Investigating The Mediating Role Of Artificial Intelligence In The Relationship Between The Branding Process And The Performance Of Start-Up Organizations

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Abstract

The purpose of the present research is to investigate the mediating role of artificial intelligence in the relationship between the branding process and the performance of start-up organizations in Tehran. The statistical population of the current research is the employees of the new organizations in Tehran, whose number is 150, and 108 people were selected using a simple sampling method. The tools used in the current research are Chen et al.'s artificial intelligence questionnaire, Liu et al.'s branding questionnaire (2013).) and Hersey and Goldsmith's organizational performance questionnaire. In this research, content validity was used to check the validity of the questionnaire, and it should be noted that the reliability obtained for the artificial intelligence questionnaire was 0.90, the branding questionnaire was 0.95, and the organizational performance questionnaire was 0.89, which was acceptable. And therefore, the research questionnaires have had sufficient reliability. In order to ensure the validity of the questionnaires, the standard questionnaire was given to subject experts, including professors who have many studies in the field of research, and according to their opinions, the necessary changes were made. Also, the validity of the questionnaire was confirmed by the AVE test

for Testing the hypotheses of the research, first, the structural model of the research was fitted. Then, one-sample t-tests and Friedman's test were used according to the type of question and statistical assumptions. The results of this research show that the significance coefficient of artificial intelligence, branding process and organizational performance in the conceptual model is greater than 1.96. which indicates that the main hypothesis of the research has been confirmed. That is, artificial intelligence as a mediating variable has a positive effect on the relationship between branding and organizational performance.

Keywords: artificial intelligence, branding, marketing, organizational science, start-up organizations.

Introduction

In today's era, one of the developments that is happening in today's business environment is the fourth industrial revolution and transformative technologies such as physical cyber systems, Internet of Things, big data, artificial intelligence and blockchain have emerged. These technologies and the fourth industrial revolution have affected various industries and areas, one of the important areas affected by the technologies of this area is the business area [1]. Artificial intelligence finds its own applications in different contexts in the business scenario. Experts and academics believe that artificial intelligence is the future of our society [2]. Artificial intelligence is a set of algorithm-based machines that are designed or coded to learn individually from data to aid in prediction and exceptional performance through artificial neural networks, machine learning, robotic process automation, and text mining [3]. With the advancement of technology, the world has become a network of interconnected networks. As organizations move towards the fourth industrial revolution, artificial intelligence and other emerging technologies are emerging in parallel [4]. Technological developments are transforming the existing marketing landscape. The widespread use of the Internet has brought the marketing of products or services into the online platform, emphasizing the recognition of a brand in the global market [5]. Artificial intelligence is significantly changing brand preferences, marketing strategies and customer attitudes.

Furthermore, these impending changes in the global gig economy (i.e., based on flexible or temporary jobs, often involving communication with customers or clients through an online platform) have a significant impact on marketing activities [6-7]. In addition, AI works intelligently by integrating business and marketers to create, organize and use marketing knowledge to sell their brands worldwide [8]. Artificial intelligence in marketing has addressed the administrative, legal and strategic planning process of sales, advertising, branding, pricing in the field of management [9]. Organizational branding is the process of shaping, cultivating and managing an organization's brand. An organization's brand is a set of perceptions and feelings that the target audience has about that organization [9]. Today, machine learning services are available, and many organizations that do not have access to the required hardware are able to use cloud services. These solutions are rapidly growing in the digital ecosystem. And these changes take place at such a scale and speed that in a short period of time the market is simply transformed and new technology comes to the market [10]. Eliminating laborious and time-consuming activities and repetitive tasks with artificial intelligence makes the great importance of creative and strategic activities and detailed analyzes performed by artificial intelligence appear more and the role of creative and strategic activities to create an advantage. Increase competitiveness [11]. The basic applications of machine learning, in addition to the areas related to the customer and the field of marketing, which are discussed in detail in the next section, on many other areas of business such as logistics [12], automation by automatic production with the integration of industrial robots. In the work flow and training them to do hard work [13], security supervision [14]. Detecting fraud and preventing it [15], predicting the performance of the organization [16], has also had a great effect. Artificial intelligence can interpret information more effectively than before and by identifying and analyzing unstructured data from customers, it can help provide sales prospects and analyze customer sensitivity behavior. Accordingly, the main focus of the current study is to discuss the impact of artificial intelligence on It is the knowledge of organization branding and marketing that leads to business optimization.

