Roles of e-Management Systems in School Administration to keep pace with Vision 2030 of KSA in Makkah (2022)

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Abstract: This study aims at defining the electronic administration and its role in developing the administrative process in the public schools, measuring the impact of implementing its systems on the development of the administrative work and the performance of the administrative staff in the public schools, identifying obstacles and presenting some recommendations to face these obstacles. To achieve this, the researcher used the descriptive, analytical method, relying on the questionnaire tool that was distributed to a random sample of 100 principals and administrators in public schools in Makkah. The data are collected from randomly different schools to measure the extent to which electronic management is applied. In order to achieve the objectives of the study, a questionnaire was developed, consisting of two parts; the first part about the personal information of each employee, and the second section consists of seven axes for the effect of electronic management on performance. The results of the study showed the application of electronic management in schools in the city of Mecca, where most of the results were limited to the mean values (3.40-4.19), which indicate that all respondents agreed that they have knowledge of electronic management systems. Electronic management systems helped develop administrative work and improve the performance of employees. In government schools, the effectiveness of electronic management systems and the speed of their performance. Whereas everyone strongly supports and agrees with a high degree between (4.20-5.00) that the use of electronic management contributes to achieving Vision 2030. However, it was found that there are obstacles in the lack of facilities that schools need to support electronic management systems, as well as challenges facing the application of electronic management systems. Through the result that appeared (2.60-3.39), the majority was neutral. Through these results, I find that a number of recommendations and proposals must be presented, the most important of which are: Providing modern tools and devices that suit this development, ensuring the security and protection of electronic information, intensifying courses and programs in the field of electronic management, and clarifying the obstacles that could cause the failure of this management.

Keywords: Eelectronic Administration, Administrative process, administrative staff performance.

دور أنظمة الإدارة الإلكترونية في الإدارة المدرسية لمواكبة رؤية المملكة العربية السعودية 2030 بمدينة مكة المكرمة عام 2020

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المستخلص: هدفت هذه الدراسة إلى التعريف بالإدارة الإلكترونية ودورها في تطوير العملية الإدارية في المدارس الحكومية، وقياس أثر تطبيق أنظمتها على تطوير العمل الإداري وأداء الكادر الإداري في المدارس الحكومية، وتحديد المعوقات وأوجه القصور فيها. وتقديم بعض التوصيات لمواجهة هذه المعوقات. ولتحقيق ذلك استخدم الباحث المنهج الوصفي التحليلي معتمداً على أداة الاستبيان التي تم توزيعها على عينة عشوائية مكونة من 100 مدير وإداري في المدارس الحكومية بمدينة مكة المكرمة. سيتم جمع البيانات من مدارس مختلفة بشكل عشوائي لقياس مدى تطبيق الإدارة الإلكترونية. ولتحقيق أهداف الدراسة تم تطوير استبانة مكونة من جزئين؛ الجزء الأول عن المعلومات الشخصية لكل موظف، والقسم الثاني يتكون من سبعة محاور لتأثير الإدارة الإلكترونية على الأداء. وأظهرت نتيجة الدراسة تطبيق الإدارة الإلكترونية في مدارس مدينه مكة المكرمة حيث كانت اغلب النتائج محصورة بين قيم المتوسط الحسابي (3.40-4.19) التي تدل على جميع المستجيبين متفقين ان لديهم معرفة بأنظمة الإدارة الإلكترونية، أنظمة الإدارة الإلكترونية ساعدت تطوير العمل الإداري، في تحسين أداء العاملين في المدارس الحكومية، فاعلية أنظمة الإدارة الإلكترونية وسرعة ادائها. حيث ان الجميع يؤيد ويوافق بشدة بمقدار عالي بين (4.20-5.00) ان استخدام الإدارة الإلكترونية تساهم في تحقيق رؤية 2030. لكن تبين ان هناك معوقات في عدم توافر المرافق التي تحتاجها المدارس لدعم أنظمة الإدارة الإلكترونية وايضا التحديات التي تواجه تطبيق أنظمة الإدارة الإلكترونية من خلال النتيجة التي ظهرت بين (2.60-3.39) كان الاغلب محايد. ومن خلال هذه النتائج أجد انه يجب تم تقديم جملة من التوصيات والمقترحات أهمها توفير الادوات والاجهزة الحديثة التي تتناسب هذا التطور والي توفر ضمان أمن وحماية المعلومات الإلكترونية، وتكثيف الدورات والبرامج في مجال الإدارة الإلكترونية وتوضيح المعوقات التي ممكن ان تتسبب في فشل هذه الادارة.

الكلمات المفتاحية: الإدارة الإلكترونية، العملية الإدارية، أداء الموظفين الإداربين.

1.1 Introduction

During the previous period, many radical transformations of individuals and organizations in government changed in the world as a result of the technological revolution, information technology, and rapid technological progress, especially in the field of information and communications technology. Digital transformation in all private or governmental sectors led to the formation of a society in which countries compete to stimulate their government institutions. This development resulted in the emergence of electronic management concepts and applications. Through this transformation, the Kingdom of Saudi Arabia seeks to encourage and support the application of electronic management systems in all its governmental and private institutions as an essential step to achieving the main goal of building an electronic government that provides integrated services to citizens through one portal and achieves Vision 2030 (Vision 2030 .N.d). Through these technological developments, they have contributed to the development of administrative work methods in recent years, as they have provided the opportunity to improve and support administrative communication, which contributes to providing an effective administrative environment that helps reduce time and effort. This requires organizations to shift from traditional methods of doing business to electronic methods. Therefore, the application of electronic management in educational institutions, including schools, is a means to improve organizational performance, the development of management processes, from the planning, organization, guidance, follow-up, evaluation and take decisions through informatics, the availability of data and knowledge depends on new technologies that provide ways new access to information, facilitate access to services and provide for large numbers of customers and the beneficiaries of the educational process of access to information and data with less effort and great speed. The ability of the school to perform its mission depends on the quality of the school administration, through which the teaching and learning process is controlled, organized, directed, and evaluated. Through effective school management, basic thinking and thinking are fundamentally rethought in all activities, procedures and strategies that are commensurate with the requirements of the age of speed, revolution, and technology. As we live in the age of tremendous technological revolution that we cannot go into the future without it we must contribute to improving the level of management in schools and keep abreast of the technological revolution and information, and deal effectively and efficiently with the changes experienced by the present era (Albalawi, 2020).School management in the face of rapid technological changes deserves to be transformed from traditional management to electronic operations management, because of the lack of quality of traditional methods and their inefficiency in work, especially in the era of electronic fast-changing, so the researcher believes that the shift towards the application of electronic management in public schools is important because Traditional management is far from functioning in a contemporary world that lives in the era of cognitive explosion of Technology. E-Government is one of the most advanced systems in services Governmental organizations, it is one of the most important pillars of economic and social development aspiring to apply to all developed and developing countries alike (Alrashide, 2020). Among all of the above, we find that organizational development in organizations, especially educational ones, is controlled by many factors, the most important of which is information systems, or what can be called electronic management. The researcher will study the applications of electronic administration and its impact on the process of organizational development in school administration in public schools in Mecca, and whether it has actually positively affected the method of administration, and also whether there are obstacles that have caused the disruption of the work of electronic administration, and whether it has actually contributed to keeping up with the expectations of the Kingdom's Vision 2030.

