

# The Reality of Implementing the Smart University Transformation Strategy at University of Palestine

Suliman A. El Talla<sup>1</sup>, Mazen J. Al Shobaki<sup>2</sup>, Nader H. Abusharekh<sup>3</sup>, Samy S. Abu-Naser<sup>4</sup>

<sup>1</sup>College of Intermediate Studies – Al-Azhar University – Gaza, Palestine.

<sup>2</sup>Dean of Bait Al-Mqds College for technical Science, Gaza- Palestine

<sup>3</sup>Faculty of Business and Management, University Of Palestine

<sup>4</sup>Department of Information Technology, Al-Azhar University, Gaza, Palestine.

<sup>1</sup>Eltallasuliman@gmail.com, <sup>2</sup>mazen.alshobaki@gmail.com, <sup>3</sup>N.sharekh@up.edu.ps, <sup>4</sup>abunaser@alazhar.edu.ps

**Abstract:** This study aims to identify global smart university transformation strategies for university Employees, as the researchers used the descriptive and analytical approach, through a questionnaire distributed to a sample of Employees 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 presence of a high degree of implementation of the smart university transformation strategy at the University of Palestine, as the percentage reached (73.07%). Smart for business, smart classrooms, smart education management system). The results also showed that there were no statistically significant differences in the smart university transformation according to personal and organizational data. The study presented a set of recommendations, the most important of which are: The need for universities to promote the use of the smart university transformation strategy.

**Keywords:** Smart University Transformation, Universities, University Of Palestine.

## Introduction

The term intelligence has become associated with many aspects of life that we live, and we started to hear about smart buildings, smart cities, smart devices, etc., Due to the great changes brought about by these systems in all areas of life and the way we think as individuals, this led to the emergence of smart societies or the smart age.

Therefore, based on the above, and because universities throughout the ages are the ones driving change in societies, researchers see the need to talk about establishing smart universities that form the nucleus to bring about the required change in society and transform it as a whole into a knowledge society, and this requires launching a bold initiative for a Palestinian university to be a model for smart universities. At the level of Palestine only, but at the level of the region. The researchers seek to study the reality of implementing the smart university transformation strategy at the University of Palestine, and this requires strategies with multiple and interrelated elements. Universities can provide inputs for designing and implementing such strategies.

## Problem Statement

The strategic applications of information and communication technology are considered a strategic resource used to implement competitive strategies on the one hand and to achieve the goals of change that the university aspires to in light of the increasing environmental and technological complexity of contemporary business organizations on the other hand. The digital economy environment in which the contemporary organization is active today requires the use of strategies based on modern technology. For information and communication to survive in the market, by facing threats and seizing environmental opportunities in order to achieve a competitive advantage.

## Research Questions

In this research, researchers will answer the following questions:

**Q1-:** What is the level of smart university transformation strategies at the University of Palestine?

**Q2-:** Are there differences in the respondents' responses to the strategies of smart university transformation at the University of Palestine according to the demographic variables?

## Research Objectives

The main objective of the study is to identify the reality of implementing the smart university transformation strategy at the University of Palestine, and to achieve this goal the following sub-objectives were formulated:

1. Understand and study the reality of the smart university transformation strategy and its importance for universities, and the degree to which this strategy is used in universities.
2. Reaching out to test the validity of the study hypotheses.
3. Provide recommendations and proposals that could contribute to developing the smart university transformation strategy.

## Research Importance

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

▪ **Scientific Importance**

1. The importance of this study stems from the importance of the topic it is discussing, which is considered one of the modern topics as it deals with the strategy of smart university transformation, which is an addition to the scientific library on this topic.
2. The scientific importance of the study derives from the role that university employees play in implementing the smart university transformation strategy and its impact on the success of these universities.
3. The availability of this study as a reference in libraries helps researchers to view the results of the study and its recommendations in the field of smart university transformation strategy.

▪ **Practical Importance**

1. Meet the needs of universities to benefit from the smart university transformation strategy to enhance their performance.
2. 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 practicing the smart university transformation strategy, which ultimately helps raise the overall performance of universities.
3. The study can help in presenting these recommendations to decision-makers and officials in universities so that they can work to benefit from them in strengthening the position of the university.

**Research hypothesis**

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

**H0<sub>1</sub>:** There are statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the average responses of the respondents regarding the strategies of smart university transformation at the University of Palestine due to the following personal and organizational data: (Gender, Age Group, Academic Qualification, Years Of Service, Job Title).

**The main hypothesis stems from the following set of sub-hypotheses:**

**H0<sub>1.1</sub>:** There are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses to the strategies of smart university transformation at the University of Palestine, due to the gender variable.

**H0<sub>1.2</sub>:** There are statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses to the strategies of smart university transformation at the University of Palestine, due to the variable of the age group.

**H0<sub>1.3</sub>:** There are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses about the strategies of smart university transformation at the University of Palestine, due to the scientific qualification variable.

**H0<sub>1.4</sub>:** There are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses to the strategies of smart university transformation at the University of Palestine, due to the variable of the Years of Service.

**H0<sub>1.5</sub>:** There are statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses about the strategies of smart university transformation at the University of Palestine, due to the job title variable.

**Research Variables**

**The Independent Variable:** the smart university transformation strategy and consists of (6) main dimensions, which are:

1. Smart Management System
2. Smart Campus
3. Smart Business Support
4. Smart Evaluation Of Outputs
5. Smart Classes
6. Smart Education Management System

**The Following Personal and Organizational Variables:** (Gender, Age Group, Qualification, Years of Service, 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 employees 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 topic of 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 (Al-Sawyer, 2017) aimed at identifying the effect of the mediating role of business intelligence competencies on the relationship between information technology competencies and organizational agility. And this study was applied to the

Jordanian commercial banks, which numbered (13). A suitable sample consisted of (384) individuals from managers, their deputies, their assistants and heads of general departments in Jordanian commercial banks in the main departments. To achieve the objectives of this study, the descriptive and analytical approach was used, and the results of the study showed: the existence of a statistically significant mediating role for business intelligence competencies (administrative competencies, technical competencies and cultural competencies) in the relationship between information technology competencies and organizational agility in Jordanian commercial banks. The study showed that the dimensions of the dependent variable (Organizational agility) has obtained high scores ranging between (4.36-3.63) and is ranked in descending order as follows: the speed of response to customers with an overall average of (4.13), the speed of response to operations with a total average of (4.04) and the speed of response to business partners with a total average of (3.94), where The percentages indicate that the level of organizational agility is high, and the study recommended the following: Continuing interest in information technology and its capabilities due to its importance reflected on organizational agility in Jordanian commercial banks, spreading the culture of business intelligence and including it within the strategies of Jordanian commercial banks.

