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# Green Banking: Support and Challenges

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Abstract: The disastrous impact of recent storms, floods, droughts, and excessive heat that many people have experienced around the world, motivate us to think seriously about global warming and its impact and to do whatever we can to address this problem (IDRBT, 2013). Governments, enterprises, and people, all have roles to play in combating global warming and building a sustainable environment. A good thing is that there is now greater awareness and a growing commitment to address environmental problems we face. Bank is also not the exception for this. This article tries to find out the ways and technologies to Go Green through 'Green Banking' and what are the confronting challenges to Go Green concept in banking sector.

### Ι **INTRODUCTION**

### CONCEPT OF GREEN BANKING

Green Banking is an umbrella term referring topractices and guidelines that make bankssustainable in economic, environment, and socialdimensions. It aims to make banking processesand the use of IT and physical infrastructure asefficient and effective as possible, with zero orminimal impact on the environment. Considering the nature of banking processes and infrastructures, guidelinesfor greening banking are:

- 1. Greening Processes, Products. Services, Making andStrategies: day-to-day businessoperations, banking products and servicesgreener by following simple practices and makingthem environmentally friendly. These include adopting appropriate ways to use renewable energy, automation and minimizing their carbon footprint. In the past few years, all the banks have incorporated paperless technologies in their internal operations to help the environment as well as provide their customers efficient and better services. In their day to day business operations, banks ordinarily generate carbon emissions through the usage of paper, electricity, stationary, lighting, air conditioning and electronic equipment. Green banking internal operations include on line account opening, online banking, mobile banking, SMS banking, net banking, EFT as well as the use of ATM, cash and cheque deposit machines, credit and debit cards, e-statement SMS alert, image statement etc.
- Greening Infrastructure: Making IT infrastructure 2. (including data center) and physical infrastructure (including buildings)greener and taking initiatives so that a bankcould itself generate electricity for its own consumption.
- 3. Green Finance: Green Finance refers to banks that provide financial assistance to environmentally reduction projects to reduce external carbon emissions. The bank support industries that are

resource efficient and emit low carbon footprint. Priority is given to financing eco-friendly business activities and energy efficient industries such as waste water treatment plant, waste disposal plants, bio-gas plants, renewable energy projects, hybrid car projects and so on.

### MAJOR BENEFITS OF GREEN BANKING TO **CUSTOMERS**

Green Banking comes with a bundle of benefits such as -

- ••• Cash back will be credited to all existing account holders shifting into Green.
- \* Cash back will be credited to all new customers opening 'Green accounts '.
- $\dot{\cdot}$ Rationalization of paper use by giving free access to do all the banking transactions throughInternet Banking, SMS Banking, Phone Banking and ATM Banking.
- $\dot{\mathbf{v}}$ Free Electronic Bill Payment Services.
- \* E-Remit services for remitting funds to the customers' home country which is a uniqueservice.
- E-Statement will be generated and sent to the customers' email.
- \* Online Account opening form for opening Green Account.
- \* Customer can opt for Go Green through various channels through Online Banking, Branches and Call Centre.

### II. TECHNOLOGIES THAT CAN SUPPORT **&ENHANCE GREEN BANKING**

### 1. VIRTUALIZATION

Virtualization can enhance green banking. Virtualization is the construct of Information Technology (IT) assets that hides the tangibility of physical assets and boundaries from end users. An IT asset may either be a server, a client, storage, networks, applications or Operating Systems (OS). Fundamentally, any IT building element responsible projects. The purpose is to provide canbe abstracted from end users. Proven industry case financial assistance to green technology and pollution studies advocate that virtualization helps in controlling grows, butmost importantly, it cost as the business brings flexibility which provides an organization with an



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added advantage. It helps to adjustswiftly and respond ADVANTAGES OF CLOUD COMPUTING to dynamic market ecosystem. Virtualization not only a. supports IT but enables businesses as it influences new storage, networks and operating system forms of applications and is also used as an enabler of Infrastructure as a service (IaaS) model. cloud computing and helps in buildingmobility.

It helps in redefining boundaries between IT components, platforms and operational processes and supports business agility by empowering IT to enable components across all platforms from mobile, desktops, servers and storage.

It helps in adoption of contemporary applications, trends and platforms at a greater speed, and does more with limited resources.

# ADVANTAGES OF VIRTUALIZATION

**Cost optimization:** Virtualization significantly a) reduces cost by enhancing productivity of IT administration, reclaiming network ports, sizing data center **3.** BYOD and MOBILITY capacity for effective utilization, etc. 'Hardware Consolidation', asenabled by virtualization, is an important driver in reducing the cost.

Green IT/Reduced power consumption: IT b) assets consolidation, as facilitated by virtualization not only takescare of physical resources, but also scales down the requirement of resources leading to significant saving ofpower.

c) **Business** agility and responsiveness: Virtualization is changing traditional, rigid, complex infrastructurecomprising of physical servers, storage, and networks into a virtual ecosystem that IT can utilize dynamicallyto tackle new challenges, and open gates for new business opportunities. Major business organizations havebeen able to enhance IT scalability, manageability, and responsiveness exponentially by consolidating multipleIT physical assets into a fewer assets.

d) Speed up deployment: Less hardware implies less infrastructure elements on which newer deployments needto be carried out. This is achieved by replicating deployment on virtualized IT assets with the help of host andguess operating system concept.

