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An ERP Web Portal for Small and Mid-Sized Clinics

Muhib A. Lambay [1], Dhaval C. Dedhia [2], Guruprasad D. Rao [3]
Assistant Professor [1], UG Students [2] & [3]
Department of Computer Engineering
Theem College of Engineering, University of Mumbai
Boisar - India.

ABSTRACT

An ERP web portal for small and mid-sized clinics using MVC 4 and visual studio from Microsoft. ERP is short for enterprise resource planning, which is business process management software that allows an organization to use system-integrated applications to manage business and automate back office functions related to technology, services and human resources. ERP software integrates all facets of an operation, including management, history, sales and marketing.ERP software is considered an enterprise planning software as it is designed to be used by larger businesses and often requires dedicated teams to customize and analyze the data and to handle upgrades and deployment. In contrast, small business ERP applications are lightweight business management software solutions, often customized for the business industry you working. Dental Clinic Management Software is useful for dental professionals to manage their businesses. This helps to manage Patients, Appointment, Treatment Plan, Imaging, Billing and many more. It helps to integrate all the inherent activities involved in the management and running of a Clinic. Dental Clinic Management System Software helps to patient data can be easily backed up, and be protected for confidentiality and from tampering through access control. We provide the user-friendly solution that offers performance and reliability. With Clinic Management System Software ERP, it empowers you to be in complete control of every aspect.

Keywords: — ERP, business management software solutions, integrated application, MVC.

I. INTRODUCTION

Health care is characteristic distinction between activities directed at keeping people healthy and activities directed at restoring health once a disease or injury occurs. Keeping people healthy is the domain of the public health care system and the activities associated with behavioural health. grew greatly in business. Health care involves activities that work at the population level to keep people healthy: protecting the environment, making sure water supplies, restaurants, and food are safe, and providing preventive health services, for example. Behavioral health focuses on helping people make behavioral choices that improve or protect health: for example, not smoking, eating well, exercising, and reducing stress. ERP systems can also be an instrument for transforming functional organizations into process oriented ones When properly integrated, ERP supports process-oriented businesses 65% of managers believe ERP project failure will damage a firm. The complexity of ERP, high costs and implementation problems force numerous organizations to Reconsider their new plans in relation to this enterprise system (Kumar and Hillegersberg, 2000). [10]

II. LITERATURE SURVEY

The goal of literature survey is to establish the significance of the general field of study then identify a place where a new contribution could be made. The aim of this survey is to critically evaluate the different methodologies used in the field so as to identify the correct approach for investigating the research question. This includes various papers where new concept and techniques are constantly introduced it is therefore, of interest to analyse the recent trends of this literature. Therefore we have given priority to analyse the literature of the few recent years on the basis of various technologies used. This confirms that the research on the project illustrated is still a growing field, but has reached some maturity.

A.ERP Systems and their Effects on Organizations:

The world has become more electronic. corporates are depending on technology to help them enhance their business processes. Companies are looking for an information system that can handle massive work issues. This is where Enterprise Resource Planning (ERP) systems plays its role. An ERP integrates different subsystems into one huge system that

shares one database. It improves efficiency and brings more profit to organization (Hasselbring, 2000). The purpose of this paper is to address the effects of ERP systems on organizations. The paper will discuss these issues and give us a scheme to overcome them. Research was carried out with articles, as well as books, to gather the suitable resources that will help us in discussing the factors that contribute to ERP systems. Many of the articles are from IEEE journals. A massive amount of data was collected that represents millions of users. Analyzing the collected data will give researchers insight into the effects brought about by ERP systems and their impacts on organizations. [1]

B. Need for ERP to run health care:

Individuals trust non-profit hospitals along with digitals health systems to a much higher extent than they trust government and for-profit organizations, which might give advocates of government-sponsored single-payer systems some pause. Organizations are rigorously learning how to use technology to operate and innovate more effectively and efficiently Khalil, T., and Sleit, A. (2012). Digitization of health information has many advantages.

However, the research of Anderson and Agarwal underscores the need to understand the situational factors that drive individuals' comfort with sharing medical information in an digital format. One implication of this research for policy makers is to explore more stringent regulation of medical information. Several implications for implementation and adoption of healthcare IS arise from Oborn et al. Most individuals involved in patient care have different relationships with others involved in the care of the same set of patients, and these relationships changes across practices and individuals. Either nurses' non-use was not driven by their rejection of the technology or by their lack of familiarity with it; helpers understood the technology, supported doctors and their patient. The quality and efficiency of healthcare delivery is heavily dependent on the efficacy of the daily routines for creating, accessing, modifying, and using these documents, and so the shift from paper-work to system-work charts is a high-stakes endeavour. [10]

C. Scheme For Successful ERP System

A. First Phase: Consultant Team

In this phase, the top management will form a consultant team from the organization. This team should include experts in three areas: ERP system, business process, and information system. The team should also include consultants from outside of the organization who are experts in ERP products.

B. Second Phase: Team Plan

In this phase, the team should design a main plan. This plan should specify the phases that they should go through in the project. They are of the following: Specify issues in the current information system ;Set up goals; Review proposals; Choose ERP product; Choose integration partner; Implementation; Training; and System Testing.

