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Preface

The first decade has been an eventful and possibly a watershed period in the Indian economy with consistently high GDP growth, a mobile revolution resulting in over 700 million connections, rapid POS, ATM and branch expansion, the establishment of ecommerce and the penetration of plastic in millions of wallets across the country.

India’s economic expansion remains the catalyst the evolution of a large robust electronic payments ecosystem. GDP growth has averaged over 7% since 1997 and clocked a commendable growth rate of 5.4% in 2009 in spite of the global recession in the immediate prior period.

As services constitute an increasing proportion of the GDP each year, urbanization and industrialization coupled with the all round growth is catalyzing the growth of a middle class estimated to be over 300 million. Studies have indicated that with the current growth trajectory, household incomes could triple over the next two decades making India the world’s 5th-largest consumer economy by 2025, up from 12th now. Private consumption plays a significant role in India’s growth with private spending having crossed 17 trillion Indian rupees ($372 billion), accounting for more than 60 percent of India’s GDP in 2005.

India stands at a very interesting cusp, wherein the seeds appeared to have been sowed for the creation of a dual electronic payment architecture & ecosystem. The first in the classical card based mold and the second in the card-less!

This document attempts to outline the key developments and events that makes the recent years possibly one of the most influential periods in the Indian payments space and the electronics payments space in particular. It will also cover macro trends and developments that are likely to influence and shape the electronic payments space.

You will notice a skew towards newer age payments vis a vis the traditional card based payments, as at some fundamental level, believe therein lies the next wave.
A. Swinges

Outlined below is a snapshot of the key events and business models that have been witnessed in the Indian retail payments space in the recent past. These could potentially influence and catalyze the course and development of the electronic payments landscape in this decade.

1. The Reserve Bank of India (RBI) drafted an electronic payments vision document, outlining its intent and focus areas for moving from a predominantly cash based society to a more efficient electronic one.
   The primary objective, to establish a framework and body of regulations to grow efficient payment systems. The document has the added benefit of providing a clear roadmap for all stakeholders including banks and service providers on the focus areas and the drivers in the coming years.

2. The National Payments Corporation of India was established in 2008 and commenced business in April '09, a result of the establishment of the Board of Payments & Settlements in 2005, with an objective of broad-basing electronic payments and making them more efficient.

3. Unique Identification Authority of India (UIDAI) : The government has commenced implementation of UID (Unique Identifier), a 12 digit unique identifier that is planned to be issued to every Indian citizen. This remarkable breakthrough sets the foundation for establishing a unique national identifier and enabling identity authentication for every citizen, a logical and imperative building block for financial inclusion. With MasterCard having developed a payment solution for ‘Aadhar’ (UID), the road has been paved for integrated identification & payment solutions.

4. An Inter Ministerial Group (IMG) was constituted by the Cabinet Secretariat in 2009, to enable finalization of a framework for delivery of basic financial services using mobile phones. The framework envisages creation of “Mobile Linked No Frills Accounts” enabling a basic set of transactions via a mobile PIN based system using “Mobile Banking POS” or through bio-metric based “micro ATMs” of the BCs (or the sub-agents of BCs).

5. The 200 million cards milestone was breached in 2010! With over 44 million debit cards issued in 2009-10 and a larger number projected to be issued in 2010-11, the scorching pace of growth is set to continue in the coming years.

6. Credit card issuance and spends are back on the upswing after a period of consolidation and delinquencies which had resulted in a reduction of the credit card base by over 9 million cards in 2008 & 2009. Secured card issuance is gaining traction, inviting a large customer base across India into the credit card fold. Annual fees are back, shoring up credit card P&Ls. Spends per active account are rising rapidly fueled by the growth in organized retail, domestic holidays and International travel.

7. Prepaid has come of age. Banks have seen the opportunity served by prepaid in addressing the gap left between the debit and credit customer base. Over 14 non banking corporate entities have been granted permissions to issue prepaid cards in card based, paper based and other electronic formats including virtual / mobile wallets till date. One of India’s leading mobile operators has been granted permission with several others in the fray.

