

# CLOUD ADOPTION IN INDIAN BANK

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**Abstract :** Cloud computing is adopting that uses data stored on an external server, accessed via the Internet. It's defined as unique, convenient, on-demand network access to a shared pool of configurable computing resources that can be rapidly provisioned and released with minimal management effort or service provider interaction. It is an evolutionary result of the improvements in digital networks and computing speed over the last decades. Banks are already widely using cloud computing for non-core and non-critical uses, such as human resources, e-mail, customer analytics, customer relationship management, and development and testing. While a few smaller banks either have transferred or are in the process of transferring entire core services. This brief looks into the relationship between banks and technology; presents an overview of the cloud model; outlines the model's benefits, costs and risks; discusses risk management strategies; and predicts what the near future holds for cloud computing in banking.

**IndexTerms-** Customer analytical, Cloud computing, Customer relationship management.

## I. INTRODUCTION

Major transformations are creeping in, when considered the Indian Banking sector. Economic growth and overall growth in banking industry is expected to be boosted by end of 2015. Innovation and implementation of technology has created awareness in this sector and many have already been moving towards upgradation of system for technological advancements Banks like HDFC, ICICI, and AXIS and many others are soon launching contact-less credit card with Near Field Communication (NFC) technology, it specifies that we could now make easy transactions without insertion or swiping of cards, now that sounds cool. Well! If banking in India is making so many improvements it is not anyway behind in its step towards Digital India. I hope you have seen my previous. Abandoning traditional banking methods now this sector is making a new turn, Cloud computing technology in banking sector is also on the rise. Previously it was reluctant to readily embrace innovations in India, but after the awareness and elucidation of related myths, it has been seen that Cloud is becoming favorite amongst banking industry. More businesses are adopting cloud computing. In fact, according to the 2010 IBM CIO study, "Sixty percent of CIOs plan .Cloud—up from thirty-three percent two years ago. "Today, cloud technology is not just a tool being used in IT, but a paradigm shift to an entirely new business model. For banks, the value proposition for cloud computing affects the entire business. Cloud technology offers a new model for delivering innovative client experiences, effective collaboration, improved speed to market and increased IT efficiency. Cloud deployments are spreading and the technology is proving to be secure.

## II BANKING INDUSTRY TRENDS:

With the rise of existing and new, non-traditional competition banking faces a changing business landscape. Satisfying customer demands has become more complex as customers demand more convenience and control over their banking services. At the same time, regulators are ushering in a new era of government oversight. Banks currently face challenges in a number of key areas. Capital inadequacy that depresses profit margins Emboldened customers who expect rapidly evolving new services and offerings Fierce competition for customers has spawned industry consolidation and the entrance of nontraditional firms Changing business models have shifted from product centric to customer-centric Enhanced regulation increases government oversight and intervention Increasing social and government pressure for financial inclusion To drive growth and innovation in banking, it is increasingly necessary to dramatically leapfrog the competition using IT and business model transformation. Google Wallet, Apple Wallet, PayPal and others are driving billion dollar revenues. However, many of today's existing bank payment solutions are 30 years old. These established solutions have served the industry well, but problems now exist. Transaction volumes and regulatory compliance burdens also increase operational risk. The dramatic changes taking place in banking require new ways to maximize profitability and returns. By modernizing and transforming older back office systems into modular building blocks, banks can create a flexible and agile banking environment that can quickly respond to new business needs. "Globally, ninety percent of financial services clients surveyed I believe they need to transform from the status quo for future profitability Cloud computing is revolutionizing ecosystems in multiple industries, and banking is no exception. Cloud technology offers secure deployment options that can help banks develop new customer experiences, enable effective collaboration and improve speed to market—all while increasing IT efficiency. Cloud adoption is growing rapidly because it can be made secure for business. In fact, according to the IBM 2010 CIO Study Sixty percent of CIOs plan to use Cloud—up from thirty-three percent two years ago."<sup>2</sup> However, in developing or updating a bank's cloud strategy and infrastructure.