1.2 Statement of the Problem

During the past five years, the Kingdom of Saudi Arabia has made great efforts in the field of information and communications technology, especially in educational institutions. The initiatives taken by information and communications technology have led to the emergence of electronic projects and services that aim to improve the performance of traditional educational sectors in terms of service, performance, efficiency, accuracy, and reduce the time and cost required to complete administrative work. This is in addition to integration and coordination between administrative bodies in other sectors and linking them to means of joint communication in accordance with the Kingdom of Saudi Arabia's Vision 2030. Therefore, the research problem is whether the shift towards the use of electronic management is effective and successful in public education schools in the Makkah region, and is it characterized by better characteristics than traditional management methods that are far removed from work in a contemporary world that lives in the era of knowledge and technological explosion. Should school administration, in the face of rapid technological changes, shift from traditional administration to electronic administration in the field of operations, due to the low

quality and inefficiency of traditional work methods, especially in light of the rapidly changing electronic age? Therefore, it requires a clear vision and message that is in line with modern developments in information technology, and the necessity of revealing those standards related to the subject of electronic administration and employing them in the education system. So that it can be used to develop administrative work, and transform traditional administration into a modern administration suitable for the technology revolution that will contribute to improving the educational and administrative process and be consistent with the Saudi Vision 2030.

1.3 Research Importance

The research will discuss one of the important scientific data in electronic management in order to clarify the importance of eliminating traditional management that is incompatible with rapid technological progress in the field of communications. Therefore, it has become necessary to shift to using technology and progress in the service of our institutions, which helps in completing their work with the lowest material costs ,human efforts and save Time to reduce the burden on citizens and reduce administrative corruption in these institutions. The importance of the research can be noted as follows:

1- The research explains the role of electronic administration and its importance in positively influencing the chain of administrative functions in educational school administrations.

2- Measure the impact range application of e-management in the performance of public school, staff and the development opportunities that contribute to the organizational development of schools and the development of human resources.

3- Research can contribute to increasing technological awareness in society and thus facilitate the introduction of electronic services in various social institutions.

1.4 Purpose of the Study

E-management is important in creating a new pattern of management styles, leaving its wide implications on Institutions and their areas of operation, Management, strategy and functions. In fact, these effects are not only due to the technological dimension of digital technology, but also to the administrative dimension of developing managerial concepts that have accumulated over many decades and are working towards greater administrative flexibility (Al-Saqai, 2020).The use of information and communication technologies is a real revolution in management; because of the change in the manner of administrative work and effectiveness and performance. The era in which we live requires us to make great efforts in order to accomplish the work with the many requirements in a short time (Muhammad, 2021).

Hence, the importance of implementing e-management in schools have made the Ministry of Education seeks to keeping pace with modern developments, and what is new, so the exchange of information using the computer and its networks contributes to the development of the efficiency of school administration, as well as helping in linking and communication between educational agencies to reduce the financial burden of money spent on paper, transport and time. Therefore, this study aims to identify the role of e-management in the public schools affiliated to the Directorate of Education in Makkah and its approach to the development of the Kingdom through vision 2030. As mentioned above, the specific objectives of the research are as follows:

1. To identify the concept of electronic management and to indicate its importance and ability to positively influence the functions of schools.

2. Identify the components of the application of electronic management and its obstacles in our educational institutions.

3. To identify the relationship between the application of electronic management and the development and improvement of functionality.

1.5 Research Questions

This research aimed to identify the level of e-management application in the public schools of the Directorate of Education in Makkah. So, this study seeks to answer the following questions:

1. What is the level of application of e-management in the public schools of the Directorate of Education in Makkah?

2. What are the roles of electronic administration in carrying out administrative work?

3. How the application of e-management in schools contributes to the achievement of the vision of the Kingdom 2030?

According to the previous goals, the following hypotheses were established:

1. The first hypothesis: There is no statistically significant relationship between the applications of electronic management and the capacity of public schools for organizational development.

   - There is no statistically significant relationship between electronic management applications and the ability public schools to develop the organizational structure.

   - There is no statistically significant relationship between the applications of electronic management and the ability of public schools to develop human resources.

   - There is no statistically significant relationship between e-management applications and capability Public schools to recruit information technology.

2. The second hypothesis: There are no statistically significant differences between the applications of electronic management and the ability of public schools to manage the administrative management process.

1.6 Theoretical Framework

From what we currently see of the great development of modern technologies and the information revolution, and the availability of the Internet in all regions at competitive prices, it is found that it is necessary for all institutions to benefit from this technology for many reasons as follows: to ensure the quality of performance and production, the diversity and development of work methods, and to reach the desired goals with high efficiency, Which contributes to being the driving force for economic, social and political transformations at the global level.

It was found that the emergence of the term electronic management contributed to producing great benefits in all fields. Therefore, the researcher will discuss modern electronic management according to the following topics:

- Definition of management between the traditional concept and the electronic concept.
- Comparison of the traditional and electronic concepts of management.
- Objectives of electronic management.
- Elements of electronic management.
- Electronic management functions.
- The advantages of electronic management.
- -Obstacles to the application of electronic management
- Electronic administration in public schools
- Vision 2030 of the kingdom of Saudi Arabia and electronic management in school administration

2.1 Definition of management between the traditional concept and the electronic concept

Both the traditional and electronic concept of management will be clarified and compared to illustrate the differences between these two terms.

