

ELECTRONIC MANAGEMENT APPLICATION REQUIREMENTS FOR IMPROVING SCHOOL MANAGEMENT IN SUDAN

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ABSTRACT: *The study aimed at answering the main general question: What are the electronic management application requirements for improving the secondary school management in Sudan. For that purpose, the descriptive / analytic method was used. The study depended heavily on the data/ collected from previous studies, besides, the literature and publications available in the field. The collected data was then compared and analyzed. The main results being reached are: technical facilities are not adequately available in the secondary school stage, beside a lot of obstacles and hindrances, which are mainly, administrative, materialistic, and human. In view of the results being reached, it is recommended that electronic management application requirements are to be more adequately available, in addition to removing all obstacles that face and impede practice.*

KEY WORDS: Electronic Management (EM). Application Requirements, School Management (SM), Sudan

INTRODUCTION

Nowadays the whole world is witnessing fast developments in the field of using information and communication technology for the purpose of more educational institutions` management. This effect is so obvious in the professional development institutions and its management and work divisions. Electronic Management is one of the more recent and modern approaches of Administration which is widely used to enable all institutions to use internet in ways that facilitate the communications with clients, provision of services, quick execution of transaction (Khaleel, 2015, 97).n(EM) is now considered to be an important approach that affects the blending of information technology with modern sorts of admiration, in that, it always aims at the achievement of excellence, which is considered the benchmark of good and desired performance.

School management is not an exception. It is very seriously responding to all this progress in all fields. It is, therefore, making use of every way to transform the traditional school management that depends on routine and paper work into an (EM) that utilizes technology as a main tool of accomplishing its work, and achieving its aims and objectives (Al-Masand, 2008).

(EM), being an accessible tool for improving services and performance, it has become one of the main concerns of many researches in the domain of modern administration, for example, the study of (Al-Lame, 2008), (Joseph, 2008), (Al-Shibly, 2009).

The study of (Al-Shibly) in particular has recommended that the internet use level needs to be raised among administrators working in the educational provinces of the Sultanate of Oman. Likewise, the study was carried out in Kuwait concluded that school correspondence still remains in its traditional pattern.

The Statement of the Problem:

Nowadays, applying (EM) has increasingly become a necessity. That is so, because of many factors, namely: the increase of students year after year on one hand, beside the managerial malpractices that accumulate over the years, and therefore create a lot of problems and difficulties on the other hand. The research problem has been formulated in the form of a general main question: What are the (EM) application requirements to improve secondary school management in the Sudan? Out of this main question stem the following subsidiary questions:

1. What are the main (EM) application requirements in the Sudan?
2. What are the main obstacles that face (EM) application in the Sudan?
3. What are the main possible recommendations and suggestions that can help in applying (EM) to improve secondary school management in the Sudan?

Objectives of the Study

The study aimed to achieve the following Objectives:

1. To specify the main (EM) requirements for Secondary School management improvement in the Sudan.
2. To single out the chief obstacles that face (EM).
3. To propose some possible recommendations and suggestions that can help improving secondary school management in the Sudan.

The Significance of the Study

The study is significant as it opens new avenues and horizons of thought for decision makers and takers as to how to use (EM) in the field of education where such studies are lacking. The significance of the study can also be seen as it comes in accordance with the general trend of the Sudanese government to apply (EM) in all public sectors. The study could also be of a sizeable boost to (EM) in secondary school in general in the Sudan.

METHODOLOGY OF THE STUDY:

For the study to achieve its objectives, the descriptive/ analytic method was rigorously used and followed. More recent literature and educational publications were also consulted and referred to, in an endeavor to highlight and illuminate the basic concepts and ideas of (EM) and its application.

Terms of the Study:

1. **Application Requirements (EM):** It refers to all human and material resources that have to be made available for the sake of executing the admonitive operations successfully.
2. **Electronic Management (EM):** It refers to the use of a group of tools, programs, and nets and data bases that can be utilized to enhance (EM) processes in secondary schools in the Sudan. Operationally, it is defined as a transfer from the old traditional and manual uses to the application of information and communication technologies such as computers and internet.
3. **School Management:** It refers to all sorts of command, organization, and coordination of all school staff, efforts, and at the same time making use of the available resources in order to achieve the school work with less time and effort, and a high level of quality.