Research literature

One of the most important tools in digital marketing is artificial intelligence, which is used in various fields of digital marketing. One of the most fundamental areas that marketers engage with is intelligent market segmentation, which leads to more efficient marketing spend in the short term and competitive advantage in those segments in the long term [17], another fundamental application of artificial intelligence in Marketing is a suggestion engine and recommender system to customers. The recommender system is a subset of the information filtering system that seeks to predict the user's rating or preference for an item [18]. In retailing, continuum analysis is used to perform basket analysis where retailers seek to understand customers' purchasing behavior in order to influence sales promotions, loyalty programs, store design, and discount schemes [6]. and intend to use market basket analysis to help maintain sales growth [7], Internet fraud researchers are trying to use artificial neural networks to detect fraudulent transactions. The important point is that today in the field of internet advertising, the regulations of countries are incomplete in combating fraud and the companies themselves must identify these frauds [6], Another application of artificial intelligence in online marketing is customer sentiment analysis [5], in fact, this technology is used to extract emotional tendencies in texts [3], Sentiment analysis helps big companies analyze metadata to gauge public opinion, conduct cross-market research, monitor brand and product reputation, and understand customer experiences. This issue has caused this field of data mining knowledge to be met with a unique welcome in recent years [2], as it can be seen that researches have extensively discussed the applications of artificial intelligence, but so far, the research that It has not been done to fully and comprehensively address the applications of artificial intelligence in the organization's branding.

Impacts of Artificial Intelligence on Marketing

1- Personalization through artificial intelligence: Content personalization plays an important role in marketing. Artificial intelligence can make suggestions for people using data from previous customer interactions with the brand and create personalized campaigns based on the needs and preferences of

each customer individually. This leads to increased customer engagement, more customer activity and a better customer experience.

2- Future data analysis with artificial intelligence: By improving data analysis using artificial intelligence, it is possible to analyze large volumes of data and provide key estimates for marketing. With the ability to identify patterns and trends in big data, marketers can investigate the behavior of their customers, evaluate trends and developments, and improve their marketing strategy. This is important because accurate AI analytics can provide a distinct competitive advantage.

3- Increasing efficiency through automation: Another impact created by artificial intelligence is the automation of tasks. AI can automate tasks that normally require a lot of time and effort, such as creating reports or monitoring campaigns. These manual processes are optimized through automation, which saves marketers time and allows them to focus on strategic tasks.

4- Placing advertisements using artificial intelligence: Using an intelligent artificial intelligence solution can have a significant impact on the success of a company's advertisements in the future and bring more effective advertisement placement. Artificial intelligence can optimize ad placement by analyzing user behavior and selecting ads based on their interests and preferences. This increases click-through rates and improves the return on investment of your marketing budget.

5- Customer behavior prediction revolution: Most companies are growing towards the use of artificial intelligence, especially in digital marketing. Artificial intelligence can predict customer behavior by analyzing data related to previous interactions and transactions using learning algorithms. By predicting customer behavior, marketers can provide personalized offers and adjust their marketing campaigns to achieve better results. Targeted marketing means customer-oriented performance and accurate understanding. In other words, the more the optimal use of available resources with the use of artificial intelligence, the higher the probability of sustainable business success.

