CLOUD COMPUTING AS A TOOL FOR REVIVAL OF SICK SPONGE IRON INDUSTRIES

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ABSTRACT

Cloud computing is the idea that all forms of computing can be delivered wholly over the Internet and is based on cloud drawings. Cloud computing is a cluster of shared servers those provide Infrastructure as a Service (IaaS), Platform as a Service (PaaS), Software as a Service (SaaS) to enormous number of resources and hosting to customers on a free or payment as per their use basis. It affects the regular conventional process because one should not have to go to the workspace to collect information which affects monetary transactions in IT spending. Sometimes it is reported on the manner in which companies make their solutions without proper knowledge about the architecture, model and services provided by cloud computing. The information is digitized and provided as a service in the cloud computing model. The cloud mimics an online data store which users can easily access by simple authentication process without any prior training on managing the resources involved and simultaneously users concentrate on their core business processes. Cloud computing customers are not supposed to own the infrastructure physically; rather the usage is taken on rent from a third-party provider. The proper implementation of cloud services reduces cost by sharing hardware, software and services. As the data is stored in remote servers and duplicate copies are maintained redundantly so recovery from failure is not a herculean task. The ability of scale up or down depending upon demand has made it more convenient option among different segment of customers. This paper is organized as related work done by several researchers as documentation and discusses about the security in cloud infrastructure, its key issues and open challenges. This describes different cloud situations to be applied to a cluster of sponge iron industries in the state and can be applied to other industries as well; the concept could be an eye opener for reviving the sick industries in the nation perspective.

KEYWORDS: Cloud Computing, Cloud Infrastructure, Cloud Services, Cloud Mimics And Digitized

Cloud computing is a term used to describe computing that is based solely on the Internet. The cloud is like a online virtual ware house with unlimited storage capacity where stuff is stored and easily accessed, especially web-based services and applications. It's called the cloud because it's out there for everyone to use, and also because the complex infrastructure that makes it possible remains hidden to the user. The other important thing to note about cloud computing is that it is all hosted by a major cloud computing service provider, which means you don't necessarily need the physical hard disk space to support your activities. Understanding the premise of cloud computing is important if one learns how to benefit from it.

Cloud computing is good for any business because of customer relationship management. It's no secret that people have flocked to the Internet in droves for all sorts of things. In some cases, it's to communicate with friends and family, but it's also to look for products and keep track of their favorite companies and brands. Getting involved with these services is a key way to reach the target consumers.

Cloud computing solutions have had a substantial impact on the way in which business is conducted, both internally and within the marketplace as a whole. The advantages have been significant, and since cloud computing developments have not even reached their full potential and are still in their infancy, there is vast room for further growth and effects on the marketplace. Offering Web-based cloud computing solutions can help your business in a number of ways.

ADVANTAGES OF CLOUD COMPUTING

Limit use of IT Resources

First, by contrast, compare the information technology (IT) efforts required with on-premise software versus cloud computing. On-premise software requires that each individual work station is installed with software that must also be legally licensed to that work station[1]. The software functions independently of other work stations, and so, too, is its maintenance. This requires time, energy, and cost, as businesses have had to hire IT staff and even, depending on the business size, entire IT departments to ensure that each work station's software is maintained and functioning

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properly. With cloud computing solutions, the software is Web-based, and requires only Internet access and a Web-browser.

Easy Storage and Maintenance

Not only does the Web-based software not require any installation or IT maintenance within your business, but the responsibility of storing, maintaining, and processing the information on the software is outside of the company [1][2]. Any glitches or malfunctions, should there be any, are handled elsewhere—remotely, on the cloud—meaning that the business need not participate in concern over such problems.

Improve Internal Communications

Cloud computing solutions can work wonders in improving the internal communications of the business. With on-premise software, data may be stored in one or more computers, and often requires manual entry and tedious communication efforts. The margin for miscommunication error is, thus, not quite large.

Accurate, Real-Time Information

Cloud computing solutions also ensure that the data is accurate and current. Web-based solutions focused on customer relationship management (CRM) track, store, and monitor all the activity of individual customers, but perhaps even more significantly, it is done in real-time[4]. This means that any permitted employee or executive can retrieve data on-demand and compile reports that accurately reflect the most up-to-the-minute information.

Drives

By having accurate, up-to-the-minute data, sales and marketing departments have readily available information with which to more rapidly begin formulating sales and marketing strategies.

Understand the Customer

The marketing and sales department have access to accurate and current information, which can be easily analyzed and opportunities for growth can be exploited using sales strategies those are specially tailored to meet the specific needs of customer.

Improved Customer Relationship Management

Since sales and marketing initiatives become customer centric and customers are allowed to personalize their buying exchanges with the business, this wholly improves customer relationship management, which is very crucial for the success of a business in current market scenario.

Use Resource Elsewhere

Cutting out the administrative work associated with manually keeping information, the same resources can be spent elsewhere, like tracking sales leads.

