



The Impact of Management Information Systems on Security Decision-Making : An Analytical Research for a Sample of Security Services Officers at Al-Muthana Governorate

Ahmed Maraid Muhail*
University of Baghdad, Baghdad, Iraq
College of administration and economics

ahmedmareed2@gmail.com

*Corresponding author

Yousif Aftan Abdullah
University of Baghdad, Iraq
College of administration and economics

yousif@coadec.uobaghdad.edu.iq

Received:9/5/2023

Accepted:20/7/2023

Published Online First: 30 /6/ 2024



This work is licensed under a [Creative Commons Attribution-NonCommercial 4.0 International \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)

Abstract:

The current research aims to identify the extent of the impact of management information systems on the level of security decision-making among a sample of security services officers in Muthana Governorate, and the researcher used the descriptive analytical approach to present, analyze and then explain the information, and collect data through the questionnaire as a main tool, designed based on international standards after making amendments to its paragraphs consisting of (40) paragraphs that included the two research variables, as well as through the field coexistence of the researcher and personal interviews, and the questionnaire was distributed to all research community (Comprehensive inventory) by (200) forms from officers working in the various directorates of security services in (Muthana Governorate) to retrieve (197) forms, valid for statistical analysis, including (191) form invalid for analysis (6) form, and non-retrieved (3) form, has been using a set of statistical methods and represented by the program (AmosV23 In some statistical aspects, the ready-made statistician (in a sample of security services officers in Muthana Governorate) in addition to the researcher's adoption of statistical methods (arithmetic averages, standard deviation, coefficient of differences, relative importance), the research has reached the most prominent result represented in: There is interest in improving the level of management information systems because of their role in making the finest security decisions in the directorates of the security services in Muthana Governorate.

Paper type: Research Paper

Keywords: Management Information Systems, Security Decision Making, System Components, Security Services Directorates.

1.Introduction:

In light of the great changes taking place in the current century, organizations are experiencing a number of transformations at various levels due to the rapid developments in the field of electronic information and programs, as well as the great openness to various countries and the escalation of competition to try to obtain information and employ it in decision-making, so that the main concern and concern of the decision-maker is to synchronize these transformations according to the right decision-making that supports these capabilities to enable them to know their immediate plans and draw scenarios that keep pace with the reality of future changes, which It makes it fully prepared to detect and control risks and threats in order to preserve the reality of the organization on the one hand and access to sound treatments on the other hand, at the same time increasing the upgrading of its technological and cognitive information reality. Information and its advanced systems have become an urgent need to be consistent with the requirements of different organizational levels, starting with the needs of operational levels and ending with the requirements of senior management. Information technology (IT) is the latest subfield of management science, which is often reflected in management information systems (MIS). Information is based on the principle of socio-technical systems (STS), so that when information is given to the people concerned in a timely manner, the functions of the organization will be more efficient. The rapid development of electronic tools for collecting, analyzing, and disseminating information in more precise terms than manual procedures has helped develop the basic management tools now known as management information systems (MIS). The departments of the directorates of the security services in Muthanna Governorate have worked to improve the level of management information systems to keep pace with the correct methods in security decision-making and taking them. Taking into account the complex environmental development that occurs in the security sector, protecting the population, and providing services that suit the volume of demand for its services, the concept of traditional methods has become unnecessary and does not affect security decision-making.

1.1. Literature Review:

Previous researchers have dealt with the dimensions and variables of the study, and among those studies, as Al-muqaddali (1998), Through his study, he included 200 policemen from Mecca who served in the army for ten years. The aim of the study was to determine the decision-making capabilities required for security and to compare the performance of newly graduated officers from the King Fahd Security Academy with expectations. The most notable result, in the eyes of the superiors, was that the newly graduated officers were "fair" to "very low" in their decision-making abilities. The research community consists of 600 members, including 400 associates in managerial positions and 200 senior managers. The study by Ajayi et al. (2007) focused on identifying the long-term role of the relationship between management information systems and managerial decision-making processes. The most notable result was the non-use of management information systems. Abu Karim, Ayman et al (2013) In study, explored the relationship between management information systems and improving the administrative performance of NGOs in the Gaza Strip. The study found high levels of use of mis to improve managerial performance in the study sample (including 172 employees). A significant correlation was also found among the study workers. Al-Wadiya ??? (2015) on the other hand, found a connection between management information systems and the caliber of administrative choices in the Ministry of Education and Higher Education of the Gaza Strip, with 247 participants in the study sample. An association between management information systems and the caliber of administrative performance in the educational sector was discovered to be statistically significant. Hindul (2016) described the analysis of the nature of the decision-making process, its methods, and objective variables on the one hand and clarified the role of the statesman in it on the other. Al-Musawi (2016) proposed a study on the extent of the contribution of management information systems to the strategic performance of the Iraqi

Council of Representatives. The study at the Military Defense College used both the functional and analytical approaches, and its findings demonstrated that problem identification and decision-making vary depending on democratic and non-democratic political systems. At the Palestinian Ministry of Interior and National Security, Abu Shaaban (2017) investigated the role of strategic thinking (strategic thinking patterns, practices, and barriers to strategic thinking) in security decision-making. The research community consisted of 137 employees, all of whom held supervisory roles in the Internal Security Service with the rank of major or higher. According to the findings, the Palestinian Ministry of Interior and National Security's supervisory staff possessed high strategic thinking abilities. In his study, Karim (2018) emphasized the focus on the reality of management information systems in a few Ministry of Labor and Social Affairs departments and their function in the process of making administrative choices at all levels and in the departments of the ministry. 75 participants made up the sample used in the study. According to the study's findings, there are managers, department heads, and officials of the divisions among the 110 people working in several ministry departments on a functional level. The discovery of a strong association between the efficiency of management information systems and the efficiency of decision-making in ministry departments, although the impact of this correlation varies depending on the dimension. Ibrahim (2019) sought to understand and quantify the influence of the aspects of knowledge sharing in aiding strategic decision-making and its implementation in the Ministry of Labor and Social Affairs, which serves the Iraqi environment. The study's most significant findings revealed a significant correlation between knowledge sharing and the process of making strategic decisions, demonstrating that the availability of knowledge plays a role in the evolution of decision-making stages. The study sample consisted of 120 people from general managers and their assistants as well as directors of departments and their assistants in the ministry. The analysis showed that the above company is interested in human resources with a specialist in management information systems, which is evident in the enhancement of strategic performance. The study sample size was 60 deputies. In Ateeb's study from 2021, 266 senior, medium, and lower leaders made up the study sample. He examined the impact of servant leadership on management information systems in the Directorate of Communications and Information Systems at the Iraqi Ministry of Interior. It discovered a direct link between the adoption of servant leadership practices by the Directorate of Communications and Information Systems and was able to use them to positively impact the growth of its management information systems in decision-making and long-term and short-term planning.

