

The Impact of Modern Strategic Planning on Smart Infrastructure in Universities

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Abstract: This study aims to identify the modern strategic planning for smart infrastructure in universities, where the researchers used the descriptive and analytical approach, through a questionnaire distributed to a sample of workers at the University of Palestine, where the size of the study population is (234) employees and the sample size is (117) employees (90) employees responded. The study reached a set of results, the most important of which are: The existence of a high level of satisfaction with the modern strategic planning of infrastructure in the University of Palestine, where the percentage reached (70.48%). The results also showed that there are no statistically significant differences in the modern strategic planning of the infrastructure according to the demographic variables, with the exception of the scientific qualification variable. The study presented a set of recommendations, the most important of which are: The need for universities to enhance the practice of modern strategic planning for smart infrastructure at the university.

Keywords: Strategic Planning, Smart Infrastructure, University Of Palestine.

Introduction

Information technology emerged to meet the urgent need for it, which includes the vast amount of information, the increase of its sources and types, and the parties using it, and thus the impossibility of being able to know, see, absorb and remember all information, which led to the inability of traditional means to meet and process information needs. , Storage, and retrieval, especially in light of the development and complexity of aspects of life, which led to a great need for information in all areas. Scientific communication is one of the basic foundations for the continuation of life in general, and therefore it is one of the necessities required by the continuation of scientific research activity, and researchers cannot invest in this field except through the presence of a medium that ensures the flow of information produced here and there, in order to benefit from it in scientific applications, by exploiting it in Other research development (Metwally, 2017, P: 95).

Problem Statement

The problem of the study is to answer the following questions:

Q1-: What is the availability of modern strategic planning for the infrastructure of the University of Palestine?

Q2-: Are there differences in the respondents' responses about the modern strategic planning of the smart infrastructure of universities according to the demographic variables?

Research Objectives

The main objective of the study is to identify the modern strategic planning for smart infrastructure in universities, and to achieve this goal the following sub-objectives were formulated:

1. Identify the reality of modern strategic planning for infrastructure at the University of Palestine.
2. Reaching out to test the validity of the main study hypotheses and the sub hypotheses
3. Providing recommendations and proposals that could contribute to the development of modern strategic planning for the universities' collective infrastructure.

Research Importance

Aspects of the importance of the study can be determined from the expected contribution and addition, as follows:

1. The importance of this study stems from the importance of the topic discussed, which is considered one of the modern topics, as it deals with modern strategic planning for smart infrastructure in universities, which is an addition to the scientific library on this topic.
2. This study provides a reference in libraries that helps researchers to review the results of the study and its recommendations in the field of modern strategic planning for smart infrastructure.
3. Meet the needs of universities to focus on the importance of modern strategic planning for smart infrastructure.

4. The researchers hope that the results of the study will contribute to directing the attention of university officials towards the need to pay attention to enhancing modern strategic planning for smart infrastructure, which ultimately helps to raise the overall performance of universities.
5. The study can help in presenting these recommendations to university decision-makers, so that they can benefit in promoting modern strategic planning for smart infrastructure among university employees.

Research Variables

The Independent Variable: modern strategic planning for smart infrastructure.

Demographic Variables: gender, age group, educational qualification, years of service, and job title

Research hypothesis

In order to provide an appropriate answer to the scholarly questions raised, the study seeks to test the validity of the following hypotheses:

H0₁: There are statistically significant differences at the level of significance ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning for the infrastructure at the University of Palestine according to the following personal and organizational variables: (for gender, age group, academic qualification, years of service, job title).

The Following Sub-Hypotheses Are Divided From It:

H0_{1.1}: There are statistically significant differences at the level of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine according to gender.

H0_{1.2}: There are statistically significant differences at the level of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine according to the age group.

H0_{1.3}: There are statistically significant differences at the level of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine, according to scientific qualification.

H0_{1.4}: There are statistically significant differences at the level of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine, according to the years of service.

H0_{1.5}: There are statistically significant differences at the level of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine, according to the job title.

Research Limits and Scope

The scope of the study shall be as follows:

1. **Human Limit:** The study was conducted on academic and administrative workers at the University of Palestine in question, who responded by filling out the questionnaire.
2. **Institutional Limit:** The study was conducted on the University of Palestine, in which the respondents responded to the study tool.
3. **Spatial Limit:** The study was conducted in Gaza Strip, State of Palestine.
4. **Time Limit:** The study was conducted in the year (2020).