Better Business Tracking

By implementing cloud computing solution gives the ability for top executives, partners and company heads to carefully monitor the business's profitability, with more accuracy up-to the minute information.

Cut Costs

Businesses will find that cloud computing solutions ultimately cut costs. Costs will be cut in data entry, customer service call centers, IT departments and marketing research.

THE FUNCTIONALITY OF CLOUD COMPUTING

The strong emergence of cloud computing, particularly in the business world, has had a tremendous impact on the computer age. Cloud computing solutions have relieved businesses of many former information technology problems, increased efficiency, streamlined operations, improved sales and marketing strategies, and have ultimately increased productivity levels of businesses of all sizes[8]. Cloud computing has relieved many of the problems and issues associated with on-premise software. On-premise software requires that each individual computer work stations software is installed, and legally licensed (which, for mid to large-sized companies can cause confusion and tedious work efforts). This software runs on each station independently, and maintenance must be performed independently as well, requiring time, energy, and more often an, additional staff [9]. Cloud computing solutions only require that the user have access to the Internet and a Web browser through any device which can facilitate the connectivity services and the bulky work stations are out of the picture. The cloud removes time-consuming and costly IT responsibilities from the business responsible for the maintenance and upkeep the software provided thereby [12].

Cloud computing also improves the internal communications of a business. With all permitted users accessing the same software and viewing the same data on the same interface, the margin for miss-communication is extremely slim, if not eliminated in its entirely. On-premise software requires that databases and spreadsheets be revised, and then that those revisions be communicated [13]. Having accurate information, readily available and current, then, is something that requires tedious sub-tasks, and therefore, ultimately, more time and energy. With cloud computing solutions, these tasks are eliminated. The information reflected and monitored on the Web-based software is accurate; revisions are reflected automatically; and the data is available on-demand. All decision makers and permitted employees have access to the same information, and therefore functions can be performed more rapidly. Also, because the information is accurate and available in real-time, sales and marketing initiatives are improved substantially. Having accurate and up-to-date information is key for marketers and salespeople to formulate sound sales and marketing strategies [10]. Customer data stored in the cloud computing software can be compiled, segmented, and analyzed much more rapidly. Marketers can create specific reports that segment the data, such as demographics, geographic location, purchasing times, and whichever category or segment is applicable to the business. Because these reports can be produced on-demand, the ability to interpret the data to identify consumer behavior, either in trends or patterns, or identify product areas or times of low or high sales volumes, is a much faster process. Sales and marketing initiatives can thus be developed and implemented much more rapidly, which ultimately improves a business' response time, strengthening it alongside competitors in the marketplace [11].

It also benefits the customers as well. Being able to identify the trends, patterns, buying behaviors, and demands of customers, sales and marketing efforts can be tailored to meet the specific needs of the customers. The buying experience for customers, therefore, is more pleasing, in that it is easier, more convenient, and faster by appealing to the customer's needs, adding a higher value and more stable positioning to the business in the customer's mind. The way cloud computing solutions improves customer relationship management, then, is mutually beneficial to both sales and marketing executives and the customers themselves. Amazon is an example of how cloud computing solutions have improved customer relationship management in ways that are mutually beneficial. Amazon, with its use of revolutionary cloud computing technology, has devised sales efforts so specific and so tailored to their customers' needs that the results have only proven how important such tailored approaches are [15]. Their customer relationship management is basically responsible for establishing the company's entire brand positioning, and maintaining its smooth, friendly relationship with its customers.

THE FUTURE OF CLOUD COMPUTING

We are still at the beginning of the cloud computing business model, so it is important for any business that relies on its services to look ahead to see the improvements of technology in the upcoming days. Couple of years ago, the earlier version of cloud computing failed when "thin client" services mostly failed to take hold; today, however, the infrastructure has been tremendously developed over a long period of time [17][9]. The popularity and awareness about the cloud has increased the commercial interest of the cloud industry hence the next ten years will make cloud computing more powerful, reachable and reasonable.

We can expect to see a change to the ways in which we interact with computers in general, thanks to new mobile platforms such as smart phones and net book computers. An iPhone is far more than a telephone and an Internet media connection; with the right software, it can be used as a complete mobile computing device, and as on-the-fly dashboard to essential business services [8].

You should expect to see ubiquitous, fast Internet connections become the norm for such devices, as 4G telecommunications and wide area wireless hotspots are implemented. Far-reaching connectivity and easy mobile hardware expands the range of when work can be completed, and widens the range of what that work can entail [16]. Finally, look for increasing maturity in deployment of cloud-based security and reliability, as well as the business understanding necessary to maintain that security within the organization

THE GLOBAL ECONOMICS OF CLOUD COMPUTING

The optimal production is completed by units (countries, people, etc.) with the greatest comparative advantage, and that the brain child, following this principle to the latter is global and free trade. When it comes to product support, the Internet is a great equalizer [18]. As long as information is communicated in a recognized language and technicality, customers will flock to online help desks when they seek assistance. In the meantime, corporations can outsource production of help desks while they focus on what they do best – producing their product [12].

