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The Impact of Strategic Foresight on Crisis Management Effectiveness at Greater Amman Municipality

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Abstract
This study aimed to investigate the impact of strategic foresight on crisis management effectiveness at Greater Amman Municipality in Jordanian capital. The study relied on four dimensions to measure strategic foresight: environmental scanning, future vision, strategic choice and scenarios building, while it identified four dimensions to measure crisis management effectiveness: response speed, crisis management team effectiveness, communication and information flow and resource mobilization.
The study was conducted on a sample of 98 managers. The researchers used the quantitative approach to achieve the objectives of the study, and the multiple linear regression coefficient was used to test its hypotheses.
The study concluded that there are medium levels of applying the dimensions of strategic foresight, and the dimensions of the crisis management effectiveness at Greater Amman Municipality, and that there is a significant impact of strategic foresight on crisis management effectiveness, and that strategic foresight affects all dimensions of crisis management effectiveness approved in the study.

Keywords: Strategic Foresight, Crisis Management Effectiveness, Jordan.

Introduction
In the current century, business organizations revolve around different orbits, some of which may be renewable and short, and others may be long, each according to its outlook for the future coming to it and where it wants to be in the future by preparing a number of proposed alternatives that help it to choose and make an informed and appropriate decision for that stage.
The Holy Qur’an, which was revealed to the Prophet Muhammad, may God bless him and grant him peace 1444 years ago, told of the importance of foresight, by describing the story of Prophet Yusuf with the dear of Egypt, for whom he then drew a planned and arranged budget in a scientific, practical and systematic way to confront potential crises from the expected drought, during which he was able to recover the situation. The economist of Egypt, who was on the brink of a cliff, drew a strategic plan that would protect them from hunger and destitution that would have afflicted them.
Crises have continued since the beginning of creation for human beings, some of them came out of it safe and sound, some of them surrendered at the first turn, and some of them bent down waiting for the crisis to pass to warm themselves on the shore of safety. The twenty-first century was not without crises. It was imposed on the organizations, of which the Jordanian commercial banks are part of, to work under wise strategic leaderships. It also imposed on its leaders to show strategic foresight and carry out innovative and innovative operations, so that they must apply art and method together, which gives them strength to ensure survival and permanence. To reach the levels of success that they hope for in these banks, and one of these levels is dealing efficiently and effectively in its way of managing the crises it faces and getting out with the least amount of losses and wastage. For all of the above, this study came to test the impact of strategic foresight on the effectiveness of crisis management in the Greater Amman Municipality.

Study Problem and Questions
The crises that occur in organizations are nothing but disguised problems that surface suddenly without expectation of their occurrence, and the fact that organizations must stand before them a lot is that there is no organization immune from falling into a crisis. Since creation began on this earth, and they dealt with it according to their available capabilities to limit its damages, so what is known as the science of crisis management appeared recently after the presence of voices calling for the need to prepare for it before it occurs. The openness of the world to each other due to globalization, which raised the pace and intensity of competition, led to the need to take care and prepare the appropriate strategy in anticipation of any emergency, especially in the field of service institutions, including Greater Amman Municipality, which is considered the largest municipality in Jordan in terms of the number of its employees, as it currently has 23,000 employees and employees. A worker to serve a population area estimated at about 1,700 km2, and the number of administrative regions in it is 22 geographically divided into the capital, Amman, with a number of citizens who are served by nearly 3 million people. (Government of Amman website).
Where competition imposed itself as an inescapable method for excellence and providing the best, which prompted Greater Amman Municipality to search for everything that provides added value to it, whether through the services provided to citizens or the processes used in providing these services, but the crises that are considered an inherent characteristic of this era did not Greater Amman Municipality implements it to declare its freedom absolutely, but to make it confined to it so that it is always on alert for any emergency that may destroy years of work and diligence simply because it is unable to manage the helm when a crisis occurs effectively and efficiently.
All of the aforementioned leads to the problem of the study inherent in human requirements in our current era in terms of the quality and speed of the services provided to him and the extent of the effectiveness of Greater Amman Municipality in providing these services in the presence of crises and changes and the extent of its ability to manage these crises with sophistication, lightness and effectiveness that always makes it come out with the least damage and prepare for any upcoming or unexpected.
Greater Amman Municipality needs to re-choose its angle of view to be more revealing and comprehensive for any external activity and a clear vision of its future in light of the increase in the number of residents, buildings, service and health facilities, which requires it to provide an infrastructure suitable for this great turmoil in the number of Amman residents.
This leads to the importance of anticipating the foggy and vague future strategically, resulting in creating flexible strategic plans, and the researcher believes that all of this requires Greater Amman Municipality to possess multiple matters to deal with the various changes in the external environment to which services are provided. Based on the above, the study problem can be formulated with the following questions

- What is the impact of strategic foresight on crisis management effectiveness at Greater Amman Municipality?
- What is the level of relative importance of strategic foresight, and crisis management effectiveness at Greater Amman Municipality?

