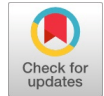# The Impact of Modern Crisis Management Strategies on Crisis Management Planning

Amany Saflo, Mostafa Aldarwish, Hussam Khadija

Abstract: The research aims to identify modern strategies for crisis management and their impact on planning for crisis management, applying the research to employees in the directorates of the university presidency and its offices, totalling 75 employees. The researcher employed a descriptive approach, and a questionnaire comprising 28 items was prepared. It included two approaches (modern strategies for crisis management and crisis management planning). A questionnaire was distributed electronically to a research sample of 60 employees, selected from the Krejci and Morgan table. The researcher found a statistically significant effect of modern crisis management strategies on crisis management planning, at a significance level of 5%. The most modern used strategies were the Crisis Fragmentation strategy, followed by the Changing Path strategy, then the Containing the Crisis strategy, then the Crisis Exhaustion strategy, followed by the Work Teams strategy, and finally the Mobilisation Reserve strategy in the last phase. The research concluded there are no statistically significant differences in modern strategies for crisis management according to the variable (gender, educational qualification, respondent's character, age), at the level of significance of 5%. The researcher recommended the need to form task forces to manage crises in colleges, utilising expertise and providing the necessary material and human support.

Keywords: Crisis Management, Modern Strategies for Crisis Management - Crisis Management Planning.

I. INTRODUCTION

Crises have become an essential feature of contemporary institutions in the 2000s, due to the dynamism and complexity of the business environment, making all organisations vulnerable to crisis occurrence. Since the crisis often coincides with the element of surprise, this requires the ability to anticipate it and avoid its occurrence, with the presence of high skills to address it, through paying attention to methods of confronting them and adapting.

I.n to. Day's world, it is difficult to find organizations that deal with crises randomly and improvised, which makes them vulnerable to surprises and bad situations that stand before them, unable to act, and the consequent threat to their future and existence (Abu Halima, 2013, p. 1) [1].

The success of forecasting in crisis management is not achieved efficiently and effectively unless accurate and up-to-date information about the crisis is available, whether at the organisational level or outside it. Therefore, there must be a management information system that provides this essential and valuable information to all departments at the administrative levels.

Since HEIs are among the most important institutions in society and an integral part of it, they are exposed to multiple and varied crises, including those related to their internal environment as well as external ones. This was evident in the researcher's work as a lecturer at the university. These crises of all kinds need to be addressed so that they do not exacerbate further and transform weaknesses into strengths, benefiting the university. Furthermore, it is not advisable to address those crises through a direct reaction, as there are modern and effective strategies for crisis management. Hence, the idea of our research is to identify a contemporary approach for crisis management and its impact on planning crisis management at Idlib University.

II. PROBLEM OF THE RESEARCH

Any university faces multiple and diverse crises, which differ in the causes of their occurrence, the severity of their effects, and the degree of recurrence, which requires the university administration to search for modern strategies for crisis management, to reduce them, mitigate their adverse impacts, and avoid their occurrence in the future, which helps in forecasting and planning for managing Crises. Therefore, the research problem can be summarized by the following question: (What are the modern strategies for crisis management, and what is their impact on crisis management planning).

III. IMPORTANCE OF THE RESEARCH

Scientific Impact: First, the research addresses an important topic (crisis management planning), which is being explored for the first time at the University of Idlib, according to the researcher. Second, it contributes to the enrichment of the Arabic library in general and the library of Idlib University in particular [11] [12].

<u>Practical Impact</u>: Relying on the results of the study to draw the attention of officials in senior management to the importance of applying modern strategies for crisis management when planning for future crises, and thus preparing for such crises before they occur, and avoiding their adverse effects.
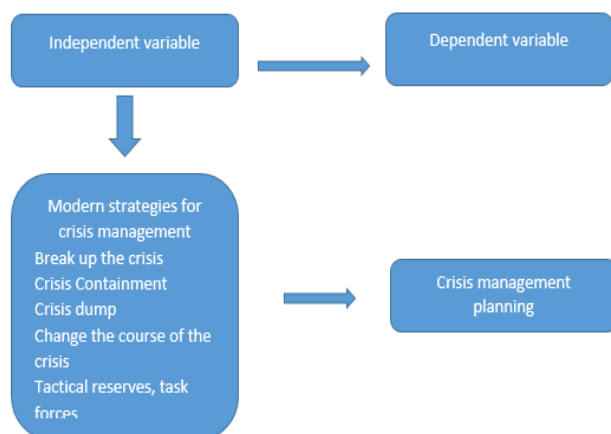
IV. OBJECTIVES OF THE RESEARCH

The research aims to:
1- Identify the concept of crisis, crisis management, and crisis management planning.
2- Identifying modern strategies for crisis management.
3- Identifying the impact of modern crisis management strategies on crisis management planning.
4- Reaching a set of results and making recommendations that help the university plan to manage its crises in the future.

V. RESEARCH HYPOTHESES

<u>The first primary hypothesis</u>: There is no statistically significant effect of modern crisis management strategies on crisis management planning, at the level of statistical significance of 5%.

