一种基于 CRM 模型的 SaaS 解决方案①

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An SaaS Solution Based on the CRM Model

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Abstract: In the middle of current financial crisis, measures have to be undertaken by working with fine user experience to alleviate the difficulties faced by every software corporation. Combining the CRM model with traditional SaaS mode, customers have little time and money in purchasing and deploying software resources. Meanwhile, developers will gradually improve the system according to user experience and feedback; besides, provide users with personalized service to obtain users' satisfaction and loyalty. The ultimate goal is to gain considerable profits for these companies to tide over the period of financial crisis.

Key words: software as a service (SaaS); customer relationship management(CRM); service innovation; personalized service; user experience

InformationWeek found that twenty-nine percent of the 250 business technology pros surveyed is using at least one licensed application that's hosted by a vendor and accessed over the Internet, typically for a monthly subscription fee. Thirty-five percent are planning to buy software that way or are considering it. And interest isn't just among small companies with minuscule IT budgets: fifty-five percent of respondents have annual revenue of more than $100 million, and a third have more than $1 billion in revenue [1].

1 Introduction

In the middle of current financial crisis, main economy of major world power is already hurt. In software industry, many corporations growingly feel the pain. Due to the numbers of software demands, software corporations have doomed to have economy downturn in 2008. So it is high time to develop software in a relative high profit.

SaaS, a completely creative software mode in the 21st century, which has the same meaning of on-demand software, the application service provider (ASP) and hosted software. In the software as a service (SaaS) mode, the application, or service, is deployed from a centralized data center across a network - Internet, Intranet, LAN, or VPN - providing access and use on a recurring fee basis. Users "rent", "subscribe to", "are assigned", or "are granted access to" the applications from a central provider. Business models vary according to the level to which the software is streamlined, to lower price and increase efficiency, or value-added through customization to further improve digitized business processes [2].

Therefore, a question is presented due to the traditional SaaS Mode. How to deal with prospects and customers to improve long-term growth and profitability through a better understanding of customer behavior? In addition, how to provide more positive feedback and improve integration to gain better profit for this kind of

corporations in the depression economy?

The rest of the paper is organized as follows. In Section 2, background section depicts traditional SaaS mode and analyses the website of Salesforce.com. A creative solution of SaaS mode with CRM model is presented based on the drawbacks of the traditional SaaS mode in Section 3. In Section 4, there is a detailed comparison between the SaaS solution with and without the CRM model. At last in Section 5, concludes the paper.

2 Background

2.1 Traditional SaaS mode

For import-export companies affected by the economic crisis, Alisoft's SaaS products for foreign trade companies are getting more and more attention. The SaaS solution provides a management platform, including e-mail and online translation services to lower the costs spent by companies, which would normally need to use external email and translation packages. Alisoft hopes that such products can effectively help its client's lower costs and increase management efficiency [3].

The software as a service (SaaS) mode has grown in popularity over the last decade since computers and the Internet have developed rapidly all over the world. In the case of Alisoft, software is provided via Internet rather than purchase licenses. Therefore, a large quantity of money will be saved according to the SaaS mode. In the use of SaaS, the consumers no longer having to buy or deploy the hardware and software, they only need to spend a little money in purchasing the services provided by the SaaS providers, which is more economical and timesaving [4,5]. Furthermore, customers needn't to buy the software and also they needn't to pay extra money to upgrade to the latest version. All they have to do, just to pay the appropriate software to order the variety, quantity and term. Via the Internet, the customers will be able to enjoy the corresponding hardware, software and maintenance services, enjoy their right to use the relevant software and constant upgrades, which is the most effective web application mode of operation.

From another perspective, the SaaS corporations such as Alisoft provides software based on Web, who has the responsibility on fully manage and maintenance

software. Besides, software manufacturers provide customers with Internet applications, who also provide software for offline operation and local data storage, allowing end-users to use their software and services at anytime and anywhere. For many small IT businesses, SaaS is the best way to advanced technology, which eliminates the enterprises to purchase, build and maintenance of infrastructure and applications needs, can in turn optimize management and work efficiency. This is why SaaS is regarded as promising.

2.2 Analysis of Salesforce.com

Salesforce.com, a vendor of Customer Relationship Management (CRM) solutions, delivers to businesses over the Internet using the Software as a Service mode.