**Study Importance**
The importance of the study stems from the following
- Scientific importance: The importance of this study derives from the importance of the concepts it included, as the concept of strategic foresight with its dimensions (environmental monitoring, future vision, strategic choice, and scenarios building) is one of the management concepts that appeared to complement the concept of traditional forecasting, which made it the focus of wide attention to obtain appreciation and interest of researchers and scholars because of its prominent impact in the business world, whose organizations strive to achieve their goals and prove their existence by creating a sustainable competitive advantage. As for the term crisis management effectiveness in its dimensions (response speed, team crisis management effectiveness, communication and information flow, and resource mobilization), it is one of the terms that wore a new dress in the whole world, which includes the business world, as the concept is as old as civilizations that faced crises in multiple forms and colors that differed. However, recently, business organizations all over the world began to delve deeper into the concept because of its great weight.

For all of the aforementioned, the two researchers seek, through excavations in these concepts, to find out everything new that may be of interest to researchers in this field and present it within this study in order to be a tributary that supports researchers and those interested in this field in the future.
- Applied importance: From an applied point of view, the importance of this study stems from the extent to which Greater Amman Municipality administrations benefit from the results that will be reached later, with regard to the concept of strategic foresight, crisis management effectiveness, the nature of the relationship between these variables, and the conclusions and recommendations that the study will present to the commercial bank managements in this regard. The important institution, which is considered one of the oldest service institutions in Jordan, which seeks to provide distinguished municipal services with smart, sustainable and flexible systems while preserving Amman’s identity and heritage and community development through planning, development, optimal investment of resources and building partnerships with stakeholders, in addition to the role of Greater Amman Municipality in supporting the entertainment and cultural aspect through organizing many activities and festivals during the year to complete the citizen’s sense of the beauty of the place and the need for psychological comfort through recreation. (Greater Amman Municipality website).

**Study Objectives**
In this study, the researchers seek to achieve the following goals
1. Identifying the level of relative importance of strategic foresight and crisis management effectiveness in Greater Amman Municipality.
2. Identifying the impact of strategic foresight on crisis management effectiveness in Greater Amman Municipality

Literature Review

Strategic Foresight

The idea of foresight goes back to the Arab scholar and historian Ibn Khaldun, the author of the famous introduction to the Muqaddimah Ibn Khaldun, where he gave the first elaborate and arranged presentation on foreseeing human urban development in the future and the stages of the rise and fall of civilizations in the future. Berger Gaston, who founded the international center for foresight in 1957 to deal with analyzing and planning the future, but the book the Art of forecasting by Bertrand de Jouvenel issued in 1964 was the most influential in the progress of forward-looking studies in France because it contained tools for future analysis and prediction (Farouk, 2020, 18-14). After that, many researchers presented multiple definitions of strategic foresight. Slaughter (1997) defined it as the ability of the organization to create a future vision of high quality and use new ideas that benefit the organization organizationally, as if it combines methods of exploring the future and strategic management. Miles et al (2016, 10) have defined it as a systematic mechanism to deal with the complexity and uncertainty in the world of business, to determine the form of practices that the concerned organizations will adopt in the future by conducting strategic research that monitors expected future events, as they described it as the latent capabilities and insights into possible future events, and ingenuity in draw conclusions about the possible future effects of any emergency, that is, it is the prudence of opinion on which the organization will make its decision. Al-Hindawi et al (2017, 22) define it as “a systematic, participatory, multidisciplinary approach to explore the driving forces of change and future alternatives ranging from the medium to the long term.” Bereznoy (2017) interprets it he says that strategic foresight is the transition from the future to the present, unlike the traditional prediction that moves from the present to the future by building a future vision that achieves consistency between the opinions of decision makers and developing a proactive action plan to meet future challenges. Kononiuk (2018) defined it as a systematic, participatory process practiced by the leadership in the organization and targeting the future. It is a medium-term vision that contributes to diagnosing environmental opportunities and risks in the social, cultural, economic and environmental fields. Qadouri and Al-Alusi (2018) indicated that strategic foresight is an attempt to explore the future according to the planned alternatives, using quantitative methods based on reading information, data, and events of the past and present. Foresight is also known as the way of thinking about the future and the ability to envision many possibilities, whether desirable or undesirable (Woensel, 2019, 39). Polier (2019, 13) described it as the future behavior that organizations follow in order to be able to anticipate external changes in the environment and work to address them, thus maintaining integrated visions and outlooks that help set strategic directions, explore opportunities and identify risks.