<u>The second primary hypothesis</u>: There are no statistically significant differences in the perception of the research sample members of the modern strategies for crisis management used to plan crisis management according to the variable (gender, educational qualification, the attribute of the respondent, age), at the level of statistical significance 5%.

VI. RESEARCH VARIABLES

VII. RESEARCH METHODOLOGY

To achieve the objectives of the research, the descriptive approach was used, which describes the phenomenon under study and interprets the relationship between the research variables according to the following:

The descriptive side: through reading Arab and foreign books, periodicals, and research related to crises, crisis management, crisis management strategies, and crisis management planning.

The analytical aspect: A questionnaire was designed to find out the modern strategies used for crisis management, and their impact on crisis management planning, then apply them to the research sample, tabulate and analyze this data using the appropriate statistical treatments in SPSS V.18 to reach the results

VIII. DATA COLLECTION TOOLS

The research relied on a questionnaire prepared by the researcher, addressed to the university presidency and its administrative units, to find out the modern strategies for crisis management, and their impact on crisis management planning

IX. RESEARCH PARAMETERS

- First: Spatial Parameters: The research was conducted at the University of Idlib.
- Second: Time Parameters: The research was applied in 2022.
- Third: Institutional Parameters: The research was limited to the directorates and offices of Idlib University.
- Fourth: Capacity Parameters: Employees in the directorates and offices of the University of Idlib

X. RESEARCH COMMUNITY AND SAMPLE

The research community includes the directorates of Idlib University and its offices, which number (10) directorates (University of Idlib, 2022), and the number of employees in it is (75) employees (University of Idlib, 2022), while the research sample has been using the sample law (n=x2Np(1-p)/e2(N-1)+X2P(1-P)), and from the tables of Craigsey and Morgan were determined. Hence, the population whose size is (75) is single; its sample is (63) single (Crigsey and Morgan, 1970, p. 610). (3) questionnaires were excluded because the employees did not respond to the researcher, so the research sample was 60 employees [7] [8].

XI. TERMINOLOGICAL AND PROCEDURAL DEFINITIONS

Crisis: A critical period or unstable situation awaiting decisive change.

Crisis Management: how to overcome crises with various scientific and administrative tools, control their pressure, course, and trends, avoid their negatives, and benefit from their positives.

Modern Strategies for Crisis Management: These are non-traditional methods and strategies that align with the spirit of the contemporary era, utilised in crisis management.

Crisis Management Planning: It is an organised and continuous process subject to elaborate controls that takes place in advance of the expected timing of potential crises.

XII. LITERARY REVIEW

1. A study (Ayad, 2015) entitled (The Impact of Using Modern Strategies in Crisis Management on the Marketing Performance of Local Banks in the Gaza Strip.

The goal of the study was to investigate the impact of contemporary crisis management tactics on the marketing success of publicly traded local banks in the Gaza Strip. The study's key findings include a discrepancy between the importance of using contemporary crisis management techniques in the banks under study due to the nature of those techniques, where the strategy for preventing the crisis from starting in the first place and the strategy for breaking it upcoming last, the strength of the correlation between the independent variables, and the presence of a significant effect. The statistical significance of current crisis management strategies (altering course, mobilising reserves, defusing the crisis, breaking up the crisis, and containing the crisis) on marketing outcomes (creating services and products, realising profits, and increasing market share) in the banks under investigation. The use of either strategy—changing the crisis's trajectory or breaking it up—had no statistically significant impact on how well local banks performed in their marketing. It is possible to conclude that the application of alternative tactics affects the advertising efficiency of local banks operating in the Gaza Strip in a statistically significant manner.

2. A study (Al-Derawi, 2020) entitled (Strategic Planning and Its Relationship to Crisis Management)

This study aimed to investigate the interaction between crisis management and strategic planning at the Al-Amal Institute for Orphans in the Gaza Strip. The degree of risk in decision-making, the amount of medium-term strategic planning, the strategic planning's contribution to problem-solving, and the absence of employee involvement are all barriers to problem-solving [15].

3. A study (Abu Halima, 2013) entitled (The Role of Strategic Planning in Crisis Management.

Among the most important findings of the study is the practice of strategic planning at a high level. Among the obstacles to strategic planning are the lack of financial resources, inadequate administrative support, and frequent staff turnover. The study has also demonstrated that the degree of practice in strategic planning for crisis management varies by gender, with males being more likely to engage in this practice. There is no difference due to the nature of the work variable (employee vs. volunteer).

4. A study (Samaneh and Al-Khaddam, 2016) entitled (Crisis Management Methods and their Relationship to Strategic Planning in the Jordanian Ministry of Interior) [14]

At the Jordanian Ministry of Interior, the study aimed to identify crisis management techniques and their connection to strategic planning (JMI). One of the study's most significant findings is the existence of variations in the estimates of administrators working in the Ministry of Interior related to the gender variable (in favour of males); this finding has been utilised to guide the development of crisis management techniques (escape, containment, confrontation, cooperation). The variables of educational background and years of experience, as well as the high level of administrator involvement in strategic planning processes, with a relative weight of 84.82%, do not differ significantly. Due to the gender variable working in favour of men, there are disparities in people's interest in strategic planning procedures.

