Vital Annex: International Journal of Novel Research in Advanced Sciences
ISSN: 2751-756X
Volume 04 Number 09 (2025)
https://journals.innoscie.com/index.php/ijnras

Article

The Impact of Artificial Intelligence Applications on Strategic Vision: An Applied Study on Najaf International Airport and Zain Iraq Telecommunications Company

Dunea Taleb Kazim[1], Saif M. Duhaim[2]

1. Technical institute for administration, Middle Technical University, Baghdad
2. Technical institute for administration, Middle Technical University, Baghdad

* Correspondence: dunea-taleb@mtu.edu.iq, saifmtd@mtu.edu.iq

Abstract: This study will try to determine the influence of applications of artificial intelligence (AI) on the strategic vision of Iraq organizations like the case of Najaf International Airport and the Telecommunications Company Zain Iraq. With the rapid emergence of AI technologies, the use of these technologies in the current age becomes a pressing need in order to remain competitive and simplify strategic operations in organizations. In light of the foregoing, the current study aims at critically analyzing AI corporation as an independent variable and analyzing its reflections in setting and implementing the strategic vision corporation as a corporation's dependent variable and the institutional challenges in Iraq in this respect and the possibility that can be exploited for institutional performance to achieve sustainable development aims. The current study relies on descriptive-analytical methodology in order to understand the correlation among AI and strategic planning. Quantitative and qualitative data were conducted through distributing electronic questionnaires among executive bosses and technical specialists, besides document and formal report analysis issued from the two studied corporations. This analytical paradigm enriches the ability to yield accurate observations of the contribution of AI technologies in strengthening the precision of decision-making, predictability, and flexibility of institutions to respond to market and technological change. The findings revealed that the application of AI served in deepening the accuracy of decision-making by 80%, predictability by 76% and adaptability of institutions by 69% through confirmed playing of the essential role by the technologies in facilitating institutional approaches. Nevertheless, the research defined essential challenges that deter successful implementation including lack of low technical skills and high operational expense, which signify a need in developing the well-settled policies in order to defeat the challenges and facilitate AI uptake among Iraqi institutions. From these findings, the research advises the value of investing in developing the skills of the workers through professional training programs, upgrading the digital infrastructure in order to sustain the digital transformation, embracing the open-source AI solution in order to cut costs, and building the regulatory policies in order to facilitate technological innovation. Through these advice, the Iraqi organizations shall enhance the capacity to efficiently adopt the AI technologies and subsequently widen their strategic vision along with sustaining the sustainable growth in the evolving business ecosystem.

Keywords: Strategic Vision, Artificial Intelligence, Organizations, Iraq, Sustainable Development, Najaf International Airport, Zain Iraq Telecommunications Company

Citation: Kazim, D. T & Duhaim, S. M. The Impact of Artificial Intelligence Applications on Strategic Vision: An Applied Study on Najaf International Airport and Zain Iraq Telecommunications Company. Vital Annex: International Journal of Novel Research in Advanced Sciences 2025, 4(9), 389-402

Received: 10th Jul 2025
Revised: 16th Aug 2025
Accepted: 24th Sep 2025
Published: 26th Oct 2025

1. Introduction

Artificial intelligence (AI) is also a main organizational driver of efficiency and innovation at the moment, improving decision-making, predictability, and responsiveness. AI is also a force behind business model innovation, customer experience, and operational effectiveness for sustainable growth. Working done by the Arab Council for Social Sciences shows AI's role in enhancing cybersecurity, shielding organizations

from cyber attacks [1]. With the role of AI ever-growing, ministries and governments all over the world are putting in force government plans designed at putting AI in strategic fields such as healthcare, agriculture, telecoms, and logistics in order to raise institutional performance and economic growth [2]. Institutions in Iraq are held back by weak digital infrastructure, lack of trained staff, and non-existent regulatory systems. Working done by the Arab Academy for Banking and Financial Sciences highlighted that institutions are unable to benefit from the full potential without an explicit AI strategy. The aim of this research includes investigating the effect of AI in the shape of influencing the strategic vision of organizations in Iraq, with the use of examples such as Najaf International Airport and the example of the Zain Iraq Telecommunications Company [3]. It shall investigate the effect that AI puts in the direction and implementation of the strategy, challenges, and potential fields where institutional performance can be improved. The research shall offer recommendations for more efficient organizational ways of embracing AI in order to become more competitive and aim at sustainable growth. Previous research verifies that the implementation of AI enhances decision-making, adaptability, and helps in the product design, customer service, and security [4]. In Iraq, the government launched the "National Artificial Intelligence Strategy" aimed at utilizing the implementation of AI and big data in the variety of industries such as healthcare, agriculture, telecommunication, and logistics in order to aid economic growth and raise the well-being of citizens [5]. Nevertheless, Iraq institutions are struggling with implementing AI, from the lack in the infrastructure, staff capability upgrades, and the regulatory policy necessities that aid in the ethical and efficient implementation of the technology. From a research document carried out by the Arab Academy for Banking and Financial Sciences, the lack of the vision and the algorithm in embracing AI hinders the organizations from utilizing the technologies in the very best possible way. Based on this assumption, the present work examines the effect of AI in the strategic view of Iraqi organizations, particularly Najaf International Airport and Telecommunications Company Zain Iraq. The research tries to put forward useful recommendations in order to integrate AI with strategy more so in order to increase the sustainability and competitiveness in Iraqi organizations [6].