Al-Baroudi (2019, 21) considers strategic foresight as the process of forecasting in order to detect any future problem by extrapolating the future, recording observations and preparing solutions. Organizations employ it to read the market and customer trends to estimate the amount of profit and loss and to conduct feasibility studies that are based mainly on activating
information and drawing conclusions related to possibilities future. As for Hussein (2021), strategic foresight is defined as the ability to prepare for an unknown future and anticipate developments and trends that may occur in it, by adopting alternatives and comparing them in order to influence the image of the upcoming future.

1. Environmental scanning: The survey is concerned with delivering information to strategic thinkers that support the strategic planning process (Hussain, 2021). It consists of collecting data and information and working on analyzing it in order to reach the factors arising or likely to occur in the environment of organizations in order to explore new ideas to meet the challenges that they may face (Abdullah et al., 2018). Qahtan and Al Himyari (2022) indicate that environmental scanning is the extent to which an organization can study and scrutinize its internal and external environment to collect information from it, and use that information as early warning signs of impending environmental changes, and then determine its future course of action. Miles et al (2016, 64) Environmental scanning is the collection and analysis of activities related to the environments surrounding organizations to identify the main forces responsible for any future change in an attempt to build future scenarios and determine the directions that organizations will adopt. It was defined as “monitoring, evaluating, and collecting information from the external and internal environments of key individuals in the organization. The organization uses this tool to avoid strategic surprises and ensure the long-term sustainability of the organization” (Nama & Abdel-Rahim, 2021). It can be said that the environmental survey aims for the organization to understand its internal and external environment in order to be able to respond to rapid changes and exploit the opportunities of those changes to achieve high performance in it (Shallaka & Juda, 2021).

2. Future vision: From the point of view of Miles et al (2016, 93) future vision is the adoption of innovative methods contrary to traditional expectations, in an attempt to draw a future picture based on the visual trends of the present, because a good vision assumes the volatility of future events in an unexpected way and thus provides proactive support for the implementation of the most effective and optimal option in certain circumstances. Future vision is defined as “the ability to see future trends by conducting a survey of the dynamic factors in the past and present” (Abdelal, 2023). It also denotes prediction in order to be able to draw a picture of future events for a particular case through understanding, perception, analysis and a rational study of this case, and this requires having the ability to foresee the future in order to eventually reach the picture in which the organization should look in the future (Al-Dasouki, 2022). In the same context, Mathani et al (2021) see that the future vision expresses the general goal that the organization hopes to reach in the future.

3. Strategic choice: Mustafa and Gatheer (2022) consider that the strategic choice consists of three parts: analyzing the data collected about the future, the vision formed by the stakeholders, and planning that includes future strategies to achieve the goals of the organization, which enhances the expectation of future events and raises the organization’s ability to learn and innovate ahead of its competitors. The strategic choice is also expressed as planning and defining what the organization will achieve in terms of future goals by finding proactive solutions to crises resulting from a realistic and real understanding that the future is full of various options (Al-Hindawi et al., 2017, 61). The strategic choice also refers to the organization’s ability to determine its current performance and know what it wants to achieve in the future through a set of alternative courses of action that it will use to achieve its vision and goals (Nama & Abdel Rahim, 2021).

4. Scenario building: Scenario building is a systematic calculation and evaluation to confirm or deny the possibility of something happening in the future as defined by Miles et al. (2016,
125-126) that it is the dynamic sequence of future events and their development, presenting analytical charts for any possible event, and linking details and events together to form a general picture expected in the future. A scenario is a possible or probable description of the future, accompanied by an explanation of the features of the plans that lead to this situation in the future, based on the current situation (Nassar, 2021). Scenario building is the most used method in strategic foresight, through which multiple scenarios are developed for the proposed alternatives (Al-Ajib & Al-Najjar, 2022). Scenarios are an important tool for the decision-making process and the ability to discover the complex interaction between the drivers of change and to develop a real view of the impact of the events and trends of the organization in the present and the future (Zahraei et al., 2019). Building a scenario does not provide for predicting the future, but rather for investigating it, as it is considered important for using strategic foresight in directing tasks (Heifi & Muhaimid, 2022).

Crisis Management Effective

With the beginning of the sixties of the twentieth century, the interest in studying crisis management academically emerged clearly, coinciding with the emergence of major crises to the surface, as the pace of international conflicts and the Cold War rose, in particular, when US Secretary of Defense Robert McNamara during the era of President John Kennedy used this term. For the first time during the missile crisis with Cuba in 1962, when it was considered one of the most severe confrontations and almost led to a nuclear war at the time, McNamara described it as managing an emergency and dangerous situation, after which interest began in transferring and studying the term and moving from the political arenas to the meeting and then the economy to administration (Zamoum & Gorpe, 204).