THE THEORETICAL FRAMEWORK OF THE STUDY:

SECTION ONE: (EM) APPLICATION REQUIREMENTS:

THE CONCEPT OF (EM):

The term (Electronic Management) has been newly introduced in the field of education as a result of so many developments the world has witnessed since the period of transfer from the paper to the electronic dealings. According to some researchers, the (EM) is the big Umbrella that includes other sorts of management such as: E-Commerce, E-business, and electronic government. The idea – for that reason- is more general and comprehensive (Abu Ubaid, 2011, p.25). (Al-Hassan, 2009, p.4) defines (EM) as all managerial efforts exerted to provide the business sector quickly and with a relatively low cost through internet without affecting the degree of confidentiality of the shared information.

The Concept of School Management

The concept of school management emerged as an independent concept in the year 1946. This can be attributed to a number of factors, e.g. the significance and effectiveness of (school management, compared with other educational sectors) (Al-Lami, 2009, p.28).

Electronic Management Application Requirements

According to (AL-Mufti, 2004), and (Darwish, 2005), for (EM) to achieve its aims and objectives, all facilities ought to be made available to affect its successful application. With reference to rendering services and transmission of information to the stakeholders, two principles have to be adhered to: The first one is technical that includes electronic information assimilation and its transmission across internet with very high degree of confidentiality. The second one is operational that includes the demand for and assimilation of information and services through internet with very high degree of genuinity and reliability assurance without the need of customers to personally come and ask for services, or to use paper forms or documents.

Electronic Management Application Outputs

As (EM) project has been recently introduced, its outcomes and outputs at different levels are not fully crystalized. That is to say, experts now are mainly concerned with the positive outcomes of the project to ensure the official and popular support for it (Al-Subaia, 2005). Alternatively, experts are more concerned with specifying the main determinants of the project application effects. They are concerned namely with two elements: the first one is the managerial element which is considered to be a modern administrative and managerial concept that marks the extension to the administrative information systems application. In this context, the development of administrative thought is taken as a yardstick for estimating the positive effects of the application of the project. The second element is technical which concentrates heavily on modern digital technologies. (EM) is seen as an investment of these technologies in different human activities to meet the demand of all. Modern technologies ensure the creation of wide scope of effective and useful application.

Section Two: Obstacles of (EM) Application

As (EM) has been recently introduced, and due to the fast and momentous developments in the field of information and technology, there are a lot of obstacles that it is now faced with, as it is still being under more elaboration and experimentation (Al-Subaia, 2005, p. 53). Such obstacles can generally be categorized as follows:

Firstly: Administrative Obstacles Related to Administrative Organization

- The lack of planning and coordination at higher administrative levels of (EM), besides, the mis setting of a fixed time tables for electronic information and services application.
- Not enough care is given by the higher administrative levels to evaluation and follow-up of (EM) application.
- The absence of coordination between (EM) units and other similar departments. Coordination is of utmost importance as it makes it possible for all units to have the same devices and programs (Al-Amri, 2003).
- There are no clear-cut organizational infrastructures that have the capacity of covering all activities in the organization, besides, the absence of gradual application of (EM). In addition of that the information awareness programs are considerably weak, and do not keep up with (EM) application. It is also observed that there are basic variations between the systems and techniques of administration even in the same organization (Radwan, 2004).
- The absence of a clear strategic vision in most countries, specifically, the Arab countries regarding technology, information and communications application. Undoubtedly, this will weaken the capacity of these countries to keep up with future developments in the field.
- The lack of transparency with regard to the right of all citizens is not fully secured to get the required information.
- The political support is less than expected, as the political leaders care less with (EM) projects.
- There is not central coordinating body that can sponsor (EM) projects in the country at large. This automatically leads to maladjustments and lack of flexibility in selecting right solutions due to the inappropriate practices in public purchase, running and maintenance (Al-Himaili, 2003).
- The slow administrative procedures inside and outside the organization is reflected in malpractice in many ways. Besides, there are no sound specialized training policies, coupled with the difficulty of creating proper electronic organization which in turn entails a whole organization restructuring.

