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The use of planning in crisis management and its impact on the educational sector: An analytical exploratory study at the Dor Institute of the Northern Technical University

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ABSTRACT

The educational system in universities has been exposed to several crises, the most recent of which is the Corona crisis, which affected the educational systems followed and the latest change in the education system, which turned to e-learning systems to prevent the spread of the epidemic and preserve the lives of students from infection, so the types and forms of crisis management systems differed in the diversity of planning methods and what it contains From (realistic, comprehensive, coordination, integration, timing, participation, provision of the necessary resources), so the educational administration followed the distance education strategy with the availability of places for social distancing and keeping the geographical space allocated to the university as it is. In order to overcome the problem of availability and wide spaces for study halls and laboratories, various planning methods must be used, as it is possible to use crisis management approaches, given that crises have become an integral part of the fabric of contemporary life, and that the occurrence of crises has become a fact of daily life, and the name of each crisis has become It is associated with a special type of disaster. One of the characteristics of the crisis is entering into a circle of future unknowns that are difficult to know or accurately calculate, given that the real danger of the crisis does not go away or relates to the past and the present only, but is strongly oriented towards what the crisis may lead to in the future, so it required intensive professional training for workers In the field of education, on how to face crises, develop their awareness of the characteristics and nature of the crisis, and develop their skills that must be available in those managing the educational process to enable them to deal effectively with various crises . The study dealt with the correlation and the impact of planning and crisis management on the educational sector by relying on an academic sample of (128) teachers and academic staff.

Keywords: planning, crisis management, educational sector.

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1. Introduction

Planning is the first and basic building block that paves the way for organizing the resources needed to complete the work, as it is the main element for setting general policies and forming the desired goals for the facility and achieving them within a specific period of time, taking into account all future crises and disasters [1, 2]. With the advancement of sciences, including the science of crisis management and predicting the future in order to remedy difficulties and accidents, and technology sciences invaded space and time, the place through the Internet, which contributed to the provision of virtual halls and laboratories, and a temporal invasion possessed tools to get rid of the routine of going back and forth and crowding out others to reach universities [3-6]. As for the educational crisis, it is an exceptional situation facing the educational system. It is necessary to avoid it by taking a quick decision and formulating an alternative plan that faces the challenge affecting that problem [6-7], and that the routine response of the educational institution to this problem is insufficient, so the problem will then turn into a crisis, requiring renewals in the educational administrative organization. In addition, the

administrative methods followed by that organization, which negatively or positively affects the universities [7-9].

1.1. Study methodology

First: The problem of the study
Organizations are currently looking for new mechanisms and alternative ways to confront sudden crises and predict planning to ensure survival, sustainability and growth in the educational process. Therefore, the following questions emerged.
a. Do the study sample members have a clear vision of planning and crisis management?
b. What is the extent of the transformation of traditional education to e-learning?

Second: The importance of the study
The study dealt with a modern concept in planning and crisis management in educational institutions, from its descriptive perspective, it can contribute positively to generating renewable ideas that keep pace with the movement of changes in the world of management. Its outcome can benefit the target educational district to raise the level of universities and adapt to sudden crises.

Third: Objectives of the study
The study aims to provide a theoretical framework on the issue of crisis planning in the educational institution, with a description and diagnosis of the dimensions of planning and crisis management, and measuring the availability of capabilities and resources to make a change in the organization in question.

Fourth: Limitations of the study
Spatial boundaries: Northern Technical University, Technical Institute Al-door
Time limits: implemented during 2022.

Fifth: Methods of data collection
1- Theoretical framework: The researchers relied on modern foreign sources in writing the study.
2- The field framework: the researchers used a questionnaire in collecting data for the variables.

