Chapter 29
Cloud Service Platform: Hospital Information eXchange (HIX)

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ABSTRACT

Health Information eXchange (HIX) is a part of Happiness Cloud Service Platform of Happiness Guangdong in Guangdong Province of China based on innovation of cloud-based business model. This article illustrates the hospital health care business services system based on cloud computing. Major business functions of HIX includes integrated mobile medical information services, and mobile health information services. Key cloud service platform capabilities include appointment of HIX registration, doctor-patient interaction and Health Manager System, medical statistical analysis, and the other integrated support module including service platform and platform management provided by two major cloud computing technologies of SaaS and PaaS. Medical cloud services of HIX is an innovative business model for cloud computing, that is, the medical and health services provided to the public going though by cloud computing all over Guangdong Province in China.

INTRODUCTION

Health Information eXchange (HIX) is a part of Happiness Cloud Service Platform of Happiness Guangdong in Guangdong Province of China, with innovation of cloud-based business model. In Hospital Management Year, China’s Ministry of Health proposed to streaming medical care processes, simplifying registration innovations, registered convenience, increasing the proportion reservation registered, taking measures to enhance the efficiency, shortening patient waiting time.

Help with Health Information eXchange (HIX), the hospitals can solve “three long and one short” (registration waiting for a long time, payment waiting for a long time, and taking medicine waiting for a long time, and a short time to see a doctor), enhancing the service level of hospital information management. However, China’s Development of IT is not optimistic. Mainly by the above phenomenon and imperfect medical services has been caused by medical information system. HIX is total solution for medical and health care in China.

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The other hand, the cost is a major problem how medical information can be to promoted to the people. It is understood that services system of hospitals in Guangdong province such as booking system, reservation and registration system of registration, short message platform, and live station platform, are depend on their supporting project construction investment, operation and maintenance costs. Although put into huge, but the hospital cannot charge any reservation fees, consulting fees from patients. That is truly free appointment. Although the spirit of moral factors in hospital, huge burden of cost, but the situation is not conducive to the promotion of medical information system construction. It will need to mature business models to address.

For the above two major problems, this article focuses on how does HIX work in cloud platforms, MAS cloud-based technology, and its Business model. It will provide total solutions to achieve three-win situation for customer, enterprises, and medical institution.

LITERATURE REVIEW

Cloud Computing

Michael Armbrust (2009) pointed out, Cloud Computing, the long-held dream of computing as a utility, has the potential to transform a large part of the IT industry, making software even more attractive as a service and shaping the way IT hardware is designed and purchased. Developers with innovative ideas for new Internet services no longer require the large capital outlays in hardware to deploy their service or the human expense to operate it.

Cloud Computing refers to both the applications delivered as services over the Internet and the hardware and systems software in the datacenters that provide those services. The services themselves have long been referred to as Software as a Service (SaaS). The datacenter hardware and software is what we will call a Cloud. Any application needs a model of computation, a model of storage, and a model of communication. The statistical multiplexing necessary to achieve elasticity and the illusion of infinite capacity requires each of these resources to be virtualized to hide the implementation of how they are multiplexed and shared.

Tim O’Reilly (2009) believes that the future belongs to able to provide immediate information to users of services. Mobile is the key. Background in the datacenter is a natural model to run in, especially those mashup integration type of service.

Business Model

Li Zhenyong (2010) thinks the business model is to maximize customer value, elements can make the enterprise run internal and external integration, form a complete set of efficient running systems with unique core competitiveness, and through the optimal form to meet customer needs, customer value, at the same time keeps the system reaching profit targets for the overall solution. Henning Kagermann, Weiying Zhang, Hubert Osterle (2010) considers that customer awareness of the value of a historical process of development, from the first cheap and fine products and services, to customers in the process of solution, is a gradual process of gradual close to the real requirements of the customer.

Amit and Zott (2008) describe the business model as an architecture configuration consisted of service elements. It’s designed to make the best use of business opportunities. The framework demonstrates the approach of network operating, composed of companies, suppliers, candidates and customers.

Another scholar Applegate (2010) considered the business model from the perspective of enterprise operating. He argued that business model is the demonstration of complicated business industry.