

A REVIEW OF CLOUD BASED TECHNOLOGY IN BANKING SECTOR

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ABSTRACT

The number of people using cloud computing for both personal and professional purposes has been steadily increasing over the last several years. This kind of computing has been met with scepticism by financial institutions, mostly due to a number of security concerns and the possibility of uptime failures. Because of this, it is imperative that the banking industry do research into the cloud model as a potential new method of computing. This article examines the benefits and drawbacks of cloud computing and attempts to address the topic of whether or not financial institutions will use cloud computing in the foreseeable future. Cloud computing is a sophisticated tool for information technology that enables a person or organisation to make use of the internet for the purpose of transforming into powerful hardware and software programmes and tools. This tool may be used by anybody. These days, cloud computing has made its way into the banking industry.

Keywords: *Cloud computing, Banking, Technologies, E-Banking*

INTRODUCTION

Over the course of the last several years, we have gained the knowledge that cloud computing is a major and ever-evolving instrument for practically every aspect of both our personal and professional lives. People are utilising cloud-based e-mail services, document storage, calendars, and note-taking applications at a rising pace every single day, and a large number of them probably aren't aware that their data is being saved in the cloud. Because of the decreased expenses involved with building and especially maintaining the applications utilised throughout a company's day-to-day operations, cloud computing has become increasingly beneficial to companies. This is because of the fact that these costs are minimised. Nevertheless, this specific form of processing has traditionally only been available via banks. According to what they indicated, the key cause was due to the fact that the vast majority of cloud solutions were unable to achieve the uptime standards for their most vital services. Nevertheless, the security of the data has been and continues to be the primary concern. In this day and age, when there are several cloud implementations and variants, would it be feasible for the banking sector to migrate some or all of their information technology operations to the cloud?

Cloud Computing

Cloud computing is the activity of connecting several computers to a single server in order to share the server's resources for the purpose of running software and offering various services. It is a new sort of computing that makes advantage of resources that are spread out in different locations. Cloud computing has a number of benefits, the most prominent of which is scalability. This suggests that a company that makes use of an external

cloud is able to add and remove resources from their system according to the requirements of the business. This suggests that a cloud service provider's resources are able to be redistributed to a number of different customers at different times, which is beneficial from the provider's point of view.

utilising data that is stored on an external server and is accessible over the internet is an example of "computing in the cloud," which refers to the technique of utilising such data. When someone refers to "ubiquitous, convenient, on-demand network access," they are referring to access to a shared pool of customizable computing resources (such as networks, servers, storage, applications, and services) that can be promptly supplied and released without any administration effort or contact from service providers.

These resources include networks, servers, storage, applications, and services. Over the course of the last several decades, there has been a steady increase in the speed at which computers and digital networks can transmit data, and this is a logical result of that expansion. Eighty-eight percent of the EU-based financial institutions that were polled in June 2015 were already employing cloud-based services, and a few of the smaller banks either have migrated or are in the process of moving their whole core services (treasury, payments, retail banking, corporate data, etc.) to the cloud. Cloud computing is already extensively utilized by banks for applications that are not considered essential or vital, such as human resources, email, customer analytics, customer relationship management, as well as development and testing. This article explores the connection between banks and technology, offers an overview of the cloud model, identifies the benefits, costs, and hazards connected with the model, assesses strategies for risk management, and projects what the near future holds for cloud computing in the banking sector.

OBJECTIVES

1. To Study Cloud-Based Technology in Banking Sector.
2. To Study Cloud Banking Given the Most Reasonable Money Transfer with Safety Transactions.

Scope of Cloud Computing on Banking & FinTech

Thanks to cloud computing, people working in the banking industry now have the opportunity to connect directly with their consumers. Cloud computing enables digital service providers to maintain accurate records of customer interactions regardless of the location of the customer or the time of day. Because of the internet, many services, such as storing, preserving, and accessing information, have become easier, and this is true for both bank employees and clients. Computing in the cloud is a technology that is easy to put into action and link with all of the services that are offered by the banking system. Because of this, the amount of time and effort that the user needs to devote is cut down significantly by cloud computing.