2.1.1 First: The Traditional Concept of Management

The traditional concept of managing the scientific literature that deals with the definition of management has varied in terms of "the human effort that involves planning, organizing, leading and controlling human and material resources to achieve specific goals efficiently"(Vilkaite-Vaitone & Povilaitiene, 2022).

2.1.2 The Concept of Electronic Management

The research is limited to the term "electronic management": defined as "the transition from the performance of the work in management from the traditional manual approach to the application of information and communication technology using the technology to the beneficiaries more effectively and with the least effort and time, and is defined as" the use of all modern technologies, and to employ them in institutions with different activities in order to provide more effective services with the least effort and time (Al-Saqai, 2020).

2.2 Comparison of the Traditional and Electronic Concepts of Management

- Traditional management relies on traditional means of communication between different parties, while electronic management relies on modern means of communication using electronic networks, which distinguish them quickly in response.

- The traditional administration provides five days a week service to individuals according to the working hours of the organizations, while the work lasts for seven days a week and for 24 hours per day in electronic administration.

- Traditional management relies primarily on paper documents, while electronic management practices are carried out without the use of paper documents, but electronic documents, which reduces storage costs and reduces the risk of loss (Rabee Rahmani, 2019).

- Therefore, the contribution of electronic administration contributes to profound changes in the nature of administrative work and methods and application affects the functions of administrative processes positively through:

- Transition from physical activity management to virtual activity,

- Transition from direct to face management to remote administration,

- Moving from hierarchical organization based on chain of command to network organization,

- Moving from task-based or employee-driven leadership in technology-based leadership,

- Transition from control to concept in comparison to actual performance with the plan to direct control (Aleaqwn, 2019).

2.3 Objectives of Electronic Administration

The objectives that electronic management seeks to achieve are stated as follows:

- It contributes to integrating parts of the organization and making them one interconnected system through information technology.

- Contributes to developing administrative processes and supporting their effectiveness in serving institutional goals Provide effective and supportive decision-making mechanisms.

- It contributes to providing quality information flow with accuracy, adequacy, timeliness, and continuous readiness.

- It can reduce operating costs and has an effective role in continuously improving productivity rates.

- An effective role in providing and creating the appropriate organizational environment and climate for comprehensive and continuous administrative research and development (Vilkaite-Vaitone & Povilaitiene, 2022).

2.4 Elements of Electronic Management

Bdiar (2019) Implementing electronic management in any organization requires several elements as follows:

1. Hardware and equipment.
2. Software of various kinds.
3. Communications.
4. Information systems.
5. Human Resources.

2.5 Electronic Management Functions

Coinciding with the amazing development during the current era of technical wealth, it has caused new changes in terms of the traditional functions of management that have been transformed into electronic functions. This contributes to achieving optimal utilization of time, money, effort and human energy.

This helped in changing the traditional administrative process and transforming modern management that relies on information systems in planning, designing organizational structures, managing collective work teams, and achieving coordination and remote control.

2.5.1 Electronic Planning

The most important differences that distinguish electronic planning from traditional planning are:

1. Electronic planning is a dynamic process that helps achieve broad-based, flexible, time-saving development goals that are short-term and continuous. In contrast to that, traditional planning sets the goals to be implemented in the next year only without taking into account any of the previously mentioned features.

2. Electronic planning helps in the continuous flow of digital information that supports the continuity of everything in the organization, including planning, and transforms it from time-bound planning to continuous planning, unlike traditional planning.

3. Electronic planning is planning that depends on the horizontal form within its general framework between management and employees, while traditional planning is top-down planning. (Walahi Almakhtar, 2019).

2.5.2 Electronic Organization

Electronic regulation focuses on changes at all levels and forms of organizational structures in order to address and support all the problems of traditional administrative regulations and eliminate them. The organization includes the following elements:

- Division of work tasks: This occurs by assigning each person in the organization to a specific task to accomplish.

- -Defining responsibilities for all members of the organization: This occurs by defining the appropriate responsibilities and authorities for each individual to perform duties while coordinating collective efforts within the organization.

- The development of administrative bodies: because it allows for cooperation and communication between the various operators of administrative work everywhere and faster and more effective (Sowelam, 2020).

2.5.3 Electronic Guidance

Electronic guidance in contemporary organizations depends on the presence of electronic leaders, which seeks to activate the role of dynamic goals and work to achieve them, and also depends on existence Leadership capable of effectively interacting with other people in an electronic manner, and the ability to motivate them and collaborate; to accomplish the required work. The efficient application of electronic routing relies on the use of advanced electronic communication networks such as the Internet so that all the steering processes are accomplished and implemented through them (Musawi Fatima, 2019).

Moreover, leaders and managers in this era must follow all new in the field of electronic technologies and be aware of the culture of creativity, openness and flexibility, which are the necessities of this era; so that they can plan well and good to enter the era of the digital revolution and benefit from its potential to improve the performance of organizations and improve efficiency Productivity.

2.5.4 Electronic Control

The advantages of electronic control include:

1. Achieve continuous control.

2. Real-time monitoring is achieved rather than censorship based on what has been reported in the past.

3. The minimum internal surprises in the control and reduce the risks is not exacerbated within the organization without first knowing and this minimizes to a minimum internal surprise.

4. Electronic control requires and even stimulates trust-based relationships, thus reducing the administrative effort required in oversight.

5. Electronic control over time reduces the importance of monitoring based on inputs or processes, so it is closer to monitoring by results.

6. Electronic surveillance helps to engage everyone in knowing what is in the organization to a large extent in order to achieve the requirements of control and reduce the surprises and crises in the Organization (Vilkaite-Vaitone & Povilaitiene, 2022; Sowelam, 2020).

2.6 E-management Features

Digital electronic management features include:

1. Electronic management is the most efficient and efficient way to manage virtual work in terms of planning, implementation and control.