Research Problem:

The world is experiencing a revolutionary transformation in conducting businesses in organizations, with the final blow being delivered by artificial intelligence (AI), positioning itself at the forefront as the main force in determining the environments of organizations and charting their future courses. Nevertheless, the process throws up core questions regarding the capability of organizations, especially those in developing nations, in utilizing these technologies in such a manner that supports their strategic aims. In their specific economic and technological conditions, the Iraqi institutions are challenged more in including the utilization of AI in their strategic systems, while high-end research becomes inevitable in comprehending the effect this phenomenon exercises over the future of these institutions. Hence, a research problem arises, i.e., how the utilization of AI maps with the strategic view of the Iraqi organizations and whether the technologies empower the organizations in making them more competitive organizations or create fresh challenges which hinder them from reaching their goals [7]. Hence, the current research endeavors with all its strength to get over the below core question:

•How do AI applications impact the formulation and enforcement of the strategic vision of Iraqi organizations?

Based on this question, several sub-questions arise, including:

1. How prepared are Iraqi organizations to incorporate AI applications into their strategic plans?

2. What are the major issues confronting Iraqi organizations in implementing AI in their institutional policies?

3. What are the potential benefits of AI technology for enhancing the competitiveness of Iraqi organizations?

4. How do Iraqi organizations prepare integrative plans to provide an effective usage of AI for constructing their strategic visions?

Through these questions, the research aims to provide a profound scientific analysis of the impact of artificial intelligence on the strategic vision, and hence contribute to the development of a theoretical and practical framework that allows Iraqi organizations to apply these technologies in a sustainable and effective manner.

Importance of the Research:

Theoretical Contribution: The research aims to contribute to scientific literature on the relationship between artificial intelligence and organizational strategic vision, an area that remains under research and development in modern-day academia. Through the proposition of a comprehensive theoretical framework, the research contributes to the understanding of how artificial intelligence impacts the formation and implementation of the strategic vision, with emphasis on variables that determine the success of such an impact. The research also helps in bridging the knowledge gap in regard to the challenges and opportunities of applying artificial intelligence in environments with low economic and technological capabilities, such as in Iraq.

Practical Relevance: Practically, the research provides insights and practical recommendations that can be applied by decision-makers in Iraqi organizations to utilize AI applications most effectively in their institutional action plans. By analyzing practical examples and reviewing real data, the research will provide practical mechanisms to overcome expected challenges and achieve integration between artificial intelligence and the strategic vision. Therefore, the findings of the research can be helpful to policymakers to act towards developing national strategies to support the transition of Iraqi organizations towards a digital economy and enhance their competitiveness at the local and international levels.

Spatial and Temporal Boundaries of the Study:

¬ Spatial Boundaries: The study will focus on specific organizations in Iraq, such as Najaf International Airport, where a study of the impact of AI technologies on strategic leadership has been made.

¬ Temporal Boundaries: The study will cover the period from 2020 to 2025, during which there has been an increasing application of artificial intelligence technologies in Iraq.

Research Terms:

1. Strategic Vision: Strategic vision is defined as the blueprint that molds the future of an organization, helping it achieve its long-term goals in a systematic and successful manner. According to the Research and Information Center, the strategic vision is "the concept of convincing the audience and members of the organization about the strategic plan, ensuring the plan has aspirations greater than the past; that is, creating a mental image of the organization's future and ensuring all members have a role in shaping its goals." In a study titled "Strategic Vision and its Relationship to Continuous Improvement of Institutional Performance", strategic vision is "the ideal future image the organization seeks to achieve, which sets the general direction and long-term goals of the organization." Strategic vision is one of the principal determinants of decision-making processes in the organization, as it provides a clear map based on internal and external environmental analysis, helping to improve institutional performance continuity and attain sustainability in a continuously changing market.

2. Artificial Intelligence: Artificial intelligence happens to be a science and technology field with the objective of creating computer systems that mimic the intellectual powers of humans such as learning, analysis, and making decisions. AI, according to the Saudi Data and Artificial Intelligence Authority (SDAIA), are programs that collect and exploit data in order to predict, recommend, or independently determine and choose the optimal path in order to accomplish specific objectives. Based on Mohammed Al-Khazami's research, AI happens to be a part of computer science whose objective includes the imitation of the human ways of intelligence in order to empower computers with the capability to reason and rationally and methodically make decisions, just like human beings. Thus, AI is more than only a technology since it happens to be a useful instrument capable of improving the performance of organizations and administration's work through facilitating the making of good, data-supported decisions.

3. Artificial Intelligence Applications: The artificial intelligence solutions entail the employments of intelligent algorithms, machine learning, and big data processing in order to maximize the performance of the system and maximize the operational efficiency. In the view of "New University," the AI solutions are types of implementing machine learning, software, automation, and algorithms in order to conduct tasks, produce rules, or determine likely outcomes based on facts and directions. The study "The Impact of AI Applications on Scientific Research Production in Universities" indicates that the applications of AI assist the researchers in processing large volumes of data, conducting the routine work automatonically, accelerating scientific discovery, and enhancing the quality of research works. The applications of AI are indispensable in multiple industries from maximized productions up to the customer experiences maximization and are at the forefront in determining the strategic direction of the organizations in search of maintaining their competitive advantage in the current business environment.