6- Using artificial intelligence in strategy and planning: Artificial intelligence can help marketers in planning and marketing

activities and it does this with the help of segmentation, targeting and positioning [11]. In addition to segmentation, targeting, and positioning, artificial intelligence can help marketers predict the company's strategic direction. Huang and Rast [20], a combination of data optimization techniques, machine learning, and causal predictions can help customers narrow the target [27],

7- Use of artificial intelligence in product management: Marketing analysis tools based on artificial intelligence can measure the fit of product design with customer needs and customer satisfaction [7], weighting product features during product search helps marketers to recommend system. Understand the product provider and adapt marketing strategies in line with meaningful product management. Artificial intelligence provides capabilities to customize offers to fit customer needs [13],

8- Use of artificial intelligence in pricing: Artificial intelligence based on armed bandit algorithm can dynamically adapt the price in real time scenario. In variable pricing scenario such as e-commerce portal, Bayesian inference in machine learning algorithm can quickly price points. adjust to match the competitor's price. According to Dekimpe [28], best response pricing algorithms include customer choices, competitor strategies and supply network in order to optimize dynamic pricing [14].

9- Using artificial intelligence in advertising management: advertising management includes media planning, media scheduling, advertising campaign management, search engine optimization, etc. Advertising techniques are changing from physical to physical-digital. Digital marketing and social media campaigns have become common due to digital transformation worldwide [3], artificial intelligence enables message personalization and customization for customer profiles and preferences [27], content analysis It can optimize the value and usefulness of the message. The customer's likes and dislikes can be tracked in real time with the help of artificial intelligence emotional algorithms. Network ethnography of social media content provides new avenues for marketers to adapt their marketing strategies based on customer interests [9].

Methodology

The current research is based on a quantitative approach that has been carried out using correlation and survey methods, and in terms of its purpose, the current research is practical. The statistical population of the current research is the employees of public and private organizations in Tehran, and according to the size of the research population, 108 of them were selected by simple random sampling.

Three questionnaires were used to collect data and information for the research. The questionnaires used in this research include artificial intelligence questionnaire which includes 5 main components (artificial intelligence management, artificial intelligence-based decision-making, artificial intelligence infrastructure, artificial intelligence skills and desire for artificial intelligence) and 22 items, Liu branding questionnaire and colleagues (2013) that this questionnaire also includes 5 components (internal branding, acceptance of brand value, organizational commitments, brand performance and market performance) and 18 questions and Hersey and Goldsmith's organizational performance questionnaire (1980) which has 7 components (ability, clarity , help, incentive, evaluation, credit and environment) and 42 questions.

Table 1. Examination of Cronbach's alpha and the reliability of the research tool

constructs (variables)	**Composite reliability**	**Cronbach's alpha**
Artificial intelligence	0.767	0.90
branding	0.869	0.95
Organizational Performance	0.783	0.89

After collecting the data that is needed to conduct the research, it is very important to choose a suitable tool to calculate and analyze the information related to the variables. In order to perform calculations and prepare data, as well as descriptive analysis of questionnaires, Excel and Laser software were used.

Research Findings

Structural equation modeling is a comprehensive approach for testing hypotheses about the relationships between observed and existing variables. In this section, we first calculate descriptive statistics, that is, we investigate the statistical

population under investigation, and then we investigate the inferential statistics of research hypotheses.

As Table No. 2 shows, 31% of the respondents have bachelor's degrees, 54% have master's degrees, and 15% of respondents have a doctorate degree in our statistical population.

Table 2. Educational qualifications of the examined sample

Row	Frequency	Frequency Percent
Masters	34	**31%**
Masters	58	**54%**
P.H.D	16	**15%**
Total	108	**0.100**

Introducing the investigated components

Considering the normality of the research data and the sample size of 108 active employees of new organizations in Tehran, we will examine the research hypotheses using the structural equation modeling method (using PLS 3 software) in order to fit the conceptual model of the research and examine the main and sub-hypotheses of the research. Table 3 shows the introduction of symbols.

