

Advantages of Using Cloud Computing by Knowledge Management Personnel

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Abstract

Cloud computing is acknowledged as one of the application that enable by the knowledge management personnel or individual level. With the facility provided by cloud computing, it is vital to encourage individual users to extensively use cloud computing to enhance the performance. The main flaw that have been highlighted by previous researcher is on security as cloud computing can be access from any geographical locations. This paper reviews the literatures related to the benefit of cloud computing at individual or personel level. As a result of review, the benefits of using and applying the cloud computing system by individual or personnel level are important as it is starting from the individual itself on how the successful of knowledge management would be.

Keywords: Cloud computing, Knowledge Management Personnel

1.0 Introduction

Knowledge management personel (KMP) can be identifying as on how the individual manage their knowledge as well as it can be used in the future. According to Zuber-Skerritt (2005), personal knowledge management has been classified as on how individual manage their knowledge in the way for them to quest for learn as well as to better socialize. This statement shared by Doong and Wang (2009), they state that the main goal of the existing PKM is to enable the individual to create as well as organize knowledge which enable the important knowledge from the individual to be keep. As indicate by Kirchner, Razmerita and Nabeth (2009), the idea of PKM include the process where the individual or personel collect as well as identify the important knowledge and next to store the knowledge which enable for them to search and retrieve the knowledge in the future.

Cloud computing as the applications that include platform, software and infrastructure as the services offers benefits for large spectrum of users including knowledge management personel (KMP). The existence of cloud computing is in line with the progress in knowledge management toward more efficient process. This is because, cloud computing enable the knowledge to be store and retrieve regardless the geographical spaces as long as knowledge

seekers and providers are exist (Mona & Sharma, 2014). From this statement, it explain that the existing of cloud computing will give advantage to the users.

As indicate by Aleem and Ryan Sprott (2012), the four common models for cloud computing are private cloud, public cloud, hybrid cloud and community cloud. Other quotation from the literature describing the model of cloud computing with emphasis on the private cloud.

For private cloud, it is where their data is more control (Low, Chen & Wu, 2011) and example of this type of cloud computing is Cancer Research Lab where the sensitivity of the patients data and information. The second model of cloud computing is public cloud which offers with a little degree of control but comes with data efficiency and cost reduction. The other model of cloud computing include hybrid computing where the mixture of two or more clouds in the way to serve for some particular purpose. Lastly, the models of cloud computing is community cloud which the usage is shared by several organizations. In this scenario, the existing of multiple type of cloud computing enable to suit user needs to store the knowledge.

In light of the above, this paper is limiting the scope of the study based on benefit that will get towards user who is using cloud computing to manage their knowledge.

2.0 Literature Review

This section presents the review with respect to the benefit if cloud computing by knowledge management personel.

2.1 Knowledge Sharing

First of all, the benefit is on the application of cloud computing in KMP for knowledge sharing. According to Li, et.al (2009), one of the aims of cloud computing is to enable for the effective sharing to others. Basically, cloud computing will give advantage towards others either individual or group. As indicate by Bruque, Moyano and Maqueira (2015), the existing of cloud computing not only useful to the individual, but also towards companies in the way to manage and retrieve information. In the same time, the existing of cloud computing also enable to generate trusting, collaborative cross-firm relationship and promote supply chain integration. As indicate by Lloyd and Sloan (2011), the usage of cloud computing able to decrease the platform-incompatibility problems and also build fundamental transformation either internal or external collaboration. This is because, the best thing that found in the cloud computing features is, it will enable for the user to share not only files but the entire folders (Mohamed & Pillutla, 2014). Through cloud computing, it will enable for the collaboration tools such as video conferencing and file sharing through Office 365 (Oyelude, 2015). From these statement, it is learnt that advantages of cloud computing will enable to enhance the knowledge sharing between users as well as the individual itself able to speak out their ideas and knowledge towards others.

In making the knowledge sharing to be successful, a person should understand the concept of knowledge management processes and the knowledge sharing process in particular. According to Li, et.al (2009), in the networking environment, it depends on the individual on how they share the knowledge. In this era technology, anyone can share their knowledge through software and hardware application as there is an also synchronous method for example forums and chat room which enable user to make them eager share their knowledge.

In this case, cloud computing will make user know on which place is the right platform for them to share their ideas as well as contribute to the social sharing knowledge environment.