2.   Electronic management is characterized by the ability to improve operational efficiency through the optimal investment of the best available technologies and trained and expert digital minds.

3.   The ability to achieve the highest speed and agility and high flexibility embodied by the provision of anything and at any time and place and in any way.

4.   E-management has a well-established culture based on transparency of information and increased competitiveness among employees.

5.   Reduce costs, enhance performance and improve service quality (Muzafar & Jhanjhi, 2020).

In light of the above, the researcher believes that e-management has many advantages, which are countless of saving time, effort and money, improving performance and services, and emphasizing the principle of transparency in all transactions. Therefore, public schools and public and private organizations in the Kingdom of Saudi Arabia must adopt and implement them as soon as possible; to take advantage of these advantages and keep abreast of accelerating technological developments.

2.7 Obstacles to the Application of Electronic Management

2.7.1 Constraints related to administrative procedures and methods

1.   Poor planning, coordination and follow-up by senior management.

2.   Lack of coordination between other departments related to the activities of the Organization.

3.   The control of traditional bureaucratic concepts on the administrative work environment in the institution and not be able to overcome or limit the impact.

4.   The misconception that change occurs only in administrative processes and procedures, while change should include leadership relations with its staff other leaders and many of the concepts of the electronic environment, such as transparency, flexibility, decentralization and others.

5.   The complexity and inflexibility of administrative procedures make electronic management turn into just broken technical practices do not have the immunity of the administrative entity (Ismael & Abbas, 2019).

2.7.2   Technical Obstacles

1.   Not using the expertise and consulting in the field of information technology and systems.

2.   The use of old devices and networks, which contributes to the difficulty of keeping pace with modern technologies.

3.   Lack of technical skills of staff in the technical field, which makes them resist technologies

4.   4.The inability of the infrastructure of some developing countries to provide the requirements of the operation of electronic management

5.   High cost of developing systems and software.

6.   Lack of software that controls the control of systems and ensures non-penetration (Muzafar & Jhanjhi, 2020 ; AlOqlah, 2021).

2.7.3   Human Constraints

1.   Limited awareness of some employees and leaders of the importance of transition to electronic management and its advantages.

2.   Lack of qualified human resources with basic skills for the use of electronic management elements.

3.   Resistance of some employees and leaders to change.

4.   Weak physical and moral incentives that encourage follow-up education, training and development.

5.   Lack of training programs and workshops in the field of modern technology and electronic systems (AlOqlah, 2021).

2.8   Electronic Administration in Public Schools

The Ministry of Education aims to develop the administrative system, including the transformation from traditional management to electronic management. It relies mainly on disseminating and benefiting from the outputs of modern technology and its tools in the fields of computers in all its different sectors and employing them to serve the employees of the schools and the ministry of faculty members, administrators and students in accordance with security guarantees and confidential levels. With the next generation of the Internet and associated technologies, there is a direct correlation between the advent of the enormous potential of

network technologies and requirements for e-management software applications that require establish the infrastructure of information and communication systems that will support building the electronic management system at the schools. The following are the electronic systems in effect in schools (Ministry of Education, 2019).

Noor system is considered a special program for all educational processes in Saudi Arabia, which is a comprehensive system linking all the educational institutions of the Ministry of Education and educational directorates through an integrated database. Noor system provides many e-services for students, teachers, parents and school principals.

- Know the results of students in the exams in different educational stages.
- Parents' knowledge of the level of their children and follow-up and improve their educational performance.
- Communicate with parents and students through the sending program, through which students' results are sent.
- Teacher's benefit from the Noor system by entering the results of students and checking them electronically for all schools in Saudi Arabia.
- Registration of first grade students electronically through an integrated system (Ministry of Education, 2019).

School Equipment Portal is considered a service provided by the Department of School Supplies, to facilitate the procedures to meet the needs of schools of educational and office supplies and delivery of the school through the warehouses without the need to review the school building equipment, and provide technical support in the use of educational devices that have been secured to schools (Ministry of Education, 2019).

Injaz - Teachers Affairs Portal is considered a service provided by the Department of Teachers Affairs at the General Directorate of Education in Jeddah, a portal for educational affairs regarding the transfer of teachers within the governorate and its affiliated offices (Ministry of Education, 2019).

Kawader is considered a system provider of The Personnel Unit at the General Administration of Education in Makkah City, to facilitate procedures for updating administrative data, transport and distribution (Ministry of Education, 2019).

Future portal is a program that aims to shift towards digital education and the delivery of knowledge, increase the student's scientific output, and it supports the development of the capacity of scientific and educational teachers (Ministry of Education, 2019).

Makkah Schools Directory (Makani) Guidance service provided by the Department of School Planning of the General Directorate of Education in Makkah to determine the best way to go to the school sites (Ministry of Education, 2019).

Manhal is a school planning management database that includes all e-services for schools, in terms of classroom preparation, students, school sites and school contact numbers (Ministry of Education, 2019).

Internal Circulars System aims to provide schools, departments and educational offices with the latest circulars, which are exported by the administrative communications of the General Directorate of Education in Makkah, where they can be viewed and printed in PDF format (Ministry of Education, 2019).

Fars System - Self Service is a subsystem of the HR system which is a set of services that the employee (teacher or administrative) can obtain and take the necessary approvals by the owners of the authority automatically (Ministry of Education, 2019).

The official mail of the department is a service provided by the Information Technology Department in Makkah to schools, offices, departments and educational staff to communicate with the various parties and all those related to education, as well as access to electronic services, including circulars, operational plans and technical equipment (Ministry of Education, 2019).

2.9 Vision 2030 of The Kingdom of Saudi Arabia and Electronic Management in School Administration

The current transformations, which have brought with it many challenges, necessitate that those concerned with education, develop new perspectives on their activities, educational environments and administrative procedures, and define the new role that the educational institution should play in light of the emergence of many developments. Therefore, in light of the changes that the Kingdom is undergoing in the educational, administrative, economic and social fields, and in light of the future directions of the Ministry of Education and its developmental mobility, it is imperative to develop the concepts, methods and administrative procedures and to move towards modern concepts and procedures that accompany the organizations of the age and achieve the satisfaction of the beneficiary in the educational and administrative fields.

