

Developing a Strategic Framework for Integrating Artificial Intelligence in Real Estate Services in Emerging Markets with an Emphasis on the Role of Leadership, Innovation, and Organizational Behavior: A Case Study of Isfahan Province

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Abstract

In today's world, AI is recognized as one of the key factors in the transformation and improvement of service quality in various industries, including real estate services. This paper examines the integration of AI in real estate services in emerging markets with an emphasis on Isfahan province. The main purpose of this research is to develop a strategic framework for integrating AI and identify the role of leadership, innovation, and organizational behavior in this process. To achieve this goal, a field research method has been used. The statistical population includes 30 managers and experts in the field of real estate services in Isfahan province. Data were collected through questionnaires, interviews, and observation and independent t-test was used to analyze the data. Independent t-test showed that there was a significant difference between the mean of AI familiarity between managers and experts ($p\text{-value} = 0.021$). The findings show that managers are generally more familiar with AI, and this can lead to a direct impact on strategies for integrating AI into real estate services. The results of data analysis indicate that effective leadership and innovative culture in organizations play a significant role in the success of AI integration. Also, challenges such as lack of specialized human resources and lack of proper culture building in organizations for AI adoption were identified. Finally, this research recommends that organizations pay attention to strengthening the organizational culture and improving the skills of employees in the field of artificial intelligence, and implement appropriate training programs to develop their capabilities. These measures can facilitate the process of integrating artificial intelligence into real estate services and improve the quality of services provided.

Keywords: Artificial Intelligence, Real Estate Services, Independent T-Test, Leadership, Innovation.

1- Introduction

In the current era, artificial intelligence (AI) is known as one of the most important transformative technologies that has the ability to change traditional structures and create innovation in various industries. This technology, with capabilities such as machine learning, data analysis, and process automation, plays an important role in improving the efficiency and quality of services (Smith et al., 2021).

The real estate industry, as one of the most important sectors of the economy, has always been affected by technological changes. Artificial intelligence in this industry can help provide better services, predict prices more accurately, analyze the market, and increase customer satisfaction. However, the use of this technology in emerging markets, especially in developing regions, has its own challenges. Isfahan province, as one of the economic and cultural centers of Iran, has a vast real estate market that has a high potential for the development of new technologies due to its geographical and historical location. However, the integration of artificial intelligence in this market requires careful consideration of factors such as leadership, innovation, and organizational behavior (Jafari et al., 2023).

Leadership in organizations plays a key role in the adoption and integration of new technologies. Transformational leaders can facilitate the adoption of AI in organizations by creating clear visions and supporting innovation. This leadership style is becoming more important in emerging markets, especially in the real estate industry (Bass & Riggio, 2001). Innovation as a key factor in the success of organizations has become more important due to the speed of change in new technologies. Organizations that foster an innovative culture have a greater ability to adopt and integrate technologies such as artificial intelligence (Damanpour, 2010).

Organizational behavior also plays an important role in the success of the integration of new technologies. Behaviors related to collaboration, flexibility, and acceptance of changes can facilitate the process of integrating AI. In contrast, resistance to change and lack of cultural coherence can prevent the process from succeeding (Robbins & Judge, 2019).

In emerging markets, there are challenges such as a lack of expert human resources, financial constraints, and insufficient awareness of the benefits of AI. These challenges can slow down the process of integrating new technologies and require the design of appropriate strategies to overcome them (Jafari et al., 2023). Previous studies have shown that the use of AI in real estate markets can lead to increased transparency, reduced costs, and improved strategic decision-making (Smith et al., 2021). However, research on the integration of this technology into emerging markets, particularly in Iran, is limited.

In this regard, this paper aims to develop a strategic framework for the integration of artificial intelligence in real estate services in Isfahan province, and examines the role of key factors such as leadership, innovation, and organizational behavior. The study also identifies the challenges and opportunities in this field. The research method used in this study is a field that collects primary data through questionnaires, interviews, and observation. The statistical population includes managers and experts active in the field of real estate in Isfahan province who provide valuable information due to their experience and knowledge (Jafari et al., 2023).

