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The Role of applying electronic management in the development of professional performance of the professors of the institutes of science and techniques of physical and sports activities - Souk Ahras Institute as a model –

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ABSTRACT

The study aimed to identify the role of applying electronic management in the development of professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities at the University of Souk Ahras, and to identify the impact of the variables (degree, professional experience, job (administrative, non-administrative, and specialization) towards the role of electronic management. In the development of professional performance of the institute's professors, and for this we used the descriptive analytical approach to suit the nature of the subject. We distributed a questionnaire formed of 27 phrases distributed over four domains to a sample of professors of the Institute of Sciences and Techniques of Physical and Sports Activities at Souk Ahras University, included (21) professors, The data were statistically processed by the Statistical Package for Human Sciences, version 22, and the study concluded that there are no statistically significant differences in the professors view of applying electronic management, a role in the development of professional performance of the professors of the Institute of Sciences and Techniques of Physical and Sports Activities from their point of view depending on the variable of scientific degree, professional experience, Job (administrative, non-administrative) and specialization.

1. Introduction

The developments and technological changes that the world witnessed at the end of the twentieth century had a great impact on all political, economic, social and administrative levels, electronic methods. (Antara, 2018, pg. 5), the need for change within organizations has become inevitable, as it is more like a person's need for water and air , especially in a world where challenges and fluctuations are looming, which has become the dominant feature of the work environment today, and the assassination of creativity and creators, there is no doubt that change with its positive trends, carries with it great difficulties and new crises, and raises in its paths troubling questions that often clash with the old reality, so the process of reform and change to feel the importance of change and development in order to get out of a crisis reality, to a better reality to ensure the survival of the organization, in this process the efforts of the leadership and employees fuse with their different currents and desires, to form a front for change using various methods and resources.(Al-Hayali, 2015, page 17), and due to the great development in all areas of information technology, institutions are racing to use the latest innovations in the administrative field, and the emergence of the Internet has helped make it more influential in the completion of the work of these institutions, which prompted the current administration to adopt A great deal on information technology, which is one of the most important independent variables to improve performance with high efficiency and achieve total quality (Al-Ayadi, 2022, page 444), because the use of this advanced technology helps to simplify procedures and reduce paper use to the least possible, and as a result of these increasing changes the term electronic management appeared , whose essence and philosophy lies in bringing about a radical change in the style and interaction of employees, considering that professional performance is what achieves excellence from its applications, through the advantage it adds to it in terms of saving time, effort, cost, and for this reason, the adoption of the idea of electronic management has become an imperative , and there is no choice, meaning that it must be followed first to keep pace with the technological changes taking place, and secondly to avoid spending exorbitant costs. (Mustafa, 2008, pg.9), Sports institutions to impose electronic management sometimes by applying some information technology (Sheikh, 2022, page 429)

Some of the previous studies dealt with a part of this topic, and this is what was indicated by the study (Ammari, 2017) entitled “The Role of Electronic Administration in Developing the Performance of Higher Education Institutions.” And a study (Abdul Muttalib, 2018) entitled "The Impact of Electronic Management on professional Performance", This study aims to understand the impact of electronic management on functional performance. The study community may be working at the Al-Batinah Specialized Hospital in Al-Mansoura University. The study found a correlation between the dimensions of electronic management and each other at a level of morale of 1%, and the existence of a correlation between the dimensions of performance and each other at a level of morale of 1%, as well as the presence of a moral effect of the dimensions of electronic management on the dimensions of job performance. (Malik, 2016) the necessity of holding continuous training courses related to how faculty members use modern technological methods and advanced teaching aids,

in addition to the importance of informing them of global experiences in the field of university teaching and benefiting from them to improve the level of their teaching performance, with the increase in information and the volume of institutions and the services they provide and the value of performance time and the time taken to deliver the service, systems based on the human element only became unsuitable to meet the needs of business completion, and then there was a need to rely on computer-based information systems that are fast and accurate, to The side of error and sometimes neglect of the human element and bureaucracy that may disrupt the business, projects and interests of the beneficiaries of the services is what made the need for electronic management an urgent requirement, and to stand on the reality of the application and transformation of traditional management into electronic management that helps achieve goals and take appropriate decisions at the right time.

