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The role of management information systems (MIS) in attaining strategic success - Applied research at the College of Administration and Economics - University of Baghdad

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Abstract

The research sought to identify the function of management information systems in achieving strategic success and coherent job performance in the College of Administration and Economics, University of Baghdad. The research used the descriptive analytical approach, using the questionnaire as the main tool for collecting data. The study community included all employees in the organization under study. The number of employees in the study community was 66 employees. The comprehensive survey approach was used for the research community. The role of management information systems in achieving strategic success for organizations is an important and influential topic, as management information systems (MIS) play a crucial role in supporting, formulating and implementing organizational strategies. In short, management information systems are an integral part of strategic success, providing the tools and information necessary to achieve efficiency, creativity, and effective risk management.

Keywords: Management information systems, strategic success, creativity

Introduction

In a world where technology is developing at a breakneck pace, management information systems are becoming a need for every kind of organization, including higher education establishments like colleges and universities. These organizations work to improve performance and offer top-notch educational services in order to achieve strategic success. In this situation, management information systems are essential because they help streamline administrative procedures, enhance decision-making, and increase productivity and efficacy. It is anticipated that this study will help spread the word about how crucial management information systems are to institutions' ability to succeed strategically. Additionally, to offer helpful suggestions for enhancing the implementation of these technologies in the educational setting. Encourage college to make strategic decisions based on the research's findings. This research is taken into significant step in the direction of a better comprehension of the connection between management information systems and college strategic performance. The findings of this study should aid in the creation of fresh strategies to raise educational standards and organization effectiveness.

Chapter one

Research Methodology First: Research problem

Despite the significance of management information systems in the modern world, little is known about how much of an impact they have on universities' strategic performance. The use of these technologies in academic settings is likewise beset with difficulties, for which thorough research studies must be conducted in order to comprehend this relationship and offer workable answers.

1. From the viewpoint of the study sample, what is the degree of availability of each research variable (MIS, organization success?)

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- 2. From the viewpoint of the individuals in the research sample, what is the nature of the relationship and is it statistically significant between MIS and the aspects of organizational success?
- 3. From the viewpoint of the persons in the research sample, do the dimensions of MIS influence the variable of organizational success?

Second: Research Significance

This research aims to study the relationship between management information systems and strategic success within the organization under study. The research addresses the following questions:

- 1. What are the positive effects of management information systems on administrative processes within college?
- 2. How do management information systems contribute to improving strategic decision-making?
- 3. What are the challenges facing the application of management information systems in the academic environment?

Third: Research objectives

- 1. Determine the importance of management information systems in achieving the strategic success of college.
- 2. Analyze the direct and indirect effects of management information systems on institutional performance.
- 3. Propose a set of recommendations for the development and effective application of management information systems in the organization under study.

Fourth: Hypothetical Research Framework

As it shows the logical relationship between the research variables, designing the hypothetical framework for the research is one of the most important steps in solving its problem. It also shows how these variables and their dimensions relate to one another and in which direction. The proposed structure for the research, which aims to comprehend the influence and correlation among the research variables, is depicted in Figure 1.

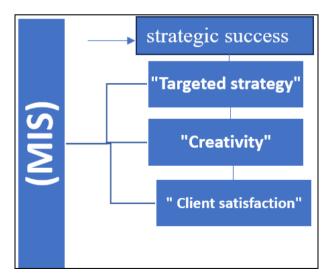


Fig 1: Hypothetical Research Framework

The source: The figure is prepared by the researcher Fifth: Research Hypotheses

1. The First Hypothesis: There is a significant positive correlation between the dimensions of (MIS) and

- strategic success. The following sub-hypotheses stem from the main hypothesis:
- 1. There is a significant positive correlation between a Technological Dimension and strategic success.
- 2. There is a significant positive correlation between Organizational Dimension and strategic success.
- 3. There is a significant positive correlation between Human Aspect and strategic success.
- 4. There is a significant positive correlation between Information and strategic success.
- 2. The Second Hypothesis: There is a significant effect of each dimension of (MIS) on strategic success. The following sub-hypotheses are derived from the main hypothesis:
- a) There is a significant effect of a Technological Dimension on strategic success.
- b) There is a significant effect of Organizational Dimension on strategic success.
- There is a significant effect of Human Aspect on strategic success.
- d) There is a significant effect of information on strategic success.

