Requirements Of Implementing Smart Digital Management For Academic Department Heads To Confront COVID-19: Ajloun National University Academic Staff Perspective

Amjad Mahmoud Daradkah[1] , Buthaina Elias Owais[2] , Mohammad Ahmad Al-Omari[3]

[1]*Department of Educational Administration/Associate Professor/Faculty of Educational Sciences, Ajloun National University.*
[2]*Department of Educational Administration/Associate Professor/Faculty of Educational Sciences, Ajloun National University.*
[3]*Department of Special Education / Assistant Professor / Faculty of Educational Sciences, Ajloun National University.*

Abstract

The current study aims at pinpointing the requirements of implementing smart digital management for academic department heads to confront COVID-19 the point of view of the faculty members at Ajloun National University and the degree of different points of view according to gender, faculty, academic rank, and the number of experience years. To achieve the objectives of the study, the descriptive approach is used. Besides, the required data are collected by adopting a questionnaire to a sample of (45) faculty members selected by the purposeful method. The findings show that the degree of implementing the requirements of the smart digital management among the heads of academic departments to confront COVID-19 from the point of view of the faculty members is of high degree with a mean of (4.01). Also, the findings indicate that there are no statistically significant differences due to the variables of faculty, academic rank, and the number of experience years, while there are differences due to the gender variable in favor of females. In light of these findings, the study recommends that the university make its plans within the strategies of digital management, providing financial and moral incentives to encourage continuous development, implementing new activities that raise the spirits of creativity and development, and holding educational courses and workshops related to digital management.

Keywords: Digital management, smart management, heads of academic departments, COVID-19, faculty members.

1. Introduction

The nature of the accelerating technological race daily witnessed by the world has increased technological challenges, such as globalization, the knowledge revolution, and information technologies, forcing universities to enter a technological contest. The impact of this technological contest has added a greater responsibility to universities to adopt the latest technological forces and modern administrative methods, bring about fundamental changes in their culture and ways of thinking to enter this race, progress, and achieve a competitive advantage.

Each age has its characteristics and requirements distinguishing it from others, as one of the most prominent requirements of the current era is the transition to digital management and the adoption of technology and digitization as general principles that govern the people's work, and most significantly is the ability to take advantage of these modern technological tools to push universities forward. As put by Deloitte (2020),

with the spreading of the new crisis of COVID-19, there is also an urgent need to take many measures to limit the spread of the virus, including relying heavily on electronic management information systems.

Moreover, the roots of digital management are not traced back to a distant historical era, as the first to introduce and develop this concept quickly in institutions are the Japanese in 1960, then this matter is transferred to German institutions and then to American institutions (Stief, 2000). The significance of digital management rests in the natural development of the human mind, which contributes to producing and developing all devices and equipment as an aid to overcome the obstacles faced by the implementation of both administrative and production work, such as the human invention of the plane, the car, the computer, the Internet and the mobile phone, where this resourceful and creative human mind is the one who has invented and discovered all things (Al-Araywi, 2011).

Furthermore, digital management is regarded as an integrated system more than a technical process, for it is a new management thinking approach, and an innovative vision for business based on the added value that can be produced or reproduced through the effective management of information, knowledge and Internet resources (Ghaleb, 2005). This paper is, however, divided into 11 main sections apart from the introductory section, and the next section presents the literature review.

2. Literature Review

In the world of modern management, digital management is a necessity thanks to its positive effects in facilitating administrative processes, reducing the time and cost of completing tasks, developing job performance, and raising the level of productive efficiency of the organization by using technology and information systems to support the management process (Al-Dais and Al-Dais, 2020). Digital management contributes to achieving the logic of excellence and creativity management models by facilitating fundamental transformations in the patterns of work organization and the implementation of operations in the organization (Boudi, 2011). For example, those working in digital management differ from ordinary workers who do not like change and prefer to continue with what they have learned from work patterns, considering change, innovation, novelty, and creativity contrary to what is prevalent and known to them (Al-Qaryuti, 1993).