2.2 Mobility

On the other hand, the other benefit of cloud computing into knowledge management is in the aspect mobility. According to Mohamed and Pillutla (2014), mobility means they can access knowledge sources from anywhere and do not have to stand in one places and on a single machine. In this case, the user can access the data either using their personal computer (PC) as well as other portable wireless device as the application is not only tied to the computer in the office. As support by Dhar (2012), cloud computing is technology independent as it can be accessed through any type of devices such as laptop, tablet and mobile phone. In this scenario, user can share their information without any geographic area boundaries and anytime they want to. This is because, information and knowledge not only limit to the office area but also maybe other places such as when they are on their course.

Besides than that, the usage of cloud computing is not limit to the working area only but also within the education area. This is because, the usage can be used either teacher or also towards student. For example, student able to do their homework or assignment from different geographical area such as at home or library in the way to finish their task as well as using multiple platform devices such as through mobile or laptop as long as the devices are connected to the internet.

Moreover, according to Chihande and Van der Poll, (2017), the advantage of mobility is not only realized by cloud computing user, but also towards the whole organization as it enable to enhance the workers' productivity.

2.3 Cost Reduction

Apart from that, the other benefit that will get when applying cloud computing into knowledge management is cost reduction. According to Aleem and Ryan (2012), cloud platform have shown amazing growth by \$46billion market which represent 17 percent from the world software sales. In the same time, through cloud computing usage also enable to reduce cost in the aspect of total cost for the technology ownership.

In the same time, cost reduction is one of the benefits where user will only be charged based on their usage of cloud computing. Through this scenario, it will enable to reduce the cost of the organization especially within current economic crisis conditions (Aleem & Ryan, 2012). As indicate by Dwivedi and Mustafee (2010), using cloud computing also enable for the cost saving benefit as the usage of hardware as well as for the maintenance cost can be reduce. In the other aspect, it will give benefit towards organization as they only need to pay for the online computing resources without involving the presence of people interaction and provider (Brender & Markov, 2013).

Besides than that, the concept of cloud computing also can be used within the education area. For example, teacher can save their time as well as enable to make the learning process more attractive by using technology from any geographical area. In the same time, IT administrator able to eliminate other routine job and from this situation they will have enough time and the

administration able to reduce the number of IT staff as well as able to cut the cost (Klimova & Maresova, 2016).

2.4 Compatibility

The word compatibility for cloud storage can be referred as platform which innovation compatible with any adopter current value and previous practices. As indicate by Calisir (2009), compatibility had been described as the innovation that can be applied towards the user as well as the existing value and previous requirements.

In this modern era, most of works that have been done through traditional and manual way have been changed into technology. In this scenario, this concept can be related to the Technology Acceptance Model (TAM) which the component in the model are including perceived ease of use, perceived usefulness, attitude towards using and behavioral intention to use. For compatibility as well as Information Technology (IT) adoption, it is more related to the perceived ease of use and perceived usefulness (Peng, *et.al*, 2012). As indicate by Sheikhshoaei and Olumi (2011), perceived ease of use can be give definition as there is no effort needed when user are using the technology. Meanwhile, perceived usefulness can be describe as the technology enable for the user to increase their job performance.

Besides than that, compatibility can be classified as one of the benefit from the application of cloud computing into knowledge management personel as nowadays most of the work had been done through technology. Due to this scenario, cloud computing is one of the initiative especially in the way to manage the knowledge. This is because, the features of cloud computing is easy for the user to use and understand as well as it will enable for the organization to follow the current trend of technology without affect the existing legacy information technology systems (Gutierrez, Boukrami, & Lumsden, 2015).

According to Gangwar and Ramaswamy (2015), cloud computing has been designed, tested and maintain before it is being introduces to the public. In the same time, it will enable for the user to use cloud storage in the offline mode if the cloud is down.

2.5 Backup

Information need to be handle properly as it is crucial especially for the decision making process. Through the usage of cloud computing, it will give benefit in the aspect of backup. In this case, backup is including the scenario such as natural disaster and also hardware is infected by virus.

In the same time, cloud storage do not only limited to one stand places and single hardware to make it function. In this case, for example if there is any natural disaster or infection of virus that occur towards the computer at the office, they do not have to worry as they can access anywhere from any geographical area and the information are safely saved. As indicate by Klimova and Maresova (2016), user can access the data that stored in the cloud at all-time no matter what happen to the user's physical devices.

According to Aleem and Ryan (2012), there are variable of cloud storage that is available nowadays such as DropZone and Mozy which offering low range for cloud storage. In this

situation, no matter either big or small companies can use cloud computing applications especially in this economic crisis era.