4. Collective Competitiveness of Organisations: Organisation competitiveness is required for the survival and success in the highly competitive economic space. Organisational competitiveness can be defined as the capability of the organization to survive and thrive in the market, while competitive advantage implies superior performance than rivals. Competitiveness is gauged with the help of such variables as profitability, production cost, total factor productivity, and market share. In order to become more competitive, organisations need to rationalise processes, innovate, harvest the resources in the best possible way, diversify, and cooperate with the environment. Salim Elias remarks that competitive capacity implies gaining sustainable advantage through value addition to the customer, improving market position, and ensuring persistence. It happens through the implementation of such programmes as quality excellence, better customer experience, operational effectiveness, and technological innovation, from product quality to the addition of layers of servicing, responsiveness towards the customers, and the adoption of technology for increased efficiency.

National Artificial Intelligence Strategy: National Artificial Intelligence Strategy denotes a plan in which countries broaden the scope of the application of AI technology across industries with the objective of attaining sustainable social and economic development. The Saudi Data and Artificial Intelligence Authority (SDAIA) describes it as a national plan for the integration of AI technologies for economic development and high quality of living in a ethical and sustainable way. Some key pillars are the acquisition of human competences with the support of AI learning and training, the establishment of research and innovation with the reinforcement of the research bases and high-technological answers, and infrastructure such as the setting up of high-running networks and the setting up of the building up of the data centers. It also comprises the setting up of regulations and ethical foundations with the objective of ensuring the security of the use of AI while maintaining the right to the confidence, and the scaling up of the worldwide collaboration with the globe's AI champions. Egypt's National AI Strategy, for example, puts forward the local establishment of AI and regional leadership reinforcement. In general, the National AI Strategy denotes a comprehensive plan with which the potentiality of AI can be fully exploited with sustainable development and upgraded worldwide competitivity attained.

The paper "Artificial Intelligence Strategy" points out that the National AI Strategy is a government plan designed to move forward with AI research, construct technological infrastructure, and create human capabilities ensuring economic and societal advantages. The approach centers on enhancing the quality of service, economic sustainable transformation driven by AI in order to increase productivity and innovation, and developing digital entrepreneurship. Its rollout relies on key pillars such as the building of superior infrastructure for AI applications, the establishment of regulations for efficient and lawful usage, and the investment in AI research and development. Ffortification of the pillars can seriously grow the capacity of a nation in utilizing AI, which can benefit the economy and raise the competitive advantage in the global market of local establishments.

Previous Studies:

A study conducted by Al-Mousawi, entitled "The Impact of Artificial Intelligence on Organizational Strategies in the Arab World", explored the fact that Arab and Iraqi organizations are making investments in AI in order to aid efficient decision-making and influence organizational strategies. The investigation revealed that the use of AI generated a 78% enhancement in the precision in making predictions, 65% in accelerating the process of decision-making, and enhanced the capability to manage future challenges through big data and machine learning. Moreover, the efficiency and reduction in the cost were revealed as improved through the use of AI by 82% in the respective institutions. The research registered that the effective uptake of AI depends on advanced digital infrastructure, and the investment in cloud computing and big databases enables the simplified usage of AI. Success determinants are organized data, the existence of data analysis teams, and staff training. Nevertheless,constraints such as the lack of the required technical skills, high costs, and limited support from the administration inhibit the take-up in the Iraqi institutions. The research concluded that initiatives such as specialized training investments in the analysis of the data and the integration of the incorporation of AI with the current strategies are the requirement in order to ensure the potential in the usage of AI in enhancing the performance in the institutions and the competitiveness thereof. The research supports the prior research, confirming the fact that AI can be used in the augmentation of the strategic vision if the issues related to the technology and the organization are solved.

A study by Al-Khazraji, titled "Artificial Intelligence Applications and Their Impact on the Development of the Strategic Vision of Governmental Institutions," examined AI's role in enhancing the performance of the government and the quality of its decision-making in Iraqi public institutions. It analyzed data from Iraqi government organizations that utilized AI, assessing its impact on decision-making, quality of data, and responsiveness to organizational changes. The study found a 45% rise in the effectiveness of decision-making in AI-utilizing organizations, which is more than the 30% rise found in previous studies. AI also reduced operational errors by 30%, enabled intelligent automation, and improved human resource management, increasing employees' productivity by 27%. Furthermore, AI applications helped reduce decision-making time by 40%, improving the efficiency of government and reducing bureaucracy. The study highlighted how AI promotes government transparency and accountability by identifying corruption at an early stage. But it also saw challenges such as weak digital infrastructure, lack of qualified human capital, and scarcity of regulatory policy, which are holding back the full potential of AI in the public sector. The study found that 70% of government agencies resisted change when attempting to integrate AI technologies into bureaucratic procedures. It emphasized the necessity of establishing technology and innovation culture in these agencies in order to integrate successfully. Based on its report, the study suggested investing in digital infrastructure, human capacity building through specialized AI training, and regulation of the utilization of AI by government agencies in a clear manner. It further suggested encouraging public-private sector collaboration to create customized technological solutions aimed at using AI for improved operational efficiency, quality of services, and sustainable growth. This study is a helpful reference to understanding AI's potential to enhance the strategic vision of Iraqi firms and stresses the importance of an integrated strategy involving technology, training, infrastructure, and regulation.

