

Using Information Technology to Improvement Traditional Management System in the Iraqis' Educational Institutions

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Abstract

The research goals at descriptive the use of information technology on the performance of management system in Iraqis' educational institutions in general and in the University of Dyalā as a model, in particular, using the electronic management system in all amenities of the University of Diyala, Based on all the requirements required by the colleges of university in general and the presidency of university, especially information (functional, practical, and scientific) for all employees working from the administrative and technical in the university. All the colleges of the university have been used to offer us with combined statistics to determine the range of reliance on the using the management system in all amenities of the University of Diyala by the colleges of the University. The information collected was processed through the design of the content management system of human resources. Therefore, the use of information technology in administrative department of university is the substance for the development of The employees of the electronic system and the development of their skill in the use of modern information technology. The use of the MS depends on the people who work with it with knowledge in the field of technologies. Besides that, the contribution of employees in the MS with training workshops and courses to improve their expertise in the use of information technology. The advantage of using CMS through tangible reality is the reduction time, effort and paper consumption. As well as Improving the level of performance in the management of educational institutions and keeping pace with the development of modern applications and technologies.

Keyword: CMS, CM, SQL, Information Technology.



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1. Introduction:

The expansion of the close relationship between information technology and the management system in educational institutions and based on the increasing developments in the use of information and communication technologies and keeping pace with the continuous development in modern electronic systems, and thus its reflection on all levels, including educational institutions, through the automation of their departments and the building of new electronic systems. It focuses on everything that is modern and developed, especially the rehabilitation of human resources departments and linking them with an integrated networked electronic system. It is the basic element for the work and success of each institution, and thus will be reflected in making the right decisions and applying the laws in force for any institution. And that its outputs are sound, and thus it will achieve the desired goals in accordance with the plans and strategies that have been developed in order to implement it correctly. The human resources system and its application in educational institutions had a great role in getting rid of routine and reducing effort and time as well as paper consumption, as the total dependence on electronic work became the largest in the university and the use of modern information technology would be the main factor in expanding the capabilities of workers in human resources management and improving their performance and orientation. Towards the use of information technology in exchange for accurate information available, building sound foundations, training workers on the data and information management system, and holding continuous workshops in order to improve the level of performance [1]. As a result of the strong relationship between the use of information technology and the job performance of the educational institution, the purpose of building a database system that includes departments and administrative units came. To comply with the requirements of the educational institution.

2. Human resource Management System:

Human resource management system or human resource information system is a form of human resource software that combines a number of systems and processes to ensure the ease of managing human resources, business processes, and data. Companies use HR software to bring together several functions that human resource management performs, such as

storing employee data, preparing payroll and hiring processes, managing benefits, and keeping track of attendance records. Besides, these systems ensure that all HR processes are manageable and easily accessible. HR as a system, especially core HR activities and operations, integrates with the IT domain, while data processing systems programming develops into standardized procedures for enterprise resource planning (ERP) packages. Generally, ERP systems are rooted in software that integrates information from different applications into a single database. Human resource information systems provide the means to acquire, store, analyze and distribute information to various stakeholders. HRIS can improve traditional processes and enhance strategic decision making. The wave of technological progress has revolutionized all areas of life today, including human resources. Old systems operated on a small scale, usually focused on a single task, such as improving payroll or tracking employee hours [2]. Today's systems cover the full spectrum of tasks associated with human resource departments, including tracking and improving the efficiency of operations, managing the organizational hierarchy and simplifying financial transactions of all kinds[3]. In short, just as the role of human resource departments has expanded and become more complex, human resource technology systems have also evolved to suit these needs.

3. The problem of the study:

Most of the educational institutions in Iraq depend on the old traditional software such as (Microsoft Office) in the management of human resources and most of the administrative units. These applications do not meet all the needs of the educational institution with the rapid development of modern systems and applications. Hence, the most important challenges and problems in the old systems can be diagnosed. Difficulty accessing certain information in addition to the difficulty of sharing data and information between human resources units, as well as problems in storage, updating, follow-up and access to certain information.

