Cloud computing persuasive essay

Technology



CLOUD COMPUTING PRASHANT G. PANDEY SANDEEP D. SINGH 3rd Author TIMSCDR TIMSCDR 3rd author's affiliation C-502, Silver Oak Appt. , Beverly park B-201, New Garden view, Tulinj Road, 1st line of address Mira Road (E), Thane-401107. Nalasopara (E), Thane- 401209 2nd line of address Mob. No. +91- 09322119824 Mob. No. +91- 09850394576 Telephone number, incl. country code prashant.com Sandy.com 3rd E-mail ABSTRACT As with any new trend in the IT world, enterprises must figure out the benefits and risks of cloud computing and the best way to use thistechnology.

The buzz around cloud computing has reached a fever pitch. Some believe it is a disruptive trend representing the next stage in the evolution of the internet. Others believe it is hype, as it uses long established computing technologies. One thing is clear: The industry needs an objective, straightforward conversation about how this new computing paradigm will impact organizations, how it can be used with existing technologies, and the potential pitfalls of proprietary technologies that can lead to lock-in and limited choice.

This document is intended to initiate a conversation that will bring together the emerging cloud computing community (both cloud users and cloud vendors) around a core set of principles. We believe that these core principles are rooted in the belief that cloud computing should be as open as all other IT technologies. This document does not intend to define a final taxonomy of cloud computing or to charter a new standards effort. Nor does it try to be an exhaustive thesis on cloud architecture and design.

Cloud computing persuasive essay – Paper Example

Rather, this document speaks to CIOs and other business leaders who intend to use cloud computing and to establish a set of core principles for cloud vendors. Cloud computing is still in its early stages, with much to learn and more experimentation to come. However, the time is right for the members of the emerging cloud computing community to come together around the notion of an open cloud. Multitenant : For an organization having many tenants renting some services. Authors & scientists of various publications: Hartig, Hinchcliffe, Greenberg, Robbins, Gupta & Swaminathan 1. INTRODUCTION

The word Computing means any goal-oriented activity requiring, benefiting from, or creating computers. Thus, computing includes designing and building hardware and software systems for a wide range of purposes; processing, structuring, and managing various kinds of information; doing scientific studies using computers; making computer systems behave intelligently; creating and using communications and entertainment media; finding and gathering information relevant to any particular purpose, and so on. Computing is categorized according to the requirement of the individual or an organization.

The topic I am going to discuss in this paper presentation would be " Cloud computing" dealing as Group and organization . Fig. 1 demonstrates a simple architecture about cloud computing. GENERAL TERMS " Cloud computing" is termed as the next big thing in the modern corporate world, the growing impact is will be seen on enterprise IT and business activities in many large organizations. This paper provides an insight to cloud computing, its impact and discusses the issues that business organizations face while https://assignbuster.com/cloud-computing-persuasive-essay/

implementing cloud computing, It also discusses various strategies that organizations need to adopt while migrating to cloud computing.

Fig. 1 KEYWORDS Cloud computing is very simple and broad concept in which we are using internet which allows people access technology enabled services. It is named so as its representation is always done as a cloud as in a network diagram. In broader context, cloud computing can be said as a large network of computers used by large organizations to provide services to smaller ones and individuals. It is sometimes termed as Grid computing or Network computing. Cloud computing can be said as a Network of providing resource via network " on demand" and " at scale" in an multitenantenvironment.

The resource provider network is called as " Cloud". ? ? ? The wide band's network fast development. The virtualization tech and market's fast development. The hardware's fast development, like CPU and network drives. 2. ISSUES NEEDED TO BE SOLVED I have come across certain issues which arise during the normal stages of computing which are needed to overcome, Let me take each issue one by one: 2. 1 Technical Issues The biggest challenge in cloud computing may be the fact that there is no standard or single architectural method. Common hurdles to be overcomed: Fig. Hartig States " What goes on in the cloud manages multiple infrastructures across multiple organizations consisting of frameworks providing mechanisms for self-healing, selfMonitoring and automatic reconfiguration". The cloud is virtualization of resources so it manages itself. Still there are people required to take care of operating systems, hardware and networking in a proper order, but from the user's or application https://assignbuster.com/cloud-computing-persuasive-essay/ developer's perspective, only the cloud is referenced. We can say cloud computing is the Third revolution of IT industry, following the personal computer revolution.

