

The effect of digital leadership in creating smart organizations in the Jordanian private universities

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Abstract

This study aims to define the effect of digital leadership in creating smart organizations in Jordanian private universities. A convenient random sample consisting of 283 faculty members was selected and asked to respond to a questionnaire. The results of the study showed that there is a positive effect of total digital leadership on total smart organizations in Jordanian private universities. In light of the results, recommendations were provided, the most important being that Jordanian private universities should develop procedures encouraging administrative and academic leaders to make technology an integral part of their work when interacting with employees.

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1. Introduction

Technological transformation has marked the last twenty years, dictating the need for the adoption of various applications. One of the variables that emerged as a result of this technological advancement is digital leadership, a concept implying that leaders in different organizations employ digital applications in various organizational processes. Creating smart organizations is one of the most important drives motivating leaders to heavily adopt digital leadership. In the management literature, smart organizations are those that make applications an integral part of their daily operations so they can stay apprised of the progress in their work.

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1.1. Digital Leadership

In a changing world, organizations are changing in light of technological improvements, therefore, there is a need for systematic use of digital leadership, which has a significant role in enhancing the benefit of developments caused by digitalization and the use of technology in the different sectors [1]. In this vein, Al-Blaihed [2] add that digital leadership is a modern entry point for developing, and improving leadership and eliminating problems by using modern, efficient, and fast-paced technological techniques that seek to transform organizations, including universities, into digital organizations that use digitalization in the administrative functions. Thus, universities need highly effective creative leadership with skills and expertise to deal with current challenges that have the ability to replace technology in all administrative processes depending on the needs of the current time, contributing to creative services that deliver efficiently and effectively [3].

Leadership as stated by Gonim [4] is the process by which a group of individuals is influenced to achieve a common goal. It is also defined as a targeted process and unspecified practices that address challenges by inspiring a common vision, enabling others to move, formulating mechanisms and ways to achieve the desired goal. This process results in determining the systematic change and transformation required, changing convictions and developing new models, creating significant improvements or innovations, and adding new value to the organization [5].

Digital leadership is defined as using technology resources such as interactive board, computers, software, social media, and online open education resources in order to enhance the learning, teaching, and administration processes [6]. It is also defined as a social influence technique that involves the use of cutting-edge information technologies in order to achieve changes in individuals, groups, and organizations' emotions, thoughts, attitudes, performance, and behavior [7]. While DIZDAR [8] mention that digital leadership entails adopting new perspectives regarding organization platforms, the IT function, its strategy, organizational mindsets, and skill sets.

Digital leadership consists of five aspects suggested by the International Society for Technology in Education [9]:

- Excellence in professional practice: as the leaders are in need to encourage an environment that is supportive of innovation and professional growth and welcoming the use of digital and technology resources.
- Visionary leadership: the emphasis here is on the digital leader's incorporation of a distinct vision for the direction they want to take their organization. The efficiency of decision-making processes is one of the key justifications for incorporating visionary leadership into the framework of digital leadership.
- Digital-age learning culture: leaders are in need to create, facilitate, and sustain through a learning culture that embraces modern digital advancements and platforms.
- Digital citizenship: leaders are in need of modeling and mobilizing the understanding of ethical, legal, and social duties when developing digital culture and citizenship.
- Systemic improvement: a platform for change is provided by systemic improvement, which prevents instability in the leadership process. This has a positive effect of increasing how well high standards of effectiveness are upheld throughout the leadership process over the course of both the short- and long-term, which are crucial qualities in terms of improving digital leadership.

Moreover, the importance of digital leadership stems from the fact that it ensure more efficient and effective performance, it has a role in defining new methods to perform administrative and organizational processes, it contributes in making the change in the organizational styles, help to build value for the organization and achieve creativity, improves relations among the organization's members, supports group participation in decision-making at all levels of the organization and eliminating hierarchy, as well as achieving flexibility which makes the environment of digital leadership change [2]. On the level of the university, Xu, et al. [10] consider that digital leadership achieve complementarity of the university's core functions, it develops information leadership and management styles and coordinates the university's functions contributing in its turn to providing creative services.