The role of successfully implementing electronic management systems requires an evaluation process. Ongoing to measure its effectiveness and compare the achieved results with the desired goals, and then make developmental efforts to close any performance gap Between what is achieved and what is required of these systems, and perhaps one of the most prominent administrative aspects affected by the application of electronic management is the functionality of its users, as it is considered one of the most important criteria for the success of electronic management, As the most recent school of management, it has produced many effects on the

traditional management model, and thus on its form and functions, which have moved from a traditional form directly to the electronic service model. As a result of this, distances have been reduced, time has been reduced and the type and level of service provided has developed. In light of the increasing progress in the use of modern technology and computer applications, the role of the use of electronic management has become a requirement and an indispensable necessity in the institutes of Science and Techniques of Physical and Sports Activities for the positive results they achieve, such as improved service and more efficient performance. Accordingly, and in the light of the applied developments experienced by electronic management, we have crystallized the problem of the study with the following question:

Does the application of electronic management have a role in developing the professional performance of the professors of the institutes of sciences and techniques of physical and sports activities from the professors' point of view?

From the main question, the following sub-questions emerged:

1- Are there statistically significant differences in the professors' vision of the role of applying electronic management in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities due to the academic degree variable at the significance level $\alpha = 0.05$?

2- Are there statistically significant differences in the professors' vision of the role of applying electronic management in developing the job performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities due to the variable years of service at the significance level $\alpha = 0.05$?

3- Are there statistically significant differences in the professors' view of the role of applying electronic management in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities due to the job variable (administrative, non-administrative) at the significance level $\alpha = 0.05$?

4- Are there statistically significant differences in the professors' vision of the role of applying electronic management in developing the job performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities due to the variable of specialization (theory and methodology of physical and sports education, sports training, sports

management and management) at the significance level α = 0.05?

2. Method and Materials

1- Sample and methods of selection:

The research sample formed of 21 professors chosen randomly from among the professors of the Institute of Science and Techniques of Physical and Sports Activities at Souk Ahras University, which represents 68% of the original community (31) professors.

2- Study procedures:

2-1- Approach:

In our study, we relied on the descriptive, analytical and comparative approach appropriate to the nature of our research topic.

2-2- Determine the variables:

The independent variable: electronic management.

Dependent variable: professional performance.

2-3- Research tools and their scientific foundations:

The researchers relied on bibliographic books and references, and we also used a questionnaire prepared by the researchers, taking into account its ability to diagnose and measure the dimension of the study so that it serves the objectives and hypotheses of the study. Five-point Likert scale, and the questionnaire included four domains, as shown in the following figure:

Table 1: ***shows the distribution of phrases on the domains***

Domain	**Expressions**
Domain of teaching	1,2,3,4,5,6,7
Domain of scientific research	8,9,10,11,12,13,14
Domain of Relationships with co-workers	15,16,17, 18, 19, 20
Domain of Relationships with the management	21,22,23,24,25,26,27

- Scientific bases for the study tools:

- Structural validity of the tool: The correlation coefficients between the domains and the questionnaire were calculated and came between 0.74 and 0.86, which are strong correlation coefficients that indicate the validity of the tool, and the following table shows that:

*Table 2**: Shows the correlation coefficients of the domains with the questionnaire***

Domains	Correlation coefficient	indication level
Domain of teaching	0.79	.000
Domain of scientific research	0.82	.000
Domain of Relationships with co-workers	0.86	.000
Domain of Relationships with the management	0.74	.000

Source: Prepared by researchers based on spss22 outputs

- Self-honesty coefficient: by calculating the square root of Korenbach's alpha coefficient, which came to 0.94, which is a strong coefficient indicating the validity of the tool.