Sixth: The study model

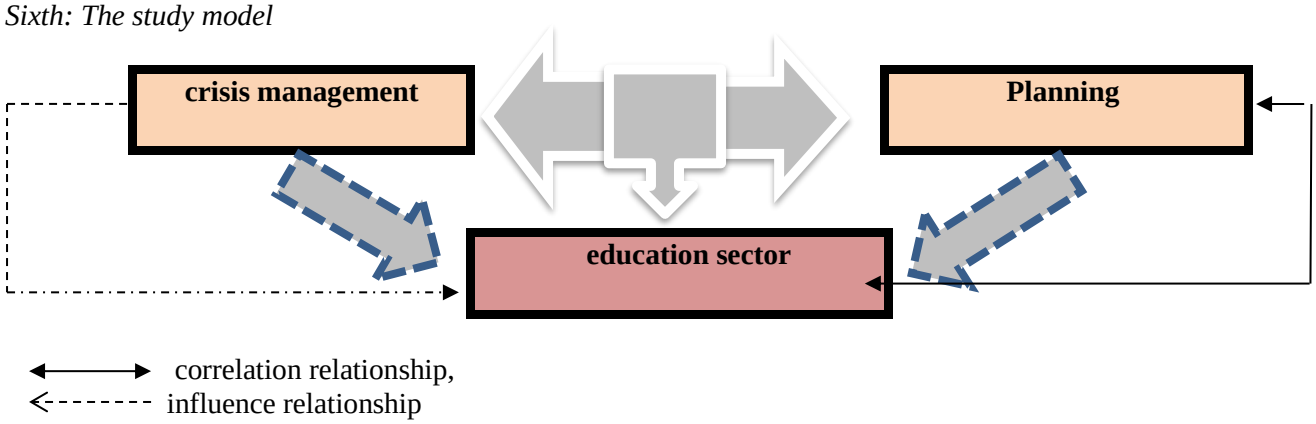

Figure 1. The design of the virtual model prepared by the researchers

The study includes two hypotheses:

The first main hypothesis: from which each of the following branches:
1- There is a significant statistically correlation between planning and the educational sector in the organization in question.
2- There is a significant statistically correlation between the crisis management and the educational sector in the organization in question.
The second main hypothesis: Each of the following is derived from it:
1- There is a significant effect of statistical significance between planning and the educational sector in the organization under study.

2- There is a significant effect of statistical significance between the crisis management and the educational sector in the researched organization. The concept of planning: it defines as one of the important functions because it is the basis on which other functions are established, and planning is the development of a plan to achieve a specific requirement by defining the resources, tasks, procedures and schedules necessary to achieve it, so that the goal expresses the future purpose that the institution seeks to reach and achieve [10-14], Planning includes two ideas in that it determines the organization's future goals and identifies the appropriate means to achieve these goals, and planning is usually by the organization's official as it predicts the risks that can occur in the future and this helps to continue the work for a longer period, and the planning process helps the manager to solve problems and develop strategies To facilitate the work and prepare the appropriate path to achieve the goal in the end [15, 16].
Planning is also defined as "a means of making decisions related to determining the objectives of the institution, and setting the correct path that is used to implement the objectives of the institution, which determines its style and personality, and distinguishes it from other institutions."

1.2. Planning types

1- Strategic planning: It includes long-term plans, which range from five years for small and medium enterprises and more than ten years for large enterprises. This type of planning is characterized by not stagnation to the contents and its flexible ability to deal with these changing contents based on the reality of the situation. This type of planning sets general frameworks, rules, values and strategic goals. Be the one in control and ruler of the plan to leave a wide space for implementation.
2- Tactical planning: it includes medium-term plans, which in small enterprises are from one to three years, while medium enterprises are from three years to five years, and in large enterprises from five to ten years, they are a break from strategic planning and we divide the general goal into detailed goals with less duration and builds This kind of planning on these goals.
3-Executive planning: The executive part of the plan is considered after writing the strategic plan, presenting it to the senior management and approving it to move into implementation. In this space, the institution with the plan is divided into parts that can be analyzed, the reality and the resources required and the measurement indicator for each part set and its objectives are set for a period of less than year.
4- Planning by procedures, programs and tasks: This planning is concerned with the daily procedures. plan for it.
5- Planning by goals: This type of planning is considered one of the best types because it depends on the wide participation of the work team in setting their own goals, so that all these goals are integrated into the plan and vision of the organization so that the plan includes everyone and this is a very important element in achieving the plan because everyone seeks to reach For its purpose and achieving its goals within the goals of your organization, and Figure No. (2) shows the planning steps in the educational sector.