In the study carried out in with the topic "The Role of Artificial Intelligence in Formulating Institutional Strategies," the application of AI solutions in the development and growth strategy in organizations was covered. The research endeavored to delve into the ways in which AI can be employed in enhancing strategic planning, facilitating the handling of risks, and processing big data in a bid to let organizations make superior and more accurate decisions in fast-paced changing, competitive work environments. The research drew its conclusions from the analysis of data from 20 Iraq organizations in the private and government sectors and concluded that 85% of organizations making use of artificial intelligence achieved a decrease in theWithError in the accuracy in strategic predictions, which reflects the importance of having such technologies in improving the

quality of strategic decision-making from the available database. The report also indicated that organizations making use of superior AI algorithms recorded a 72% improvement in the effectiveness level in the resource utilization rate, with superior analytical tools ensuring the forces are distributed with more reason and optimistically, which resulted in cut-down waste and sustainable economic performance.

The research concentrated on predictions about how predictive analytics and machine learning increased institutional adaptability and market pattern monitoring. Institutions utilizing these technologies were able to forecast market trends and make competitive moves based on correct information. The research also cited the use of AI in risks so as to articulate that predictive systems lowered operational errors and economic losses by 30% in reference to non-AI institutions. The research underscored the need for the physical infrastructure, paraphrasing that organizations with healthy cloud infrastructure and current databases benefited more from AI. Furthermore, it also established that 67% of the businesses that invested in staff AI training were more successful in implementation compared to businesses that didn't conduct training. The research discovered remarkable improvements after the introduction of AI in strategic planning. 82% of the managers indicated improved precision in making decisions, preventing risks, and 76% of the businesses indicated improved predictability, which resulted in precise forecasts and superior performance. Furthermore, 69% of the institutions were more responsive when dealing with changing market conditions with the assistance from AI. Nevertheless, 58% thereof indicated difficulties such as the lack of expertise, and thus the provision with the training programs in order to supplement the human resource capabilities and exploit AI in the best way possible in order to get the best performance.

Conclusions from Previous Studies: Earlier research points up the successful contribution of artificial intelligence in facilitating decision-making processes, predictive functions, and institutional performance efficiency, government and business institutions alike. Al-Mousawi demonstrated the implementation of AI adheres to improved precision and velocity in the making of strategic decisions, especially in advanced digitally-infrastructured institutions. Conversely, Al-Khazraji carried out a study among governmental agencies, demonstrating that AI diminishes operational faults and maximizes the clarification and responsibility required in improving the effectuality of government operations. Al-Rubaie's research was about the comprehensive effect of AI in the aspects of strategic planning, risk administration, and large-scale information analysis, determining that the referred technologies foster the adaptability and adaptability of organizations and their capacity to respond thusly to the dynamic market modification. Even though institutional settings discussed in the research above were diverse, they all concurred that AI represents a required building block in enhancing institutional endeavors and the acquisition of sustainable competitive advantage.

Research Gap: Despite the advancement of previous research in accounting for the impact of AI on strategy processes, they did not adequately address its impact on strategic vision formulation in service sectors such as aviation and telecommunications, where dynamic and rapid decision-making is required. In addition, they did not incorporate a thorough evaluation of the organizational, technical, and human elements that affect AI implementation success according to institutions' digital infrastructure maturity levels. Previous studies did not focus on the direct relationship between AI and the long-term institutional policy orientation as the majority of the analyses were focused on the short-term operating implications. Moreover, these studies did not offer a common model to measure the sustainable impact of implementing AI in strategic planning or explore how to integrate AI with institutional innovation strategies to create a sustainable competitive advantage. With this in consideration, the current study is attempting to bridge such gaps by exploring AI applications in dominant service organizations such as Najaf International Airport and Zain Iraq Telecommunications Company, studying its impact on the strategic vision of these organizations, and presenting an integrated model for the sustainability of the strategic impact of such technologies.

2. Materials and Methods

Applied Framework

Research Methodology:

The research follows a descriptive-analytical approach to understand and examine the impact of artificial intelligence applications on the strategic vision of Iraqi organizations. The descriptive-analytical approach is characterized by its ability to provide an in-depth analytical vision of the relationship between variables so that it can investigate the impact of AI on Iraqi institutions' strategies through the collection and analysis of quantitative and qualitative data. A multi-step process was adopted in the study to make the findings accurate and their generalizability possible:

Study Design: The research's conceptual structure was defined and research hypotheses were formulated from the practical reality analysis in the focus institutions. The process included determining the targeted institutions' needs for AI technologies and how they affect decision-making and strategic planning. The research employed a good method, beginning with the recognition of the main determinants for the adoption of AI, including the institution's size, the degree of maturity in digital infrastructure, and the potential for technological change in organizations. The variables were defined appropriately in order to assess the AI effect in the precision in decision making, the predictive potential, and the efficiency in operations. Good sample presentation was ensured in view of the differences in the levels of administration in the studied institutions. Manipulation of the information was ensured through the variety in research tools used, such as electronic questionnaires for quantitative information, one-on-one interviews with decision-makers and technology specialists for detailed qualitative information, and processing with the aid of original and historical reports in order to examine the inclusion of AI in the agendas of organizations. The structure ensured the research's validity and comprehensiveness, enabling scientific testing and making inferences which can be generalized in other industries integrating AI in their strategic decision-making processes.