### Driving sales and profitability:-

A mortgage company implemented a cloud-based integrated collaboration mortgage solution, so customers can apply and complete loans electronically. Instead of going into a branch, customers can initiate, review and sign applications electronically through services delivered over the cloud. The solution not only improved customer satisfaction, but also helped the mortgage company reduce loan application processing times from seven days to 24 hours. It also reduced the loan closing process time to 10 to 15 days, compared to the typical industry figures of 30 to 45 days, which gives the mortgage company a competitive advantage. The solution also contributed to a thirty-four percent increase in loan volume, reduced errors on the mortgage applications, lowered overall costs and increased annual revenues. In banking, customer focus enterprises deliver a superior customer experience by engaging customers in insightful conversations. Banks aren't just providing a pleasant banking experience. Because of cloud

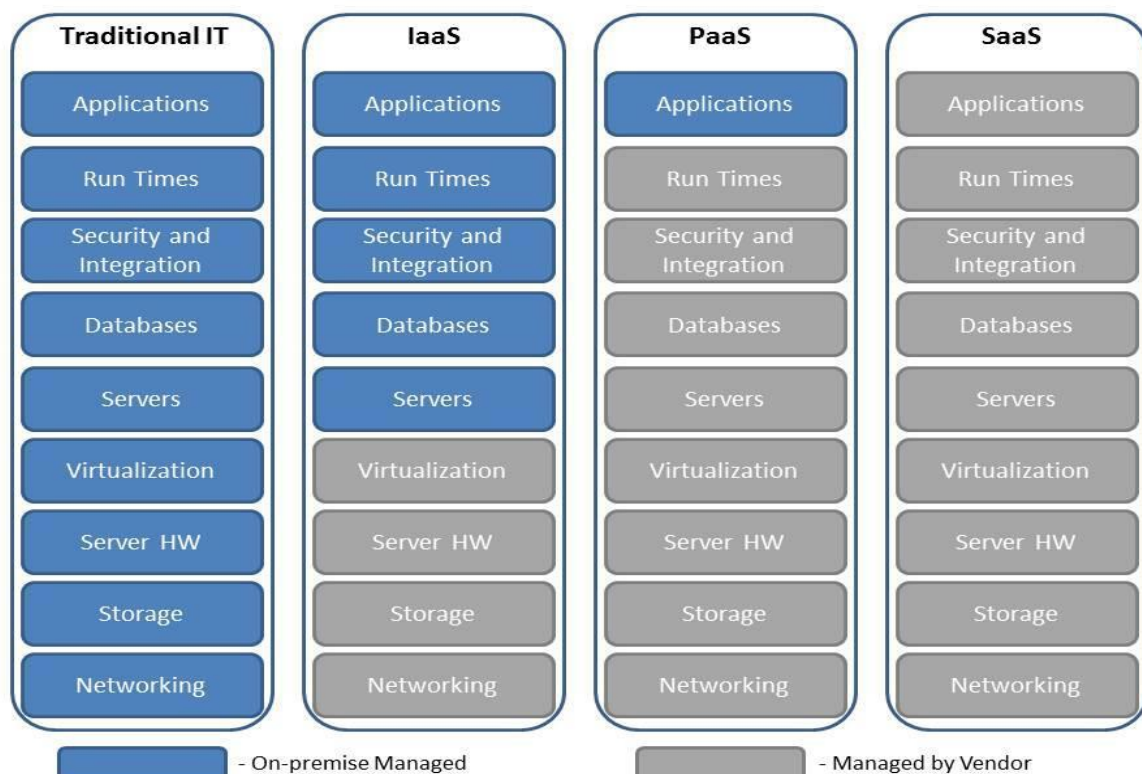
applications, they can now offer a consistent, cross-channel experience, much like customers receive from retailers and airlines. Additionally, the business model transformation enabled through cloud can help banks accelerate and optimize the capture and analysis of multi-channel data to allow banks to better monetize customer relationships, not just transactions.

**Bank as technology companies**

Banking technology was mostly manual until the mid-20th century, when computers were brought in to automate and speed up processes. The first computer in banking was introduced to process checks in 1955. Since the late 1950s, banks have relied heavily on in-house mainframes and server farms for data processing. In the 1980s and 1990s they started using personal computers (PCs) to interact with the mainframes, replacing the older terminal technology. The use of PCs has allowed access to external networks through the web and e-mail, while the explosive growth of the Internet and mobile computing has led to online banking, bringing tremendous flexibility and convenience to customers, while lowering costs. For example, the annual number of noncash payments in the U.S. is more than 122 billion and increases by more than 11 million per day. However, this has also exposed banks’ data ever more to security breaches. For example, the value of unauthorized transactions per year is around \$6.1bn. However, the predominant occupations found within credit intermediation and “management of enterprises and companies,” which covers bank holding companies, do not include computer scientists and programmers. This influences the corporate cultures of banks, as they are, in part, molded by the requirements of their industry 3 —competitive environment, customer requirements, and societal expectations. If banks are not information technology companies in the traditional sense of the word, despite their high technological intensity, the question of whether they might be losing out by not focusing on core competencies, including having core services on the cloud, becomes very pertinent. As each bank tries to answer this question, it will be weighing control vs. transaction costs related to two alternatives—using in-house data centers and software or cloud computing for core services.