The problem of this study lies in the limited knowledge of the officers and associates of the security services in Muthanna governorate and the employees of the systems and information and their relationship to making security decisions for the purpose of reaching the type, type and direction of the relationships assumed by this study.

- 1 .To what extent do the dimensions of a management information system affect the security decision-making process of a security agency sample?
- 2 .What is the level of practice and attention to error that the sample has, and what are the most common and popular practices?
- 3 .What is the sample level for security decisions?
- 4: How do Management Information Systems relate to their dimensions in the report of security procedures in the sample? The aim of the current study, which includes a sample of Muthanna security officials, is to determine the answers to these questions and the necessary solutions.

1.2. Research objectives:

The current research aims to highlight the importance of management information systems and their impact on security decision-making in the research sample represented by the officers of the directorates of the security services in Muthanna Governorate. Through:

1. Determining the relationship and impact between management information systems and their dimensions by making security decisions in the security services of the research sample.
2. Determining the level of security decision-making in the directorates of security services in Muthana Governorate.
3. The importance of providing a set of conclusions and proposals that overcome the difficulties about the use of management information systems in security decision-making in the research sample.
4. Determining the relationship between management information systems and their dimensions in security decision-making in the sample studied.

2. Materials and Methods:

The research aims to diagnose the level of availability of management information systems practices at the level of security decision-making among officers of the directorates of the security services in Muthanna Governorate, and the questionnaire also included (40) paragraphs and opinions (191) from the officers of the security services in Muthana Governorate, and the scale Atheeb (2021) was adopted in management information systems with an average of (3.64). And Al-Muqdali (1998) in security decision-making with an average of (3.70), indicating that the senior departments in the directorates of the security services in Muthanna Governorate have an exceptional ability, through their skills and behaviors distinct, to influence their subordinates and instill a spirit of perseverance and equality among them by directing them and assigning the right people with the appropriate tasks, and continuous work to develop and improve management information systems, and provide the necessary support to achieve the best security decisions. The MIS variable obtained a standard deviation of (1.022). Good relative importance (73%) and answer level (high) indicate the sample's approval of the high answer level. As for the security decision-making variable, it obtained a standard deviation of (0.930), good relative importance (74%), and a high response level, which also indicates the approval of the sample on the high level of answer

2.1 Hypotheses

Management information systems are related to security decision-making, and their dimensions are morally related, and the following hypotheses branch from them:

1. The attention of senior management is related to making a security decision, and its dimensions are morally related.
2. Human resources are associated with making a security decision, and their dimensions are morally related.
3. Material resources are associated with making a security decision, and their dimensions are morally related.
4. Software is associated with making a security decision, and its dimensions are morally related.
5. The training is connected with making a security decision, and its dimensions are morally related.

2.2 importance of management information systems

The importance of the information system is evident in its ability to improve the processes and performance of all types and sizes of organizations, especially supporting the decision-making process and assigning cooperative work between work teams, which results in strengthening the competitive position of the organization in the market arena operating in it, as the contribution of Internet-based information systems has increased in achieving the success of modern organizations that operate in a dynamic global competitive environment characterized by sharpness, speed of change, and lack of emphasis Sudanese (2014). KORIDON (2019) points out, "In the twenty-first century, we cannot create security by building walls." It is impossible to

imagine our world without information technology (IT), where almost all processes and systems of organizations depend in some way on information technology.

Kandhalji and Samurai (2002) considered the most prominent factors that led to interest in the existence of MIS in organizations as following:

1. The dynamic global and local environment continues to change rapidly, and in order to adapt to these changes, accurate, sufficient, and up-to-date information must be provided in order to influence government agencies and affiliated organizations.
2. The continued development of business and functions led to the complexity of the activities of organizations and the expansion of their scope, which called for the need for coordination and follow-up based on an information network characterized by modernity and development with the presence of specialized devices for the purpose of storing and completing information.
3. Good information systems ensure that the manager makes the best decisions in a timely manner, especially since we live in the age of technology and it is not acceptable to wait even for specific hours to make a decision. Al-Kubaisi (2018) pointed out that the importance of management information systems produces several benefits, including: Information is provided to different administrative levels and to all departments in order to issue various reports on the activities of the organization. In addition, it corrects possible deviations by evaluating the results and activities of the organization. And the processing of current, appropriate, and accurate information in a timely manner to create the appropriate conditions for making the finest decisions.

