

## CLOUD TECHNOLOGY APPLICATIONS ON RURAL BANKING

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### ABSTRACT

ICT are transforming all human activities, including agriculture which is the mainstay of rural India. ICT is a powerful and productive system which can accelerate economic and social development in rural areas. We discuss in this issue, how this new age technology is helping rural India live a better life. Cloud computing can be helpful for the rural development in terms of rural population in overcoming the huge costs incurred the infrastructure and software. It can be lead rural area development as well as economic progress of nation. In India 73% population lives in the rural areas and villages . The cloud computing to reduce price will create a world without poverty.

### 1. INTRODUCTION

ICT is transmits information and knowledge to individual to widen their choices for economic and social empowerment. Importance of ICTs for Rural Development in national development, countries across the globe have put in place mechanisms such as Universal Service Funds and other forms of Government intervention to achieve Universal Access to ICTs. ICTs people in rural areas can connect with the local, regional and national economy and access markets, banking/financial services and employment opportunities. India still breathes in villages and this becomes obvious when the fact is taken into consideration that more than 700 million of its population reside in about 636 thousand villages of this country.

### 2. SIX BIG BENEFITS OF THE CLOUD:

**2.1 Less Cost:** Cloud computing means banks will not have to invest heavily in dedicated hardware, software and related manpower. It is much easier for them to update their IT infrastructure and the cloud's modular, pay-on-demand model means they pay only for the hardware and software they need.

**2.2 Improve flexibility and scalability:** Cloud gives banks the ability to respond quickly to changing market, customer and technological needs. They can scale up and scale down technology according to requirement. The ability to respond quickly will be an important competitive edge.

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**2.3 Increase efficiency:** Banks will enjoy improved efficiency ratios and operating leverage. The standardisation inherent in the cloud could makes it easier to integrate new technologies and applications in the future. Because technology and business operations can be much more closely aligned, the cloud gives banks a golden opportunity to drive out complexity.

**2.4 Serve clients faster:** Cloud computing makes new and bundled products and services easier to develop and launch, either on a stand-alone basis or in partnership. It eliminates procurement delays for hardware and software. Banks will be able to boost computing power to meet demand peaks and provide the latest treasury solutions without needing to worry about whether the technology is up to date. Corporates will be able to access bank systems using web browsers from anywhere at any time.

**2.5 Good client relationships:** The combination of big data and potentially unlimited computing power will allow banks to develop systems capable of providing better insight into clients and make better decisions on their behalf. Services could become more customised.

## 3. PROPOSED SYSTEM

The cloud plays a key role in the bank's efforts to transform its business and operating model. From a technical viewpoint, the cloud automatically assembles, integrates and configures technology resources to meet business goals. In business terms, it eliminates the need for a physical infrastructure to be present at each location from where the bank operates,

thus making it easier for the bank to deploy services rapidly and at a lesser cost. Owing to its enhanced computing power and capacity, the cloud can store information and real time data about customer preferences that can help a bank in product and/or service customization. Using this stored information, the banks can personalize customer interactions and offer their customers a unique experience. The cloud can also help banks to streamline operations. By aligning business, operations and technology, it enables banks to drive higher growth and profit margins and increased flexibility. The cloud also helps banks to scale up IT resources on-demand for expanding its business operations. Banks can also respond to customer and market demands much faster and rapidly adjust processes, products and services to suit the changing needs. This creates an environment of innovation, competitive differentiation and also speeds up time to market. Banks are offering Internet banking and moving the payment function to the cloud, simply because of the great promise of cost savings, efficiency and reliability. By moving the payment function to cloud, banks can fend off the threat of disintermediation from Telco's and other mobile payment service providers. Payments are a huge source of revenue for the banks and banks will not let it go off that easily. Moving payments to the cloud not only eases the pressures on the bank from the point of view of managing an entirely IT setup for this but also benefits their customers.



**Fig 1 Rural Banking in India using Cloud Computing**

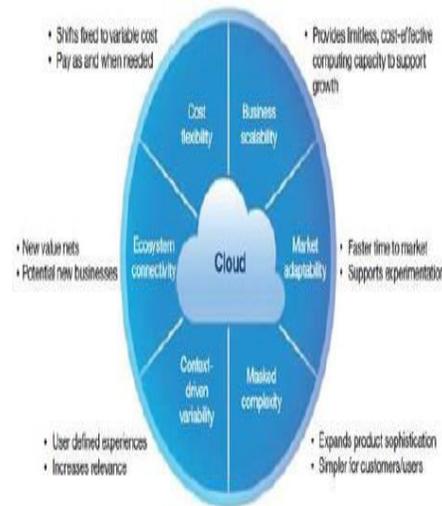
#### 4. THE FIVE MAIN CHALLENGES:

**4.1 Security and compliance:** Maintain at all times the security of data. Banks need to demand stringent safety measures from suppliers and ensure new applications meet the latest and most rigorous security standards. Service Level Agreements (SLAs) are a must.