3.0 Methodology

Methodology have been identify as analysis method of study and effective way to solve issue that occur (Rajasekar, Philominathan, & Chinnathambi, 2006). The data that have gain for this study is from combination of multiple studies that relate to the advantages of using cloud computing by knowledge management personel.

The articles were selected is based on the related issue and from online database that have been subscribed by UiTM such as Emerald, Science Direct, IEEE and from free online database; Google Scholar.

Articles that have been search for this studies is by using string or keywords most on Personal Knowledge Management and Cloud Computing. In the same time, articles are selected based on the content that is close to the issue on advantages of using cloud computing by knowledge management personel.

4.0 Discussion

This study describes the benefit towards the user who uses cloud computing in the way for the knowledge management. The benefits are including either towards worker in the organization as well as towards student to gain new knowledge from the lecturer.

Besides than that, compatibility was found to be one of the benefits when applying cloud computing into knowledge management. Compatibility has been discussed as the innovation is compatible with the previous and current practices. In the same time, it is needed for the innovation to be compatible as previous knowledge might be needed for the future use and references. It will be useless if the innovation is only focusing for the future use and leave previous knowledge which might be useful and avoid from the same mistake occur.

Apart from that, cost reduction and mobility have been the two most benefit that have been discussed by authors. This is because in this economic crisis era, most of the organizations especially find initiatives in the way to manage the knowledge as well as able to reduce the cost and in the same time able to improve the organization productivity. Most of the authors have issued cloud computing as one of the initiative to manage the knowledge as there are cloud computing which they only need to pay when they use. Second, organization only needs to pay for the online computing resources without involving the presence of people interaction and provide. In this case, it is where the user does not need to spend money such as on hardware as well as facilities and utilities to make it operate. With the usage of cloud computing, the organization able to save their capital and operational expenses to the minimum as the cost for cloud computing comes with zero in house server requirements. Due to this scenario, the organization able to reduce the cost as the least of non-promises environment able to reduce cost on operational such as air conditioning and the power as well as on administration cost.

For the aspect of mobility, it is where the user can work from any geographical spaces in the way to manage the knowledge as long as there is any internet connection. Due the benefit of mobility, business able to offer flexible working perks towards their employees as well as the employees can enjoy their work life balance within anytime and any geographical spaces. In

the same time, it will also enable for more productivity as they can share ideas right away after they got inspiration and not only within working hours and spaces.

Moreover, findings also shows that the implementation of cloud computing is basically based on the social support and requirements. As indicate by Gangwar and Ramaswamy (2015), cloud computing needed support and cooperation between the users in the way to make cloud computing will give function towards its full potential support. In this scenario, in the way to make the social support between user are well function, first it is needed for them to understand on how to use the cloud computing. Training and seminar on cloud computing should be given especially towards baby boomers who are less exposed to the current technology world. In this scenario which is joining training and seminar, only a few staff should be sending for the training. Then, the knowledge which they have gained from the training can disseminate towards others such as through knowledge café and storytelling. In the same time, in the scope benefit of social support, the existing of cloud computing enable for the formation of network within other individual in the way to share the resources of information can be more even faster. In the same time, the existing of economic crisis and competitive advantage from the provider enable for them to retain their client as well as able to offer geographical spaces of technological solutions.

Lastly, the literature also discuss on backup. Backup is including the aspect of the situation such as natural disaster for example flash flood and tsunami which might harm the hardware. In this benefit, the author has discuss that although the hardware have affect by natural disaster, user do not have to worry about their information as within cloud storage, it can be accessed anywhere from any geographical area as the information are safely saved and not only saved on single hardware that they are using.

5.0 Conclusion

Based on the literature review that have been made, the five benefit of using cloud computing by personal knowledge management are including social support, mobility, cost reduction, compatibility and backup. For the social support, it is means as the application enable for them easier to share knowledge while for mobility means they can able to use cloud computing in any geographical spaces and time. Next, for cost reduction, it is where the price to use the technology is more flexible compared to the traditional software license as for example it is only need to pay per use. In the same time, for the compatibility it is where the innovation can be applied towards the user as well as the existing value and previous requirements. Lastly, backup is including the scenario on planning disaster recovery and the hardware is infected by virus as cloud computing can be access from any geographical spaces. By using cloud computing, it will enable for the organization especially in response to increase the digital solutions as well as able to compete with other advanced organization.

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