Information Technology as Commodities

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Abstract – This paper is about a model of software delivery known as Software as a Service (SaaS). We believe that companies will pay for software as they pay for electricity and telephone. They will pay for what they use. We present why and when it happened. That it came from the outsourcing idea and became possible by the advances in the Internet. Software retailers will become service provides. The main points taken into account by companies when choosing a service will be: cost, usability, availability and trustworthiness. This model allow companies to reduce its initial investments in software. This paper presents two case studies of B2T, a company in Brazil that is Software as a Service Provider.

Keywords: SaaS, Software, Service, Commodities

1. Introduction

Software as a service (SaaS) is a model of software delivery in which the clients do not buy the software; they only pay for using it. The software provider offers maintenance, constant improvements, support and daily technical operations. In this manner the client no longer needs to worry about buying servers, choosing operational systems, installing and configuring software, backup, contingency planning etc.

SaaS will eventually transform technology in commodities. In the same manner companies pay for electricity, water, telephone and taxes they'll soon pay for software. A CRM, ERP or Content Management, they'll all become services. One of the advantages of services is that they'll be available any time you need them.

One aspect of all this that may not be forgotten is the user, its satisfaction is primordial. For SaaS to be successful, it must dedicate careful attention to the user experience and provide attractive costs. The system must be customizable to answer to the different customer needs, especially regarding interface customization.

Nowadays this model of business, where the customer is charged by use of the service, is adopted by mobile phone operators. In order to get more clients the companies are offering phones in exchange for the customer fidelity. Once the customer subscribes to the operator new services are offered in order for him to use the network as much as possible. In Europe and Japan most of the revenue already comes from SMS use. In Brazil, SMS is being used more and more my media networks allow users to participate in contests.

The Internet has unified the world; however the IT world became even smaller. New technologies are born all over the world all the time, and every one of us has a saying in what is next big thing. It doesn't matter if it comes from the Silicon Valley or from a garage in a South-American country. A software company in Brazil may use developers in India to help in specific projects.

Every day from the office, at home or though a mobile phone people are gradually more connected. Information is abundant and at every ones reach. Terms like firewall, spam, router, worms, spyware are increasingly making part of the common person routine. This was once considered to be information only the IT geeks knew about, and it should be. What the customer really needs is the functionality of the software and not need to build a complete IT Department just to deal with these issues. Even because small companies cannot afford to do it, this doesn't mean however that they don't need the functionality offered by the software.

The cost of setting up a server to run an application is too high for small companies. Webservers, databases, firewalls, user policies, backup, contingency plans and so many other parts of an application are too high of a cost. Many times these costs make the application unviable which leads the companies to give up the use of the software or worst, choose cheap software from companies that are not up to the challenge and only after a great deal of suffering, they give up.

SaaS may rise to the challenge and offer companies of every size the chance to focus on their business, letting go of the worries of tech world, and leaving them to the specialized companies.

2. When It Happened?

SaaS is recent and has been made possible by the advances in the Internet. The increasing number of broadband connections and its reducing costs are what make SaaS possible. In Brazil for example the broadband connections are not accessible to every one, many cities still don't offer decent speed and reliability in the connection. In areas where the number o connected offices is higher SaaS is already starting to happen slowly.

The concept of SaaS comes from the outsourcing idea. In the industrial field the companies used to do the whole production of their goods by themselves, however when the companies started specialize in certain areas the companies started to hire services from each other. The same thing happened with countries like Brazil that's recognized as a major player in the agriculture business or Japan that is primarily focused in electronics.

The outsourcing business became global as the Internet unified the world, all is left are maps and time zones. Now, any one is able to use VoIP technology to communicate across the city, the country or the world. Your supplier may be hours 8 time zones apart and still make the delivery. The software industry is a great example since all the work may be done on-line and rarely, if ever, will be the need to exchange some physical product that needs to be shipped. As far as you're concerned your developers may as well be in the office next door.

Since software development is already outsourced, why not outsource hosting, security support? An application could be projected in Brazil, developed in India, hosted in the United States and accessed from all over the world. Whether the server has one or two processors should not be a concern of a small business owner in Argentina, all that matters is that the application is functional and the data is secure.

Matters regarding technical issues should be left to the application provider to decide and control. The customer should decide what services are required. To make this decision some aspects will be taken into account such as: cost, usability, availability and trustworthiness.

SaaS is already happening in the form of software on-demand and application service provider (asp), in the near future though; SaaS will be the dominant business model.

3. What's going to happen to the big companies?

The big software retailers will become service provides. Still there will be institutions, such as banks and governments, which will need to have software installed locally, but even in these cases they may only rent the application instead of buying it. They way software is sold is going to change, among the big companies few will survive. Between the small e medium companies there will be very competitive, customers will choose companies that can meet their needs, always looking for better: cost, usability, availability and trustworthiness.