2.3. Dimensions of management information systems:

1. Attention of senior management: Senior management is keen to overcome obstacles and solve problems facing employees and to provide all devices, equipment, and everything else that would support the development of management information systems. As senior management always works to motivate employees and urge them to implement by using their abilities and skills more efficiently and effectively to achieve organizational goals, individuals tend, without guidance, to do their work according to their personal vision of the tasks they do, the way they are done, and in a certain order, or perhaps they practice their work in the way they did in the past or emphasize the tasks that bring them the greatest pleasure, far from considering the organization's priorities. Hangar Wollen (2014) viewed of researchers on the roles and tasks of senior management are integrated in their importance, strategic role, and responsibility in the success and failure of the organization, or the effects of the influence of senior management in the field of strategy formulation and strategic decision-making and determining the organization's goal and objectives in the face of environmental change. Daft, (2001) Strategist often work under different names, including the top president, owner, chairman, and CEO, and it is noted that strategic success is associated with a more comprehensive number of managers in the organization, who are those who have leadership requirements and superior intellectual skills. David (2001) Al-Ghalbi (2015) pointed out that there are six basic tasks for managers: Developing the work environment, leading creative strategic thinking, managing the organization's resources fruitfully, and working on developing and distributing human resources are all part of building a dynamic organization. And also supervise the work day by day, each separately. Successful managers are better at seeing the interrelationships between these fields, prioritizing them, preparing for the right things, and making them happen.

2. Human resources: represented by human skills working and specializing in the management information system, and they are the designers of programs, analysts, and distributors of information. The development of human resources is one of the most important things in the fields of management and business and has won the attention of many thinkers, researchers, specialists, training and development institutes, and decision-makers in organizations of all kinds.

Asafe, Kolawole (2013) Al-Najjar (2010) pointed out that human resources include the following: Specialists can be defined as a group of individuals specialized in the process of analyzing, designing, and operating information systems. (Kandilji and Janabi, 2005) included specialists in information systems as follows:

Systems analysts are specialized individuals who study business problems, information, and system requirements and work with the user to develop and improve information systems. Programmers are information specialists who use documents provided by systems analysts to encode them on computer programs and then make them into programs and technical solutions. Operators are individuals who enter data and information into the computer and operate the system. The individual end-user is the direct beneficiary of the outputs of the information system. Bourgeois, (2014). Al-Attabi (2016), explained, "With regard to the theory of stakeholders, they represent the lifeblood within the organization because of the service they provide, whose positives are withdrawn to the general framework carried by the title of the organization, and to those who lead the organization within the organization, they all gather around one principle entitled the interest behind which the fruit is reaped and the proceeds benefit all workers inside and outside the organization."

3. Material resources: Information technology is important for organizations as its importance has risen significantly more than in the past as it is now present everywhere and in almost every aspect of organizational life. Information systems use a set of components and material resources, including devices, materials and media that are used to process data and information, including: Devices: Computers include printer screens and scanners, and media: The ends include keyboard, screen, magnetic disks, optical discs Al-Azzawi and Al-Khafaji (2022). Asafe, y, Kolawole,(2013) the seen The information system and its elements are computer-based and represent the equipment, a name given to all devices from which a computer-based information system is made, as it includes the input device, the processing device, the storage device, the output device, and equipment communication data. Al-Abadi and Al-Ardhi,(2012) showed that information technology consists of four sub-technologies: Hardware, software, databases and communication networks. He explains that the physical components include equipment that is used to enter information, store, transfer, circulate, retrieve and receive information, as well as broadcast to the beneficiaries, as it includes the calculator and all associated devices, which include (different things, including the central processing unit (CPU), the basic interface, the screen, and others, and these are called physical components. The better the computer's memory, its ability to process data, and its speed.

4. Software resources: include all systems and programs that operate devices of data, information, and knowledge and determine the operations performed through the following: Parker and Cast, (1993).

- Operating software: through which the system is able to process data, such as drivers that monitor and support system accessories and control the management of the device.
- Application programs: special programs whose task is to operate and process the organization's data in various functions through the end user, including sales analysis programs.
- Texts: Procedures: Data Entry Procedures It is a set of steps and guidelines that are followed by individuals who use information; they are operating directions and guidance that describe what the system user should do (Boell, Cecez, 2012).
- Information data resources: Databases include knowledge bases and information banks that organize data resources and provide information to beneficiaries. Information includes reports and administrative documents such as text, presentation drawings, images, sounds, and output models (O'Brien, 2003).

- Network and communication resources: They are considered one of the parts of resources in information systems, and many systems have spread to store and pass information, such as the Internet, intranets, and extranets, which have become factors for standard success in operations and in all organizations (Boell, Cecez, 2012).

5. Training: It is the organized process through which the behaviors and feelings of others are changed for the purpose of increasing and improving their effectiveness and performance Al-Salem and Saleh, (2000) It also defined a process aimed at making a skill, cognitive, and behavioral change in the characteristics of current and future working individuals in order to be able to meet the requirements of his job and must identify the availability of human resources in the organization by knowing the extent of the organization's interest in providing external and internal training courses for specialists in information systems and the availability of designers in information systems who develop various programs and technical solutions Atheeb, (2022) Trained one of the insulators to help develop many skills and achieve efficiency and effectiveness, which are reflected in the exit of rational decisions accepted by society. The individual, with his qualities, abilities, and motives, affects the role he plays and the activities and functions he performs. The continuous relationship with mutual influence between the individual and the work he performs needs to be activated and not left to revolve in the same circle, not freeze his experiences and skills at a certain limit, and not lose the challenge side of them. Hence the role of training in development, Training provides new knowledge, describes various information, gives skills and abilities, influences attitudes, modifies ideas, changes behavior, and thus works on the self-development of the individual. It raises the level of ambition, develops its motivations, renews its views of the role it plays, improves its performance rates, and raises the efficiency of achieving goals, meaning that training serves both the person and the role he plays and increases its effectiveness, and that training programs target three purposes: information transfer, skill development, and behavior improvement Al-Jayali(1990) as it indicated ,Hititia, (2016) that spirituality in the workplace is a learnable behavior, so the human resources department should try to include it in its training programs.

