

## Digitization Applications under the Crisis Management Challenges: Case Study

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### Abstract

The study was based on the idea that today's world in light of its renewed crisis, its accelerating changes and survival strategies in light of the turbulent competitive environment bears the character of sustainability in its construction and dealings to create and manage crisis in the system of creative chaos. To confront the variables of the new world in light of the fabricated epidemic crisis, societies resort to building a digital system to face its challenges and know the role they play to frame the new management thought for crisis management and crisis management by organizations and societies to find out the true image of the conflict, which generated the problem of evident weakness in facing crisis, including the epidemic crisis (Corona). The Researchers reached some conclusions, the most important of which are the necessity of adopting modern and renewed digitization with its systems of a strategic dimension in providing strategic information and following up the renewal of decisions within the principle of survival of the fittest and dealing with complex and interlocking problems to enhance the management of the crisis team is facing challenges according to the available capabilities and advanced knowledge and harmonization between the human mind and the electronic mind to prepare for new global changes and build integration strategies to reduce crisis interaction with a strategic dimension.

**Keywords:** Digitization, crisis, management, challenges.

### Introduction

Today, the world is moving towards using contemporary departments with sustainable digital strategic thought in light of the new war and accelerating changes, creating and exploiting opportunities and avoiding their threats to stay in the sustainable competition circle and determining the strength needed to plan them. Especially in the surveyed community who faces strategic thought it is characterized by creative chaos Imposed by developed countries to control the world by creating crisis proportional to the size of the intellectual flow of society it is managed in a scientific and complex manner. Hence the need to use modern digitization with its systems and applications of a strategic dimension Such as (GAIS NNIS -ES- SIS) To achieve support in crisis management Before, during and after fabricating it In the system of possibilities previously drawn based on information produced by these systems which considered the essence of the problem because of the society's weakness and apparent fear of using the electronic system.

To find out the research problem, it is necessary to raise the questions that frame that problem and whose future scenarios derive from the global intellectual structure for the use of digitization of their systems (GAIS-NNIS- ES- SIS) in the face of the fabrications of the crisis before, during and after its occurrence.

## The Research Methodology:

### The Research Problem

To find out the research problem, it is necessary to raise the questions that frame that problem and whose future scenarios derive from the global intellectual structure for the use of digitization of their systems (GAIS-NNIS- ES- SIS) in the face of the fabrications of the crisis before, during and after its occurrence. So, The following questions that posed the problem were raised to answer them:

- 1- What is the extent of the society's awareness of the importance of digitization in crisis management and response?
- 2- Is there a possibility of applying digitization before and during the crisis and managing it?
- 3- Will digitization of its systems contribute to reducing the burden of crisis management and facing its challenges?
- 4- Will a qualitative shift take place for modern administrations in light of the contemporary orientation of the researched community?

### The Research Importance:

And the importance of the study was strengthened in light of the current situation that the world suffers generally and the research community in particular from facing a crisis (Corona Virus) the fabricated and managed in a scientific and administrative manner high performance and strategic thinking. Where the study aimed to adopt the standards of the digital system and its applications to enhance its role in crisis management and meet the challenges of its fabrication. The Researchers used the case study method adopting the checklist and Likert triple scale for the purpose of sample responses and descriptive analysis to approve the results.

### The Research Sample:

The Researchers tended to use the case study method by adopting the checklist prepared according to detailed scientific foundations that , We are used a checklist containing (15) items and a method of accurate descriptive analysis to deal with extrapolated values address the mean, standard deviation and relative importance based on the Likert scale and a matrix measuring the direction of the response level of the study sample of (45) professors according to the categories specified in Table (1).

Table (1) Response Level Matrix

Weighted average	Level (direction of response)	Notes
1-1.66	I do not agree	Where I calculated the length of the class, According to the following rate: = 3/2 (0.67)
1.67-2.33	neutral	
2.34- 3	agree	

## The concept of digitization and its strategic applications

### Digitization:

Advanced reproduction process convert documents whatever its type and its bowl into a digital chain keeping up with technical and intellectual work Tosupport the possibilities contained in the strategic decision. GAIS : (Genetic algorithms information system) artificial intelligence system simulates survival of the fittest Tofind better solutions increasingly a problem what he finds is the optimal mix of inputs that give the best output (Ghobakhloo & Fathi, 2019).

### Expert systems:

Computer software designed to model the ability of a humane expert to solve semi-structured and unstructured problems within complex applications to act as an adviser to the end user (Beckers & Bsat, 2002).

