

E-Services: Critical Success Factor for Health Care Industry

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ABSTRACT

Present study aims at studying the role of information technology in success of health care industry in India. Healthcare sector is getting strategic advantage with all the important dimensions of the information technology. It is true that healthcare industry has witnessed revolutionary changes in recent years and it would not be a surprise if it is said that information technology is the only factor which is feeding the revolution. Indeed healthcare sector is growing because information technology is spreading its wings as every important task of the operational work is based on information technology like immediate storage of information, immediate retrieval of information, preparation of accurate and prompt reports generating bills etc. somehow these operational works has increased the cost of the healthcare services, since private hospitals are dependent on the income they earned from their customers and on the other hand government hospitals suffering due to lack of attention from the government side, despite of enormous amount of investment. That's the biggest reason that government hospitals are not able to compete with private hospitals. More use of information technology in private hospitals attracts more customers.

Key Words: *E Services, Hospital, Health care industry.*

INTRODUCTION

During the last decade, healthcare sector is becoming more and more integrated and dependant upon Information technology. In major hospitals every important task of the operational work is based on information technology like immediate storage of information, immediate retrieval of information, Preparation of accurate and prompt reports, generating bills etc. Li and Benton (2006) argue that large hospital systems tend to invest more in tools and equipment for providing technology-related services than smaller hospitals. Whenever we talk about small hospitals or before commencement of the information technology, all the required information used to be written on paper manually by the receptionist and operational staff. Patients Information used to be collected by writing the Patients name, gender and age. Whenever the Patient comes again his information stored freshly. This resulted in full of stores and almirah with papers. All records have to be

destroyed after some time period to decrease the paper load in the office. In addition to that medical error occurs very frequently. These hectic exercises compel hospital employees to adopt the information technology. Now healthcare sector has left the classical approach of collecting and maintaining records. Advanced technologies are being used in many hospitals. Paper and pen has been replaced by various software, this is for automation of the healthcare system. These software works for maintaining patient's detail, generating bills and reports, precautions to be taken etc. Electronic medical record considered e-health services; they can affect patients' satisfaction, perceived quality, and behavioral intentions (Hadwich et al., 2010, Whetstone and Goldsmith, 2009). Many hospitals admit the significance of the information technology, that's why large number of hospitals have started online medical services or programs for their staff and after that tremendous change has been seen, They have identified the potential of e-learning to provide training at work, and many have begun implementing online medical programs for the employees. (Barlow, 2006).

Growth of the healthcare in the light of information technology:

Healthcare sector is growing rapidly because hospitals in India are not only increasing in digit but in size, complexity and the number of the services provided are also increasing, there is an continuous need for professional management of hospitals (Tabish, 1996; Sharma, 1998). The world healthcare information technology market is anticipated which will grow from \$99.6 billion in 2010 to \$162.2 billion in 2015, at a Growth Rate of 10.2% from 2010 to 2015. (www.marketsandmarkets.com)

Information Technology in medical market has commercialization opportunity in India (both current and future) is the highest among the countries USA, UK, Germany, France, Japan, Israel, India, China and Brazil report indicates a need for information technology to meet the demands of the local market. (www.orissadiary.com)

There is no doubt that information technology is providing rapid growth to the healthcare industry. Initially the growth of information technology in healthcare was low but surveys indicate that now it is growing very fast so

will be in future. However, few healthcare service providers have wholly adopted IT. Low diffusion is due because government hospitals are lacking in proper use of investment for information technology.

Second reason for the low diffusion is lack of attention towards healthcare from government side. No doubt, government is spending huge amount in healthcare sector but the utilization of resources is not appropriate. This weakness of the government hospitals has given a chance to the private hospitals to introduce new technologies and provide better services. Andaleeb (2000) compared the services provided by public and private hospitals in Bangladesh. He concluded that the quality of the private hospital services is dependent on income earned by these hospitals from patients. Private hospitals would be more concerned with good quality services than public hospitals. This is the biggest reason that private hospitals are searching for the new technologies everyday and gives best possible services to the customers. Here if services are provided via information technology then consumers has to pay big amount for that. Other side sometimes government hospitals are not able to provide basic services to the customers, and people who can not pay the fee to get treatment in private hospitals has to rely on government hospitals which is too risky with respect to their life, because least government hospitals are working with information technology.