2.4. The concept of security decision-making:

There are many concepts about security decision-making, and according to different points of view, Simon (1976) defined "the specific function of management is to develop and organize the decision-making process in the most effective way possible." Lashin (1980) "The security decision is defined as the result of the wrong decision in all fields of business administration and public morals, with limited financial losses that affect the organization itself or unlimited financial losses that affect society, but it does not reach the lives except in the security services. The wrong decisions may reach the lives that the decisions the security man has a kind of frankness and rigor, and the degree of risk in it is greater because the reality of the currency imposes on him that", as he explained. Kanaan (1985): "It is a complex and difficult process, and it requires activities, capabilities, and skills that we do not accomplish," he indicates. Al-Jabri (1989): "The rational security decision is the one that exceeds in addressing the problem security conditions, looking to the future from the window of foresight and correct judgment, examining the possibilities, and preparing for them in the face of rational decisions involving a degree of effective objectivity." He explained that Al-Maqdhali (1998) said, "It is a decision in which a kind of frankness and rigor are required, and the degree of risk in it is greater because the reality of the currency imposes it on him, so the security man must be empowered with decision-making skills and follow the scientific stages in decision-making, which ultimately lead to a rational decision that settles confidence." Kharboush (2013) pointed out that "it is based mainly on a high potential of skill and the ability to innovate, renew, and follow all methods of successful management to ensure the achievement of security and stability", Al-Hudhali (2002) explained. "The action taken by the security commander As the best available

means to achieve the specific goal or objectives and thus accomplish the security mission, it depends on the situation and on the choice of the conscious and aware security leader for the best solutions to face emergency and normal circumstances. Al-Zahrani (2001) referred to "a decision issued by the senior or middle leadership of the security services according to the powers granted to them regarding a problem or certain situations that require the intervention of security men, each in its own regard, to address and solve the problem in order to maintain the security and stability of society" and clarified Lewis et al.'s (2007) the process through which managers identify and solve problems and take advantage of available opportunities. This Daft (2010) showed "the process of identifying and solving problems." As Bousmara (2013) pointed out that "the security decision is to manage security crises if the rational security decision leads to reaching the goals set and not managing security crises", Ejimabo (2015) explained, "It is the process of choosing an alternative from two or more alternatives, or choosing an action plan from among several options available to the manager with the intention of solving the problem.

2.5. Success factors for security decision-making:

The sensitivity and seriousness of the security decision made it necessary to surround it with some guarantees for reasons including to ensure its goodness and performance of the goal that was taken for its sake and to ensure the decision-maker at the same time so that this is not reflected in the fear and cowardice of the security men in making their decisions, and thus the result is negative on security performance in general. We can summarize the most important guarantees necessary for decision-making as follows:

1.The intellectual maturity of the decision maker: Doganay (2011) pointed out that the specifications necessary to be available in the security man are his intelligence, quick wit, and intellectual maturity in order to make the appropriate decision at the right time, and this leads us to decisions to choose the security man, whether for positions or for operations, based on accurate scientific and technical rules, i.e., follow the scientific method as much as possible. The development of thought processes and skills must be taken into account, as studies of thinkers and psychologists show that they are related to the mind and that training in thinking, learning, and developing processes is possible and will show results in the future. Al-Ruwaishidi (2015) pointed out that competitive intelligence has become a necessity because decision-makers need accurate and timely intelligence in order to make effective decisions.

2.The location of the decision-maker in the situation: It means its distance or proximity to the sites of events; for example, if a group is assigned to follow up on demonstrators, the decisions issued by the leader are based on the information presented to him. Here, the reliance in security decision-making is on the carriers of information, or those describing the situation, and in the light of what they present and describe (Al-Manea, 1999).

3.Scientific specialization and experience of the decision maker: The degree and experience in the field of work have a key role in the ability to make the appropriate choice that leads to rational decisions, and a good choice is one of the factors for the success of the decision (Daoud, 2018).

4.Proper planning of how to implement: The issuance of the decision is important, but more important than that is the method of implementation. The decisions were possible, and their implementation improved the spatial deployment of forces. For example, when carrying out raids and raiding one of the houses of the accused, attention must be paid to good armament, the availability of communication technologies, and the quality of personnel selected. The organization can continue to make serious daily mistakes for a long period of time as long as the direction it is heading, given the market it serves and the products it offers, is good, but if the decision-making process is bad and the path the organization is taking is wrong, no one can survive (Amira, 2017).

5. Advice in decision-making: Enlightenment with the opinions of others during situations where there is time to be heard is one of the most important features of decision-making in modern organizations. The security man who makes the decision must be tactful in seeking advice from within the security centers (from superiors, specialists, technicians, and all administrative levels) and also seek advice from outside the organization from stakeholders (chosen, lawyers, retired officers, and community notables). This meaning was confirmed by the statement that "domestication and guidance are essential factors to ensure the effectiveness of decisions related to technical, specialized, regulatory, or legislative aspects, which require the use and enlightenment of the opinions and expertise of specialized experts" (1993) As she explained to Mohammed (2018) decisions have characteristics that vary according to the time period in terms of importance, uncertainty, risk, and the ability to fit between strengths and weaknesses on the one hand and opportunities and threats on the other hand, and it is clear that there is a comprehensive and future view of these decisions and their ability to anticipate what will happen and realize reality with its various data.

2.6. Dimensions of security decision-making

1. Diagnosis and analysis of the problem: Specialists monitor internal and external information that indicates the possibility of deviations from planned behavior and diagnose opportunities, and identifying the problem is the most accurate and important step in the decision-making process because the decision that will be taken is related to the problem or goal subject to the decision. Chandan (1998) and confirmed that Hellriegel's stage of monitoring the decision environment The diagnosis of the problem is often a problem in itself because of the lack of clarity of the situation in question (Hellriegle et al., 2001) as any error at this important stage can result in making wrong decisions, and the important questions that arise in this area are:

A: Why was the decision made?

B: What is the purpose behind the decision-making? (Russell-Jones, 2000).

2. Generating alternatives: This stage follows the stage of identifying the problem (goal) and is defined as "the set of proposed and available solutions on the problem subject of the decision and the way in which the organization can exploit its resources and potential to generate a set of alternative solutions" (Jones, 1999) It may benefit the security apparatus in managing circumstances and preparing to face them, as well as the ability to make decisions and prioritize under pressure in the light of incomplete information and to go to atypical solutions to show a new leadership model to confront and manage the crisis, regardless of its seriousness, and to make effective and efficient security decisions.