4. Important of the Study:

The importance of the human resources management system lies in the use of information technologies and modern applied programs in educational institutions, as it provides the user with all the tools to manage

the database system for human resources and ease of access to the required data and information, in addition to the possibility of sharing sources and files between the employees in charge of the system and saving effort, time and cost of materials used in the old traditional systems, so the focus in this study will be on the use of modern software such as the database program (SQL) and the graphical interface program (Visual Studio), which provides the user with great flexibility in dealing with data, storing, updating and retrieving information.

5. Documents Management Systems:

Document management systems contain a range of electronic tools that are important for dealing with writing, documents, copying, processing, and archiving. These tools [4]:

1. Desktop Publication is a modern office technology consisting of special software and equipment for the production of file and documents.
2. Text Processing is a computer application or software that converts texts into electronic documents that can be transferred, stored processed, transferred or electronically to other electronic like notes, letters, and reports. This applications is available and accessible to all users [5].
3. Reprographics: are a big number of copies of a single of reproduction and document, of copies can be done by the same by imaging equipment or computer printer by quantity which user needs.
4. Archiving Systems are an important function of document management. Although traditional archiving is still widespread, especially in institutions departments, electronic storage systems are growing rapidly[6]. The most important means of electronic storage: cassettes magnetic, tapes, laser discs, floppy, microfilm[5] as showing in the figure (1).

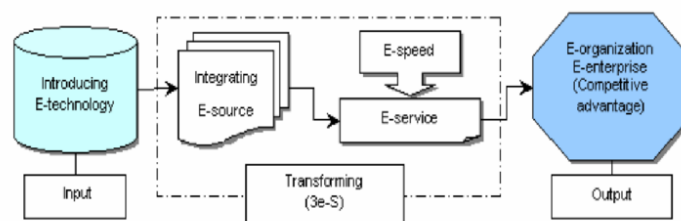


Figure (1) Management System Model

6. The Framework of Study:

Modern information technology has affected the reality of the management so rapidly that it transcended reality. The world realized that users would reach the level of open management by networks without paying efforts and attention to the extent of the modern technical response to it [7]. The main concept of developments and archival in the emergence of new professional disciplines virtual electronic, and computational management, the concepts of which collided with the basic concept of the management[8].

6.1 ER diagram:

To get good database without a redundancy, the process must be analyzed accurately. Over the study, the project model is Diyala University that has four major entities which are Assistant of Rector, Rector, , Employees and Departments[9]. The entities are specific objects that are represented in the database. There are properties used to describe attributes and entities. The figure (2) is showing the attributes and entity.

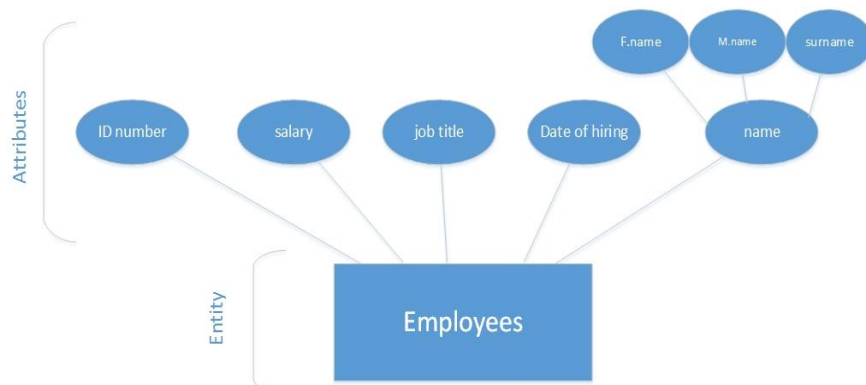


Figure 2: Attributes & Entity

6.2 The proposed model:

In this part, the Microsoft SQL will be used, which provides the user with many tools that are used to store and retrieve data and information, as well as , possibility of linking the database to the main interface of the system Microsoft SQL Server is one of the Microsoft Company products [10]. The proposed system contains many tools for example; management studio and information that used in providing user interface to manage and design database[11], as shown in figure (3)