Al-Faqih (2011, 15) describes the crisis as an event or a series of events that carry with it threats to the organization that may negatively affect it or in certain sectors and may reach the extent of affecting its reputation, during which it is necessary to intervene and take quick decisions to bring about a change in its current situation. As for the effectiveness of crisis management he defined it as containing the damage resulting from a specific crisis that harms the reputation of the organization or the impression of it by putting the planned strategies and operations into effect in order to avoid the occurrence of the crisis or contain it when it occurs.

Almsaed (2012, 19-20) referred to the crisis as a situation or situation facing the decision-maker in organizations through which events accelerate in an intertwined manner, causes overlap with results, and things mix with each other in a way that leaves no room for vision for decision-makers to collide in it in an attempt to stop it or change its course, it makes them confused, any decision taken in a state of uncertainty and lack of knowledge and available information would make matters worse and raise the blurring of the scene, so the organization will move more towards the unknown, and the Chinese have excelled in pronouncing the word as they pronounce it (W e t-ji ), and it is a word of two parts, the first meaning danger, and the second meaning opportunity. During a crisis, the ingenuity of leadership appears by turning adversity into a gift and an opportunity to dust off losses into gains. As for crisis management, from the writer’s point of view, it is the administrative effort and preparation to confront a critical situation that occurs to the organization by preparing a specially selected and trained team to reduce the resulting losses.

As for Al-Kashali (2015, 27), he sees the crisis as an unprecedented situation that is outside the scope of the organization’s control over which it stops work completely or paralyzes its movement temporarily, which delays the achievement of its objectives in the required time,
while crisis management is the administrative approach followed by raising readiness, readiness and knowledge of it. Dealing with the crisis in an organized and planned manner without the organization's regular activity being affected by any of it, and the effectiveness of crisis management is defined by the administrative approach followed by organizations with current or future crises and dealing with them through tools that contribute to the success of its mission such as the operating room, the crisis management communication system, and media Crisis, impact tools, crisis information system, transportation and movement tools.

There are those who defined the effectiveness of crisis management as the extent to which organizations are able to find creative ideas and solutions through communication, and find a common language of dialogue among their employees, in addition to formulating and drawing a clear strategic road map to deal with the crisis away from managing it randomly through the use of the necessary means to reduce the negative effects of it (Al-Shayyal & Al-Jidiyah, 2021). Muiru (2022) defines it as preparing strategic plans and preparing communication strategies for a proactive response to prevent a crisis from occurring before it occurs, or to reduce its damage when it occurs, or to divert its course through an organized, trained, and harmonious crisis team. As for Hassan et al (2022), they define the effectiveness of crisis management as the ability of organizations to remedy crises and end the belief of decision-makers in the superiority of long- or short-term successful results over the results of failure, and mitigate the effects of crises on the goals of organizations by keeping them in charge when dealing with crises.

The effectiveness of crisis management refers to the administration’s ability to move away from potential crises, and that the results of success in managing it outweigh the results of its failure. Many studies have dealt with several dimensions of the effectiveness of crisis management, such as the study of Hassan et al (2022) and the study of Al-Zahrani (2022), which adopted: response decision-making, communication and flow Information, mobilization and mobilization of resources as dimensions of the effectiveness of crisis management. As well as the study Yassin (2020) that adopted the following dimensions of the effectiveness of crisis management: discovering early warning signs, preparedness and prevention, containing and limiting damage, restoring activity, and learning, and in the current study the following dimensions were adopted: response speed, crisis management team, crisis information systems, and resource mobilization.

1. Response speed: Al-Shayyal and Al-Jedaya (2021) explain the speed of response as choosing the appropriate alternative to deal with the crisis from among several proposed alternatives that carry certain standards that suit the existing crisis under the weight of time constraints and limited resources to implement it as quickly as possible, i.e. making the most appropriate, best and most compatible decision with the current situation of the organization, this is not done easily if the leadership does not have a great knowledge of the resources and capabilities available to it, and it bears an insight into the future. From the point of view of Almsaed (2012, 109-110), the speed of response indicates the speed in which those responsible for managing the crisis get to know the new data that pertains to it through preparation and planning to surround it from all sides so that the well-qualified crisis team is directed to deal with it according to the new circumstances with flexibility and grace to contain it stop its repercussions.

On the other hand, Muhammad (2006, 82-86) believes that the rapid response is the reaction shown by the crisis management team to deal with it by preparing for it with good planning, effective plans, and conducting a quick survey to assess the risks at the internal and external
levels of the organization, and mobilizing efforts to prevent mounting. Almutairi and Alkshali (2020) defined it as the active preparation for expected worst-case scenarios by developing strategies and making decisions that mitigate the negative effects of the crisis on short- and long-term operations. Crandall et al (2013, 112) to the speed of response is the flexibility and speed in decision-making of managers and those responsible for crisis management.