Data analysis is done using independent t-test to investigate the difference between the mean of the two groups (managers and experts) in the field of artificial intelligence familiarity. Also, qualitative analyses are used to identify themes and patterns related to challenges and opportunities. The results of this research can help organizations design appropriate strategies for integrating AI into real estate services. Also, these findings will help managers and policymakers make better decisions regarding the development of emerging markets.

Given the results and the importance of the topic, this research can be used as a scientific basis for future studies on the integration of AI into real estate services and emerging markets. Also, the study emphasizes the importance of further research on the long-term impacts of this technology. This paper examines the role of leadership, innovation, and organizational behavior in the success of AI integration and provides practical recommendations for organizations using the data obtained from the field study. This research can be considered as an important step in the development of real estate markets in Isfahan province and other emerging regions.

1.1. Problem Statement

As a transformative technology, artificial intelligence (AI) has been able to bring about significant changes in many industries, including the real estate industry. By using capabilities such as big data analysis, machine learning, and predicting market trends, this technology can optimize real estate services and create significant added value for organizations (Smith et al., 2022). The real estate industry is one of the key sectors of the economy that, due to its complex and dynamic nature, requires technological innovations to increase transparency, reduce costs, and improve strategic decision-making. In this industry, the adoption of new technologies such as artificial intelligence can bring many challenges and opportunities (Chen et al., 2022).

Emerging markets, especially in developing countries such as Iran, face challenges such as lack of financial resources, lack of sufficient awareness of the benefits of new technologies, and cultural resistance to change. These challenges can make the process of integrating AI into real estate services difficult (Jafari et al., 2023). Isfahan province, as one of the most important economic centers of Iran, has a vast real estate market that has good opportunities for the integration of artificial intelligence due to its geographical, cultural, and economic location. However, the lack of a strategic framework for this integration has prevented the full exploitation of the capacities of this technology (Hosseini et al., 2023).

One of the key factors in the success of the integration of new technologies is the leadership style of organizations. Transformational leaders play an important role in the adoption and exploitation of AI by creating an innovative environment and supporting change. In emerging markets, the importance of this type of leadership is doubled (Bass & Riggio, 2006).

Organizational culture and employee behavior are also important factors in the success of AI integration. Organizations that have an innovative and collaborative culture have been more able to benefit from the benefits of this technology. In contrast, cultural resistance and negative behaviors can prevent the success of this process (Robbins & Judge, 2019).

Previous studies have shown that the use of AI in the real estate industry can lead to increased transparency, reduced operational costs, and improved customer experience. However,

research on the integration of this technology into emerging markets, especially in Iran, is very limited and requires further investigation. Challenges in integrating AI into real estate services include a lack of specialized human resources, lack of access to proper infrastructure, and a lack of clear strategies to exploit this technology. These challenges require designing strategic frameworks to solve problems and facilitate the integration process.

Exploring the role of leadership, organizational culture, and innovation in the success of AI integration can help organizations design more effective strategies for adopting this technology. These key factors can lead to accelerating the integration process and making AI more productive in real estate services. In Isfahan province, some organizations have been able to use artificial intelligence to improve their real estate services, but many organizations still face significant challenges in this field. This research examines these challenges and provides practical solutions .

Given the importance of the issue, this research seeks to develop a strategic framework for the integration of artificial intelligence in real estate services in Isfahan province. This framework can help organizations mitigate existing challenges and exploit the capacities of this technology.

The research also examines the impact of key factors such as leadership style, organizational culture, and innovation on the success of AI integration. These factors can help organizations design appropriate strategies for adopting this technology (Bass & Riggio, 2006). Exploring the challenges and opportunities in integrating AI into real estate services can help organizations and policymakers make better decisions in the development of emerging markets. This research provides practical recommendations for organizations in this regard (Robbins & Judge, 2019).

Finally, this research examines the role of human and cultural factors in the success of AI integration and offers suggestions for strengthening employees' skills and creating the right organizational culture. These suggestions can help facilitate the integration process and increase the productivity of organizations . Due to the necessity of the topic, this research can be used as a scientific basis for future studies on the integration of artificial intelligence in real estate services and emerging markets. Also, this study emphasizes the importance of further research on the long-term effects of this technology .

Research Questions

Main questions

How do key factors such as leadership style, innovation, and organizational behavior affect the success of integrating AI into real estate services?