The ‘Tipping Point’ is surely around the corner in 2011
8. With the operationalization of large scale transit projects including metros, toll roads, organized parking and other emerging urban transit systems, electronic transit payment systems have become the norm. Large transit payment products (contactless cards largely) are already flourishing across major metro towns eg. Delhi Metro, Gurgaon-Delhi toll road & Mumbai Suburban Rail

9. With 2 new credit bureaus being set up, in addition to the existing CIBIL, the quality and depth of credit history and analysis is expected to grow multifold in the coming years, resulting in enhanced quality of credit scoring and recoveries. The remarkable transformation has been the increased consumer awareness of the importance and impact of their credit histories.

10. Debit cards have been opened up for Internet transactions, potentially providing a tipping point for ecommerce transactions. With cash withdrawal at POS machines now a reality, the seeds for wide adoption and use have been sowed.

11. With an estimated 450,000 POS terminals and 45,000 ATMs the acceptance infrastructure is set at yet another inflection point for growth. Several Indian banks have blueprints in place to install and potentially double the base in the next 3 years. Entry of global players including First Data and ATOS in merchant acquiring marks a significant shift in banks’ strategy moving to the processor model vis a vis completely owned and operated model. This should revive the profitability of the merchant acquiring business lines and lead to the next phase of profitable long term expansion.

12. The India Card initiative as an alternative domestic payment network and system could potentially take the Indian card payments into another orbit.

13. ATM access fees have been normalized by the RBI enabling easier and cheaper access for banked customers across all bank ATMs. Though stressing the cost lines of banks, the lower charges should result in an explosion in ATM usage across India.

14. Payback acquired iMint, India’s largest coalition loyalty programme which in turn was subsequently acquired by American Express. This potentially changes the contours, creating a fine meshing of payments and loyalty systems. Interesting times ahead

15. The qualifying criteria for business correspondents, potentially allowing the entry of corporates with their distribution partners and retailers into the realm, could be a game changer for financial inclusion and banking access. More on this in a subsequent section on Mobile Banking.

16. The innovation melee continues with a wide array of breakthrough business models, consumer propositions and technology solutions being implemented driving adoption of electronic payments. Eko, FINO, ATOM and a host of other players have been setting and redefining the grass-root level electronic payment principles

17. The RBI has introduced Interbank Mobile Payment Service (IMPS) enabling seamless mobile based transfers between bank account holders. The cornerstone of interoperability has been established with this measure

18. With over USD 133 billion payments from bank accounts via ECS & NEFT, electronic fund transfers has proven to be the silent monster that has established the increasing orientation towards cashless (and even chequeless) payments in India
19. With the formal launch of 3G in India a deluge of service offerings across customer segments is expected to fuel purchases and transactions on the mobile.

20. The BC model has received a quantum push, with both retailers and non-banking entities now being permitted to work with banks as extensions of their branch counters. This virtually opens up the opportunity of converting over 10 million retail outlets in India into bank branches!
B. Nitty Gritties

1.0 The Indian Electronic Payments Landscape

The size of the retail electronic payments space in India, estimated at USD 152 billion and projected to grow to over USD 248 billion for the period Apr ’10 – Mar ’11.

2004-05 was the turnaround period for electronic payments, as the NEFT system, facilitating person to person payments via bank accounts gained momentum, fueled by the rapid adoption of Internet Banking by customers of both public sector and private sector banks in India.

A large number of consumers in the self-employed and corporate segments also commenced utilization of the fund transfer mechanisms to transfer funds and make payments to government agencies and suppliers. The upsurge in retail loans including mortgages, car loans and personal loans led increasing use of the ECS facilities, wherein customers and banks preferred direct debits to their bank accounts vis a vis cheque clearing mechanisms.

