



*FIBAC 2014*



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*Digital India:  
Emerging Challenges & Opportunities for the  
Banking Sector*



**Harun R Khan**  
**Reserve Bank of India**

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# Outline



- Digital Revolution: migration from cash to electronic payments
- New Thrust Areas: mobile banking – BBPS - TReDS
- Security vs Convenience
- Challenges & Opportunities for banks
- Concluding Thoughts

# Migration from cash to electronic payments

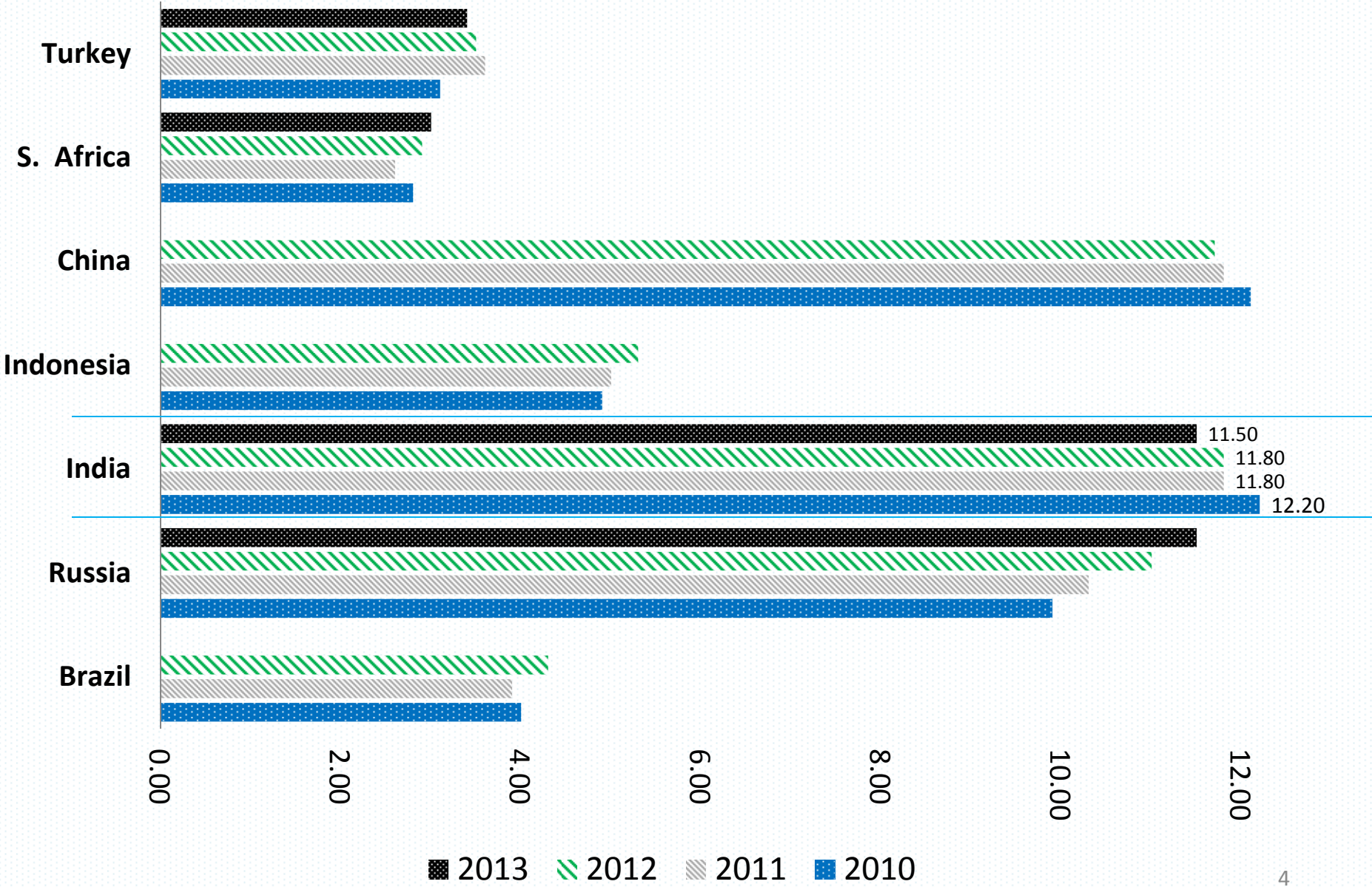


- The Payment Systems Vision Document 2012-15 of the Reserve Bank portrays a renewed commitment towards provision of safe, efficient, accessible, inclusive, interoperable and authorised payment and settlement systems in the country.
- The Vision Document recognises the challenges that exist in the form of predominance of cash payments, lack of penetration of modern electronic payment systems in rural and semi-urban areas, challenges to financial inclusion and migration of government payments to electronic modes as well as other infrastructural issues