- Study of (Felix , 2014) which aimed to investigate how school leaders can help build the capacity of teachers to be able to effectively integrate ICT in their teaching and learning, at the school level in general secondary education in a school in Kenya by discovering shortcomings in Use of information technology. The most important findings of the study were that the strategies used by school leaders to build the capacity of teachers lead to the use of information and communication technology. It was noted that rapid innovation in technology is a challenge to identify the continuous new skills that leaders need. And low awareness of teachers with poor school leadership. The capabilities of faculty members in the field of information and communication technology are weak. And that basic skills in information technology are weak.

### **Commentary on Previous Studies**

By informing researchers of previous studies, it has been observed that the topic of smart university transformation has received the attention of researchers widely, but in light of the shifts and changes in all fields, their criteria for judging matters differed, and this is what the study sought to research, as it is evident from previous studies that they agree In dealing with the topic of the smart university transformation strategy, but it varies between them through a link with other dimensions and variables, as most of the previous studies aimed to address the smart university transformation strategy from different angles, while other studies focused on shedding light on some of the smart university transformation strategies, while This study dealt with the following smart university transformation strategy: (smart administrative system, smart campus, smart business support, smart output evaluation, smart classrooms, smart education management system) and a statement of its impact on the global entrepreneurial trend, which is not covered by most of these studies. The current study is similar to previous studies in that it used the questionnaire as a research tool, but it differed from it in the variables and population of the study.

### **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**

Smart systems have become a feature of this era and its greatest productions, as they are present in most of the facilities and systems that we use, such as smart buildings, smart cities, smart devices, and the smart web ... etc. We can call the era in which we live the smart era. The concept of smart has been expanded from small devices and companies to large smart environments and spaces that represent society, entire cities and all their institutions, and among these spaces are smart universities.

Where the researchers deal with the theoretical framework of the research the concepts and mechanisms of strategies for intelligent university transformation from several perspectives of scholars and writers, then addresses the importance of the global entrepreneurial trend in today's world, and the rapid change and intense competition it witnesses. The research is also exposed to the most important activities that are applied to reach the goals.

### **Smart University Transformation Strategies**

The world is in a frantic race to activate technology in all aspects of our life. The need to create a smart university has become an urgent matter, as it will transform the student from a consumer of knowledge into a producer of it, so working on building a new person is the most important and prominent goal of the smart university, a different and unconventional human being In his style of

learning and dealing, he is characterized by intellectual and behavioral flexibility, masters various and numerous skills, is able to self-learning, loves change, renewal, and searches for information on his own, and is a producer of knowledge, and has a spirit of initiative, innovation and creativity. Where the importance of the smart university lies because it is considered the main pillar for sustainable development to form human capital by preparing graduates with high qualifications and skills that bring about a scientific revolution to achieve distinction and competitiveness in the midst of intense competition in higher education, in addition to raising the value of higher education and improving the overall quality of education. The smart university transformation strategy, in turn, comes as an important strategy with its correct concept of dispensing with all that hinders the progress of work to serve the achievement of the goals of the institution.

The researchers believe that the smart university is a highly efficient and effective educational institution that works to bring about a scientific revolution in knowledge acquisition and management, in the production of interactive information and the way it is received, and it is considered an effective tool in changing the movement of contemporary life, as it works to provide programs of highly competitive educational quality. Through the e-learning environment, it supports and promotes the idea of lifelong learning. Whereas, the smart university is based on a number of basic principles and requirements that cannot be divided, and it is necessary to manage it as a single unit in a smart way, namely:

1. Smart Campus: S-Campus
2. Smart, Modern Buildings And Facilities S-Building
3. S-IT Infrastructure
4. Digital Culture
5. Smart Human Resources Trained With The Necessary Digital Skills
6. Smart S-Educational Environment

#### **Smart University Components**

The smart university is based on a number of basic principles, which are the following:

- A smart campus S-Campus consisting of:
  - A smart physical infrastructure that includes Smart Building.
  - IT hardware infrastructure Smart that includes (advanced wired and wireless network infrastructure, laptops and tablets, cameras and sensors, storage devices, smart boards, displays, surveillance systems, communication systems ...
  - IT software infrastructure Smart that includes (learning systems management systems, enterprise management systems, control and control systems, security and protection systems, social networks systems, a smart electronic library, an interactive website, pages on social media.
- Smart, efficient and trained human frameworks " Smart Individuals "
- Educational environment Smart that include a set of smart interactive software and educational systems, smart e-books, educational materials and items.
- "Smart strategy" Clear learning plans, strategies and goals.
- Smart management system: It uses integrated management programs for education systems and the institution.

#### **Smart University Goals**

The most important goals of the smart university are as follows (Ng. Et al, 2010):

- Creating an effective teaching model, and moving towards cooperative education.
- Achieving distinction and competitiveness in the midst of intense competition in higher education.
- Raise the value of higher education and improve the overall quality of education.
- Maximizing students' ability to teach and learn.
- Make individuals able to take on leadership roles in the outside world.
- Moving from the stage of acquiring knowledge to the stage of applying it to address real problems.
- Providing good educational opportunities without any restrictions.
- Empowering the educational and administrative team with a new set of educational and administrative capabilities.
- Providing multi-faceted systematic solutions to meet the needs of students and their staff.
- Increase productivity and reduce operating costs.

#### **Characteristics of the Smart University**

A smart university has five basic characteristics (Al Shobaki et al., 2020):

- Mobility Education: is the ability of the educational process elements to access scientific content, from anywhere, anytime, through mobile devices.
- Individual Education: It consists in imparting a personal privacy for education related to each individual, building individual education cards (smart card) and organizing communication and cooperation in the field of education between all concerned parties.

- Accessibility: is the ease of access to educational and administrative information and services such as learning systems, scientific databases, information sources, online resources, and others.
- Technological Effectiveness: The technical effectiveness provides the validity of the information technology infrastructure in the university, through cloud technologies, and virtual technologies, based on the principles of flexibility, simplicity, modularity, scalability and others.
- Openness: Openness in the smart university system means that it works to provide open repositories of educational materials and resources to form e-learning courses, provide training for students in all disciplines, and free access to sources and scientific research.

In sum, we must know that smart education is no longer an option but has become a necessity, and the question should not be about the possibility of achieving this, but about the timeframe for achieving it. Whereas, the smart university is a scientific revolution in knowledge acquisition and management, in the production of interactive information and the way it is received, and an effective tool in changing the movement of contemporary life.

**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 population of this study is represented by the employees of the University of Palestine in Gaza Strip, whose number is (234) employees (Personnel Affairs, University of Palestine, 2020).