Literature Review

Researchers have reviewed previous studies related to the topic, which in turn increase knowledge and knowledge about the current subject of the study to conclude the foundations and procedures of the study as well as answer its questions. Therefore, previous studies were reviewed from the most recent to the oldest.

- Study of (Keshta et al., 2020) aimed to identify the strategic creativity in Islamic banks in Palestine between reality and implementation. The study adopted the descriptive analytical approach. A questionnaire was designed as a tool for the study. The study community consisted of all employees in Islamic banks from the top and middle management and the study has been applied to the Palestinian Islamic bank and the Arab Islamic Bank. The comprehensive inventory method was used, given the small size of the study sample, as questionnaires were distributed to (175) employees, and a number of (5) categories were chosen from each branch of the bank (general manager, deputy general manager, director Branch, department head, department manager). (164) questionnaires have been used Recovered with a recovery rate of (93.71%). The study showed a number of results, the most important of which is the availability of dimensions of strategic innovation at a high level in Islamic banks in Palestine with a relative weight of (82.22%). In addition, that there are no differences between the averages estimates about the reality of the study variables in Islamic banks due to (gender, age group, educational qualification, number of years of service, job title).
- Study of (Keshta et al., 2020) aimed to identify the perceived organizational reputation and its impact on achieving strategic creativity in Islamic banks, the study adopted the descriptive analytical approach, and a questionnaire was designed as a tool for the study, and the study community of all employees in Islamic banks from the top and middle management has been represented, and the study has been applied to The Palestinian Islamic Bank and the Arab Islamic Bank were used; the

comprehensive inventory method was used, due to the small size of the study sample, as questionnaires were distributed to (175) employees, and a number of (5) categories were chosen from each branch of the bank, and they are (general manager, deputy general manager Branch Manager, Head of Department, Department Director), (164) questionnaires were retrieved, with a recovery rate of (93.71%). The study showed a number of results, the most important of which are: The perceived organizational reputation is available at a high level in Islamic banks in Palestine at a rate of (79.931%). The dimensions of strategic innovation are available at a high level in Islamic banks in Palestine with a relative weight of 82.22%. There is a direct relationship with statistical significance between and the level of enhancing the perceived organizational reputation and achieving strategic creativity in Islamic banks in Palestine. There is a statistically significant effect to enhance the perceived organizational reputation on achieving strategic creativity at a level in Islamic banks in Palestine at a rate of (39.1%), and that the remaining percentage (61.9%) in influencing the achievement of strategic creativity is due to other variables. There are no differences between the average estimates about the reality of the study variables in Islamic banks due to (gender, age group, educational qualification, number of years of service, job title).

- Study of (Alayoubi et al., 2020) aimed to identify the impact of the requirements of implementing strategic entrepreneurship in achieving technical innovation in Palestine Technical College- Deir al-Balah from the point of view of the employees. The researcher used the analytical descriptive method. The study community consists of all academic and administrative staff in the college. The researchers used the comprehensive inventory method. 149 questionnaires were distributed to all members of the study community. The number of questionnaires returned was (115), ie, the response rate was (77.1%). The results of the study showed a strong positive correlation between the requirements of applying strategic entrepreneurship (leadership, pioneering thinking, pioneering culture, strategic resource management) and achieving technical innovation in Palestine Technical College- Deir al-Balah from the point of view of the employees of Palestine Technical College- Deir al-Balah. It also showed a statistically significant effect between the requirements of implementing strategic entrepreneurship (pioneering culture, strategic resource management) and achieving technical innovation in Palestine Technical College- Deir al-Balah, and that the remaining variables show that their effect is weak.
- Study of (Alayoubi et al., 2020) aimed to identify the strategic leadership practices and their relation to improving the quality of educational service in the Palestinian universities in Gaza Strip. The researcher used the analytical descriptive method. The study population consists of all the supervisors working in three universities in Gaza Strip (The Islamic University, Al-Azhar University, and Al-Aqsa University). A random sample of 177 employees was selected by 50% of the study population. The researcher used the questionnaire as a data collection tool. The results of the study showed a strong and statistically significant relationship between strategic leadership practices (strategic orientation, investment of strategic capabilities and talents, development of human capital, strengthening organizational culture, emphasis on ethical practices, implementation of balanced regulatory control) and improvement of quality of educational service , Responsiveness, safety, empathy) in Palestinian universities.
- Study of (Alwan, 2019) aimed at determining the extent of the influence of employees 'performance on the strength of strategic planning as an independent variable and as a critical factor in developing employees' performance through their contribution to raising or lowering their performance. As successful strategic planning can achieve a breakthrough in a high level of workers' performance by developing the necessary procedures to develop their performance, presenting the research variables intellectually, and applying this research to a sample of workers in the Iraqi commercial sector. And Islamic banks in the Karbala branch (80) and their assistants and officials. The research also assumes that there are statistically significant differences between the dimensions of strategic planning and employee performance as well as the effect of strategic planning on employee performance. Analysis of variance and multiple regression analysis were used for all dimensions of the search variables. The results showed that commercial and Islamic banks vary in adopting all dimensions of the strategic planning variable except after the goals that have proven the results of the analysis of variance. There are no statistically significant differences between the banks that were investigated in this dimension.
- The study of (Al-Mikhlaifi, 2019) aimed at identifying the degree of practicing strategic planning skills among academic leaders at King Khalid University from the viewpoint of the university's faculty, and are there differences attributable to the variables: specialization, gender, academic rank, number of years of service at the university. The descriptive approach was used for its convenience with the nature of the research. The research sample consisted of (326) faculty members in the first semester of the academic year 39/1440 AH, and randomly (16.11%) of the research community totaling (2024) members. The results showed that the average degree of practicing strategic planning skills among academic leaders at King Khalid University was achieved to a large extent, with an average of (3.57) score and a percentage (71.30%) of the total score for practice, and the results showed that there were no statistically significant differences in the average degree of practicing strategic planning skills according to the two variables. Academic rank, gender, and statistically significant differences according to the two variables of specialization in favor of the specialty of applied sciences, and the number of years of service in favor of more years of service.
- Study of (Al Shobaki et al., 2017) aims to study the role of strategic and operational planning as approach for crises management in UNRWA- Gaza Strip field- Palestine. Several descriptive analytical methods were used for this purpose and a