Cloud computing matters to us as cloud computing and web based are the future of computing in which all of us will interact. Let me give you an examples that in our day to day life, we come across a number of vendors providing cloud computing services such asGoogle, Yahoo, MSN, etc. among web based office applications and onlinephotoand document sharing include flickr and Zoho. By cloud computing, we have the ability to scale to meet changing user demands quickly, usually within minutes. Cloud computing is : ? Environment friendly ? Task oriented ?

Requires no Maintenance It gives user the benefit of separating application code from physical resources and to use external assets to handle peak loads. 2. 1. 1 Security Security is the most important thing for an organization or and company. If a company has a very big portal then we cannot say that the company is really very big but if the security of the company should be well assured that it is safe . Hence, I can say that Security is the most important hurdle for an organization to keep its data & policies undercover so that only the recommended people can have an access to it.

With their business information and critical IT resources outside the firewall, customers worry about their vulnerability to attack. 2. 1. 2 Technical Hardware & Software Expertise Users need equipment and resources to customize cloud computing services more relevant and more tailored to the

needs of their businesses. Proper man-power is needed to develop the applications to suit a business's needs. The availability of physical hardware and software components need to be ensured for realizing the benefits of cloud computing. According to the writings of Hinchcliffe(2009, p. 61), wider technical fluency and expertise in the selected cloud computing platforms, which tend to emphasize technologies such as Open Source or newer webstyle programming languages and application models will have to be achieved. 2. 2 Non-Technical Issues needed to overcome Apart from the technical issues, there are several non-technical issues which require equal attention and need to be resolved. Some of the significant non-technical hurdles to the adoptions of cloud computing services by large enterprises are financial, operational and organizational issues. 1 Reasons to accept Cloud Computing. ? ? ? The fast increase of corporate IT infrastructure requirement. Economy crisis forcing company to cut cost. The fast change and time-to-market requirement of Internet applications. 2. 2. 1 Financial Issues Different people have different opinions on cloud computing, One such report says, Cloud computing can cost twice as much as inhouse data centers. This poses a problem for large enterprises, but actually works to the advantage of small and midsize companies and businesses.

Further reports say that Cloud offerings are most attractive for small and medium-sized enterprises... and most customers of clouds are small businesses. The reason behind this is that smaller companies don't have the option of developing themselves into giant data centers. Greenberg(2009) notes, " Few if any major corporations are looking to replace their data centers with cloud... the ' server-less company' are one that's only feasible for startups and SMBs. " Cost variability is the important aspect of cloud computing.

If cost , transparency, scalability and cost variability is to be considered then a new challenge and opportunity arises for organizations. security through the public cloud. The availability of a robust network and information security is also a challenge. 2. 2. 3. 3 Cost Cost of process change is another hurdle in the transformation. Conventional IT organizations will have to engage with internal customers as well as IT service providers at a different plane. Most importantly, thecultureand mindset and mindset will have to change. 3. PLANNING TOWARDS TECHNOLOGY THE NEW 2. 2. 2 Operational & Organizational Issues

Organizations need to define standards and workflow for authorizations. A strategy for the consumption and management of cloud services, including how the organization will deal with semantic management, security and transactions need to be created. One should evaluate cloud providers using similar validation patterns as one does with new and existing data center resources. According to Gupta (2008), before deciding to switch over to cloud computing, one should fully understand the concept and implications of cloud computing as to whether maintaining an IT investment in-house or buying it as a service.

The organization has to look at the overall return on investment inhouse or buying it as a service. The organization has to look at the overall return on investments as they cannot simply rip off and replace an existing infrastructure. The managers have to look at the short-term costs as well as the long term gains. Finally, a proof of concept should be created which can do a few things including getting an organization through the initial learning process and providing proof points as to the feasibility of leveraging cloud computing resources.

Cloud computing is inevitable and it is a force that organizations and businesses need to quickly come in terms with. As the economic and socialmotivationfor cloud computing is high, businesses which are heavily computer resource dependent need to take cautionary measures and the right decisions at the right time to avoid ending up with unreproductive solutions while migrating to new technologies. According to Robbins(2009), an organization should always make sure that they know what they are paying for and should pay careful attention to the following issues: ? Service levels ? Privacy matters ?