The advent of cloud computing has made it feasible for financial institutions to place a greater focus on business models that are centered on clients and digitalize trading and wealth management. This has been made possible as a result of the fact that financial institutions may now store data on the cloud. The use of cloud computing gives companies the ability to develop multi-channel interactions with their customers across all aspects of service delivery. The vast volumes of data that the firm generates may be safely stored, backed up, and retrieved with its assistance. The technology of cloud computing makes it very easy to carry out a broad range of operations, such as the distribution of software, the transfer of data, the updating of already-existing material, and the recovery of data that has been lost. These duties include not just storing data but also retrieving data that has been lost and updating data that already exists.

The use of cloud computing solutions that are more effective in terms of cost also helps to increase the turnover of financial institutions. For the banking industry to maintain its level of competitiveness, it is necessary to meet the ever-increasing need for data input. It is vital to explore the systems that do not rely on the migration of linked systems in order to guarantee that there will be no interruptions when the infrastructure is updated. This may be accomplished by looking into the systems that are not tied to one another. Concerns about the reliability of cloud computing, as well as the legal and security risks associated with it, have resulted in the slow adoption of this computing model by financial institutions. The manner in which clients interact with financial organizations like banks is being gradually but inevitably transformed by cloud computing.

The financial technology business is continuing to see considerable growth while also maintaining that growth over time. This growth may be attributed to the developments that have been made in cloud computing. It is possible that the CAPEX and OPEX budgets will be decreased as a result of FinTech, which will also enhance the service portfolio and the experience for customers. The most important aspect of cloud computing is the mitigation of risks that are connected to the data center and the structure of the cloud itself. All measures will be taken to ensure the confidentiality of sensitive information. It is also helpful in performing risk assessments for the organization, which allows management to focus more of their time on operating the company rather than worrying about maintaining the confidentiality of sensitive data.

Advantages and disadvantages of cloud banking

The following is a list of the different advantages/benefits and disadvantages/limitations that come from the banking sector's practices including cloud computing.

Cost-effective

The upfront costs associated with purchasing and installing new hardware and software in data centers are significantly reduced thanks to cloud computing. Because of this, the banks are forced to concentrate more on their banking duties.

Feasibility

The utilization of the data is made simpler by cloud computing services. It is possible to take advantage of a substantial quantity of data stored in banks. The use of cloud computing makes it easier for banks and other financial institutions to meet the varied requirements of the banking industry.

Reliability

The infrastructure of the cloud is quite dependable. The use of cloud computing ensures that information is backed up in its entirety. Additionally, data may be retrieved very easily at numerous redundant places simultaneously. The data stored in hybrid cloud models has the highest possible level of protection. The data that is kept on the cloud is encrypted very securely, which eliminates any and all security risks that may be present in banks.

Productivity

Cloud computing reduces the amount of time wasted on activities such as racking and stacking data in storage facilities, which results in a gain in productivity. Through the use of cloud computing, the program will handle any and all responsibilities inside the bank that are associated with the data.

Advantages in Regulatory and Compliance

The use of cloud computing offers several regulatory advantages. The data may be totally protected by the vendor, or the vendor can provide access to some of the data. This guarantees that the restrictions in the database are adhered to. Every single bank and every single financial institution will entirely digitalize by using cloud computing. This is because it is anticipated that by the year 2020, cloud storage will be used to connect businesses that are worth a total of 162 billion dollars.

Comparison of cloud banking and traditional banking

It's not the first time we've heard this bit of information: the future belongs to Internet banking. The convenience of being able to access your financial information whenever you want, wherever you are, with just the press of a button gives customers of online banks the appearance of having all they could want in a financial institution. However, internet banking is not appropriate for all customers, and the distinction between the two is becoming less clear as more financial institutions strengthen their online presence in order to remain competitive. In order to assist you in making a decision, we contacted Richard Barrington, a senior financial analyst at MoneyRates.com, and asked him to compare and contrast the benefits of keeping your cash in a conventional bank with those of having it in an online bank.