El-Meligy's study (2011) aims to elucidate the process of developing the management of university education institutions in Egypt using the digital management approach and identify the reality of the management of university education institutions. Other aims addressed in the study are recognizing the most important principles and foundations of digital management and the stages of their implementation, the obstacles that prevent the process of its implementation in university education and suggesting some procedural mechanisms that are advanced through developing the management of university education institutions in the light of digital management. To achieve the objectives of the study, the descriptive approach is adopted with a study sample consisting of (300) faculty members. The findings indicate that the university administration is weak in employing digital technology at work, and lacks awareness of methods of dealing with administrative techniques. The findings also show that implementing digital management requires the development of human resources at the university and the provision of some organizational and security requirements.

In the same vein, Al-Athari& Al-Omar's study (2015) aims to highlight the role of the social intelligence of the current leadership in raising the quality of production of workers in the sectors and departments of the Public Authority for Applied Education and Training in the State of Kuwait. To achieve the objectives of the

study, a questionnaire consisting of (30) items is developed and used to survey the opinions of employees on the most important characteristics and qualities of smart leadership enjoyed by the administration and sectors, and the degree of possession of these skills and social capabilities related to the elements of social intelligence. The study also examines the impact of successful leadership behaviors on raising the quality of production of employees at the Applied Education and Training Corporation in the State of Kuwait, where the study instrument is used with (150) individuals from different categories of employees at the Public Authority for Applied Education and Training with a response rate of 94.6%. The findings indicate that successful management is the management that can adapt to the situations and circumstances of work based on mutual respect and feeling for the suffering of the employees of the organization. However, they need transparency and frankness from the administration and the ability to admit mistakes if there a mistake from the administration. The study also shows that the current administration has the elements of social intelligence to raise the quality of work and production and overcome difficulties if any, as there are no significant statistical differences for the variables of gender, academic qualifications, age, and the number of experience years. Also, the factor-based analysis shows that the most important factors of successful smart digital management revolve around human relations, knowledge and skill competencies for management and cultural and scientific awareness about the events of global changes in the domain of management and the exchange of cooperation and experiences with relevant external parties.

On the other hand, Yieng & Dud's study (2017) aims to identify digital leadership in a high-performance school in Malaysia in the Far East. Together with the role of the principal as the school leader, the principal plays a role as a technical leader, as this applies to principals of high-performance schools, excelling in all aspects of learning. To achieve the objectives of the study, the principal's role as a technology leader is examined through interviews with three high-performing school principals, and several digital-related issues are also discussed among principals based on national educational technology standards for administrators. The findings indicate that high-performing school principals have significantly played their leadership role for technology in schools by meeting the various components of the National Education Technology Standards for administrators (NETS). However, the findings show that the Internet is a major obstacle to promoting the use of ICT in school. The results also demonstrate good results towards the hard work and effort of the principal of high-performance schools in the domain of information and communication technology.

Likewise, Al-Baqawi's study (2019) aims to identify the role of digital management in activating administrative communication and the obstacles to implementing digital management in the process of administrative communication in secondary schools in Hail City in Saudi Arabia from the point of view of female administrators. Another aim tackled in the study is to find out whether there are differences due to variables of academic qualification, number of years of service, and technology-based training courses. To achieve the objectives of the study, the descriptive approach is adopted, and the questionnaire is used as a study instrument for data collection applied to a sample of (244) administrative staff. The findings indicate that the mean of the role of digital management in activating administrative communication is 2.76 out of 4 with a medium degree, while the mean of the obstacles to the implementation of digital management is 3.59 out of 4 with a high degree. The findings also show that there are statistically significant differences due to the academic qualification variable in favor of those holding bachelor and diploma degrees. The results also demonstrate that there are statistically significant differences in favor of

those holding a secondary or high school qualification with training courses in the domain of technology. The results, however, show no statistically significant differences due to the variable of the number of experience years .

Moreover, another study by Battran (2021) aims at identifying the role of digital management in improving administrative services in university education through its impact on raising the level of human capital. To achieve the objectives of the study, the descriptive analytical approach is adopted, along with using a questionnaire applied to a sample of (150) administrative employees. The findings indicate that there is a strong positive impact of the implementation of digital management systems on the development of the administrative work of the faculties' employees. Besides, the findings show that there is a relative decrease in the staff's knowledge of the nature of the systems applied in their faculties. The findings also indicate that the facilities required to support the systems need the support of the university to a great extent, and the percentage of obstacles faced by the employees is of a medium degree, and the digital management systems receive a high degree of evaluation in terms of their efficacy.

