THE DEGREE OF ELECTRONIC MANAGEMENT APPLICATION IN PUBLIC EDUCATION SCHOOLS IN HAIL IN LIGHT OF THE KINGDOM OF SAUDI ARABIA'S VISION 2030

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Abstract:

The study aimed to identify the electronic management degree of application in public schools in Hail in light of Saudi Arabia's 2030 vision. The researcher developed a questionnaire consisting of three dimensions: (Management Operations, Human Resources, and Electronic Organization) which was distributed to a random sample of (65) female educational supervisors in public education schools in Hail city. The descriptive analysis method was used in the study. The study concluded that the three dimensions came with a medium mean. The results also showed no variations according to the educational qualification variable. Furthermore, there were significant differences according to the work experience variable, and the differences were for those with more experience.

Keywords: E-Management - public education- Schools in the city of Hail- Saudi Arabia 2030 vision.

درجة تطبيق الإدارة الالكترونية في مدارس التعليم العام في مدينة حائل في ضوء رؤية المملكة العربية السعودية 2030

الملخص:

هدفت الدراسة التعرف إلى درجة تطبيق الإدارة الالكترونية في مدارس التعليم العام في مدينة حائل في ضوء رؤية المملكة العربية السعودية 2030. وقد طورت الباحثة استبانة مكونة من ثلاثة أبعاد هي: العمليات الإدارية، الموارد البشرية والتنظيم الالكتروني. ووزعت أداة الدراسة على عينة مكونة من (65) مشرفاً تربوياً في مدارس التعليم العام في مدينة حائل وتم استخدام منهج التحليل الوصفي(المسحي) في الدراسة. وخلصت الدراسة الى أن الأبعاد الثلاثة قد جاءت بدرجة متوسطة، كما وأظهرت النتائج عدم وجود فروق ذات دلالة إحصائية حسب متغير المؤهل العلمي، كما توجد فروق ذات دلالة إحصائية باختلاف متغير خبرة العمل لصالح المشرفات ذوات الخبرة الأكثر.

الكلمات المفتاحية: الإدارة الإلكترونية، التعليم العام، المدارس في مدينة حائل، رؤية المملكة العربية السعودية 2030.

Introduction:

Electronic management is directly related to the application of technical innovation's results to enhance performance levels of educational institutions, raising their technological efficiency, and enhancing their attaining the intended goals with efficiency of planning, organizing, and following up, in addition to the quality of educational work.

However, the application of electronic management in educational institutions is a fundamental pillar of the strength of educational systems (Al-Titi and Erekat, 2015) In light of technological progress, the electronic communication revolution and the development of information systems, administrative activities, including educational and educational activities, gradually shifted from ordinary activities to digital activities to take advantage of the characteristics of these new activities in the field of providing educational services in schools, in an effort to boost effectiveness of the work of educational institutions and others (Neff, 2016).

That the success of educational schools depends in most cases on their ability to keep pace with developments related to the application of electronic management, which requires these schools to adapt to the rapid digital changes (Boulaqwas, 2018). The ability of these educational institutions to monitor the changes taking place in the application of electronic management, which is often characterized by complexity and change, helps them to adapt to these transformations on the digital stage that is sweeping the world today (Salem, 2017).

Based on the previous considerations, Royal Decree No. 7 / B / 33181 dated 7/10/1424 AH came. It includes the Ministry of Communications and Information Technology drawing up a plan to provide government services and transactions electronically., in addition to Cabinet Resolution No. (235) dated 8/20/8 1425 AH, which included adopting the use of computer systems in all administrative operations in the Kingdom of Saudi Arabia (Yosur, 1424 AH).

Accordingly, educational institutions, including schools of education, are witnessing a qualitative shift in ways and methods of work, which is called today electronic management, which is related to information technology, in order to offer new possibilities in exchanging information and sharing with other groups in the era of the information society (Mukred & Yusof, 2020). Depending on this vision, it is imperative that public education schools adopt the causes of progress and advancement and follow the path of development, or they will be destined to be in the path of isolation which will end with decline, as the educational field is witnessing rapid transformations in all fields of knowledge, science, and technology (Al-Qahtani, 2017).