The big companies are already on the move, SAP offering their applications on-demand; Microsoft changing hotmail to look like outlook, Google is charging advertisers by click on their link. Network games for teenagers, like Ragnarok, or for adults, like Poker Online, are examples of SaaS. In these games players install the game on their computers and challenge players from all around the world.

4. Why Services?

Companies operate based money, profit or loss, even if they refuse to admit it. The SaaS model allows these companies to reduce its initial investments in software and spend only more wisely. In this way the companies will be able to hire a service at any time, and if after using the service they decide it's not fit they may abandon this provider an choose another one without having spent a fortune on a software only to find it's not adequate. Even knowing that the software becomes a fixed cost for the company it's still a better model than owning software that may soon become obsolete. On top of this the software will become as necessary to the company survival as is electricity or telephones.

5. How to do it?

For companies hiring the service there will be essentially two options: Local installation or use over Web browsers. Even for software installed locally there's still going to be some kind of integration, like web services for instance. The local installation option will be used mainly where the connection speed is no good enough to use the application over the web or where there's a need to work with large files such as videos. On both cases though, the application administration is still going to be made by the provider.

Another point that demands close attention is the use of best practices, the ERP applications are a good example for this. Many ERP projects fail due to the desire of over-customize the application, if instead the companies were to adopt a model offered by the provider it would have a lot to gain, for they would learn from past experiences from several companies, an many mistakes could be avoided.

For small and medium companies, the base will probably be on open source software that would be customized and adapted to the needs of each region or market segment. The hosting will be hired from specialized companies.

6. Where it's going to happen?

In spite of the globalization, there will always be barriers due to local culture and needs. Due to these specific needs of each region or country, there will be a large number of service providers of small and medium size. Among these regional needs there are points as simples as holidays or time zone settings. Things as simple as these might bring undesirable results such as meetings scheduled on holidays or people from different time zones missing a conference call. Of course these are only examples; much more complex problems may appear, specially related to money issues, like interest rates or split payments.

In spite of all this the software on-demand, where one instance of the application is accessed by various customers, will still be the main business model. Software developed in India may be customized to Brazilian needs and then hosted anywhere in the world.

7. How much will it cost?

As stated before, the main points taken into account when choosing a service will be: cost, usability, availability and trustworthiness. The service providers although may not take only these items into account when defining their prices, on top defining a value that satisfies their customers, they still need to worry about the prices offered by the competition. One way to work this issue is use a model like the one cable TV uses; the client may hire the service package that fits its needs. If you have enough money hire the complete package, if you a little short and are not into sports, pick a package that does not includes the sports channels.

The price formation will follow traditional points like: target audience and estimated quantity of subscribers. One item in specific that is normally not taken into account will need to be considered, that is global competitiveness. In spite of the aforementioned need for regional customization, there is still going to be services that may be used globally like selling music. This will strengthen a concept very valuable to all companies that is customer maintenance.

When forming the price the availability may be a critical factor, since not all business need high availability and its cost increases as the service level agreement demands more time on-line guaranteed or fines may be charged from the hosting company.

Other incentives services providers will probably use are usage points and deals with stores like Amazon.com to offer gifts or discounts to its customers.

Several partnerships should be seen on the upcoming years to form strong alliances in order to grab a share of this emerging market. Most likely software companies will walk hand in hand with hosting companies in order to offer a complete package of services to the client.

8. Conclusion

The usage of information technology as commodities has been waiting to happen for a while and it should become true through the business model known as Software as a Service. The connected world population is ready for this. The self-service has been accepted and is now demanded by the people. Governments and companies need to decrease software piracy. The concept of paying only for what we use is increasingly more present in our lives.

The interesting part is that software as a service is a natural evolution of the current technology and it will not be the last one. Even though the information technology market is very cyclic, this transformation should change the software culture as we know it.

9. B2T Case Study

B2T is a company focused on the customers and their needs. Currently B2T is working on creating a portfolio of products to be offered under the SaaS model. Some of them are already on the market, their description is below.

9.1 MeuComercial

MeuComercial is web based software that helps small and medium companies to control their business opportunities and the work being done by the sales team. The software may be sold by itself or accompanied with a sales methodology and trainings.

The software is completely open source, using php as programming language and MySQL database. The hosting is the United States where prices are more affordable than in Brazil.

9.2 Websitepravc

This service allows the user hire a website as a service. For a monthly fee during at least twelve months the user gets an original site, designed specially for him according to his needs. All website related tasks will be done for him included in the package. During the whole subscription period his site is taken care of by specialized professional that guarantee that the site is always updated and working.

A content management tool is also provided so that the user may update his own site as easily as if he was using a text editor.

10 References

[1]Rifkin, Jeremy. “The Age of Access: The New Culture of Hypercapitalism, Where all of Life is a Paid-For Experience”. Tarcher, March 2001.

[2] Friedman, Thomas L. “The World Is Flat: A Brief History of the Twenty-first Century.” Farrar, Straus and Giroux, April, 2005.