survey as a tool for data collection. Community size was (881), and the study sample was stratified random (268). The overall findings of the current study show that strategic and operational planning is performed in UNRWA. The results of static analysis show that there are a relation between strategic and operational planning and crises management. In spite this relation existence, it need more improvement and expanding. Also there are shortcomings in the way that organization manages the crises before and after they occur. A crisis management is only practicing during the crisis.

- The study of (Ndege; 2017), which aimed to find out the relationship between strategic planning and business continuity management, in private security companies in Kenya, and the study followed the descriptive and analytical approach and the study tool was a questionnaire, and the random sampling method was used, and the study revealed that business continuity has an element Important from strategic management because it supports the growth and expansion of the company, and the respondents added that when you plan well, this means that you are planning for the future. Therefore, planning for the future is very important because it gives the management the guidelines for long-term business continuity.
- Study of (Faris, 2016), which aimed to identify the relationship between the entrepreneurial characteristics of senior management in commercial banks and strategic planning in Gaza Strip by studying its dimensions (self-confidence, initiative, creativity, achievement, independence and taking responsibility, and taking risks) and its relationship to strategic planning as a variable Follow. The sample of the study was (164), represented by managers and workers in commercial banks. The study used the descriptive and analytical approach, and the questionnaire was used as a tool to collect data. Among the most prominent results of the study was the availability of a good level of entrepreneurial characteristics (self-confidence, initiative, creativity, achievement, independence and responsibility, risk taking) as well as for strategic planning, in addition to the absence of statistically significant differences about the entrepreneurial characteristics of managers working in commercial banks. In Gaza Strip, it is attributed to the following variables (gender, age, academic qualification, job title, specialization), and the existence of statistically significant differences on the entrepreneurial characteristics of managers working in commercial banks in Gaza Strip attributable to the variable of years of service.
- Study of (Al Shobaki et all, 2016) aims to analyze the impact of top management support for strategic planning on crisis management in UNRWA-Gaza Strip field in Palestine. Several descriptive analytical methods were used for this purpose, and a survey as a tool for data collection. Community size was (881), and the study sample was stratified random (268). The overall findings of the current study show that top management provides needed HR for strategic planning but with no financial support. Also there are shortcomings in the way that organization manages the crises before and after they occur. A crisis management is only practicing during the crisis. The study suggest that top management must provide the financial support for strategic planning, periodic meetings to prepare how to deal with potential crisis in the future, establishing a specialized team and provide them with all sources needed.

Commentary on Previous Studies

Aspects Of Agreement Between The Current Study And The Previous Studies: The current study agreed with the previous studies in several aspects, as well as the study method used, which is the descriptive and analytical method, as well as the study tool, as all previous studies used the questionnaire as a tool for the study, while the current study will It depends on the descriptive and analytical method, and it depends on the questionnaire as a study tool.