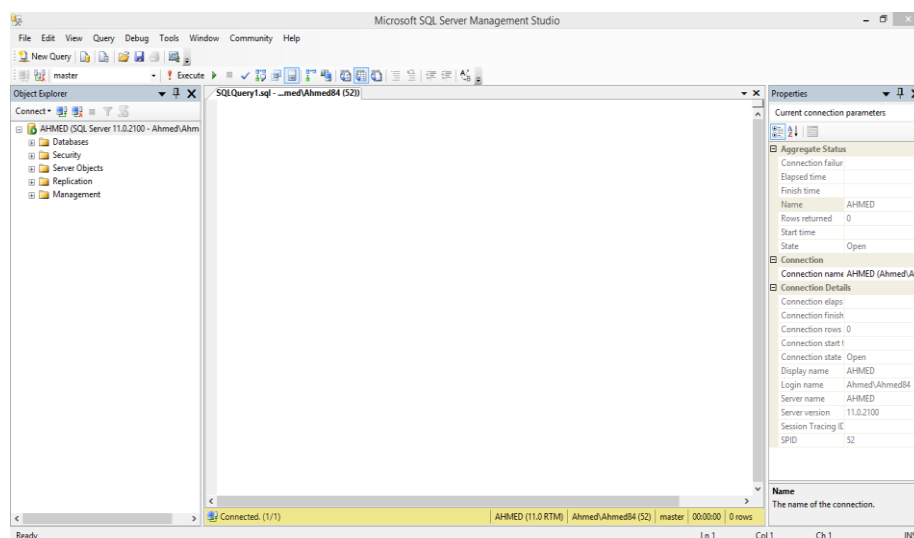


Figure (3) Microsoft SQL Server Management Studio

6.3 Create a New Database:

To create a new database by using a graphical interface through SQL Server Management Studio, we have to right click the database folder and select a new database then a new window will be shown, as shown in figure (4),(5).