5. A study (Nour Al-Daeem, 2015) entitled (The Impact of Management Information Systems on Crisis Management)

The goal of this study is to evaluate the impact of management information systems on crisis management on the performance and continuity of business organisations. The research's most significant findings include the absence of a crisis management system in the factory, which hurts the crisis' resolution, the absence of a crisis management system in the factory's various stages, and the existence of a link between the success of systems management information and crisis management in the factory [16].

6. A study (Baubion, 2013) entitled (Strategic Crisis Management)

The research aims to identify crises and their risks to institutional performance, as well as methods for managing and confronting crises, and effective ways to manage them. The research concluded that crisis management requires several key elements to succeed, including planning, follow-up, and evaluation at each stage of the process.

7. A study (Austino, O., 2014) entitled (Crisis Management to ensure effective and continuous performance)

The research focused on crisis management and concluded that the effectiveness of performance within an organisation is influenced by the crisis management process and the importance of having a team capable of managing crises efficiently. The study emphasized that the survival and continuity of the organization depend on the efficiency of crisis management, as some crises may harm the reputation of the organization, and the need for the crisis management team to have plans, policies, and strategies for managing the crisis, as well as for it to have complete information that enables it to manage the crisis.

XIII. THEORETICAL APPROACH TO CRISIS

1. Concept of Crisis

The concept of crisis is commonly used in all journals, as well as in our daily lives. This has led to the difficulty in developing a comprehensive definition of crisis, due to the vast amount of studies published during the past years on the meaning of crisis, which tried to address this meaning from its various angles (Ben Jameh, 2010, p. 9) [10]. Webster's dictionary defines a crisis as a critical period or an unstable state awaiting a decisive change (Mazloum, 2012, p. 4). A crisis is also described as an unexpected and sudden event that threatens the organization's operations and leads to disruption of the organization's reputation (Coombs, 2007, p. 164) [17-26].

2. The Concept of Crisis Management

The term crisis management is part of the modern terminology that has emerged in the context of internal and international dealings. This term has been constrained by traditional concepts that governed relations at various levels.

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Until the end of World War II, the term was further developed due to its close association with various affairs. Crisis management has garnered significant concerns from the international community and its methods of dealing with crises (Maryam, 2019, p. 13). The definitions of crisis management have proliferated due to the multiplicity of concepts and the divergence of viewpoints.

Margaret defined it as the application of strategies designed to help an organization in which an adverse event, suddenly occurred, as a result of an unpredictable event, or as an expected result of some events that constituted a potential danger, which necessitates that decisions be taken quickly to limit the damage to the organization (Margaret, 2013, p3). Crisis management is also known as overcoming crises with scientific tools, controlling their pressures, paths, and directions, and mitigating their negative aspects while benefiting from their positive aspects.

3. Crisis Management Strategies

These strategies emerged as a result of the developments witnessed by the administrative entity, due to the diverse types, forms, and nature of crises, and are more effective than traditional strategies, aligning with the spirit of the times and its requirements. Among these modern strategies:

4. Crisis Fragmentation

It is used in dealing with crises of magnitude and severity, through detailed and accurate knowledge of the factors causing the crisis, identifying conflicting interests and potential benefits, and then dividing the impact of the crisis into multiple solvable parts Containing the Crisis: It is besieging the crisis or confining it to a limited scope, freezing it at the stage it has reached, absorbing the pressures it generates, and then losing its destructive power. (Al-Deeb, 2012, p. 22) [4] [6].

Changing the Path of the crisis: This strategy is used when exposed to severe crises, the escalation of which cannot be stopped, by changing its course to another, more effective field.

The mobilisation reserve: Weaknesses and sources of crises are identified, allowing for the formation of a preventive mobilisation reserve that can be utilised in the event of a crisis. This strategy is often used in industrial organizations when a situation in raw materials or a shortage of liquidity occurs (Ahmed, 2012, p. 42) [2].

5. Crisis Exhausting from its Content:

It is also called "abortion of thought". The crisis revolves around specific content. Therefore, without agreement on this content, it is difficult to maintain the pressure that drives the emergence of the crisis. Hence, the decision-maker's fundamental task is to empty the crisis of its content (Ayad, 2015, p. 37).

6. Formation of Work Teams:

It is one of the most common strategies used to deal with crises in our present time, as a result of the complex and intertwined relationships and factors driving and stimulating the crisis, as it requires the presence of more than one expert, specialist, and technician in different fields, so that each of the factors is calculated, and the required behavior is determined. To address it, an integrated work team is typically formed, consisting of several experts and specialists in various disciplines related to the crisis, to discuss areas and ways to deal with it, and to develop a comprehensive, well-researched, and meticulously planned action plan (Al-Khudairi, 2003, p. 294).

7. Democratic Participation

When a crisis involves people or has a strong human component, it is employed. This approach entails involving the employer and subordinates in an open, democratic disclosure of the situation, its severity, and a plan for addressing it (Ahmed, 2012, p. 42).