2. Crisis management team effectiveness: Al-Kashali (2015, 41-42) believes that the term crisis management team refers to a group of individuals that are carefully selected based on the skills and experience they possess, to deal with specific crises in a scientific and objective manner with all flexibility and professionalism, whether the crisis is expected or emergency, as it falls on them responsibility to end the crisis with the least costs and losses, and in the fastest time, through the availability of a number of features and characteristics of this team, such as their possession of skills, physical and mental capabilities, and skills related to anger management, time and resources, in addition to cooperation and teamwork. Al-Faqih (2011, 89-90) defines the crisis management team as the trained and well-equipped human cadre to deal with crises and prevent their occurrence in advance or reduce as much as possible the consequences thereof, and the necessity of certain conditions for the crisis management team to be successful in achieving the main task “crisis management” as if the team is composed of senior management in the organization, multi-disciplinary, and highly flexible in dealing with different circumstances, in addition to the internal consistency between the team members, and the intensification of vertical and horizontal communications between its members. The crisis management team is defined as representatives and managers associated with the main organizational processes that need specific knowledge, skills and experience, i.e. a mixture of talents and competencies that ensure the success of crisis management and ensure the achievement of planned results (Lukić et al., 2020).

3. Communication and information flow: Al-Kashali (2015, 47) defined the crisis information system as a highly efficient information system that collects and sorts information in order to classify it for appropriate analysis, and saves it securely and confidentially in the system to retrieve it at the time decision-makers need it and provide them with this information to help them decide on their decisions to the maximum degree than make sure. A crisis information system is defined as a mixture of equipment, hardware, computer software, and trained personnel that are collected and organized together for the purpose of developing plans, controlling crises, supporting decision makers, and helping them take the right actions (Al-Faqih, 2011, 115).

4. Resource mobilization: Resource mobilization refers to mobilizing and equipping the organization with all its material resources to deal with the crisis through the use of strategic reserves in confronting it, placing crisis management in the organization as a specific restriction and limit for all available resources, whether available now or in the future, knowing their flexibility and organizing their paths to ensure their movement at the appropriate speed (Almutairi & Alkshali, 2020). Resource mobilization, according to Hassan and Hamed (2022), means facing the crisis occurring in the organization with all its financial, informational and human resources available to it, by planning in an orderly manner, and organizing the effective use of available resources to deal with the crisis. Hasan et al (2022) Mobilizing resources is the best way to utilize resources and time in preparation for sudden and unexpected situations during the occurrence of a crisis to reduce it or mitigate its consequences, and among the most important resources, according to his description, are well-trained human resources that use the best equipment and technology to confront them, and mobilize moral resources such as their culture, principles, and their
own way of dealing with the crisis. Al-Zahrani (2022) says that resource mobilization includes all activities that seek to provide the material and human resource and appropriate support at the right time to address the causes related to the crisis and find reserves to use them effectively that reduces the time and effort spent.

The relationship between strategic foresight and crisis management effectiveness
Some studies supported the impact of strategic foresight on the effectiveness of crisis management, such as the study of Yassin (2020), which aimed to identify the role of strategic foresight as a dimension of strategic intelligence in enhancing the effectiveness of crisis management. It has an effective impact in enhancing the effectiveness of crisis management in the organization by sensing and anticipating future indicators that may bring about a negative or positive change within the organization and thus helps it reformulate its future strategic plan and then draw a somewhat clear road map for its future. On the other hand, the study of Al-Zahrani (2022) dealt with the analysis of the environment as a dimension of the strategic planning processes and its role in improving the effectiveness of crisis management in universities in the Kingdom of Saudi Arabia. Crisis management, with the recommendation to promote the culture and practices of environmental analysis in those universities, as the relationship between the analysis of the internal and external environments as an introduction to strategic planning is very close and important. Analyzing the external environment, for example, requires research in the past and foreseeing the future for this environment to raise the level of effectiveness of crisis management in organizations and predict them. and its possible effects.

Previous Studies
Al-Zahrani's study (2022) aimed to know the role of strategic planning processes in improving the effectiveness of crisis management. It also aimed to improve the level of effectiveness of crisis management. This study was conducted on a stratified random sample of (138) academic department heads. The study concluded that there is an impact of strategic planning processes in improving the effectiveness of crisis management in all its dimensions. Benefit from previous experiences, which will have a significant impact in discovering early warning signs and making decisions quickly and appropriately. As for the study of Hassan et al (2022), it sheds light on strategic leadership and the effectiveness of crisis management. The study was conducted on a sample of department and division managers with a total of (56) manager, in which the descriptive analytical approach was used. The study concluded that there is a strong link between strategic leadership and the effectiveness of crisis management, which appeared through the mobilization and mobilization of resources, the provision of flexibility to be transferred between the departments of the ministry and their focus as required, and the tendency to employ the changes in resources, to bring about more changes in the field of building management capacities as they are I became aware of insufficient information on the size of resources, which came as a natural result of the organization's inability to make response decisions during crises.

