

Technical requirements for administrative digitization among physical education supervisors

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Abstract:

This study was conducted to identify the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education mentors. On an exploratory sample of 30 mentors and a core sample of 76 mentors, the researcher used the descriptive approach in the survey method, and one of the data collection tools was the questionnaire designed by the researcher, and one of the most important results is the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes to a moderate degree with a relative weight of (69.12%) provide information infrastructure that serves sports activities in Al-Azhar institutes.

المتطلبات الفنية للرقمنة الادارية لدي موجهي التربية الرياضية

الملخص:

أجريت هذه الدراسة للتعرف على واقع الإبداع الإداري لدي موجهي التربية الرياضية بالمعاهد الأزهرية على عينة استطلاعية قوامها 30 موجهاً وموجهة و عينة أساسية قوامها 76 موجهاً وموجهة، واستخدمت الباحثة المنهج الوصفي بالأسلوب المسحي ، ومن أدوات جمع البيانات الاستبيان من تصميم الباحثة ، ومن أهم النتائج جاء واقع الإبداع الإداري لدي موجهي التربية الرياضية بالمعاهد الأزهرية بدرجة مرتفعة بوزن نسبي قدرة (75.12%) ، ومن أهم التوصيات ضرورة تفويض السلطات للمسؤولين في بعض الأعمال ، التنوع في استخدام آليات العمل إستجابته للمستجدات في بيئة العمل ، وإتباع طرق جديدة لحل المشكلات .

Technical requirements for administrative digitization among physical education supervisors

Introduction and research problem:

Information and communication technology has revolutionized the field of information and has even become the basic standard by which the degree of progress of nations is measured in the twenty-first century. This rapid development has led to a change in the prevailing concepts in methods of dealing at the level of countries, organizations and individuals. The world has become a small, interconnected village, and has allowed the temporal and spatial dimension to be transcended to form a vital, effective and influential part in implementing these transactions and services=

(1:2)

The prominent role of knowledge has led to the emergence of societies called knowledge societies, which are societies based primarily on knowledge, keeping pace with the rapid technological transformations witnessed by the world, whether by using new technologies, or updating and upgrading existing programs and technologies, in addition to contributing to the emergence of modern terms in this aspect such as the term digital transformation or administrative digitization, as the concepts of the term administrative digitization are multiple, which can be considered a phenomenon resulting from a group of modern digital technologies that operate simultaneously, including computers, artificial intelligence, cloud computing, and others. Administrative digitization leads to the production of large and new amounts of information, which can contribute to decision-making and strategic planning. (4:10)

Since we are now in the digital stage, which is the stage of transition from limited paper information to widespread global digital information, as almost everything around us is gradually turning into a digital and electronic state, we use computers in various activities of our lives. (9:113-114)

Administration has remained and still is the main driver in the development and advancement of any institution and organization, as it serves users with data, information and knowledge resources. Information

and communication technology, with its successive technologies, has also remained the nerve and lifeblood of these bodies. There is no doubt that what we are experiencing today in terms of electronic administration is a turning point between the era of traditional administration and the era of digital electronic administration, just as humanity experienced in the periods following the emergence of printing or the emergence of the telephone, where a huge qualitative leap was achieved in the year of administration in the field of information exchange and management. (2:12)

Administrative digitization refers to the use of new technology and developments accompanying the Fourth Industrial Revolution such as "social media, mobile, big data analytics, artificial intelligence, Internet of Things (IOT), cloud computing to achieve major leaps in the way of completing work by achieving new operational efficiency.