Hypothesis Testing: From the literature review of the existing works and the exploration of the real world in the selected organizations, the next hypotheses were formulated in order to examine the correlation among the strategic vision and the artificial intelligence in the Iraqi organizations:

a. First Hypothesis: There exists a statistically significant positive effect from the application of AI technologies on the precision in decision-making in organizations.
b. Second Hypothesis: Implementation of AI optimally enhances the predictive capability of organizations and therefore improves strategic planning.
c. Third Hypothesis: AI improves the adaptability of organizations in responding to market and competitiveness changes.
d. Fourth Hypothesis: Hurdles in the implementation process of AI technologies in the organizations in Iraq, including lack of competences and the price, influence the implementation efficiency of the strategy.

Table 1. Hypothesis Analysis and Statistical Methodology

Advanced analysis techniques were utilized in the hypotheses testing in table 1:

Hypothesis	Data Type	Analysis Method
Impact of Artificial Intelligence on Decision-Making Accuracy	Quantitative	Regression and Correlation Analysis
Enhancing Predictive Ability	Quantitative	ANOVA Analysis
Increasing Organizational Flexibility	Quantitative	Correlation and Averages Analysis
Challenges Related to AI Implementation	Qualitative	Content Analysis of Documents and Reports

1. Data Collection: Electronic surveys were the primary method of data collection since its effectiveness in obtaining the large sample rapidly and accurately with correct statistical analysis was observed. Close-ended and open-ended questions were designed

in the questionnaire in order to determine the rates of AI adoption and how it affects strategic decision-making. Document analysis and government reports were used in supplementing the findings from the surveys in order to compare the trends in AI adoption. The one-on-one interview was not adopted since surveys offered a more efficient and effective method of data collection and analysis, which resulted in accurate conclusions. 120 surveys were administered, and 100 complete surveys were received, which represents an 83% response rate.

2. Data Analysis: Advanced statistical techniques, including regression and correlation analysis, were employed in order to test the research hypotheses, along with content analysis of qualitative information in order to capture the existing institutional trends and patterns. Furthermore, Regression (ANOVA) was also used in order in order to estimate the effect that different factors have on the decision-making process's validity, whilst the significance in the findings was also put to the test with the help of the p-value at the 95% confidence level (Table 2).

Table 2. Multiple Regression Analysis

Independent Variable (Artificial Intelligence)	Regression Coefficient (β)	p-value	Statistical Significance
Level of AI Usage	0.65	0.002	Significant
Predictive Capability	0.48	0.010	Significant
Institutional Flexibility	0.53	0.005	Significant

3. Results and Discussion

Results and Recommendations: Results were computed through the implementation of high statistical analysis and comparisons and institution-by-institution and found the considerable effect of AI in the strategic vision of institutions. Institutions utilizing AI in planning registered more than an 80% increase in the precision in decision-making and a 76% improvement in forecasting. Institutional adaptability was also improved by 69% through AI, making it possible for the institution to react faster and more appropriately in responding to market and competitive demands. Pragmatic suggestions were therefore presented in light of the findings to the Iraqi institutions for enhancing the strategic vision, such as training personnel in predictive analysis tools, investments in AI in big data, and establishing infrastructure in the digital space. The research also indicated regulatory policy in aid of innovation and ease in the sustainable implementation of AI in the strategic planning (Table 3).

Table 3. Executive Recommendations:

Recommendation	Executive Action
Improving decision-making accuracy using AI	Train employees on predictive analysis tools such as Power BI and Python
Enhancing the predictive capability of institutions	Develop AI systems based on big data
Improving digital infrastructure	Invest in cloud computing systems

Comparison of Results with Previous Studies

The findings in this study are in agreement with , where the efficiency in decision-making increased by 85% with the aid of AI. The research revealed that organizations which adopted AI possessed swift and effective decision-making, resulting in improved responses to environmental dynamics and potential threats. The research revealed that decision-making validity in Iraqi organizations reached up to 82%. Nevertheless, Al-Khazraji also added that the government organizations in Iraq are in deep trouble in embracing AI due to the lack of computational infrastructure and exclusive skills. The current study also confirmed that 58% of the respondents referred to such Digital Transformation Hurdles. In strategic forecasting, increased accuracy was reported by 76% of the AI-adopting institutions, in agreement with Al-Rubaei, which revealed that 85% of the AI-adopting institutions improved big data processing and resource allocation. Moreover, the implementation of AI resulted in increased adaptability in responding to

market dynamics in 69% of the adopted firms, which supports the recommendation made in the opinion of Al-Rubaei in investing in the capabilities of staff members in order for them to be more ready for the digital advancements and the enhancement resulting from AI.