Furthermore, Al-Rashidi's study (2021) aims to identify the degree of the practice of digital management among assistant principals in middle schools in Kuwait and find out whether there are statistically significant differences in the responses of the sample members according to the variables of gender, academic qualification, academic specialization, and the number of experience years. To achieve the objectives of the study, the descriptive survey approach is adopted, alongside designing a questionnaire consisting of (31) items divided into six domains and electronically distributed to (188) assistant principals. The findings indicate that the assistant managers practice digital management to a medium degree, while the obstacles are found to be of a high degree.

The results also show that there are statistically significant differences due to gender in favor of females, while there are differences in the degree of practice due to the variable of academic specialization in favor of the humanities. Also, there are differences due to the variable of the number of experience years in favor of those with less experience. Based on the previous analysis of the related literature review, the problem of the study is presented in the next section.

3. Problem Statement

With the tremendous developments witnessed by the world in technology, production methods, and how to provide products and services to beneficiaries in the current global market, the ceiling of the beneficiaries' demands and their volatility have increased and their inclination has become toward the fastest response to their requests. Therefore, the main concern of institutions has become to provide integrated computer services without being restricted by local resources to facilitate the work and use among the users.

At the same time, judging the excellence and effectiveness of institutions rests on their ability to attract smart people and manage their performance in a way, ensuring a difference in the implementation of the required work on the one hand, and its ability to produce knowledge and strategic information with the required accuracy and timing that participate in supporting decision makers in making the right decisions on the other hand. Therefore, technological progress has forced institutions to develop and renew themselves through learning, especially at present in response to the rapid changes in all areas of life. Currently, the main factor for success and survival in the turbulent and rapidly changing business environment is knowledge, and if the organization actively takes care of it, can achieve excellence, which is an essential step to smart organizations.

In the same mood, the red tape and bureaucracy inherited for many years and adopted by the employees are used in various ways and means as a pretext to prevent the arrival of an intelligent, talented, creative, or efficient individual to occupy their rightful place in the administrative ladder of the institution. Also, many universities face the problem of how to provide alternative smart, young and talented leaders to lead institutions and advance them in success and development. Another issue confronted by these universities is the interconnection and interdependence between smart digital management and senior management, and the amount of interest of senior management in digital smart management that leads to business development and leadership in the organization.

Regrettably, most universities suffer from a lack of effective leadership that can cope with the requirements of the current work environment. Although there are some effective leadership elements, these leaders work according to traditional theories incompatible with the characteristics of the current business environment, which is reflected in the performance of universities. As a result of the lack of awareness of the importance of smart digital management in universities, this is negatively reflected in the inability of these universities to achieve development requirements.

Though what the world has witnessed during the last decade of the 20th century of developments brought about by the knowledge society and the trend of educational systems to employ communication and information technology in operations, it is noticeable that it has not received this much attention in using communication and information technology. Also, the world still uses traditional means, requiring reconsideration to develop and modernize that administration in light of the developments in communications and information technology (Al-Harbi, 2021).

Digital management is an integrated electronic system that aims to transform administrative work from manual management to computer-based management, relying on powerful information systems that help in making administrative decisions as quickly as possible and at the lowest costs, thus achieving the elements of full transparency and accountability and improving the services provided to citizens with effective and fast performance. Digital management enables strengthening the capabilities and standards of human resources, especially in the communicative aspect, whether internal or external (Bujumah, 2021).

Digital management also thrives and grows in an environment of innovation, creation, and creativity, deriving its strength from technological thought and knowledge creativity, which has become a feature of the knowledge economy, where digital management mainly depends on our commitment to technology and knowledge (Nieto, 2004). Intelligent and talented individuals are the key to solving any problem and striving to reach the goal they want to achieve (Scheer, 2007, p. 28). According to Haysen (2003), unlike ordinary individuals who prefer immutability, the intelligent and talented individual can listen and understand the up-to-date aspects of work and life.