2. The Regulatory Framework

The RBI, the Indian financial regulatory authority was on overdrive in 2008-2010, as it unleashed a progressive set of measures, to catalyse the electronic payments landscape in India.

Under the Payment Systems & Settlements (PSS) Act of 2007, two regulations have been made by the Reserve Bank of India, the Board for Regulation and Supervision of Payment and Settlement Systems Regulation (BPSS), 2008 and the Payment and Settlement Systems Regulations, 2008. Both these Regulations came into force along with the PSS Act, 2007 on 12th August 2008. The BPSS would exercise the powers on behalf of the Reserve Bank, for regulation and supervision of the payment and settlement systems under the PSS Act, 2007.

The Payment and Settlement Systems Regulations, 2008 covers matters like form of application for authorization for commencing/ carrying on a payment system and grant of authorization, payment
instructions and determination of standards of payment systems. This in essence permitted third party non-banking entities to play the role of clearing & settlement in financial networks, with the permission of the RBI.

This was subsequently followed by the establishment of the National Payments Council with the following objectives:

“......to consolidate and integrate the multiple systems with varying service levels into nation-wide uniform and standard business process for all retail payment systems &...... to facilitate an affordable payment mechanism to benefit the common man across the country and help financial inclusion”

It published its vision for electronic payments in 2010, outlining the broad operating principles and focus areas. Considerable headway made in defining the methods and standards for mobile banking, prepaid card issuance & usage and financial inclusion, wherein leveraging retail distribution channels for financial inclusion related activities has become a reality.

The RBIs approach to electronic payments has been summarized in the below diagram:
3. Prepaid Cards : The New Kid on the Block

Prepaid cards have been classified into four categories by the RBI : Closed, Semi closed, semi-open and Open, basis the permissible end uses.

For the purpose of this discussion would be offering a perspective basis the following three dimensions:

1. **For Retail & Internet purchases:**
   a. Most banks had initially focused on foreign exchange cards denominated in USD, Sterling, Euro and other leading currencies targeted at the international traveler and the domestic gift cards market. Payroll and gift cards are also finding increasing traction, enabling both POS and ATM cash withdrawal transactions.
   b. Operators such as Itz cash have addressed the gap in the online payments space targeted at otherwise uncarded (referring to credit card) customers or even unbanked customers.

![Pie chart showing distribution of prepaid cards](image1)

Payroll Cards continue to dominate! The market is expected to have grown by over 75% in 2010 rising from USD 2.19 billion to over USD 5 billion in 2010

![Pie chart showing prepaid card market share](image2)

Axis Bank is a market leader with over 39% market share. Itz Cash stands out as a large non-banking prepaid card issuer addressing non-carded customer segments seeking to make payments on the Internet for purchasing railway tickets and a host of other services.

2. **Closed User Group Cards** : Facilitating a wide array of payments to Govt. authorities including octroi and toll payments, for retail individuals for meal purchases within corporates and college campuses, retailer issued cards for store level transactions and even by fuel companies in payment and loyalty combination formats for closed loop purchases.

3. **The Mobile Revolution** : With over 90% of the over 700 million mobile connections operated on a prepaid platform, the concept of stored value for future use is well established and accepted by consumers and trade alike.

![Pie chart showing mobile payments](image3)
The RBI issued guidelines for the issuance and operation of prepaid cards in April 2009, clearly defining the four prepaid product types and also clarifying the roles of the issuers, the transaction and reload limits, end uses and the KYC norms applicable for each variant.

As per the amended guidelines of November 2010, banks have also been permitted to issue & reload semi-closed prepaid instruments through external agents other than business correspondents subject to a maximum value of Rs. 5,000 per customer.

On the aspect of co-branding, the RBI has indicated that both banks and non-banks may issue co-branded prepaid cards with corporate and government entities.