Sixth: Research methodology

In order to accomplish the primary objective of the research, the researcher used the descriptive-analytical technique, which is based on gathering data and then evaluating and interpreting it. Consequently, the following methods were used to gather data and information:

- 1. The theoretical aspect: The information gathered from Arabic and foreign sources, including books, journals, research papers, university theses, and information accessible on the global network (the Internet), was reliant on the contributions of experts, books, and researchers.
- **2. Field Aspect:** To address the field aspect of the current study, a number of crucial techniques were used, including:
- a) **Personal interviews:** A crucial technique for comprehending and delving into the nature of the work of the organizations under investigation and the respondents to the research questionnaire is the use of personal interviews. With the goal of achieving accuracy in the results and improving them, significant information has been acquired through these interviews, giving a thorough picture of how the colleges in the researched organization function and what is available to them.
- **b) Questionnaire:** To gather real data and information on the primary and secondary variables of the study, the questionnaire is used as a sample and a measuring tool.

Chapter two

Theoretical Aspect

First: Management information systems (MIS)

1. The notion of management information systems

Management Information Systems (MIS) are utilized to gather, store, process, and analyze data pertinent to an organization's activities, hence facilitating administrative decision-making and enhancing operational efficiency. Management Information Systems (MIS) are integral to the information framework of contemporary businesses, facilitating the provision of important information required

to attain strategic objectives. Definitions of management information systems include:

- 1. Definition by O'Brien & Marakas (2016): O'Brien characterizes management information systems as "a collection of integrated systems that deliver administrative and statistical information to support decision-making across different management tiers."
- 2. Definition by Laudon & Laudon (2018) [12]: Management information systems are defined as "information systems that collect, process, store, and disseminate data to facilitate administrative decision-making, analyze business processes, and monitor the organization's financial and production performance." (Laudon, K. C., & Laudon, J. P. 2018:132) [12].
- 3. **Definition by Turban** *et al.* (2020): Turban characterizes management information systems as "systems that utilize contemporary technology to manage organizational data, delivering precise and high-quality information that facilitates strategic and administrative decision-making."

2. Components of Management Information Systems

- The components of management information systems inside enterprises can be delineated as follows (Liu *et al.*, 2021:1547) [13].
- Data: Comprises primary data gathered from various sources.
- Software: Applications utilized for data processing and analysis.
- Individuals: System users, encompassing managers and analysts.
- Procedures: Methods employed to gather and analyze data.

3. Significance of Management Information Systems

- Management information systems have become essential tools in modern organizations for attaining administrative and strategic success. Their significance can be emphasized by the following points (Gómez: 2024:1047) [7].
- Decision Support: Furnishing the requisite information for precise decision-making.
- Enhancing Operational Efficiency: Streamlining information flow and minimizing data processing time.
- Attaining Integration: Promoting collaboration and synchronization among several departments.
 Management Information Systems are essential tools for modern firms to attain administrative and strategic success.
- **4.** The Dimensions of Management Information Systems (MIS): The dimensions of information systems can be categorized into various principal factors that influence their functions and impacts within orgniztion. These characteristics are sourced from scholarly literature and are utilized to assess the impact of management information systems on organizational and administrative performance. Numerous studies regard the subsequent dimensions as paramount:

1. Technological Dimension

This dimension encompasses the technological infrastructure, comprising hardware, networks, and software that provide data processing and storage. Technology

underpins management information systems by supplying the essential tools for effective and rapid data processing and analysis. Laudon & Laudon (2018) [12] assert that technology is fundamental to any management information system, as it supplies the technological resources necessary for data gathering and processing.

2. Organizational Dimension

This dimension pertains to the integration of information systems with the organizational structure, as these systems are interconnected with the processes and rules that dictate the organization's operations. This necessitates alignment between the system and the organizational structure to enhance efficiency and effectiveness. O'Brien & Marakas (2016) assert that effective systems must be congruent with the strategic objectives of the organization and aid the administrative framework by delivering requisite information promptly.

3. Human Aspect

The human aspect constitutes a fundamental dimension of management information systems. This dimension pertains to staff training, their proficiency in utilizing the system, and their involvement in its development. This encompasses managers, analysts, and end users.

Turban *et al.* (2020) assert that the human aspect constitutes a primary obstacle in management information systems, since inadequate user skills or resistance to change may result in system failure, regardless of its design quality.

4. Information

This dimension emphasizes the quality and efficiency of data collection, processing, and transformation into actionable information to facilitate decision-making. This encompasses the quality of information (accuracy, timeliness, relevance) and its dissemination throughout the many departments of the firm.