**Third: The Study Sample:** The simple random sampling method was used to collect data by distributing the questionnaire to (50%) of the employees, i.e. (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, 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 “The Reality of Implementing the Smart University Transformation Strategy at the University of Palestine”, as it consists of two main sections:

**The First Section:** It is the personal and organizational data of the respondents (Gender, Age Group, Qualification, Years of Service, and Job Title).

**Section Two:** Scale of the Smart University Transformation Strategy

The scale consists of (33) items, which measure 6 sub-dimensions of smart university transformation, and the following table illustrates this

**Table 2:** Distribution of the paragraphs of the questionnaire on the different fields

#	The Dimension	Number Of Paragraphs
1.	Smart Management System	6
2.	Smart Campus	6

3.	Smart Business Support	5
4.	Smart Evaluation Of Outputs	5
5.	Smart Classes	5
6.	Smart Education Management System	6
<b>The Total Degree Of Smart University Transformation Strategies</b>		<b>33</b>

**Correction of 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 respectively (5, 4, 3, 2, 1).

**The Second Stage: The Legalization Stage:** It included a validity and consistency account for the test.

- 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.
- 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 3:** 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.
<b>Smart Management System</b>			<b>Smart Campus</b>			<b>Smart Business Support</b>			<b>Smart Evaluation of Outputs</b>		
1	0.871	0.000	1	0.591	0.000	1	0.670	0.000	1	0.814	0.007
2	0.789	0.000	2	0.577	0.000	2	0.891	0.000	2	0.771	0.000
3	0.835	0.000	3	0.611	0.000	3	0.843	0.000	3	0.827	0.000
4	0.771	0.000	4	0.451	0.010	4	0.815	0.000	4	0.715	0.000
5	0.877	0.000	5	0.484	0.005	5	0.663	0.000	5	0.758	0.000
6	0.898	0.000	6	0.640	0.000						
<b>Smart Classes</b>			<b>Smart Education Management System</b>								
1	0.674	0.000	1	0.782	0.000						
2	0.842	0.000	2	0.823	0.000						
3	0.806	0.000	3	0.794	0.000						
4	0.831	0.000	4	0.850	0.000						
5	0.824	0.000	5	0.913	0.000						
			6	0.700	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 marital expressions and the total of the individual statements of the test and its domains, and by using the Spearman Brown equation, the overall reliability coefficient was (0.964), 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 (0.967), 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 4:** the scale stability coefficient by the half-segmentation method and Cronbach Alpha

#	Dimensions	Number of Paragraphs	Correlation Coefficient before Adjustment	Correlation Coefficient after Adjustment	Alpha Cronbach	Significance Level
1.	Smart Management System	6	0.873	0.932	0.916	0.01
2.	Smart Campus	6	0.433	0.605	0.563	0.01
3.	Smart Business Support	5	0.778	0.875	0.830	0.01
4.	Smart Evaluation of Outputs	5	0.709	0.830	0.836	0.01

5.	Smart Classes	5	0.824	0.904	0.852	0.01
6.	Smart Education Management System	6	0.859	0.924	0.887	0.01
<b>The Total Degree of Smart University Transformation Strategies</b>		33	0.831	0.908	0.940	0.01

It is clear 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 in the validity of the questionnaire and its validity to analyze the results, answer the study questions and test its hypotheses.

**Test Hypotheses of the Study.**

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

**Table 5:** 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
<b>Total</b>		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
<b>Total</b>		90	100.0
Qualification	PhD	38	42.2
	M.A.	25	27.8
	Bachelor's degree or less	27	30.0
<b>Total</b>		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
<b>Total</b>		90	100.0
Job Title	Academic	62	68.9
	Administrative	28	31.1
<b>Total</b>		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 6:** 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 answer to the first question, which states: What is the level of smart university transformation strategies at the University of Palestine?

To answer the question, the researchers used averages, standard deviations, and percentages, according to the following tables:

- The First Indicator: A Smart Management System:** the arithmetic mean, standard deviation, relative weight, and order b were used to find the degree of approval. The results are shown in the following table:

**Table 7:** The arithmetic mean, standard deviation, relative weight, and ranking for each paragraph of the first indicator: an intelligent management system

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university provides flexibility in information exchange and sharing with stakeholders	3.6563	0.90195	73.13%	5	Agree
2.	The university provides the ability to deal with complex issues and systems	3.5938	0.83702	71.88%	6	Agree
3.	The university supports sustainability in its smart administrative processes	3.7188	0.72887	74.38%	4	Agree
4.	The university facilitates innovation processes and enhances its competitiveness	4.0625	0.87759	81.25%	1	Agree
5.	The university works to strengthen and expand the circle of participation in decision-making through representatives from the local community and the private sector	3.8437	0.88388	76.87%	2	Agree
6.	The university provides multiple services to achieve the social welfare of students and workers	3.8437	0.84660	76.87%	3	Agree
<b>Total Marks</b>		3.7865	0.71119	75.73%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the fourth paragraph, "The University facilitates innovation processes and enhances its competitiveness," is equal to 4.06 (overall score out of 5), meaning that the relative weight is 81.25%, and this means that there is high agreement by the sample members for this paragraph.
- The arithmetic mean of the second paragraph, "The University provides the ability to deal with complex issues and systems" is equal to 3.59, meaning that the relative weight is 71.88%, and this means that there is high agreement by the sample members for this paragraph.

In general, it can be said that the arithmetic mean of the first indicator: an intelligent administrative system "is equal to 3.78, meaning that the relative weight is 75.73%, and this means that there is high approval by the sample members for the paragraphs of this dimension, as the Palestinian universities in general and the University of Palestine in particular are universities. It is modern, developed and has a smart administrative system, which led to the university facilitating innovation processes and enhancing its competitiveness, and the university is working to strengthen and expand the circle of participation in decision-making through representatives from the local community and the private sector, as the university provides multiple services to achieve social welfare for students and employees The university also supports sustainability in its smart administrative processes, as well as the university provides flexibility in exchanging and sharing information with stakeholders, as well as the university has the ability to deal with complex issues and systems.

These results are in agreement with some studies, such as a study (Al-Sawyer, 2017) which recommended spreading the culture of business intelligence and including it within the strategies of Jordanian commercial banks. As well as the study (Alsolamy, 2019), which indicates that the ability to innovate positively affects the sustainable competitive advantage of Saudi social enterprises. These results differed with a study (Felix, 2014), whose most important finding was that the capabilities of faculty members in the field of information and communication technology are weak. And that basic skills in information technology are weak.