Table 3. Introduction of model components

parameters	constructs (variables)
Ability	Organizational Performance
Clarity	
Help	
incentive	
Assessment	
Validity	
Environment	
Internal branding	branding
Acceptance of brand value	
Organizational commitments	
Brand performance	
Market performance	
Artificial intelligence management	Artificial intelligence
Decision making based on artificial intelligence	

Artificial intelligence infrastructure	
Skills to use artificial intelligence	
Desire to use artificial intelligence	

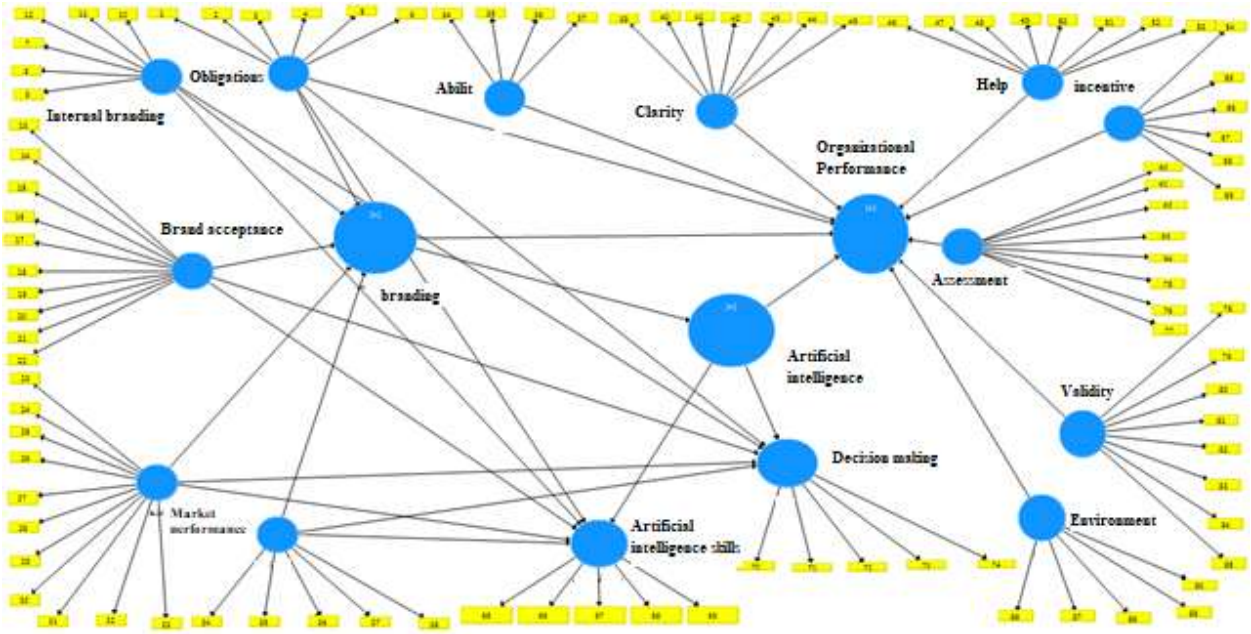

Diagram 1. Introducing the components of the model

Reliability of the model

Cronbach's alpha coefficient and composite reliability (CR) were used to check the reliability of the model. In this research, the values of Cronbach's alpha coefficient and combined reliability (CR) related to each of the dimensions of the research questionnaire are shown in Table 4**.**

Table 4. Cronbach's alpha values and composite reliability of the research model

constructs (variables)	**Composite reliability**	**Cronbach's alpha**
Organizational Performance	0.767	0.724
Ability	0.869	0.970
Clarity	0.783	0.725
Help	0.874	0.844
incentive	0.805	0.823
Assessment	0.866	0.865

Validity	0.706	0.768
Environment	0.910	0.925
branding	0.902	0.912
Internal branding	0.736	0.795
Acceptance of brand value	0.863	0.881
Organizational commitments	0.810	0.862
Brand performance	0.725	0.710
Market performance	0.901	0.925
Artificial intelligence	0.725	0.763
Artificial intelligence management	0.830	0.836
Decision making based on artificial intelligence	0.859	0.861
Artificial intelligence infrastructure	0.829	0.826
Artificial intelligence skills	0.874	0.844
Desire for artificial intelligence	0.805	0.823

According to the above table, Cronbach's alpha coefficient and combined reliability for the 5 structures in question is higher than 0.7, which indicates the appropriate reliability of the model.