Alter (2002) posits that efficient Management Information Systems (MIS) deliver appropriate information to the correct individuals at the optimal moment to facilitate decision-making and attain strategic goals.

Second: Strategic Achievement 1. The notion of strategic success

The modern landscape is defined by organizations striving for exceptional performance to fulfill future expectations. Consequently, numerous studies have focused on the examination of strategic success, exploring its definition and significance to illustrate performance across various domains and disciplines in pursuit of anticipated objectives. According to the Oxford Dictionary, success denotes the achievement of targeted goals and the attainment of desired outcomes (Oxford, 2010:1223) [11]. When juxtaposing the notion of strategic success with concepts such as superiority, distinction, or creativity, strategic success aligns more closely with excellence, as it serves a similar purpose. As articulated by (Johnson & Whittington, 2008: 129) [9], strategic success embodies an organization's capacity to endure, adapt, and thrive in accordance with its objectives. It also analyzes the assessment of the organization's performance using a singular metric throughout its existence that fulfils the evaluation criteria, in contrast to organizational excellence, which assesses performance through various metrics, standards, and methodologies (Al-

Zaidi, 2007:132) [2]. Daft has described strategic success as the management's capacity to acquire knowledge, experiences, and ideas (Fisher *et al.*, 2017:189) ^[5], together with the effective and precise analysis of the experiences and histories of analogous businesses or the timely grasping of new chances after attaining their objectives. Defined strategic success as effective leadership and management that comprehends the organization's objectives and the dynamics of the business environment, anticipates confronts reality developments. with a long-term perspective centered on critical success factors, competitive advantage that enhances value for customers and stakeholders, visionary outlook, potential for cultivating intellectual capital, and emphasis on employee development, motivation, satisfaction, feedback, evaluation, and review, deeming it a sustainable success. The Strategic success can be defined from several aspects.

2. The Contemporary View on Strategic Achievement

In contemporary settings, strategic success emphasizes adaptability, innovation, and data management to attain competitive advantage. Below are contemporary definitions of strategic success:

- 1. Strategic Achievement via Digital Transformation: Strategic success is characterized by the capacity to adopt digital transformation to reconfigure corporate operations and increase customer experience, hence increasing market competitiveness. Successful enterprises implement creative digital tactics to enhance Creativity and optimize value.
- 2. Strategic Achievement with Organizational Agility: Strategic success refers to a company's capacity to cultivate organizational flexibility, allowing it to adjust to unforeseen and swift environmental alterations. This adaptability encompasses organizational structure, corporate culture, and human resource management.
- 3. Strategic Achievement through Data and Analytics: Strategic success in the contemporary period hinges on utilizing Big Data analytics and making evidence-based decisions to foster innovation and competitive advantage. (Davenport, T. H., & Harris, J. G., 2017:45)
- 4. Strategic Achievement via Efficient Change Management: Strategic success entails the proficient management of organizational change by harmonizing innovation with established processes, while simultaneously augmenting leadership and human resource involvement. (Davenport, T. H., & Harris, J. G. 2017:134) [4].
- 5. Strategic Achievement via Sustainability and Social Responsibility: In contemporary practice, strategic success is linked to the formulation of strategies that prioritize sustainability and corporate social responsibility, as emphasis on these elements improves interactions with customers and society while fortifying the brand (Kotter, J. P., 2012:67) [10].
- 6. Strategic Achievement via Ongoing Innovation: Strategic success relies on ongoing innovation in products, services, and value delivery methods, facilitating enduring competitive advantages in swiftly evolving contexts. These criteria embody a contemporary comprehension of strategic success, which is fundamentally dependent on innovation, technological adaptability, sustainability, and proficient

change management.

3. Dimensions of strategic success

Given the significance of the dimensions of strategic success, the key issues pertaining to each dimension will be discussed as follows:

1. Targeted strategy

The fluctuations in the business environment, driven by political, economic, and social developments, significantly influence an organization's selection of strategies and resources necessary for its survival, continuity, and competitive advantage. For organizations to thrive in the contemporary landscape, managers must possess a well-defined long-term strategy, as this strategy delineates the envisioned future for the organization. Such clarity in strategy and vision facilitates the attainment of established objectives, thereby ensuring successful implementation (Al-Halalma and Al-Azzawi, 2009:122-124) [1].