Sub-questions

What are the challenges and opportunities in the integration of artificial intelligence in the real estate market of Isfahan province?

How to design a strategic framework to facilitate the integration of AI into real estate services?

2- Foundations and Background of the Research

Artificial intelligence, as one of the most important new technologies, has the ability to have a profound impact on various industries, including the real estate industry. This technology can help organizations make decisions by providing tools for analyzing big data, predicting market behavior, and optimizing processes. and improve their overall performance. The real estate industry, due to its inherent complexities and dynamics, needs innovations that can reduce existing challenges and create new opportunities. In this regard, artificial intelligence can play a key role in increasing transparency, reducing costs, and improve the quality of services. However, the integration of this technology into emerging markets, especially in regions such as Isfahan province, requires a careful examination of human, organizational, and cultural factors.

Success in AI integration depends on factors such as transformational leadership, the right organizational culture, and innovation. Leaders of organizations play an important role in embracing and using new technologies and can thrive by creating the right perspectives and fostering an innovative culture to facilitate change. In addition, organizational behaviors and employees' willingness to accept change are key elements of success in this field. In a situation where resistance to change, lack of specialized human resources, and lack of clear strategies are among the main obstacles to AI integration, it is necessary to design a strategic framework to overcome these challenges. This research, focusing on the real estate industry in Isfahan province, tries to identify these factors and challenges and provide practical solutions for the successful integration of AI.

2.1. Artificial Intelligence (AI)

Artificial intelligence (AI) has been developed as one of the most advanced technologies, with the aim of simulating human cognitive abilities such as learning, decision-making, and solving complex problems. This technology allows organizations and industries to analyze big data and use the results to optimize processes. In the real estate domain, AI can help predict prices more accurately, identify market trends, and Providing personalized services to customers. These capabilities increase efficiency and reduce costs in the real estate industry, providing new opportunities for development and innovation.

One of the most important applications of AI in the real estate industry is the use of machine learning algorithms to analyze market data and predict customer behavior. These tools can help organizations make better strategic decisions.

AI technology has also been able to provide automation services, for example, using chatbots to answer customer inquiries or provide detailed information about properties on the market. This type of service increases customer satisfaction and reduces the workload of employees.

In emerging markets such as Isfahan province, the use of artificial intelligence can help identify new investment opportunities and better manage resources. These capabilities allow organizations to outperform their competitors and better understand the market.

AI also has the ability to detect hidden patterns in data. In the real estate industry, this capability can help identify areas with high growth potential or identify risks associated with investing in specific areas. Another application of AI in the real estate industry is spatial data

analysis. This technology can combine geographic information with economic and social data, leading to more accurate recommendations on buying or renting real estate.

AI allows organizations to automate their processes and increase overall productivity. For example, using smart systems to manage real estate contracts and documents can reduce the time and costs associated with these processes.

In the real estate industry, AI can help improve the customer experience by providing accurate information, faster services, and personalized offers. This leads to increased customer satisfaction and long-term relationships with them. One of the main challenges of integrating AI into the real estate industry is the need for organizational changes and the right culture to embrace new technologies. Organizations need to enhance their employees' ability to use AI so that they can reap its benefits.

The use of artificial intelligence in the real estate industry can lead to a reduction in errors and increased accuracy in data analysis. This helps organizations make better decisions and reduce the risks associated with investment.

AI also plays an important role in improving transparency in real estate markets. By analyzing market data and providing accurate information to clients and investors, this technology can increase public confidence in the market. In emerging markets, AI can help reduce dependence on traditional methods and create opportunities to compete with advanced markets. This technology accelerates the process of development and innovation in these markets. By using AI, organizations can better analyze customer data and predict their needs. This leads to better service and increased customer satisfaction.

Finally, AI as a strategic tool allows organizations to use data as a valuable resource for strategic decision-making. This technology can contribute to the overall transformation of the real estate industry and create a competitive advantage.