3. Evaluation of alternatives: This stage is the exact test of the skills possessed by the decision-maker, which is a difficult intellectual stage that does not appear with his objective possibilities and personal possibilities. What is rumored about the security man is that he is very likely and doubtful, and this is a positive factor in evaluating alternatives and distinguishing between tangible and intangible elements. There are several evaluation criteria that can be briefly mentioned:

1. Implementation costs and the adequacy of this alternative

2. The effects of the implementation of this alternative on the organization and the surrounding community, including psychological and social effects.

3. Appropriate time, and these are clearly reflected in security decisions.

4. Senior leadership will accept this alternative.

5. The time taken to implement the alternative

6. The importance of operations research and the use of mathematical methods in the evaluation process and the need to seek the opinions of specialists and consultants inside and outside the organization to the extent that the task allows, there is also an evaluation defined as a joint evaluation and the focus of many countries today is directed at strengthening their capacities to conduct joint assessments on which policies and decision-making are based, and the main focus is on the exchange of information and the integration of intelligence efforts, To produce threat

assessments from a wide range of sources that give a parallel view to organizations (Browse, B & Publications M a charitable c, 2005)

7. Choosing the appropriate alternative: The choice for this alternative is made from among the available alternatives and in light of the weights reached to nominate the best alternative in a way that secures its superiority over the rest of the alternatives and thus paves the way for the optimal decision-making process. Al-Fadl (2009) as it was explained by Plous (1993) that the theory of expected utility as a standard theory of behavior aims to provide a series of proposals for the purpose of rational decision-making, and these proposals are:

- **Winning alternatives:** A rational decision-maker must be able to compare at least two alternatives. The decision-maker must choose one of the alternatives, while the other remains indifferent.
- **Dominance:** The decision-maker should not adopt strategies that have been suppressed by other strategies; the strategy must be strongly dominant as it is better in all respects when compared to other strategies.
- **Cancel:** When there are two alternatives, the results of the alternatives must be taken into account, not their results that resemble each other. Similar options are ignored when making a decision.
- **Transition:** If the rational decision-maker prefers the results of A to B or B to C, the rational decision-maker should prefer the results of A to C.
- **Continuity:** The decision-maker must choose a middle path from a combination of the best (gains) and the worst (losses) of the options.

Follow-up of the implementation of the decision: Implementation is carried out if the proposed solution is reasonable and acceptable within the limits of possibilities; successful implementation emerges from the solution of the original problem; failed results will lead to a return to the stage of evaluating alternatives. Turban et al. (2001) as he explained, and Gomez-Meias et al. (2008) highlighted the benefit of participation by those in charge because this will help to properly implement the problem, and in the end, when the decision is implemented, the manager is the one who translates the decisions into action. Ali (2015) has showed that one of the characteristics of the implementation of the decision is the availability of economic or technical capabilities and ideal in the decision and also the effectiveness of the application must be effective in terms of application in practice, the availability of economic and technical capabilities sometimes is not enough alone to apply and obtain the desired results, but that the training of decision implementers and confirmation in order to provide the necessary skills and the manual and electronic administrative information system and the presence of a new system of communication and work on motivation are all factors that increase the effectiveness of the application.

3. Discussion of Results:

Table (1) below shows that after the interest of senior management, it ranked first with an arithmetic mean of (3.92) and a standard deviation of (0.949) and the relative importance reached (0.78), while after training it came in the last rank with an arithmetic mean of (3.47) and a standard deviation of (1.081) and a relative importance of (0.69), and the management information systems variable obtained a high general arithmetic mean of (3.64), a standard deviation of (1.022), and a relative importance of (0.73).

Table (1) arithmetic mean, standard deviation, response level of the study sample and the ordinal significance of the main dimensions of the variable of Management Information Systems (n=191)

Main dimension	arithmetic mean	standard deviation	relative importance	answer level ordinal	Importance
1 Attention of senior management	3.92	0.949	0.78	high	1
2 Human resources	3.63	1.046	high	high	2
3 Material resources	3.59	1.016	high	high	3
4 Software	3.58	1.018	high	high	4
5 Training	3.47	1.081	high	high	5
	3.64	1.022	0.73	high	--

Source: prepared by the researcher based on the outputs (Spss.v.26) (Microsoft Excel 2010)

Table (2) below shows that after diagnosing and analyzing the problem, it was solved in the first order with an arithmetic mean of (3.83) and a standard deviation of (0.797), and its relative importance was (0.77), while the selection of the appropriate alternative was solved in the last order with an arithmetic mean of (3.58) and a standard deviation of (1.017), and its relative importance was (0.72), and the security decision-making variable obtained a high general arithmetic mean of (3.70) and a standard deviation of (0.930) and relative importance (0.74).

Table (2) arithmetic mean, standard deviation, response level of the study sample and the ordinal importance of the main dimensions of the security decision-making variable (n=191)

The main dimension	Arithmetic mean	standard deviation	Relative importance	response rate	Ordinal importance
1 Diagnosis and analysis of the problem	3.83	0.797	0.77	high	1
2 Generating alternatives	3.70	0.919	0.74	high	3
3 Evaluation of alternatives	3.67	0.978	0.73	high	4
4 Choosing the right Alternative	3.58	1.017	0.72	high	5
5 Follow-up to the implementation of the resolution	3.74	0.938	0.75	High	2
	The overall average of the security decision-making variable	0.930	0.74	High	--

Source: prepared by the researcher based on the outputs (Spss.v.26) (Microsoft Excel 2010)