2. Creativity

The milieu of administrative organizations has been defined dynamism, necessitating movement and organizations identify the means and strategies to rejuvenate their operations and leverage their resources. Consequently, academics have examined the role of creativity in facilitating organizational change, defining organizational creativity as the adoption of innovative ideas or behaviors that signify modernity within the sector, market, or environment. Creativity is described as the capacity of individuals to produce novel ideas or to conceive alternative viewpoints on established concepts (Griffin: 2020, 22) [6]. The capacity to generate value is fundamental to an organization's strategic success, as it is recognized as a pioneer in introducing innovative products or practices through effective leadership and the implementation of suitable plans, so frequently serving as a source of strategic achievement. Creativity frequently emerges from an astute concept that inspires enhanced work tactics methodologies, which are periodically evaluated to ensure optimal performance. Creativity signifies the significant unique characteristics inherent in each person, and as organizations mirror persons and their representations, creativity differentiates one company from another. The significance of administrative creativity can be summarized as follows:

- 1. Enhancing the present and future capacity of organizations to address unforeseen events and the disparity between their actual circumstances and what the environment reveals.
- 2. The necessity for firms to enhance their competitiveness and improve service delivery in response to industry changes and surroundings, together with alterations in values, trends, and perceptions.

Creativity enhances organizational advancement, improves adaptability to changes, and augments flexibility in administrative and technological operations. The organization consistently acquires new knowledge or advances existing scientific, technical, or social knowledge, with the creativity stemming from this knowledge varying in significance, ultimately leading to its introduction in the market as "new products, processes, or services." Change and creativity may be regarded as two facets of the same

entity. Transformation necessitates ongoing innovation within the organization, whereas innovation demands the capacity for adaptation. In this context, creativity might offer insights and interpretations of the organization's recognized or unrecognized demands.

3. Client satisfaction

Customer satisfaction serves as a pivotal criterion for evaluating strategic success, The advent of human relations studies in the 1920s heightened interest in this concept. which has since become a contentious topic among numerous researchers and authors. While there is consensus on the essence of satisfaction, there is a divergence in the formulation of a precise definition, we can define customer satisfaction as the criterion pertinent to organizations that depend on service quality to cultivate customer loyalty and preferences. It is also characterized as an individual's emotional response of contentment or dissatisfaction arising from the comparison between the actual service performance and the anticipated outcomes. Posits that if performance aligns with expectations, the guest experiences satisfaction; if performance surpasses expectations, the guest achieves high satisfaction or happiness. Conversely, if performance falls short of expectations, the guest becomes dissatisfied. The organization must possess the capability to retain the customer to foster an enduring relationship. Satisfaction arises from an interactive system comprising three components: the organization's operations, customer expectations, and employee engagement.

4. The role of (MIS) in achieving strategic success for organizations

The significance of management information systems in attaining strategic success for businesses is a critical and impactful subject, as management information systems (MIS) are essential in supporting, creating, and executing corporate plans. Several pertinent subjects can be addressed in this context (Ismail *et al.*, 2024:338) ^[8]:

1. Facilitating strategic decision-making

Management Information Systems (MIS) offer instruments for the analysis of critical data and information, facilitating leaders in making strategic decisions grounded in precise facts and statistics. Information systems utilize technology like predictive analytics and decision support systems (DSS) to mitigate risks and enhance the likelihood of success.

2. Improving operational efficiency

By automating administrative operations and enhancing information flow, Management Information Systems (MIS) augment operational efficiency, resulting in decreased costs and enhanced performance. This assistance enhances organizations' capacity to attain their strategic objectives.

3. Competitiveness and Innovation

Management Information Systems facilitate innovation and the development of new products or services that address evolving market demands. The capacity to scrutinize customer data, assess the market, and discern trends empowers organizations to compete effectively and enhance their strategic standing.

4. Attaining congruence between technology and strategy: Aligning information systems with strategic objectives can enhance the congruence between technology and organizational trends. This integration facilitates the alignment of technology resources with business requirements, hence augmenting the organization's capacity to attain its strategic objectives.

5. Facilitating risk management

Information systems offer tools to identify and evaluate strategic and operational risks. Through the monitoring and analysis of data, companies can leverage information systems to mitigate hazards and circumvent future challenges, so improving their capacity to thrive in a dynamic business landscape.

6. Attaining organizational adaptability

Management information systems enable firms to swiftly adjust to alterations in the economic and competitive landscape. The prompt accessibility of precise information enables management to swiftly modify its strategies in reaction to emerging obstacles or possibilities.