Intelligent digital management systems prefer to provide full support and assistance to organizations and individuals with all their new ways, creative ideas, and courage in implementation (Howson, 2008). Successful digital management requires that the administration be well aware of its role and its responsibility. Accordingly, Putlitz (2007) indicates that bosses are smart managers because they take a series of decisions and perform a set of very important and influential functions in the organization they lead because these bosses carry out the process of making decisions and developing strategies, innovation, leadership, and direction. Digital management has become a strategic duty of every president

in the first place, and many advanced companies in the West are fully aware of this. Despite this full awareness, however, some organizations have not succeeded in the real implementation of this strategic duty.

Numerous educational institutions are still in dire need of university research to crystallize their plans and win the bet of local development as a strategic goal that shall be achieved. Thus, this leads the researchers and scholars to talk about one of the most successful modern means and mechanisms to achieve this goal represented by administrative digitization as a methodology for managing and engineering development goals based on the allocation and directing of available capabilities and resources and exploiting the possible opportunities offered by modern technology in facing potential challenges (Bujumah, 2019; Shanfar, 2021). With that being said, several studies such as (El-Meligy, 2011; Al-Baqawi, 2019; Al-Rashidi, 2021) recommend investigating digital management and the requirements for its implementation in educational institutions. Accordingly, the problem statement lies in exploring the requirements for the implementation of smart digital management for the heads of academic departments to confront COVID-19 from the point of view of faculty members at Ajloun National University.

4. Research Objectives

The objectives of this study are to:

1. Pinpoint the requirements of implementing smart digital management for academic department heads to confront COVID-19 from the Ajloun National University academic staff perspective.

2. Identify the existence of statistically significant differences among the means of the responses of faculty members to the requirements of implementing smart digital management for academic department heads at Ajloun University due to the variables of gender, faculty, academic rank, and the number of experience years.

5. Research Questions

1. What are the requirements of implementing smart digital management for academic department heads to confront COVID-19 from the Ajloun National Universityacademic staff perspective?

2. Are there statistically significant differences among the means of the responses of faculty members to the requirements of implementing smart digital management for academic department heads at Ajloun University due to the variables of gender, faculty, academic rank, and the number of experience years?

6. Significance of the Study

The significance of the study lies in dealing with a contemporary and up-to-date topic of great importance to universities, which is the transition to digital management systems and its challenges that are reflected on the university in terms of the new roles that should be played. Also, this study is a response to the requirements of the digital age and what it imposes on university education, especially in light of the crises resulting from the spreading of the COVID-19 crisis. The results and recommendations of the current study can benefit those responsible for the development of university education in providing the requirements of digital management, which contributes to achieving the effectiveness and competence of human resource development in universities.

Besides, the study plays a key role in supporting a constructive dialogue between governments and institutions to improve policy development to make a rational decision on the role of information and communications technology and digital management in facilitating information participation in administrative affairs with employees. It is hoped that this study will be an introduction to other studies in which new variables are included.Importantly,

the study shows the ability of the digital administration to provide more common services centered on institutional services for the citizen, and the multiplicity of channels for providing and accessing administrative services in line with the actual needs/capabilities of citizens.

7. Limitation of the Study

The findings of this study can be generalized in light of the following limitations:

1. **Objective Limitations:** They represent the requirements of implementing smart digital management for academic department heads to confront COVID-19 from the Ajloun National University academic staff perspective.
2. **Human Limitations:** This study is limited to a sample of faculty members at Ajloun National University.
3. **Spatial Limitations:** This study is conducted at Ajloun National University.
4. **Temporal Limitations:** This study is conducted in the second semester of the academic year 2021/2022.

8. Research Terms and Definition

In this study, the term "digital management" is mentioned, and its procedural definition is as follows:

Digital management: It is defined as all smart, talented, and creative individuals, scientific and technical applications, along with data and information that facilitate the completion of work and achieve goals in the fastest time, with the least cost and effort, and the highest profits in the organization (Al-Araywi, 2011, p. 7). Al-Serafy (2007) defines it as a means used to raise the level of performance and efficiency, and it is a paperless administration that uses electronic archives, evidence, electronic diaries, and voice messages. It is also management that meets rigid requirements and depends mainly on the knowledge factor. It is procedurally defined by

the degree obtained by the heads of academic departments at Ajloun National University through the response of the faculty members to the questionnaire of the requirements for implementing digital management prepared for this presentation, consisting of (28) items distributed over five requirements (administrative, financial, human, technical and security).