Digital leadership differs from classic leadership as it adapts to the requirements of the digital age. This difference is illustrated by a set of points the most important of them that digital leadership attaches the utmost importance to innovation, creativity and growth, which promotes the desire to change and work independently as opposed to traditional leadership where there is little room for creativity. In addition to that, class leadership distributes information on a regular basis across hierarchical levels, with managers bearing the responsibility. As for the digital leadership, information is fully available, which fosters high levels of transparency and flexibility in the workplace. In regard of delegation and control, digital leaders prioritize tasks and outcomes and evaluate them with employees, whereas managers regulate the transfer of tasks and the evaluation of results in class leadership [11].

Undoubtedly, universities are considered a type of organization that can benefit from digitalization through both the incorporation of new technologies and the conversion of traditional workspaces into virtual – digital ones [12]. In this regard, Ahmad [13] adds that digital leadership has become a modern approach and a strategic process for the development and modernization of academic leadership. It is also considered a strategy that can be used to improve academic work performance by relying on them as new digital methods that are efficient, effective, fast, and appropriately costly.

1.2. Smart Organization

Organizations in the 21st century is facing radical changes, that have formed a series of challenges that threatened their survival, which is why organizations become in need to review their strategic points, concentrate on adopting to its environments, and to respond the needs and expectations by adopting new methods Al-Kasasbeh [14]. Rico-Bautista [15] affirms that universities are complex organizations. Even though they are autonomous, there is a series of functions that they must perform and a set of procedures that they must develop to ensure compliance with the demands of today's world, which

is an ongoing challenge. Smart organization is a concept that is based on the idea of the thorough upgrading of all educational procedures, and depending on the advanced technologies, which in turn leads to an intelligent university.

Smart organization developed in 1998 by Matheson and Matheson in their book "*The Smart Organization: Creating Value through Strategic R&D*", they indicated that smart organization is the process of generating value through strategic R & D, and the organization's ability to take smart decisions and adapt to fast changes. Smart organizations build an organizational culture that focuses on taking the right strategic decisions at the right time and aligning the organizational practices to support these decisions and preserve their results [16].

Smart organization is an organization capable of creating, acquiring, organizing, sharing and using knowledge to increase operational efficiency and competitiveness in the global market [17]. While Rady and Shammale [18] define it as those organizations that have the ability to respond quickly, and agility in generating knowledge, leveraging that knowledge to achieve their desired goals by seizing chances and adapting to environmental changes and challenges. Additionally, it is an organization that invests in their human talents and information technology through an institutional value system based on creativity, transparency and respect, in order to achieve sustainability [19].

There are three domains of strategic leadership that summarized by Al Shobaki, et al. [20]. The first is a clear strategic vision, which indicates that clarity of purpose must be provided by vision. The second domain is a merit culture, which includes listening to employees' opinions, not punishing employees for dissenting opinions, and sharing extremist ideas, even if they fail. The last one is a supportive incentive system, which includes enhancing the organization's core values, creating an implicit culture that values individuals, and correcting performance measurement.

Further, smart organization is characterized by a set of features including having a clear vision and a high level of change ability, sharing knowledge and empowering employees, the existence of an organizational structure that supports renovation, having a culture that supports continuous learning, implementing continuous improvement policy, and paying attention to human resources as it is considered the most important source in the organization. In addition to that, the smart organization is an organization that has high level of adaptability to changes, creativity in developing strategic orientation, creativity when facing problems, and an interest in intellectual capital [21].

Thus, in light of the rapid developments, universities need to become smart organizations, as this is one of the fundamental and successful pillars for improving university quality, knowledge production and dissemination, achieving creative levels, and efficiency. Smart organization is an inevitable trend to adapt to the world of technology and the Internet [22].