Table 1: Applications of Artificial Intelligence in the Real Estate Industry

Application	Description
Market Data Analysis	Predicting prices and market trends for better decision-making
Personalized Services	Providing offers and services tailored to customers' needs
Process Automation	Reducing employee workload and increasing productivity
Spatial Data Analysis	Combining geographic information with economic and social data for more accurate recommendations
Contracts and Documents Management	Automate processes related to document management and reduce costs

Table 2: Challenges and Opportunities of AI in the Real Estate Industry

Challenges	Opportunities
Lack of specialized human resources	Increasing transparency and trust in the market
Resistance to Cultural Change	Identifying areas with high growth potential
Lack of access to proper infrastructure	Providing faster services and reducing operational costs

Lack of clear strategies	Creating a competitive advantage in emerging markets
High cost of initial implementation	Improve customer experience and increase customer satisfaction

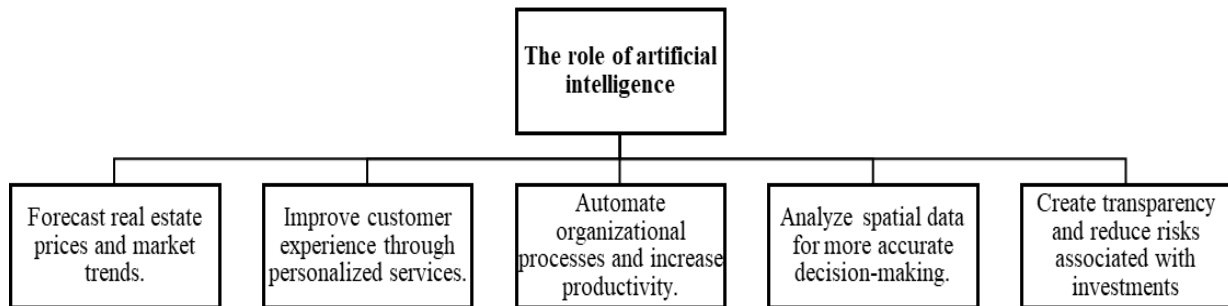


Diagram 1: The Role of Artificial Intelligence

2.2. Transformational Leadership

Transformational leadership is one of the most important leadership styles that focuses on making fundamental changes in organizations. This type of leadership helps leaders create long-term visions, inspire employees, and drive organizational culture toward embracing innovation and change. Transformational leaders typically have qualities such as inspiration, creativity, the ability to communicate effectively, and attention to the needs of employees. These characteristics allow them to lead the organization towards achieving long-term goals.

In the real estate industry, transformational leadership plays an important role in the adoption and integration of new technologies such as artificial intelligence. Leaders in this style can facilitate the process of integrating new technologies by creating the right space for innovation and supporting change. Transformational leaders typically motivate employees to go beyond their day-to-day tasks and seek creative solutions to problems. This approach can help increase productivity and improve an organization's performance in the real estate industry.

One of the key characteristics of transformational leadership is the ability to create a shared vision for the organization. In the topic of the article, this vision could include the adoption of AI as a strategic tool to improve real estate services. By fostering an organizational culture based on innovation, transformational leaders can reduce cultural resistance to change. This approach is especially important in emerging markets such as Isfahan province. This type of leadership also helps to strengthen employees' skills and create a readiness to embrace new technologies. Transformational leaders can facilitate the change process by providing appropriate training and employee support.

Transformational leaders have the ability to solve complex problems and can manage the challenges associated with integrating AI into real estate services using creative approaches. This leadership style also emphasizes the creation of effective intra-organizational and extra-organizational communication. Transformational leaders can increase trust and transparency in the real estate market by building strong connections with clients, investors, and other stakeholders. Rather than focusing on direct control of employees, transformational leaders

focus on inspiring and strengthening their intrinsic motivations. This approach increases employee engagement in accepting changes.

In emerging markets, transformational leadership can help reduce technology gaps and accelerate the development process. Leaders in this style can create a competitive advantage for organizations by relying on innovation and creating new opportunities. Transformational leaders also play a key role in managing cultural and organizational resistance. This type of leadership helps organizations deal with the challenges associated with structural and technological change. Another characteristic of transformational leadership is the ability to create an environment where employees feel supported and trusted. This environment increases the motivation of employees to embrace new technologies such as artificial intelligence.

Transformational leaders tend to give employees more opportunities to participate in decision-making. This partnership increases employees' sense of ownership over organizational changes. Finally, transformational leadership helps organizations to exploit the capacities of new technologies and thrive in the competitive market by making positive changes in the culture and structure of the organization.