Secondly: Human Obstacles Relating to Employees and Customers:

According to Al-Areeshi, (2008) the main human obstacles are as follows:

- The absenteance of experienced and competent staff from working for public organizations because of the low wages offered.
- Decision takers at public organizations are not always aware of information technology importance.
- (EM) and computer projects are most of the time looked at from the cost perspective rather than how they can be utilized and made use of.
- The lack of well-trained staff who are capable of handling and maintaining this new and complex technology.
- The weak cultural awareness about information technology at the social organization levels.
- Individuals are not strongly motivated to make the transformation process a success.
- The staff tendency to resist change and as they feel that change – if it happens – will threaten the authorities they have.
- English language skills are very weak on the part of employees, and therefore they are irreluctant to handle electronic devices.
- The lack of trust among employees regarding the degree of secondary and secrecy of personal dealings.

- The lack of encouragement on the part of the officials and the information media to self-learning of (EM) application and information technology.

Thirdly, Financial Obstacles:

According to Al-Mufti, (2004) they can be summarized as follows:

- The scarcity of resources due to the fixed and unchangeable funds allocated for expenditure.
- The high cost of making available the suitable infrastructure, such like purchasing instruments and applied programs, and installation of web sites, and net connections.
- The poor funds assigned for employees training in the field of information systems.
- The high cost of computer maintenance.
- The relatively high cost of using the global web of internet.

In addition to that, there are many studies carried out to highlight the main obstacles facing (EM) in the present and future.

The Study of Al-Shamari, (2010) aimed at pointing out the main obstacles that face (EM), and which in turn do not facilitate applying (EM) in secondary schools in Kuwait. The results of the study revealed that:

- The infrastructure is not enough, and not regularly maintained.
- The acute shortage in qualified and trained staff capable of its application.
- The continuous fear of change that may come out due to this new technology.
- The absence of laws and regulations to monitor the application of this kind of management.

The Study of Stern, (2003) titled (Incorporated School Project: Lessons on (EM) and Training in Uganda) aimed at providing some primary and secondary schools in Uganda with personal computer sets, beside building some Laboratories, beside making such school in continuous touch with internet. The main results of the study are as follows:

- One of the main factors behind the project success is the positive interaction between teachers, employees and students, besides, working in a team, workshops, the use of electronic mail and its role in facilitating compeonence between all team members.
- (EM) application has considerably contributed to raising the trainees` experience and general performance as a result of working as on team.

The Study of Aduwa- Ogiegbaen and Lyamu, (2005) aimed at realizing the problems that face electronic communicator in secondary schools in Nigeria. The results of the study revealed that:

- The main obstacles facing the ideal application of communication are namely: the high cost of programs and instruments, lack of skills, and the poor infrastructure.

The Study of Crouse, (2004) carried out a study titled "The role of technological school managers". The aim of the study was to realize the role of the technological public-school managers in California. The study concluded that:

The use of the majority of school managers of the computers connected with the local nets for administrative purposes related to the daily decision making. It is found out also, their skills gained by the training computer programs have been considerably improved to the local nets. It has also been observed that the available resources are not adequate as to meet the managers' needs regarding computers and information management systems.

The Study of Russel, (2004) carried out a study titled: How can School Counsellors benefit from the solutions reached by the (EM). The study aimed at realizing the (EM) contribution to the schools` practice, and its influence on students with special needs` counsellors in Ohio State, beside the obstacles that face the utilization of (EM) at the schools. The study came up with main following findings: (EM) contributes considerably to productivity increase, and minimization of cost, and the satisfaction of customers and their participation, besides, improving the internal services and operations. (EM) makes, it possible to automatically render services without the need for more excessive use of paper work, which in turn minimizes cost and efforts. (EM) has a positive effect on students with special needs` counselors` tasks through allowing more time for meeting the students` needs.