**4.2 Reliability:** It ensure that applications and data are always available in the event of a natural disaster or an unpredictable event. Banks need to have stringent SLAs in place, complete with guarantees, end-game scenarios and remedies if a provider fails to meet service levels.

**4.3 Cloud management:** To achieving visibility and measuring performance are harder to do, especially if, as seems likely, large banks will source cloud services from several providers and to use them for both internal – or private – and external, or public, services. This could result in a bank having to handle multiple security systems, and the need to ensure all parts of their business can communicate with each other and where necessary with clients. Increased use of various technology infrastructures

and a mix of different cloud environments internally and externally mean banks will need to develop fully-fledged cloud management platforms. They will be a necessity to ensure banks can fully realise the cost savings and flexibility benefits of cloud computing.



**Fig 2 Cloud Computing Business Models**

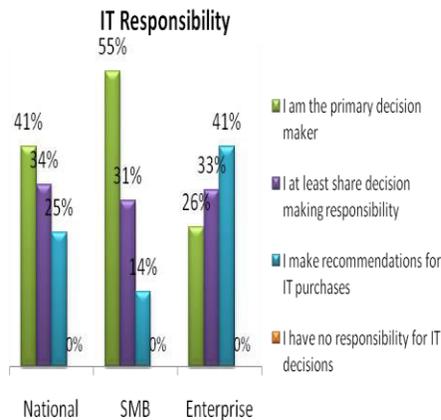
**4.4 Interoperability:** Banks will need to ensure data and applications can be moved across cloud environments from a number of providers. They should look to develop a single interface and management layer that can work across different platforms internally and externally.

**4.5 Regulation:** The rules governing the cloud vary from country to country. Many countries' data protection laws impose constraints on where data is kept, limiting take-up. This is why the EC's move to regulate the cloud is welcome.

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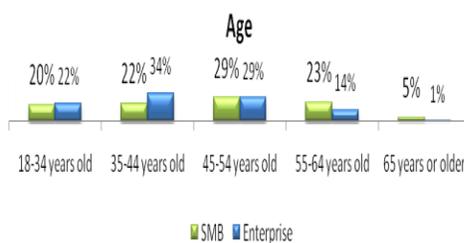
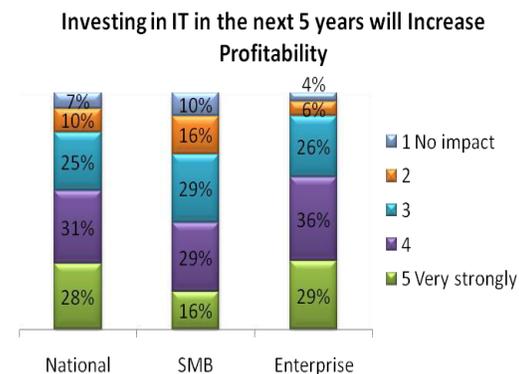
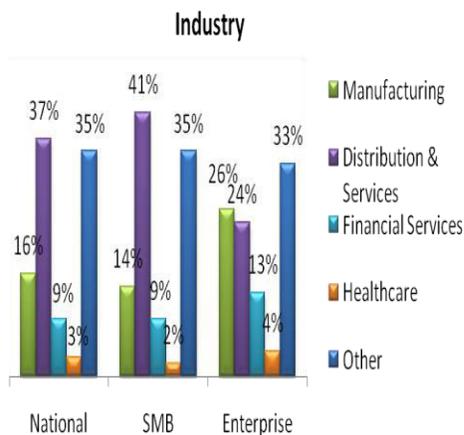
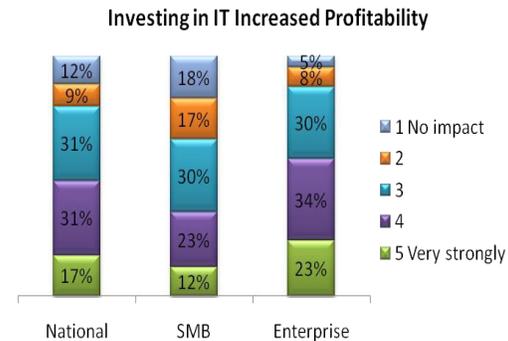
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## 5. RESULTS AND ANALYSIS



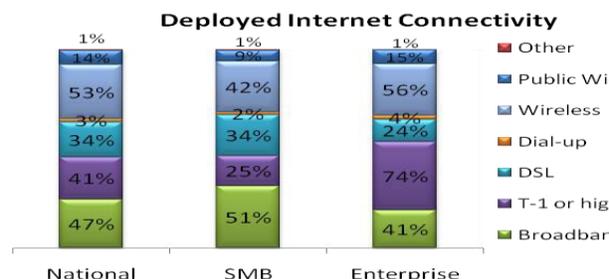
### Investing in IT Promotes Profitability

More than one-third of SMBs and more than half of Enterprise companies surveyed agree that investing in IT increased profitability.