Tool stability:

- Alpha Kornbach method: Alpha Kornbach's coefficient was calculated by spss 22 program, which came: 0.887, which is a strong coefficient indicating the stability of the tool.
- Half-split method: The stability coefficient was calculated using the ssps 22 statistical program, where the Spearman-Brown coefficient was 0.772 and the Gutman coefficient was 0.756, which are large coefficients that indicate the stability of the tool.

2-4- Statistical tools: We employed in the research:

Lieberson correlation coefficient, Alpha Cronbach coefficient, Spearman-Brown coefficient and Guttmann coefficient of stability, arithmetic mean, t-test for differences, ANOVA test, and we relied on the statistical package spss22.

3. Results

Table 3: ***The results of the professors' vision of the application of electronic management represent a role in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities.***

Dimension	m Arithmetic	Relative Weight	Estimation	Rank
Domain of teaching	4.02	80.40	Large	3
Domain of scientific research	4.12	82.40	Large	2
Domain of Relationships with co-workers	3.84	76.80	Large	4
Domain of Relationships with the management	4.21	84.20	Very Large	1
Total	4.04	80.80	Large	-

Source: Prepared by researchers based on spss 22 output

Through the results shown in the above table, we find that the professors' responses towards the role of the application of electronic management in developing professional performance at the Institute of Science and Techniques of Physical and Sports Activities were great, where the arithmetic mean came to a large degree 4.04 and relative weight 80.80 and the fields were:

- First came the domain of relations with the administration with an arithmetic mean of 4.21 and a relative weight of 84.20 to a very large degree, and this is a result that indicates a close link between electronic management and its impact on professional performance by virtue of the major transformations in official institutions towards the adoption of electronic management, computing and digitization in all their transactions.

-Secondly, the domain of scientific research came with an arithmetic mean of 4.12 and a relative weight of 82.40 to a large degree, as the administration of the Institute has modern trends and plans in light of the application of electronic management in order to develop the performance system so that it supports the domains of creativity and innovation among professors.

-Third, the domain of teaching came with an arithmetic mean of 4.02 and a relative weight of 80.40 to a large degree, as the modern trends in teaching in our various universities depend mainly on electronic applications and software, as imposed by the surrounding variables, whether in keeping with the ranked and advanced universities, or what imposed by the health conditions that our country experienced, similar to the countries of the world recently.

-Fourthly, the domain of relations with colleagues at work came with an arithmetic mean of 3.84 and a relative weight of 76.80 to a large degree, as

the professors have a positive professional performance behavior characterized by the ability to innovate, complete the work properly and establish effective communications with others in light of the application of electronic management.

Table 4: ***Represents the results of the differences in the professors' view of the role of applying electronic management in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities due to the degree variable:***

Dimension	Sample	s sq	D. F	means	F	Sig	Est
Total	Between groups	0.476	2	0.238	0.724	0.499	Not sig at an estimate-d level (0.05)
	Inside groups	5.916	18	0.329			
	Total	6.391	20				

Source: Prepared by researchers based on spss 22 output

Through the results shown in the above table, we find that:

- There are no statistically significant differences in the professors' view of the role of applying electronic management in developing professional performance at the Institute of Science and Techniques of Physical and Sports Activities, according to the degree variable.

Table 5: ***Represents the results of the differences in the professors' view of the role of applying electronic management in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities due to the variable of professional experience:***

Dimension	Sample	s sq	D. F	means	f	Sig	Est
Total	Between groups	0.756	3	0.252	0.760	0.532	Not sig at an estimate-d level (0.05)
	Inside groups	5.635	17	0.331			
	Total	6.391	20				

Source: Prepared by researchers based on spss 22 output

Through the results shown in the above table, we find that:

- There are no statistically significant differences in the professors' view of the role of applying electronic management in developing the professional performance of the professors of the Institute of Sciences and Techniques of Physical and Sports Activities, according to the variable of professional experience (years of service).