- Indicator Two: Smart Campus:** The arithmetic mean, standard deviation, relative weight, ranking and degree of approval were used. The results are shown in the following table:

**Table 8:** The arithmetic mean, standard deviation, relative weight, and arrangement for each paragraph of the second indicator: a smart campus

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university offers a complete caring and interactive environment for students	3.6452	0.95038	72.90%	5	Agree
2.	The university owns buildings equipped with a remote monitoring system and managing operations through sensors and monitoring	3.7812	0.97499	75.62%	3	Agree
3.	Buildings allow people to control the temperature inside the building	4.0000	0.95038	80.00%	1	Agree
4.	The university provides a broadband and high-speed wireless communication network	3.4688	1.10671	69.38%	6	Agree
5.	The university uses alarm and protection systems	3.8437	1.08090	76.87%	2	Agree
6.	The university uses solar energy and thermal insulation for exterior walls and ceilings	3.7500	0.84242	75.00%	4	Agree
<b>Total Marks</b>		3.5802	0.54292	71.60%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the third paragraph "The buildings allow individuals to control the temperature inside the building" equals 4.00 (total score out of 5), meaning that the relative weight is 80.00%, and this means that there is a high agreement by the sample members for this paragraph.
- The arithmetic mean of the fourth paragraph, "The University provides a broadband and high-speed wireless communication network" is equal to 3.47, meaning that the relative weight is 69.38%, 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 mean of the second indicator: "smart campus" is equal to 3.58, meaning that the relative weight is 71.60%, and this means that there is high approval by the sample members for the paragraphs of this dimension. The researchers attribute this to the fact that the buildings in the University of Palestine allow individuals to control the temperature inside the building, and that the university uses alarm and protection systems. The university provides a complete care and an interactive environment for students, and the university also provides a high-speed, broadband wireless communication network.

These results are consistent with some studies such as (Al-Sawyer, 2017) which recommended continuing interest in information technology and its capabilities, and the study (Felix, 2014), which was the most important findings of the study that the strategies used by school leaders to build the capacity of teachers Leads to the use of information and communication technology.

3. **The Third Indicator: Smart Business Support:** The arithmetic mean, standard deviation, relative weight and ranking were used to find the degree of approval. The results are shown in the following table:

**Table 9:** the arithmetic mean, standard deviation, relative weight, and ranking for each paragraph of the third indicator: Smart business support

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university uses knowledge to match the job market	3.4778	0.97413	69.56%	5	Agree
2.	The university provides research and patent centers	3.6111	0.90807	72.22%	3	Agree
3.	The university works to direct investors and civil institutions towards a knowledge economy	3.6111	1.02436	72.22%	4	Agree
4.	The university has a business incubator to support students' entrepreneurial projects	3.7667	0.94868	75.33%	2	Agree
5.	The university communicates with local and international business incubators to promote entrepreneurship	3.8876	0.68155	77.75%	1	Agree
<b>Total Marks</b>		3.6711	0.69626	73.42%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the fifth paragraph "The University communicates with local and international business incubators to promote entrepreneurship" equals 3.89 (total score out of 5), meaning that the relative weight is 77.75%, and this means that there is high approval by the respondents of this paragraph.
- The arithmetic mean of the first paragraph, "The University uses knowledge to suit the labor market" is equal to 3.48, meaning that the relative weight is 69.56%, and this means that there is high agreement by the sample members for this paragraph.

In general, it can be said that the arithmetic mean of the third indicator: smart business support "is equal to 3.67, meaning that the relative weight is 73.42%, and this means that there is high approval by the sample members for the paragraphs of this dimension. The researchers attribute this to the fact that the university is in contact with local and international business incubators to promote entrepreneurship, as the university is employing knowledge to match the job market.

These results are in agreement with some studies such as (Felix, 2014), which showed that the strategies used by school leaders to build the capacity of teachers lead to the use of information and communication technology. It was noted that rapid innovation in technology is a challenge to identify the continuous new skills that leaders need. And the study (Alsolamy, 2019), which results indicate that the ability to innovate positively affects the sustainable competitive advantage of Saudi social enterprises.

4. **Fourth Indicator: Smart Evaluation of the Outputs:** The arithmetic mean, standard deviation, relative weight, and ranking were used to find the degree of approval. The results are shown in the following table:

**Table 10:** the arithmetic mean, standard deviation, relative weight, and ranking for each paragraph of the fourth indicator: Smart evaluation of the outputs

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university works on analyzing students' learning levels through documented data for his university career	3.8000	0.75252	76.00%	2	Agree
2.	The university adapts activities related to the university curriculum with rapid changes	3.8667	0.79606	77.33%	1	Agree
3.	The university supports sustainability in its operations	3.7000	0.79958	74.00%	4	Agree
4.	University performance results are reviewed periodically	3.7528	0.81577	75.06%	3	Agree
5.	The university corrects the deviations and existing problems up to date	3.5556	0.87552	71.11%	5	Agree
<b>Total Marks</b>		3.7339	0.61689	74.68%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the second paragraph, "The University aligns activities related to university curricula with rapid variables" equals 3.86 (total score out of 5), meaning that the relative weight is 77.33%, and this means that there is high approval by the sample members for this paragraph.
- The arithmetic mean of the fifth paragraph, "The University corrects deviations and existing problems first-hand," is equal to 3.55, meaning that the relative weight is 71.11%, and this means that there is high agreement by the sample members for this paragraph.

In general, it can be said that the arithmetic mean of the fourth indicator: an intelligent evaluation of the outputs "is equal to 3.73, meaning that the relative weight is 74.68%, and this means that there is high agreement by the sample members for the paragraphs of this dimension.

The researchers attribute this to the fact that the university is adapting activities related to university curricula with rapid changes, as the university works on analyzing students' learning levels through documented data of their university career, and university performance results are reviewed periodically, as the university supports sustainability in its operations. Corrects deviations and problems present on the go.

These results are in agreement with some studies such as (Al-Sawyer, 2017), which showed that the speed of response to customers with an overall average of (4.13), the speed of response to operations with an overall average of (4.04) and the speed of response to business partners with an overall average of (3.94), where the ratios indicate the level of High.