9. Method and Procedures

Research Approach

To achieve the objectives of the study, the descriptive analytical method is used, as it is the most appropriate method for such a study, along with the use of a questionnaire as a means of collecting data related to the study.

Population & Sample Study

The study population consists of all (83) faculty members at AjlounNational University with the rank of professor, associate professor, and assistant professor. A random sample is also selected and distributed, as shown in Table (1).

Table 1 Distribution of Study Sample Members According to Study Variables

Variable	Categories	Number	Total
Gender	Female	8	45
	Male	37	
Faculty	Scientific	20	45
	Humanities	25	
Academic Rank	Professor	7	45
	Associate Professor	17	
	Associate Professor	21	
Number of experience years	1 to Less Than 10 Years	28	45
	10 Years and Above	17	

Study Instrument

A study instrument is developed for the study by reviewing the theoretical literature and related studies such as (El-Meligy, 2011; Al-Rashidi, 2021). The study instrument includes two domains:

1. Personal data: It includes gender, faculty, academic rank, and the number of experience years.

2. (28) required items of the requirements for implementing digital management are divided into five requirements (administrative, financial, human, technical, and security).

The 5-level Likert scale is adopted, as it identified five levels: (5) very high, (4) high, (3) medium, (2) low, and (1) very low.

Content Validity of Study Instrument

To check the content validity of the study instrument, content validity is used to present the items of the questionnaire in their initial

form to a group of (10) experienced and specialized faculty members at the University of Jordan, Yarmouk University, Al-Balqa Applied University, and Ajloun National University. The observations and recommendations suggested by the validators are taken into consideration by retaining the items and obtaining an approval rate of (80%) or more. Also, the necessary procedures are done with the items proposed to be deleted, modified, or reformulated to obtain the questionnaire in its final form.

Reliability of Study Instrument

To check the instrument validity, a sample survey of (45) faculty members is adopted, and then an internal-consistency approach (Cronbach's Alpha) is used to compute the reliability coefficientto all domains, as it measures the consistency in the respondents' answers for all the items in the questionnaire as shown in Table (2).

Table 2 The Reliability Coefficients of the Questionnaire of the Requirements of Implementing Smart Digital Management Measured by the Internal Consistency Method

Domain	Reliability Coefficient Value (Cronbach's Alpha)
Administrative Requirements	0.84
Human Requirements	0.84
Financial Requirements	0.82
Technical Requirements	0.79
Security Requirements	0.89
Overall Digital Management Requirements	

As shown in Table (2), the values for the reliability coefficient of the questionnaire on the requirements of implementing digital management for the heads of departments at Ajloun National University have ranged from (0.79) to (0.89), where the highestreliability coefficient is for security requirements and the least is for technical requirements.

Study Variables

1. **Independent Variables**
- **Gender:** It includes: (males and females).
- **Faculty:** It includes: (humanities and scientific).
- **Academic rank:** It includes: (Professor, Associate Professor, and Assistant Professor).

- **The number of Experience Years:** It includes (1 to less than 10 years and 10 years and above).
2. **Dependent Variables**
- Requirements for implementing digital management for academic department heads from the point of view of faculty members.

Statistical Processing

To answer the research questions and statistically process the data, the following statistical methods are used:

1. To answer the first question, means and standard deviations of individual responses to each item of the study instrument, rank, and degree are used .

2. To answer the second question, the independent sample (t-test) is used for two independent samples concerning the variables: gender, faculty, number of experience years, and One-Way ANOVA (Analysis of Variance) concerning the variable of academic rank. Scheffé's post-comparison test is also used to determine the significance.

3. The Cronbach's Alpha coefficient is used to find out the internal consistency coefficient of the study instrument.

4. The degree of implementation is classified into three levels (Low, Medium, and High) by calculating the mean, using the following formula:

(The Highest Value of the Alternative - the Minimum Value of the Alternative) ÷ Number of Levels = (5-1) ÷ 3 = 1.33

And by adding (1.33) to the Minimum Value of the alternative (the minimum); the criterion for expressing those levels is: the Mean ranging between (1-2.33) indicates a Low Degree, and the Mean ranging between (3.67-2.34) indicates a Medium Degree, and the Mean ranging between (5-3.68) indicates a High Degree.

10. Results & Discussion

First: Findings related to the First Research Question

What are the requirements of implementing smart digital management for academic department heads to confront COVID-19 from the Ajloun National University academic staff perspective?