On the other hand, Al-Amoush study (2021) focused on verifying the impact of business intelligence systems in crisis management. The researcher chose the Greater Amman Municipality and its regions in the Hashemite Kingdom of Jordan as a study community, and to achieve the objectives of the study, an electronic questionnaire was distributed to the study sample of (189) employees. The study concluded that the Greater Amman Municipality applies business intelligence systems to a high degree, and that business intelligence systems
with their dimensions have a statistically significant impact on crisis management in the Greater Amman Municipality. It has to make decisions during the crisis management process when it occurs. The more effectively it uses business intelligence systems, the greater its ability to organize data and extract the appropriate from it, and thus increase the effectiveness of its crisis management. As for the study of Hilal and Arbab (2020), it aimed to clarify the role of organizational innovation as an effective and important method in finding solutions to crises facing companies, especially unusual and non-stereotypical solutions, which mitigate the effects of crises when they occur in an accelerated and unstable world. The study was conducted on a sample of (70) employees, in which the descriptive approach was used to present the problem, and the questionnaire was adopted as a tool for data collection. The study found that there is a direct relationship between organizational innovation and increasing the effectiveness of the organization in facing crises. It also found a relationship between the organizational structure of the organization and the ability to innovate. Crises also have reasons related to the internal environment of the company that can be controlled and others related to its external environment, which makes finding solutions to crises somewhat complicated.

As for Yassin (2020), he tried in his study to identify the role of strategic intelligence management in enhancing the effectiveness of crisis management and to ascertain the true level of the role of strategic intelligence in enhancing the effectiveness of crisis management. The study was conducted on a sample of (56) employees. The study concluded that managing strategic intelligence in an effective and highly efficient way enhances the effectiveness of crisis management in organizations. The relationship was positive, that is, the greater the strategic intelligence, the more effective the crisis management. Consequently, it does not keep up with it, which reduces its chances of success and weakens its level of performance. It does not use the results of its information analysis in developing its business, as its failure to keep up with modern methods of facing crises makes it vulnerable to successive crises. As for the Muiru study (2022), it tried to test the extent of the contribution of innovation and the commitment of senior management to the effectiveness of crisis management in the Kenyan Safaricom Plus Company. The study used the questionnaire as a data collection tool, and the study sample consisted of (30) employees. The study concluded with results, the most important of which is that product innovation is an important indicator of effective crisis management and is based on the fact that the company's product innovation strategy is based on improving product performance and quality during the crisis, as this strategy, i.e. product innovation, was not sufficient during the crisis.

Sharma et al (2022) identifying the relationship between innovation and crisis management during the Corona pandemic, as the outbreak of the epidemic promoted innovation, especially in light of the fierce competition between countries of the world to find solutions to the economic and health crises that befell them. The study concluded that innovation plays an important role in creating a somewhat sustainable environment and a future that is capable of confronting crises and restoring the health of the economy, which is greatly affected by the crises occurring in it, especially after storing and analyzing very accurate data for humans. This may help in finding new tools that help in resolving crises. This is an opportunity to raise global awareness about the critical and important role of innovation in various fields to face crises. As for the study of Allahveisi et al. (2019) they tried to test the relationship between strategic thinking in crisis management. The study was conducted on a sample of (111) managers. The study concluded that there is a significant positive relationship between strategic thinking and crisis management, where the most important relationship of
systemic thinking was with crisis management, and that the formulation of policies to take decisions and implement them at any stage of any level in crisis management is one of the tasks of crisis managers. Managers who hold a strategic thought also carry a well-studied behavior and orientation and a specific thought, such as sensitivity to surrounding conditions, high flexibility in performance and foreseeing the future by studying the external environment and seizing opportunities. In addition, the strategic thinking of crisis managers enables them to link the different administrative levels to each other, regardless of the different circumstances and environments. Breaking away from monotonous traditional thinking and expanding perceptions through strategic thinking will increase the quality of crisis management operations.

**Study Hypotheses**

H1: There is a significant impact of strategic foresight on crisis management effectiveness in Greater Amman Municipality.

H2: There is a significant impact of strategic foresight on response speed in Greater Amman Municipality.

H3: There is a significant impact of strategic foresight on crisis management team effectiveness in Greater Amman Municipality.

H4: There is a significant impact of strategic foresight on communication and information flow in Greater Amman Municipality.

H5: There is a significant impact of strategic foresight on resource mobilization in Greater Amman Municipality.

**Method**

1. **Population and Sample**

This study was applied to manager’s at all organizational levels in Greater Amman Municipality in Jordan. A simple random sample of (120) managers was chosen. The questionnaire was distributed to them electronically. The researchers obtained (98) questionnaires, on which statistical analysis was conducted.