The applications used in administrative digitization are many, such as managing files, conducting dialogues and questionnaires electronically, reviewing the contents of topics electronically, printing drafts of documents instead of writing them by hand, e-mail as an alternative to incoming and outgoing mail, ready-made modeling instead of traditional minutes, achievements instead of follow-up, discovering problems electronically, and successfully preparing for meetings. (3:23)

Hence, the researcher believes that administrative digitization is one of the main practices that positively affect the increase in the level of performance of those in charge of work in educational institutions, and thus leads to an improvement in the performance of the entire educational process and achieving administrative creativity that satisfies the needs of workers in the field. Educational and pedagogical, as indicated by many studies that the researcher reviewed, such as the study (2011) (13) Hayat Alrefaie, the study of Mustafa Muhammad Ali (2021) (10), the study (2018) (15) Okaeal, the study of Abdul Rahman bin Fahd Al-Mutref (2020) (7), the study of Jamal Ali Khalil (2020) (5), the study of Lahtinen, WEAVE (2015), (14), the study of Ali Khaled Al-Khalidi (2013) (8), and the study of Hajir (2015) (12). Based on the previous concepts and the researcher's work as a senior physical education teacher at Al-Azhar Al-Sharif for sixteen years, she felt that the process of teaching physical

education, guidance and supervision requires the introduction of administrative digitization to achieve the desired goals with the least possible effort, time, capabilities and obstacles. This study came to identify the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors=

Research objective:

The research aims to identify the reality of the technology required for administrative digitization in Al-Azhar Institute from a point of view directed towards physical education=

Research question:

What is the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors?

Search terms:

= **Administrative digitization :**

Mustafa Ahmed Amin(2020) defined it as:

"Moving from a traditional system to a digital system based on information and communications technology in all areas of work, in light of a set of requirements represented in developing a strategy for administrative digitization, spreading the culture of digital transformation, designing digital educational programs, managing and financing digital transformation, in addition to human, technical, security, and legislative requirements." (10:22)

-hnicl requirementsTec :

Tsekhovoy (2019) defined it as:

"It reflects the necessity of having an accurate, integrated and secure database with the latest means that contributes to determining needs by calculating the cost and return of implementing the administrative process and emphasizing the importance of having specialists in information

technology and assigning tasks to them according to the fields of work appropriate to their skills and qualifications.” (16: 154)

Search procedures:

-Research Methodology

The researcher used the descriptive method using the survey and analytical method, which is the most appropriate method for the nature of this research, its variables, and achieving its objectives

-research community

The research community included all physical education supervisors at the educational stages in Al-Azhar institutes for the academic year 2023/2024 AD, and their number was (155) supervisors, male and female, as follows: (75 primary supervisors - 38 preparatory supervisors - 42 secondary supervisors).

- The research sample.

It was completed to choose a sample search in a way The inventory mentors And directed (155) Comprehensive And it included on Number Restriction search Divided to -:what The following

First: The basic research sample:

It was chosen intentionally from the research community, as it included (76) male and female supervisors, divided into (25) primary school supervisors, (30) middle school supervisors, and (21) secondary school supervisors.

Secondly, the exploratory rese sample :

It was randomly selected from the research community and outside the basic research sample, as it included (30) male and female supervisors divided into (10) primary school supervisors, (10) middle school supervisors, and (10) secondary school supervisors, and the following table shows that.

Table (1) shows the quantitative description of the community and the basic and exploratory research samples.

Table(1)
Quantitative characterization of basic and exploratory research groups and samples

Stage \ Society and sample	research community	Survey sample	Basic sample
Primary stage	75	10	25
Preparatory stage	38	10	30
Secondary stage	42	10	21
the total	155	30	76

-Data collection tools

documents and records: First :

The researcher reviewed the documents of Al-Azhar institutes as a guide for physical education supervisors and supervisors and records of their numbers, in addition to reviewing scientific references, studies and previous research related to the reality of administrative digitization in various institutions.

Second: Personal interview.

The researcher conducted a personal interview with some officials in the Al-Azhar regions of Al-Azhar Al-Sharif, by determining the number of male and female physical education supervisors.

Questionnaire :Third :

The researcher used a questionnaire designed by her to collect data for the current study entitled "The reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors."