8. The self-destruction of the crisis and its detonation from the inside

is used in the absence of information, and the certainty that there is no alternative, and herein lies its danger. This crisis is dealt with (Al-Khudairi, 2003, p. 305) [3] by striking the crisis from its weak sides with a severe strike, attracting some elements of the movement and pushing it to the crisis, eliminating the main aspects of the crisis, finding new leaders who are more understanding..

9. False Abundance

In this context, the psychological method is used to cover up the crisis, such as the loss of food supplies. During the crisis, the decision-maker resorts to providing these materials, albeit temporarily. Based on the foregoing, the researcher focused in her study on the most successful modern strategies for facing crises that were agreed upon by the researchers (Al-Naji, 2012, p. 38) [9]. These modern strategies are: Crisis Fragmentation, containing the crisis, changing the path of the crisis, mobilising reserves, Crisis Exhaustion, and forming work teams.

10. Crisis Management Planning

Crisis management planning is defined as an organized and continuous process that is subject to elaborate controls that take place early before the expected timing of potential crises (Salama, 2019, p. 148)[13]. Planning is considered a basic requirement in crisis management (Ahmed, 2012, pp. 50-49):

1- Facilitation of the planning process and its timetable, and review of plans drawn up by managers along the line of authority to ensure their sincerity and non-conflict between them.
2- Studying environmental factors, forecasting, diagnosing their current and potential effects on the organisation, and linking goals, capabilities, constraints, and available opportunities within the organisation, as managers often lack sufficient skills to make such predictions.
3- . Identify strategic problems and develop alternative solutions to address them.
4- Continuous evaluation of the organisation's strategy, based on planning and control information, enhances the quality of decision-making.

Therefore, the successful management of a crisis begins with well-planned planning, taking into account the setting of goals, ensuring that the individuals around the crisis understand its various dimensions taking into account accuracy when making decisions, in addition to preparing multiple scenarios to confront and solve the crisis (Ahmed, 2012, p. 52).

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11. Management information systems and crisis management:

Information technology is utilised in crisis management in various ways, including rapid response to the crisis, providing electronic information and scenarios, and, in particular, by making information systems, such as decision-support systems, readily available. As a result of this advancement in information systems, a specific problem or crisis has emerged as the foundation for advanced planning to support decision-making in crisis handling reviews, by developing simulation and prediction models that aid in making the correct decision at the right time. Information will therefore continue to be the primary tool for decision-makers. As information industry technology advances and its methods of transmission and circulation dramatically increase, this will significantly aid in making the best decisions quickly to handle crises (Tashtoush, 2020, p. 15).

12. The role of management information systems in facing the crisis:

Crises occur in organizations due to the failure of the decision-maker to predict crises, due to the lack of sufficient information about the organization; thus, the role of management information systems in helping the decision-maker to avoid crises (Adwan, 2019, p. 48):

- Determine the indicators that predict the occurrence of the crisis through various information.
- Identify crises or predict the possibility of their occurrence.
- Preparing estimates of the potential risks and threats of the crisis.
- Preparing a work team to face the crisis with experience and training in the field of crises.
- Maintaining the flow of information to the crisis management centres in the organisation to make the appropriate decisions to face the reactions.
- Information plays an essential and effective role in modifying previously prepared plans to confront the crisis and its developments.
- Participate in preparing alternatives and identifying the appropriate alternative for decision-making in the face of the crisis.
- Contribute to updating the basic information base of the various crisis management centres.
- Analysing the causes of the crisis and benefiting from the results in facing future crises.

(Salama, 2019, p. 152) believes that there is a vital role for management information systems of all kinds in facing crises through the following stages:

1. Pre-crisis stage:

The role of management information systems at this stage is represented by the following:

- Contribute to defining the organization's general policy and objectives.
- Contribute to the preparation of estimates of the potential risks and threats of the crisis.
- Contribute to identifying crises or predicting the possibility of their occurrence.
- Building appropriate information bases for each type of crisis that the organization faces.
- Contribute to identifying the indicators that predict the occurrence of the crisis through various information sources.

- Contribute to the preparation of a work team to face the crisis with experience and training in the field of crises.

2. The stage of the crisis:

The role of management information systems at this stage is represented by the following:

- Maintaining the flow of information to the crisis management centres in the organisation to make the appropriate decisions to face the reactions.
- Assist in reaching experts and consultants with specialisations relevant to the crisis.
- Information plays an essential and effective role in modifying pre-prepared plans to confront the crisis and its developments.
- Participate in preparing alternatives and identifying the appropriate alternative for decision-making in the face of the crisis.

3. Post-crisis phase:

The role of management information systems at this stage is as follows:

- The company can update the basic database of the numerous crisis management centres thanks to information systems.
- Assistance with the analysis of the crisis, the causes of its occurrence and drawing up results for future use.
- Assistance in the identification of deviations related to the face of the crisis and the possibility of correcting them to face similar future crises.