In this context came the Kingdom's 2030 vision, to achieve the principles and requirements of developing the educational process and enhancing the ability of the education system to fulfil the demands of development and improving efficiency in employing electronic management in public education schools, to build a thriving culture, a booming economy, and an ambitious country, and these axes are complementary and consistent with the requirements of the development philosophy mentioned by the Vision of 2030, and this is confirmed by King Salman bin Abdulaziz Al Saud, the Custodian of the Two Holy Mosques, declaring: "My primary aim is for our country to be a successful and innovative example in the world at all aspects. I'll cooperate with you to make this happen. (The Kingdom's vision 2030, 2016).

The confirmation of the Kingdom's vision 2030 on developing the mechanisms of educational work linked to the employment and application of electronic management comes from the fact that the world is witnessing a set of transformations, the most prominent of

which is the emergence of the era of the technological revolution, and this indicates the emergence of a third wave society that emphasizes the organization of science and knowledge (Al-Luhaidan, 2018). In confirmation of the above, the Arab Development Report in the United Nations Development Program (2018) indicated that "there is little hope for traditional reform methodologies, unless we rely on realistic reform methodologies that improve the connections between the educational institution with the neighborhood and bring about real reform by employing new methods of management.

Based on all of the above, the search for the degree of application of electronic management in public education schools in Hail considering the Kingdom of Saudi Arabia's 2030 Strategic Plan has its justification, in light of the policies presented on the local and international educational administrative arena related to the need to develop and modernize public education schools in the Kingdom. Among those justifications is that public education schools become capable of creativity and innovation, and these justifications called for the researcher to address the problem of the degree of application of electronic management in public education schools of the Ministry of Education and the extent to which it keeps pace with modern trends in electronic management in line with the ministerial orders issued to do so.

PROBLEM OF THE STUDY

World Bank report indicated that there are gaps between what the educational systems have achieved in the Arab world and what the region needs to achieve regarding its current and future development goals in its use of electronic management (World Bank report, 2019).

In this context, the Arab Development Report indicated that there is little hope for traditional reform methodologies unless relying on realistic reform methodologies that rely on electronic management and automating educational work (UNDP, 2018).

Those that adhere to the Saudi Arabian educational system may notice that its mechanisms have evolved a lot from what they were in the past, but they still need to be updated and developed in their systems and programs through the employment and application of electronic management which was backed up by the research of Al-Mutahmi (2012) on the importance of applications of Electronic management in education, and the results of Al-Luhaidan (2018) confirmed that electronic management contributes to the development of administrative work to a high degree.

The researcher's sense of the study problem stemmed from a review of international reports and previous studies ((Al-Qahtani, 2017). (Al-Luhaidan, 2018) related to electronic management, in addition to being delegated by the Ministry of Education to the USA, and that the researcher is familiar with the mechanisms of applying electronic management and its importance in educational work, as the researcher noticed the necessity to apply electronic management in public education schools, as it makes educational work characterized by creativity and achievement.

Hence, the study problem arose, and a question related to the degree of application of electronic management in public education schools began to be crystallized in the researcher's mind, and as public education schools in the city of Hail needed to build and enhance their foundation and system according to the scientific, knowledge and technical advancements taking place worldwide, related to electronic management, in order to keep pace with all that is new on the educational and educational arena; this will not happen except through the

development of their systems and programs, in accordance with these developments. Hence, the above calls for the researcher to determine the extent of the use of electronic management in public education schools, and to know the most important factors assisting in the application of electronic management in these schools.

SIGNIFICANCE OF THE STUDY

The topic of electronic management in the educational field has gained wide importance, and this is what Al-Khalidi study (2016) indicated to the mechanisms of developing administrative performance in educational institutions in light of the approach to electronic management, and the study of Ibn Suwailem (2020) explained the application process's reality of electronic management in governmental schools. Consistently, the importance of knowing the degree of application of electronic management in public education schools in Hail is as follows:

1. This study may contribute to identifying methods and mechanisms for employing electronic management in public education schools in Hail.
2. Disclosure of requirements for applying electronic management in public education schools and placing them in the case of decision-makers in the Ministry of Education.
3. It is hoped that the results of the study will help clarify the e-management model in governmental schools.

PURPOSES

1. Determining the degree of electronic management application in governmental schools in light of the Saudi Arabian Kingdom's 2030 Strategic Plan.
2. Highlighting the importance of the requirements of the Kingdom's Strategic Plan 2030 in dealing with the development of education and the employment of electronic management mechanisms.
3. Identify whether statistically significant differences exist at the significance level (0.05) between the educational supervisors' responses about the degree of application of electronic management in governmental schools according to the variables (academic qualification, work experience).