1.3. Previous Studies

A set of research sought to examine digital leadership and smart organization in different organizations. For instance, in Palestine, Rady and Shammale [18] aimed to define the level of implementing the smart organization and the level of achieving characteristics of technical innovation at the Palestine technical college of Deir al-Balah from the staff's perspectives (n = 147). In order to achieve that, the descriptive analytical design was used by distributing a questionnaire and to conduct an interview with the sample. A moderate level of implementing the concept of smart organization at the college was found and a moderate level of achieving characteristics of technical innovation. Furthermore, the study revealed an impact of the smart organization in the creation of technical innovation in Palestine Technical College. Statistically significant differences were found in the responses of the study sample with regard to the level of implementing smart organization and its role in the creation of technical innovation in Palestine technical college in light of age and years of service, while no differences were found in light of qualification and job title.

Using a questionnaire and through a personal interview, Aboudy and Ma'an [23] aimed to highlight the role of smart organization in promoting strategic-social responsibility. A sample of private colleges in Kurdstan was selected depending on the organizational structure consisted of (237) administrative leaders. A positive correlation was found between smart organization and strategic social responsibility.

Quddus, et al. [24] addressed the influence of ecology leadership, servant leadership and digital leadership toward universities performance. The sample of the study was selected from lectures of universities in Banten using snowball sampling method (n = 222). Using a quantitative method data were obtained from an online electronic questionnaire distributed on the respondents. The results of data analysis found that servant leadership, digital leadership and ecological leadership significantly influence universities performance.

To define the role of university's governance in achieving smart organization, Sultan [21] employed the descriptive analytical design through a questionnaire distributed on a random sample of (38) university presidents, their assistants, deans and heads of departments. A statistically significant correlation was revealed between the standards of university's governance and smart organization. Statistically significant differences were found regarding achieving smart organization, in light of years of experience, in favor of more than 7 years, while no statistically significant differences in achieving smart organization were found in light of age, gender, qualification, and no statistically significant differences in university's governance were found in light of age, gender, qualification, and years of experience.

Al-Blaihed [2] addressed digital leadership practice at Princess Nora Bint Abdul Rahman University in Saudi Arabia using a sample consisting of (76) heads of departments and the dean of the faculty who was asked to respond to a questionnaire developed by the researcher. The results revealed that the level of implementing digital leadership in the university was high, especially in publishing its decisions electronically and providing its administrative services. The study also found that there is a set of obstacles that hinder the university from implementing digital leadership, the first one is the low level of moral and material incentives, and the second is the absence of legislation that support implementing digital leadership.

In order to investigate the impact of digital leadership on the institutional performance of private higher education institutions in the digital era, Lim and Teoh [25] distributed a questionnaire on a sample consisted of (121) program leaders/ managers, department heads, deputy deans, deans, deputy vice-chancellors, and vice-chancellors in Malaysia PHEIs selected using a non-probability sampling method utilizing purposive sampling. The results found that digital-age learning culture, professional excellence, and digital citizenship positively affect higher education institutions performance, while, visionary leadership and systemic improvement do not have a significant positive relationship with performance.

2. Study Problem

Technology has become an integral part of organizational processes. Since the emergence of smart applications, there have been several attempts to capitalize on the advantages offered by such technologies in daily organizational operations. The transformation to a smart organization requires adopting behaviors that may motivate both higher administrators and employees to make use of smart applications as part of their routine work. One of the variables that may boost the development and creation of a smart organization is digital leadership, a concept implying that leaders in different organizations encourage their subordinates to use technological applications to ease their daily activities and to save time and money. Therefore, it has become a necessity for organizations seeking to minimize their costs and human resources to take advantage of the different applications that advanced technologies offer.

Smart digital universities are an outcome of the natural and logical development of e-learning and the accompanying broad launch in the field of open-source cloud computing and educational platforms, which today are considered one of the most important pillars of modern education in international and Arab universities, going hand in hand with traditional education. This rapid development in e-learning techniques is reflected in the teaching side, changing the faculty member from a mere conveyer of information to a more advanced member through the role of a guide, trainer, and corrector. Digital technologies have also affected the change of the role of the student from a mere recipient of science to a researcher and discoverer in the academic specialization. One of the most important reasons for relying on smart-university systems is the problem of accepting and accommodating students wishing to enroll in higher education institutions in Arab countries, which generated great pressure on public universities, not to mention the obvious weakness in the infrastructure of the scientific research sector in the educational institutions of Arab countries, which is almost modest [26].