The CRM, which is the abbreviation of Customer Relationship Management, is a comprehensive strategy and process of acquiring, retaining, and partnering with selective customers to create superior value for the company and the customer. It involves the integration of marketing, sales, customer service, and the supply-chain functions of the organization to achieve greater efficiencies and effectiveness in delivering customer value [6].

As is implicit in the above definition, the purpose of CRM is to improve marketing productivity. According to the official site of Salesforce.com, a complete CRM solution is presented below. Fig.1 depicts the important components of a CRM solution.
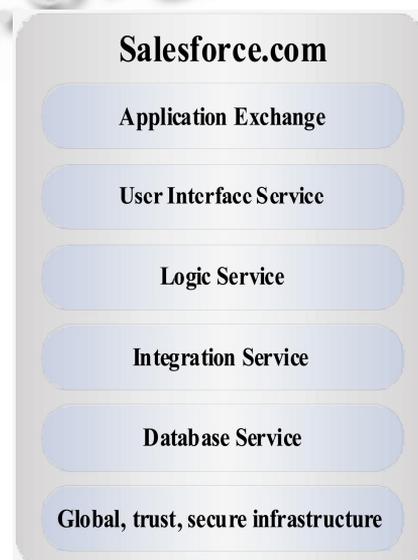

Fig.1 A complete CRM solution [7]

As is shown in Fig.1, a CRM solution consists of six components. At the bottom of the solution, the global, trust, secure infrastructure is the prerequisite for the CRM solution. Secondly, it is necessary to create a database, accumulate the customer transaction and contract information as a natural part of the interaction with customers[8]. Thirdly, integrating salesforce.com with ERP such as SAP, etc, that proves the site salesforce.com could easily satisfy the integrate requirements of small and medium-sized organizations. Fourthly, the logic service, which directly contact with Integration Service below and User Interface Service above, makes it easy to connect user interfaces to the background system. Above the Logic Service is User Interface Service, which is commonly used in the Operator Interface Console (OIC) and Operator Interface Terminal (OIT), affects the amount of efforts the user must expend to provide input for the system and to interpret the output of the system, as well as the efforts to learn how to do this. Last but not least, the Application Exchange is one-stop marketplace for ondemand business applications, makes it easy to find and select from hundreds of apps according to customers' businesses.

Because of tight coupling and mutual cooperation of the six parts, enterprises will improve product quality to enhance customer satisfaction by analyzing customer information provided by CRM model, thereby promote the competitiveness of enterprises.

3   An Improved SaaS Solution

Building on the previous work and a SaaS solution[9] launched by Fujitsu, we develop a SaaS solution with CRM model comprised of the following two sub-modules: a SaaS application platform and a CRM model. Fig.2 depicts the important components of the SaaS solution.

In the SaaS solution, end-users connect into the terminal system by two methods via the Internet, The Browser method (B/S Structure) and application client method (C/S Structure). On the one hand, by using web browser, such as Internet Explorer, Firefox, Chrome and so on, end-users could directly gain resources provided by the SaaS application platform. On the other hand,

end-users could also use the SaaS system without web browsers, only need to install a kind of thin client on their computers. The thin client could link its computer with the SaaS system automatically.

Before entering the SaaS system, security check is quite necessary. A firewall is a dedicated appliance, which inspects network traffic passing through it and denies or permits packages based on a set of rules assigned by the network administrator. After pass through a firewall, user verification, charging, authority control functions are also needed. The following is the execution process: First of all, the SaaS system will authenticate the end-user if he/she is legal. Secondly, check end-user if he has enough payment in order to use the corresponding services or functions. Finally, return the function list which the end-user has ordered, that is the outcome executed by authority control module.

From then on, the SaaS platform begins to provide software as a service to serve the end-user. Besides, store data that are generated by the system into databases when it is needed. In addition, SaaS applications, such as industry-specific packages, which contain specific software restricted to a particular industry; groupware, the software which is used in LAN, is able to communicate each other between multi-users at the same time (e.g.: e-mail, database, phone-sharing services, etc.).

The CRM platform, which is a creative module added into the SaaS system, will improve software sales by analyzing sales data from end-users in the period of buying software. Also, it will improve software experience to end-users with feedback during their use collected by CRM platform. The overall purpose of the SaaS solution is to enhance use value of the software provided as a service. And ultimate goal of the SaaS solution is to improve marketing productivity of corresponding corporations.