### Strategic Information Systems:

Computerized system that serves administrative and organizational levels to solve problems of strategic direction in light of the conditions of uncertainty and lack of accuracy (Earl, 1993).

### **The importance of digitization:**

To enhance the role of digitization, benefits must be identified that society seeks to achieve which clarifies the importance of the variable in a world of accelerated variables and can be summarized as follows (Netshakhuma, 2016; Nooruddin, 2018; Delgosha, Saheb & Hajiheydari, 2020; Lorenz, Benninghaus, Friedli & Netland, 2020):

1. Its importance lies in strategic analysis in light of unconfirmed information it is of low precision to be controlled by probabilities of a strategic dimension to complex and accelerated problems.
2. Support the higher strategic management needs of information and operations and their activities to control the possibility of occurrence and prepare for crisis management.
3. It works on the intensive parallel treatment of continuous problems and working to restore the balance of the decision in light of the reverse treatment of it.
4. Promote the scientific stability of strategic thought, being more stable than natural intelligence, its ability to keep information unchanged and work to analyze it at the least time.
5. Working to simulate the human mind and its methods and direct support for semi-structured and informal structured decision-making processes.
6. Dealing with new and complicated circumstances automatically, continuous analysis of recent data and balancing previous decisions to reach the best decision with a high dynamic.
7. The programs of mixing Darwinian concepts (natural selection and survival of the fittest) and adopting mathematical functions are used to simulate the development process to find the best solutions.
8. Providing support to solve logistical operational problems and constantly monitor their development.
9. It is noted from the importance of digitization of asynchronous nature to achieve sustainable competition In handling the decisions according to the specified time and provide alternatives and support the human mind in reprogramming it to cross the barrier of fear and management of crisis and the direct support of these systems must be adopted to prepare for them, anticipate treatment decisions and meet strategic challenges.

### **Crisis management challenges:**

Today, the world is moving towards a new name for domination in light of reality and future challenges towards epidemic wars in which conventional weapons are out of use, geared towards fabricating managing crisis which forced the other party to manage it according to modern data and face it which generated challenges that contributed to proving the existence or not. The proof is the Corona crisis and how to manage the crisis by the world in general and Iraq in particular significant weaknesses have resulted from a lack of preparedness and a sudden timing (Stieglitz, Mirbabaie, Fromm & Melzer, 2018).

### **The concept of crisis management**

We will address crisis management not only in its academic sense, but also in terms of actual use Where to eat it (Al-Khudairi, 1995) as a position and decision-making situation in an administrative entity (state, institution, etc.) where events coincide and causes intertwine with them the decision maker loses with it the ability to control and manage it or its future directions. It is clear from this that the crisis cannot be addressed or dealt with through impotence, insufficiency, resistance, or management of the movement, first it needs to be fully prepared and provide the necessary information on the ground with its results or imaginary assumptions according to scientific foundations to build alternatives and future possibilities for facing them

In light of the formation and good organizational coordination of thought and thinking and the distribution of tasks to deal with it before, during and after the crisis (Fulop, Linstead & Clarke, 1999).

### **The objectives of the crisis and the means to confront it**

To perpetuate crisis management activities in all its aspects the goals that countries and organizations seek to meet to face the crisis must be defined and prepare for the formulation of policies and strategies to overcome the challenges and obstacles that stand in the future to define and manage the crisis in a scientific way, through which the losses and risks faced are achieved, and among these goals (Burnett, 1998 ; Al-Serif, 2003; Pieterse, 2013):

**A-** Activating possible entities to face the crisis.

**B-** To identify the types of behavior, motives and incentives that may prevail during the crisis.

**C-** Knowing ways to create an organizational and administrative climate based on understanding and participation.

**D-** Development of the communication network.

**E-** Knowing the position of the individuals of the country or organization regarding the crisis as motors or makers of its events or opposed to its secretions and results.

**F-** Learn about the means to reduce tension.

**G-** Knowing the organization's previous experiences during crisis and the amount of control over its events.

**H-** Publishing all the facts necessary to create a healthy atmosphere to deal with the crisis.

**I-** Finding different ways to motivate to provide effective first aid and assistance.

**J-** Getting to know the essence of the events and the themes that revolve around it.

**K-** Approving a specialized work team for crisis management within a scientific cell with high performance skills and attracting internal and external scientific energies to confront them.