In light of the fact that private universities are profitable organizations always working to make profits from educational services they provide to students while maintaining highly standard educational services, Jordanian private universities has worked on making digital applications as one of the key components able to help them offer high quality educational services. Reviewing previous studies, the researchers found both a theoretical and practical gap in educational administration literature as he found no previous studies examining the effect of digital leadership on creating smart organizations in the educational sector, especially higher educational institutions despite the fact that there is a need to examine such an important variable on transferring private universities to smart organizations. Therefore, the study aims to define the effect of digital leadership in creating smart organizations in the Jordanian private universities.

3. Model of the Study





3.1. Hypotheses of the Study

The problem of this stud

y lies in testing the following hypotheses:

- H1: There is no effect for the total digital leadership on the total smart organizations in the Jordanian Private Universities
- The following three sub hypotheses were derived from this hypothesis:
- *H1-1: There is no effect for digital leadership on clear strategic vision.*
- H1-2: There is no effect for digital leadership on merit culture.
- H1-3: There is no effect for digital leadership on supportive incentives system.

3.2. Study Significance

It is well documented in previous literature that the transformation to digital tools is a key factor in making organizations more efficient in their work performance. Thus, universities either private or public must realize this fact. It is hoped that the results of this study will open the eyes of administrators in Jordanian universities about the importance of employing digital leadership tools to make it possible to transform these universities into digital organizations; something that will save both time and money. As for universities leaders in Jordanian universities, capitalizing the many advantages digital organization provides may ease their work and make it smoother in completing their administrative responsibilities.

3.3. Definitions

Digital leadership: digital leadership is defined as using technology resources such as interactive board, computers, software, social media, and online open education resources in order to enhance the learning, teaching, and administration processes [6]. Digital leadership is defined in this study as digital tools employed by university leaders while assuming their work tasks.

Smart organization: smart organization is an organization capable of creating, acquiring, organizing, sharing and using knowledge to increase operational efficiency and competitiveness in the global market [17]. Smart organization is defined in this study as Jordanian universities making use of the many advantages digital tools provide for making work tasks easier.

4. Methods and Procedures

4.1. Methodology

In order to achieve the study's objectives, the researcher employed the descriptive-analytical design.

4.2. The Population and Sample of the Study

The population of the current study includes (825) faculty members who work at the Jordanian private universities during the first semester of the academic year 2022/2023, which include: Jadara University, Jarash University, and Irbid National University. A convenient random sample consisted of (283) faculty members were selected from the population of the study. As the researcher is one of the faculty members at one Jordanian private university, he approached head of departments in the different faculties of the three sample universities and asked them to distribute the instrument of the study to those faculty members volunteering to participate in the study. No exclusion criterion was employed in the study. The following table shows the distribution of the study sample in light of gender and age.

Table 1.

Variable	Category	Total
Gender	Male	199
	Female	84
	Under 30	50
Age	30-40	94
	Over 40	139

Distribution of the Study Sample in Light of Gender and Age.

4.3. Instruments

Two questionnaires were developed through reviewing previous studies. First instrument is digital leadership questionnaire, while the other is smart organization questionnaire, and as follows:

4.3.1. First: Digital Leadership Questionnaire

The researchers adopted digital leadership questionnaire which was developed by Al-Blaihed [2] which consisted of (15) items.

4.4. Construct Validity of Digital Leadership Questionnaire

Correlation coefficients was calculated between the items and the total score in order to obtain construct validity via a pilot sample included (30) faculty members. These were selected from different scientific and humanitarian faculties so as they can provide reliable data about the content of the instrument. Correlation coefficient of the items and the total score ranged between (0.69-0.93) as shown in the following table.