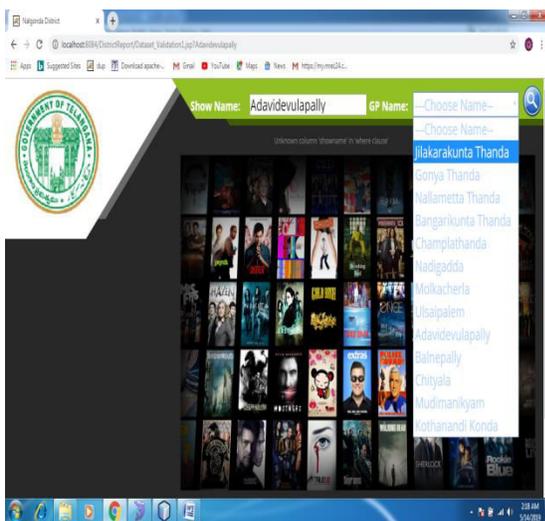
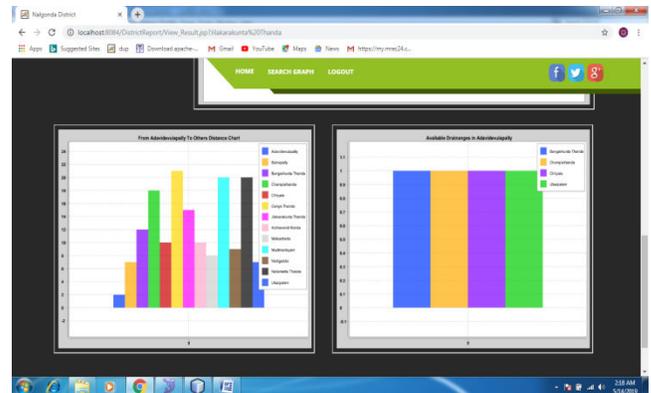
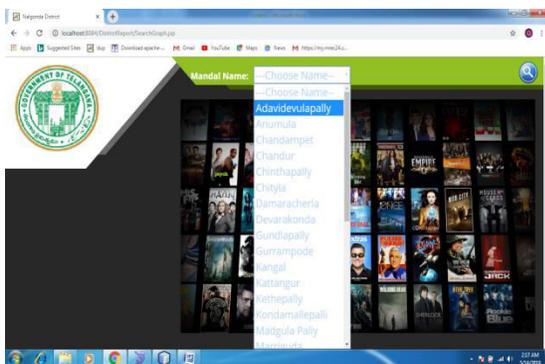
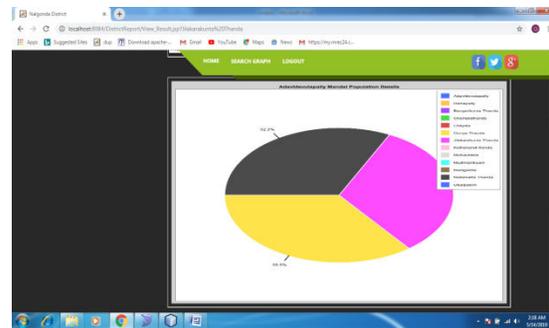
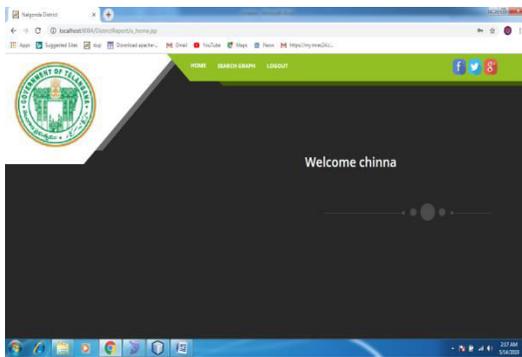
SMBS agree that the IT department must present an opportunity for the company to grow in revenue (68%) and address the requirement to work anywhere at any time (66%), while Enterprise companies are more concerned with addressing internal clients' needs (82%) and business process issues (82%).

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## CONCLUSION

In future, Cloud technologies along with analytics, mobile technologies and big data will enable banks to unlock value from existing data and processes to address risk management and drive customer engagement. By advantage on standard development processes, scalability and collaboration enabled by the cloud, the banks will be able to create new and Innovative product and service offerings for their customers. The cloud architecture also offers flexibility in deployment models, thereby; enabling banks to become more agile and respond to market changes must faster and transform their businesses. As far as security in the cloud is concerned, in many cases, the security mechanisms put in place by global cloud providers may actually be stronger than those in many banks'

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internal systems. The future of banking in the cloud holds great promise.

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