The study of Al-Asmari, (2010) study aimed at realizing the degree of public schools` managers` application of (EM) in Abu-Dabie for (EM). In the study, the descriptive/ survey method was used. The study came up with the following main results: The degree of public-school managers in Al-Ain district was remarkably high. There were statistically significant differences between school managers` application degree regarding; planning, electronic organization, facilities, electronic control, and electronic competences on the part of school managers. The differences were in favour of school managers` assistants.

The Study of Omran & Al-Houni, (2018) aimed at realizing the main obstacles that face (EM) application in the university. The study concluded that: There were a number of obstacles that hinder the (EM) application in the university. It was observed that the human obstacles were the most obstacles facing (EM) application, in addition to the administrative, financial and technical obstacles.

The Study of Simaia & Others, (2016) aimed at estimating the degree of higher education and scientific research employees` awareness about (EM) applications in Sabha University in Libya. The study concluded that: The majority of staff members were very much aware of the significance of shifting to (EM) in all higher education institutions.

The study of Atiya, (2015) Aimed at proposing a framework for developing administrative decision-making process in Ghaza province in view of (EM), besides, realizing (EM) concepts and the actual practice of decision making in the Plasterian Health Ministry in Ghaza sector. The study concluded that: (EM) considerably contributes to decision making process development in all institutions. It is also suggested that there is an insistent necessity for building technological and information database in the ministry of health.

The study of Al-Aiashi, (2013) was oriented to measure the effect of (EM) application, electronic planning, electronic organization, electronic leadership, electronic control. The results of the study proved the truth of the hypotheses based on the importance of (EM) in improving the efficacy of administrative processes. It was suggested that the study of the cost and time of administrative transactions should be minimized as far as possible, beside the proper use of the available resources for the sake of more competency and effectiveness.

The study of Remke, (2013) titled: The digital gap in primary schools in Bangladesh, aimed at realizing the situation of (EM) gap, and to what extent the advanced technology is being use in public schools` management in Bangladesh. The study was mainly concerned with the used of multi-media in classrooms, the use of internet by teachers especially in the economically rich areas, beside primary schools use of electronic devices for more interacting with students. The study

concluded that the use of digital technology among students tended to go parallel to their economic and social status. From the previous studies being outlined, it can be concluded that:

- The use of (EM) and its application leads to more competence and productive effectiveness.
- (EM) is distinguished from the traditional administrative in that it is more conducive to improving the quality of all administrative work and practice.

Section Three: Recommendations and Suggestions

1. Paying attention of secondary schools' managers and staff to the importance of (EM) and its positive impact on practice, and therefore, there is always a need for training on its application.
2. It is of utmost necessity for spreading (EM) culture among managers and teachers and parents through symposiums and media.
3. There is a need for supplying programmers and technicians with the skills of maintenance, and installations of instruments on regular follow-up bases.
4. There is a need also for conducting regular training courses on (EM) for all school managers and teachers for more mastery of computer uses skills.

The Administrative Requirements:

- 1/ The ministry of education needs to adopt and support (EM) application in all schools to minimize time, cost, and effort in order to achieve schools' objectives competently and affectingly.
- 2/ It is equally necessary that there should be some kind of coordination between school managements and the private sector for more support to the infrastructure of (EM) system.
- 3/ There is a need for a wide spreading of awareness among all school staff members about (EM) application and the positive benefits that come out of it.
- 4/ All training requirements need to be made available and accessible, together with regular training courses for teachers.

Means of Overcoming Obstacles That Face (EM) Application at Secondary Schools

- 1/ There is a need for continuous meetings of school managers to realize the main obstacles that face (EM) application in each unit, besides, showing the means through which, these obstacles can be removed.
- 2/ An appropriate infrastructures and technical financial resources need to be made available for more (EM) effective application in Sabha university.
- 3/ Creation and innovation activities need to be encouraged among all school staff to induce encouraging and motivating environment that can enhance the transition to (EM) application.

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