Item	Correlation Coefficients to the Instrument	Item	Correlation Coefficients to the Instrument	Item	Correlation Coefficients to the Instrument
1	0.73(**)	6	0.81(**)	11	0.69(**)
2	0.86(**)	7	0.80(**)	12	0.87(**)
3	0.82(**)	8	0.92(**)	13	0.80(**)
4	0.70(**)	9	0.85(**)	14	0.87(**)
5	0.89(**)	10	0.78(**)	15	0.93(**)

 Table 2.

 Correlation coefficients between items, the total score and the domain to which they belong.

Note: * Significant at (0.05) ** Significant at (0.01).

It is noted that the correlation coefficients are significant.

4.5. Reliability of Digital Leadership Questionnaire

To verify reliability, Cronbach Alpha Coefficient for internal consistency reliabilities was calculated. Internal consistency coefficient for the total instrument amounted (0.92).

4.5.1. Second: Smart Organization Questionnaire

The researchers adopted smart organization questionnaire which was developed by Al-Kasasbeh [14] which consisted of (19) items divided into (3) domains: clear strategic vision (7 items), merit culture (7 items), and supportive incentive system (5 items).

4.6. Construct Validity of Smart Organization Questionnaire

Correlation coefficients was calculated between the items and the total score in order to obtain construct validity via a pilot sample included (30) faculty members. These were selected from different scientific and humanitarian faculties so as they can provide reliable data about the content of the instrument. Additionally, for every item Correlation coefficient was counted (correlation point to validity significance of every item). Correlation coefficient of the items and the total score ranged between (0.51-0.88), and with the domain (0.57-0.91), and the following table shows them.

Item	Correlation coefficients to the domain	Correlation coefficients to the instrument	Item	Correlation coefficients to the domain	Correlation coefficients to the instrument	Item	Correlation coefficients to the domain	Correlation coefficients to the instrument
1	0.83(**)	0.77(**)	7	0.67(**)	0.79(**)	13	0.66(**)	0.51(*)
2	0.89(**)	0.88(**)	8	0.86(**)	0.71(**)	14	0.74(**)	0.76(**)
3	0.84(**)	0.76(**)	9	0.73(**)	0.51(*)	15	0.77(**)	0.76(**)
4	0.89(**)	0.80(**)	10	0.67(**)	0.75(**)	16	0.83(**)	0.78(**)
5	0.57(**)	0.77(**)	11	0.73(**)	0.59(**)	17	0.66(**)	0.53(*)
6	0.64(**)	0.71(**)	12	0.87(**)	0.75(**)	18	0.91(**)	0.88(**)

Table 3.

Note: * Significant at (0.05)

** Significant at (0.01).

It is noted that the correlation coefficients are significant.

4.7. Reliability of Smart Organization Questionnaire

To verify reliability, Cronbach Alpha Coefficient for internal consistency reliabilities was calculated. The following table shows internal consistency reliabilities for the individual domains and the total instrument which as noted are appropriate for the study objectives.

Table 4.

Cronbach alpha internal consistency reliabilities for individual domains and total instrument.

Domain	Internal consistency coefficient
Clear strategic vision	0.79
Merit culture	0.78
Supportive incentive system	0.88
Smart organization	0.93

Table 4 indicates that Cronbach's Alpha coefficient for Smart Organization (0.93). These results indicate that reliability levels for the instrument are at a satisfactory level to use the questionnaire to test the hypotheses of the study.

4.8. Procedures of the Study

The instruments of the study were meld to head of departments in the three Jordanian private universities who were asked to distribute them to the faculty members working in these universities during work hours. Each of the respondents was told to return the completed instruments. As the participation was voluntary, no ramifications were imposed to those who did not complete their instruments.