The objectives of Vision 2030 for the school administration are as follows:

- Determine the training needs of the staff and re-training according to their actual professional needs and the required roles assigned to them and the tasks they actually practice.

- Inventory of administrative staff at the level of schools and administration and determine the need of each school and management and redistribution according to the system of school configurations, and the need of the actual sections.

- Building performance standards that represent a road map for employees towards professional excellence and improvement of administrative processes, as well as a tool for self-evaluation of employees.

- Developing the skills of school principals and directors of education departments in the field of technology and their appearance in educational institutions.

- Holding annual meetings with employees of all categories, aimed at reviewing performance and informing them about the new and motivate them and touch their needs to work to meet them.

- Activate the principle of specialization and the appropriate situation in the right place, and the distribution of work among employees according to their abilities and qualifications and tendencies.

- Developing the capabilities of employees in dealing with modern technology in the implementation of administrative procedures as an imperative (Almatrodi, 2021).

The Ministry of Education has followed the planning process to move from the current reality to the reality to be reached and the development of business and behavior in practical ways to promote the change to be achieved with the least possible disadvantages to individuals and management in general effectively and efficiently, through the following:

- Work to provide facilities and financial and technical capabilities to help bring about the process of change.

- Using human elements capable of influencing others; to explain the process of change and its goals and motives and the resulting gains.

- Creating a positive, material and moral environment that accepts, supports and reduces resistance.

- Inculcating a culture of change among workers and allowing them to participate and accept criticism and different opinion.

- Creating new ways and means of knowledge Transforming school administration into an effective learning organization.

- Develop leadership practices for school leaders so that they are able to develop the potential of individuals and are able to form one-team groups.

- Creating an effective communication system that links the parts of the school administration and achieves unity of thought and goal among all employees and constitutes a common language.

- Evaluate the progress of all stages of change and measure the degree of satisfaction among employees and beneficiaries of the process of change.

- Identifying the sources of resistance to change and its causes. Knowing the causes of the resistance eliminates or mitigates it.

- Continuous training for change leaders and implementers according to specific needs to ensure that the change process is carried out in a proper manner that achieves its objectives.

- Providing a system of incentives to motivate employees to change and help make change a feature of an educational institution (Ministry of Education, 2019).

3.Literature Review

The study conducted by Alrashide (2020) showed the reality of the use of the directors of general education schools in Al-Dawadmi for e-school management programs from their point of view, identifying the obstacles that prevent the development of the performance of school principals with regard to electronic school management programs, and reaching some suggestions and possible means of development that Developing administrative work for school principals. The researcher used the descriptive approach. The study tool was applied to the directors of the general public schools of education in Al-Dawadmi governorate, which number fifty-three. The paper highlighted the main obstacles facing the use of electronic management programs and clarified some suggestions that would develop the work of school principals in this field. The most important of these were the recruitment of specialized staff for

computer work and electronic programs in schools, and intensive and continuous courses for managers to keep abreast of this area, providing continuous technical support and qualifying programs.

Albalawi,(2020) explained the process of integrating ICT in management has a positive impact on human resources management in government in The University of Tabuk. So that it helped to support administrative functions such as staff records management, payroll management and completion of operations such as budgeting, manage and digitize employee information and comply with legal obligations due to accurate and timely availability of staff data and reduction of administrative corruption. Thus, the benefits of this will ensure long-term achievement of institutions objectives such as enhancing efficiency and effectiveness in recruitment and selection; training and development.

Al-Mamary et al., (2022) found that the implementation of electronic management in any public administration helps to improve the performance of the general management of the institution and the management of administrative processes, especially this technology helps improve the flow of information and enhance the process of good communication and rapid and efficient receipt of data access to beneficiaries, The implementation of such solutions has improved the performance of departments in general and the management of administrative processes, especially as this process allowed the strengthening of relations between the citizen and the office.

A study has shown that mature IT governance in the archive sector has positive effects on digital document information management, as it leads to increased communication, collaboration, competence and clarity in decision-making power. Also contribute to the effective management of inputs through direct participation, ensuring the proper implementation and use of all the relevant features of the IT system (Muhammad, 2021).

Bdiar (2019) revealed the requirements and constraints of the application of electronic management so that among the obstacles of the application of electronic management. The lack of planning and coordination at the level of senior management of electronic management programs, the lack of organizational changes required to introduce electronic administration, the addition or integration of some departments or divisions and the identification of authorities and relations between departments and the flow of work between them, the absence of a clear strategic vision on the use of information technology And communication to serve the shift towards e-management organizations. Political and legal obstacles through the absence of the political administration and supporting the effect of a qualitative shift in the transition to electronic administrations and provide the necessary political support to convince the administrative bodies the need to apply modern technologies and keep pace with the digital age.

Financial and technical constraints through high costs of processing electronic management infrastructure, which limits the progress of electronic transformation projects, lack of financial resources to evaluate training programs and the use of information, expertise in the field of information technology, the weak financial resources allocated to electronic management projects and the technical maintenance problem of electronic management programs, the difficulty of accessing Internet services as a result of the high costs of using them. Human Constraints through the decline of e-culture in many peoples of developing countries and the difficulty of communication through modern technologies, the absence of training courses of management staff and regulatory bodies in the transition to electronic management. Security constraints or security threats, which can be described as follows: fear of technical and non-conviction of electronic transactions for fear of what can be done to prejudice and threaten the elements of security and privacy in government services, so that the loss of sense of security towards a lot of electronic transactions and this is one of the most important security constraints facing the application of electronic management, where the manifestations of information security and the survival of information and not deleted or destroyed (Al-Saqai, 2020).

All studies have agreed on the existence of positive impacts for the application of e-government, e-government and ICT, especially in the field of performance and administrative work. The current study is an extension of the previous studies. It agrees with the studies that dealt with the subject of electronic management in the disclosure of its concept, objectives, elements, characteristics, functions, importance, requirements and constraints on the positive effects of their recruitment and difficulties in public schools in Makkah.

4.1 Methodology

In this study, the descriptive approach was used to describe the views of the study sample on the degree of application of electronic administration in the administrative processes. The analytical method was also used to test questions to study and prepare the study tool and ways to develop it.