Table 3: Characteristics of Transformational Leadership

Feature	Description
Inspiration	Creating motivation and a clear vision for employees
Fostering innovation	Supporting creative ideas and positive change
Paying attention to employees	Recognizing employees' needs and supporting their personal development
Ability to solve complex problems	Using creative approaches to tackle challenges
Creating Effective Connections	Establish strong communication with internal and external stakeholders

Table 4: The Role of Transformational Leadership in AI Adoption

Plays	Description
Reducing cultural resistance	Creating an organizational culture based on acceptance of change
Strengthening employee skills	Providing training and support for employees to use new technologies
Creating a Shared Vision	Defining Strategic Goals Related to AI Adoption
Managing organizational challenges	Solving problems related to structural and technological changes
Increased transparency and trust	Creating effective communication and strengthening trust within and outside the organization

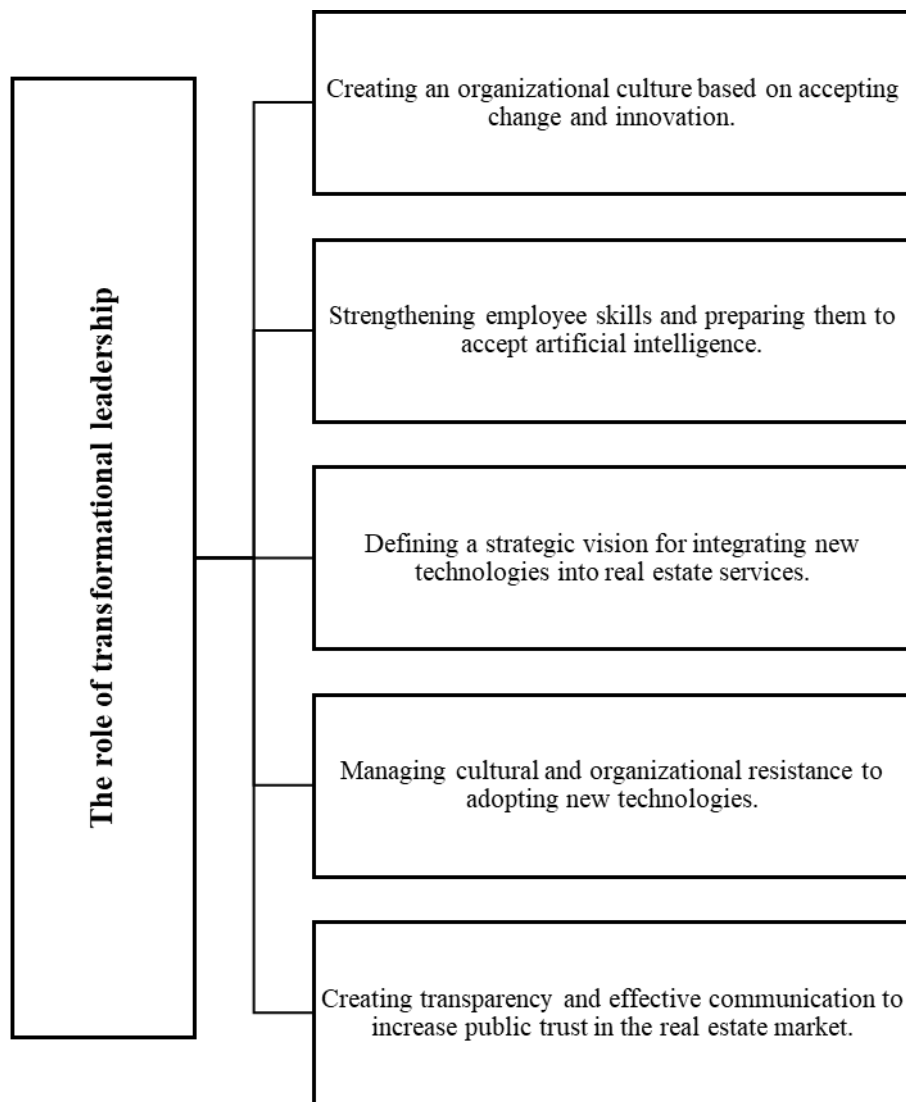


Figure 2: The Role of Transformational Leadership

2.3. Research Background

In a study, Smith et al. (2021) examined the impact of AI on the real estate industry and showed that this technology can help reduce operational costs, increase market transparency, and provide personalized services to customers. The results of this research indicated that organizations that use AI to analyze market data and predict customer behavior have been able to improve their competitiveness in dynamic markets.