4. Phases of crisis management according to management information systems plans:

The phases of crisis management are divided according to the plans developed in management information systems (Adwan, 2019, p. 49) [5]:

- The phase of discovering early warning signals refers to the events that predict the occurrence of crises. It includes (research and analysis of events that may lead to the occurrence of crises, and interest in events that may be influential in the occurrence of crises.
- Preparedness and prevention phase: Refers to the stage of advanced preparation to avoid crises and deal with them if they occur.
- Damage containment phase: refers to the procedures followed after the occurrence of crises and includes (modern technologies, appropriate distribution, provision of financial needs, and means of communication).
- Recovery phase: Refers to the procedures followed to complete the business after the occurrence of crises, and includes (an informational message to the customer audience, taking the necessary measures for the activity, and providing financial and humanitarian support).
- Learning phase: Evaluating what has been accomplished in crises (taking advantage of lessons from previous crises, identifying strengths and weaknesses, and continuous evaluation).

XIV. PRACTICAL APPROACH

Description of the characteristics of the research sample in terms of (gender, academic qualification, respondent's character, and age).
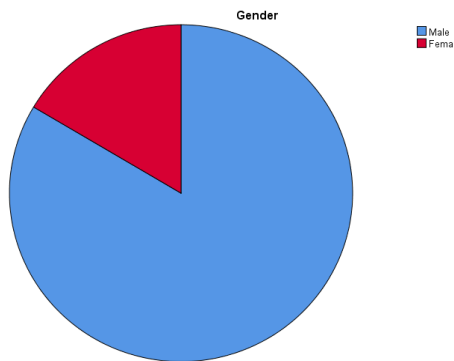

Figure (1): Distribution of sample items by gender

Figure (1) shows that 85% of the research sample are males and 15% are females. The researcher explains that the nature of some jobs in the directorates requires more male employees than females, such as the Directorate of Engineering and Transportation, the Directorate of Internal Control, and the Directorate of Publications.
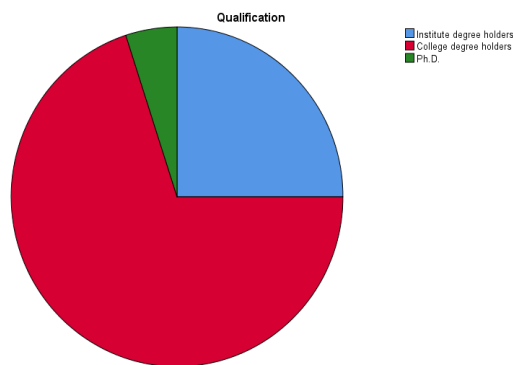

Figure 2: Distribution of the sample according to the educational qualification

Figure (2) shows that (25%) of the study sample hold an institute degree, (70%) have a university degree, and (5%) have a Ph.D. The researcher explains that the administrative staff in the administrative units are typically holders of an Institute or university degree, as master's and doctoral holders are often employed as teachers at the university.
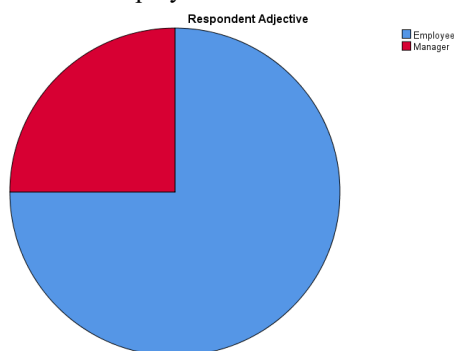

Figure (3): Distribution of the samples according to the characteristics of the work

Figure (3) shows that (45%) of the research sample are administrative employees, and (15%) are managers. The researcher explains that it is normal for the number of

administrative employees to exceed the number of managers, as each directorate typically has one manager and several administrative staff.
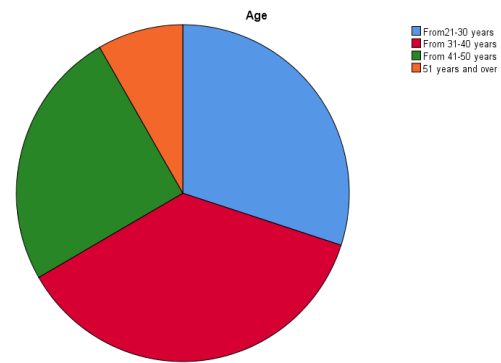

Figure (4): Distribution of sample items by age

Figure (4): The most significant percentage of the research sample ranges between the ages of 40 31 years, and the lowest percentage of the research sample is over 51 years old. The researcher explains that when the university announces vacancies, specific age requirements are specified. Additionally, when hiring fresh graduates, those graduates are typically young.

Calculating the arithmetic means and standard deviations of the research variables: The following table shows the results of the descriptive statistics related to the research variables.