### **Extent of benefit from digitization in crisis management.**

Crisis have become a true image that impedes the world's dreams and dreams of a peaceful life rather I went back to the pessimistic future assumptions about survival, It adopted the increased focus imposed by the new changes in light of the crowding of human thought and complex control to deal with the techniques and technology on which they are based in the processing and management of these images Which increases in complexity daily in the world of crisis and its fabrications and the lack of theoretical frameworks that have coexist with its results and fabricating fictional assumptions that were actually assigned to it and not yet tested. to see the extent of benefiting from the shift towards the digital system It is necessary to address the type of administrations resorted to by states in their new wars (especially epidemic wars) It is crisis management (Kagermann, 2015). Which is (A method used by countries and international institutions aimed at stopping an activity or destabilizing a situation and managing it in the way it serves it and the countries of the crisis are subject to it). To manage the crisis through a high-performance organizational coordination based on an electronic system in which the activities and efforts of all relevant entities and experiences interact with a flexible and adaptive management with the changes that occur with crisis (Isard, 2005).

Thus the countries and institutions of the crisis seek to prevent crisis from occurring or reduce their consequences by removing their causes and designing an effective organizational pattern to confront them, reduce their effects, prepare for and prevent them by discovering and overcoming weaknesses, setting a strategic plan for its direction, identifying the methods and preparations necessary to implement the plan, and training individuals and groups to deal with it focusing on containing and limiting its damages and responding to it through the efficiency and effectiveness of the guidance and control center and the extent of cooperation between technical devices and supportive systems as well as restoring balance and activity through

short-term plans and programs designed to gradually restore balance in the face of danger and avoid rumors and learn from previous experiences and evaluate them to benefit from them in the future And to prevent their recurrence (Shrivastava, Mitroff, Miller & Miclani, 1988). And identifying strategies that are appropriate to the reality of the capabilities in the application to achieve integration between the various administrative and technical activities using advanced information systems and redesigning the organizational formation of the crisis cell according to its conditions and providing the administrative climate for the various specializations working in it as building strategies such as (violence strategy - growth stopping strategy - retail strategy - strategy Change of course (Rashica, 2018)

And because of the human reason's need for intellectual support an electronic knowledge base was created to confront the crisis and reduce its seriousness after the following things were available (Abdulrahman, 2020):

1. Building an information society capable of realizing the importance of information and communication technology and its systems in all its dimensions and an information culture that gives full confidence to use by assigning artificial intelligence electronic brains to human minds
2. Building a culture of crisis culture and methods of dealing with it and managing it according to scientific principles trained on the possibilities of its occurrence in advance to prevent confusion and tension and to continue to implement the strategic plan and follow up its evaluation and implementation to confront it.
3. Adopting the specialized scientific and intellectual minds in the framework of collective action by forming a crisis cell capable of managing it scientifically realistically and the probability of events.
4. Rebuilding the digital infrastructure and continuously updating it (hardware, software, communication systems, databases, and building specialized scientific thought for the individuals in charge of it) to increase the ability to contain crisis and treat them with electronic support follow-up and expect their occurrence and continuity during and after.
5. The use of advanced information systems and applications with a strategic dimension to obtain information before, during and after the crisis to use it in building probable and expected decisions and choosing the best alternative and adopting survival for the fittest.
6. Attracting managerial, technical, scientific, and technical experiences and brains with high strategic performance characterized by general and specialized intelligence, cognitive speed, analytical and innovative capabilities, balanced behaviors electronic uses decision-making capabilities in times of crisis their management emotional control of crisis communication skills and dealing with formal and informal organization through (Abdulrahman, 2011):
  - a. Determine the set of jobs that must be performed.
  - b. Determining the objectives to be reached.
  - c. Determining the use of the necessary human and material resources.
  - d. Planning and designing a crisis strategy.
  - e. Study previous crisis and seek the benefit of them.
  - f. Defining the set of policies, rules and systems to face the crisis.
  - g. Follow up on the set of environmental conditions, conditions and variables that hinder the achievement of the goal.
  - h. Defining the set of methods and techniques supporting the crisis management.
  - i. Define the operational communication networks and the continuity of their modernization and maintenance.