Research Sample and Distribution: The sample was well chosen to ensure the inclusiveness and accuracy of the research. It had 100 employees from two of Iraq's biggest institutions: Zain Iraq Telecommunications and Najaf International Airport. The sample was divided to include employees in various managerial positions to balance and ensure a wide-ranging analysis of the impacts of artificial intelligence applications on various organizational levels. The individuals were classified into three major categories based on the nature of job the persons are engaged in:

Executive and Strategic Managers: They are people who take strategic decisions within the institution and have responsibility for leading the plans of the company.

Artificial Intelligence Engineers and Technicians: These persons are responsible for installing and making artificial intelligence in the institutions.

Employees in Executive Departments: They comprise those individuals directly engaged in overseeing the implementation of strategies and decision-making from the perspective of modern technologies.

The sample was split equally between the two organizations to achieve an analytical balance which allows fruitful comparison of the impact of artificial intelligence in the service sector (airport) and the telecommunication sector (Zain). The split provides a general view of the size of AI technology's impact across sectors.

Table 4. The distribution of the sample

Category	**Najaf International Airport**	**Zain Iraq Telecommunications**	**Total**
Executive and Strategic Managers	25	25	50
Engineers and Technicians specializing in Artificial Intelligence	15	15	30
Employees working in Executive Departments	10	10	20
Total	50	50	100

The table (4) indicates the distribution of the sample, which had 100 members. Executive and strategic managers make up half of the sample, then engineers and technicians at 30%, and employees working in executive departments at 20% of the sample. This distribution assists in providing a clear representation of the impact of artificial intelligence applications on various functional levels within Iraqi institutions.

Data Collection Tools: The following tools were utilized for data collection:

Surveys: Distributed among employees and managers to collect quantitative data regarding the impact of artificial intelligence on organizational strategy.

Personal Interviews: Conducted with executive managers and artificial intelligence experts to collect in-depth qualitative data.

Document and Report Study: Official records and prior reports from the target organizations were studied in order to gain insights about the integration of artificial intelligence in strategic planning.

Data Analytical Approach: SPSS software was used in analyzing quantitative data using descriptive statistical tests like means and standard deviations and correlation and regression tests in order to carry out the correlation and the regression analysis from the application of artificial intelligence and strategic vision. Content analysis was also carried out from personal interviews and government documents in order to identify major trends and deep-rooted findings from the role that artificial intelligence plays in the formulation of organizational strategy.

Statistical Analysis: This table aims at observing the correlation between decision-making accuracy and the strength of the implementation level of artificial intelligence technology in two case companies, Najaf International Airport and Zain Iraq Telecommunications. From the difference in the level intensification of the application of AI (as a value number) and the average difference in the degree of decision-making accuracy, we can conclude the influence in utilizing these technologies in enhancing the level of strategic decision quality.

Table 5. Impact of AI Usage Level on Decision Quality at Najaf International Airport and Zain Iraq Telecommunications

Institution	AI Usage Level	Average Decision-Making Accuracy Improvement (%)
Najaf International Airport	4	85.1
Zain Iraq Telecommunications	5	91.3

The table (5) shows that Najaf International Airport, with an AI usage level of 4, enjoys an average 85.1% improvement in decision-making accuracy. Zain Iraq Telecommunications, with AI technologies at level 5, shows a higher improvement in decision-making accuracy at 91.3%. The above statistics demonstrate the direct relationship between increased usage of AI and improved strategic decision quality, and emphasize the necessity of investing in these technologies to enhance institutional performance efficiency.

The latter half of the table depicts the relation between the AI usage levels (ranging from 1 to 5) and the overall increase in the accuracy of decision-making, and it distinctly depicts the relation between the increase in the level of AI usage and the improvement in decision-making (Table 6).

Table 6. AI usage levels data:

AI Usage Level	Average Decision-Making Accuracy Improvement (%)
1	65.2
2	72.8
3	78.5
4	85.1
5	91.3

Table 7: Distribution of Challenges in Implementing Artificial Intelligence at Najaf International Airport and Zain Iraq Telecommunications

Institution	Number	Average Challenge Percentage (%)	Standard Deviation	Minimum	First Quartile
Najaf International Airport	50	58.2	15.4	30.00	45.10
Zain Iraq Telecommunications	50	64.4	19.2	32.00	49.12
Total	100	61.32	18.77	30.00	47.11

Table (7) show the spread of the challenges faced by institutions in adopting AI technologies. The columns show the number of respondents, the mean percentage of challenges, the standard deviation, the minimum value, and the first quartile. The statistics show that the mean percentage of challenges is 61.32%, a measure of the spread of challenges among institutions, and a confirmation of the need for further investments in training and infrastructure improvement to facilitate successful adoption of the technologies.

Quantitative Data Analysis:

Variable Classifications: Research variables were categorized into an independent variable (level of AI application) and a dependent variable (vision of strategic), such that the independent variable represents the intervention force assumed to influence the force of the dependent in the realm of strategic planning in organizations.

Multiple Regression Analysis: Multiple regression analysis was conducted in order to examine the direct effect of artificial intelligence over strategic planning factors. The findings indicated that an increase in the level of AI corresponds with a substantial

increase in the precision in decision-making, predictive capacity, and institutional versatility.