5. Results

H1: "There is no effect for the total digital leadership on the total smart organizations in the Jordanian private universities"

The relationship between digital leadership and the total smart organizations in the Jordanian private universities was analyzed using correlation and linear regression analysis. According to Pearson's correlation test, the relationship between digital leadership and smart organizations is presented in Table 4. There is a statistically positive significant correlation (r=0.969, α =0.000) between the smart organizations and digital leadership. This means that the first hypothesis stating "there is no effect for the total digital leadership on the total smart organizations in the Jordanian private universities" is rejected.

Table 5.

The correlation coefficient the digital leadership and smart organizations.

		Digital leadership
Smart organization	Pearson correlation	0.969**
	Sig. (2-tailed)	0.000
	Ν	283

Simple linear regression is used to estimate the relationship between DL and smart organizations.

Table 6.

Simple regression analysis to estimate the relationship between the total digital leadership and the total smart organizations in the Jordanian private universities.

	R	R Square	F	Sig.	В	Std. Error	Т	Sig.
1	0.969(a)	0.939	4325.869	0.000(a)	0.966	0.015	65.771	0.000
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Note: a. Predictors: (Constant), Digital Leadership. b. Dependent Variable: Smart Organization.

Table 6 shows that regression coefficient R2 value was 0.969 which means Digital Leadership 93.9% of the variance happening in Smart Organization, B value tells us that for every one unit increase in digital leadership there is a corresponding 0.966 unit increase in smart organizations. Because the p-value is so low (p < 0.001), we can reject the null hypothesis and conclude that there is an effect for the total digital leadership on the total smart organizations in the Jordanian Private Universities.

H1-1: There is no effect for digital leadership on clear strategic vision

The relationship between digital leadership and clear strategic vision was analyzed using correlation and linear regression analysis. According to Pearson's correlation test, the relationship between digital leadership and clear strategic vision is presented in Table 7. There is a statistically positive significant correlation (r=0.947, α =0.000) between the digital leadership and clear strategic vision. This means that hypothesis H1-1 stating "there is no effect for digital leadership on clear strategic vision" is rejected.

Table 7.

The correlation coefficient the digital leadership and clear strategic vision.

		Clear strategic vision
Digital leadership	Pearson correlation	0.947**
	Sig. (2-tailed)	0.000
	Ν	283

Simple linear regression is used to estimate the relationship between digital leadership and clear strategic vision.

Table 8.

Simple regression analysis to estimate the relationship between digital leadership and clear strategic vision.

	R	R Square	F	Sig.	В	Std. Error	Т	Sig.		
1	0.947(a)	0.897	2453.322	0.000(a)	0.924	0.019	49.531	0.000		
Note: a Pre	nte: a Predictors: (Constant) Digital Leadership									

b Dependent Variable: clear strategic vision.

Table 8 shows that regression coefficient R2 value was 0.897 which means digital leadership 89.7% of the variance happening in clear strategic vision, B value tells us that for every one unit increase in digital leadership there is a corresponding 0.924 unit increase in clear strategic vision. Because the p-value is so low (p < 0.001), we can reject the null hypothesis and conclude that: There is effect for digital leadership on clear strategic vision.

H1-2: There is no effect for digital leadership on merit culture

The relationship between digital leadership and merit culture was analyzed using correlation and linear regression analysis. According to Pearson's correlation test, the relationship between digital leadership and merit culture is presented in Table 9. There is a statistically positive significant correlation (r=0.933, α =0.000) between the digital leadership and merit culture. This means that hypothesis H1-1 stating "there is no effect for digital leadership on merit culture" is rejected.

Table 9.

The correlation coefficient the digital leadership and merit culture.

		Merit culture
Digital leadership	Pearson correlation	0.933**
	Sig. (2-tailed)	0.000
	Ν	283

Simple linear regression is used to estimate the relationship between digital leadership and merit culture.

Table 10.