**Results: Descriptive analysis of the checklist:**

1. The result (1) indicates (society's awareness of the importance of digitization contributes to strengthening crisis management, dealing with and overcoming it through specialized seminars and training programs). That the mean value of the mean was (2.64) and this value falls in the response level matrix within (agree) level which indicates a tendency to the importance of digitization in enhancing the awareness of society in times of crisis and this is an indication of the current crisis of the spread of Corona disease as an impression was born of the importance of digitization in spreading and educating society about the danger of the virus and ways to prevent it with follow-up of cases as well as benefit from them in finding electronic means Informational in nature to assign crisis management . With a standard deviation of (0.64) which indicates a clear homogeneity in the respondents' answers, and with a relative importance of (88.4 %).
2. The result (2) dealt with (adopting the application of digitization before, during and after the crisis to provide the capabilities available to manage it). The value of the mean is (2.64) and this value falls in the matrix within the (I agree) level. This indicates that whenever available capabilities are available and managed in a manner that achieves the required knowledge from them it is possible to apply digitization in its scientific and logical image within the limits of the time of the crisis and its transcendence. By the standard deviation it reached (0.63) indicating a relatively average dispersion that tends towards agreement and neutrality achieving homogeneity in the answers and with a relative importance of (88.2%).
3. The result (3) refers (The system (GAIS) contributes to reducing the burden of the crisis managing the possibilities of its occurrence and facing its challenges). Until that the value of the arithmetic mean reached (2.15) and this value falls in the matrix within the (neutral) level. This indicates a weakness in the response within the limits of the scientific knowledge of the study sample by dealing with such information systems to move away from specialization and not inform them about them. Therefore the responses came more neutral than the rest of the answers despite the presence of some of them with a specialization in this field but after the Researchers informed the study sample of The scientific value of the system and its role in dealing with the potential for the decision adopting the principle of survival of the fittest choosing the appropriate decision in light of the crisis and following its development and the development of the decision with it the point of view changed. The value of the standard deviation was (0.84) indicating weak homogeneity in answers and of relative importance (71.74%).
4. The result (4) affirmed (NNIS) contributes to alleviating the burden of the crisis managing the complex possibilities of its occurrence, and facing its challenges through the best decision). However the arithmetic mean value reached (2.24) and this value falls in the response level matrix within (neutral) level. As indicated in paragraph (3) of this analysis this indicates the weakness of the possibility of scientific knowledge in the information systems of neural networks and dealing with them previously and determining the importance of its role in dealing with complex intertwined and unstructured problems to reach the best decision in light of the crisis with the apparent neglect of the sample in other supporting disciplines and familiarity with it. While the value of the standard deviation was (0.84), it indicates a weak homogeneity of the respondents' answers and with a relative importance of (74.81%).
5. The result (5) touched on (Information Systems (ES) contribute to analyzing the vocabulary of the crisis during and after its occurrence and facing it to reach the best decision). That the value of the mean is 2.22) and this value is in the matrix within the (neutral) level. This indicates the existence of a state of cognitive confusion in explaining the importance of the system and their neglect of it despite the need for crisis management for it especially epidemiological crisis that need health support as it plays an important role in the