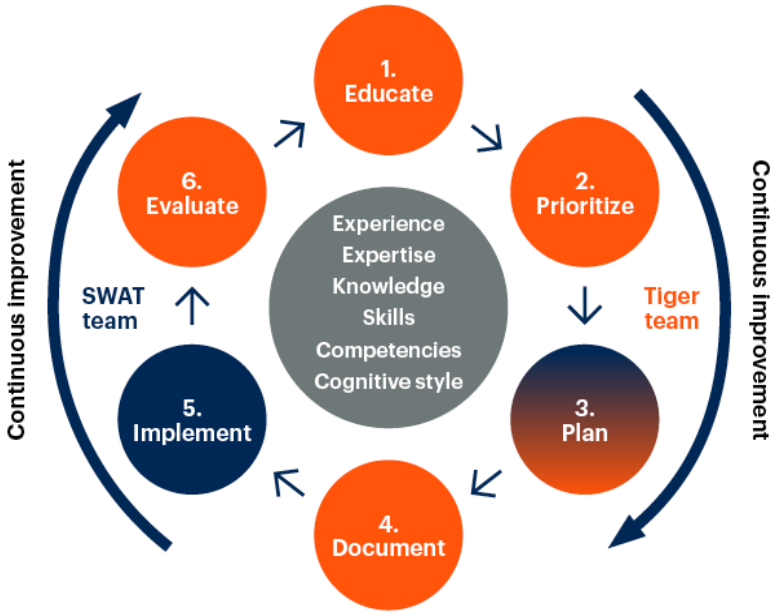

Figure 2. It shows the steps and stages of planning in education sector

1.3. Crisis management concept

The crisis is "an extraordinary turning point, an emergency event in the life of the organization that loses balance, stops its normal behavior in a way that is difficult to predict, and its intertwined dimensions for others, the extent to which it is benefited, and the management's ability to face the difficulties resulting from it materially and morally, and control it before it turns into a permanent problem that increases his work events over time and threatens the life of the organization"[17-19] . In [20], they define the crisis as "a critical and decisive moment related to the fate of the administrative entity that was afflicted with it, thus creating a severe difficulty for the decision-maker that makes him extremely perplexed, any decision taken in light of a malicious circle of uncertainty, lack of knowledge and the mixing of causes with results and the collapse of each of them successively To increase the degree of uncertainty about the developments that may happen in the future of the crisis and the crisis itself. Procedural definition of educational crisis management: It is a management method that aims to predict crises that may occur within the institution, and deal with them properly as soon as they occur. Specific methods of communication that ensure control and control over events. And with a plan in place before the crisis occurs, which must include preparation, preparations and continuous training to deal with the various types of crises, so there must be a preventive plan to anticipate these disasters and crises, so that there are trained teams to deal with them.

1.4. Crisis stages and management

The shock stage: It is that situation that is formed as a result of ambiguity and leads to confusion and a feeling of bewilderment and disbelief of what is happening, and it is a stage that is inversely proportional to the extent of human knowledge and awareness [21, 22].

The stage of decline: This stage occurs after the occurrence of the shock, and signs of confusion and confusion begin to appear increasingly, accompanied by symptoms, including an increase in the volume of useless work (chaotic works) [23-25].

The stage of recognition: Here is the rationality of thinking - after absorbing - the shock, as a process of wide awareness and review of the crisis begins in order to dismantle it [26, 27].

Adaptation stage: where fixed strategies and methods are used, in addition to the use of human and material resources in the organization to deal and mitigate the effects of the necessary. Unless intelligent and careful handling is done at this stage, things will head towards catastrophe. It may be called the early warning stage or the stage of discovering danger signals, and in this sense, it is the first steps of crisis management, followed by a set of preventive methods and certain scenarios that follow up on the events of the crisis and define for each individual in the crisis team, his role very clearly. It creates working methods that limit the damage and prevent it from spreading [28-30].

2. The practical side

Description of the study sample: The study sample included the Northern Technical University/Al Dour Technical Institute, where an electronic questionnaire was distributed to the faculty and staff at the Institute, and 128 questionnaires were retrieved. The researchers used the simple random sampling method in distributing questionnaire forms to academic circles, assuming that the community is homogeneous.