Facilitating internal collaboration and communication

Management information systems facilitate efficient communication among various work teams and departments within the firm, thereby enhancing collaboration and expediting the attainment of shared strategic objectives.

8. Sustainability and sustainable development

Management information systems facilitate the execution of sustainable plans by offering tools that allow firms to assess their environmental and social impacts, thereby achieving a balance between financial and ecological success.

Case study example: In corporations like Amazon and Apple, information systems are integral to innovation plans and customer service. Amazon use data analytics to customize the shopping experience and enhance its supply chain, hence facilitating its strategic success.

In summary, MIS is essential for strategic success, offering the tools and information necessary for efficiency, creativity, and effective risk management.

Chapter three: Practical Aspect

The study elucidates the relationship between the (MIS) and strategic success. The Likert Pentagram scale was employed to reveal the orientations of the sample individuals in the educational organization. In this scale, individuals are requested to indicate the extent of agreement or disagreement based on specific options. Some tests were conducted after distributing the questionnaire, which included:

1. Scale validity and reliability pertain to the degree to which the ratings obtained from a scale are internally consistent and do not contradict each other while assessing the behavior of the individual being studied. The concept of self-validity was employed, determined by taking the square root of the Cronbach's Alpha coefficient.

Table 1: Validity and Reliability Coefficients

The Variable	Cronbach's Alpha	Validity Coefficient
First: Technological Dimension	0.725	0.852
Secondly: Organizational Dimension	0.686	0.826
Thirdly: Human Aspect	0.840	0.910
Fourthly: Information	0.740	0.860
(MIS)	0.944	0.970
Targeted strategy	0.872	0.936
Creativity	0.905	0.954
Client satisfaction	0.872	0.930
Strategic success	0.960	0.980
The Total	0.976	0.988

The source: The table was prepared by the researcher based on statistical analysis using SPSS software

The table number (1) indicates that the value ranged between (0.826-0.988), which is a high value reflecting the reliability of the questionnaire items. The researcher ensured the stability of the questionnaire form through the use of the Cronbach's alpha coefficient, as explained in Table (3).

Secondly: Description and Diagnosis of Research Variables

and Dimensions

The researcher performed a descriptive analysis of the data using the statistical program (SPSS v.26) to examine the mean values, compute standard deviations, and determine the highest and lowest values. This was conducted to demonstrate the attributes of the research variables based on the perspectives of the surveyed participants. The findings are displayed in Table 2.

Table 2: Results of descriptive analysis for the opinions of the research sample

The Variables	The Dimensions	The Mean (Average)	The Standard Deviation	Minimum Value	Maximum Value	Coefficient of Variation	Relative Importance %	Approval
	Technological Dimension	3.754	0.675	1.5	5	0.209	75.2	High
(MIS)	Organizational Dimension	3.612	0.755	1.5	5	0.195	72.3	High
, ,	Human Aspect	3.820	0.743	1	5	0.190	76.5	High
	Information	3.896	0.740	1	5	0.151	78	High
	The Total	3.885	0.586	1.25	5	0.188	75.7	High
	Targeted strategy	3.780	0.712	1	5	0.174	75.7	High
Strategic	Creativity	3.992	0.696	1	5	0.192	76.9	High
success	Client satisfaction	3.710	0.712	1	5	0.170	74.3	High
	The Total	3.808	0.646	1	5	0.209	76.2	High

The coefficient of variation is calculated by dividing the standard deviation by the mean. If the coefficient ratio is less than 50%, it is considered an indication of no significant difference or dispersion.

The source: Compiled by the researcher based on the outputs of the SPSS program

1. Description of the (MIS) Variable

From the previous table, the following observations are evident:

- a) **Technological Dimension:** The research sample perceives the level of a Technological Dimension as high, with a relative importance value of (75.2%) and a mean value of (3.754) with a standard deviation of (0.675). The coefficient of variation is low (20.9%), indicating a lack of dispersion in their opinions.
- b) Compensation: The research sample perceives the level of Organizational Dimension as high, with a relative importance value of (72.3%) and a mean value of (3.612) with a standard deviation of (0.755). The coefficient of variation is low (19.5%), indicating a lack of dispersion in their opinions.
- c) **Human Aspect:** The research sample perceives the level of the Human Aspect variable as high, with a relative importance value of (76.5%) and a mean value of (3.820) with a standard deviation of (0.743). The coefficient of variation is low (19%), indicating a lack of dispersion in their opinions.
- d) Information: The research sample perceives the level

of Information as high, with a relative importance value of (78%) and a mean value of (3.896) with a standard deviation of (0.740). The coefficient of variation is low (15.1%), indicating a lack of dispersion in their opinions.