Statistical Significance Measurement: The research was based on the estimation of the p-value at the 95% confidence level in order to establish the significance level so that the findings achieved are generalizable and statistically significant.

Analysis of Variance (ANOVA): We used ANOVA to determine the effect of different factors in the connection between artificial intelligence and organizational strategy and revealed low differences among the studied groups.

Table 8. Multiple Regression Analysis Results:

Independent Variable (Artificial Intelligence)	Regression Coefficient (β)	p-value	Statistical Significance
AI Usage Level	0.65	0.002	Significant
Predictive Capability	0.48	0.010	Significant
Institutional Flexibility	0.53	0.005	Significant

From the table, it can be observed that all the variables of concern in the research are statistically significant at the 95% confidence level and thus the level of use of AI augments in a beneficial way decisions making precision, the degree of predictability, and the degree of flexibility of institutions (Table 8) [8].

Qualitative Data Analysis: Content Analysis

The qualitative data collected from personal interviews and government reports were studied through content analysis in the attempt to determine the leading concepts and the most existing patterns that were in the institution. This helped in drawing deeper insights into the extent the applications of artificial intelligence affected institutional strategy.

Data Categorization Using the SWOT Model: Qualitative data were categorized using the SWOT model in order to investigate the strengths, weaknesses, opportunities, and threats in the implementation of AI. Such categorization provides a compass in the identification of the internal and external organizational environment that propels the success in the uptake of smart technology.

Identification of Repeated Phrases and Key Words: Repeated phrases and key words were also isolated from reports and interviews in order to determine the strong trends which are the bed-rock for the making of future strategies.

Table 9. SWOT Model Analysis Table

Dimension	Results Extracted from Qualitative Analysis
Strengths	Enhanced decision-making accuracy, improved predictive capability, and increased institutional flexibility.
Weaknesses	Lack of technical competencies, difficulty integrating legacy systems with modern technologies, and high costs.
Opportunities	Potential for technological development and digital transformation, supporting innovation through research and development.
Threats	Risks of falling behind technological development, weak digital infrastructure, and the impact of market competition.

Table shows the different aspects after conducting the SWOT model analysis in which strengths are the advantages reaped in utilizing the artificial intelligence and weaknesses are the disadvantages which are the determents for the successful implementation of the technologies. Table also shows the current opportunities in the aid of the digital transformation and the threats which can deter the growth of the institutions if managed inefficiently (Table 9) [9].

Interpretation and Comparison: After both qualitative and quantitative analysis, the results were compared with previous studies in order to find similarities and differences and situate the findings in the theoretical background [10]. Statistical inference with the aid of SPSS software indicated that there existed a very high positive correlation between the application of AI and increased institutional strategic performance. Content analysis of report and interview also confirmed the findings, in which the importance of adopting holistic AI-based approaches was highlighted in the facilitation of the quality of decisions

and strategic planning. The mixing of quality and quantity in this way gives an overall and comprehensive idea of the effect of the use of AI on the institutional strategic vision in the direction of extending pragmatic directions for enhancing the performance of the institution in competitive settings [11].

Study Findings: The research findings revealed Significant improvement after the introduction of AI in strategic planning. 82% of the managers reported better decision-making quality and precision, which reduced risks. Further, 76% of the businesses realized better predictive ability, with forecasts and future-oriented strategic information more accurately, enhancing performance. Institutional agility also improved by 69% so that businesses could better handle fast market changes with the support coming from AI. But inexperience in the eyes of 58% respondents was perceived in the form of challenges, which testified the requirement for training programs so that the skills of the human resource could get built up in order to leverage AI in the right way in the form of enhancing performance [12].

Analysis and Discussion of Results: The study revealed that the application of artificial intelligence yields a quality improvement in strategic decisions and reduced uncertainty-related risk, enhancing the accuracy and efficiency of decision-making processes in establishments [13]. The research also reemphasized the pressing need for further training and development in order to upskill the skills of the personnel in the utilization of intelligent tools since an investment in people is the determinant in the realization of the applicability of the success in the use of such technologies [14]. Notwithstanding the immense value that can be gained from the utilization of artificial intelligence, in the process of the research, concrete challenges in the area of the cost in the installation and upgradation of the digital infrastructure in some establishments were realized and which necessitate the implementation in the gigantic investment and development policies in order to overcome them and reap the best of the advanced technologies.

Results: The results were interpreted by employing complex statistical analysis and comparisons between the institutions that were being researched, which helped determine the precise connection between artificial intelligence applications and institutional strategic vision [15]. The research revealed that institutions that applied artificial intelligence in strategic planning processes attained a significant increase in their decision accuracy, which was more than 80%, and their predictive capacity increased by 76% according to variance analysis. Consequently, AI-based applications enabled 69% increase in institutional flexibility so that institutions could react faster and more efficiently to market and competitive changes.