Statistical Indicators:

In the statistical analysis, the researchers relied on the data and information obtained from the study according to the five-point Likert scale.

1- Frequencies and percentages: to find out the number and percentage of respondents within the study sample.

2- Weighted arithmetic mean: It is used to find out the degree of agreement of the researched sample to the questions.

3- Standard deviation: It is used to determine the extent to which the answers of the researched sample are dispersed from the degree of agreement.

4- Person correlation coefficient: It is used to measure the extent to which the research variables are related to each other and to determine the type of relationship, is it direct (positive) or inverse (negative).

5- F-test: It is used to find out the effect of the independent variables in the study on the dependent variable.

6- Simple regression equation: It is used to determine the extent of the influence of the independent variable on the dependent variable.

It is worth noting here that all these indicators have been calculated by the Statistical Package for Social Sciences (SPSS).

Second: the demographic variables of the study

Table 1. Frequencies and percentages of demographic variables

Number of years of service			
		No. of repetition	**Percentage %**
Valid	**5-1**	38	%30
	10-6	10	%12
	15-11	28	%20
	20-16	30	%24
	25-21	4	%0.03
	More than 25	18	%14
	Total	128	%100
Age			
Valid	**34-25**	52	%40
	44-35	40	%31
	54-45	26	%21
	More than 55	10	%8
	Total	128	%100
Sex			
Valid	**Male**	72	%56
	female	56	%54
	Total	128	%100
Academic achievement			
Valid	**Diploma**	22	%17.2
	Bachelor's	20	%15.6
	Master's	60	%46.9
	PhD	13	%20.3
	Total	128	%100

We note from Table 1 the following:

The age group 25-34 is the most fortunate in the number of recurrences, as the number of recurrences reached 52 by 40% of the sample of the studied study, and the male component is the majority with a recurrence number of 72 at a rate of 56%, while the category of service years 1-5 years with a recurrence number of 38 and a percentage amounted to 30%, and with regard to academic achievement, the rate was 46.9% with the number of recurrences of 60, which indicates that the youth ages of males who obtained a master's degree and who have years of experience ranging from 1-5 years are the influential group in the study.

Table 2. The variables of the special study for planning

No.	**Planning**	**Arithmetic mean**	**Standard Deviation**	**Frequencies**	**%**	**Answer**
1	The educational institution has a plan to achieve the goal and mission	3.75	1.108	40	31.1	Strongly agree
2	Plans are built according to a specific schedule and within a database	3.77	.984	40	31.3	Agreed
3	Existence of scientific and field studies to address past failures and find appropriate solutions to avoid them in the future	3.63	1.072	44	34.4	Agreed
4	Availability of laws and legislation to work in the educational institution	3.86	083	50	39.1	Agreed

No.	Planning	Arithmetic mean	Standard Deviation	Frequencies	%	Answer
5	Involve representatives of the academic community with competence to develop the educational institution	3.81	.954	48	37.5	Agreed
6	The educational institution compares its performance with the rest of the international educational institutions.	3.41	1.118	38	29.7	Agreed
7	Having documented financial plans to be implemented in the event of crises	3.45	1.203	36	28.1	Agreed
8	Provides adequate infrastructure that is continuously maintained	3.52	1.304	38	29.7	Agreed
9	Developing and updating the curricula in line with the continuous development	3.88	1.057	44	34.4	Strongly agree
10	Training and development of staff to keep pace with continuous scientific development	3.95	1.086	56	34.8	Strongly agree
11	To ensure the production of an educated and conscious generation that possesses a scientific sobriety that qualifies them to build society	3.97	1.163	60	46.9	Strongly agree
The overall average of the planning dimension		**3.78**	**.979**			
	Axis crisis management					
1	Choosing an effective leader in administrative affairs who is able to manage crises	4.02	1.129	58	45.3	Strongly agree
2	Identification of some of the specialized advisory staff that anticipate and predict crises before they occur	3.63	1.087	50	39.1	Agreed
3	Establishing an independent budget to address the effects of crises	3.72	1.273	48	37.5	Strongly agree
4	Putting several prepared kits in advance to face crises	3.77	1.119	46	35.9	Agreed
5	Take preventive measures and the number necessary to prevent crises	3.81	1.063	48	37.5	Agreed
6	Commitment to preventive measures and setting appropriate regulations and guiding announcements in the event of a crisis	4.02	.896	54	42.2	Agreed
7	Study the societal problems that occur when the crisis occurs and develop appropriate solutions to	3.92	1.054	48	37.5	Agreed