The Differences Between The Current Study And The Previous Studies: The current study differed with previous studies, in the size and diversity of the study sample, as the size of the study was less and varied between companies and different administrative institutions, while the current study is less sample size, and it will consist of workers at the University of Palestine Moreover, the current study focused on the reality of the strategic planning for the smart infrastructure of the University of Palestine.

Areas of Benefit from Previous Studies:

1. That previous studies, in addition to the researchers 'experience in the nature of universities' work, helped researchers in determining the topic of this research and the manifestations of the research problem.
2. Formulating the study methodology.
3. Determine the main and sub-variables of the research and the extent of the relationship between them.
4. Contribute to building some pillars of the theoretical framework of the research.
5. Choose the study methodology and the statistical methods used in these studies, and how the data were analyzed in these studies.
6. Determining the appropriate size of the study sample after reviewing the size of the samples approved in these studies, which will facilitate reaching important conclusions and recommendations in the current study.
7. Knowing the methods of validity and reliability used in these studies, which enables the identification of appropriate methods for the study variables.

Theoretical Framework

Contemporary scientific institutions of all kinds are facing a wave of rapid transformations and changes sweeping the world today, foremost of which is the information and technology revolution, that revolution that relies on advanced scientific knowledge and

the optimal use of information flowing from the great advances in computer technologies and the global network of communications (the Internet), and as a result of those Transformations Knowledge has become the most important strategic source, but it has become the strongest and most influential and controlling factor in the success or failure of the organization.

Modern Strategic Planning For Smart Infrastructure

Both (Tallon, and Kraemer, 2003) reviewed the importance of strengthening the relationship between the organization's strategy and the positive aspects provided by information technology by means of a positive marriage between them, which lies in eliminating the gap, or at least reducing it, between the two strategies. Among the reasons for the existence of this gap, either the deficiency in the total or partial role of information technology, which affects its effectiveness in implementing the objectives of the organization, or its failure to use and benefit from its functions by the employees of the organization. And they confirm that the shrinking of this gap is a result of the quality of the organizational structure and the organizational and technical strategic planning, which provides strong support for the performance of the organization and the implementation of its objectives, in this case the organization has achieved compatibility between its strategies on the other hand, when the organization's strategy is weak, the parallel with the IT strategy is missing. It negatively affects the achievement of the objectives of the organization.

Both Elliot and Starkings (1998) state that the balance between the IT strategy and the organization's strategy that includes operational activities, and middle management strategy is critical to the role that information technology should play in serving the organization. The obsolescence or lack of adaptation of the current organization's strategy with the IT strategy requires modifying the organization's strategy to fit with the IT strategy or modifying both of them to reach the best coherence and suitability for the achievement of the organization's goals.

The researchers believe that the strategic planning of the organization as a whole must be compatible with that of the general strategic system of the institution with an emphasis on the importance of strategic thinking in the institutional work.

Methodology and Procedures:

First: Methodology Of The Study: The study used the descriptive and analytical approach that relies on description, analysis and comparison with the aim of describing what is an object, and its interpretation by shedding light on the problem of the study to be investigated and understanding its conditions, and collecting information that increases the clarification of the circumstances surrounding the problem.

The Researchers Used Two Primary Sources Of Information:

1. **Secondary Sources:** Where the researchers turned in addressing the theoretical framework of the study to secondary data sources, which are the relevant Arabic and foreign books and references, periodicals, articles and reports, and previous research and studies that dealt with the subject of the study, and research and reading in various websites on the Internet.
2. **Primary Sources:** To address the analytical aspects of the subject of the study, researchers resorted to collecting primary data through a questionnaire as a main tool for the study, designed specifically for this purpose.

Second: The Study Population: the study community is defined as all the vocabulary of the phenomenon that the researcher studies, and based on the study problem and its objectives, the study population is represented by the employees of the University of Palestine in Gaza Strip, whose number is (234) employees (Personnel Affairs, University of Palestine).