Table (1): Means, Standard Deviations, and Relative Importance of Research Variables

Parameters	Arithmetic average	standard deviation	Relative importance
Modern strategies for crisis management	4.3224	0.37459	86.4%
Crisis Fragmentation	4.3625	0.56827	87.2%
Crisis Containment	3.8875	0.87142	77.7%
work teams	3.5667	0.87074	71.3%
Crisis dump	3.6375	0.90599	72.7%
tactical reserve	3.5250	1.00286	70.5%
Changing Path Strategy	4.0917	0.71599	81.8%
Crisis management planning	3.3333	0.90393	66.6%

Table 1 shows that all the values of the arithmetic averages for the modern strategies for crisis management are greater than 3, which is the neutral value, indicating a positive follow-up of contemporary strategies for crisis management. The strategy most followed was the strategy of Crisis Fragmentation, followed by the strategy of Changing Path, followed by the crisis containment strategy, then the crisis relief strategy, then the work teams, and finally the mobilization reserve strategy, which cannot be finally resolved, due to its nature or the lack of availability of the material and human capabilities necessary to deal with it.

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Normal Distribution Test

To determine if the data had a normal distribution, the researcher employed the Kolmogorov-Smirnov test. To validate the research hypotheses, we use parametric tests (ANOVA) if the probability value of the sig data is greater than the significance level (0.05). Still, if it is less than 0.05, the data do not follow a normal distribution, in which case we use nonparametric tests (Kruskal-Wallis). The following table illustrates the test for the normal distribution of the research variables.

Table 2: Results of the standard distribution test

Parameters		Probability value
The first Parameter: modern strategies for crisis management	Crisis Fragmentation	0.279
	Crisis Containment	0.161
	Crisis dump	0.141
	Changing Path Strategy	0.150
	tactical reserve	0.133
	work teams	0.221
The second Parameter	Crisis management planning	0.186

Table (2): The probability value of the two approaches of modern strategies for crisis management and planning for crisis management is greater than 0.05, and therefore the data follows a normal distribution.

Research Hypotheses Test:

Testing the first central hypothesis: There is no statistically significant effect of modern crisis management strategies on crisis management planning, at a statistical significance level of 5%. The researcher employed a multiple regression test to examine the impact of modern crisis management strategies on crisis management planning. The following table shows the results of the correlation coefficient and the coefficient of determination between the research variables.

Model	correlation coefficient	The coefficient of determination	Modified coefficient of determination	standard error of the estimate
1	0.771[a]	0.594[b]	0.548	0.60747

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a. The independent variable: modern strategies for crisis management.

b. The dependent variable: crisis management planning.

Table (3): The results of the correlation coefficient and the coefficient of determination between the search variables

Table (3): Pearson correlation coefficient between the dependent and independent variables, where it reached an above-average value (0.771), with a determination coefficient value (0.594), and a mean determination coefficient value (0.548), i.e. the independent variables explain 54.8% of the variance in crisis management planning.

The following table shows the results of the ANOVA analysis of the search variables:

source of contrast	sum of squares	degrees of freedom	medium square	F value	Moral	Statistical significance
Between groups	28.650	6	4.775	12.940	0.000[b]	Statistically function
Within groups	19.558	53	0.369			
Total contrast	48.208	59				

a. The independent variable: modern strategies for crisis

management.

b. The dependent variable: crisis management planning.

Table 4: Results of the ANOVA analysis of the research variables

Table No. (4): Results of ANOVA analysis for testing the significance of the regression, and we note that the value of sig is equal to (0.000), which is less than (0.05) statistically significant, i.e. the regression is significant, and therefore there is an effect of the independent variables on the dependent variable, and we can predict the dependent variable through these independent variables. The researcher explains that the presence of work teams specialised in crisis management, containment, breaking down the crisis into manageable parts, and implementing preventive precautions all undoubtedly contribute to effective crisis management planning. Thus, "we accept the alternative hypothesis", which says: There is a statistically significant effect of modern crisis management strategies on crisis management planning at a statistical significance level of 5%.

We reject the first central hypothesis, namely: "There is no statistically significant effect of modern crisis management strategies on crisis management planning at the level of 5% statistical significance."

Testing the second central hypothesis: There are no statistically significant differences in the perception of the research sample members of the modern crisis management strategies used in crisis management planning according to the variable (gender, educational qualification, respondent's character, age), at the level of significance of 5%.

To confirm this hypothesis, a T-test for independent samples was conducted. The following table depicts the results of the independent samples test by gender:

Table (5): Independent samples test results by gender

Gender	Amount	Arithmetic average	Standard deviation	T-value	Probability value	Statistical significance
Male	51	4.3216	0.36550	0.037	0.971	Statistically non-functional
Female	9	4.3273	0.44705			

Table (5): According to the results of the (T) test, the standard deviation for the average male response to contemporary crisis management tactics is equal to (4.3216), and for the average female response, it is equal to (4.3273), with a standard deviation of (0.44705). (0.037). There are no statistically significant differences between the average responses of the respondents about contemporary crisis management strategies by gender, as indicated by a probability value (0.971) greater than the level of significance (0.05), which means that the difference is not statistically significant. To accept the null hypothesis regarding the gender variable, which states that there are no statistically significant differences of 0.05 between the averages of the respondents' responses about contemporary crisis management strategies according to the gender variable at the level of significance of, the researcher explains that the work of females with males in the same administrative unit leads to this indicating that they follow the same crisis management strategies at the level of significance of 5%.