**III CLOUD COMPUTING SERVICE AND DEPLOYMENT MODELS**

There are three main cloud computing models: Software as a Service (SaaS), Platform as a Service (PAAS), and Infrastructure as a Service (IAAS). SaaS allows use of a provider’s applications on a cloud infrastructure. The consumer does not manage or control the underlying cloud infrastructure including the network, servers, operating systems, storage, or even individual application capabilities, with the possible exception of limited user-specific application configuration settings (Chart 3). PaaS gives users more control as it allows them to deploy onto the cloud their own or acquired applications, as long as they have been created using programming languages, libraries, services, and tools supported by the provider. IaaS allows consumers even more control, as it provides consumer processing, storage, networks, and other fundamental computing resources to deploy and run arbitrary software.<sup>4</sup> According to Cisco, 45% of the installed cloud computing workloads in 2014 used the SaaS model, 42% used IaaS and 13% used PaaS. Cisco forecasts that by 2019, SaaS will account for 59%, IaaS for 28% and PaaS for 11%.<sup>5</sup> Banks are already using SaaS for non-core services in cases when they are able to outsource business processing, such as billing, payroll, or human resources, and are actively exploring moving more critical services to the cloud, but so far, only relatively small banks have transferred the entirety of their core services onto the cloud. When they have done so, they have relied on the PAAS or IAAS models.



#### IV CHALLENGES OF CLOUD BANKING

The Indian banking industry is facing considerable challenges right now. Firstly, the levels of Non-Performing Assets (NPAs) are rising and fast becoming a crisis, especially for public sector banks. The numbers are staggering. Twenty-nine state-owned banks wrote off a total of Rs. 1.14 lakh crore of bad debts between 2013 and 2015. This is more than the amount written off in the preceding nine years. Needless to say, this has had a significant impact on their profitability.

At the same time, banks need to deal with changing customer expectations driven by the digital revolution. India has over 200 million mobile internet users who shop, watch movies and chat online. Not only do they expect to be able to bank online, but they demand a seamless experience across devices and channels. With little differentiation in products, superior customer experience is a critical driver for competitive advantage. However the current infrastructure places severe limitations on banks' abilities to deliver outstanding customer experiences.

The gap has also spawned a host of financial technology start-ups. Powered by advanced technologies and agile business models the fintechs are growing rapidly, delivering disruptive services that thrive on superior customer engagement. These companies present a real threat to banks because they can potentially eat away a significant chunk of their revenue and this is where cloud computing comes in.

Cloud technology can help banks improve profitability while also transforming their customer engagement model. By providing nearly unlimited hardware and software resources on a pay-as-you-go basis over the Internet, cloud computing drives down costs and enables innovation. Cloud also gives banks the ability to respond quickly to changing market, customer and technological needs, which is an important competitive edge.

#### V CONCLUSION

Technological developments have now made cloud computing readily available and cheaper, but the terms of the transactions in the long run will be heavily influenced by the balance of power between banks and cloud computing providers. As the number of banks will likely be larger than the number of cloud computing providers, in the absence of efficient regulation and competition, banks could end up in a situation where the providers dominate, and thus increase prices or renegotiate contracts to the detriment of banks. Cloud services take a standardized form of raw computing power, so if the transition is planned and managed well, the low asset specificity can keep switching costs low, thus improving banks' bargaining power.

All of this makes it difficult to predict if, when and how banks, especially those considered as technological leaders, will move core services to the cloud, but it is very likely that the trend of small banks transferring core services to the cloud will continue and intensify. The larger banks are likely to transition services onto the cloud step by step, diving deeper into the cloud application in areas such as human resources, customer analytics and customer relationship management, development and testing, and in some cases, payments, all the while continuously assessing trade-offs. Ultimately, the trip to cloud nine will be different for each bank.

#### REFERENCE:

- [1] [www.wikipedia.com](http://www.wikipedia.com)
- [2] Indian economy
- [3] [www.indexcel.com](http://www.indexcel.com)
- [4] [www.internationalbank.com](http://www.internationalbank.com)