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Innovative M-commerce Approaches with Cloud Computing

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Abstract: Technological innovations have already started to gain momentum within the past decade in M-commerce platform. Mobile espousal has revolutionized the e-commerce. The aim of this paper is to investigate how Cloud Computing is effective to M-commerce. The cloud computing is one of the latest technology in computer & information era. The customers are more benefited to have their space and trade security with cloud innovations. Business are expanding and reforming or conducting mobile trade for better prospects. There are many industry segments which are benefited with the use of cloud computing. Emerging M-commerce with cloud computing can open new phase of trade records with hi-fi data storage approach. The mobile can perform many basic and advance E-business tasks for greater availability operational data from anytime, anywhere. A conceptual model is proposed on the analysis of m-commerce user data. Cloud Computing impression underpins the conceptual model and helps to explain some of the findings from the study. This paper emphasis on promoting solutions for the issues of small and large scale enterprises. This include security of data travel through network and data available at specific resources. This research include one of the Cloud computing service to identify the solution of data storage in m-commerce trading through Data as service.
Keywords: M-commerce, cloud computing, diversity, Database as a service

I. INTRODUCTION

It is about the online business transactions which involve applications for goods and services trading. M-Commerce is popular in use of information and communication technologies in order to achieve different chains in business relationships[1]. The mobile handheld devices are responsible to carry out communication, inform transaction and entertain using various forms of data through public and private networks in m-commerce[2]. The globalization of business is become popular due to dynamic features of mobile devices. This feature include easy mobility, less costing compare to traditional approach, any time- anywhere availability.

The one of the application as GPS has provide many convenient way of location based information sharing. Mobile phones are started used as an ATM or debit card for several applications as payment option, entertainment, content distribution and business services. The new opportunities are created for the mobile service providers as well as for users with M- Commerce[2]. Various unified forces are impacting as driving factors of mobile commerce. The latest social trends are very popular where everybody is connecting with others via mobile society for better and quick communication. Other force like technological advancements itself is very powerful for spreading economical alertness in global market. One of strong driving force element is the success of the electronic commerce[3] for mobile commerce. User/Customer expects more convince transaction day by day. User/customer are habituated to perform their day to day tasks with e-media[4]. The user demands for quick and secure services for extensive transactions which is one step ahead from e-form. mobile form is next to e-form. Mobile communication is extensively required for various factors affecting business. These parameters are conventional force point as cots, time and availability. Users expects that the content should be loaded and delivered to them anytime through an instant access. Taylore mentioned that 80% of world's population is engaged with Mobile phone. The mobile phone networks is one of the busiest network [5]. These features of m-commerce are become mandatory in many fields to survive many types of business in today's competitive environment. M-commerce transaction for sales, purchase, services, resource sharing, product popularity, time base notification, location base services are increasing very extremely day by day.

A. Key Issues in Mobile Commerce

Along with benefits there are some issues of M-commerce. M-Commerce need to deal with issues like Secure transaction, restricted numbers of devices and supported application, Location base business issues, Ethical practice for certain types of business, data privacy, data storage, product usability & availability, trustful environment [5,6]. Further issue are from the point of view is security. The customers may have doubt about the secure transaction compare to e-Commerce. [5,6]. These all are the issues which

affect the operability of m-commerce. One of the major issues data rendering. Data rendering may affect the network traffic and it may Couse further complications in transaction. The m-commerce applications required to build with specified constraints to overcome, this study focus on issues related to data storage over the network.

B. Cloud and Its Types,

The data management, processing & storage is very impressive in Cloud computing. It provides better facility for all these with the various types of network instead of local server or a personal computer. It also use remote servers hosted on the Internet [7]. Cloud are divided into four types as Public, Private, Hybrid & Community. Many industry is adopting Cloud computing for their business explorer. Cloud technology is become popular to provide consumers data storage and computing services. It manages transaction in a secure, fast and convenient way [8]. The Business are free to customize their network, , service and infrastructure related resources as per the demand [9]. Many author agrees that the cloud computing is a dynamic computing environment where scalability is key important features to give virtualized resources through Internet as part of various services [10].