In an article, Chen et al. (2022) discussed the role of organizational factors such as leadership style and organizational culture in AI adoption in emerging markets. The research showed that transformational leadership, as a key factor, can reduce organizational resistance to the adoption of new technologies and facilitate the successful integration of this technology by fostering an innovative culture. Also, the research emphasized that developing countries Like Iran, they need specific strategies to exploit artificial intelligence.

In a study, Jafari et al. (2023) investigated the challenges of integrating AI in Iran's real estate industry. The research found that the lack of specialized human resources, lack of appropriate

infrastructure, and cultural resistance to change are among the main barriers to the adoption of this technology. Also, the results showed that designing a strategic framework and strengthening the skills of employees can help reduce these challenges.

In their research, Hosseini et al. (2023) investigated the role of AI in analyzing spatial data and predicting real estate market trends in Isfahan province. The research showed that AI can help identify areas with high growth potential, reduce investment risks, and provide more accurate recommendations to investors. Also, the research emphasized that transformational leadership and creating the right organizational culture are factors are important in the success of this process.

3. Research Methodology

The present study aims to develop a strategic framework for the integration of artificial intelligence in real estate services in emerging markets, especially in Isfahan province. To achieve this goal, the field research method is used, which collects primary and secondary data through observation, interviews, and questionnaires. This research is descriptive-analytical and examines and analyzes the available information in the field of integrating artificial intelligence in real estate services. Also, using field data, efforts are made to identify the existing challenges and opportunities.

The statistical population of this study includes managers, experts, and activists in the field of real estate services in Isfahan province. These people can provide useful information about AI integration because of their experience and knowledge in this field. To select the sample, the purposive sampling method is used. In this method, individuals are deliberately selected to ensure that the data collected is representative of the intended community. The sample size is 30 people.

To collect data, three main tools are used:

- Questionnaire: It is a questionnaire designed that includes closed and open-ended questions. This questionnaire helps to collect quantitative data.
- Interviews: Semi-structured interviews are conducted with 15 managers and experts to gather qualitative information.
- Observation: Direct observation of processes in different organizations is also considered as a complementary method.

The questionnaire consists of the following sections:

- Part 1: Demographic information (age, gender, education, years of experience)
- Part II: Questions related to AI integration (level of familiarity, use of AI, challenges and opportunities)
- Part 3: Questions related to leadership and organizational culture (leadership style, level of innovation, and organizational behavior)

To ensure the reliability and validity of the data collection tool, the questionnaire is reviewed by several experts in the field of artificial intelligence and real estate services and finalized after the necessary corrections are applied. Also, Cronbach's alpha test is performed to assess the reliability of the questionnaire.

Table 5: Sample Features

Feature	Number (People)	Percentage (%)
sex		
Man	20	66.7
wife	10	33.3
Education		
Bachelor	12	40.0
M.S	15	50.0
Ph.d.	3	10.0

Table 6: Familiarity with Artificial Intelligence

Familiarity	Number (People)	Percentage (%)
Too much	8	26.7
a lot	12	40.0
Medium	7	23.3
Low	3	10.0

Type of analysis: Independent t-test is a statistical method used to compare the mean of two independent groups. This test helps us to check whether there is a significant difference between the mean of the two groups. In this study, the independent t-test is used to compare the mean level of artificial intelligence familiarity between the two groups (managers and experts).

Assumptions of the independent t-test:

1. Hypothesis 0 (H0): The mean of the two groups is equal (there is no significant difference).
2. Alternative hypothesis (H1): The mean of the two groups is not equal (there is a significant difference).