-Survey study

For the safety of the procedures for constructing the proposed questionnaire form, the researcher applied the questionnaire to a sample of the research male and female teachers of physical = (30 =) = community consisting of AD, for = 2024/2023 = education in Al-Azhar institutes for the academic year the purpose of identifying the suitability of the form for application to that = sample, by conducting scientific .transactions for it

-Scientific transactions for the questionnaire

The researcher calculated the scientific coefficients of the questionnaire as follows:

First: Calculation of honesty:

a) The content was verified by arbitrators:

The researcher presented the questionnaire to a group of (5) experts in the field of sports management to calculate the validity of the content by expressing an opinion on the extent of the suitability and phrases of the questionnaire of the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors in order to express an opinion on the extent of the suitability and formulation of the phrases and their sufficiency and achievement of the set objectives, and to delete, add or modify what they see as appropriate.

b) Internal consistency validity:

To calculate the internal consistency validity of the questionnaire, the researcher applied it to a sample of (30) male and female supervisors from the research community, where the correlation coefficients were calculated between the score of each statement and the total score of the questionnaire.

Table (2)

Correlation coefficient between the score of each statement and the total score of the questionnaire on the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors

n = 30

The reality of the technical requirements necessary for administrative digitization	
M	Correlation coefficient
1	*0.719
2	*0.481
3	*0.668
4	*0.546
5	*0.611
6	*0.498
7	*0.266
8	*0.621
9	*0.654

* The tabular "R" value is at $0.312 = (0.05)$

that (2) It is clear from Table:

The correlation coefficients between the score of each statement and the total score of the questionnaire ranged from (0.266: 0.719). These are statistically significant correlation coefficients at a significance level of (0.05), except for statement No. (7), which is not statistically significant. Therefore, this statement was deleted, so the number of questionnaire statements became (8) statements instead of (9) statements.

The above-mentioned presentation indicates that the statements of the questionnaire on the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors are characterized by an acceptable degree of honesty=

Second: Calculating stability:

To calculate the stability of the questionnaire on the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors. The researcher used the Cronbach's alpha coefficient by applying it to a sample of (30) female students from the research community, and the following table shows that:

(3)Table

Cronbach's alpha coefficient values for the questionnaire on the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors.

n=30

the hub	Alpha coefficient value
The reality of the technical requirements necessary for administrative digitization	0.74

Table (3) shows the following:

The alpha coefficient for the questionnaire on the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors is (0.74), which is a statistically significant coefficient, indicating that the questionnaire has an acceptable stability coefficient.

The researcher wrote the questionnaire in its final form after calculating the scientific coefficients in preparation for applying the questionnaire to the main sample=

-Basic study:

The researcher applied a questionnaire form on the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors, under study, on the basic sample consisting of (76) male and female physical education supervisors in Al-Azhar institutes during the period from 8/10/2023 to 9/25/2023 AD. The application was done electronically in preparation for statistical processing using the SPSS program.

The researcher adopted a three-point rating scale according to the experts' opinions, which is (agree) and gets 3 points, (somewhat) and gets 2 points, (disagree) and gets 1 point for the statements, and thus the questionnaire becomes valid for application.

: Statistical Processing-

After collecting and tabulating the data, it was processed statistically. To calculate the research results, the researcher used the following statistical methods:

- Percentages.
- Correlation coefficient.
- Cronbach's alpha coefficient.
- Estimated degree.
- Relative weight.
- Duplicates.

- Presentation and discussion of results:

To achieve the research objective and answer its questions, and within the limits of the data the researcher has reached through the methodology used, the research sample, the data collection tools, and the statistical analysis used, the researcher presents and discusses the research questions.

The researcher adopted the relative weight of the research sample responses of 75% or more to accept the statements that indicate or give an indication that the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors is achieved to a high degree, and from (60

to less than 75%) as an indicator of its achievement to a medium degree, and less than 60% as an indicator of its achievement to a weak degree.

Presentation and discussion of the results of the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors.