C. Cloud Computing Approach for M-Commerce

The Proposed approach highlights the combination of m-commerce and cloud computing. The integrated approach argues about the time & data storage better usability in said environmental. This factor influencing individual business as well as group of business in heterogeneous platform. Now a day's internet is not far aware from mobile device. This is the reason why m-commerce is propagating very quickly. M-commerce encourage the use of mobile trading and purchasing. The proposed M-commerce architecture with Cloud computing focus on data storage utilization with cloud service. Any product ordered from online portal provide a specified data storage for future usage for future transaction. The proposed model is diverse storage ssytem based on Database as a service (DaaS). This service is specialized type of storage which will improve database capability. The data of many users is kept on cloud through DaaS as multi-tenant platform. We can apply diversity fundamental for DaaS for managing n-numbers of users' data. The user will get data storage by mobile application with DaaS mobile diversity. The diversity data storage will be executing another way to the server where user data is classified and store on cloud for the data analysis. This diversify storage of data can lead many alternative way of M-Commerce enhancement services. Any relevant information can be provided through cloud computing on demand access. One of the main issues of infrastructure management about data storage is tackle with the use of DaaS. The M-commerce activities and cloud computing is becoming the choice of various small and large scale enterprises in the prospect of scalable data storage. The diversity Storage which manage uses' data from cloud as well as from personal to remote server is very large dataset. The shared resources can analysis the need of wide range of product transaction for future business growth.

II. RESULT DISCUSSION/M-COMMERCE WITH CLOUD COMPUTING

The integrated working of M-Commerce with cloud computing will result high profit in commercial organization

A. Commercial organization can determine location base product launching with the use of analysis of diversify data storage.
B. Commercial organization can determine about the most busiest products transaction analysis
C. Commercial organization builds ability to organizations to analyze their data. They can also determine the changing needs of the customers.
D. Commercial organization can remain competitive in the market as per data flow of transaction
E. Commercial organization can allow open information access to others companies from past to current and current to past
F. Commercial organization can take technological advancements by infrastructure sharing

III. CONCLUSION

Cloud computing is needed for M-commerce application for better performance of business. The integrated approach provides abundant openings for established or new business. The M-commerce integrated with cloud computing provides better businesses sustainability with competitive edge. M-Commerce with benefit of cloud is more portable, quick, secure easy to access, less costlier than E-commerce. Especially it is popular to reduce time to order. Mobile commerce with current trends technology in Cloud Computing propositions a global scope for small and large scale business. Diversity data through DaaS may enhance rich environment for providing efficient data storage with minimum investment and better data management. This paper has examined how cloud computing is adopted by an M –commerce and why an individual may be influenced to use this technology faster.

REFERENCES

[1] Barnett, N., Hodges, S. and Wiltshire, M. (2000) 'M-commerce: an operators manual', McKinsey Quarterly, Vol. 3, pp.163–173.

[2] Snowden, S., Spafford, J., Michaelides, R. and Hopkins, J. (2006) 'Technology acceptance and m-commerce in an operational environment', Journal of Enterprise Information Management, Vol. 19, No. 5, pp.525–539.

[3] Wymbs, C. (2000) 'How e-commerce is transforming and internationalising service industries',Journal of Services Marketing, Vol. 14, No. 6, pp.463–478.

[4] Min Wu "Cloud Trust Model in E-Commerce" Proceedings of the Second International Symposium on Networking and Network Security (ISNNS '10) Jinggangshan, P. R. China, 2-4, April. 2010, pp. 271- 274, ISBN 978-952-5726-09-1 (Print).

[5] Taylor, P. (2007) 'Money transfer by mobile phone plan', Financial Times, October 19, Vol. 8, London.

[6] S.Krithika, M.Moorthi (2013) "Prediction of M-Commerce User Behavior by a Weighted Periodical Pattern Mining". International Journal of Advanced Research in Computer and Communication Engineering Vol.2, Issue 6, June 2013. IISN (Print)- 2319-5940, IISN (Online)-2278-1021.

[7] Danping Wang "Influences of Cloud Computing on E-commerce Business and Industry" Journal of software Engineering and Applications,2013, 6, 313-318.

[8] Xiaoyanyang, Tiejun Pan, Jingjing Shen "On 3G Mobile E-commerce Platform Based on Cloud Computing" 978-1-4244-6709-9/10 2010 IEEE.

[9] E.M. Hanna, N. Mohamed, and J. Al-Jaroodi, "The Cloud: Requirements for a Better Service," In 2012 12th IEEE /ACM International Symposium on Cluster, Cloud and Grid Computing (CCGrid), pp. 787-792, IEEE, 2012

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