- application to replace the doctor in remote treatment. The value of the standard deviation was (0.79) indicating a weakness in the homogeneity and dispersion of the respondents' answers and of relative importance (73.91%).
6. The result (6) indicates (SIS) contributes to providing strategic information to build the likelihood of a crisis occurring and dealing with it before during and after it occurs). The value of the mean is (2.33) and this value falls in the response level matrix within the (neutral) level. This also indicates neglect of some of the study sample familiarity with the specializations of digital strategic systems and knowledge of their importance to building strategic plans for the information they provide with a strategic dimension and the apparent weakness in the endeavor to build scientific knowledge support with electronic orientation in dealing with the crisis and its management which is reflected in building strategies working for the confrontation. With a standard deviation of (0.82) it indicates the weak homogeneity of the answers and with a relative importance of (77.91%).
  7. The result (7) emphasized (Crisis management needs to make strategic decisions for unstructured problems to resources capabilities and strategic features with high performance). The value of the mean is (2.82) and this value falls in the matrix within the level (I agree). It is a high value that indicates the concentration of scientific ideas and trends within each of its specialization and the adoption of business engineering, departments, resources and decisions re-engineering in a manner that suits the available capabilities and trying to develop them to serve the organization and parallels the movement of new global variables in a turbulent environment so that scientific minds with strategic direction control the decision of the crisis and its management and draw a road map To overcome the risks and challenges of crisis. With a standard deviation of (0.48) it indicates a high homogeneity in the answers and with relative importance (92%).
  8. The result (8) indicates (The crisis depends on providing the goals it seeks to achieve through:
    - A- The result (A) of (8) (Activating Possible Entities to Confront the Crisis). The mean value of the mean was (2.87) and this value falls within the (I agree) level in the response level matrix. This indicates the unanimity of most of the study sample that in the case of achieving the goals set in the working strategies for crisis management it is necessary to activate the possible entities to face them. In the epidemic crisis (Corona), it was necessary to provide a specialized directorate capable of managing such crisis training and developing human and material capabilities and building an electronic data base and strengthening the capacity of flags at the same time. With a standard deviation of (0.41) it indicates a high homogeneity in the respondents' answers and with a relative importance of (93.5%).
    - B- The result (b) of (8) confirmed (identifying the behavior and motivations that prevail during the crisis). The value of the mean is (2.8) and this value falls in the matrix within the level (I agree). And it stresses the importance of studying the behaviors and motivations that deal with its vocabulary during crisis to reach the real treatments that these behaviors produced. And with a standard deviation of (0.5), indicating the homogeneity in the answers and the reflection of their behaviors on them and their support for the study of behaviors resulting from the crisis and with a relative importance of (93.8%).
    - C- The result (c) of (8) affirmed (creating an organizational and administrative climate for understanding and participation). That the value of the mean is (2.87) and it is in the matrix within (I agree) level. And it emphasizes that building strategies and working with them and their possibilities must work within one team considering that the whole society is a crisis cell that needs scientific and rational management capable of providing an organizational and administrative climate and a new culture of understanding and participation to manage the crisis and adhere to the standards of facing it and this is what was produced by the epidemic crisis (Corona). With a standard deviation of (0.41), it

- indicates the homogeneity and agreement on this paragraph with relative importance (93.5%).
- D- The result (d) of (8) (Approving the development of communication networks). The value of the mean is (2.8) and this value falls in the matrix within the level (I agree). It indicates that the crisis and its management must achieve the primary goal of dealing with it to eliminate the gap in the communications system with its traditional and electronic trends and the trend towards network engineering re-engineering and development in line with the need for information delivery between the parties to the crisis. And with a standard deviation of (0.5) it indicates a high homogeneity and agreement in the respondents' answers and with a relative importance (93.8%).
- E- The result (e) of (8) (Adoption of stress relief methods). The arithmetic mean value is (2.73) and this value in the matrix falls within the level (I agree). It indicates that one of the reasons for the failure in crisis management is the accompanying tension that affects the level of decisions after which we need advanced communication systems and media networks to reduce tension. The value of the standard deviation (0.55) indicates the homogeneity and agreement in the answers with relative importance (90.7%).
- F- The result (f) of (8) (to know the previous experience of the organization during crisis and the amount of control over its events). The value of the arithmetic mean is (2.91) and the value in the matrix is indicated within (I agree) level. The necessity of constantly reviewing the previous procedures and transactions in crisis management to correct the path knowing cases of failures and failures to avoid them in the future and building a new strategy for management. The value of the standard deviation was (0.34), indicating the homogeneity and agreement of the sample on the subject and its importance, and with relative importance (94.1%).
- G- The result (G) of (8) confirmed (adopting the publication of facts to create a healthy climate to deal with the crisis). That the value of the mean is (2.6) and the value in the matrix falls within the level (I agree). And she points out that one of the main goals of building the credibility of dealing within a real reality and framing a vision that carries a high percentage of certainty must be published facts to enhance confidence with the crisis team. The value of the standard deviation was (0.8) and reflected a relatively average homogeneity in the answers and with a relative importance of (86.2%).
- H- The result (h) of (8) confirmed (identifying the essence of the events and their themes around them). The value of the mean is (2.84) and it falls within the (I agree) level in the matrix. It indicates the importance of learning about the essence of the events and their axes and building a database that contributes to providing the crisis team with the necessary information. And with a standard deviation of (0.42), it indicates homogeneity and high agreement in the answers, and with a relative importance of (91.1%).
9. The result (9) dealt with (defining methods and preparations for implementing the plan and training individuals and groups to confront it). The arithmetic mean value of (2.82). This value falls in the matrix within the level (I agree). It indicates to the Researchers the importance of identifying the methods and early preparations for the implementation of the strategic plan as well as training individuals and groups (work teams) on how to face the crisis and prepare to overcome it. With a standard deviation of (0.49), it indicates homogeneity and high agreement in the answers, and with a relative importance of (91.9%).
10. The result (10) (Adoption of an effective organizational pattern design to confront the crisis, reduce its effects and prevent it through a strategic plan). The value of the mean is (2.82) which is in the (I agree) level in the matrix. It indicates the interest in developing the society by adopting a new design for an effective organizational pattern that relies on outputs based on high efficiency of specialized departments with high performance to confront crisis according to strategic plans to prepare for them and reduce their effects and