*Focus on migration in the retail segment (individuals), businesses and government agencies*



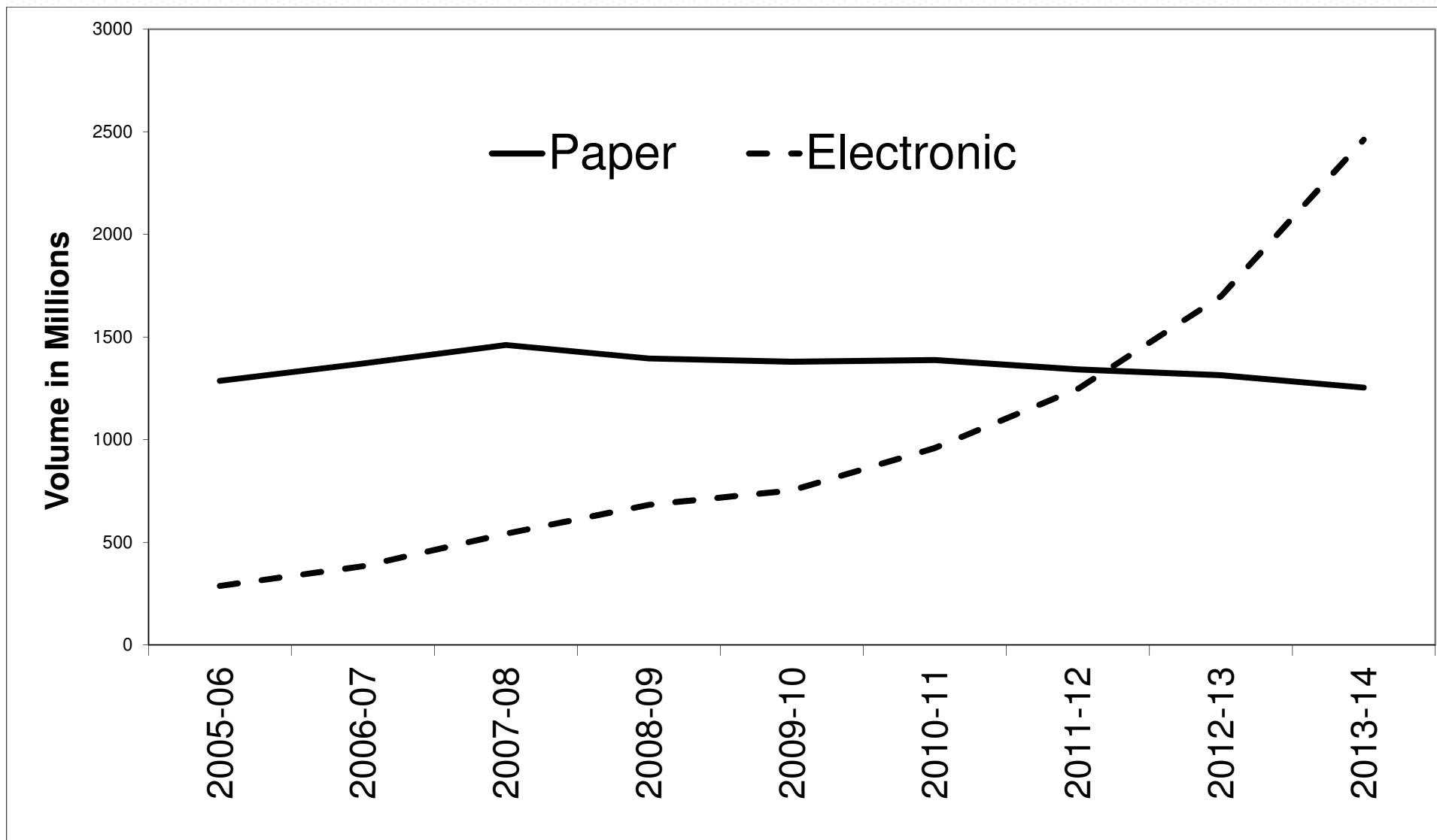
# Currency in Circulation to GDP Ratio



# Recent trends in e-payments



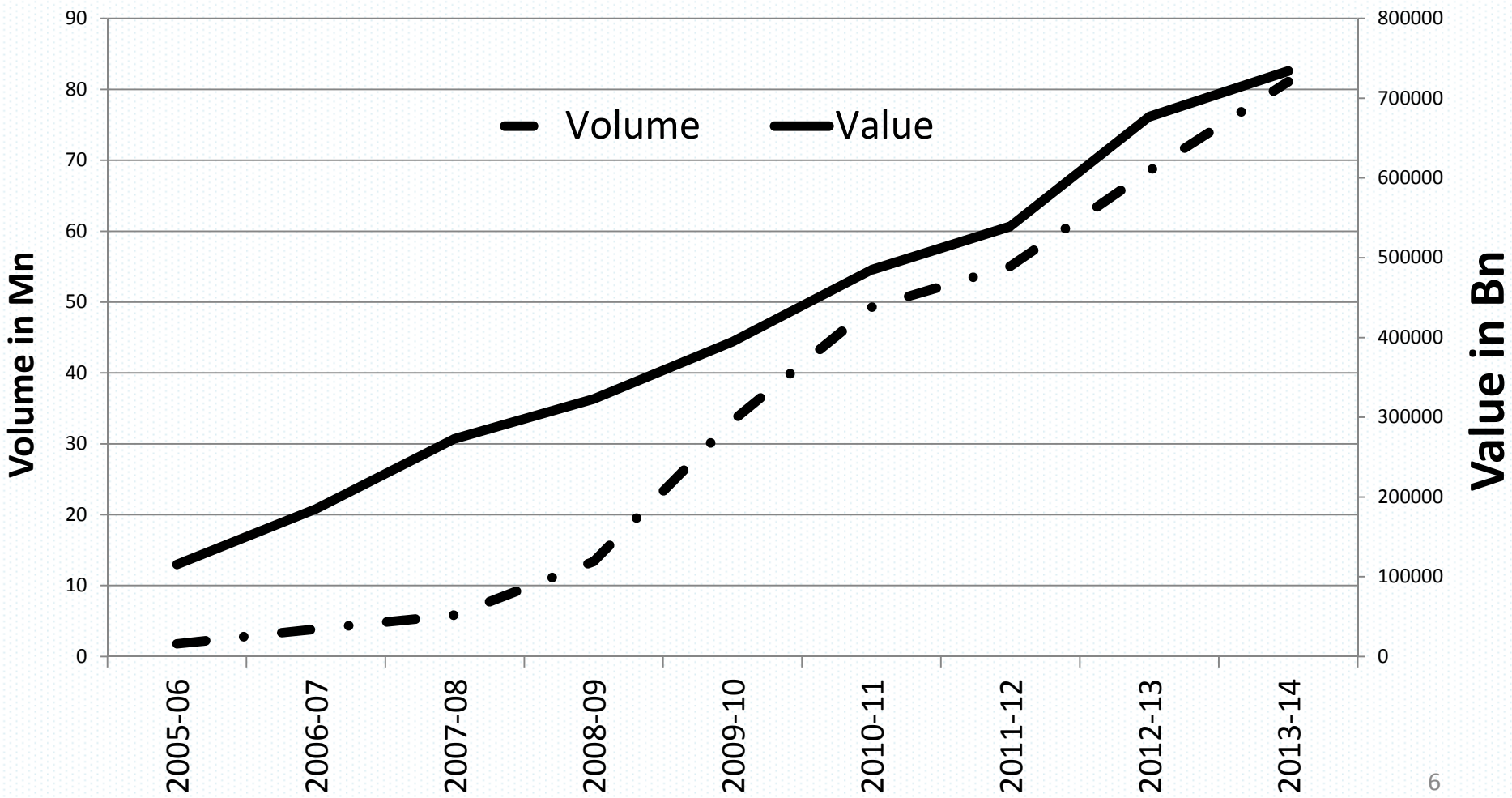
- Share of paper-based instruments in the volume of total non-cash transactions declined to 34.56% during the year





# Recent trends in e-payments..2

- transactions through RTGS have increased by 18.38% and 8.48%, in volume and value terms respectively in the current year



## Recent trends in e-payments..3



- Retail electronic segment has registered a growth of 59.68% in volume and 50.11% in value
  - NEFT volumes and values grew by 67.71% and 50.87%, respectively, during the year
- Debit card usage has registered a growth rate of 28.35% against the growth rate of credit card at 25.24 %.