The following table shows the results of the Levene test by educational qualification:

Table (6): Levene test results by academic qualification

Levene value	degrees of freedom	Moral	Statistical significance
0.583	2	0.561	Statistically non-functional

Table (6) shows that the probability value of sig is equal to 0.561, which is greater than 0.05, indicating that the variance is homogeneous, so we do the parameter test (ANOVA).

The following table shows the results of the ANOVA test by academic qualification:

Table (7): ANOVA test results by academic qualification

source of contrast	sum of squares	degrees of freedom	medium square	F value	Moral	Statistical significance
Between groups	0.139	2	0.070	0.488	0.616	Statistically non-functional
Within groups	8.139	57	0.143			
Total contrast	8.279	59				

Table (7) shows: that the probability value (0.616) is greater than (0.05), and it is considered not statistically significant, and therefore we conclude that there are no statistically significant differences between the average responses of the respondents about modern strategies for crisis management according to the academic qualification at the level of significance of 5%, The researcher explains this to the fact that most of the employees in the administrative units hold university degrees.

As a result, "we accept the null hypothesis regarding the educational qualification variable," which states: "At the level of significance of 5%, there are no statistically significant variations between the averages of the respondents' comments about modern tactics for crisis management." The following table shows the results of the Levene test according to the characteristics of the respondent.

Table 8: The results of the Levene test according to the variable of the respondent's characteristic

Levene value	degrees of freedom	Moral	Statistical significance
0.478	2	0.623	Statistically non-functional

Table 8 shows that the probability value is equal to 0.623, which is greater than 0.05.

The following table shows the results of the ANOVA test according to the respondent trait variable:

Table (9): Results of the ANOVA test according to the characteristics of the respondent

source of contrast	sum of squares	degrees of freedom	medium square	F value	Moral	Statistical significance
Between groups	0.104	2	0.052	0.363	0.697	Statistically non-functional
Within groups	8.174	57	0.143			
Total contrast	8.279	59				

Table (9) shows: that the probability value (0.697) is greater than (0.05), and it is considered not statistically significant, and therefore, we conclude that there are no statistically significant differences between the mean of the sample responses on modern strategies for crisis management according to the respondent's characteristic at the level of significance of 5%. The researcher explains this as the fact that most of the employees in the administrative units have the same job description.

Thus, "we accept the null hypothesis regarding the variable of the respondent's quality", which says: There are no statistically significant differences between the averages of the respondents' responses on modern strategies for crisis management according to the variable of the respondent's quality at the level of significance of 5%.

The following table also shows the results of the Levene test by age:

Table 10: Levene test results according to the age variable

Levene value	degrees of freedom	Moral	Statistical significance
0.706	2	0.498	Statistically non-functional

Table (10) shows that the probability value is equal to (0.498) greater than (0.05), and it is considered not statistically significant, that is, the variance is homogeneous, so we do the parameter test (ANOVA).

The following table shows the results of the ANOVA test by age:

Table (11): ANOVA test results by age

source of contrast	sum of squares	degrees of freedom	medium square	F value	Moral	Statistical significance
Between groups	0.003	2	0.001	0.010	0.990	Statistically non-functional
Within groups	8.276	57	0.145			
Total contrast	8.279	59				

Table (11): We conclude that there are no statistically significant differences between the average responses of respondents regarding modern strategies for crisis management, according to age, at a significance level of 5%. Therefore, the researcher indicates that the ages of employees in the administrative units are similar. The probability value (0.990) is greater than 0.05, which is considered not statistically significant. Therefore, "we accept the null hypothesis regarding the age variable," which states that: "At the 5% level of significance, there are no statistically significant differences between the averages of the respondents' responses to modern strategies for crisis management".

We accept the second central hypothesis: There are no statistically significant differences in the perception of the research sample members of the modern crisis management strategies used in crisis management planning according to the variable (gender, educational qualification, respondent's character, age), at the level of significance of 5%.

XV. CONCLUSION

Information and communication technology plays multiple roles in the field of crisis management, including quickly reaching the crisis, providing electronic information and scenarios, and facilitating the availability of various information systems, as well as the specific crisis assessment determined by the specialist according to the criteria set by the decision-maker. As a result of this development in information systems, it has become the basis for advance planning to support decision-making in the stages of dealing with the crisis, by devising prediction and simulation models that help in making the appropriate decision at the right time, so information will remain the basic support for decision-makers and makers, while improving and stimulating The organization's communication movement, the formulation and implementation of the organization's strategies, and information and communication technologies allow quick access for all employees to all valuable information for their tasks, and are associated with great opportunities for individual and group learning via the internet.

FINDINGS

1- The effect of modern crisis management strategies on crisis management planning is statistically significant.
2- The most modern strategies followed are the strategy of Crisis Fragmentation, followed by the strategy of Changing Path, then the strategy of containing the crisis, then the strategy of Crisis Exhaustion, then the work teams, and finally the strategy of the tactical reserve.
3- There are no statistically significant differences between the mean responses of the respondents about the modern crisis management strategies used in planning crisis management according to the variable (gender, educational qualification, respondent's character, age), at the level of significance of 5%.