Enhanced resiliency: Beyond tangible benefits e) such as cost optimization, organizations are also adoptingvirtualization for improved business continuity and disaster recovery (BC/DR).

### **CLOUD COMPUTING** 2.

Businesses demands innovation, agility and flexibility of operations by reducing excessive processes, a. technologyoverhead, IT overheads and maintenance Green banks will be screening their customers and operations. Cloud computing, emerged as a key naturally, they'll be limiting and restricting their business technology whichenabled convenient, on-demand access to those entities that qualify. With a smaller pool of to pool of configurable computing resources (e.g., networks, servers, storage, applications and services) that to support them. If they focus their loans oncertain can be rapidly provisioned.

layer depends on thedatacenter b. The foundation technologies and hardware, which make use of Apparently, it takes 3 to 4 years for a typical bank to start virtualization. Cloud offers benefits for all type of business making money. Many greenbanks in business today are requirements.

Consolidation of hardware & software, servers, through its

b. Availability of platform to businesses through sets of toolsand services designed to offer development and deployment of applications through Platform as a service (PaaS) Model.

c. Ability to offer applications designed for consumers/end user delivered over the web through Software as service (SaaS) Model.

Cloud computing is considered as an extension to virtualization, wherethe hardware used to deliver the virtualized instances is not owned byorganization but by a third-party and the instances are accessed through a service model.

The need for BYOD and mobility arises with the demand from users and business groups to compute and communicate using devices of their choice, in and out of the physical boundary of the office. Enterprise mobilityfacilitates use of mobile devices and technologies, enabling its workforce to remain connected to corporateresources, partners, clients, suppliers etc. irrespective of their physical location or access network. In recent times,

Enabling mobility requires a combination of mobile devices, wireless connectivity, applications and portals tofacilitate information exchange. Further, solutions for securing this information exchange by controlling accessto corporate resources and authenticating devices, or securing the device or applications are required. Withmobility, the enterprise data and information will be increasingly accessed from outside its physical boundary.

This adds to the challenges of IT function as they now need to secure transactions and interaction on the mobilityplatform. The devices used may either be purchased by the end user themselves, or be corporate owned or partly financed by the organization. However, in all cases safeguards have to be built into the mobility architecture toensure protection against the ever-changing security landscape.

### III. CHALLENGES TO GOING GREEN

# **Diversification matters**

customers, they'll automatically have a smaller profit base industries, they open themselves up to being much more vulnerable to economicshifts.

# These banks are still startups

very new and are still in startup mode. It doesn't help that



thesebanks are trying to get their footing during a recession.

### c. Banks are "specialized"

The main goal of a green bank is to do good by supporting those who are takingcare of the environment, which involves money. Saving the environment does not necessarilyequate to "making a profit". Hopefully though, this premise is proven wrong in this case andthat green banks prove that they can survive, even as they face restrictive requirements fordoing business.

# d. **Operating expenses and costs are higher**

Green banks require specialized talent, skills and expertise as well, due to the kind ofcustomers they are servicing. Employees, such as loan officers, need to have additionalbackground and experience in dealing with green businesses and consumers. Plus, givingbreaks to such clients via discounted loan rates can eat at their profit margins.

# e. **Reputation Risk**

In all likelihood, due to growing awareness about environment safety, banking institutionsare more prone to lose their reputations if they are involved in big projects, which areviewed as socially and environmentally damaging. There are also few cases whereenvironmental management system has resulted in cost savings, increase in bond value etc.(**Heim, G** et al, **2005**). In few cases the environmental management system resulted inlower risk, greater environmental stewardship and increase in operating profit. Reputationrisks involved in the financing of ecologically and ethically questionable projects.

# **OTHER REASONS**

a. Lack of RBI mandates as main barrier to adopting sustainability.

b. Majority of banks identified 'risk of failure of business to peers'.

- c. Unavailability of skilled employees.
- d. Insufficient budget to train employees.
- e. Complex reporting framework
- f. Lack of interest shown by customers and investors

# CONCLUSION

It should be the responsibility of Banking, Financial Services, and Insurance (BFSI) sector to work together in creating a greener and sustainable environment.Banks are responsible corporate citizens. Banks believe that every small 'GREEN' step taken today would go a long way in building a greener future and that each one of them can work towards to better global environment.

So Green banking will help in creating awareness to business people about environmental and social responsibility enabling them to do an environmental friendly business practice. Still a lot of channels are unutilized by the Indian banks for greening their activities.

Moreover they could adopt the green practices only in selected branches due to many existing challenges.

### REFERENCES

- [1]. Starogiannis, D (2006) "What is Environmental Responsibility of Banks" UNEP FI Conference, June.
- [2]. Green Banking Framework (2013) by IDRBT
- [3]. A STUDY OF GREEN BANKING TRENDS IN INDIA by Dr. Nishikant Jha1 and Shraddha Bhome2
- [4]. Annual report of State Bank of India 2013-14.
- [5]. Jha N., Bhome S. (2013). A study of green banking trends in India. International Monthly Refereed Journal of Research In Management & Technology. Vol-2; May ISSN – 2320-0073
- [6]. Ray Vareen, 'A Green Dream', 4P's Business and Marketing, 21 Nov to 4 Dec 2008.
- [7]. Leslie D Monte, 'It's Times for Green Banking', Business Standard, May 21, 2010.
- [8]. IDRBT Publication, August 2013