A STUDY ON CLOUD BANKING SYSTEM -AN OVERVIEW

[1] Anumol P T
[1] M Phil Scholar
[1] Sri Ramakrishna College of Arts and Science For Women, Coimbatore

Abstract : Due to the advancement in science andTechnology just like any other sector banking Sector is also coming under a serious of changes. Information technology plays an important role in the modern world. As banking sector is also considering customers as the king they have to react to this new customer driven environment by bringing innovations in the business models and operations. Cloud banking is a platform offers a new way of experience. Present study aims at understanding the types of cloud computing models, cloud services difference between cloud computing and cloud banking, benefits of cloud banking, to understand cloud computing model, to understand the risk management model, to know about the challenges faced etc .

***IndexTerms*- cloud Banking, cloud computing, information technology.**

I. INTRODUCTION

The banking industry is facing unprecedented changes. The use of technology by the customers is one of the main reason for this banks have to react with this changes in customers. The value proposition for cloud computing effects the entire banking business.It is just a matter of time before all financial institutions move their technology to cloud. It is a method for delivering information technology services in which resources are retrieved from internet through web- based tools and applications.At first when cloud computing was adopted it brought a serious of issues but later on it has become much more mature.

II. CLOUD COMPUTING DEPLOYMENT MODEL:

1. Public clouds: It enable the services from 3rd party providers over a network. The data and processing may be located anywhere in the world on infrastructure and is shared with the cloud providers i.e., other customers or tenants.
2. Private clouds: It is built by applying virtualization within banks own data centers. It is not exposed to external tenants.
3. Hybrid clouds: It is a combination of public and private clouds depending on the sensitivity of the data and applications in each process. Most of the banks prefer hybrid clouds as it is located within the bank and operated by third parties.
4. Public sovereign cloud: It is an emerging variant.It keeps and process the information within a specific jurisdiction. It has a data protection regulations forbidding personal data from passing beyond national borders.

III. CLOUD SERVICES :

1. Infrastructure cloud structure: It is also known as infrastructure as a service (IaaS). These service provides pay-as-you-use access to infrastructure resources . this facility includes servers, storage or network devices, that consumers configures and controls.
2. Platform cloud services: It is also known asplatform as a service (PaaS).These servicers provide computer capability and a predefined middleware stack that is typically structured for developers or advanced IT users.
3. Application cloud services: It is also known as software as a service (SaaS). This service is a predefined application such as CRM andERP, which is typically delivered via a public cloud provider consumers with multiple organizations share a single application instance, with virtualization technologies employed to segregate customer data and maintain privacy.
4. Business process cloud services: It is also known as Business process as a service (BPaaS). This service combines application cloud services and the shared services model in which a single organization delivers business services, such as employee benefits management, help desk, wealth management,risk management,treasury management,retail banking etc..,
5. Channel services: It supports different channels such as ATM,call center, mobile, online, telephone, video etc,.the service are tailored per channel, built on a channel-specific technology stack with some shaing across channels via bridging technology.
6. Security : It supports the Authentication, Authorization,security, privacy,and Access control in a cloud environment
7. Scalability: It provides a visibility into resource utilization, operation performance,network traffic etc..,.It enables the employees of different branches to access trading and banking system.

IV. DIFFERENCE BETWEEN CLOUD COMPUTING AND CLOUD BANKING:

Cloud computing is an umbrella term that outlines an internet based computing system consisting of a large number of things, such as infrastructure, access to applications, software, processing power etc….Cloud computing is the delivery of computing services, servers, storage, database, networking, software, analytics and more over the internet. Cloud computing is the use to perform the virtually provided shared computer processing resources and data to computers to other devices on demand.It requires higher processing power. It is essentially targeted towards business.It has the ability to work onand transform the data.Some of the benefits of cloud computing includes:Cost efficiency,Operating Speed, Global scale, productivity, performance and reliability.

Cloud banking is the use of cloud storage. Cloud storage is a service in which the data is remotely maintaine ,managed and backed up. It allows the user to store file online. Thus the users can access them from anywhere at any time with the help of internet. It is managed by cloud storage service provider. It is only a data storage medium and requires more storage space, It is utilized both for professional and personal reasons.some benefits of cloud storage are Usability,bandwidth,accessibility,disaster recovery and cost savings etc..,

V. BENEFITS OF CLOUD BANKING:

1. It gives an opportunity to standardize IT across an organization. It makes banking transactions more straight forward for the regulators so that they can have a clear picture about the organization.
2. Cloud based banking improves the efficiency in decision making and policy implementation. It brings a single format , increases security and effective evaluation of matter.
3. Cloud banking helps in easy scaling of processing capacity and react to the changes in customers demand.
4. It embraces the team - based collaborative culture of modern organizations.
5. It increases the velocity, elasticity , availability etc…
6. It is cost effective as it allows the bankers to save capital expenditure. It helps banks to focus on core banking functions.
7. It leads to workload optimization by increasing the compute capacity and reducing the overall cost.
8. Using cloud computing ,the non crore business processes can be outsourced to vendors who operate on shared services delivery models, while still meeting data privacy requirements.

VI. CHALLENGES IN IMPLEMENTING CLOUD BANKING:

Like any other large-scale platform, design and development platform comes with its own challenges in different dimensions. With current matured cloud service providers most of the risks can be mitigated. The following are the key challenges faced when implementing cloud banking

1. There is a problem of data residency requirements. Handling the data for subsidiary bank branches located overseas is difficult.
2. Compatibility of application for cloud computing or options for porting them into the cloud is another challenge.
3. Business process availability is key for smooth operations. Using a cloud based model, networking adds another dimension of complexity for business availability. Banks are operating in rural and urban areas so network latency can be an inhibitor in such areas.
4. Data privacy and security is another challenge faced by banks while moving to public cloud.
5. Vendor lock in, platform lock in, data lock in and tools lock in.
6. Data storage and management is a critical issue especially in financial matters.
7. Governance is another problem. Some governance issues can be managed by enterprise and others should be managed by cloud service provider.

VII. SCOPE FOR FURTHER STUDY:

Cloud computing as a computing paradigm has existed just for a few years while considering that the genera technologies supporting the cloud computing have existed for many decades. In this regard the scope for further research is enormous. There exists a great requirement for more research and case studies to evaluate the adoption of technology particularly those relating to the adoption of cloud computing.

REFERENCE:

[1] Kerravala,Z2012,'why cloud computing needs a cloud – intelligent Networks', cloud computing has arrived, Chennai, india, pp2-3.
[2] Ibm.com/services/cloud
[3] www.opengroup.org