Table 5. Common values

constructs (variables)	**Common values**
Organizational Performance	0.526
Ability	0.632
Clarity	0.715
Help	0.777
incentive	0.369
Assessment	0.514
Validity	0.753
Environment	0.611
branding	0.725
Internal branding	0.526
Acceptance of brand value	0.745
Organizational commitments	0.823
Brand performance	0.778
Market performance	0.803
Artificial intelligence	0.563
Artificial intelligence management	0.694
Decision making based on artificial intelligence	0.626
Artificial intelligence infrastructure	0.618

Artificial intelligence skills	0.777
Desire for artificial intelligence	0.369

The quality of the measurement models in the PLS method is evaluated using the shared values criterion. This measure shows how much of the variability of the indicators (questions) is explained by the related construct. Common values belonging to the constructs of the research model are shown in Table 5.

Validity of the conceptual model

Two criteria have been used to check the validity of the external model. The first criterion is convergent validity and the second criterion is divergent validity.

Convergent validity

The second criterion for examining the fit of measurement models is convergent validity, which examines the correlation of each construct with its questions (indices), the higher the correlation, the better the fit. The noteworthy point is that if the average variance extracted for a variable is lower than 0.5, the question that has the lowest factor load should be removed and the model run again [28], the convergent validity values of the research dimensions in the table 6 is shown.

Table 6. Convergent values of conceptual model research dimensions

constructs (variables)	**Convergent validity**
Organizational Performance	0.623
Ability	0.715
Clarity	0.512
Help	0.661
incentive	0.623
Assessment	0.736
Validity	0.825
Environment	0.910
branding	0.995
Internal branding	0.536
Acceptance of brand value	0.635
Organizational commitments	0.824
Brand performance	0.881
Market performance	0.863

Artificial intelligence	0.551
Artificial intelligence management	0.756
Decision making based on artificial intelligence	0.639
Artificial intelligence infrastructure	0.695
Artificial intelligence skills	0.661
Desire for artificial intelligence	0.623

It should be noted that according to the results of the data in the above table, all the convergence validity values of the research constructs were greater than 0.5, so the convergence validity of the present study was confirmed.

Divergent validity

This model has acceptable divergent validity if the numbers listed in the main diameter of Table 7 are greater than their underlying values [28].

Table 7. Matrix of divergent validity assessment by Fornell and Larcker method of the conceptual model

									0.789
								0.845	0.6827
							0.715	0.668	0.7265
						0.813	0.7087	0.571	0.7145
					0.789	0.4856	0.4867	0.654	0.6754
				0.857	0.4934	0.3626	0.3516	0.382	0.5417
			0.908	0.48166	0.0674	0.5755	0.2017	0.046	0.4867
		0.953	0.23638	0.29502	0.7487	0.8042	0.5884	0.658	0.7655
	0.997	0.400525	0.801329	0.40510	0.7410	0.1370	0.4894	0.537	0.5496
0.732	0.601095	0.701567	0.279893	0.45806	0.7758	0.7643	0.6543	0.567	0/6519
0.657097	0.622746	0.659021	0.324757	0.49587	0.6952	0.7464	0.5645	0.615	0.7014
0.648709	0.57124	0.561112	0.171149	0.32602	0.5130	0.6533	0.4326	0.694	0.5068
.0569801	0.684298	0.615145	0.146543	0.53368	0.2512	0.6156	0.4396	0.456	0.3426
0.54981	0.271112	.0702549	0.390105	0.38044	0.6481	0.7932	0.6749	0.691	0.7732
0.457614	0.567801	0.615134	0.320611	0.51820	0.7286	0.7719	0.6003	0.696	0.5458
0.597236	0.06423	0.697182	0.160817	0.54330	0.3586	0.6800	0.7023	0.613	0.5812

According to the data in the above table, the convergent validity square of each construct is greater than the correlation

values between other constructs, so the research model is confirmed in terms of divergent validity according to Fornell and Larcker's method.

Structural model evaluation

After examining the fit of the measurement models, it is time to fit the structural model of the research. The structural model part, unlike measurement models, is not related to the questions of obvious variables and only hidden variables are examined along with the relationships between them [17].