2. Description of the strategic success variable

- a) Targeted strategy: The research sample perceives the level of Targeted strategy as high, with a relative importance value of (75.7%) and a mean value of (3.780) with a standard deviation of (0.712). The coefficient of variation is low (17.4%), indicating a lack of dispersion in their opinions.
- b) Creativity: The research sample perceives the level of Creativity as high, with a relative importance value of (76.9%) and a mean value of (3.992) with a standard deviation of (0.696). The coefficient of variation is low (19.2%), indicating a lack of dispersion in their opinions.
- c) Client satisfaction: The research sample perceives the level of Client satisfaction as high, with a relative importance value of (74.3%) and a mean value of (3.710) with a standard deviation of (0.712). The coefficient of variation is low (17%), indicating a lack of dispersion in their opinions.

Description and Characterization of the Main Research Variables: According to Table 4, the research sample perceives the first variable at a high level, with a relative

relevance value of 75.7%. The mean value for this variable is 3.885, with a standard deviation of 0.586. The coefficient of variation is 18.8%, suggesting that there is little difference in their perspectives. Regarding the strategic success variable, it is clear that the perception level is high, as indicated by a relative importance value of 76.2% and a mean value of 3.808, with a standard deviation of 0.646. The coefficient of variance is 20.9%, suggesting that there is minimal variation in the viewpoints of the research sample.

Thirdly: Hypothesis Testing

Primary Hypothesis 1: There is a considerable and positive statistical link between the variable of (MIS), including all its dimensions, and organizational success. In order to assess the accuracy of this hypothesis, the researcher employed the Pearson correlation coefficient. Table 3 displays the coefficients for the (MIS) variable and its four dimensions, as well as the strategic success variable. The table provides the following information:

Table 3: Matrix of the Relationship between dimensions of (MIS) variable and strategic success variable

The Variables		(MIS)	Technological Dimension	Organizational Dimension	Human Aspect	Information
Ctrotogia guagas	Pearson	0.823**	0.545**	0.560**	0.625**	**0.666
Strategic success	(Sig)	0.000	0.000	0.000	0.000	0.000

^{**} Signifies statistically significant correlation at 0.01 level, * Signifies statistically significant correlation at 0.05 level. *Source*: Compiled by the researcher based on the outputs of the SPSS statistical program.

1. There is a correlation between the (MIS) variable and strategic success: The (MIS) variable and its four dimensions show a strong positive association with the strategic success variable, with a correlation coefficient of 0.823, which is statistically significant at a level of 0.000. The value is below the usual significance level, suggesting a substantial correlation between them. Enhancing the (MIS) in the examined organization directly correlates with an improvement in strategic success. The findings indicate a direct relationship between the (MIS) and the performance of the organization, so validating the acceptance of the main hypothesis.

2. There is a correlation between the dimensions of (MIS) and strategic success: Upon analysing the data shown in Table 5, it is evident that the correlation coefficients between the dimensions of (MIS) and strategic success were both statistically significant and favourable. The correlation analysis revealed that employment stability had the highest correlation coefficient of 0.666, followed by Human Aspect with a rate of 0.625. Organizational Dimension showed a correlation coefficient of 0.560, while Technological Dimension had a coefficient of 0.545. All of these coefficients were statistically significant at a p-value

of 0.000, which is below the conventional significance level of 0.05.

The findings demonstrate a strong and meaningful association between these factors, implying that when the organization improves the (MIS) and offers sufficient support and amenities for the teaching staff, the level of strategic success rises. The results indicate a strong and positive association between the aspects of (MIS) and organizational success. Thus, the sub-hypotheses are deemed valid.

2. Secondary Hypothesis 2

There is a statistically significant impact of the dimensions of (MIS) on strategic success, leading to the following subhypotheses:

A. Sub-Hypothesis 1: There is a statistically significant impact of the Technological Dimension on strategic success. A simple linear regression equation was formulated to estimate strategic success based on the Technological Dimension. Table 4 illustrates the test of the impact of the Technological Dimension on strategic success.