The research methodology used in the research study is quantitative research. Data were collected mainly from questionnaires designed by the researcher for this research, which were distributed, to the school administration in Makkah.

4.1.1 Sampling

The study was conducted on 100 principals and administrators in public schools in the city of Mecca in the year 2022. The structure of the study was based on a questionnaire model, and the theoretical framework of the study was from previous research and studies, and some existing tools in the field were guided. The questionnaire was designed to contain a set of questions that support the topic of the study. The questionnaire consists of the following parts:

Part 1: The first part contains a set of questions related to the respondent's personal information: age, education, years of work experience, years of experience in electronic work, location of the school to which the employee belongs, and electronic systems to be dealt with. Part II: This part has seven topics related to the impact of applying electronic management systems on performance, which are as follows:

1. The first axis: This axis depends on the extent of employees' knowledge of the electronic management systems applied in government schools (it consists of six items).

2. The second axis: This axis is based on how electronic management systems contribute to supporting and developing administrative work (it consists of five items).

3. The third axis: This axis is based on what electronic management systems contribute to by improving the performance of principals and employees in public schools in Makkah (consists of 9 items)

4. The fourth axis: the availability of facilities required by the government schools to support electronic management systems (Consists 9 items).

5. Fifth axis: Challenges and difficulties facing the implementation of electronic management systems in the public schools in Makkah (Consists 7 items).

6. Sixth axis: The effectiveness of electronic management systems in public schools in Makkah (Consists 12 items).

7. Seven axis: Extent of realization of vision 2030 by using electronic management (Consists 2 items).

The Likert method has been used (Strongly Agree, Agree, Neutral, Disagree, Strongly Disagree), in order to measure the impact "Application of electronic management systems to functional performance".

4.1.2 Instrumentation

- Percentages were used to describe the study population for primary information as follows.
- The mean was used to calculate the value given by the study sample members to each axis.
- Standard deviations were used to show and identify differences in the opinions of sample members about each paragraph of the questionnaire.

4.1.3 Data Collection and Analysis Procedures

The data were collected through two types of sources:

- Preliminary sources by collecting the data using the questionnaire method for the purpose of this study. Whereas, a list of numbers of principals and administrators of government schools was compiled as a random sample, and electronic questionnaire lists were sent to them in the city of Mecca. And then compile, review, unpack and analyse them using SPSS method.

- Secondary sources represented in references and scientific periodicals, research and previous studies.

4.2 Reliability Statistics

To measure the stability of the study tool, the Cronbachs Alpha equation was used in the Spss program to verify the stability of the study tool. The following table shows the stability coefficient of the study instrument. The SPSS program extracted the coefficient of stability of the study instrument; the total stability of the study instrument has reached (0.967), which is a high stability coefficient suitable for study purposes. All stability coefficients of the study axes are considered high and suitable for the purposes of this study.

Reliability Statistics	
Cronbach's Alpha	N of Items
.967	50

SCHOOL PLACE					
		Frequency	Precent	Valid precent	Cumulative precent
Valid	Jeddah	34	34.0	34.0	34.0
	Makkah	66	66.0	66.0	100.0
	Total	100	100.0	100.0	

Age					
		Frequency	Precent	Valid precent	Cumulative precent
Valid	55 and over	4	4.0	4.0	4.0
	From 25 to 34	12	12.0	12.0	16.0
	From 35 to 44	54	54.0	54.0	70.0
	From 45 to 55	30	30.0	30.0	100.0
	Total	100	100.0	100.0	

Scientific Qualification					
		Frequency	precent	Valid precent	Cumulative precent
Valid	BA	82	82.0	82.0	82.0
	DIPLOMA	13	13.0	13.0	95.0
	M.A	4	4.0	4.0	99.0
	PH.D.	1	1.0	1.0	100.0
	TOTAL	100	100.0	100.0	

YEARS OF Experience in the Job					
		Frequency	precent	Valid precent	Cumulative precent
Valid	10 years and over	48	48.0	48.0	48.0
	From 5 to 9 years	48	48.0	48.8	96.0
	Less than 5years	4	4.0	4.0	100.0
	Total	100	100.0	100.0	

YEARS OF Experience in Electronic work					
		Frequency	precent	Valid precent	Cumulative precent
Valid	5years and over	57	57.0	57.0	57.0
	From 3 to 4 years	12	12.0	12.0	69.0
	From1 to 2 years	9	9.0	9.0	78.0

YEARS OF Experience in Electronic work				
Less than 1year	22	22.0	22.0	100.0
Total	100	100.0	100.0	

Gender				
		Frequency	Precent	Valid precent	Cumulative precent
Valid	Female	84	84.0	84.0	84.0
	Male	16	16.0	16.0	100.0
	Total	100	100.0	100.0	

4.2.1 Results and Discussion

This chapter deals with the analysis of the results of the field study, by presenting the responses of the sample of the study sample to the questions of the field study, and statistical processing using descriptive and descriptive statistical methods and their statistical methods to arrive at the results and their analysis and interpretation in the light of the theoretical methods of field study related to applying the electronic management systems in the schools in Makkah region.

Method of collects the responses in the study tool: The responses were emptied according to the criteria specified in the study instrument, where they were given to each paragraph in the scale of the Likert scale (Strongly agree = 5, Agree = 4, Neutral = 3, Disagree = 2, Strongly disagree= 1). Statistical analysis of this study was carried out using SPSS. To answer these questions, the arithmetical averages and standard deviations of all axis expressions were calculated.

Likert-Scale	Interval	Description
1	1.00-1.79	Strongly disagree
2	1.80-2.59	Disagree
3	2.60-3.39	Neutral
4	3.40-4.19	Agree
5	4.20-5.00	Strongly agree

Results of the first axis: the extent of employee knowledge of electronic management systems applied in public schools

	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
I have a comprehensive knowledge of the service provided by e-school management system.	100	1	5	3.41	1.147
I have comprehensive knowledge of the systems that the school administration uses and which I need in my work.	100	1	5	3.89	1.197
I keep track of what is being updated by the new. electronic systems.	100	1	5	3.78	1.227
I have a good knowledge background about the concept of e-management.	100	1	5	3.40	1.310
I have an excellent knowledge background of the key element of e-management.	100	1	5	3.27	1.254
I have a knowledge background on the advantages of electronic management.	100	1	5	3.58	1.319

The Mean of all Questions					
	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
Mean	100	1.00	5.00	3.5550	1.04582

It was found that the average of the answers in this axis is 3.56 and it is located in the period (3.40-4.19), which means agree that it is clear that all members of the sample have the characteristics of the first axis.