Simple regression analysis to estimate the relationship between digital leadership and merit culture

	R	R Square	F	Sig.	В	Std. Error	Т	Sig.			
1	.933(a)	.871	1901.943	.000(a)	.876	.020	43.611	.000			
Note: a Prec	ste: a Predictors: (Constant), Digital Leadership										

b Dependent Variable: merit culture

Table 10 shows that regression coefficient R2 value was 0.871 which means digital leadership 0.87.1% of the variance happening in merit culture, B value tells us that for every one unit increase in digital leadership there is a corresponding 0.876 unit increase in merit culture. Because the p-value is so low (p < 0.001), we can reject the null hypothesis and conclude that: There is effect for digital leadership on merit culture.

H1-3: There is no effect for digital leadership on supportive incentives system

The relationship between digital leadership and supportive incentives system was analyzed using correlation and linear regression analysis. According to Pearson's correlation test, the relationship between digital leadership and supportive incentives system is presented in Table 10. There is a statistically positive significant correlation (r=0.883, α =0.000) between the digital leadership and supportive incentives system. This means that hypothesis H1-3 stating "there is no effect for digital leadership on supportive incentives system" is rejected.

Table 11.

The correlation coefficient the digital leadership and supportive incentives system.

		Supportive incentives system
Digital leadership	Pearson correlation	0.883**
	Sig. (2-tailed)	0.000
	Ν	283

Simple linear regression is used to estimate the relationship between digital leadership and supportive incentives system.

Table 12.

Simple regression analysis to estimate the relationship between digital leadership and supportive incentives system.

		R	R Square	F	Sig.	В	Std. Error	Т	Sig.	
	1	.883(a)	0.781	999.341	0.000(a)	1.153	0.036	31.612	0.000	
Note	ate a Predictors (Constant) Divital Leadershin									

b Dependent Variable: supportive incentives system.

Table 12 shows that regression coefficient R2 value was 0.781 which means digital leadership 78.1% of the variance happening in supportive incentives system, B value tells us that for every one unit increase in digital leadership there is a corresponding 1.153 unit increase in supportive incentives system. Because the p-value is so low (p < 0.001), we can reject the null hypothesis and conclude that: There is effect for digital leadership on supportive incentives system.

6. Discussion and Conclusion

The study showed an effect for the total digital leadership on the total smart organizations in the Jordanian Private Universities. This result may be explained by several factors. Firstly, transformation to digital leadership is one of the methods to keep abreast with the new trends in management literature since several authors (e.g. [1, 3]) have indicated that organizations wishing to maintain a competitive advantage should rely on digital tools as one means for being excellent. In this respect, it should be acknowledged that adopting a vision of digital leadership paves the way for the transformation to smart organization concept; one of the terms used to describe hose organizations making digital tools an integral part of their daily activities. Furthermore, Soon and Salamzadeh [7] emphasized that digital leadership is a core concept in educational administration for facilitating the change to smart organizations, as leaders a simulate their vision to followers who in turn go along with leaders positive attitude towards technology. Knowing that leaders encourage the use of technology and digital

tools, followers are highly motivated to employ smart tools, which are now easily accessible for completing their work tasks since they realize that their leaders will be more satisfied with their work.

Additionally, adopting the digital leadership perceptions enables leaders to lunch several organizational procedures boosting the transformation to smart organization. Leaders can develop rules and regulations controlling work flow in the organization which is mainly based on making smart tools an effective method to communicate with leaders and complete the tasks at hand.

It also showed that there is effect for digital leadership on clear strategic vision. Clear strategic vision becomes straighter forward if leaders come out with procedures that make such a vision easy to access. Which digital leaders employ technology to make followers receive their strategic vision as it is release at across the organization; the followers will in turn work on embracing such vision to guide them while working. Also, followers will know that leaders make their effort to capitalize the digital tools at their disposal to make followers receive their strategic vision. This implies that such digital tools can ensure that all followers have been handed the organizational strategic vision and can work accordingly.