No.	Planning	Arithmetic mean	Standard Deviation	Frequencies	%	Answer
	avoid falling into them in the future					
The overall arithmetic means of the crisis management dimension		**3.89**	**1.11**			
The overall arithmetic means of the planning and crisis management dimensions		**3.835**	**.948**			
	Axis the educational institution					
1	Training and development of academic, educational and administrative cadres on the latest scientific, electronic and informational developments to develop skills and methods that can be used in the event of a crisis	4.14	.92	56	43.8	Strongly agree
2	Determining the material, human and infrastructure capabilities required in the educational institution	4.05	.995	52	40.6	Strongly agree
3	Finding suitable alternatives to cover the methods and methods of the educational process	3.89	1	54	42.2	Agreed
4	Develop long-term plans that contribute to shaping the future of the educational process	3.83	1.262	54	42.2	Strongly agree
5	Provide a safe and sound place to store data and information	4	1.108	56	43.8	Strongly agree
6	Adopting advanced computer programs in the process of organizing and storing information	4.09	1.015	56	43.8	Strongly agree
7	Adoption of trained teams for first aid in the event of disasters and accidents	3.81	1.107	44	34.4	Strongly agree
8	Establishing research and scientific centers to control crises when they occur	3.81	1.215	50	39.1	Strongly agree
The general arithmetic means **of the educational institution dimension**		**4**	**1.033**			

The results of Table 2 indicate that after planning, a general arithmetic mean of (3.78) and a standard deviation (.9796) was obtained, and this indicates the homogeneity of the sample answers about the value of the arithmetic mean. An educated and conscious generation that possesses a scientific sobriety that qualifies it to build a society) is the most homogeneous in terms of answers, as it obtained an arithmetic mean of (3.97) and a standard deviation of (1.163), with a number of 60 repetitions, its percentage (46.9) and the direction of this paragraph is (strongly agree). After crisis management, he obtained a general arithmetic mean of (3.89) and a standard deviation of (1.11). This indicates the homogeneity of the sample answers about the value of the arithmetic mean, and at the level of paragraphs where Paragraph 6 came, which was (commitment to prevention measures and setting appropriate regulations and guiding announcements when the crisis occurs) is the most homogeneous in terms of answers, as it obtained an arithmetic mean of (4.02) and a standard deviation of (0.896), with a number of 54 recurrences, its percentage (42.2) and that the direction of this paragraph is (agree), and after the educational institution, it obtained a general arithmetic mean Its value is (4) and standard deviation

(1.033), which indicates the homogeneity of the sample answers about the value of . For the arithmetic mean, and at the level of paragraphs, where Paragraph 1 came, which was (training and developing academic, educational and administrative cadres on the latest scientific, electronic and informational developments to develop skills and methods that can be used in the event of a crisis) is the most homogeneous in terms of answers, as it obtained an arithmetic mean of (4.14) and a standard deviation of (0.92), with 56 iterations, its percentage (43.8), and the direction of this paragraph is (strongly agree). Analysis of the correlation and effect relationships between the study variables:

Table 3. The correlation between planning, crisis management and the educational sector

Correlation				
		Planning	Crisis Management	for the educational institution Overall Indicator
Educational institution	Pearson Correlation	.593**	.846**	.802**
	Sig. (1-tailed)	.000	.000	
	N	128	128	128
**. Correlation is significant at the 0.01 level (1-tailed).				

Analysis of the correlation relationship between planning and crisis management and the educational institution, as the content of this analysis is reflected in the first hypothesis of the study, which states that there is a significant correlation between planning and crisis management in the educational institution, as the contents of Table 3 indicate the existence of a strong moral correlation at the level of overall indicators In terms of the correlation coefficient of (.802) at the level of significance (0.01), it occupied the dimension of crisis management (the first rank with the strength of the correlation coefficient of (.846), and the second dimension came in planning with a correlation coefficient (.593), so the first and second hypotheses were accepted.