QUESTIONS

1. What is the degree of the electronic management application in public education schools from the point of view of educational leaders in light of the vision of Saudi Arabia 2030?
2. Are there statistically significant differences at the level of significance (0.05) regarding the degree of application of electronic management in general education schools according to the variables (qualification, experience)?

TERMS OF THE STUDY

Electronic management

Electronic management: By relying on information systems that assist in the administrative decision-making process as quickly as possible and at the lowest costs, electronic management is known as an integrated electronic system that aims to convert

typical administrative work from manual management to computer-based management. (Goh & Wen, 2021).

It is also known as information technology applications in educational work to facilitate information control, and to carry out work effectively, efficiently and with outstanding speed (Panbua, 2019). In this sense, it is that management that relies on information technology to achieve educational organizational performance that achieves effective outcomes in society (Frolova at all, 2019).

Procedurally, it is the use of all modern technologies, communication networks, and electronic organization to accomplish administrative, educational processes in public education schools in Hail in order to achieve educational and scientific goals.

The Saudi Arabian Kingdom's 2030 Strategic Vision

It is a document depending on a set of foundations, and it relies on three axes: a strong economy, a dynamic society, and an aspirational country. It is also considered as the post-oil plan and it was announced on April 25, 2016, and its rationale reflects on the Saudi society with all its components and spectrums and is based on the mechanisms of modernization and development. It also emphasizes in its entirety the building of a knowledge society based on prosperity and sustainable development (Saudi Arabia Vision 2030, 2016).

DELIMITATIONS

The objective of this study was to investigate the application degree of electronic management in public education schools in Hail city, in terms of the following dimensions: (administrative operations, human resources, electronic organization).

Human delimitations: The study was limited to the (65) educational supervisors in public education schools in Hail city.

Spatial delimitations: The Kingdom of Saudi Arabia is represented in public education schools in the city of Hail.

Temporal delimitations: The study was implemented during the year 2020.

Methodology and procedure

Methodology

The descriptive methodology is adopted to gather and categorize data and facts. It is concerned with describing the concerned with the studied phenomenon accurately and then expressing it either qualitatively or quantitatively.

Sample

The population consists of all the educational supervisors in governmental schools in the city of Hail, the education leaders, whose number is (290) supervisors, according to what was reported by the central Noor system. In the next step, the research sample was selected through random sampling, where the study sample reached (65) educational supervisors. The percentage was almost (22.42%) of the total community. One of the justifications for selecting the sample and its size is that it is representative of the entire community, in addition to choosing it among similar categories. See the following table (1):

Table (1): Sample distributed according to its variables.

Variables of the study	Percentage	The number of members of the research community in each stratum
Variable of Educational Qualification		
Bachelor of	% 52.30	34
Higher than a bachelor's	% 47.70	31
Variable of Experience at work		
5 - 10 years	% 30.76	20
11 - 20 years	% 46.15	30
21 and over	% 23.09	15
Total	100 %	65

Instrument of the Study

The researcher developed a questionnaire that the respondent would fill out in order to collect data. The researcher tended to seek the opinion of the educational supervisors in public education schools in Hail city regarding the dimensions of study (administrative operations, human resources, electronic organization).

Validity of the study instrument

When administered to a survey sample of (22) female educational supervisors, the validity of the questionnaire was determined by determining the validity of internal consistency. The responses were uploaded to (SPSS 17). The correlation coefficients were then determined between the overall scores for each research dimension using the correlation coefficient values' degrees of significance. Determining the validity of internal consistency are shown in Table (2).

Table (2) validity of internal consistency

Dimensions	correlation coefficients	significance value
Administrative operations	0.72**	0.000
HR	0.62**	0.000
Electronic organization	0.77**	0.000

Reliability of the Questionnaire

Cronbach's alpha is a technique for determining how different elements relate to each other. are shown in Table (3).

Table (3) Reliability

Dimensions	Cronbach alpha coefficients
Administrative operations	0.61
HR	0.74
Electronic organization	0.66
Total	0.87

The total reliability coefficient of Cronbach alpha (0.87), which is a strong reliability coefficient, as can be shown in Table 3. All of this suggests that the questionnaire is highly reliable and that it can be used in the study's field applications.

RESULTS AND DISCUSSION

Q1: What is the degree of the electronic management application in public education schools from the point of view of educational leaders in light of the vision of Saudi Arabia 2030?