Table 8. Coefficient of determining the conceptual model of the research R^2

Row	structure (variables)	R^2
1	branding	0.380
2	Organizational Performance	0.278
3	Artificial intelligence	0.521
4	Artificial intelligence management	0.780
5	Decision making based on artificial intelligence	0.630
6	Artificial intelligence infrastructure	0.521
7	Artificial intelligence skills	0.759
8	Desire for artificial intelligence	0.654

It is a measure that is used to connect the measurement part and the structural part of structural equation modeling and shows the effect that an exogenous variable has on an endogenous variable. The important point is that the value of R^2 is calculated only for the dependent (endogenous) structures of the model, and in the case of exogenous structures, the value of this criterion is zero. The higher the value of R^2 related to the endogenous structures of a model, the better the fit of the model, considering that three values of 0.19, 0.33, and 0.67 are used as criteria for measuring R^2 for weak, medium, and high values. The robustness of the fit of the structural part of the model is considered by the R^2 criterion, which can be seen in Table 8.

After realizing that one variable moderates the effect between two variables, it is time to examine the intensity of this effect. If the adjustment effect is significant in the research, how strong or moderate was the adjustment amount? Using

Cohen's effect size formula, it is possible to measure the intensity of the moderating effect, this measure determines the predictive power of the model, and if the value of Q2 in the case of an endogenous construct is 0.02, 0.015, and 0.025, respectively It indicates weak, medium and strong structure or its exogenous instruments [11]. The results of Table 8 show the appropriateness of the model's prediction regarding the endogenous constructs of the research and confirm the appropriate fit of the structural model.

Table 9. Q2 measuring criteria of the conceptual model

Row	Local variables	Sum of squares of observations	Set of squares	Q2
1	Organizational Performance	253/000000	1324/807705	0.020
2	Artificial intelligence	362/000000	3314/852361	0.025
3	Artificial intelligence management	273/000000	2354/783215	0.020
4	Decision making based on artificial intelligence	262/000000	231/3263952	0.20
5	Artificial intelligence infrastructure	281/000000	2354/783215	0.020
6	Artificial intelligence skills	259/000000	2256/783215	0.020
7	Desire for artificial intelligence	362/000000	2614/852361	0.025
8	branding	421/000000	3215/5526345	0.024

Indicator Redundancy criteria

This criterion indicates the amount of variability of the indicators of an endogenous structure that is affected by one or more exogenous structures. The higher the value of this criterion, the better the fit of the structural model, which can be seen in Table 10 [16].

Table 10. Redundancy criteria of the indices of the endogenous structures of the research conceptual model

Row	structure (variables)	Indicators of endogenous structures
1	Organizational Performance	0.27
2	Artificial intelligence	0.49
3	Artificial intelligence management	0.39
4	Decision making based on artificial intelligence	0.34
5	Artificial intelligence infrastructure	0.41
6	Artificial intelligence skills	0.33

7	Desire for artificial intelligence	0.35
8	branding	0.26

The higher the amount of these structures, the better the fit of the whole model.

Determining the intensity of the moderator effect (F2)

After realizing that one variable affects the relationship between two variables, it is time to examine the intensity of this effect. In other words, if the adjustment effect is significant in the research, the researcher should state the intensity of the adjustment and how strong or moderate the adjustment was. Hensler and Fassot [27] state that the intensity of the moderating effect can be measured using Cohen's effect size formula:

$$f^2 = \frac{R^2 \text{Model with moderator} - R^2 \text{Model with out moderator}}{1 - R^2 \text{Model with moderator}}$$

This criterion determines the intensity of the relationship between the components of the model, and the values of 0.02, 0.15, and 0.35 indicate the intensity of small, medium, and large influence of one structure on another structure. First, the model has been calculated by removing the organizational performance variable between the two variables of branding and artificial intelligence.

In the case of removing the organizational performance variable = 0.0027

$$f^2 = \frac{0.016 - 0/10}{1 - 0/016} = \frac{0/0021}{0/984}$$

In the case of removing artificial intelligence = 0.0014

$$f^2 = \frac{0/016 - 0/0152}{1 - 0/016} = \frac{0/0008}{0/984}$$

Considering the values of 0.0027 and 0.0014 for the effect size of the two variables of branding and artificial intelligence on the variable of organizational performance, the effect of the two exogenous variables and the proper fit of the structural model of the research are confirmed.