Third: The Study Sample: The simple random sampling method was used to collect data by distributing the questionnaire to (50%) of the workers, ie (117) employees, of whom (90) employees responded, or (77%). The following table shows the distribution of respondents according to the study variables:

Table 1: Distribution of respondents according to the variables of gender, age group, educational qualification, years of service, job title,

Gender	Male		Female		Total
	71		19		
Age Group	Less than 30 years old	30 - less than 40 years old	40- Less than 50 years old	50 years or more	90
	26	22	32	10	
Qualification	PhD		M.A.	Bachelor's degree or less	90
	38		25	7527	
Years Of Service	Less than 5 years	5- Less than 10 years old	10 - less than 15 years old	15 years and over	90
	40	21	20	9	
Job Title	Academic		Administrative		90
	62		28		

Study Tool: A questionnaire was prepared on "Modern strategic planning for smart infrastructure in universities". It consists of three main sections:

The First Section: It is the personal and organizational data of the respondents (gender, age group, academic qualification, years of service, job title).

The Second Section: the measure of modern strategic planning for the infrastructure. The scale consists of (12) paragraphs

Correcting the Scale: Each paragraph is answered according to a five-point scale consisting of alternatives: strongly agree, agree, neutral, disagree, strongly disagree, and this scale has been given the following grades in order (5, 4, 3, 2, 1).

The Second Stage: the legalization stage: It included a validity and consistency account for the test.

1. **Referees' Validity:** The scale was presented in its current form to a number of specialized referees, including business administration professors, in order to identify the suitability of the questionnaire phrases and their representation of the aspects included in them, and the scale was modified based on the observations provided.
2. **The Validation Of The Construct, Using The Internal Consistency Method:** the scale was applied to a survey sample of (32) members of the original community for the study, and the correlation coefficients for each paragraph were calculated in the domain to which they belong, as well as the correlation coefficients between the domains with each other, and all the paragraphs obtained a significant level 0.05 This indicates that the scale has a high degree of validity for internal consistency.

– Results of the Internal Consistency of the Scale

Table 2: The correlation coefficient between each paragraph of each dimension and the overall degree of the dimension

Paragraph	R	Sig.	Paragraph	R	Sig.	Paragraph	R	Sig.	Paragraph	R	Sig.
Modern Strategic Planning Of the Infrastructure											
1	0.769	0.000	4	0.723	0.000	7	0.806	0.000	10	0.850	0.000
2	0.724	0.000	5	0.648	0.000	8	0.760	0.000	11	0.825	0.000
3	0.649	0.000	6	0.854	0.000	9	0.806	0.000	12	0.894	0.000

Stability Of The Scale: The researchers checked the stability of the scale on a pilot sample of (32) individuals. The stability of the scale was calculated using the two half-segmentation methods and Cronbach's Alpha.

The correlation coefficient was calculated between the total of the paired expressions and the total of the individual statements for the test and its ranges, and by using the Spearman Brown equation, the overall reliability coefficient was (0.972), and the reliability coefficients were all high, indicating that the scale has a high degree of stability. The reliability coefficient of the Cronbach alpha was also calculated, and the overall scale reliability coefficient was (0.969), which is a significant and high reliability coefficient, and the reliability was calculated by the Cronbach alpha method for all areas of the scale and the following table illustrates this:

Table 3: the scale stability coefficient with the Alpha-Cronbach split method

Dimensions	Number of paragraphs	Correlation Coefficient Before Adjustment	Correlation Coefficient After Adjustment	Alpha Cronbach	Significance Level
Modern Strategic Planning Of The Infrastructure	12	0.904	0.950	0.939	0.01

It is evident from the previous table that the reliability coefficients are all statistically significant, confirming the validity of the scale for application. Thus, the researchers have made sure of the validity and reliability of the study tool, which makes them fully confident of the validity of the questionnaire and its validity to analyze the results, answer the study questions and test its hypotheses.

1. One Way Analysis of Variance (ANOVA) test to find out if there are statistically significant differences between three or more sets of data. Researchers used it for the differences that are attributed to the variable that includes three groups or more.
2. LSD test for comparing dimensional averages.

Analyzing Data and Testing Hypotheses of the Study and Discussing Them

Test Hypotheses of the Study

The Statistical Description of the Study Sample According To Personal and Organizational Data

The following is a review of the characteristics of the study sample according to personal and organizational data

Table 4: Distribution of the study sample according to personal and organizational data

Personal And Organizational Data		The Number	Percentage%
Gender	Male	71	78.9

	Female	19	21.1
Total		90	100.0
Age Group	Less than 30 years old	26	28.9
	30 - less than 40 years old	22	24.4
	40- Less than 50 years old	31	35.6
	50 years or more	10	11.1
Total		90	100.0
Qualification	PhD	38	42.2
	M.A.	25	27.8
	Bachelor's degree or less	27	30.0
Total		90	100.0
Years Of Service	Less than 5 years	40	44.4
	5- Less than 10 years old	21	23.3
	10 - less than 15 years old	20	22.3
	15 years and over	9	10.0
Total		90	100.0
Job Title	Academic	62	68.9
	Administrative	28	31.1
Total		90	100.0