Table (3) The Matrix of correlations between the independent variable (management information systems) with its dimensions and the dependent variable (security decision making)

		higher management interest	material resources	Material resources	Software	Training	management information systems
higher management interest	Pearson Co.	1					
	Sig. (2-tailed)						
	N	191					
HR	Pearson Co.	.717**	1				
	Sig. (2-tailed)	.000					
	N	191	191				
Material resources	Pearson Co.	.584**	.716**	1			
	Sig. (2-tailed)	.000	.000				
	N	191	191	191			
Software	Pearson Co.	.599**	.722**	.792**	1		
	Sig. (2-tailed)	.000	.000	.000			
	N	191	191	191	191		
Training	Pearson Co.	.647**	.721**	.772**	.773**	1	
	Sig. (2-tailed)	.000	.000	.000	.000		
	N	191	191	191	191	191	
Decision making	Pearson Co.	.675**	.716**	.747**	.801**	.834**	.867**
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000
	N	191	191	191	191	191	191

Source: SPSS Program Outputs.v.26

Through the above, this study has reached the hypothesis that the variable of management information systems and its dimensions are associated with a statistically significant relationship with the variable of security decision-making in the security services research sample. To clarify the nature of the relationship between management information systems and security decision-making, the Pearson technique was adopted in order to test the main correlation hypothesis of the nature of the relationship between the independent variable (management information systems) and its dimensions (attention of senior management, human resources, material resources, software, and training) and the dependent variable (security decision-making). Through this hypothesis, the researcher predicts the existence of a correlation between management information systems and security decision-making in the security services in Muthanna governorate. Table 3 shows the matrix of the coefficients of the simple correlation between management information systems and their dimensions and security decision-making. Before testing the research hypotheses, Table 3 shows the sample size (191) and the type of test (2-tailed). As for the abbreviation (Sig. This is done by comparing the calculated and tabular value (t), as the programme does not show its value and depends on the appearance of a sign (* *) above the correlation coefficient, which means that the tabular value (t) is smaller than calculated to judge the amount of the correlation coefficient strength, as follows: To determine the extent of acceptance or rejection of the first main hypothesis, rely on the value of the simple correlation coefficient and the level of its morale between the management information systems (independent) and the security decision-making variable (adopted), as table (36) shows that the moral correlation was achieved in a positive direction between the management information systems variable and the security decision-making variable, reaching the simple correlation coefficient (Pearson) among them (.867**). This value shows a very strong centrifugal relationship between the two variables, which guides the researcher to accept its value, which

was at a moral level of.000, and table (36) shows the value of the correlation relationship and its significance. This leads to the acceptance of the first main hypothesis, which is that the variable of management information systems with its dimensions is associated with a statistically significant relationship with the variable of security decision-making in the security agencies of the research sample. At a moral level (0.05), i.e., accepting it with a confidence level (0.95). Based on the above results, the main hypothesis of correlation is accepted.

4. Conclusions:

The results showed that the directorates of the security services in Al-Muthanna Governorate receive attention from senior management to improve their management information systems. They also pay attention to their material resources and software and are interested in training and determining their training needs. Additionally, they have sufficient diligence to identify the challenges, problems, and factors responsible for them. The directorates of the security services in Muthanna Governorate have a commitment to developing software and improving security decision-making practices. They are aware of the impact of personal values on problems and challenges and are working to adopt previous expertise and experiences when comparing alternatives. They also see the failure that accompanies the implementation process for reasons related to the decision-maker and are interested in improving management information systems.

Authors Declaration:

Conflicts of Interest: None

-We Hereby Confirm That All The Figures and Tables In The Manuscript Are Mine and Ours. Besides, The Figures and Images, Which are Not Mine, Have Been Permitted Republication and Attached to The Manuscript.

- Ethical Clearance: The Research Was Approved By The Local Ethical Committee in The University.

5. References:

1. Abu Karim, Ayman Mohammed, 2013, The relationship of management information systems in improving administrative performance, Published Master Thesis, Faculty of Economics and Administrative Sciences, Al-Azhar University, Gaza.
2. Al-Wadia, Mohamed Samih, 2015, The relationship of management information systems with the process of quality of administrative decisions, Master Thesis, Faculty of Administration and Economics, Al-Azhar University.
3. Atheeb, Mohammed Kazim, 2021 "The Role of Servant Leadership in Developing Management Information Systems" Master Thesis, College of Administration and Economics, University of Baghdad.
4. Al-Musawi, Shuja Abdul Wahid, 2016, The Role of Management Information Systems in Improving Strategic Performance, Part of the Requirements for Obtaining a Higher Diploma in Strategic Planning, College of Administration and Economics, University of Baghdad.
5. Al-Salem, Saleh, Moayad Saeed, Adel Harhoush, 2000, Human Resources Management, 1st Edition, Beirut.
6. Qandilji, Amer Ibrahim, Al-Samarrai, Iman Fadel, 2002, Information Technology and its Applications, Dar Al-Warraq for Publishing and Distribution, Amman, Jordan.
7. Al-Abbadi, Hashem Fawzi and Al-Ardi Jalil Kazim, 2012, Information Management Systems – A Strategic Perspective, First Edition, Dar Safaa for Publishing and Distribution, Amman-Jordan.
8. Qandilji, Amer Ibrahim, Janabi, Alaa El-Din Abdel Qader, 2005, Management Information Systems, First Edition, Dar Al-Masirah for Publishing and Distribution, Amman - Jordan.