Examining the fit of the overall research model

In this section, we will examine the fit index of the entire model. In the modeling of structural equations based on the least squares method by SmartPLS3 software, the index will be used to check the fit of the entire conceptual model of the research. This index can be calculated by the following effect.

$$\text{GoF} = \sqrt{\overline{\text{Communalities}} \times \overline{R^2}}$$

$$\overline{\text{Communalities}}$$

It is obtained from the average shared values of the first order hidden variables. According to the output of Smart P.A.L. These values can be seen in Table 11.

Table 11. Calculation of overall fit or GOF of the conceptual model

Row	Local variables	Average R^2	Average shared values	GOF
1	Organizational Performance	0.504	0.657	0/59
2	Ability			
3	Clarity			
4	Help			
5	incentive			
6	Assessment			
7	Validity			
8	Environment			
9	branding			
10	Internal branding			
11	Acceptance of brand value			
12	Organizational commitments			
13	Brand performance			
14	Market performance			
15	Artificial intelligence			
16	Artificial intelligence management			
17	Decision making based on artificial intelligence			
18	Artificial intelligence infrastructure			
19	Artificial intelligence skills			
20	Desire for artificial intelligence			

Wetzles et al. (2009) introduce three values of 0.01, 0.25, and 0.36 as criteria values for weak, medium, and strong values of the overall model fit. Therefore, obtaining a value of 0.59 indicates a very strong fit of the model.

Z significance coefficient (T-value values)

To check the fit of the structural model of the research, several criteria are used, the first and most basic criterion is the significance coefficients of Z. The diagram below shows the structural model of the research along with (T-Value). The significant Z coefficients related to the paths of the research model are shown in Table 12.