It is evident from the previous table that 78.1% of the study sample is male, while 21.1% are females, and this is proportional to the percentage of males employed in the University of Palestine in particular and Palestinian universities in general. It is clear that 28.9% of the study sample is under the age of 30 years, while we find that 24.4% of those under the age of 40 years. This reflects the fact that the university is relatively young and recently established, and the rest of the percentage is from the older age group. It is clear that 42.2% of the study sample are doctoral degree holders, while 27.8% of master's holders and 30.0% of bachelor's degree holders or less, and this is consistent with the nature of work of academic institutions and their need for holders of higher qualifications. It is also evident that 67.7% of the study sample is of those with less than 10 years of service. This corresponds to a young and developing university, while 17.9% and the same are recruiting new competencies, and the remaining percentage are those with greater years of service. It is clear from the previous table that 68.9% of the study sample were from the academic staff, while 31.1% were from the administrative staff, and this reflects the nature of the staff distribution at the university.

The Criterion Adopted In the Study (Ozen et al., 2012):

Table 5: clarifies the criterion adopted in the study

SMA	Relative Weight	Degree Of Approval
From 1.79 - 1	From 35.9% -20%	Strongly Disagree
From 2.59 - 1.80	From 51.99% -36%	Disagree
From 3.39 - 2.60	From 67.99% -52%	Medium (neutral)
From 4.19 - 3.40	From 83.99% -68%	Agree
From 4.20 - 5	From 100% - 84%	Strongly Agree

To interpret the results of the study and judge the level of response, the researchers relied on arranging the arithmetic averages at the level of the fields of the questionnaire and the level of the paragraphs in each field. The researchers determined the degree of approval according to the criterion adopted for the study.

The Answer to the Study's Questions:

The result of the first question: which states:

Q1-: What is the availability of modern strategic planning for the infrastructure of the University of Palestine?

To answer the question, the mean, standard deviation, relative weight and order were used to find the degree of agreement. The results are shown in the following table:

Table 6: The arithmetic mean, standard deviation, relative weight, and arrangement for each of the “modern strategic planning for infrastructure” paragraphs

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university is developing a strategy based on the needs and expectations of current and future stakeholders	3.6444	0.82532	72.89%	5	Agree
2.	The university collects and analyzes information about the labor market and its current and future needs.	3.7222	0.96019	74.44%	1	Agree
3.	The university works to understand current and future needs and aspirations.	3.7000	1.38959	74.00%	3	Agree
4.	The University understands and anticipates growth in new and competitive higher education institutions and programs.	3.4556	0.91383	69.11%	8	Agree
5.	The university undertakes continuous planning for policy and strategy development and review.	3.6111	0.87016	72.22%	6	Agree
6.	Policies and strategies are developed to be consistent with the university's mission, vision and values.	3.7222	0.88721	74.44%	1	Agree
7.	The university is working on contingency planning, risk analysis, and developing scenarios and alternative plans.	3.4444	0.94941	68.89%	9	Agree
8.	The university reviews and updates the effectiveness and appropriateness of policies and strategies.	3.4667	0.90193	69.33%	7	Agree
9.	The university is interested in developing a framework for defining and designing the main processes in order to support and communicate the university's policies and strategies.	3.2333	0.90006	64.67%	12	Medium
10.	The university activates and follows up strategies with employees and stakeholders in an appropriate manner	3.3444	0.88890	66.89%	10	Medium
11.	The university expresses interest in measuring awareness and evaluating the strategies used inside and outside the university.	3.2778	0.88721	65.56%	11	Medium
12.	The university uses a measurement framework that monitors and reports progress in relation to the goals and strategies used.	3.6667	0.93616	73.33%	4	Agree
Total Marks		3.5241	0.81776	70.48%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the sixth paragraph "Policies and strategies are developed to be consistent with the university's mission, vision and values" equals 3.72 (total score out of 5), meaning that the relative weight is 77.44%, and this means that there is high approval by the sample members for this paragraph.
- The arithmetic mean of the ninth paragraph, "The University is interested in developing a framework for identifying and designing the main processes in order to support and communicate the university's policies and strategies" equals 3.23, meaning that the relative weight is 74.67%, and this means that there is an average approval by the sample members for this paragraph.