DIMENSIONS OF IT IN HOSPITAL

Each and every sector is running behind the best possible use of the new technology. Software's has been created for using the technology in an effective manner. In any sector or industry, Information technology has the potential to improve the efficiency. Information can be stored electronically, so very less amount of paper work is needed. This is one of the most important motivators for adopting it. Healthcare has adopted so many new technologies to provide best services to the customers. Many hospitals IT applications are the belief that they improve the quality of service. The information technology is broader in scope and offers maximum advantages for its potential to improve the quality of patient care, reduce cost, and accommodate all types of administrative, transactional and educational needs (Mehta and Partin, 2007). Most importantly, it creates opportunities to improve healthcare service provider-patient communication via messaging, and immediate access to electronic record and alternative treatment options (Mukherjee and McGinnis, 2007). This is what we call computerizing all the routine work in the hospitals.

Use of IT in Healthcare sector has brought revolution for the service provider as well as for consumers. Healthcare service providers become able to provide required services to the customers because information technology has increased the knowledge of the service provider besides all

the essential decisions can be taken on time. (Olivia and Matthew, 2010 and Likewise, Institute of Medicine, (2001) concluded that information technology is used for creating patient centered services, as patient preferences and needs is being concentrated in the light of responsiveness.

Olivia and Matthew, (2010) stated that an ideal patient-centered healthcare delivery can be yielded by some considerable outcomes:

Efficiency; information technology reduced the time of searching any documentary records, paper charts, and eliminate the unproductive hours via communicating electronically.

Cost effectiveness; Proper utilization of information technology in terms of suitable administration, financial calculations etc. helps in reaching cost effectiveness.(Hillestad et al., 2005).

Quality control; providing reliable health services with least variations to the consumers via using information technology resulted in quality control. (Institute of Medicine, 2001)

Safety; information technology never improve the quality by just implementing it, but the reality is, implanting the information technology with lack of knowledge increase errors (Koppel, et al., 2005). So it is necessary to manage the information technology properly

Privacy and Security; When health information becomes online then there is no doubt it is easy to assess, not only for those who are concerned with it but also for the frauds. So it's the ultimate duty for the healthcare industry to protect from not permitted access. Information technology wonderfully provided the solution to stop the unethical access by using various software's. Buying and selling the records of the patients is so common to earn profit dishonestly. (www.pwc.com) France has started providing secure electronic processing of health information for all the users in 1998, it could be possible by using smart card for health professionals that information can only be retrieved when patient is available (Cornwall, 2002). Data whether it's administrative or related to patients health record must be kept so carefully that chances of the fraud become less.

CONCLUSION

Above mentioned studies indicates that healthcare sector is working on information technology and getting great results, but uses of information technology is seems to be limited or only in the big cities where private hospitals are located. Large percent of population lives in rural areas where it's hard to find the hospital working with

information technology. Government is not using the full potential of information technology. That's the biggest reason that government hospitals are not able to compete with the private hospitals. Even after utilizing huge amount of money by Government hospitals there performance is embarrassing. Besides private hospitals are utilizing the money which they are earning from the customers, and giving tremendous results in the healthcare sector. Here it is proved that why customer give preference to the private hospitals rather than government hospitals. Mainly private hospitals are using information technology, so to get medical facilities in private hospitals consumers has to pay very big amount as private hospitals are providing expected services via information technology. So only small portion of the population is able to enjoy services rendered by hospitals where information technology is used. However a major part of the population in India is below than poverty line. They can not even imagine about services provided via information technology which is too costly.

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