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Table 4. A table for analyzing the extent of variance

ANOVA[a]							
Model		Sum of Squares	Df	Mean Square	F	Sig.	R Square
1	Regression	87.089	1	87.089	226.705	.000[b]	.643
	Residual	48.403	126	.384			
	Total	135.492	127				
a. Dependent Variable: Educational institution							
b. Predictors: (Constant), planning, Crisis Management							

Table 5. The impact relationship between planning, crisis management, and the educational institution

Coefficients[a]						
Model		Unstandardized Coefficients		Standardized Coefficients	T	Sig.
		B	Std. Error	Beta		
1	(Constant)	.656	.229		2.861	.005
	Crisis Management	.874	.058	.802	15.057	.000
a. Dependent Variable: Educational institution						

The results of the F test, the results of the regression analysis and the extent of variance indicate the existence of an impact of planning and crisis management on the educational institution, which is shown in Table 4 that the calculated F value reached (226.705) at a significant level (0.01) where the P-value was equal to (0.000) It

is less than 0.01 and it is higher than its tabular value (199.5) at the degree of freedom (127-1), which means rejecting the null hypothesis and accepting the alternative hypothesis, and this indicates a significant effect between the study variables. Table 6 indicates that the coefficient of determination R2 is equal to (.643), and this means that planning has explained 64% of the changes that occur in the educational institution, and with regard to the effect of planning, it was significant, because the value of sig. The t-test is equal to 0.000, which is less than the level of significance of 0.05, and the effect value is equal to 2.861. This means that increasing the planning variable by one unit of standard deviation will lead to an increase in the improvement of the educational institution by 28.6% of the standard deviation unit.

Table 6. The effect of independent variables on the dependent variable

Educational institution					dependent variables
Indication of effect	**Tabular F**	**Calculated F**	**R^2**	**B**	**Independent Variables**
moral	**199.5**	**226.705**	**.643 (2.861)**	**.593****	planning
moral				**.846****	Crisis Management

Source: Prepared by the researcher based on the results of the electronic calculator n=128 ** P >0.01
(2.861) refers to the calculated T value for the degree of freedom df (1,127)

The results of the regression analysis in Table 6 on the level of planning under study indicate a significant effect of the educational institution, as the coefficient of determination (R2) is (0.643), and this means that 64% of the explained differences in the educational institution are due to planning and the rest is due to variables Uncontrollable randomness or it is not included in the regression model, and by following the B coefficients and their t-test, it was found that the calculated t value (2,861), a significant value greater than its tabular value, which is (2.77) at a significant level (0.01) and also B for the management variable The crises amounted to (0.846), which is also significant, so the second main hypothesis was verified.

3. Conclusions and recommendations

3.1. Conclusions

1- The educational institution has a database in which all data and statistical information have been collected, and it is kept in a safe place to avoid its loss.
2- There are weekly and monthly reports that include all the assumptions that will be taken into account when crises occur.
3- The existence of sub-goals identified through the main and basic goals provided in the educational institution.
4- The existence of alternatives in terms of resources, places, and requirements, with evaluation of the alternative through a measure of the efficiency of the alternative.
5- There is an executive action plan that was selected by an advisory team with experience and knowledge of the crisis and disaster scenario.
6- Taking official approvals to adopt the chosen plan from the senior management easily and smoothly without the need to resort to a series of higher references to obtain approvals.
7- There is permanent follow-up and maintenance of the material resources drawn in the executive work plan after its implementation and directing them to the correct path in case of deviation.

3.2. Recommendations

1- Marketing creative ideas and bold and implemented plans as previous experiences to solve recurrent or similar crises in order to bring back financial profits to the educational institution.
2- The necessity of involving the local and international community in all stages of preparing plans and proposing executable projects needed by the educational institution.
3- Adoption of international standards and controls and the necessity of implementing them in order to avoid crises.
4- The necessity of treating the observed defects and defects in the work and finding effective strategies to raise the efficiency of the educational institution.

5- Increasing the efficiency of the institution by involving its distinguished cadres and engaging them in educational courses and evaluating their efforts by giving them incentives and letters of thanks and appreciation for their efforts.

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