The Mean score and standard deviations of the research participants' responses for each of the dimensions represented in the first question: (administrative operations, human resources, electronic organization) were computed.

The First Dimension - Administrative Operations:

The following table (4) shows how the Mean score, and standard deviations of study. participants' responses were calculated for each item.

Table (4) means, standard deviations, and ranks for the dimension of administrative operations (N = 65)

No.	Items	Mean	Standard Deviation	Rank	Degree of Practice
4	Public education schools develop e-management applications to serve the objectives of the educational process within the directions of 2030 Vision.	3.32	1.038	1	Moderate
2	Public education schools work to achieve speed and flexibility in providing electronic services to students and their administrative staff	3.29	0.960	2	Moderate
5	Public education schools apply proper planning for the transition process for electronic management within a comprehensive digital system.	3.23	1.033	3	Moderate
1	Public education schools provide data and information and make them available to all administrative levels within the information network.	3.19	1.121	4	Moderate
3	Public education schools employ digital supervisory methods that help achieve their goals.	3.14	1.081	5	Moderate
	Total mean	3.23	1.521	-	Moderate

From Table No. 4 shows that the Mean score of the sample group responses to the administrative operations dimension reached (3.23), and a standard deviation (1.521), and it is in a Moderate degree of application. Between the lowest and highest mean score, the means of the questions in this dimension vary from 3.14 to 3.32, while the replies of the study participants fell between 52% and 68%.

This result can be explained by supervisors 'realization of the importance of compatibility of electronic management applications with all regulations and systems by choosing appropriate application methods and standards for them. This, of course, increases the need to re-update and develop programs and design programs that serve all the requirements of regulations in public education schools. This result can also be traced back to the fact that supervisors transform to some extent the reduction of bureaucratic and routine

procedures that hinder the provision of services in public education schools, as the application of electronic management methods lead to the development and simplification of procedures and work steps and getting rid of the daily routine, and this is positively reflected in the revitalization and development of the educational process.

The Second Dimension - Human Resources

For each item of the human resources dimension, the means, and standard deviations of the replies of (study members) were determined. are shown in Table (5).

Table (5) means, standard deviations, and ranks of the human resources dimension (N = 65)

No.	Items	Mean	Standard Deviation	Rank	Degree of Practice
10	Supervisors nominate qualified people to apply digital management according to the standards of regulations in public education schools	3.34	1.209	1	Moderate
8	Effective programs are implemented for continuous training of supervisors in public education schools on electronic management techniques	3.32	1.377	2	Moderate
7	The Ministry of Education participates with the supervisors in setting goals related to electronic management	3.28	1.159	3	Moderate
9	Providing material and moral incentives for excellent supervisors in computer and electronic management	2.57	1.317	4	Low
6	Supervisors in public education schools are required to pass (ICDL)	2.52	1.317	5	Low
	Total Mean	3.01	1.382	-	Moderate

Table No. 5 shows that the arithmetic mean of the participants' replies to the items related to human resources reached 3.01, had a standard deviation of 1.382, and was applied to a Moderate degree. The replies of the study participants were within a percentage range that ranged between (52% - 68%), while the means of the items on this dimension were between (2.52) and (3.34), between the lowest and highest arithmetic means.

This can be due to the fact that the supervisors realize that nominating qualified supervisors for the application of electronic management who are able to deal with digital administration is the most important element in the transformation towards electronic management, and this is what the Kingdom's vision 2030 indicated in its requirements towards developing the educational process and linking it to information systems. The supervisors are aware that (ICDL) is considered one of the important steps in facilitating electronic business, raising the level of knowledge of information technology and mastering computer skills and its applications, as it ensures that the supervisor is fully aware of the use of the Internet, e-mail, and word processing, using Conventional software.

The Third Dimension - Electronic Organization

The table below demonstrates how the arithmetic means and standard deviations of the (research subjects') responses for each item were obtained are shown in Table (6).