# Mobile Banking



- Despite a very high mobile density in the country, the potential for leveraging on this technology for offering financial services is largely yet untapped.
  - over 900 million mobile users in the country but only 40 million mobile banking customers
- Underscores the need for active collaboration between banks and telcos
  - irrespective of the channel through which such services are provided, such as, SMS, applications, USSD
- Regulatory measures
  - TRAI has set the ceiling tariff for USSD-based mobile banking services
  - RBI has taken steps to provide accessible, convenient as well as cost effective services to mobile banking customers



# Recent trends in mobile banking



<b>Year</b>	<b>No. of Users (million)</b>	<b>Volume (million)</b>	<b>Value (₹ billion)</b>
2011-12	12.96	25.56	18.21
2012-13	22.51 (73.69%)	53.31 (108.56%)	59.90 (228.94%)
2013-14	35.53 (57.84%)	94.71 (77.66%)	224.38 (274.59%)

*(Figures in bracket is %age changes over previous year)*



# Role of banks & telcos in expanding mobile banking outreach

- Need to create more public awareness through a sustained centrally orchestrated common marketing campaign for popularizing USSD
- Banks need to see mobile banking channel as a cost saving avenue (*reduction of cash handling charges*) rather than revenue generation vertical
- Incentivising consumers for using mobile banking (?)
- Banks and telcos to work together for addressing customer grievances



# Role of banks & telcos in expanding mobile banking outreach

- Reserve Bank had set up a Technical Committee on Mobile Banking (Chairman: B. Sambamurthy) to
  - study the challenges faced by the banks in providing mobile banking to customers
  - examine the options/alternatives including the feasibility of using encrypted SMS-based funds transfer
- Two technical groups have also been constituted to
  - set standards for on-boarding mobile banking customers
  - set standards for industry agreements between banks and MNOs for handling customer grievances
- The National Unified USSD Platform (NUUP) of the NPCI offers an interoperable USSD-based mobile banking service
  - this holds great opportunity for expanding the mobile banking outreach in the country

# Bharat Bill Payment System (BBPS)



- The BBPS is proposed to be a pan-India system for running the bills payment system in the country
  - the entire system operating on a single brand image so as to enjoin the confidence and trust of the customers.
- The BBPS is aimed to provide
  - convenience of *'anytime anywhere'* bill payment
  - an interoperable bill payments for millions of customers in the country
  - replace the segmented bill payments taking place in silos at present
- The proposed system will function as a tiered structure with a single brand image under the standards (technical and operational) set by the centralized unit.
  - standards will also address the need for uniformity in handling customer grievances, settlement procedures and timelines, etc.
- The operating units will link up the billers and the collection agents and provide the interoperability which is lacking today

# Trade Receivables Discounting System (TReDS)



- The TReDS aims at addressing concerns related to efficient financing options for the MSME segment
  - eligible invoices and bills of MSMEs will be placed on the system for acceptance by the buyers
  - financed by financiers so as to ensure financing
- The TReDS will
  - centrally on-board the various stakeholders – buyers, sellers and financiers
  - handle KYC and documentation related matters
  - ensure that master agreements are in place
  - standardize turnaround time for various activities involved in stages from uploading of invoices / bills to final payments on due dates



## Role of banks in BBPS & TReDS

- Many banks are providing bill payment services and payment gateway services especially in card payments
  - network effect and positive impact with these banks joining the BBPS
- Other banks will be able to leverage on the inter-operable platform of BBPS and offer enhanced services and bill payment options to their clientele
- Banks can also use their vast BC and agent network for this task
- Banks have to work for the success of the TReDS through active involvement and engagement
- Banks would be expected to support setting up of desirable standards for all operational processes and procedure so as to derive synergy for all participants.