Security

According to Barrington, this should not be a concern for those who are considering moving their banking activities online but do so out of fear. Even the most conventional banking institutions keep all of your financial data in large data centers that may be susceptible to attack by cybercriminals. According to him, "Data theft is a very real risk in today's world, but unfortunately, as a consumer, it does not come down to whether you choose to bank online or not."

If you utilize the FDIC's Bank Find tool to make sure that the online bank you pick is FDIC-insured, you will be protected from losses of up to \$250,000 just like any other bank client. It goes without saying that you should never do any online banking transactions while connected to a public or shared WiFi connection since this is the situation in which your information is most likely to be stolen.

ATMs

Barrington advised customers to research the locations of an institution's automated teller machines (ATMs) before opening an account with that institution since banking is all about having access to cash when you need it. According to Barrington, "You want to make sure that you choose a bank where the geographic footprint of their ATM network is similar to your regular movements," The ATMs of traditional banks, such as Chase and Bank of America, may be found all throughout the main cities in the United States. Online financial institutions, such as Simple, often negotiate fee-free cash withdrawals with a variety of ATM networks, including Allpoint. And most of the others will pay their clients, up to a certain limit, for using ATMs that are not part of their network.

Online banking institutions provide customers with a number of alternatives to choose from when depositing paper checks. You always have the option of mailing cheques in, but the majority of online banks now provide something called "e-deposits," in which you can just snap a photo of the front and back of each cheque and

upload it to your account in order to make a deposit. Although there are many individuals who would still prefer to deposit a check with a teller rather than through text message, the option to do so is now available. "People are checking their balances and getting information online," said Barrington, "but when it comes to depositing a check, they'd much rather hand it to a teller." "People are checking their balances and getting information online."

Interest rates

Because they do not have physical locations, online banks are able to avoid the costs associated with maintaining brick-and-mortar branches, which allows them to offer more competitive interest rates. According to the findings of a recent survey by MoneyRates.com, internet banks have interest rates that are around six times higher than the average rate offered by traditional banks. Ally Bank, American Express Bank, and Sallie Mae Bank had some of the top rates and products, respectively.

Banking in the cloud

The rapid rise of cloud computing is prompting a paradigm shift in the way that banks and other financial organizations approach the utilization of their information technology resources. Up until this point, technology has typically posed a costly obstacle for financial institutions, particularly those in developing markets where it has either been impossible to develop customized solutions or invest in advanced banking platforms, or where the result has been an excessive number of failures, an excessive amount of resources used, and an excessive amount of time wasted. Cloud computing, which in the most fundamental of terms offers unlimited computing resources as a service on a pay-per-use basis, is proven to directly translate to less upfront, capital expense and reduced IT overheads, offering a cost-effective and simple alternative to accessing enterprise-level information technology without the associated costs.

Cloud computing offers a cost-effective and simple alternative to accessing enterprise-level information technology without the associated costs. Because of cloud computing's capacity to make enterprise-level banking systems and related technologies accessible in the cloud on a pay-per-use basis, there are no longer any restrictions connected with this technology. Anyone, anywhere in the world may now have access to banking systems without the expense and other requirements that were previously in place. When it comes to businesses that provide financial services, the most essential benefit of cloud computing is very clear: the capacity to grow on demand without the need to acquire labor-intensive and costly equipment. Cloud computing provides a number of appealing benefits.

Kindly add the current (2019) status of Banks using Cloud Services:

CONCLUSION

The cloud is not yet generally embraced as a new paradigm for IT infrastructure in the banking industry, but this is slowly beginning to change. In the years to come, financial institutions will make significant investments in the cloud. However, customer relationship management (CRM) and human resources (HR) analytics are

likely to be the first activities to be managed over the cloud. It is unmistakable that financial institutions are investigating cloud computing and maybe even already basing part of their operations there. The private cloud environment is going to be the most attractive model, particularly in the beginning phases of its adoption. The private cloud could benefit from having some backup power provided by hybrid and community clouds. It is still unknown whether or if the public cloud will be connected with those systems, as well as to what degree this integration will occur.

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