To answer this question, the means and standard deviations of faculty members' responses to the questionnaire items related to the requirements of implementing smart digital management for the heads of academic departments to confront COVID-19 are calculated. Table (3) illustrates those findings.

Table 3 Means, Standard Deviations, Rank, and Degree of the Requirements of Implementing Smart Digital Management for the Heads of Academic Departments to Confront COVID-19

Digital Management Domains	Mean	Standard Deviation	Rank	Degree
Administrative Requirements	4.24	0.75	1	High
Human Requirements	4.08	0.79	2	High
Financial Requirements	4.04	0.69	3	High
Technical Requirements	3.95	0.80	4	High
Security Requirements	3.75	0.84	5	High
Total	4.01	0.50		High

As shown in Table (3), the requirements for implementing digital management among academic department heads from the faculty members' point of view are of a high degree, as the mean is (4.01) and the standard deviation is (0.50). All domains of the study instrument are also of a high degree, as the means ranged from (4.24) to (3.75). The order of the domains in terms of the means is as follows: administrative requirements, human requirements, financial requirements, technical requirements, and security requirements. The reason for this order is due to the importance of digital management at present and keeping pace with the requirements of the times. It is also a prerequisite for university excellence and a criterion of quality assurance. The finding of this study agrees with the results of the studies (El-Meligy, 2011; Yieng& Dud, 2017; Battran, 2021), and differs from the results of the studies (Al-Baqawi, 2019; Al-Rashidi, 2021).

Second: Findings related to the Second Research Question

Are there statistically significant differences among the means of the responses of faculty members to the requirements of implementing smart digital management for academic department heads at Ajloun University due to the variables of gender, faculty, academic rank, and the number of experience years?

This question is answered as follows:

1. Gender Variable
To answer this question, the means and standard deviations of faculty members' responses to the questionnaire items related to the requirements of implementing smart digital management for the heads of academic departments to confront COVID-19 are calculated. The independent sample (t-test) is also used for two independent samples. Table (4) illustrates those findings.

Table 4 Means and Standard Deviations of the Faculty Members' Responses of the Questionnaire of the Requirements of Implementing Smart Digital Management for the Heads of Academic Departments According to the Gender Variable

Domain	Gender	No.	Means	Standard Deviation	T-Value	Significance Level
Administrative Requirements	Male	37	3.85	.540	-2.04	.050
	Female	8	4.17	.730		
Human Requirements	Male	37	4.08	.400	-3.45	.000
	Female	8	4.43	.430		
Financial Requirements	Male	37	4.04	.580	-0.57	.570
	Female	8	4.13	.620		
Technical Requirements	Male	37	3.60	.530	-1.88	.070
	Female	8	3.84	.480		
Security Requirements	Male	37	3.41	.590	-2.08	.050
	Female	8	3.73	.680		
All Domains	Male	37	3.51	.490	-2.32	.020

| | Female | 8 | 3.79 | .480 | | |

*Statistically significant at the significance level (α≤0.05).

Table (4) shows that there are statistically significant differences at the significance level (α≤0.05) for the requirements of implementing smart digital management among academic department heads according to the gender variable based on the (T) value calculated on the total values which is (-2.32) and at the significance level (0.02) in favor of the female category. The findings indicate that there are statistically significant differences in the administrative, human, and security domains, while there are no statistically significant differences in the financial and technical domains. The finding is due to the high interest of females and their eagerness to complete the work accurately and regularly, the preoccupation of males in leadership positions and opportunities to make decisions, and the economic requirements of females are less than males. The result of this study agrees with the study (Al-Rashidi, 2021) and differs from the studies (Al-Athari& Al-Omar, 2015; Al-Baqawi, 2019).

2. Faculty Variable

To answer this question, the means and standard deviations of faculty members' responses to the questionnaire items related to the requirements of implementing smart digital management for the heads of academic departments to confront COVID-19 are calculated. The independent sample (t-test) is also used for two independent samples. Table (5) illustrates those findings.