Table (6) means, standard deviations and ranks of the electronic organization dimension (N = 65)

No.	Items	Mean	Standard Deviation	Rank	Degree of Practice
11	Public education schools provide the appropriate infrastructure to implement electronic management (computers - networks - servers).	3.31	1.118	1	Moderate
12	Public education schools apply the mechanisms and patterns of online digital work.	3.29	1.072	2	Moderate
13	Public education schools provide networking to provide services related to educational science.	3.25	1.086	3	Moderate
14	Public education schools employ database programs such as the Noor-Fares-Takamul-Takaful program	3.19	1.162	4	Moderate
15	In public education schools, media such as optical disks and memory cards are used to store and retrieve data and information	3.17	1.251	5	Moderate
	Total Mean	3.24	1.207	-	Moderate

Table (6) shows that the mean of the research participants' replies to the items in the electronic organization dimension attained (3.24), had a standard deviation of (1.207), and was in a moderate level of application. The study participants' replies fell between the percentage range of (52%) and (68%), while the means of the items on this dimension range between (3.17) and (3.31), the lowest and highest arithmetic means.

This can be due to the fact that the educational supervisors realize that electronic management in public education schools requires the existence of a modern and flexible organizational structure, in addition to the existence of a network structure based on an advanced technical and information base, and an organizational culture centered around the initiative in performance and the completion of work in an efficient and effective manner, as well as the need for developing, changing, and dealing efficiently with information technology and continuously re-engineering the organizational environment, in addition to reducing the bureaucratic and routine procedures that hinder each development.

Q2: Are there any statistically significant differences at the level of significance (0.05) regarding the degree of application of electronic management in general education schools according to the variables (qualification, experience)?

Educational Qualification Variable

The t-test was performed to determine whether there were any variations in the means of replies of the study sampled population compared to the scale. This is shown in Table (7).

Table (7) T-Test (N = 65)

Scale	Qualification	No.	Mean	Standard Deviation	T	Degree of Freedom	Significance	Decision
Whole Scale	Bachelor	34	24.08	82.1	0.716	63	0.462	Insignific ant
	Higher than Bachelor	31	22.62	65.1				

Table (7), (T) value was (0.716), which is insignificant value at the (05.0) level of significance, and probability value was (05.0). Given the scientific qualification variable, we infer that there aren't any statistically significant variations at (0.05) between the opinions of the survey participants (the educational supervisors) regarding the extent of application of electronic management in public education schools. The reason for this is that there is one approach among female supervisors in public education schools towards the importance of applying electronic management, as well as the supervisors' comprehension of the importance of governmental schools seeking to reach the requirements of the knowledge society in light of the Kingdom's vision 2030, so that the educational process is developed and modernized, and this of course is not related to the level of academic qualification, as it is part of the interest of every educational supervisor regardless of his or her academic qualification.

Years of Experience Variable

The One-Way ANOVA test was used to examine the means of the responses provided by the study sample members. This is shown in Table (8).

Table (8) One Way ANOVA (N = 65)

Scale	Years of Experience	No.	Mean	Standard Deviation	F	Degree of Freedom	Significance	Decision
Whole Scale	5 - 10 years	20	19.66	1.52	4.509	63	0.021	**Significant**
	11 - 20 years	30	21.37	2.01				
	21 and over	15	22.98	1.53				

Table (8) findings, the value of (F) was (4.509), which is significant at (0.05). As a result, we declare that there are variations between the replies of the selected participants (educational supervisors) are conclusive at the significance level (0.05) about the degree of application of electronic management in general education schools due to the variable of years of experience, and to find out the reason for these differences, the Scheffe test was used. , as it contains more than one level, and the samples are different in size, and that the Scheffe test is more sensitive to the critical differences between the means, as shown in Table (9).

Table (9) Scheffe test results for dimensional comparisons according to years of experience variable (N = 65)

Dimensions of the Scale	Years of Experience	Mean	Differences between arithmetic means according to years of experience	
			From 5 years to 10 years	From 21 and over
Administrative operations	5 - 10 years	24.76	1.22	-0.45
	11 - 20 years	23.39	------	-1.39*

	21 and over	24.89	------	------
HR	5 - 10 years	19.22	-0.82	-1.24*
	11 - 20 years	18.17	------	-0.49
	21 and over	19.99	------	------
Electronic regulation	5 - 10 years	22.47	-2.52	-3.21*
	11 - 20 years	21.34	------	1.42
	21 and over	22.89	------	------

** Statistically significant*

Table (9) shows that these differences are statistically significant between the means of responses of those with 5 to 10 years of experience, and those with more than 21 years of experience, and the differences were in favor of those with more experience in the areas of administrative operations, human resources, and electronic organization. It is also clear that these differences are statistically significant between the means of responses of those with experience of 21 years and over and those with from 5 to 10 years, and the differences were in favor of those with more experience in the field of administrative operations.