Table 4: Results of linear regression analysis for the impact of the technological dimension on strategic success

The Dimensions	Regression Coefficient (β)	T-value (Significance level)	F-value (Significance Level)	(R ²)	(R ²) - The Coefficient of Determination
Technological Dimension	0.665	17.948 (0.000)	321.92 (0.000)	0.44	0.439

Source: The table is prepared by the researcher based on the statistical program SPSS.

The following is evident from Table 4

- 1. Stability of the Regression Equation Model: If the (F) value is (321.92), and it is significant at a (5%) significance level, this indicates the possibility of estimating the Technological Dimension with the significance of strategic success and confirms the validity of the regression equation model.
- 2. Significant stability of regression coefficients after the Technological Dimension: The T-value for the constant term is (17.948) at a (5%) significance level, confirming the significant stability after the Technological Dimension in strategic success.
- 3. The regression coefficient value is (0.665), indicating a

positive impact.

4. The coefficient of determination (R²) is 0.44, indicating that after the Technological Dimension explains (44%) of the changes that occur in strategic success. Based on the above, the first sub-hypothesis is accepted.

B. Second Sub-Hypothesis

There is a statistically significant impact of Organizational Dimension on strategic success. To test this hypothesis, a simple linear regression equation was formulated to estimate overall strategic success in relation to compensation. Table (5) displays the test results for the impact of Organizational Dimension on strategic success.

Table 5: Results of linear regression analysis for the impact of organizational dimension on strategic success

Dimensions	Regression Coefficient (β)	T-value (.Sig)	F-value (.Sig)	(R ²)	(R ²) - The Coefficient of Determination
Organizational	0.756	23.2	543.495	0.57	0.569
Dimension	0.730	(0.000)	(0.000)	0.57	0.309

Source: The table is prepared by the researcher based on the program SPSS.

The following is evident from Table (5)

- 1. Stability of the Regression Equation Model: If the (F) value is (543.495), and it is significant at a (5%) significance level, this indicates the possibility of estimating strategic success with the significance of Organizational Dimension and confirms the validity of the regression equation model.
- Significant stability of regression coefficients after Organizational Dimension and the constant term: The T-value for the constant term is (23.2) at a (5%) significance level, confirming the significant stability of the impact of Organizational Dimension on strategic success.
- 3. The regression coefficient value is (0.756), indicating a

positive impact.

4. The coefficient of determination (R²) is 0.57, indicating that Organizational Dimension explain (57%) of the changes that occur in strategic success. Based on the above, the second sub-hypothesis is accepted.

C. Third Sub-Hypothesis

Human Aspect has a statistically significant influence on strategic success. In order to examine this idea, a straightforward linear regression equation was developed to evaluate the overall performance of the organization in relation to the balance between work and personal life. Table (6) presents the test results about the influence of Human Aspect on the performance of the company.

Table 6: Results of linear regression analysis for the impact of human aspect on strategic success

Dimensions	Regression Coefficient (β)	T-value (.Sig)	F-value (.Sig)	(R ²)	(R ²) - The Coefficient of Determination
Human Aspect	0.595	14.965 (0.00)	223.546 (0.000)	0.353	0.352

Source: The table is prepared by the researcher based on the statistical program SPSS.

The following is evident from Table 6

- 1. Stability of the Regression Equation Model: If the (F) value is (14.965), and it is significant at a (5%) significance level, this indicates the possibility of estimating strategic success with the significance of Human Aspect and confirms the validity of the regression equation model.
- 2. Significant stability of regression coefficients after Human Aspect and the constant term: The T-value for the constant term is (14.965) at a (5%) significance level, confirming the significant stability of the impact of Human Aspect on strategic success.
- 3. The regression coefficient value is (0.595), indicating a

positive impact.

4. The coefficient of determination (R²) is 0.353, indicating that Human Aspect explains (35.3%) of the changes that occur in strategic success. Based on the above, the third sub-hypothesis is accepted.

D. Fourth Sub-Hypothesis

There is a statistically significant impact of Information on strategic success. To test this hypothesis, a simple linear regression equation was formulated to estimate overall strategic success in relation to Information. Table (7) displays the test results for the impact of Information on strategic success.

Table 7: Results of linear regression analysis for the impact of information on strategic success

Dimensions	Regression Coefficient (β)	T-value (.Sig)	F-value (.Sig)	(R ²)	(R ²) - The Coefficient of Determination
Information	0.664	17.948 (0.000)	321.92 (0.000)	0.44	0.439

Source: The table is prepared by the researcher based on the statistical program SPSS.