The results found that there is effect for digital leadership on merit culture. This result indicates that digital leaders can work on clearing their vision that all types of acknowledgment are spread and well known across the organization. Digital leaders inform followers that all in the organization who work hard are merited are respected and such merit will be received by all working at the organization. This in turn helps in assimilating a merit culture as digital leaders employ digital tools to make sure that all employees know that those who deserve merit should be known across the organization

Also, an effect was found for digital leadership on supportive incentives system. This result can be explained by the fact that digital leaders employ technological tools for making everyone in the organization know that good work is highly valued and that material and moral incentives are a way for respecting the effort followers provides for the success of the organization. Digital leaders may send joint emails on the official website of the organization to send braises and verbal support as a way of moral incentives or can send a copy of the cheque they offer the excellent employee as a way to make everyone in the organization know that distinguished employees are morally supportive in addition to being rewarded.

7. Limitations

This study is limited to a sample of faculty members at private universities (Jadara University, Jarash University, and Irbid National University) during the first semester of 2022/2023. The results are also determined by the instrument's psychometric properties and the indicators of validity and reliability, which limit the generalization of the results.

8. Recommendations

According to the previous results, the study suggests:

- Jordanian private universities should develop some procedures encouraging leaders' administrators and academic leaders to make technology an integral part of their work when interacting with employees.
- Private universities need to provide the adequate infrastructure that may contribute in the transformation to smart organization concept by allocating sufficient human and material resources.
- Future studies may examine obstacles hindering the transformation to smart organization.

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Appendix

Questionnaires Final Form

Greetings,

The researcher is conducting a study entitled "The Effect of Digital Leadership in Creating Smart Organizations in the Jordanian Private Universities". The following is two questionnaires the first addresses digital leadership and consists (15) items, while the other addresses smart organization and consists (19) items measuring your perceptions. Please read the items carefully and give your opinion about the level representing your opinion the best, noting that the scaling of the questionnaire is 5 points Likert scale rating from 1 (Strongly disagree) to 5 (Strongly agree). Your responses will be taken into consideration and all information obtained will be confidential and only used for academic research purposes

Sincerely yours

The researcher

Items of digital leadership questionnaire:

- 1. The university depends on modern technology in providing its services.
- 2. Speed of use and implementation of modern technology.
- 3. Modern software and technologies are used when holding meetings.
- 4. The university activates e-transactions and techniques for college and departments leaders.
- 5. The university requests its departments to exchange information and files electronically.
- 6. The university publishes its announcements and decisions it made electronically.
- 7. The university shares the description of the tasks and actions with the staff electronically.
- 8. The university has an e-follow up system for the transactions.
- 9. The university makes continuous monitoring of its facilities in order to improve the services delivery mechanism.
- 10. The procedures of delivering the service are fast.
- 11. The staff of the university communicates electronically.
- 12. Electronic media are used to instruct the university's staff.
- 13. E-applications are used in the administrative process.
- 14. Training courses in administrative technology are held to improve performance.
- 15. Security systems are provided to secure e-data bases.

Items of smart organization questionnaire:

First domain: Clear strategic vision

- 1. The university has a strategic vision.
- 2. The university's vision describes the efforts required to achieve its objectives.
- 3. The university's vision is an inspire source for its core values.
- 4. The university is keen to communicate its vision clearly to all employees.
- 5. The university's vision enhances the collective intelligence of team members.
- 6. The university's vision achieves the alignment between its goals and resources.

7. The university's vision provides underlying motivation for teams to improve their performance to exceed the expected level.

Second domain: Merit culture

- 8. The university's values enhance the ability of teams to share knowledge.
- 9. The university culture encourages open dialogue between employees.
- 10. The university listens to the voices of opposition workers.
- 11. The university does not punish dissenting opinions of its directions.
- 12. The university encourages the exchange of creative ideas even though it's difficult to implement.
- 13. The university provides an environment that encourages innovative behavior.
- 14. The university provides space for the collective adaptation.

Third domain: Supportive incentive system

- 15. The university incentives system supports the company values.
- 16. The university rewards interaction between individuals to achieve its objectives.
- 17. The university rewards cooperation between colleagues to develop its teams.
- 18. The university rewards employees' efforts which enhance its intelligence.
- 19. The university rewards knowledge sharing process between employees.