Results of the second axis: The contribution of electronic management systems to the development of administrative work in public schools in Makkah

Application of electronic management system has contributed to :	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
1.Change the organizational structure (cancellation or establishment or integration of some units) to increase the effectiveness and efficiency of systems.	100	1	5	3.66	1.139
2.Switch to decentralization management.	100	1	5	3.62	1.162
3.Simplification of administrative procedures.	100	1	5	3.91	1.215
4.Reducing the number of paper transactions.	100	1	5	3.58	1.401
5.Facilitate the process between different department	100	1	5	4.00	1.206

The Mean of all Questions					
	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
Mean	100	1.00	5.00	3.7540	1.02291

It was found that the average of the answers in this axis is 3.75 and it is located in the period (3.40-4.19), which means agree that it is clear that all members of the sample agree on

that the electronic management systems contribute to the development of administrative work in public schools in Makkah region.

Results of the Third axis: The contribution of electronic management systems to improving the performance of employees in public schools

Application of electronic management system has contributed to:	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
1.Increasing the employees' knowledge of the work tasks.	100	1	5	3.82	1.167
2.Speed of completion of work.	100	1	5	3.96	1.063
3.Low percentage of errors in work.	100	1	5	3.79	1.094
4.increase the productivity of the employee.	100	1	5	3.70	1.210
5.Transparency and information availability.	100	1	5	3.76	1.111
6.Facilitate monitoring and follow up.	100	1	5	3.85	1.167
7.To stimulate the spirit of creativity and self-development among empolyees.	100	1	5	3.77	1.127
8.Traning staff on new tasks.	100	1	5	3.93	.998
9.Participation of staff in decision making.	100	1	5	3.61	1.081

The Mean of all Questions					
	Number	**Strongly disagree**	**Strongly agree**	**Mean**	**Std.Deviation**
Mean	100	1.00	5.00	3.7989	.97156

It was found that the average of the answers in this axis is 3.799 and it is located in the period (3.40-4.19), which means agree that it is clear that all members of the sample agree on that Electronic management systems contribute to improving the performance of public school employees.

Results of the Axis 4: Availability of facilities required by schools to support electronic management systems

	Number	**Strongly disagree**	**Strongly agree**	**Mean**	**Std.Deviation**
1.Schools provide computers with appropriate specifications that enable staff to access electronic management systems.	100	1	5	3.22	1.440
2.The school provides fast and secure communication networks.	100	1	5	2.96	1.370
3.The school provides all the programs needed by the staff to operate the systems used in the field of work.	100	1	5	3.17	1.341
4.The school provides all computer accessories (printer, storge units, papers, ink, etc) which staff need in their area of work.	100	1	5	3.05	1.410
5.There are sufficient data and information storage databases.	100	1	5	3.12	1.350
6.The school responds quickly to any technical requirements that serve the interests of the business.	100	1	5	3.52	1.299
7.The Ministry of Education provides training courses and workshops to teach staff how to use e-management system.	100	1	5	3.56	1.321
8.The Ministry of Education is interested in spreading awareness in schools about launch of new electronic system	100	1	5	3.63	1.292
9.The Ministry of Education is interested in developing electronic systems continuously in schools.	100	1	5	3.52	1.291

The Mean of all Questions					
	Number	**Strongly disagree**	**Strongly agree**	**Mean**	**Std.Deviation**
Mean	100	1.00	5.00	3.3056	1.10609

It was found that the average of the answers in this axis is 3.305 and it is located in the period (2.60-3.39), which it means Neutral, which shows that there is a lack of facilities required by schools to support electronic management systems.

Results of the fifth axis: the challenges facing the implementation of electronic management systems in public schools in Makkah

	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
1.You have difficulties in dealing with the computer to perform the required work.	100	1	5	2.64	1.460
2.You have difficulties in dealing with electronic systems.	100	1	5	2.66	1.297
3.There are resistance and rejection by some staff for e-management systems.	100	1	5	3.19	1.245
4.E-management system need to develop the school infrastructure (computers, operating, systems and communication networks)	100	1	5	3.91	1.443
5.The continuous development of e-management systems requires high material costs.	100	1	5	3.94	1.062
6.the continuous development e-management systems require specialized human resource.	100	1	5	3.89	1.154
7.Safety and information protection programs used by the school are sufficient.	100	1	5	3.23	1.221

The Mean of all Questions					
	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
Mean	100	1.43	5.00	3.3514	.81610

It was found that the average of the answers in this axis is 3.35 and it is located in the period (2.60-3.39), which it means Neutral, which shows that it found that they cannot determine that there are challenges faced in the application of electronic management systems in public schools in Makkah.

Result of the sixth axis: the effectiveness of electronic management systems in public schools in Makkah

	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
1.the process of entering e-management system is easy and smooth.	100	1	5	3.72	1.120
2.The systems interfaces clearly distinguish all the services you provide.	100	1	5	3.60	1.137
3.Some tasks and work procedures are still written on the shortcoming of electronic system.	100	1	5	3.90	1.202
4.Electronic systems are easy to navigate and use.	100	1	5	3.65	1.132
5.Electronic systems are characterized quickly respond to required commands.	100	1	5	3.51	1.124
6.Any information can be easily accessed and retrieved.	100	1	5	3.68	1.145
7.The information retrieved from systems is accurate and reliable.	100	1	5	3.81	1.116
8.Electronic systems provide security and privacy for users.	100	1	5	3.83	1.173

	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
9.Copies of data and information are available in case of loss.	100	1	5	3.69	1.098
10.The system allow for follow up of work	100	1	5	3.87	1.125
11.The existing e-management systems need to be developed and optimized to suit business needs.	100	1	5	4.17	1.006
12.I support the conversion of all existing traditional systems into electronic.	100	1	5	4.18	1.175

The Mean of all Questions					
	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
Mean	100	1.33	5.00	3.8008	.86844

It was found that the average of the answers in this axis is 3.799 and it is located in the period (3.40-4.19), which means agree that it is clear that all members of the sample agree on that which shows that it found the effectiveness of the application of electronic management systems in public schools in Makkah.