9. Al-Azzawi, Al-Khafaji, Firas Rahim, Othman Ibrahim, 2022, Fundamentals of Management Information Systems, 1st Edition, University of Baghdad, Al-Daad for Publishing and Distribution, Baghdad - Iraq.
10. Hanger, Lynn, J. David, Thomas L., 2014, Pillars of Strategic Management, 1st Edition, Librairie du Liban Publishers, Beirut, Lebanon.
11. Al-Silawi, Fadel Abbas Moussa, 2019, Improving Management Information Systems through Value Flow Maps, Higher Diploma, College of Administration and Economics, University of Kufa.
12. Abdul Rahman, Fawad Youssef 2019, Contemporary Thought of Management Information Technology, 1st Edition, Tuta Library for Printing and Reproduction, Baghdad, Iraq.
13. Al-Muqdali, Abdul Mohsen bin Obaid Allah, 1998, Decision-making skills among fresh graduates from King Fahd Security College between reality and hope, PhD thesis, um Al-Qura University, Saudi Arabia.
14. Hindul, Ali Fadel, 2015, The Role of the Statesman in the Decision-Making Process, Master Thesis, National Defense College, Defense University for Military Studies.
15. Abu Shaaban, Osama Nasser El-Din, 2017, The Impact of Strategic Thinking on Security Decision-Making at the Palestinian Ministry of Interior and Security, Master Thesis, College of Administration and Politics, Al-Aqsa University, Gaza.
16. Karim, Raad Qasim, 2018, The effectiveness of management information systems and their reflection on the decision-making process, Master Thesis, College of Administration and Economics, University of Baghdad.
17. Simon, Simon Herbert, 1976, Administrative Behavior, New York Translator Book, A, R, KYAT.
18. Lashin, Abdel Azim, 1980, The decision in the police administration: its nature and features, Egyptian Public Security Magazine, Egypt, No. 91.
19. Kanaan, Kanaan Nawaf, 1985, Administrative Decision Making between Theory and Practice, 1st Edition, Riyadh, Saudi Arabia.
20. Al-Jabri, Abbad Eid, 1989, Decision Making in the Security Organization, Master Thesis, Naif Arab Academy for Security Sciences.
21. Kharboush, Khaled Abdel Hamid, 2013, Security Media and Human Rights between Values and Decision, First Edition, World of Books, Cairo, Egypt.
22. Al-Hudhali, Saad Abdullah, 2002, Security Leader Skills in Decision-Making in Emergency Circumstances, Master Thesis, King Naif Arab University for Security Sciences.
23. Al-Zahrani, Jamaan, 2001, Administrative Decision Making in the Security Services, 1st Edition, Al-Alam Press, Riyadh, Saudi Arabia.
24. Bu Samra, Abdullah, 2013, Security Decision and a Course in Security Crisis Management in the United Arab Emirates, Master Thesis, Dubai Police Academy.
25. Al-Manea, Mohammed bin Suleiman, 1999, Elements of the Security Decision, Journal of Security Research, King Naif University for Security Sciences. Saudi Arabia, Issue 36.
26. Abdullah, Zafer Mahdi, 2020, E-government and its role in developing institutional performance and strategic decision-making, National Defense College, Defense University for Military Studies.
27. Khalaf, Jihad Salem, 2019, The problem of political pluralism and its impact on the security decision after 2003, Master Thesis, Staff College, Defense University for Military Studies.
28. Amiri, Hamri Amira, 2017, Organizational communication and its impact on decision-making, Master Thesis, Faculty of Social Sciences and Humanities, Larbi Ben M'hidi University.
29. Al-Borai, Mohammed bin Abdullah, 1997, Principles of Management and Leadership in Islam, 1st Edition, Eastern Province Literary Club, Dammam, Saudi Arabia.
30. Al-Fadl, Muayad Abdul Hussein, 2009, Creativity in Decision Making, 1st Edition, Ithra for Publishing and Distribution, Amman, Jordan.

31. Al-Kubaisi, Salah Al-Din Awad Karim, 2018, Knowledge Management, 1st Edition, Baghdad.
32. Dawood, Fadila Salman, 2018, Strategic Management: Basic Concepts and Applied Practices, 1st Edition, Al-Daad for Publishing and Distribution, Baghdad.
33. Mohammed, Nisreen Jassim, 2008, The impact of environmental change and the characteristics of strategic decisions in the field of restructuring processes, PhD thesis, College of Administration and Economics, University of Baghdad.
34. Al-Ruwaishidi, Hussam Ali Muhaibis, 2015, Entrepreneurship of public organizations in light of the compatibility between competitive intelligence and strategic innovation, PhD thesis, College of Administration and Economics, University of Baghdad.
35. Al-Attabi, Mohsen Rashid Musaiheb, 2016, The Impact of Ethical Leadership Behaviors on Power Practices in the Light of Stakeholder Theory, PhD Thesis, College of Administration and Economics, University of Baghdad.
36. Rahima, Salma Heteta, 2016, The Impact of the Organization's Spirituality on the Quality of Health Services through Positive Attitudes of Workers, PhD Thesis, College of Administration and Economics, University of Baghdad.
37. Ajayi, and others, (2007), The Use of Management Information System in Decision Making in the South –West Nigerian .
38. .Parker, Charles, and Thomas L. Case,(1993), "Management information systems: strategy and action.
39. .Karanja, E., & Patel, S. C,(2012), A review of research trends in strategic information-systems planning. *International Journal of Business Information Systems*, 10(2), 151-177.
40. O'Brien, Jame,(2002), *Managing information Technology in the* ,McGraw Hill, rwin Boston, Fifth edition. 'E-Business enterprise .
41. Laudon, K.C.,(2000), "Management Information Systems", 4th Edition.
42. Prentice, Hall , Inc, New jersey ,U.S.A.
43. .Gupta , A.K., (2008) , *Management Information Systems* , The Institution Of Engineers (INDIA).
44. Laudon , Kenneth C. & Laudon , Jane P.,(2009) , *Essentials of Management Information Systems* , Eighth Edition , Pearson Prentice Hall. Upper Saddle River , New Jersey.
45. Stair, M. Ralph & Reynolds, W. George,(2012) *Information system: Tenth Edition*, Course Technology Cengage Learning , Australia.
46. Rainer Jr R. Kelly & Casey Cegielski G. ,(2011) , *Introduction Information Systems – Third Edition - International Student Version* , John Wiley & Sons(Asia) Pte Ltd.
47. . Nowduri, S. (2014), An Impact of Management Information System on Corporate Sustainability: A Survey. *International Journal of Business and Management*, 9 (7), pp. 146-154.
48. .Parker, Charles, and Thomas L. Case,(1993), "Management information systems: strategy and action.
49. David, Fred R.,(2001),*strategic Management, Concepts &Cases"*, New Jersey,8 ed .,Prentice Hall Inc.
50. .Koridon, M,(2019), Security by decision-makin 13.A Decision-Making Capability Model for Security Countermeasures.
51. Master Thesis, Business Information Technology, University of Twente, Drienerlolaan 5, 7522NB Enschede, The Netherlands.
52. Daft, Richard L,(2010),(*Organization Theory and Design*), 10th ed , South Western Cengage Learning.
53. Bourgeois ,David T, Ph.D,(2014), *Information Systems for Business and Beyond*, under a Creative Commons Attribution (CC BY) license made possible by funding from The Saylor Foundation's Open Textbook Challenge in order to be incorporated into Full license.