C. Third Phase: Announcement

In this phase, the scheme should be announced to all of the employees in the Organization. This phase is critical because the involvement of the employees is very important.

D. Fourth Phase: Involvement

In this phase, the employees will be told how they will be involved in this project. The involvement of the employees will reduce the user resistance. They will also have higher self-esteem toward this project.

E. Fifth Phase: Business Process Mapping

In this phase, the integration partner will first meet with the consultant team to discuss the main processes of the system. Then they have to go to each department and understand how each business process is carried out.

F. Sixth Phase: Implementation Plan

In this phase, the integration partner will build the implementation plan. Moreover, they need to discuss this plan with the consultant team and get their approval.

G. Seventh Phase: Tracking

In this phase, the consultant team will need to track the progress of the implementation with the implementation team. They should track the progress every week and evaluate the progress.

H. Eighth Phase: Evaluation

In this phase, the consultant team should evaluate the project after it has been done. They should see if it has met the goals that they set. [1]

III. PROPOSED ARCHITECTURE

Clinicians, physicians, nurses and managers need quality tools in order to improve and cope with emerging medical technologies and methods to maintain quality healthcare services (Miller and Sim, 2004).Recently Poonam and Divya (2014) asserted that previously the healthcare sector used IT mainly for billing and accounts. However, this trend has extended to include complex areas, such as reducing costs,

improving efficiency, managing and caring for patients, and keeping track of inventory and supply chains.

Healthcare organizations handle huge amounts of information that they rely on to carry out their services (Grimson and Hasselbring, 2000). For example, a hospital handles data from many different departments, some of which must be shared in order to provide services. The information is used differently according to the function of departments, such as controlling and planning. Therefore, it is important to make this information accessible to the appropriate departments at the right time. (Stefanou and Revanoglou, 2006.)

Because information is an important part of the healthcare system, it is relied on to carry out the duties of physicians, patients' home care, and chronic care. Hence, the integration of different services and processes would benefit the healthcare organization and eradicate the traditional segregation of processes, which has resulted in the reduced sharing of information. Integrated systems would allow the

Furthermore, Handayani, Rahman,and Hidayanto. (2013) emphasized that healthcare organizations need to have automated information systems, such as an ERP system in order to meet the demands for the quality of healthcare services. In addition, Chen, Dolan, and Lin (2004) pointed out that the healthcare sector has lagged behind other sectors in making these changes. Currently, several different systems are used in the healthcare sector in order to help conduct daily work and manage resources effectively.

Lee and Kwak (2011) argued that many business environments have changed, including also the healthcare sector. Therefore, ERP could help the healthcare sector by improving the integration of processes and services. They suggested that if ERP were successfully implemented in a healthcare organization, it would promote significant change, especially in finance, human resources and capacity, revenue, and admission resources.

Furthermore, Tarn, Yen, and Beaumont (2002) noted the importance of information technology as a key factor in organizations. Therefore, technologies such as ERP systems could play a major role in facilitating organizations in meeting their goals. The benefit of technologies such as ERP systems is the integration of the organizational processes, data and organizational elements. Tarn et al. concluded that combining all elements into a single system has many benefits, such as improving the operational efficiency of an organization.

Healthcare systems rely on information from different sources and entities to carry out duties, such as physicians' diagnoses, patients' home care and chronic care. Hence, the integration of different services and processes would benefit the healthcare organization and eradicate the traditional segregated processes, which result in the reduced sharing of information.

IV. CONCLUSIONS

Finally, this paper concludes after researching various factors, which play important role in the implementation of ERP and various advantages, as well as various difficulties arising in the development cycle of ERP. We used the cheapest and new technology for a lightweight ERP web portal for small and midsized clinics.

Design and Implementation Guangmin", Year 2014.

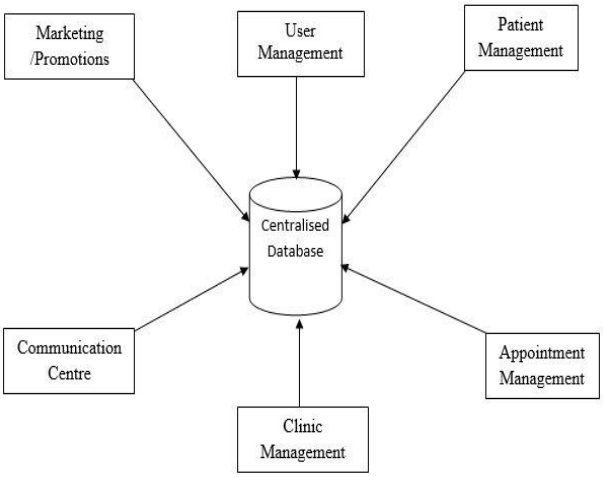

fig.1: Basic architecture of the system

The proposed system integrates all various modules as shown in fig.1. It contains of different modules which are connected and handled centrally by proposed system

FUTURE SCOPE

This web portal will help us to manage all the essential erp models in order to recover all the limitation modern web portal .Its main aim is to store a centralized data

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