Table 5 Means and Standard Deviations of the Faculty Members' Responses of the Questionnaire of the Requirements of Implementing Smart Digital Management for the Heads of Academic Departments According to the Faculty Variable

Domain	Gender	No.	Means	Standard Deviation	T-Value	Significance Level
Administrative Requirements	Scientific	20	3.85	.630	-1.79	.080
	Humanities	25	4.17	.740		
Human Requirements	Scientific	20	4.08	.630	-0.66	.510
	Humanities	25	4.43	.720		
Financial Requirements	Scientific	20	4.04	.570	-1.34	.190
	Humanities	25	4.13	.690		
Technical Requirements	Scientific	20	3.60	.680	-1.45	.150
	Humanities	25	3.84	.580		
Security Requirements	Scientific	20	3.41	.390	-1.51	0.14
	Humanities	25	3.73	.630		
All Domains	Scientific	20	3.51	.740	0.66-	510.
	Humanities	25	3.79	.630		

*Statistically significant at the significance level (α≤0.05).

As shown in Table (5), there are no statistically significant differences at the significance level ($\alpha \leq 0.05$) for the requirements of implementing smart digital management among academic heads at Ajloun National University according to the faculty variable in the study instrument as a whole, as the T-value calculated on the total values is (-0.66) with a significance level of (.510). The reason is attributed to one university environment and specific regulations and instructions, and the result of this variable agrees with the study (Al-Athari& Al-Omar, 2015) and differs from the study (Al-Rashidi, 2021).

3. Academic Rank Variable

To answer this question, the means and standard deviations related to the requirements of implementing smart digital management for the heads of academic departments at Ajloun National University are calculated. Table (6) illustrates those findings.

Table 6 Means and Standard Deviations of the Requirements of Implementing Smart Digital Management for the Heads of Academic Departments at Ajloun National University According to Academic Rank Variable

Domain	Academic Rank	No.	Mean	Standard Deviation
Administrative Requirements	Professor	7	3.53	.590
	Associate Professor	17	3.50	.600
	Assistant Professor	21	4.11	.610
Human Requirements	Professor	7	3.95	.260
	Associate Professor	17	4.18	.410
	Assistant Professor	21	4.30	.470
Financial Requirements	Professor	7	4.07	.730
	Associate Professor	17	3.46	.710
	Assistant Professor	21	4.20	0.53
Technical Requirements	Professor	7	3.85	0.44
	Associate Professor	17	3.71	0.49
	Assistant Professor	21	4.20	0.47
Security Requirements	Professor	7	3.55	0.24
	Associate Professor	17	3.45	0.53
	Assistant Professor	21	3.76	0.54
All Domains	Professor	7	3.40	0.45

	Associate Professor	17	3.38	0.41
	Assistant Professor	21	3.69	0.51

Table (6) shows that there are apparent differences among the means of the requirements for implementing digital management among the heads of departments at Ajloun National University, according to the academic rank variable. The respondents of the category (Professor) are ranked first with the highest mean of (3.40), the respondents of the category (Associate Professor) are ranked second, with the least means of (3.38), and the category of (Assistant Professor) has a mean of (3.69).

The One-Way ANOVA (Analysis of Variance) test is also used to identify the existence of statistically significant differences in the responses of faculty members. Table (7) illustrates the results of that test.

Table 7 One-Way ANOVA (Analysis of Variance) According to the Academic Rank Variable

Domain	Source of Variation	Sums of Squares	Degrees of Freedom	Mean Square	F-Value	Statistical Significance
Administrative Requirements	Between Groups	10.09	2	5.05	3.16	.000
	Within Groups	67.04	42	1.60		
	Total	77.13	44			
Human Requirements	Between Groups	1.44	2	.720	0.82	.130
	Within Groups	37.06	42	0.88		
	Total	38.50	44			
Financial Requirements	Between Groups	8.82	2	4.41	3.27	.000
	Within Groups	56.81	42	1.35		
	Total	65.63	44			
Technical Requirements	Between Groups	1.78	2	.890	0.75	.110
	Within Groups	49.76	42	1.18		
	Total	51.54	44			
Security Requirements	Between Groups	1.35	2	.680	0.36	.240
	Within Groups	80.06	42	1.91		
	Total	81.41	44			

All Domains	Between Groups	5.15	2	2.58	2.77	.190
	Within Groups	39.17	42	0.93		
	Total	44.32	44			

* Statistically significant at the significance level (α≤0.05).