1. **Measurement**

To measure the study variables, the researchers used a scale consisting of (20) items to measure the dimensions of strategic foresight (the independent variable). A scale consisting of (20) items was used to measure crisis management effectiveness (the dependent variable), after reviewing many previous studies on subject of the study. The five-point scale was used to answer the items in the following way: completely agree 5, agree 4, neutral 3, disagree 2, totally disagree 1.

**Results**

Table 2 indicates the personal and functional characteristics of the study sample managers, where the number of males reached 58 managers, at a rate of 59%, while the number of females reached 40 managers, at a rate of 41%. This indicates that the managers in the Greater Amman Municipality are the largest number of them males, but there are a good number of females. The researchers expect that in the coming years there will be a greater convergence in this ratio between males and females.
With regard to age, the majority of managers are in the age group 30-less than 40, with 40 managers at a rate of 41%. This percentage is reasonable due to the employee's need for a relatively long period in order to obtain the position of manager.

With regard to experience, 38 managers, at a rate of 39%, have experience of 15 years and more, and this percentage corresponds to the age at which an employee can be a manager.

The educational level, the majority of the managers in the study sample were holders of a bachelor's degree, with a number of 60 managers, at a rate of 61%.

Table 1
The personal and functional characteristics of study sample managers.

<table>
<thead>
<tr>
<th>Variable</th>
<th>Frequency</th>
<th>Percentage</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sex</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Male</td>
<td>58</td>
<td>59</td>
</tr>
<tr>
<td>Female</td>
<td>40</td>
<td>41</td>
</tr>
<tr>
<td>Age (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 30</td>
<td>10</td>
<td>10</td>
</tr>
<tr>
<td>30- less than 40</td>
<td>40</td>
<td>41</td>
</tr>
<tr>
<td>40 - less than 50</td>
<td>32</td>
<td>33</td>
</tr>
<tr>
<td>50 and more</td>
<td>16</td>
<td>16</td>
</tr>
<tr>
<td>Experience (years)</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Less than 5</td>
<td>7</td>
<td>7</td>
</tr>
<tr>
<td>5- less than 10</td>
<td>30</td>
<td>31</td>
</tr>
<tr>
<td>10- less than 15</td>
<td>23</td>
<td>23</td>
</tr>
<tr>
<td>15 and more</td>
<td>38</td>
<td>39</td>
</tr>
<tr>
<td>Degree</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Community college diploma or less</td>
<td>5</td>
<td>5</td>
</tr>
<tr>
<td>Bachelor's</td>
<td>60</td>
<td>61</td>
</tr>
<tr>
<td>Master’s</td>
<td>28</td>
<td>29</td>
</tr>
<tr>
<td>PhD</td>
<td>5</td>
<td>5</td>
</tr>
</tbody>
</table>

From Table 2, it is noted that all alpha values exceeded 70%, which is the percentage adopted in this study, which indicates the existence of internal consistency for the study items variables (Al-Najjar et al., 2020).

With regard to the values of mean, the results showed that the dimensions of the two variables were at medium levels, the highest for crisis management team effectiveness 3.65 with a standard deviation of 0.65, and the lowest for environmental monitoring 3.50 with a standard deviation of 0.73, noting that the study adopted less than 2.34 for a low level, 2.34 - less than 3.67 medium level, 3.67- 5 high level.
Table 2

Descriptive statistics

<table>
<thead>
<tr>
<th>Dimension</th>
<th>Items</th>
<th>Alpha</th>
<th>Mean</th>
<th>Std.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Environmental scanning</td>
<td>5</td>
<td>0.76</td>
<td>3.50</td>
<td>0.73</td>
</tr>
<tr>
<td>Future vision</td>
<td>5</td>
<td>0.75</td>
<td>3.56</td>
<td>0.74</td>
</tr>
<tr>
<td>Strategic choice</td>
<td>5</td>
<td>0.72</td>
<td>3.61</td>
<td>0.73</td>
</tr>
<tr>
<td>Scenario building</td>
<td>5</td>
<td>0.76</td>
<td>3.52</td>
<td>0.76</td>
</tr>
<tr>
<td>Response speed</td>
<td>5</td>
<td>0.77</td>
<td>3.55</td>
<td>0.76</td>
</tr>
<tr>
<td>Crisis management team effectiveness</td>
<td>5</td>
<td>0.71</td>
<td>3.65</td>
<td>0.65</td>
</tr>
<tr>
<td>Communication and information flow</td>
<td>5</td>
<td>0.74</td>
<td>3.62</td>
<td>0.72</td>
</tr>
<tr>
<td>Resource mobilization</td>
<td>5</td>
<td>0.71</td>
<td>2.61</td>
<td>0.67</td>
</tr>
</tbody>
</table>

Table 3 indicates that the study hypotheses were tested using the multiple linear regression coefficient.