5. **Indicator Five: Smart Classes:** The arithmetic mean, standard deviation, relative weight, and ranking were used to find the degree of approval. The results are shown in the following table:

**Table 11:** the arithmetic mean, standard deviation, relative weight, and arrangement for each paragraph of the fifth indicator: smart classes

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
---	-----------	-----	--------------------	-----------------	------	--------------------

1.	The university has classrooms equipped with modern technical means and the necessary technical capabilities	3.6778	0.77645	73.56%	2	Agree
2.	The university has programs and screens to navigate through the virtual environment	3.3977	0.86489	67.95%	5	Medium
3.	The university has halls equipped with smart interactive panels	4.1136	0.80846	82.27%	1	Agree
4.	The university has a sufficient number of video conference rooms	3.5222	0.82418	70.44%	3	Agree
5.	The university provides students with virtual classes on the university's website	3.4000	0.87152	68.00%	4	Agree
<b>Total Marks</b>		3.6269	0.63233	72.54%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the third paragraph "there are rooms equipped with interactive smart panels" at the university equals 4.11 (total score out of 5), meaning that the relative weight is 82.27%, and this means that there is high approval by the sample members for this paragraph.
- The arithmetic mean of the second paragraph, "The University has programs and screens to navigate through the virtual environment" equals 3.39, meaning that the relative weight is 67.95%, 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 mean of the fifth indicator: "smart classes" is equal to 3.63, meaning that the relative weight is 72.54%, and this means that there is high approval by the sample members for the paragraphs of this dimension.

The researchers attribute this to the fact that the university has halls equipped with smart interactive panels. The university has classrooms equipped with modern technical means and the necessary technical capabilities. The university has enough video conference rooms, and the university provides students with virtual classes on the university's website, where The University has programs and screens to navigate through the virtual environment.

6. **Sixth Indicator: A Smart Education Management System:** the arithmetic mean, standard deviation, relative weight and order were used to find the degree of approval. The results are shown in the following table:

**Table 12:** The arithmetic mean, standard deviation, relative weight, and ranking for each paragraph of the sixth indicator: a smart education management system

#	Paragraph	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	The university uses modern educational systems using the virtual environment	3.4889	0.86433	69.78%	4	Agree
2.	The university provides curricula that cover all stages to develop creative capabilities	3.6111	0.88298	72.22%	1	Agree
3.	The university adopts foreign languages as part of the learning process to exchange and benefit from knowledge	3.6023	0.80999	72.05%	3	Agree
4.	The university allows students to electronically register for courses	3.6067	0.80648	72.13%	2	Agree
5.	Students are provided with grades electronically via the website and SMS	3.4889	0.91485	69.78%	5	Agree
6.	The university communicates with faculty members through modern technical means	3.3034	0.94634	66.07%	6	Medium
<b>Total Marks</b>		3.5130	0.71215	70.26%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the second paragraph "The university provides curricula that include all stages of developing creative capabilities" is equal to 3.62 (total score out of 5), meaning that the relative weight is 72.22%, and this means that there is high approval by the sample members for this paragraph.
- The arithmetic mean of the sixth paragraph "The university communicates with faculty members through modern technical means" equals 3.30, meaning that the relative weight is 66.07%, 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 mean of the sixth indicator: "an intelligent education management system" is equal to 3.51, meaning that the relative weight is 70.26%, and this means that there is high approval by the sample members for the paragraphs of this dimension.

The researchers attribute this to the fact that the university provides curricula that include all stages to develop creative abilities. The university allows students to electronically register for courses. The university also adopts foreign languages as part of the learning process to exchange knowledge and benefit from them. The university uses modern educational systems using the virtual environment, and students are provided with grades. Electronically via the website and short messages, and the university communicates with faculty members through modern technical means.

**The overall score of the Smart University Transformation Strategies Scale:**

The arithmetic mean, standard deviation, relative weight, and ranking were used to find out the degree of agreement. The results are shown in the following table:

**Table 13:** the arithmetic mean, standard deviation, relative weight, and ranking for each dimension of the scale of "smart university transformation strategies"

#	The Dimension	SMA	Standard Deviation	Relative Weight	Rank	Degree Of Approval
1.	Smart Management System	3.6889	0.77701	73.78%	2	Agree
2.	Smart Campus	3.6859	0.58895	73.72%	3	Agree
3.	Smart Business Support	3.6711	0.69626	73.42%	4	Agree
4.	Smart Evaluation Of Outputs	3.7339	0.61689	74.68%	1	Agree
5.	Smart Classes	3.6269	0.63233	72.54%	5	Agree
6.	Smart Education Management System	3.5130	0.71215	70.26%	6	Agree
<b>The Total Degree Of Smart University Transformation Strategies</b>		3.6533	0.54676	73.07%		Agree

From the previous table, the following can be drawn:

- The arithmetic mean of the fourth dimension "smart assessment of the outputs" is equal to 3.73 (overall score out of 5), meaning that the relative weight is 74.68%, in the first place, and this means that there is high agreement by the sample members on this dimension.
- The arithmetic mean of the sixth dimension "an intelligent education management system" is equal to 3.51, meaning that the relative weight is 70.26%, and this means that there is high agreement by the sample members on this dimension.

In general, it can be said that the arithmetic mean of the "Smart University Transformation Strategies" scale is equal to 3.65, meaning that the relative weight is 73.07%, and this means that there is high agreement by the sample members on the scale's dimensions.

The researchers attribute that to the fact that the University of Palestine has a smart evaluation of the outputs, it also has a smart administrative system, a smart campus, and has smart support for business, and that the University of Palestine has smart classrooms, and the University of Palestine applies a smart system for managing education, all of this made it have the The capabilities that help it in implementing the strategies of smart university transformation.

These results are in agreement with some studies such as (Al-Sawyer, 2017), (Felix, 2014), and (Alsolamy, 2019), as well as (Abas & Ibrahim, 2019).

**Test Hypotheses of the Study**

**H0<sub>1</sub>:** There are statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the average responses of the respondents regarding the strategies of smart university transformation at the University of Palestine due to the following personal and organizational data: (Gender, Age Group, Academic Qualification, Years Of Service, Job Title).

**The main hypothesis stems from the following set of sub-hypotheses:**

**H0<sub>1.1</sub>:** There are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses to the strategies of smart university transformation at the University of Palestine, due to the gender variable.

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 14:** means, standard deviations, and the value of "t" due to the gender variable

Dimensions	Gender	The Number	The Average	Standard Deviation	T Value	Significance Level	Indication
Smart Management System	Male	71	3.7911	0.70807	1.156	0.135	Not Sig.
	Female	19	3.3070	0.91669			

Smart Campus	Male	71	3.7028	0.50483	0.524	0.602	Not Sig.
	Female	19	3.6228	0.84773			
Smart Business Support	Male	71	3.7521	0.55597	1.556	0.135	Not Sig.
	Female	19	3.3684	1.03551			
Smart Evaluation of Outputs	Male	71	3.7190	0.60659	0.416-	0.681	Not Sig.
	Female	19	3.7895	0.66824			
Smart Classes	Male	71	3.6678	0.56320	0.948	0.353	Not Sig.
	Female	19	3.4737	0.84383			
Smart Education Management System	Male	71	3.5371	0.62033	0.619	0.537	Not Sig.
	Female	19	3.4228	1.00013			
<b>The Total Degree of Smart University Transformation Strategies</b>	Male	71	3.6950	0.46128	1.407	0.163	Not Sig.
	Female	19	3.4974	0.78620			

- 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 smart university transformation strategies and their impact on the smart university transformation at the University of Palestine due to the gender variable.