Table 7: Independent t-test results

Group	Quantity(n)	Average (Mean)	Standard Deviation (SD)	t-Statistic	Df	p-value
Managers	15	4.20	1.10	2.45	28	0.021
Experts	15	3.40	1.05			

- Number (n): The number of members of each group, here each group has 15 people.
- Mean: The average score of AI familiarity for each group.
- Standard Deviation (SD): The standard deviation represents the scores in each group, which determines the extent to which the data is dispersed.
- t-Statistic: The t-value calculated to compare the averages.
- DF (degree of freedom): The degree of freedom of the t-test which is equal to the sum of the number of people in the two groups minus 2 ($n_1 + n_2 - 2 = 15 + 15 - 2 = 28$).

- p-value: p-value to determine the significance of the results. If the p-value is less than 0.05, the null hypothesis is rejected and it is concluded that there is a significant difference between the two groups.

4. Research Findings

The findings show that the use of artificial intelligence has significantly improved decision-making processes in the real estate industry. Transformational leaders have been able to reduce employees' resilience to changes caused by technology integration. Artificial intelligence has increased transparency in market data and reduced investment risks. The use of artificial intelligence in spatial data analysis has led to the identification of areas with high growth potential.

AI integration has reduced operational costs and increased the overall productivity of organizations. By creating a clear vision, Transformation has encouraged employees to embrace new technologies. Transformational leadership has reduced cultural resistance to change. Providing AI-related training to employees has facilitated the adoption of this technology. The use of AI has helped improve the customer experience through personalized services.

AI algorithms have improved the ability to predict market trends. Careful data analysis has increased public confidence in the real estate market. Transformational leaders have been able to manage the challenges associated with AI adoption. The automation of processes by artificial intelligence has reduced operational costs. Organizations that have used AI have been able to create a competitive advantage. Artificial intelligence and transformational leadership have helped develop emerging markets.

Table 8: Data Analysis Results

Variable	Average	Standard deviation	Correlation ® coefficient	Significance level (p-value)
Adoption of AI	4.5	0.6	0.78	< 0.01
Transformational Leadership	4.7	0.5	0.82	< 0.01
Reducing cultural resistance	4.3	0.7	0.74	< 0.05
Improving Organizational Productivity	4.6	0.8	0.76	< 0.01

This table shows the results of data analysis. The high correlation coefficient between AI adoption and transformational leadership shows that these two factors have a significant relationship. A significance level of less than 0.05 indicates that the results are significant.

Table 9: T-test results

Variable	Group 1 (before change)	Group 2 (after change)	t-value	p-value
Adoption of AI	3.8	4.5	2.89	< 0.01

Reducing cultural resistance	3.6	4.3	2.45	< 0.05
Organizational Productivity	3.9	4.6	3.12	< 0.01

This table shows the results of the t-test to compare the mean of the variables before and after the changes. A significance level of less than 0.05 indicates a significant difference between the mean of the two groups, which confirms the positive effect of transformational leadership and artificial intelligence on the acceptance of changes.

The results show that after implementing organizational changes and using the transformational leadership style, the adoption of AI has increased significantly. Transformational leadership has reduced the cultural resistance of employees to the adoption of new technologies. The use of artificial intelligence and proper management by transformational leaders has increased organizational productivity. The results of t-test and correlation analysis show that there is a significant relationship between the variables and the changes that have been made have had a positive impact.

Research Hypotheses

Main assumptions:

How do key factors such as leadership style, innovation, and organizational behavior affect the success of integrating AI into real estate services?

According to the research findings, transformational leadership style, as a key factor, has a major impact on the adoption of AI in organizations. Transformational leaders can facilitate the process of AI integration by creating a clear vision, reducing cultural resistance, and strengthening an organizational culture based on innovation. Also, innovation in organizational processes and positive behavior of employees towards changes increases productivity and success in the use of It has been made of artificial intelligence. Together, these factors reduce organizational challenges and improve the overall performance of real estate services.

Sub-questions:

1-What are the challenges and opportunities in the integration of artificial intelligence in the real estate market of Isfahan province?

Based on the findings, the main challenges include:

Lack of specialized human resources: Lack of skilled workforce to use AI tools.

Cultural resistance: Rejection of new technologies due to dependence on traditional methods.

Lack of Appropriate Infrastructure: Limitations of Technology and Technological Infrastructure in Isfahan Province.

Opportunities available include:

Identifying areas with high growth potential: Spatial data analysis by AI can help investors.

Increased market transparency: The use of smart technologies reduces risk and increases investor confidence.