The results of the H1 test show that there is a significant impact of strategic foresight on crisis management effectiveness, as the value of \( r = 0.87, r^2 = 0.75 \). This indicates that the variation in crisis management effectiveness is due to 75\% of strategic foresight, and it reached \( f = 70.62 \), with a significance level of Sig. = 0.00.

With regard to H2, it was found that strategic foresight had a significant impact on response speed, as it reached \( b = 0.19 \), value of beta = 0.23, and value of t = 2.98 at level of significance Sig. = 0.00.

For H3, the results indicate that there is a significant impact of strategic foresight on crisis management team effectiveness, as it reached \( b = 0.19 \), beta = 0.23, and the value of t = 2.91 at the significance level Sig. = 0.01.

Regarding H4, it was found that there is a significant impact of strategic foresight on communication and information flow with a value of \( b = 0.20 \), beta = 0.25, t = 3.34, and the significance level of Sig. = 0.00.

As for H5, which is related to the impact of strategic foresight on resource mobilization, the results indicated that there is a significant impact, as the value of \( b = 0.23 \), beta = 0.29, t = 3.26 at the level of significance Sig. = 0.00.

Table 3

Impact of strategic foresight on crisis management effectiveness

<table>
<thead>
<tr>
<th>Hypothesis</th>
<th>Variable</th>
<th>Unstandardized Coefficients</th>
<th>Standardized Coefficients</th>
</tr>
</thead>
<tbody>
<tr>
<td>H1</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>0.87</td>
<td>0.75</td>
</tr>
<tr>
<td></td>
<td></td>
<td>b</td>
<td>beta</td>
</tr>
<tr>
<td>H2</td>
<td>Response speed</td>
<td>0.19</td>
<td>0.23</td>
</tr>
<tr>
<td>H3</td>
<td>Crisis management team</td>
<td>0.19</td>
<td>0.23</td>
</tr>
<tr>
<td></td>
<td>effectiveness</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H4</td>
<td>Communication and information</td>
<td>0.20</td>
<td>0.25</td>
</tr>
<tr>
<td></td>
<td>flow</td>
<td></td>
<td></td>
</tr>
<tr>
<td>H5</td>
<td>Resource mobilization</td>
<td>0.23</td>
<td>0.29</td>
</tr>
</tbody>
</table>
Discussion
This study investigated the impact of strategic foresight on crisis management effectiveness at Greater Amman Municipality in the Jordanian capital. The results of the statistical analysis indicated that there are medium levels of application of the dimensions of strategic foresight (environmental scanning, future vision, Strategic choice and scenarios building), the most of which was the application of strategic choice and the least of which was the application of environmental scanning. Greater Amman Municipality is interested, to a moderate degree, in identifying strengths and weaknesses in its internal environment, as well as its interest in opportunities and threats in its external environment. Municipality also has future strategic directions at medium levels. It also encourages its employees to implement its vision, and it is working on building multiple scenarios to face future events.

On the other hand, the results of the analysis indicated that there are medium levels for all dimensions of the reactivity of crisis management (response speed, crisis management team effectiveness, communication and information flow and resource mobilization), foremost among which was crisis management team effectiveness, as Greater Amman Municipality grants crisis management teams appropriate powers to take decisions when crises occur, and it moves away from routine procedures in making decisions in times of crises, and it also allocates an operations room in which modern communication systems are available for crisis management, and it has the ability to move its available resources in different directions at the time of crises.

The study results showed that there is a significant impact of strategic foresight on crisis management effectiveness. The speed in responding to it and the ability to form appropriate work teams to confront it, and to provide the necessary information for this team and to enable the team to communicate with all parties concerned by the crisis, in addition to the ability to employ its material and human resources in an appropriate manner to stop the crisis. The results also indicated that there is a clear significant impact of all dimensions of strategic foresight on crisis management effectiveness, which reinforces the results of the first hypothesis of this study.

The results of this study can contribute by alerting organizations' departments to increase their operations in analyzing the internal and external environment, as it is considered an influencing factor in their ability to respond quickly and identify organizational paths to facilitate the movement of their material and human resources, in addition to building appropriate scenarios according to their strategic choices and in accordance with their future vision.

Recommendations
1. Giving Greater Amman Municipality greater attention to scanning changes that may occur in the environment, by developing sensors to sense the movement of limbs that could pose a threat to it.
2. Conducting a comprehensive survey of dynamic factors for the purpose of forming a picture of future events through realizing and understanding the events.
3. Increase interest in developing scenarios in order to discover the complex interaction between the drivers of change, and develop a realistic view of the impact of the organization's trends in the future.
4. Raise the Secretariat's readiness to determine its material and human resources for the purpose of mobilizing it economically in the face of crises by preparing databases that include the quantity of these resources and their locations.
References

The Holy Quran. Surat Al-Imran.


Miles, I., Saritas, O., & Sokolov, A. (2016). Foresight for science, technology and innovation. DOI 10.1007/978-3-319-32574-3