RECOMMENDATIONS AND SUGGESTIONS

1- Forming work teams for crisis management in colleges with expertise, and providing them with the necessary material and human support.
2- Diversifying the application of modern strategies for crisis management, in a manner appropriate to the type of crisis.
3- Spreading the culture of crisis management among employees, to encourage them to take the initiative in resolving them, or to suggest solutions.
4- The existence of a comprehensive database of the university about everything that happens, and updating this database continuously, to rely on it to predict the occurrence of crises, and plan for managing such crises.

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REFERENCES

1. Abu Halima, Aziza Suhail, The Role of Strategic Planning in Crisis Management, Higher Education Diploma. Islamic University of Gaza (2013).
2. Ahmed, Abdullah. Strategic Planning for Crisis Management. Master's Thesis, Mohamed Kheidar University, Biskra (2012).
3. Al-Khudairi, Mohsen Ahmed, Crisis Management,1st edition, Arab Nile Group, Cairo(2003).
4. Al-Dulaimi, Muhammad Abdul-Razzaq, Media and crisis management, first edition, Amman, Dar Al Masirah for publishing, distribution and printing (2012).
5. Al-Dulaimi, Abdul-Razzaq, Public relations and crisis management, Al-Yazuri Scientific House, (2019).
6. Al-Deeb, Suleiman, Salama Suleiman, The reality of the use of crisis management methods in the Palestinian Contractors Union in Gaza Governorate, Master's thesis, Faculty of Economics and Administrative Sciences, Al-Azhar University, Gaza, Palestine (2012).
7. Al-Dirawi, Ayman Hassan, Strategic Planning and Its Relationship to Crisis Management, Journal of Economics and Finance, Al-Aqsa University 6 (2) (2022).
8. Al-Sairafi, Muhammad, Crisis Management,1st edition. Horus International Foundation for Publishing and Distribution, Alexandria (2006).
9. AL-Naji, Fahd Ali, The Impact of Modern Crisis Management Strategies on Marketing Performance: A Field Study on Human Pharmaceutical Industrial Companies in Greater Amman, Master's Thesis. Faculty of Business, Middle East University, Amman, Jordan (2012).
10. Ben Jameh, Lamia, The European Union's Strategy in Managing Middle East Crises - The Palestinian Issue as a Model, an unpublished master's thesis, Biskra University (2010).
11. Idlib University, Introduction to the University of Idlib, Directorate of Administrative Affairs (2022).
12. Idlib University, Statistics of members of the teaching staff at the University of Idlib, Directorate of Administrative Affairs (2022).
13. Salama, Muhammad Walid, The Role of Strategic Planning in Crisis Management in Palestinian Governmental Institutions, Arab Journal of Management, 39 (4) (2019).
14. Samaana, Samir, and Hamza Al-Khaddam, Crisis management methods and their relationship to strategic planning in the Jordanian Ministry of Interior, Security Research Journal, 25 (63) (2016).
15. Tashtoush, Hayel Abdel Mawla, Information systems and their role in managing economic crises, Sharkia University, (2020).
16. Abdul Razzaq, Moataz Salman, Crisis management and information systems, the extent of influence and effectiveness, Baghdad College Journal of Economic Sciences, 28 (2011).
17. Abbas, Sondos Ali Muhammad, A comparison between some parametric and non-parametric tests in completely randomized sectors. Karbala University, (2018).
18. Adwan, Muhammad Samih Gomaa, The effectiveness of management information systems and their role in improving crisis management - an applied study on the ministries of social development and labour in the Gaza Strip, master's thesis. Al-Azhar University – Gaza (2019).
19. Ayad, Louay Selim, The Impact of Using Modern Strategies in Crisis Management on the Marketing Performance of Local Banks in the Gaza Strip, Master's Thesis. The Islamic University of Gaza (2015).
20. Maryam, my son, Crisis Management Strategy in the Algerian Public Economic Corporation, Master's thesis. University of Kasdi Merbah Ouargla (2019).

21. Mazloum, Muhammad Jamal al-Din, Security Crisis Management - Confronting Natural Disasters, Naif Arab University for Security Sciences, Riyadh, (2012).
22. Nour Al-Daeem, Al-Samani Muhammad Al-Ghali, The Impact of Management Information Systems on Crisis Management by Application to Asalaya Sugar Factory, White Nile College of Science and Technology, (2015).
23. Austino, O., Oparanma, Crisis Management to ensure effective and continuous performance, (2014): https://www.academia.edu/30334340/Crisis_management_to_ensure_effective_and_continuous_performance
24. Baubion, Charles, Strategic Crisis Management, OECD High-level Risk Forum, (2013).
25. Coombs, T., A Protecting Organisation's Reputation During a Crisis: The Development and Application of Situational Crisis Communication Theory, Corporate Reputation, 10(3) (2007). [CrossRef]
26. Margret, Rouse, crisis management plan, USA, (2013).

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