54. Asafe, y, & Kolawole,Q,(2013), Management Information System, “Modern Perspective, Department of Computer Technology Yaba College of Technology, Lagos Nigeria, ISBN: 978-978—931- 986-2.
55. . Shao, Z., Feng, Y., & Liu, L. (2012). The mediating effect of organizational culture and knowledge sharing on transformational leadership and Enterprise Resource Planning systems success: An empirical study in China. *Computers in Human Behavior*, 28(6), 2400–2413.
56. Boell, S.K. and Cecez-Kecmanovic, D.,(2012), Conceptualiz- ing Information Systems: From ‘Input-Processing-Output’ Devices to sociomaterial apparatuses.
57. European Conference on Information Systems 2012, Paper 20. [online] <http://aisel.aisnet.org/ecis2012/20>.
58. Goodman Stephen H.,fand t patrica m, michlits, joseph f., Lewis Pamela S.,(2007) ,”management challenges for tomorrows leaders”, international education, Thompson higher education, south-western.
59. Daft, Richard L,(2010),(Organization Theory and Design), 10th ed , South Western Cengage Learning.
60. Ejimabo, N, O, (2015),(The Influence of Decision Making in Organizational Leadership and Management Activities), journal Entrepreneurship & Organization Management journal, Vol 4 • NO
61. .Sproles, G.B. and E. Kendall.(1986), “A methodology for profiling consumers“ decision-making styles,” *The Journal of Consumer Affairs*, Vol.20, No.2:268-279.
62. Jones garthR.,George Jennifer m.,(2008),”contemporary management”, 5thed, mc graw-hill education, newyork, Avenue of the Americas.
63. Browse, B & Publications M a charitable c,(2005), National Security Decision-Making Structures and Security Sector Reform, RAND Europe (UK)Westbrook Centre, Milton Road, Cambridge CB4 1YG United Kingdom,T: 44 (0) 1223-353, F: 44 (0) 1223-35884, E: reinfo@rand.org.
64. Plous, S.(1993) *The psychology of judgement and decision making*. New York: McGraw-Hill.
65. Gómez-Mejías, L. R., Balkin, D. B., & Cardy, R. (2008). *Management: People, Performance, Change* .(3rd ed.). New York, NY: McGraw-Hill..
66. Hellrigel D., Slocum J.W.&Woodman .W.,(2001),”Organizational Behavior”,9th/ed, South-Western Collage, USA.

نظم المعلومات الادارية وتأثيرها في اتخاذ القرار الامني- بحث تحليلي في " عينة من ضباط الاجهزة الامنية في محافظة المثنى "

يوسف عفتان عبدالله
جامعة بغداد/ كلية الإدارة والاقتصاد
yousif@coadec.uobaghdad.edu.iq

احمد مرعيد مهيل
جامعة بغداد/ كلية الإدارة والاقتصاد
ahmedmareed2@gmail.com

Received:9/5/2023

Accepted:20/7/2023

Published Online First: 30 /6/ 2024

هذا العمل مرخص تحت اتفاقية المشاع الابداعي نسب المصنّف - غير تجاري - الترخيص العمومي الدولي 4.0

[Attribution-NonCommercial 4.0 International \(CC BY-NC 4.0\)](https://creativecommons.org/licenses/by-nc/4.0/)



مستخلص البحث:

يهدف البحث الحالي إلى التعرف على مدى تأثير نظم المعلومات الادارية في مستوى اتخاذ القرار الامني من بين عينة من ضباط الاجهزة الامنية في محافظة المثنى، واستخدم الباحث المنهج الوصفي التحليلي الاستطلاعي لعرض المعلومات وتحليلها ثم شرحها، وجمع البيانات من خلال الاستبيان كأداة رئيسية، مصممة بالاعتماد على المعايير الدولية بعد إجراء تعديلات على فقراتها المكونة من (40) فقرة تضمنت متغيري البحث، وكذلك من خلال التعايش الميداني للباحث والمقابلات الشخصية، وتم توزيع الاستبيان على جميع مجتمع البحث (الجرد الشامل) بواقع (200) استمارة من الضباط العاملين في مختلف مديريات الأجهزة الامنية في (محافظة المثنى) لاسترداد (197) استمارة، صالحة للتحليل الإحصائي منها (191) استمارة غير صالحة للتحليل (6) استمارة، والغير مسترجعة (3) استمارة، فقد تم الاستعانة بمجموعة اساليب احصائية وتمثلت ببرنامج (Amos V23) في بعض الجوانب الاحصائية، وبرنامج (SPSS.V23) الاحصائي الجاهز (في عينة من ضباط الاجهزة الامنية في محافظة المثنى) اضافة الى اعتماد الباحث اساليب احصائية تشمل (المتوسطات الحسابية، الانحراف المعياري، معامل الفروق، الأهمية النسبية، وقد توصل البحث الى ابرز نتيجة تمثلت في: وجود اهتمام بتحسين مستوى نظم المعلومات الادارية لما لها من دور في اتخاذ اجود القرارات الامنية في مديريات الاجهزة الامنية في محافظة المثنى.

نوع البحث: ورقة بحثية .

المصطلحات الرئيسية للبحث: نظم المعلومات الادارية، اتخاذ القرار، اتخاذ القرار الامني، مكونات النظام، مديريات الاجهزة الامنية في محافظة المثنى.