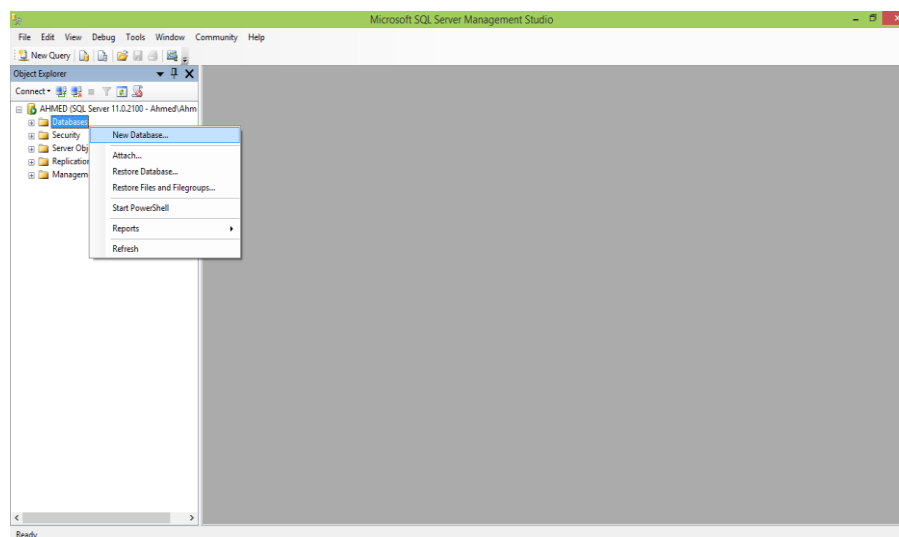


Figure (4) Establishing new database

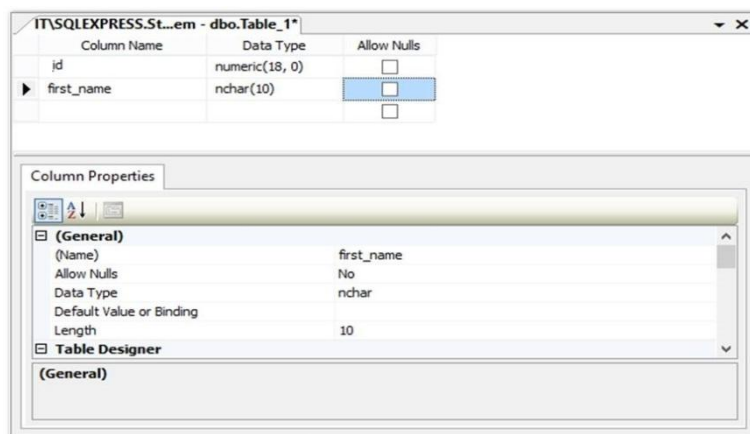


Figure (5) New table

We can start to design graphical user interface, and we establish the main interface containing “Form” that represents the window which has tools and buttons to enter it to database fields as shown in figure (6).

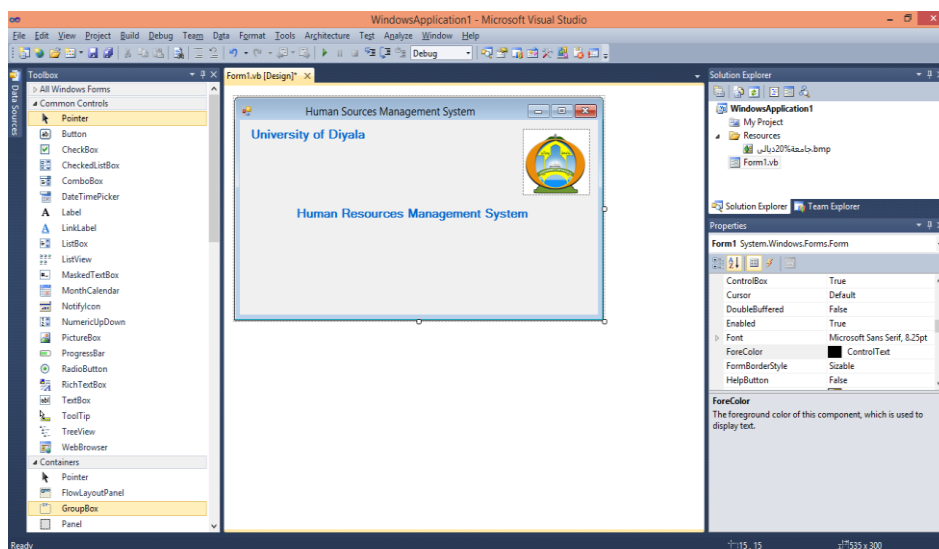


Figure (6) create main interface

In this face we can inter to human resources management system by make login through username and password as showing with figure (7).



Figure (7) Login to the window of system

6.4 Main User Interface:

Main user interface is a window that is exposed when the system is being operated. It contains a set of the tools [12], buttons and each one has particular function, as following with figure (8).



Figure (8) Main User Interface

7. Conclusion:

In this study, information technologies and modern software were used to build a human resource management system for University of Diyala by using Microsoft Visual Studio with the main interface user, as well as using Microsoft SQL Server to build a database that enables the user

(10)

to store, retrieve and update data quickly, with less effort and cost, also easy access to the required data and great flexibility in adjusting it. This proposed model can contribute significantly from the transition of the traditional system to the electronic system and keep pace with the rapid progress in modern technologies. The proposed design of HRMS is done by using the information technology components such as software and hardware, data management technology. We can linking this system with website of university and manage system regardless of time and place of admin. Finally the information technology contribute to enhancement the Performance of management in the educational institutions especially University of Diyala. Through available all services which employee needs.

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