The following is evident from Table 7

- 1. Stability of the Regression Equation Model: If the (F) value is (321.92), and it is significant at a (5%) significance level, this indicates the possibility of estimating strategic success with the significance of Information and confirms the validity of the regression equation model.
- 2. Significant stability of regression coefficients after Information and the constant term: The T-value for the constant term is (17.948) at a (5%) significance level, confirming the significant stability of the impact of Information on strategic success.
- 3. The regression coefficient value is (0.664), indicating a positive impact.
- 4. The coefficient of determination (R²) is 0.44, indicating that Information explains (44%) of the changes that occur in strategic success. Based on the above, the

fourth sub-hypothesis is accepted.

Chapter three: Conclusions & Recommendations

Management information systems are regarded as fundamental instruments that substantially aid in attaining the strategic success of enterprises. This is achieved by supplying precise and current data and information, facilitating informed decision-making and effective strategy implementation. In this framework, we will examine the key research findings that connect the dimensions of management information systems to the dimensions of strategic success.

Conclusions

1. Technology as a catalyst for success: Contemporary technology employed in information systems enhances operational efficiency, expedites decision-making, and

lowers costs, thereby augmenting organizational competitiveness. This technology facilitates the provision of precise and integrated information, which underpins strategic planning and evidence-based decision-making.

- **2. Organizational Dimension:** The Robust Foundation for Success: The establishment of a robust and cohesive technical infrastructure with other organizational systems facilitates the integration of diverse roles and departments.
- 3. Information systems must align with the organizational culture and values to support successful implementation.
- **4. Human Dimension:** The Catalytic Factor: The human component is the primary catalyst of any information system, since it conceives, constructs, operates, and sustains these systems. Employees must have adequate training and qualifications to guarantee maximum utilization of system capabilities.
- **5.** Information serves as the core of any information system and becomes a strategic asset for the firm. Information must be safeguarded against hackers and theft, while ensuring its quality and integrity.
- 6. Targeted approach: Information systems facilitate the identification of suitable strategies by delivering essential data and analysis. Systems facilitate the monitoring of strategy performance and the assessment of their efficacy.
- 7. Effective Implementation: The Crucial Element for Success: Information systems assist in executing strategies by supplying essential tools for project monitoring and performance assessment. Systems facilitate the integration of many tasks and departments, hence enhancing the successful execution of strategies.
- 8. Client contentment: The paramount objective: Information systems enhance customer service by delivering precise and prompt information regarding products and services. Systems facilitate the personalization of products and services to satisfy consumer requirements, hence augmenting customer loyalty.
- **9. Inter-dimensional integration:** Optimal utilization of information systems necessitates the combination of technological, organizational, human, and informational elements. The technical plan must align with the organization's overarching strategy.

Recommendations

Maximizing management information systems is essential for the strategic success of the College of Administration and Economics at the University of Baghdad. Here are many recommendations that may facilitate this:

- 1. Enhancing the technology infrastructure
- Supplying high-performance computers to guarantee the seamless operation of programs and applications utilized in administrative and academic functions.
- b) Investing in protective programs to safeguard data and information from hacking and viruses.
- 2. Formulating and executing integrated information systems.
- **3.** Research Management System: To streamline the administration of the scientific research process, documenting research initiatives, and disseminating the findings.

- **4. Training personnel in technology utilization:** Conducting training programs to equip faculty and staff with essential skills for the effective use of management information systems.
- 5. Incorporating technology into curricula: Implementing a course in information technology within the curricula of management and economics students to familiarize them with the significance of technology in management. Promoting the integration of technology in research initiatives to enhance students' analytical and critical thinking abilities through the utilization of technical instruments.
- **6.** Collaboration with other entities: Alliance with technology firms to use specific experience and understanding in information technology.
- **7. Ongoing performance assessment:** Establishing performance metrics to evaluate the efficacy of administrative information systems.
- **8.** Leveraging artificial intelligence: Implementing artificial intelligence methodologies in data analysis and decision-making enhances the efficiency of administrative procedures.

The development and implementation of administrative information systems require a definitive administrative decision and a forward-looking perspective. A specialist staff must be designated to manage and develop these systems, and an appropriate budget must be granted to cover the expenses associated with their development and maintenance.

By adopting these proposals, the College of Administration and Economics at the University of Baghdad can attain a significant advancement in education and scientific research, thereby strengthening its status as a premier academic institution.

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