- prevent them. And with a standard deviation of (0.5), it indicates harmony and agreement and of relative importance (91.7%).
11. The result (11) affirmed that (focusing on containing the damages of the crisis limiting it and facing it efficiently and effectively). The value of the mean is (2.73) indicating that it falls in the matrix within the level (I agree). The necessity of adopting the concentration to come out with the least possible damage and losses provided that its profits focus on the lessons learned to reduce it in the future. With a standard deviation (0.55) it indicates the consistency and agreement of the sample and with a relative importance of (90.7%).
  12. The result (12) affirmed (the adoption of a strategy of cooperation and control between technical devices supportive systems and the human mind to restore the gradual balance of the resolution). The value of the arithmetic mean is (2.57) and this value is in the matrix within (I agree) level. And it indicates the necessity of adopting and building a progressive balance strategy between human and electronic minds to benefit from time and manage it in times of crisis to achieve cooperation and control of decision. The standard deviation (0.62) indicated a relatively average homogeneity and agreement in the answers and with relative importance amounted to (85.5%).
  13. The result (13) affirmed (The Crisis Cell's reliance on avoiding the spread of rumors learning from previous experiences evaluating them and preventing their recurrence). The value of the arithmetic mean is (2.71) which falls in the matrix within the level (I agree). It indicates the necessity of building a media system for the crisis cell from specialists with an effective member in it that works to monitor the spread of rumors and present facts as they are in addition to studying the crisis work team for past experiences and benefiting from them. The standard deviation was (0.65) and indicates a relatively average homogeneity and agreement in the answers with relative importance (90.31%).
  14. The result (14) dealt with (identifying strategies that are appropriate to the reality and future of capabilities and achieving integration between administrative and technical activities). Where the value of the mean is (2.62) and the value in the matrix falls within the level (I agree). It indicates the necessity of defining the appropriate strategies for the society in which the crisis is managed that touches the reality and future of the possibilities it enjoys with the need for compatibility between administrative and technical activities to sustain electronic transactions in crisis management. The standard deviation was (0.74) and indicates a relatively average dispersion in the answers with relative importance of (87.21%).
  15. The result (15) emphasized (it depends on the necessity of redesigning the digital infrastructure and following up on its modernization in a way that is compatible with the new world changes). As the value of the arithmetic mean reached (2.87) and the value in the matrix falls within the level (I agree). It indicates the necessity of redesigning the information and communication technology infrastructure and following up on the developments that occur to it. With a standard deviation of (0.42), it indicates a high homogeneity and agreement in the answers, and with relative importance (93.6%).

### **Conclusions:**

1. Community awareness of its contribution to the formulation of crisis thought and management as a team and the use of digitization as a basis for overcoming and combating crisis.
2. Relying on the available capabilities and developing them in a way that is consistent with the movement of the new world after the crisis and dealing with the expectations of the coming crisis.
3. Weakness of the crisis community's dealing with information systems with a strategic dimension in supporting crisis departments before, during and after their occurrence such

- as (GAIS-NNIS-ES-SIS) and focusing on its importance to tackle complex and unstructured problems and deal with decisions in the form of survival of the fittest.
4. Negligence in the use of training and development programs for high-performance capabilities and capabilities to control the crisis community and benefit from strategic thinking to manage its behaviors and techniques and stimulate possible entities to confront it.
  5. Weakness in creating an organizational and administrative climate for understanding and participation in facing the crisis and reducing tension.
  6. The apparent negligence in designing a strategy for developing communication networks and creating a media system capable of reducing rumors and communicating facts during crisis.
  7. Clear negligence in promoting the use of electronic archiving to follow up on previous experiences of the organization and other organizations in this field.
  8. Weakness in adopting a strategy for the gradual balance of the uses of human and electronic minds while identifying upcoming strategies appropriate to confront other global crisis.
  9. The high value of the neutral in the respondents' answers gave the impression that the sample did not see other technical, behavioral and social specializations to build a balanced knowledge base.

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