It is evident from Table (7) that there are no statistically significant differences in the degree of application of digital management among department heads due to the variable of academic rank, based on the calculated (Q) value, as it reached for the tool as a whole (2.77) and the level of significance (0.17). The reason is that all members of The teaching staff is aware of the importance of digital management regardless of the academic rank, and there are significant differences in the areas of administrative requirements and financial requirements. in Table (8).

Table 8 Scheffé's Test for Post-comparisons of the Requirements of Implementing Smart Digital Management among Academic Department Heads from the Point of View of Faculty Members According to the Academic Rank Variable for the Domains of Administrative and Financial Requirements

Domain	Academic Rank	Means	Professor	Associate Professor	Assistant Professor
Administrative Requirements	Professor	3.53	-	0.98	0.03*
	Associate Professor	3.50		-	0.00*
	Assistant Professor	4.11			-
Requirements Financial	Professor	4.07	-	0.05	0.50
	Associate Professor	3.46		-	0.00*
	Assistant Professor	4.20			-

*Statistically significant at the significance level (α≤0.05).

Table (8) shows that the difference is in favor of the category of assistant professors and the reason is attributed to the fact that they are recent graduates and need to prove their presence and contribution at the university

4. Number of Experience Years Variable

To answer this question, the means and standard deviations of faculty members' responses to the questionnaire items related to the requirements of implementing smart digital management for the heads of academic departments to confront COVID-19 are calculated. The independent sample (t-test) is also used for two independent samples. Table (9) illustrates those findings.

Table 9 Means and Standard Deviations of the Faculty Members' Responses of the Questionnaire of the Requirements of Implementing Smart Digital Management for the Heads of Academic Departments According to the Number of Experience Years Variable

Domain	Gender	No.	Means	Standard Deviation	T-Value	Significance Level
Administrative Requirements	1 to Less Than 10 Years	28	3.85	.630	-0.70	.050
	10 Years and Above	17	4.17	.660		
Human Requirements	1 to Less Than 10 Years	28	4.08	.390	-1.49	.000
	10 Years and Above	17	4.43	.480		
Financial Requirements	1 to Less Than 10 Years	28	4.04	.630	-0.93	.570
	10 Years and Above	17	4.13	.570		
Technical Requirements	1 to Less Than 10 Years	28	3.60	.460	-1.15	.070
	10 Years and Above	17	3.84	.500		
Security Requirements	1 to Less Than 10 Years	28	3.41	.520	-0.34	.050
	10 Years and Above	17	3.73	.520		
All Domains	1 to Less Than 10 Years	28	3.51	.530	-0.99	.020
	10 Years and Above	17	3.79	.720		

*Statistically significant at the significance level (α≤0.05).

As shown in Table (9), there are no statistically significant differences at the significance level (α≤0.05) for the requirements of implementing smart digital management among academic heads at Ajloun National University, according to the variable number of experience years in the study instrument as a whole, as the T-value calculated on the total values is (-0.99) and with a significance level of (.320).The reason is due to the clarity in understanding the requirements of implementing smart digital management, regardless of their experience.

11. Conclusion

In a nutshell, the current study aims at pinpointing the requirements of implementing smart digital management for academic department heads to confront COVID-19 the point of view of the faculty members at Ajloun National University, and the degree of different

points of view according to gender, faculty, academic rank, and the number of experience years. The findings show that the degree of implementing the requirements of the smart digital management among the heads of academic departments to confront COVID-19 from the point of view of the faculty members is of high degree with a mean of (4.01). Also, the findings indicate that there are no statistically significant differences due to the variables of faculty, academic rank, and the number of experience years, while there are differences due to the gender variable in favor of females.

12. Recommendations

In light of the results and related discussion, the study recommends providing financial and moral incentives to encourage continuous development and the implementation of new activities that encourage creativity and development, holding educational courses and workshops related to digital management, furnishing wireless internet networks within the university in line with the implementation of digital management, conducting similar studies in private and public universities, and comparing their results with the current study, doing correlative studies to clarify the relationship between the requirements of implementing digital management, institutional leadership, and organizational excellence, and urging the university administration to set its plans within the strategies of digital management and adopt a clear policy regarding digital security violations, and seek the assistance of experts in information security to educate workers about the importance of protecting it.

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