, the survival of organizations depends on the adaptation and coordination of knowledge, skills and expertise of human resources with scientific advances and technological changes. Due to the high dependence of the production process in the furniture industry on manpower and due to the increasing progress of technology to

maintain and develop the position of this industry in the gross domestic product and create stable employment, the need to pay attention to skilled manpower and familiar with modern technical knowledge is very necessary.

Artificial intelligence in recruitment is a pioneering innovation and a factor for competitive advantage that helps organizations develop to compete in this era by interacting with human resources to increase the efficiency of machines to attract high-performing potential candidates to the company (Geetha & Reddy, 2018) and has become an essential tool for recruiters in the past few years. 76% of recruiters believe that AI will have a significant impact on the HR recruiting function (Verlinden, 2019) and recruiting is the most dominant function in HR where AI is expected to replace manual screening of candidates with AI-based screening in the short term. This time-consuming process is used (Premnath & Chully, 2020). Also, the results of the environmental, organizational, and technological background factors investigation show that three contextual factors technology, organization and environment affect the adoption of new technologies by companies. The researchers identified the relative advantage of artificial intelligence over other technologies, compatibility with company strategies, organizational readiness, senior management support, organization size, organization resources, competitive pressure, and government laws as factors influencing the adoption of artificial intelligence technology. In general, the results of this study showed that artificial intelligence in recruitment has many capabilities that allow recruitment experts to have more suitable recruitment by allocating less time and money; In such a way that by screening a large volume of resumes and removing irrelevant resumes through it, only people who have the desired competencies of the organization are selected for the interview.

5.1 Analysis of hypothesis test results

In the first hypothesis, the relationship between technological factors in the use of artificial intelligence in the recruitment of employees in the furniture industry in Iran was investigated. The results showed that technological factors directly predict and explain 0.503 of the changes related to the use of artificial intelligence in the recruitment of employees. Investigations show that the results obtained with the results of Pan et al. (2022), Jia et al. (2018); Hmoud & Laszlo (2019) were consistent. Based on this, it can be said that artificial intelligence can be effective in the effectiveness of the employee recruitment process by performing complex tasks, saving time and money, precision, eliminating bias, reducing workload, and increasing efficiency.

In the second hypothesis, organizational factors in the use of artificial intelligence in the recruitment of employees in the furniture industry in Iran were investigated. The

obtained results show that organizational factors directly predict and explain 0.404 of the changes related to the use of artificial intelligence in the recruitment of employees. These results show that organizational factors such as the size of the company in terms of employees and budget, resources, capital, organizational structure, infrastructure and technological competence are needed as a framework and prerequisite to activate artificial intelligence initiatives and from the relationship of strategic alignment of organizational resources and processes. It supports senior management and decisions based on data, knowledge and culture of the organization and training. These results are consistent with the studies of Pumplun et al. (2019), Hoffman et al. (2020), and Geetha & Bhanu (2018).

In the third hypothesis, environmental factors were investigated in the use of artificial intelligence in the recruitment of employees in the furniture industry in Iran. The results showed that the environmental factors directly predict 0.401 of the changes in the use of artificial intelligence in the recruitment of employees. Investigations show that the results of the present study are consistent with the results of the studies of Pan et al. (2022), Ghi & Srivastava (2021), and Alsheibani et al. (2019). Based on this, it can be said that the pressure of the industry environment to implement technological advances on the innovation initiatives of companies and the effect of eager customers and competitive market pressure that force companies to design personal and smart products have been shown as environmental factors and the influence of the regulatory environment and Government policies on the diffusion of technology and technological innovation is known as one of the most important environmental factors affecting the use of technologies such as artificial intelligence in human resource management processes in developing countries, and it is very necessary to pay attention to the benefits of these technologies.

5.2 Practical and Academic Implications

According to the results obtained in this study, it is suggested that to better implement artificial intelligence technology in companies active in the furniture industry, it is necessary to review the recruitment processes and redesign them in a way that fully matches the system based on have artificial intelligence and in this way, the costs imposed on the organization due to repetitive and time-consuming tasks will be minimized. Also, identifying the purpose for using and choosing artificial intelligence software according to human resource management policies will help these organizations plan to choose a more effective artificial intelligence. Also, the use of artificial intelligence in assessing needs and preparing and editing the content of training courses in the furniture industry using personalized and flexible platforms in time and place based on the characteristics of employees and their skills can be effective to create a positive atmosphere and gain the confidence

of investors and stakeholders. According to the obtained results, it is suggested that the companies active in Iran's furniture industry use practical platforms in this field in order to increase the effectiveness of artificial intelligence in recruiting employees. Among these platforms, the following can be mentioned:

- AllyO is an AI-powered recruiting platform that automates the end-to-end recruiting workflow.
- HiredScore is an AI-based platform that helps companies to identify the best candidates for a job by analyzing resumes, cover letters, and other application materials.
- Hiretual is an AI-powered sourcing platform that helps recruiters to find the best candidates for a job by analyzing social media profiles, resumes, and other data sources.

These are just a few examples of the many AI-based recruiting systems that are available today.

5.3 Limitations and Future Research

1. Compared to other countries, in Iranian companies, less work has been done on the application of artificial intelligence algorithms in human resources activities, and this department has been kept away from a role as a strategic partner, and it is necessary that in areas such as salaries and benefits, Training and development of innovative methods should be done more.
2. Due to the importance of economic issues and financial resources in the decisions of senior managers in using different resources of the organization to achieve the goals of the defined vision of each organization, it is suggested to use artificial intelligence technology in other human resources processes in future studies, including The payment system for employees should also be paid.
3. In this study, the size of the organization was investigated in general, in future studies, the role of this factor can be investigated separately in organizations of different sizes and about different industries, and the effect of using artificial intelligence technology in the operational and headquarters activities of manufacturing companies. And he also examined the change from the traditional human resource management method to the modern human resource management method.
4. Methods such as augmented reality or virtual reality, all of which are based on artificial intelligence, and how they might work to aid the recruitment process and select potential candidates were not explored in this research, which could be studied in the future.

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Author Contributions
AB and MM conceived the study and were responsible for the design and development of the data analysis. SH SH and MM were responsible for data collection, analysis, and interpretation. AB was responsible for the literature review section.

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