The researchers attribute this to the fact that the University of Palestine employs qualified academics. The criterion for employment to work within the university is the university’s need for the incumbent, regardless of the social type.

**H0<sub>1,2</sub>**: There are statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses to the strategies of smart university transformation at the University of Palestine, due to the variable of the age group.

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

**Table 15:** Results of the "single-factor variance" test - for the age group variable

Dimensions	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
Smart Management System	Between groups	3.921	3	1.307	2.256	.088
	Within groups	49.813	86	.579		
	<b>Total</b>	53.733	89			
Smart Campus	Between groups	.813	3	.271	.775	.511
	Within groups	30.058	86	.350		
	<b>Total</b>	30.871	89			
Smart Business Support	Between groups	2.320	3	.773	1.629	.189
	Within groups	40.824	86	.475		
	<b>Total</b>	43.145	89			
Smart Evaluation of Outputs	Between groups	.268	3	.089	.229	.876
	Within groups	33.601	86	.391		
	<b>Total</b>	33.869	89			
Smart Classes	Between groups	1.919	3	.640	1.634	.187
	Within groups	33.666	86	.391		
	<b>Total</b>	35.585	89			
Smart Education Management System	Between groups	3.321	3	1.107	2.277	.085
	Within groups	41.816	86	.486		
	<b>Total</b>	45.137	89			
<b>The Total Degree of Smart University Transformation Strategies</b>	Between groups	1.335	3	.445	1.514	.217
	Within groups	25.271	86	.294		
	<b>Total</b>	26.606	89			

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

It was found that the probability value (Sig.) Corresponding to the "one-way variance" test is higher than the significance level 0.05 for all dimensions and for the overall degree of intelligent university transformation. 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 attribute this to the fact that employees at the University of Palestine possess scientific qualifications and academic capabilities regardless of their age group, so you find them keen to pursue all strategies, sciences and skills that would develop their abilities and knowledge.

**H0<sub>1.3</sub>**: There are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses about the strategies of smart university transformation at the University of Palestine, due to the scientific qualification variable.

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

**Table 16:** Results of the "one-size-fits-all" test for the level of academic qualification variable

Dimensions	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
Smart Management System	Between groups	5.153	2	2.577	4.614	.012
	Within groups	48.580	87	.558		
	<b>Total</b>	53.733	89			
Smart Campus	Between groups	.090	2	.045	.128	.880
	Within groups	30.781	87	.354		
	<b>Total</b>	30.871	89			
Smart Business Support	Between groups	2.305	2	1.152	2.455	.092
	Within groups	40.840	87	.469		
	<b>Total</b>	43.145	89			
Smart Evaluation of Outputs	Between groups	.143	2	.071	.184	.832
	Within groups	33.726	87	.388		
	<b>Total</b>	33.869	89			
Smart Classes	Between groups	1.093	2	.546	1.378	.257
	Within groups	34.492	87	.396		
	<b>Total</b>	35.585	89			
Smart Education Management System	Between groups	.889	2	.445	.874	.421
	Within groups	44.248	87	.509		
	<b>Total</b>	45.137	89			
<b>The Total Degree of Smart University Transformation Strategies</b>	Between groups	.703	2	.351	1.180	.312
	Within groups	25.903	87	.298		
	<b>Total</b>	26.606	89			

It was found that the probability value (Sig.) Corresponding to the test of "unilateral variance" is higher than the level of significance 0.05 for all dimensions and for the overall degree of smart university transformation except for the first dimension "smart administrative system" which showed differences in favor of PhD holders and thus it can be concluded in general that there are no differences Statistical significance among the averages of the study sample estimates attributable to academic qualification.

The researchers attribute this to the fact that employees in Palestinian universities, especially the University of Palestine, are those who hold a first university degree at least to be qualified to work within the university walls.

**H0<sub>1.4</sub>**: There are statistically significant differences at the level of ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses to the strategies of smart university transformation at the University of Palestine, due to the variable of the Years of Service.

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

**Table 17:** Results of the "unilateral variance" test - for the variable number of years of service

Dimensions	Source	Sum Of Squares	Degrees Of Freedom	Average Of Squares	F Value	Significance Level
Smart Management System	Between groups	4.774	3	1.591	2.795	.045
	Within groups	48.959	86	.569		
	<b>Total</b>	53.733	89			
Smart Campus	Between groups	.128	3	.043	.119	.949
	Within groups	30.744	86	.357		
	<b>Total</b>	30.871	89			

Smart Business Support	Between groups	1.630	3	.543	1.126	.343
	Within groups	41.515	86	.483		
	Total	43.145	89			
Smart Evaluation of Outputs	Between groups	.296	3	.099	.253	.859
	Within groups	33.573	86	.390		
	Total	33.869	89			
Smart Classes	Between groups	.941	3	.314	.779	.509
	Within groups	34.644	86	.403		
	Total	35.585	89			
Smart Education Management System	Between groups	1.626	3	.542	1.071	.366
	Within groups	43.512	86	.506		
	Total	45.137	89			
<b>The Total Degree of Smart University Transformation Strategies</b>	Between groups	.604	3	.201	.666	.575
	Within groups	26.002	86	.302		
	Total	26.606	89			

It was found that the probability value (Sig.) Corresponding to the test of "unilateral variance" is higher than the significance level 0.05 for all dimensions and for the overall degree of smart university transformation except for the first dimension "smart administrative system", which showed that there are differences in favor of the category of the Years Of Service less than 5 years, and thus it can be concluded In general, there are no statistically significant differences between the averages of the study sample estimates due to the variable of the Years Of Service.

The researchers attribute this to the fact that the University of Palestine is a modern and youthful university that relies in its work on a cadre of the young generation who is qualified and holds the highest academic degrees in addition to having some academic experience, as these young employees are those with abilities and inclination towards technology and towards modernity more than those who spent years Long in the academic corps.

**H0<sub>1-5</sub>** There are statistically significant differences at the level of significance ( $\alpha \leq 0.05$ ) between the averages of the respondents' responses about the strategies of smart university transformation at the University of Palestine, due to the job title variable.

