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Kikelomo Obayemi

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Blog Post: Emerging Trends in Information Systems

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Separate individuals : Kikelomo Obayemi

New Journal Entry



Cloud Computing: Technology versus Risks

Sunday, 25 July 2021, 10:33 PM

by Kikelomo Obayemi

Edited by Kikelomo Obayemi, Sunday, 25 July 2021, 10:35 PM

Cloud computing has garnered a lot of interests from organisations and IT enthusiasts in recent times. Cost management initiative which is a key success factor of an organisation is one of the main drivers of cloud computing adoption. When the topic is mentioned, what attracts a potential user is the ability to enlarge business capacity without making huge investments in IT infrastructure or securing licenses for expensive software (Knorr & Gruman, 2008). This, of course is a win but what else should we know?

History

The first public cloud computing solution was achieved by Amazon Web Services in the year 2000 but made available in 2002 (Kittelmann, 2014). AWS became the

Blog Post: Emerging Trends in Information Systems

Topic: Identify an emerging trend in information systems research and development

Instructions to students:

- Identify a specific area

business capacity without making huge investments in IT infrastructure or securing licenses for expensive software (Knorr & Gruman, 2008). This, of course is a win but what else should we know?

History
The first public cloud computing solution was achieved by Amazon Web Services in the year 2002 but made available in 2006 (Varghesse, 2019). AWS became the pioneer of Infrastructure as a Service (IaaS) but other competitors like Google and Microsoft emerged shortly after with their solutions: Google App Engine (GAE) and Microsoft Azure were both released in 2008 (Qian et al., 2009)

Concepts
According to Beimborn et al. (2011), there are 3 main cloud computing concepts: Platform as a Service (PaaS), Infrastructure as a Service (IaaS) and Software as a Service (SaaS). SaaS as the name implies provides services that completely run on the cloud to users, PaaS aims to provide the technologies (tools and libraries) that are used to deploy SaaS applications while IaaS provides computing resources such as data storage and networking to users, all achieved through virtualization. (Carretero & Blas, 2014)

Now the risks
Despite the wins of cloud computing, there are a few security risks and challenges that should be addressed. Cloud users' loss of control of data has given rise to data protection concerns in the following areas (Liu et al., 2015):

- Loss or breach of Data by CSPs which is a top concern
- Data storage and transmission under several regulations due to the distributed nature of CSP infrastructures.
- Cheap access to users' data.

Other concerns noted by Liu et al. (2015) are virtualization threats and possible lack of transparency on the part of the CSPs.

Instructions to students:

- Identify a specific area of research and development in information systems.
- Your post could consider the emerging technology and its implications.
- Review the references and reading provided.

You should demonstrate that you understand the topic covered and ensure you use references to



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