Result of the Seven axis: Extent of realization of vision 2030 by using electronic management.

	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
1.Doyou find that e-management will contribute to realizing Vision 2030?	100	1	5	4.25	1.019
2.Do you think that e-management will contribute to linking all Ministries and government departments?	100	1	5	4.38	.993

The Mean of all Questions					
	Number	Strongly disagree	Strongly agree	Mean	Std.Deviation
Mean	100	1.00	5.00	4.3150	.95255

It was found that the average of the answers in this axis is 4.315 and it is located in the period (4.20-5.00), which means strongly agree that it is clear that all members of the sample Strongly agree on that the use of electronic management will contribute to the realization of vision 2030 for the Kingdom of Saudi Arabia.

Based on the above results, it can be answered the main question of the study:

What is the impact of the implementation of electronic management systems on the performance of administrative staff in public schools in Makkah It turns out that there is a strong positive effect to the application Electronic management systems on the performance of administrative staff in public schools in Makkah. Where the following:

- The results showed that electronic management systems have greatly facilitated the communication between different departments, improved the level of services provided by schools, and streamlined administrative procedures.
- The results showed that electronic management systems contributed significantly to the speed of completion of work, facilitating supervision and follow-up, increasing employee productivity, enabling employees to participate in decision-making, and stimulating creativity, self-development among them, and reduce the percentage of errors in work.
- The results showed strong support for converting all existing traditional systems into electronic, but consider the compatibility between electronic systems and actual work needs, attention to the network to ensure prompt response of systems to

required orders, system development to include all tasks and procedures and disposal of paper transactions, Increasing the protection and security features on the systems.

- The results showed that the employee has a comprehensive knowledge of the systems she needs in her work and used in her work. The sample of the study also has a knowledge background on the concept of electronic management, the need to educate employees to the services provided by all electronic management systems applied in schools and the new systems being activated.

- The results showed that the schools provided all the programs needed by the employees to operate the systems used in the field of work, the network fast and safe, and computers with the appropriate specifications, but should take into account the speed in providing technical requirements to serve the business interest, and awareness of the launch of new systems, Provide training courses and workshops to teach employees how to use modern electronic management systems.

- The results showed that there were no difficulties in using computers or dealing with electronic management systems by the sample members. However, the challenges lie in the high material costs and the specialized human resources required by system development and the need for infrastructure in schools to develop.

- The results showed that dealing with electronic management systems will contribute to achieving the vision of Saudi Arabia 2030 by linking all government institutions in a unified system that serves the Saudi citizens and provides them with the best services and a decent life and keep abreast of developments developed countries.

Conclusion

Through studying and reading previous studies, I found that with this modern digital development we must make changes in order to keep pace with the rapid and successive changes in all fields and obtain benefits from this development. I also find that all organizations must interact positively with these changes and innovation, especially in the field of information technology. Which will contribute to supporting innovation and creativity in business.

Hence, I find that educational institutions must keep pace with ongoing modern developments in this field and benefit from the data of the times. School administration must also continue to modernize administrative methods, benefit from information technology, and adopt modern administrative methods that are characterized by accuracy and flexibility at all levels of management. This is done by making school administration electronic and linking administrative tasks electronically in order to achieve speed of completion and at the same time quality administrative performance and saving human energy.

It was concluded from the study that the application of electronic management in public schools in Mecca contributed to the following:

- Supporting and developing administrative processes and enhancing their effectiveness in serving education objectives.
- Reducing obstacles to administrative decisions by providing data and information and linking them to decision-making centers through the use of administrative information technology.
- It helps in quickly accessing services and information from other parties working with the school at any time. The beneficiary can now request the services provided by the school directly, quickly and easily anywhere in the world without complexity.
- Facilitate the management of the school remotely, whether for teachers, employees working in schools, or beneficiaries of the services of these schools. This makes the service available without the need to travel to complete it, which helps relieve congestion in cities and reduce the burden on the state and citizens.
- Reducing the use of papers in administrative work, which contributed to not accumulating papers, and reducing the work of archiving and preserving paper, and so on.
- It helped connect different schools, education departments, and the ministry and make it a single portal for the public that provides the service linked in a specific sequence, regardless of the number of departments involved, which contributed to eliminating some forms of corruption and mismanagement, and achieving transparency by providing information equally to all school employees and parents. .

- Providing educational services to citizens in an easy, fast and low-cost way, reducing friction between school employees and citizens, and providing all information about laws and administrative regulations related to education to citizens on the Internet to know the regulations governing school education.

Recommendations

In the light of the previous research and studies reviewed and the results reached in this study, some recommendations can be made as follows:

- Activation of electronic management fully and the conversion of all administrative procedures carried out in the traditional way to electronic.

- The development of laws and regulations governing electronic transactions.

- Develop procedures and administrative processes in line with the objectives of electronic management.

- Enhancing the awareness of employees in public schools about the advantages of electronic management and the regulations applied in schools and what is being activated from new systems and how to benefit from them in facilitating their work through the holding of training workshops and seminars.

- Eliminate bureaucracy in electronic administrative work and support the transition to decentralized management of the development of the organizational structure of the party to increase the effectiveness of regulation.

- Involve employees in the decision-making process in the field of their work through electronic systems and stimulate the spirit of creativity and self-development among them.

- Harmonize the operations of electronic systems and the needs of the actual work, and give attention to the network to ensure the speed of response of the systems required orders, and the development of systems to include all tasks and procedures and the disposal of paper transactions, and attention to increase the property of protection and safety on the systems.

- To take care of the needs of all parties of the technical requirements and training courses in the field of electronic systems applied in schools and provide them as soon as possible to serve the interest of work.

- Continuous improvement of the infrastructure of computers, programs, communication networks and databases of public schools to match the technological developments in the world.

- Providing financial support and specialized human resources to develop systems continuously and commensurate with the development of business needs.

- Providing computer-training courses for all school staff.

- Conduct further studies and research to measure the effectiveness of electronic management systems in improving work and performance.

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