Cloud computing is the current trend which is fueling such international partnerships. Say a marketing department needs someone to administrate their customer relationship management database, but they do not have the resources to perform that administration in-house. So, they send the data via the Internet to a company in Thailand which will provide servers and administration panels that allow the marketing department to add to the database without having to worry about its safety and security [14]. Essentially, cloud computing is like attaching an auxiliary IT department of the exact size and scope necessary whenever they are needed.

Sponge Iron Industries can use the tremendous power of cloud to subordinate many services those can be easily handled by clouds in a more distributed and secure way. While manufacturers focus on producing their product, they can outsource technology needs to exterior companies which have a comparative advantage in providing these services [15]. These exterior companies may be across the street, but cloud computing transforms the distance into a negligible issue.

Free trade is the natural result of following the principle of comparative advantage. However, protective tariffs and duties prevent this process from coming to fruition. As such, the impact of cloud computing on the global economy will only be as large as governments allow it to become. This is true for each and every time international companies attempt to provide a new and innovative process.

BUSINESS APPLICATIONS OF CLOUD COMPUTING

Variety of business applications [5]. In today's technology driven business environment, it is crucial to find a system that supports those applications that will drive your business to success. What kind of business applications does cloud computing support? The short answer is that cloud computing can support practically any business application your company requires [18]. However, elaboration is needed to express the versatility of cloud computing and how that versatility can satisfy any business application need.

Just as there are many types of businesses, there are an abundance of business applications that a computing system must support. As a business chooses its application requirements, it is important to understand the company's needs and identify the particular applications that the computing system must support [17]. Some of these applications are: product information dissemination, design and manufacture support requirements, inventory and production control, accounting and payroll functions, quality assurance and control constraints, and shipping tracking needs. These are but a few of the many requirements that are business applications supported by cloud computing systems. Each of these applications have nuances within themselves and cloud computing systems, with their versatile scalability can easily support them [17] [18].

Cloud computing systems can easily support those applications that meet both you and your customer's expectations. How about purchasing, inventory control, and manufacturing requirements? Cloud computing systems easily support all of the platforms that control the purchase, manufacture, and product in a real-time, "just as needed" environment. However, while these production and quality control functions are easily supported by cloud computing systems, they are by no means the only applications cloud computing business systems can handle. Customer relationship management (CRM) is an important function in any business, and cloud computing supports a myriad of CRM functions [17]. CRM abilities of Cloud computing in areas such as marketing helps generate leads and monitors customer activities to more effectively use information for your sales department. Activity management through cloud computing applications help you answer customer

generated queries in a confident manner, thus building and strengthening your client relationship. Other CRM capabilities found in cloud computing can be realized through assignment management to employees who are most effective in satisfying your customers questions or complaints [16]. In addition, cloud computing supports a variety customer relation functions such as "help-desks," which answer customer inquiries in a real-time environment.

These are just some of the business applications found with cloud computing, but there are many others, and company can benefit from each and every one.

ATTRACTING CUSTOMERS WITH CLOUD COMPUTING

One of the most common challenges for any business is how to attract new customers, while still retaining and satisfying existing customers. Especially in the internet age – which makes it extremely easy for a savvy shopper to research companies, products, prices and customer service – getting new customers on board with your company can be particularly difficult [19]. Why not use the internet and, more specifically, the cloud computing revolution, to help grow your business through attracting new customers?

Cloud computing is the ideal platform for a customer relationship management system. By enabling all users to be on the same page, and view the same up to date information, the cloud helps many diverse departments – sales, marketing, advertising, customer service, even executive management – to communicate more effectively with one another [17]. Market research data, feedback from customers, Internet buzz, even competitors' promotional campaigns can all be analyzed using sophisticated techniques in order to compile a complete picture of both current and prospective customers [18]. The marketing and advertising departments can use this information to identify their target audience and create focused promotions and campaigns. Sales projections are also easy to formulate with cloud-based applications.

CONCLUSION

Because using the cloud can help automate processes, sales representatives are able to focus on wooing customers. They can also get the information they need, such as inventory quantity, pricing or discount approvals, and presentation content, in order to close the deal on the spot. Cloud-based customer relationship management systems can also harness the power of social media and Web-driven campaigns to generate and manage leads. Potential customers can be gleaned from Web site traffic, social networking sites, and traditional Internet advertising methods such as banner ads or pop-up ads, and can be seamlessly integrated into the system or routed to salespeople. When a new or potential customer reaches out to a agent, whether to ask a question or place an order, that agent is empowered by the impact of cloud computing on customer relationship management to access the most timely, reliable information possible – price; current or future promotions; in-stock verification; or services, features or upgrades that may be available. They can also be provided with opportunities to up sell or cross sell depending on the customer and the product. Delivering exemplary customer service is one great way to attract and retain new customers. The benefits of a cloud-based customer relationship management initiative are many. One of the most valuable of those benefits, however, is the intersection of information and customer service.

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