*The impact of this system for the hygiene in the eco-system will be positive in the medium and long term for the MSME sector which is a key thrust area of banks' business.*

# Security vs Convenience



- Recent reiteration of an existing policy related to security and risk mitigation in card transactions has led to some debates
  - that Reserve Bank has stifled innovation!
- Policy measures of RBI are proactive with focus on safety concerns
  - mandating online alerts for card transactions
    - now drawing attention of policy makers of other countries
  - mandating PIN entry for every transaction at ATM
  - mandating the need for additional factor of authentication for card transactions
    - put in place in 2009
  - strengthening the security of internet banking transactions including beneficiary management, velocity checks, etc.
  - migration from magstrip to CHIP and PIN cards
  - strengthening the security of card processing infrastructure
  - reducing the turnaround time for handling customer grievances

## Security vs Convenience .. 2



*Changing consumer behavior being a challenge, the trade-off between security and convenience often is not an easy one, given the tenuous trust placed on electronic payments in this country*

- Reserve Bank is in favour of innovation and innovative payments but it balances the convenience factor with suitable safeguards for protecting or limiting customer liability
  - Focus is on **Availability**, **Affordability** & **Acceptability** yet with an **Assurance** about Safety & Security



# Jan Dhan Yojana: Challenges & Opportunities



- Opportunities for expanding business by leveraging these accounts
  - small customers big markets
- Challenges of technological & operational issues in handling millions of accounts
  - Ability of banks to issue cards (and related processes for meeting existing mandates on security and safety) to millions of customers
  - Issues relating to de-duplication
  - The impact on the interoperable ATM networks
  - Enabling micro-ATMs to accept magstripe cards as per the standards laid down by the IBA
  - The need for expansion of POS networks
  - Scalability of banks' hardware and software systems
  - Augmenting human resources at banks to deal with customers' issues and grievances
  - Upgrading the capacity & capabilities of the BCs

*Imperative to ensure not only existing requirements are met but also ensure that whatever systems are put in place are “future-ready”.*

# Concluding thoughts: Changing Eco-system



- Need for a re-orientation in thinking
  - How investment in technology is viewed?
    - revenue generation or cost savings
    - Balancing between the goals of profit versus growth
- Harnessing ICT for sustainable financial inclusion
- To protect the market share and profitability
  - Banks need to reposition themselves as niche players based on inherent strengths
- Changing consumer behavior with respect to where and how he shops for financial services products: “*hyper-connectivity*”
- Proliferation of alternatives to traditional financial services organization – *for banking, banks may not be needed*  
*(ala Bank 3.0: Why Banking is no longer somewhere you go, but something you do by Brett King)*
- Rise of powerful social media platforms
  - Banks should leverage on the increasing popularity of interactive social platforms for effective engagement with their customers

# Concluding thoughts : New Possibilities



- Leveraging social and mobile capabilities as well as cloud computing and software-as-a-service (SAS) would be the key for traditional banks to drive more customer interactions at a lower unit cost
- Need for technology-enabled transformation to improve revenue generation, operational efficiency and risk management
- With lower cost-to-serve capabilities coupled with technology-driven transformation of operating and distribution models, banks can now reach new customers in new markets
- Mining of Big Data can open up new revenue verticals for the banks and help better risk measurement alongwith effective identification of sales or cost-saving opportunities.
- By tapping social networks, banks can access customers' social profiles, and thereby deepen their insights into individual customer behavior

# Concluding thoughts: Partners in Digital India Plan



- India is in the cusp of a digital revolution – it may be ambitious but definitely achievable
- Digital India Plan of the new Government
  - Connecting all the Gram Panchayats (GPs) through broadband network by 2019 with estimated expenditure of more than ₹ 1 trillion
  - Three key pillars
    - Digital infrastructure
      - Providing digital identities to people
      - Universal access to bank accounts & phones across the country
      - Safe and secure cyber space
    - Governance and services on demand
      - On real-time and accessible platform
      - Financial transactions to be electronic & cashless
    - Digital empowerment
      - All documents and certificates available on cloud
- Renewed focus on the National Digital Literacy Mission



*Banks have to be active partners in this Digital India Plan to harness the new possibilities and seize the new opportunities for socially responsible yet sustainable business growth.*