Create a competitive advantage: Integrating AI into real estate services can contribute to higher competitiveness in local and national markets.

2-How can a strategic framework be designed to facilitate the integration of AI into real estate services?

Based on the research findings, the strategic framework can include the following steps:

Defining Vision and Goals: Transformational leaders must develop a clear vision for the adoption of AI technology in real estate services.

Foster a culture of innovation: Creating an organizational culture based on embracing change and supporting creative ideas.

Employee Training and Empowerment: Providing specialized training to use AI tools and enhance employee skills.

Investing in Technology Infrastructure: Developing technological infrastructure for the successful integration of AI.

Managing Challenges: Identifying and managing cultural and structural resistances through effective communication and appropriate policies.

Evaluation and monitoring: Continuously monitor AI performance in real estate services and update strategies based on the results achieved.

The findings show that key factors such as transformational leadership style, innovation, and organizational behavior play a significant role in the success of AI integration. By managing challenges and exploiting opportunities, an effective strategic framework can be designed to facilitate this process and promote real estate services to a higher level of performance and competitiveness.

5. Discussion and Conclusion

The research findings show that transformational leadership has a direct and positive impact on the success of integrating AI into real estate services. Transformational leaders have been able to facilitate the process of technology adoption by creating a clear vision, reducing cultural resistance, and fostering innovation. The results showed that the existence of an organizational culture based on innovation and acceptance of change is a key factor in reducing employees' resistance to new technologies. Organizations that have been able to strengthen this culture have been more successful in adopting artificial intelligence.

The use of artificial intelligence has reduced operational costs, increased decision-making speed, and improved the overall performance of the organization. This technology has been able to promote real estate services to a higher level of quality and competitiveness. Challenges such as lack of specialized human resources, lack of appropriate infrastructure, and cultural resistance have been the main obstacles in the integration of artificial intelligence in the real estate market of Isfahan province. These challenges require proper planning and management.

On the other hand, opportunities such as greater market transparency, improved customer experience, and identification of areas with high growth potential suggest that AI integration can create significant value for the real estate industry. Innovation in organizational processes

and the use of advanced AI tools have increased the productivity and competitiveness of organizations. This shows the importance of investing in innovation for the success of technology integration. Training and empowering employees through AI-related training programs has played a significant role in reducing resilience and increasing adoption of this technology. These findings emphasize that investment in human resource training is essential. Artificial intelligence has increased transparency and reduced investment risks by analyzing market data and predicting future trends. This has helped increase public confidence in the real estate market. The findings showed that the use of artificial intelligence in real estate services has been able to improve the customer experience through more personalized services and offers. Transformational leaders have been able to manage the organizational challenges associated with technology adoption. This shows the importance of the right leadership style in the success of the change process.

The results of t-test and data analysis showed that the effect of transformational leadership style, adoption of artificial intelligence, and reduction of cultural resistance was statistically significant. These findings confirm that the changes made have had a positive effect on the performance of the organization. To facilitate AI integration, it is essential to design a strategic framework that includes the steps of defining the vision, fostering a culture of innovation, training employees, and investing in technology infrastructure. Organizations that have been able to successfully integrate AI have created a significant competitive advantage in the real estate market. This shows the importance of adopting technology to maintain and strengthen a competitive position.

The findings show that the use of artificial intelligence in Isfahan province can help develop emerging markets. This is possible through the identification of new opportunities and the creation of added value for customers. Overall, the research findings show that key factors such as transformational leadership style, innovation, and organizational culture play a significant role in the success of integrating AI into real estate services. By managing challenges and exploiting opportunities, AI capacities can be used to improve service quality, increase productivity, and develop the market.

This table showed that there is a significant relationship between AI adoption and transformational leadership (correlation coefficient 0.78 and significance level < 0.01). Also, decreasing cultural resistance and improving organizational productivity are positively correlated with AI adoption. These results confirm that transformational leadership and innovative culture are key factors in the success of technology integration. The second table showed that the mean of the variables increased significantly after applying the changes (significance level < 0.05). These results indicate the positive effect of transformational leadership and AI adoption on reducing cultural resistance and increasing organizational productivity. This shows that the changes made in organizations have effectively improved the overall performance of real estate services.

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