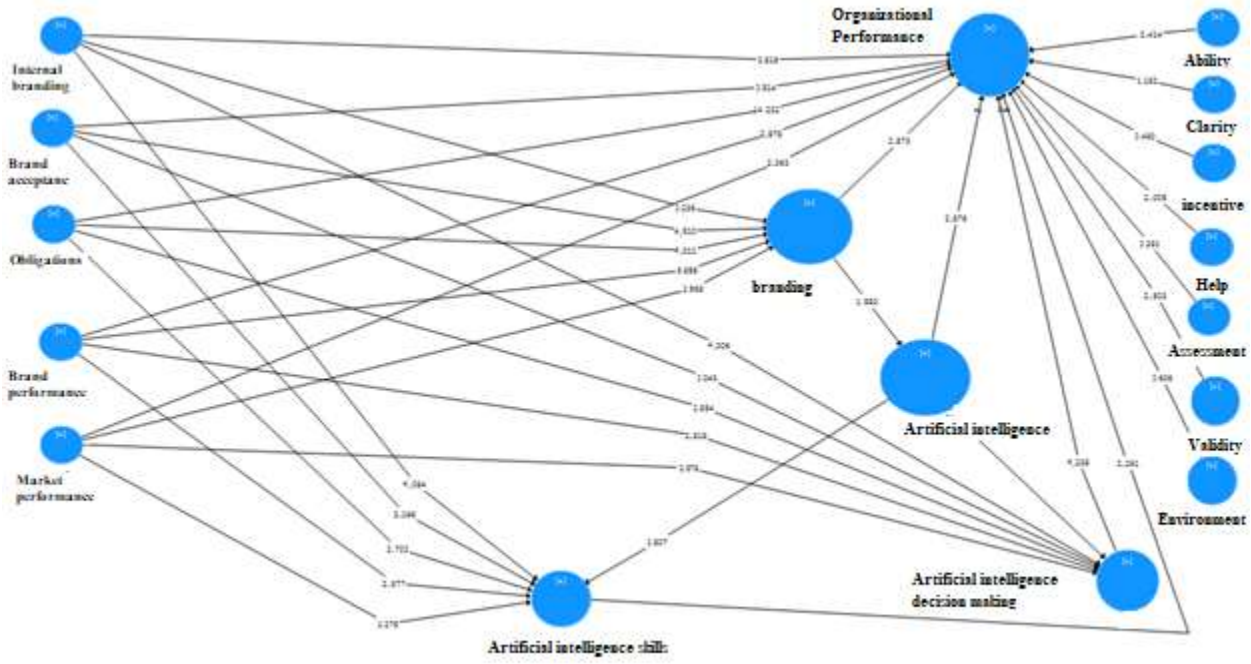

Diagram 2. Significance coefficient of the research

Table 12. Significant values of Z values (t-values) of the conceptual model

Independent	Dependent	Standard coefficient	T test statistic	Test statistic <1.96 T	Test statistics	Result
Artificial intelligence	Organization branding	0.830	4.08	96/1<T	P< 0.05	Confirmed

Artificial intelligence	Organizational Performance	0.618	2.16	96/1<T	P< 0.05	Confirmed
Organization branding	Organizational Performance	0.649	4.23	96/1<T	P< 0.05	Confirmed

Conclusion

The present research was conducted with the aim of investigating the impact of artificial intelligence as a mediating variable between organizational branding and organizational performance. The research community was the start-up organizations of Tehran, which were selected by sampling method. 108 people. The results of graph 2 of the research show that the significance coefficient of artificial intelligence, branding and organizational performance in the conceptual model is greater than 1.96. The results show that the main hypothesis of the research has been confirmed. That is, artificial intelligence as a mediating variable has a positive effect on the relationship between branding and organizational performance.

The results showed that the significant coefficient of artificial intelligence with branding of the organization is 4.08, considering that its TValues are outside the range (1.96 and -1.96) and either the value of sig or P Values is less than 0.05 It is at the confidence level of 0.099, H0 hypothesis is rejected and H1 hypothesis that there is a significant relationship is accepted. Therefore, it is expected to confirm this hypothesis in a larger sample of the same community, which is in line with the research results of Varsha et al. [4] and Danport et al. [17], Jarek and Mazurek [11], Huang [20]. Research results have shown that artificial intelligence works intelligently by integrating business and marketers to create, organize and use marketing knowledge to sell their brands worldwide, artificial intelligence in marketing to the administrative, legal and strategic sales planning process, Advertising, branding, pricing in the field of management.

The significant coefficient of artificial intelligence with the performance of organizations is equal to 2.16, considering that its T Values are within the range (1.96 and -1.96) or the value of P Values is greater than 0.05. H0 is confirmed and the hypothesis H1 that there is a significant relationship is rejected. Therefore, it is expected that this hypothesis will be confirmed

in a larger sample of the same community, that these results are in line with the research of Yazadan Parast et al. [6], Klemp [12], Olan et al. [20]. The use of artificial intelligence in data management and organizational knowledge leads to a significant improvement in the performance of organizations. By using artificial intelligence in data analysis, natural language processing and prediction, data is turned into knowledge and useful information for decision making is provided to the organization. Artificial intelligence is also effective in creating new tools to improve knowledge management and increase employee productivity. As a result, the use of artificial intelligence in data management and organizational knowledge can lead to a significant improvement in the performance of organizations.

The significant coefficient of organizational branding with the performance of the investigated organizations is equal to 4.23, considering that its TValues are outside the range (1.96 and -1.96) or the P Values value is less than 0.05 at the level Confidence 0.099, hypothesis H0 is rejected and hypothesis H1, which indicates the existence of a significant relationship, is accepted. Therefore, it is expected that this hypothesis will be confirmed in a larger sample of the same population. These results are in line with the research of Verma et al. Increasing organizational performance is the goal of every organization and there are many ways to succeed in increasing organizational performance, according to the results of the research, one of these ways is the use of artificial intelligence and organizational branding, considering that organizational performance includes several dimensions of performance. Through this, it is possible to increase the level of achievement of organizational goals, profitability, satisfaction, and productivity of employees.

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