This can be explained that those with more work experience have knowledge and awareness of the importance of electronic management, as a result of their more practice at work, and their sensitivity to work problems, as well as more years of experience. The educational environment forced them to change and depart from the norm, noting that the orientation within the dimensions of study was medium. This indicates their adherence to the traditional routine, and the fear of heading towards the new and out of the ordinary.

RECOMMENDATIONS

1. Activating the requirements of electronic management in public education schools by employing their requirements and elements represented in Administrative Operations, Human Resources, and Electronic Organization.
2. Reliance on practical procedures that facilitate the application of electronic management in public education schools.
3. Intensifying specialized training programs in the field of electronic management for the educational supervisors, in theory and practice.

8. REFERENCES

Al-Khalidi, M. (2016). A proposed conception for the development of administrative performance in educational institutions in light of the approach to electronic management. *Journal of the Faculty of Education, Tanta University, Egypt, 63(*3), 79-93.

Al-Luhaidan, M. (2018*). The degree of application of digital management in women's educational administrations in Hail city and ways to develop it* [an unpublished master's thesis]. University of Hail, Kingdom of Saudi Arabia.

Al-Mutahmi, M. (2012). *The Reality of Application of Electronic Management in Education Departments of Information Technology Department Managers and Their Assistants in the Kingdom of Saudi Arabia* [Unpublished Master Thesis]. Umm Al-Qura University, Kingdom of Saudi Arabia.

Al-Qahtani, M. (2017). Electronic Administration Application in the General Administration of Education in Asir Region. *Journal of Educational Sciences, 11* (2), 206-221.

Al-Titi, M, & Erekat, K. (2015). The reality of electronic management in achieving administrative creativity in Palestinian universities from the point of view of faculty members and administrators in them. *Journal of the Association of Arab Universities for Research in Higher Education, 35* (2), 27-44.

Boulaqwas, Z. (2018). Electronic Administration as a Contemporary Approach to Promote School Administration. *Journal of Social Change, Algeria, 6*(3), 215-233.

Frolova, E. V., Ryabova, T. M., & Rogach, O. V. (2019). Digital Technologies in Education: Problems and Prospects for" Moscow Electronic School" Project Implementation. *European Journal of Contemporary Education, 8*(4), 779-789.

Goh, E., & Wen, J. (2021). Applying the technology acceptance model to understand hospitality management students' intentions to use electronic discussion boards as a learning tool. *Journal of Teaching in Travel & Tourism,21*(2),142-154. https://doi.org/10.1080/15313220.2020.1768621.

Ibn Suwailem, M. (2020). The reality of applying electronic management in governmental public education schools for boys in the province of Delam in the Kingdom of Saudi Aribia. *Journal of Educational and Psychological Sciences, National Research Center, Gaza, 4*(8)121-142.

Mukred, M., & Yusof, Z. M. (2020). *The performance of educational institutions through the electronic records management systems: factors influencing electronic records management system adoption.* In Data Analytics in Medicine: Concepts, Methodologies, Tools, and Applications (1578-1598), IGI Global.

Neff, D. (2016). Using IT Communication in the work: The Gezira Rural Programmes*. Journal of Multimedia and Hypermedia, 15* (7), 231-252.

Panbua, R. (May,2019). *The Computer Lab Service Management of the Office of General Education and Innovative Electronic Learning*. International Academic Conference on Educational & Social Innovations (AC-ESI-2019), Munich, Germany.

Salem, F. (2017). Development of administrative communication in the administration of public education in Libya in light of electronic administration. *Reading and Knowledge Journal, Ain-Shams University, 16(*187), 93-120.

The vision of the Kingdom of Saudi Arabia 2030 AD. (2016, April 25). Text of Saudi Arabia's Vision 2030. *Riyadh: Al-Hayat*. retrieved from the source: http://www.alhayat.com/Articles/15271590/%D9%.

United Nations Development Program. (2018). *Arab Human Development Report. Arab Fund for Development and Social Economy*. Regional Office for Arab Countries, Oman: The National Press.

World Bank report. (2019). *World Development Report, the changing nature of work*. Washington, USA.

Yosur. (1424 AH). *The Electronic Transactions Program, by Resolution No. 7 / B / 33181, dated 7/10/1424 AH.* www.yesser.gov.sa. Saudi Arabia.