4. Conclusion

From the study results, it is possible to prepare a list of recommendations in order to promote the use of artificial intelligence to develop and implement the strategic vision of organizations. Institutions can build human capabilities through the introduction of training programs and comprehensive workshops for employees on the use of AI technologies in strategic planning, and encourage organizations to invest in employees' technical and managerial capabilities. The need for adopting comprehensive digital transformation practices involves creating an explicit blueprint of implementing AI as a core component within strategic decision-making frameworks and expanding predictive analysis and machine learning tools utilization towards anticipating possible future changes. A digital infrastructure establishment should also offer robust cloud-based computing infrastructures to accommodate the fulfillment of implementation of AI solutions, besides enhancing security measures to safeguard utilized data used toward analysis and decision-making. Encouraging research and development is also an important part of leveraging the potential of artificial intelligence because it entails sparking research collaborations between the private sector and academia to develop customized AI solutions and investing in AI research to fuel innovation. Besides, there is a need to promote the coordination between AI and strategic vision by creating

specialized units in institutions to monitor the implementation of AI strategies, promoting the innovation culture, and the intelligent use of data within institutions.

Finally, organizational and legal aspects must be resolved through establishing legal and regulative tools through which the moral and ethical application of artificial intelligence will be ensured and usage of data transparency increased as well as decision-making based on AI technologies. All these recommendations are required for maximum benefit derivation from AI services for providing strategic development visions to institutions and increasing their competitiveness on the market. According to the results of the study, certain suggestions could be made on how to enhance the use of AI for strategic vision formulation and implementation at the organizational level:

Further, the union of AI with the Internet of Things (IoT) in industrial supply chains has promoted efficiency in stock management and lowered costs of operation. On the farming side, AI interventions have resulted in intelligent farming methods since it is able to anticipate climatic fluctuations, interpret data regarding soil and others, optimize the efficiency of resource allocation such as fertilizers and water, thereby increasing productivity while making agriculture more sustainable. In the services sector, AI technology has proved helpful in terms of improving service quality, as they have been utilized to design intelligent customer care systems, enhance health services using big data analytics on patients, deliver accurate medical counsel, and even used to develop banking and financial systems to study customer behavior and deliver more efficient and secure financial solutions. Under the broad opportunities offered by the application of AI, applying these technologies remains hampered in Iraqi institutions by various factors, and the most common among them is the lack of specialized knowledge, the expense of application, and the insufficiency of clear-cut strategies integrating these technologies into long-term strategic plans. Additionally, limited digital infrastructure in some institutions, especially agricultural ones, would be a constraint to fully reaping the benefits provided by these technologies. To this, the research suggests that further investment needs to be made in training and professional development, a conducive regulatory environment needs to be established, and the public-private partnership should be made superior so the exploitation of such technologies more efficient and sustainable in different strategic sectors becomes easier. The research also suggests the conducting more future studies on making more evaluations about the long-term effect from the applications of AI in strategic plans in different sectors and determining the ways that maximum added value are achieved from such technologies in varied and dynamic conditions of work. This shall help in achieving sustainable development goals besides enhancing the competitiveness of Iraqi institutions in regional and global markets.

REFERENCES

[1] M. Al-Khazami, "The Role of Artificial Intelligence in Social and Human Sciences," Seminar Journal, vol. 1, no. 2, Dec. 2023.

[2] Y. Hussein, "The Impact of Artificial Intelligence Applications on Scientific Research Production in Universities," Journal of the Higher Institute for Qualitative Studies, vol. 4, no. 11, 2024.

[3] N. Hussein, "Strategic Planning for Human Resources as an Approach to Strengthening Competitive Competencies – An Applied Study on Pharmaceutical Companies within the Arab Republic of Egypt," M.S. thesis, Dept. of Business Administration, Benha Univ., Egypt, 2011.

[4] S. Elias, "Competitiveness and Competitive Advantage in Business Organizations," Journal of Research and Development Studies, Mohammed Boudiaf Univ., M'sila, Algeria, vol. 8, no. 1, 2021.

[5] Saudi Data and Artificial Intelligence Authority, Artificial Intelligence Strategy, 2nd ed., Apr. 2024.

[6] Arab Council for Social Sciences, The Role of Artificial Intelligence in Advancing Scientific Research and Educational Institutions, 2022.

[7] Arab Gateway for Artificial Intelligence, National Artificial Intelligence Strategy in Iraq, 2023.

[8] Arab Academy for Banking and Financial Sciences, Challenges of Implementing Artificial Intelligence in Arab Institutions, 2021.

[9] A. Mousawi, "The Impact of Artificial Intelligence on Organizational Strategies in the Arab World," Business Studies Journal, Univ. of Baghdad, 2021.
[10] A. Al-Khazraji, "Artificial Intelligence Applications and Their Impact on Developing the Strategic Vision of Government Institutions," Administrative and Governmental Studies Journal, Univ. of Baghdad, 2020.
[11] A. Al-Rubai, "The Role of Artificial Intelligence in Developing Institutional Strategies," Strategic Studies Journal, Univ. of Karbala, 2022.
[12] Group of Researchers, "Artificial Intelligence in Governmental Institutions," Technology and Innovation Journal, Univ. of Baghdad, 2023.
[13] OECD, Artificial Intelligence in Society, Paris: OECD Publishing, 2019.
[14] UNESCO, Recommendation on the Ethics of Artificial Intelligence, Paris: UNESCO, 2021.
[15] M. Tegmark, Life 3.0: Being Human in the Age of Artificial Intelligence, New York: Alfred A. Knopf, 2017.