Table 6: ***Represents the results of the differences in the professors' view of the role of applying electronic management in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities due to the job variable (administrative, non-administrative):***

Dimension	sample	s sq	D. F	means	f	Sig	Est
Total	Respons-ible	4.06	0.53	19	0.12	0.868	Not sig at an estimated level (0.05)
	Irrespo-nsible	4.05	0.60				

Source: Prepared by researchers based on spss 22 output

Through the results shown in the above table, we find that:

- There are no statistically significant differences between the professors responsible and those who do not occupy positions of pedagogical or administrative responsibility in their vision of the role of the application of electronic management in developing the professional performance of the professors of the Institute of Sciences and Techniques of Physical and Sports Activities.

Accordingly, we concluded that there are no differences due to the variable of pedagogical or administrative responsibility in the professors' vision of the role of applying electronic management in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities.

Table 7: ***Represents the results of the differences in the professors' vision of the role of applying electronic management in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities due to the specialization variable:***

Dimension	sample	s sq	D. F	means	F	Sig	Est
Total	Between groups	0.740	2	0.370	1.178	0.330	Not sig at an estimated level (0.05)
	Inside groups	5.651	18	0.314			
	Total	6.391	20				

Source: Prepared by researchers based on spss 22 output

Through the results shown in the above table, we find that:

- There are no statistically significant differences in the professors' view of the level of availability of electronic management requirements in the institute according to the specialization variable.

4. Discussion

The results shown in the above table showed that there are no statistically significant differences in the professors' view of the role of the application of electronic management in the development of the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities according to the degree variable. You need the employee to have a scientific degree, but it depends on practice, and these results were in agreement with the study of Al-Lawzi (2010), which found that there are no statistically significant differences between the opinions of employees in the difficulties facing the application of electronic management due to the degree variable.

The results shown in the above table showed that there are no statistically significant differences in the professors' view of the role of the application of electronic management in the development of the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities, according to the variable of professional experience, and the researchers attribute this to the fact that the newly appointed professor between rush and ambition on the one hand and his caution Receiving criticism and guidance on the other hand imbues him with a form of commitment towards keeping pace with the successive developments of electronic administration, and the behavior of the professor with long experience is only in compliance and integration with the teaching environment in which he feels self-actualization, especially if the professor with long experience receives the appropriate degree of respect and appreciation, and therefore This indicates the harmony of the ladder of professional needs and their gradation towards achieving job commitment to the application of electronic management. These results were in agreement with the study of Fawzia Bakhsh (2008) entitled Electronic Management in the Colleges of Education for Girls in the Kingdom of Saudi Arabia in the light of contemporary transformations, which concluded that there were no statistically significant differences in the sample responses to the study axes according to the variable years of experience.

The results shown in the above table showed that there are no statistically significant differences in the professors' view of the role of applying electronic management in the development of the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities according to the job variable (administrative, non-

administrative), and the researchers attribute this to the degree of awareness of the Institute's employees on The difference in their jobs, whether administrative or non-administrative, with the advantages of applying electronic management in developing their job performance, in addition to the continuous and continuous training for the acquisition of basic skills that qualify them and make them possess the cognitive and performance competencies necessary to deal with electronic management applications. These results did not agree with the study of Khalifa Al Masoud (2008). Which concluded that there are statistically significant differences between the opinions of the study community members regarding the job variable in favor of the administrators.

The results shown in the above table showed that there are no statistically significant differences in the professors' view of the role of the application of electronic management in the development of the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities according to the variable of specialization, and the researchers attribute this to the fact that all professors, despite their different specializations, deal with One administrative and academic system with its instructions and administrative regulations, and therefore there is no difference between the data and components of electronic administration that affects all departments and facilities of the institute without discrimination and thus raising the efficiency of performance, and these results agreed with the study (Kinani, 2010), which concluded that there are no statistically significant differences in the reality of The application of electronic management is due to the effect of the type of specialization.

Through the results shown in the above tables, we found that the professors' vision of applying electronic management a role in the development of the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities was to a very large degree between the domains, and the researchers attributed this to the fact that the sample members agree to a large extent to the application of electronic management role in developing the professional performance of the professors of the Institute of Science and Techniques of Physical and Sports Activities, and the results achieved through the hypotheses of the study are due to the role of the application of electronic management in developing the professional performance of the professors of the Institute of Science and Techniques of Physical Activities.