In general, it can be said that the arithmetic average of modern strategic planning for infrastructure "is equal to 3.52, meaning that the relative weight is 70.48%, and this means that there is high agreement by the sample members on the paragraphs of the modern strategic planning scale for the infrastructure.

The researchers explain this result to the fact that the university collects and analyzes information about the labor market and its current and future needs, and policies and strategies are developed to be consistent with the university's mission, vision and values, as the university works to understand current and future needs and aspirations, and uses a measurement framework that works on follow-up and reporting. The university is working on formulating a strategy based on the needs and expectations of current and future stakeholders, and it continuously plans to develop and review the policy and strategy, as it reviews the effectiveness and

appropriateness of policies and strategies and updates them. The university understands and anticipates growth in new higher education institutions and competition. It works on contingency planning, risk analysis, developing scenarios and alternative plans, as well as activating strategies and following them up with workers and stakeholders in an appropriate manner, and expresses interest in measuring awareness of the strategies used inside and outside the university and evaluating them. University policies and strategies and their delivery.

This result is in agreement with some studies such as (Alwan, 2019), which confirmed that successful strategic planning can achieve a breakthrough in a high level of workers' performance by developing the necessary procedures to develop their performance, and intellectually presenting research variables. And the study (Al-Mikhlaifi, 2019), which showed that the average degree of practicing strategic planning skills among academic leaders at King Khalid University was largely achieved. As well as the study (Faris, 2016), which was among the most prominent results of which provides a good level of strategic planning.

Hypothesis Testing

H0₁: There are statistically significant differences at the level of significance of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning for the infrastructure at the University of Palestine according to the following personal and organizational variables: (for gender, age group, academic qualification, years of service, job title).

The Following Sub-Hypotheses Are Divided From It:

H0_{1.1}: There are statistically significant differences at the level of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine according to gender.

To verify the validity of the hypothesis, the differences between the averages of the sample members according to the gender variable were calculated using the (T) test, and the following table explains that:

Table 7: means, standard deviations, and the value of "t" due to the gender variable

Domains	Gender	The Number	The Average	Standard Deviation	T Value	Significance Level	Indication
Total Degree Of Modern Strategic Planning	Male	71	3.5939	.76128	1.364	0.185	Not Sig.
	Female	19	3.2632	.98062			

- The value of "t" is statistically significant at the level of significance of ($\alpha \leq 0.05$).

The previous table indicates that there are no statistically significant differences in the scale dimensions due to the gender variable in the modern infrastructure strategic planning scale.

The researchers explain these results in light of the fact that academic institutions do not differentiate between male and female, and that all workers have the same level of supervision and the nature and characteristics of the tasks assigned to them. Gender, and therefore the sample responses were close, and there were no differences attributed to the gender variable.

This result is in agreement with some studies such as (Al-Mikhlaifi, 2019), which showed that there are no statistically significant differences in the average degree of practicing strategic planning skills according to the gender variable. And Faris (2016) study, the most prominent of which was that there were no statistically significant differences on the entrepreneurial characteristics of managers working in commercial banks in Gaza Strip due to the following variables (gender, age, academic qualification, job title, and specialization).

H0_{1.2}: There are statistically significant differences at the level of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine according to the age group.

To test this hypothesis, the "one-way contrast" test was used, and the following table illustrates that.

Table 8: The results of the "single variance" test for the variable of the age group

Domains	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
Total Degree Of Modern Strategic Planning	Between Groups	4.682	3	1.561	2.448	.069
	Within Groups	54.835	86	.638		
	Total	59.517	89			

From the results shown in the previous table, the following can be drawn:

It was found that the probability value (Sig.) Corresponding to the "one-way variance" test is higher than the significance level of 0.05 for modern strategic planning for the infrastructure. Thus, it can be concluded that there are no statistically significant differences between the averages of the study sample estimates attributable to the age group variable.

The researchers explain this result because the employees of the University of Palestine have sufficient awareness about the modern strategic planning of the infrastructure. The workers at the University of Palestine have scientific qualifications and academic capabilities, so you find them keen to follow all the strategies, sciences and skills that will develop their abilities and knowledge, and have acceptance of the challenges. And the ability to overcome it, and thus increase their sense of the importance of modern strategic planning for the infrastructure at the University of Palestine.

This result is in agreement with some studies such as (Faris, 2016), the most prominent of which was the absence of statistically significant differences about the entrepreneurial characteristics of managers working in commercial banks in Gaza Strip due to the variable (age).

H0_{1.3}: There are statistically significant differences at the level of ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine, according to scientific qualification.