4   Advantages

The benefits of software-as-a-service solution are myriad. Now, the paper below will be divided into two aspects, explains respectively.
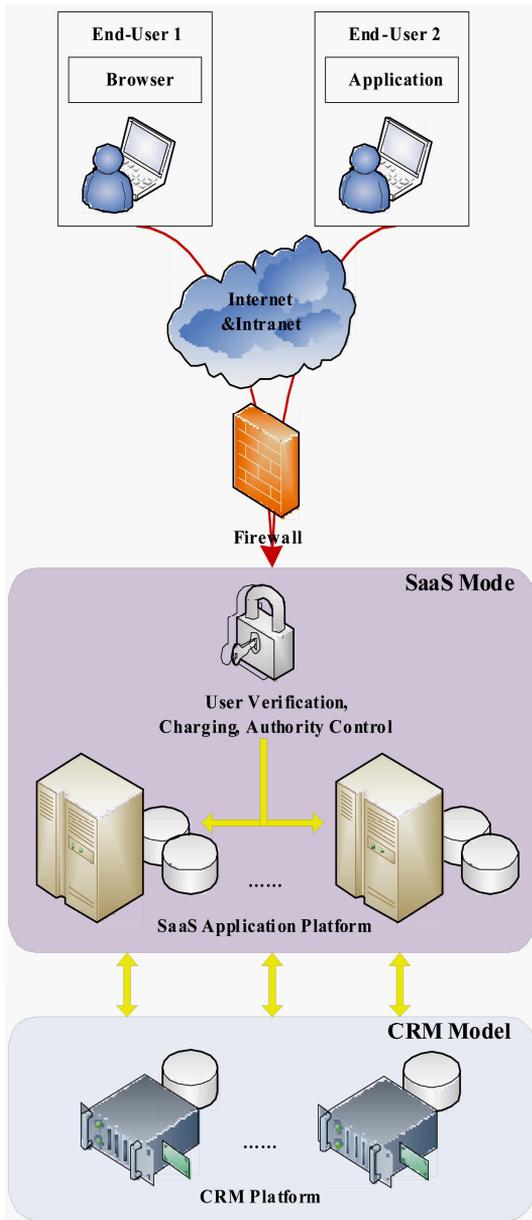
Fig.2　An SaaS solution based on the CRM model

4.1 Advantages to traditional software mode

Advantages to traditional software mode is continue to inherit due to the use of SaaS mode. And the disadvantages are no longer existed.

For one thing, compared with several characteristics of traditional software, the SaaS solution does not require buying, installing, upgrading or deploying the hardware and software. So that cost will be greatly reduced and a lot of time will also be saved.

For another reason, with the rise of Web 2.0, users

no longer receive information passively, but have the ability to interact with websites easily and conveniently. Nowadays, the mashup resources become more and more popular, and also, end-users could write their own programs with the development of SaaS 2.0 platform, which provides end-users with a programmable application hosting platform. Besides, software or applications can be customized according to end-users' own preferences. In addition, the SaaS platform will also provide more extensive services in order to adapt to the needs of enterprise management more quickly. And also, the services will continue to expand with the development of technologies, such as Google Map, Google Apps, Customer Service Center and so on.

4.2 Advantages to traditional SaaS mode

Traditional SaaS mode provides the corresponding service to end-users by the way of software as a service. Besides, users can order his/her service according to their own preferences, and enterprises can develop appropriate service in accordance with the needs of end-users.

However, there are many deficiencies still exist. For example, it is often requires users to cost a lot of time to find the appropriate service. In addition, the more service the system provides, the more trouble users will encounter during searching.

Therefore, this SaaS solution based on the CRM model designed in this paper, recommend and provide the appropriate product based on the user's preferences and habits of the end-users, allowing users to locate the products quickly which are required. In addition, gradually improve the system according to the user's experience and feedback, and to provide users with personalized service, in order to provide better user experience resulting in improving customer's satisfaction and loyalty. Finally, the companies who use the SaaS services will gain more profits in the period of depression economy ultimately.

5　Conclusion

According to the SaaS solution based on the CRM model, we can see: when end-users are in the use of the improved SaaS system, enterprises will get feedback information from end-users, as well as users' habits. Only by this way, software corporations can understand

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customers' requirements and behavior better, in order to lay a good foundation to provide end-users with more remarkable personalized service, which will help them to improve users' satisfaction and gain users' loyalty, ultimately gain considerable profits for these companies to tide over the period of financial crisis at present.

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