(4)Table

Repetitions, estimated degree, relative weight and ranking of the research sample responses to the questionnaire (the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors).

n =76

M	ferries	OK		To some extent		not agree		Estimated score	Relative weight	Arrangement
		K	%	K	%	K	%			
As one of the physical education supervisors at Al-Azhar institutes, I believe that the technical and artistic requirements necessary for administrative digitization are represented in.....:										
1	Availability of high-tech and modern computers	33	43.4	12	15.7	31	40.7	154	67.5	2
2	Availability of a highly efficient communications network	27	35.5	18	23.6	31	40.7	148	64.9	5
3	Availability of the necessary software for administrative digitization	28	36.8	20	26.3	28	36.8	152	66.6	4
4	Availability of technical support for continuous device maintenance	25	32.8	19	25.0	32	42.1	145	63.6	6
5	There is coordination and communication between all electronic units to exchange data and .information	40	52.6	27	35.5	9	11.8	183	80.3	1
6	Building a complete and secure database	31	40.7	15	19.7	30	39.4	153	67.1	3
7	Work on updating the database periodically	22	28.9	20	26.3	34	44.7	140	61.4	7
8	Providing information infrastructure that serves sports activities	20	26.3	10	13.1	46	60.5	126	55.3	8
Total score of the questionnaire								1201	65.83	

Table (4) shows the following:

- The sample responses to the questionnaire phrases (the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education

supervisors) varied, as the relative weight of the responses ranged between (55.3%) for phrase (8) to (80.3%) for phrase (5).

- As for the relative weight of the research sample's responses to the questionnaire phrases as a whole (65.83%), which indicates that the technical requirements for administrative digitization are met to a medium degree.
- The researcher attributes this to the fact that statement No. (5) obtained the first rank, which states that there is coordination and communication between all electronic units to exchange data and information, with a relative weight of (80.3%), to the use of computers supported by the Internet to facilitate the communication process between workers in the various units in its various forms..
- This result is consistent with the results of the study Hayat Alrefaie (13) (2011) Which reached the necessary results to reduce the digital gap in order to adapt to modern technologies and ease communication between numbers.
- This result is consistent with the results of the study Okaeal (15) (2018) Which concluded that there is a relationship between communication methods and modern technological methods in using digital transformation.
- This result differs from the results of the study by Mona Mohamed El-Sayed (2019) (11), which concluded that there is a lack of information and communication technology devices and equipment in secondary schools in Egypt.
- This result also differs from the study of Ramadan Muhammad Muhammad (2019) (6), whose results reached the lack of availability of modern technologies, weak Internet network, and low level of digital transformation in Egyptian universities.
- The researcher also attributes the occurrence of statement No. (8) in the eighth and last place, which states “providing the information infrastructure that serves sports activities with a relative weight of 55.3%, to the fact that the infrastructure is necessary and inevitable to provide networks, software and databases for exchanging information, and without it we cannot complete the process of digitization and

transformation from educational institutions to technical institutions with smart management.”

- This result differs from the result of Jamal Ali Khalil’s study (2020) (5), which concluded that the most important requirements for digital transformation are a digital vision and smart infrastructure.
- The researcher concludes that the reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors is represented in the use of computers supported by the Internet to facilitate the communication process between workers in the various units in its various forms, and that the most important requirements for digital transformation are represented in a digital vision and smart infrastructure.

- Thus, the research question has been answered, which states: “The reality of the technical requirements necessary for administrative digitization in Al-Azhar institutes from the point of view of physical education supervisors.”,,?

Conclusions:

In light of the research objective, its questions, statistical treatments, and research :results, the researcher reached the following conclusions

- **has been achieved from the point of view of physical education mentors to a :moderate degree, which are-**
 - a. Coordination and communication between all electronic units to exchange data and information.
 - b. Availability of computers and a secure database

Recommendations :

- a- Update the database periodically.
- b- Providing information infrastructure that serves sports activities.

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