To test this hypothesis, the "one-way contrast" test was used, and the following table illustrates that.

Table 9: Results of the "one-size-fits-all" test for the level of academic qualification variable

Domains	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
Total Degree Of Modern Strategic Planning	Between Groups	4.558	2	2.279	3.608	.031
	Within Groups	54.959	87	.632		
	Total	59.517	89			

It was found that the probability value (Sig.) Corresponding to the test of "unilateral variance" is less than the significance level of 0.05 for modern strategic planning for the infrastructure. Thus, it can be concluded that there are statistically significant differences between the averages of the study sample estimates attributable to the scientific qualification variable.

The researchers explain this result because the workers at the University of Palestine have sufficient awareness about the modern strategic planning of the infrastructure, and they have acceptance of the challenges and the ability to overcome them. Feeling the importance of modern strategic planning for the infrastructure at the University of Palestine.

This result differed with the study (Faris, 2016), whose most prominent results were the absence of statistically significant differences on the entrepreneurial characteristics of managers working in commercial banks in Gaza Strip attributable to (academic qualification).

H0_{1.4}: There are statistically significant differences at the level ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine, according to the years of service.

To test this hypothesis, the "one-way contrast" test was used, and the following table illustrates that.

Table 10: Results of the "single variance" test - years of service variable

Domains	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
Total Degree Of Modern Strategic Planning	Between Groups	4.425	3	1.475	2.302	.083
	Within Groups	55.093	86	.641		
	Total	59.517	89			

It was found that the probability value (Sig.) Corresponding to the "one-way variance" test is higher than the significance level of 0.05 for modern strategic planning for the infrastructure. Thus, it can be concluded that there are no statistically significant differences between the averages of the study sample estimates due to the years of service variable.

The researchers explain this result that, despite the different years of service, the study sample works in an academic institution that has its own characteristics, which is one of the pioneering institutions in Gaza Strip and provides the necessary capabilities for its workers. Consequently, no differences appeared about the modern strategic planning of the infrastructure at the University of Palestine due to years of service.

This result differed with the study (Faris, 2016), whose most prominent results were the existence of statistically significant differences about the entrepreneurial characteristics of managers working in commercial banks in Gaza Strip due to the variable of years of service. And the study (Al-Mikhlaifi, 2019), which showed statistically significant differences according to the variable of multiple years of service in favor of more years of service.

H0_{1.5}: There are statistically significant differences at the level ($\alpha \leq 0.05$) between the averages of the respondents' responses about the modern strategic planning of the infrastructure at the University of Palestine, according to the job title.

To verify the validity of the hypothesis, the differences between the averages of the sample members according to the job title variable were calculated using the (T) test. The following table explains that:

Table 11: means, standard deviations, and "t" value attributed to the job title variable

<u>Domains</u>	<u>The Number</u>	<u>The Average</u>	<u>Standard Deviation</u>	<u>T Value</u>	<u>Significance Level</u>	<u>Indication</u>
Total Degree Of Modern Strategic Planning	Academic	62	3.6478	.76233	0.060	Not Sig.
	Administrative	28	3.2500	.88221		

- The value of "p" is statistically significant at the level of significance of ($\alpha \leq 0.05$).

The previous table indicates that there are no statistically significant differences in the modern strategic planning of the infrastructure, and thus it can be concluded that there are no statistically significant differences between the averages of the study sample estimates attributable to the functional staff.

The researchers interpret these results as reflecting the reality of work in the academic field and in administrative positions that imparts sufficient knowledge about the modern strategic planning of the infrastructure at the University of Palestine.

This result is in agreement with some studies such as (Faris, 2016), the most prominent of which was the absence of statistically significant differences about the entrepreneurial characteristics of managers working in commercial banks in Gaza Strip attributable to (job title).

Conclusion and Recommendations

Conclusions

Through the statistical analysis of the study questions and hypotheses, the study reached the following results:

- A high level of satisfaction with the modern strategic planning of infrastructure at the University of Palestine, where the percentage reached (70.48%).
- The absence of statistically significant differences in the modern strategic planning of the infrastructure according to the demographic variables (gender, age group, years of service, and job title).
- The existence of statistically significant differences in the modern strategic planning of the infrastructure according to the scientific qualification.

Recommendations

In light of the findings of the results, the study came out with a set of recommendations, as follows:

- Work to enhance the practice of modern strategic planning for smart infrastructure in the university.
- Forming a permanent strategic planning team at the university
- Providing material and moral support for the strategic planning process for smart infrastructure in universities.

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