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 18:** means, standard deviations, and "t" value attributed to the job title variable

Dimensions	Job Title	The Number	The Average	Standard Deviation	T Value	Significance Level	Indication
Smart Management System	Academic	62	3.8414	.64262	2.882	0.005	Sig.
	Administrative	28	3.3512	.94100			
Smart Campus	Academic	62	3.6973	.52247	0.240	0.811	Not Sig.
	Administrative	28	3.6607	.72504			
Smart Business Support	Academic	62	3.7581	.56816	1.785	0.078	Not Sig.
	Administrative	28	3.4786	.90159			
Smart Evaluation of Outputs	Academic	62	3.7323	.60048	0.037-	0.970	Not Sig.
	Administrative	28	3.7375	.66313			
Smart Classes	Academic	62	3.6616	.56707	0.692	0.493	Not Sig.
	Administrative	28	3.5500	.76328			
Smart Education Management System	Academic	62	3.5188	.61929	0.115	0.908	Not Sig.
	Administrative	28	3.5000	.89723			
<b>The Total Degree of Smart University Transformation Strategies</b>	Academic	62	3.7016	.47578	1.251	0.214	Not Sig.
	Administrative	28	3.5463	.67585			

- 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 job title variable in all dimensions and to the overall degree of smart university transformation, except for the first dimension, “smart administrative system,” which showed that there are differences in favor of academics. Thus, it can be concluded in general that there are no significant differences. A statistic among the averages of the study sample estimates attributable to the job title variable.

Researchers believe that this matter is logical and natural, as academics are always keen to follow up on everything new in science and knowledge so that they transfer that knowledge to their students, unlike administrators who enjoy constant office administrative work that does not require them to have permanent knowledge development like academics.

## **Conclusion and Recommendations**

### **Conclusions**

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

- The presence of a high level of smart university transformation at the University of Palestine, where the total score for digital reputation was (73.07%).
- The order of the dimensions of the smart university transformation is as follows (intelligent evaluation of outputs, smart administrative system, smart campus, smart business support, smart classrooms, smart education management system).
- There are no statistically significant differences in the smart university transformation according to personal and organizational data.

### **Recommendations**

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

- The necessity for universities to enhance the strategies of smart university transformation and raise their level.
- The university will promote smart classrooms, and smart education management system.
- Interest in holding international conferences that contribute to networking between financiers and entrepreneurs, cooperating with international universities to work to help entrepreneurs implement their projects through advice and consultations, and working to build a network of entrepreneurs from institutions that benefit from the services they provide.