Compliances ? Data ownership ? Data mobility. A number of cloud computing vendors may be hesitant to commit to the consistency of performance regarding an application or transaction. One has to understand the service levels they expect regarding data protection and speed of data recovery. 4. SWITCHING TO NEW TECHNOLOGY 2. 2. 3 Internal Issues While switching to newer technologies, an organization could face many internal issues. Some of them are explained as follows: Switching to newer technology such as cloud computing would be best when the processes, applications, and data are largely independent.

When the points of integration in a business are well defined, embracing cloud services is effective. In an organization where a lower level of security

Cloud computing persuasive essay – Paper Example

will work just fine and the core internal enterprise architecture is healthy, conditions are favorable for the organization to switch to newer technologies. A business which requires Web as the desired platform to serve its customers 2. 2. 3. 1 Distributed business levels The distributed business and the level of consistently reliable computer networks in an organization can pose a challenge towards switching from traditional infrastructure to cloud computing.

The case for an organization to go in for cloud computing is similar to a decision to own or rent a house. An organization which has spent a good amount of cash on its own storage and security systems will have time taking the decision to migrate to dedicated environment. 2. 2. 3. 2 Complexity of applications The complexity of the applications and the technology infrastructure is dependent on how the organization has adopted IT. If this has evolved from the deployment of technologies over a period of time, then the complexity level will certainly be high and in such a case, transformation to cloud computing would be difficult.

Not everything comes under cloud computing as each organization has its own specific requirements suited to their needs whether on functionalities, performance, or maybe even computing in their organizations. Unless they seriously consider making cloud a part of their strategy. References: [1]. Buyya, Rajkumar; Chee Shin Yeo, Srikumar Venugopal, Sudershan Malpani (PDF). Market-Oriented Cloud Computing: Vision, Hype, and Reality for Delivering IT Services as Computing Utilities. Department of ComputerScienceand Software Engineering, The University of Melbourne, Australia. p. 9. [2]. www. gridbus.

https://assignbuster.com/cloud-computing-persuasive-essay/

org/~raj/papers/hpcc2008_keynote_cloudcom p2uting. pdf. Retrieved 2008-07-31. [3] . M. D. Dikaiakos, D. Katsaros, G. Pallis, A. Vakali, P. Mehra: Guest Editors Introduction: " Cloud Computing, IEEE Internet Computing", 12(5), Sep. 2009. [4] San Murugesan (Editor), " Cloud Computing: IT's Day in the Sun? ", Cutter Consortium, 2009. [5] Luis M. Vaquero et al. , A Break in the Clouds: Toward a Cloud Definition, ACM SIGCOMM

ComputerCommunicationReview, Volume 39, Issue 1 (January 2009), Pages 50–55, ISSN: 0146-4833 [6] [7] www. ikipedia. org/cloudcomputing/ www. scribd. com/cloud/cloudppt. ppt/ Fig. 3 and wants to cut cost while benefiting from the new applications, the business can achieve the best competitive advantage in the market. According to Swaminathan (2009. p. 14), to compete effectively in today's world, executives need every edge they can get, from low cost to speed and employee productivity. By tapping into the right cloud capabilities, companies can quickly enter new markets and launch new products or services in existing markets.

When demand grows, they can quickly scale up, and when opportunities dry up, they can just as quickly scale down with minimum waste of time and capital. By using cloud-based solutions such as crowd-sourcing, companies can open up innovation to more employees, customers and their partners. 5. CONCLUSION Cloud computing is a fascinating realm, that makes it easier to deploy software and increase productiovity. However, there are some technical and non-technical realities that make security somewhat difficult to deliver in cloud.

The cloud presents a number of new challenges in data security, privacy control, compliance, application integration and service quality. It can be https://assignbuster.com/cloud-computing-persuasive-essay/

Page 11

expected that over the few years, these problems will be addressed. According to Swaminathan(2009, p. 12-15) and Daugherty(2009, p. 12-15), to be successful, companies should take small incremental steps towards this new environment so they can reap benefits for applicable business situations and learn to deal with the associated risks. In general, Cloud computing will act as an accelerator for enterprises, enabling them to innovate and compete more effectively.

Under the current economic conditions, executives need to rethink their strategies dealing with cost-effective solutions. They need to use the cloud services for the right jobs they require. Today's infrastructure clouds such as Amazon EC2 offer a relatively inexpensive and flexible alternative to buying in-house hardware. They are also beneficial for computation-intensive hobs, such as data cleansing, data mining, risk modeling, optimization and simulation. Businesses and enterprises should now take steps to experiment, learn and reap some immediate business benefits by implementing cloud