5. Conclusion

This study showed that the professors' vision of the application of electronic management to develop their professional performance was to a large extent from their point of view, and this is due to the introduction of new methods and technologies that contribute to raising the level of achievement in business and decision-making with high quality and efficiency.

There are also no differences in the opinions of professors attributable to the variables of academic degree, professional experience (years of experience), function (administrative, non-administrative) and specialization (theory and methodology of physical and sports education, sports training, management and athletic management). This shows that the teaching staff is keen to keep up with the development and desire to move from traditional to electronic transactions under the application of electronic management in the institutes of science and techniques of physical and sports activities.

Therefore, the researchers recommend:

-Paying attention to human competencies and providing the necessary technological capabilities at the Institute of Science and Techniques of Physical and Sports Activities under study in order to contribute to the transformation towards the application of electronic management entirely.

-Dealing with electronic management applications as a primary goal and one of the pivotal reasons for developing the performance of institutes of science and technology of physical and sports activities.

-Providing mechanisms that ensure the embodiment of electronic transactions at the level of the Institute of Science and Techniques of Physical and Sports Activities under study, and thus push for increasing and developing performance.

-Holding training courses related to the mechanisms of applying electronic management at the Institute of Science and Techniques of Physical and Sports Activities, especially those for students and faculty members, in order to train them on how to use multimedia in teaching.

- Raising the level of cultural awareness of the importance of switching to electronic management and using its tools in the employee's daily work.

- Adopting special standards in the application of electronic management drawn from corresponding authorities as a basis of reference.

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annexe

The following is a set of statements that measure the role of the application of electronic management in developing the job performance of professors of institutes of science and techniques of physical and sports activities and related to the partial dimensions shown below.

The number	statement	Strongly disagree	disagree	neutral	agree	Strongly agree
Teaching domain						
01	Electronic management contributes to the development of the teaching competencies of the professor					
02	Electronic management contributes to diversifying the teacher's school knowledge sources					
03	The electronic management contributes to diversifying the teaching methods of the professor					
04	Electronic management contributes to strengthening the professor's employment of modern technologies in teaching					
05	The electronic management contributes to the consolidation of the relationship between the professor and his students					
06	The electronic management contributes to the development of the professor's adaptation to the demands of his profession					
07	Electronic management provides distance education platforms					
The domain of scientific research						
08	Knowledge management processes contribute to the development of the scientific research competencies of the professor					
09	The electronic management contributes to the development of the professor's research experiences					
10	The electronic management contributes to providing					

	research platforms for the university professor					
11	The electronic management contributes to providing platforms for the dissemination of scientific research for the professor					
12	The electronic management contributes to providing platforms for the follow-up of scientific research projects					
13	The electronic management contributes to facilitating the arbitration process and presenting expertise for scientific research					
14	Electronic management contributes to improving the quality of the professor's research work					
The domain of relationships with colleagues at work						
15	The electronic management contributes to the development of the managerial leadership capabilities of the professor					
16	The electronic management contributes to the organization of the professor's relations with co-workers					
17	Electronic management contributes to the organization of communication with co-workers					
18	Electronic management contributes to the development of coordination with co-workers					
19	Electronic management contributes to reducing work conflicts with colleagues					
20	Electronic management contributes to ensuring access to information for all teachers alike					
The domain of relationships with administration						
21	The electronic management contributes to organizing the communication channels between the professor and the administration					
22	Electronic management processes contribute to clarifying the duties and responsibilities of the professor					
23	The electronic management contributes to adherence to the professor's work rules and procedures					
24	Electronic management contributes to reducing bureaucratic procedures in obtaining administrative services					
25	Electronic management provides various platforms for obtaining administrative documents					
26	Electronic management contributes to fighting organizational and administrative conflicts in the workplace					
27	Electronic management contributes to shortening the time to obtain administrative services					