**References**

- [1]Abusharekh, N. H., et al. (2019). "Knowledge Management Processes and Their Role in Achieving Competitive Advantage at Al-Quds Open University." *International Journal of Academic Accounting, Finance & Management Research (JAAFMR)* 3(9): 1-18.
- [2]Abusharekh, N. H., et al. (2020). "The Impact of Modern Strategic Planning on Smart Infrastructure in Universities." *International Journal of Academic Management Science Research (IJAMSR)* 4(8): 146-157.
- [3]Ahmad, H. R., et al. (2018). "Information Technology Role in Determining Communication Style Prevalent Among Al-Azhar University Administrative Staff." *International Journal of Information Technology and Electrical Engineering`* 7(4): 21-43.
- [4]Ahmad, H. R., et al. (2020). "The Reality of Applying Recruitment Criteria for Coastal Municipalities Water Utility Company." *International Journal of Academic Information Systems Research (JAISR)* 4(3): 31-52.
- [5]Ahmed, A. A., et al. (2018). "The Impact of Information Technology Used on the Nature of Administrators Work at Al-Azhar University in Gaza." *International Journal of Academic Information Systems Research (JAISR)* 2(6): 1-20.
- [6]Al Shobaki, M. J., et al. (2016). "The impact of top management support for strategic planning on crisis management: Case study on UNRWA-Gaza Strip." *International Journal of Academic Research and Development* 1(10): 20-25.
- [7]Al Shobaki, M. J., et al. (2017). "Strategic and Operational Planning As Approach for Crises Management Field Study on UNRWA." *International Journal of Information Technology and Electrical Engineering* 5(6): 43-47.
- [8]Al Shobaki, M. J., et al. (2017). "The Reality of the Application of Electronic Document Management System in Governmental Institutions-an Empirical Study on the Palestinian Pension Agency." *International Journal of Engineering and Information Systems* 1(2): 1-14.
- [9]Al Shobaki, M. J., et al. (2018). "The Availability of Smart Organization Dimensions in Technical Colleges in Palestine." *International Journal of Engineering and Information Systems (IJEAIS)* 2(1): 49-64.
- [10]Al Shobaki, M. J., et al. (2019). "The Intermediate Role of Knowledge and Information Management in the Relationship between Adopting the Strategy Criterion and Improving Overall Performance." *International Journal of Academic Management Science Research (IJAMSR)* 2(12): 16-30.
- [11]Alayoubi, M. M., et al. (2020). "Requirements for Applying the Strategic Entrepreneurship as an Entry Point to Enhance Technical Innovation: Case Study- Palestine Technical College-Deir al-Balah." *International Journal of Business and Management Invention (IJBMI)* 9(3): 1-17.
- [12]Alayoubi, M. M., et al. (2020). "Strategic Leadership Practices and their Relationship to Improving the Quality of Educational Service in Palestinian Universities." *International Journal of Business Marketing and Management (IJBMM)* 5(3): 11-26.
- [13]AlFerjany, A. A. M., et al. (2018). "The Relationship between Correcting Deviations in Measuring Performance and Achieving the Objectives of Control-The Islamic University as a Model." *International Journal of Engineering and Information Systems (IJEAIS)* 2(1): 74-89.
- [14]Almasri, A., et al. (2018). "The Organizational Structure and its Role in Applying the Information Technology Used In the Palestinian Universities-Comparative Study between Al-Azhar and the Islamic Universities." *International Journal of Academic and Applied Research (IJAAR)* 2(6): 1-22.
- [15]Alshaer, I. M. A., et al. (2017). "Governance of Public Universities and Their Role in Promoting Partnership with Non-Governmental Institutions." *International Journal of Engineering and Information Systems (IJEAIS)* 1(9): 214-238.
- [16]Ammar, T. M., et al. (2018). "Evaluation and Follow-Up and Their Relationship to the Level of Administrative Transparency in the Palestinian Universities." *International Journal of Academic and Applied Research (IJAAR)* 2(2): 30-44.
- [17]Arqawi, S. M., et al. (2019). "Strategic Orientation and Its Relation to the Development of the Pharmaceutical Industry for Companies Operating in the Field of Medicine in Palestine." *International Journal of Academic Management Science Research (IJAMSR)* 3(1): 61-70.
- [18]Arqawi, S. M., et al. (2019). "The Policy of Functional Integration of the Product Planning Team as a Strategy for the Development of the Pharmaceutical Industry in Palestine." *International Journal of Academic Accounting, Finance & Management Research (JAAFMR)* 3(1): 61-69.
- [19]El Talla, S. A., et al. (2017). Technical Colleges as Smart Organizations and their Relationship to Sustainability. Second Scientific Conference on Sustainability and enhancing the creative environment of the technical sector Palestine Technical College - Deir Al Balah 6-7 December 2017.
- [20]El Talla, S. A., et al. (2017). The Creative Environment and Its Relationship to the Lean Management of Technical Colleges Operating in Gaza Strip. Second Scientific Conference on Sustainability and enhancing the creative environment of the technical sector Palestine Technical College - Deir Al Balah 6-7 December 2017.
- [21]El Talla, S. A., et al. (2018). "Organizational Structure and its Relation to the Prevailing Pattern of Communication in Palestinian Universities." *International Journal of Engineering and Information Systems (IJEAIS)* 2(5): 22-43.
- [22]El Talla, S. A., et al. (2018). "The Reality of Applying the Policy and Strategy Standard in the Palestinian Universities According to the International Quality Models." *International Journal of Engineering and Information Systems (IJEAIS)* 2(9): 1-9.
- [23]FarajAllah, A. M., et al. (2018). "The Impact of the Leadership Standard in International Quality Models on Improving University Performance through the Intermediate Role of the Strategy Standard." *International Journal of Engineering and Information Systems (IJEAIS)* 2(9): 21-32.
- [24]FarajAllah, A. M., et al. (2018). "The Reality of Adopting the Strategic Orientation in the Palestinian Industrial Companies." *International Journal of Academic Management Science Research (IJAMSR)* 2(9): 50-60.
- [25]Hamdan, M. K., et al. (2020). "Creative Behavior and Impact on Achieving Lean Strategy in Organizations." *International Journal of Academic Accounting, Finance & Management Research (JAAFMR)* 4(6): 66-90.
- [26]Hamdan, M. K., et al. (2020). "Strategic Sensitivity and Its Impact on Boosting the Creative Behavior of Palestinian NGOs." *International Journal of Academic Accounting, Finance & Management Research (JAAFMR)* 4(5): 80-102.
- [27]Hamdan, M. K., et al. (2020). "The Effect of Choosing Strategic Goals and Core Capabilities on the Creative Behavior of Organizations." *International Journal of Academic Information Systems Research (JAISR)* 4(4): 56-75.
- [28]Hamdan, M. K., et al. (2020). "The Reality of Applying Strategic Agility in Palestinian NGOs." *International Journal of Academic Multidisciplinary Research (IJAMR)* 4(4): 76-103.
- [29]Kassab, M. K. I., et al. (2017). "The Impact of the Availability of Technological Infrastructure on the Success of the Electronic Document Management System of the Palestinian Pension Authority." *International Journal of Engineering and Information Systems (IJEAIS)* 1(5): 93-109.
- [30]Kassab, M. K. I., et al. (2019). "Impact of Information Technology on the Success of Office Management Systems in the Palestinian Pension Agency." *International Journal of Academic Information Systems Research (JAISR)* 3(2): 7-26.
- [31]Kassab, M. K. I., et al. (2019). "The Role of Policies and Procedures for the Electronic Document Management System in the Success of the Electronic Document Management System in the Palestinian Pension Agency." *International Journal of Academic Multidisciplinary Research (IJAMR)* 3(1): 43-57.
- [32]Keshta, M. S., et al. (2020). "Strategic Creativity and Influence in Enhancing the Perceived Organizational Reputation in Islamic Banks." *International Journal of Academic Accounting, Finance & Management Research (JAAFMR)* 4(7): 13-33.
- [33]Keshta, M. S., et al. (2020). "Strategic Creativity in Islamic Banks in Palestine between Reality and Implementation." *International Journal of Academic Accounting, Finance & Management Research (JAAFMR)* 4(3): 79-98.
- [34]Owda, M. et al., (2019). Entrepreneurs and Entrepreneurship in Gaza Strip between Reality and Ambition. *International Journal of Academic Management Science Research*, 3(8).
- [35]Shamia, M. J., et al. (2018). "Using the Asian Knowledge Model "APO" as a Determinant for Performance Excellence in Universities-Empirical Study at Al-Azhar University-Gaza." *International Journal of Information Technology and Electrical Engineering* 7(1): 1-19.
- [36]Sultan, Y. S. A., et al. (2018). "The Style of Leadership and Its Role in Determining the Pattern of Administrative Communication in Universities-Islamic University of Gaza as a Model." *International Journal of Academic Management Science Research (IJAMSR)* 2(6): 26-42.
- [37]Zaid, A. A., et al. (2020). "The Impact of Total Quality Management and Perceived Service Quality on Patient Satisfaction and Behavior Intention in Palestinian Healthcare Organizations." *Technology Reports of Kansai University* 62(03): 221-232.
- [38]Zaqout, I., et al. (2018). "Information Technology used and it's Impact on the Participation of Administrative Staff in Decision-Making in Palestinian Universities." *International Journal of Academic Multidisciplinary Research (IJAMR)* 2(8): 7-26.
- [39]Mady, S. A. (2020). "The Effect of Entrepreneurial and Customer Orientation on Service Quality in Hotels." *Technology Reports of Kansai University* 62(06): 3025-3056.

- [40]Abas, Saad F. and Ibrahim, Rangeen M. M. (2019). The Role of the Leading Approach in Achieving Value Innovation in the Production Factories a survey study of the views of a sample of managers in a number of productive factories in the governorate, Academic Journal of Nawroz University (AJNU) is currently accepting applications for guest-editor post. Vol 8 No 1 (2019).
- [41]Ng, J. W., Azarmi, N., Leida, M., Saffre, F., Afzal, A., & Yoo, P. D. (2010). The Intelligent Campus (iCampus): "End-to-end learning lifecycle of a knowledge ecosystem", In Intelligent Environments (IE), 2010 Sixth International Conference on (332-337).
- [42]Felix, Mndenyi Mwawasi (2014). "Technology Leadership and ICT Use: Strategies for Capacity Building for ICT Integration, Vol. 1, No. 2.
- [43]Alsolamy, Majed Qabil (2019). Exploring the Relationship between Entrepreneurial Orientation, Innovative Capability and Social enterprises Competitive Positioning: Evidence on Social Enterprises in Saudi Arabia, Global Journal of Economics and Business, 7 (3), pp. 335-347
- [44]Al-Sawyer, Mossa (2017). The mediating role of business intelligence competencies in the relationship between information technology competencies and organizational agility, a field study in Jordanian commercial banks (unpublished master thesis). Middle East University.
- [45]Al-Damen, R. A., & Abdulwahab, M. H (2015). The Impact of Entrepreneurs' Characteristics on Small Business Success at Medical Instruments Supplies Organizations in Jordan. International Journal of Business and Social Science, 6(8).