However, the industry is beset with a myriad of opportunities and challenges:

**Key Challenges:**

Business Models : For Bank Issued Cards, Issuance, Top Up Fees, Transaction Fees, float revenues and breakages constitute the key revenue streams. Though the forex cards offer a high revenue per card opportunity, gift cards are limited by their typical single use nature.

For semi-open or semi-closed prepaid instruments issued by non-banking entities, the distribution and customer acquisition costs make for a challenging business case if they are required to be set up afresh.

Evolving Regulations : The norms issued by the regulator have imposed greater emphasis on the Know Your Customer (KYC) norms to be adopted for customer acquisition card issuance and limited the opportunities on both float revenues and breakage opportunities.

- Semi-Closed up to Rs 1000/- may be issued without any KYC ensuring that, under no circumstance, more than one card is issued to the same person.
- Semi-closed Prepaid payment instruments which permit only payment of utility bills/essential services and purchase of travel tickets up to a limit of Rs 10,000/- can be issued without any KYC being undertaken by the issuer.
- Prepaid payment instruments up to Rs 5000/- can be issued by accepting any ‘Government issued Identity Cards’ as proof of identity, but no cash withdrawal.
- Entities issuing prepaid payment instruments to institutions/companies for further issuance to their employees or beneficiaries may complying with KYC norms, wherein the value of individual payment instrument shall not exceed Rs 5000/-, but no permit cash withdrawal.

Hence the environment for organizations seeking to establish both distribution channels and new customer acquisition (vis a vis cross selling within existing) would be up a steeper curve.

**Key Trends / Opportunities**

1. C2G (Consumer to Government) & G2C (Government to Consumer) Payments remain the focus area for the regulator and government alike both to drive inclusion and increase efficiencies in payment processing and collections

   Financial Inclusion would emerge as a key driver for banks, business correspondents, MFIs, Insurance companies and other entities to issue prepaid instruments to the unbanked. The prime driver being the need to enable efficient transfer of Government benefit schemes to the citizens. The NREGS (National Rural Employment Guarantee Scheme) possibly one of the largest social benefits scheme operational
in the developing world has fueled the advancement of electronic payment instruments within the underbanked in the rural and urban areas

2. Business formats: 16 corporate entities have been granted permission till date by the RBI to issue prepaid cards in India (Reference: click here). Two business models emerging, wherein corporate entities are exploring prepaid instrument issuance on their own and the other along with banking institutions.

Life Insurance Corporation of India, the country's largest life insurance player, boasting possibly the world's largest agent and customer base, received permission for the issuance of prepaid cards to its customers towards crediting premium amounts. The cards would be issued in conjunction with a bank. The prime benefits viewed by LIC include automation and cost reduction in the remittance procedures and in driving financial inclusion for the unbanked with the added convenience of ease, timeliness and ease of access for its customers.

Other firms are evolving business models based on creating mobile/virtual wallets that could be used to make payments towards non-face to face transactions.

3. With increasing penetration of ATMs and POS terminals in the country, and with the explosion in debit card usage, banks are seeing the business opportunity in the issuance of prepaid cards, hence having a complete product suite comprising debit, prepaid and credit card issuance to their customers. Several banks have issued RFPs and firming up business plans for prepaid card issuance in 2011.

4. Multiple product formats being explored including card based, paper based and mobile wallets. With the regulations clearly permitting mobile wallet based payments in the closed formats for other players and in the open formats for banks & NBFCs, there is considerable promise and work underway in this domain.

5. Some organizations, including Edenred and Sodexho, that have been granted approvals are also evaluating disbursing food coupons under the social welfare schemes to be distributed via the prepaid card/voucher format. This would be an interesting initiative to be followed considering the potential scale and the difference in end use via a vis traditional monetary payments.
4. Mobile Banking & Payments – The Darling Child!

With over 600 million connections and over 15 million being added each month, the belief is that herein lies the panacea and the pill for the Great Indian dream for universal financial access. Often considered a dreamy untenable policy statement issued in corporate boardrooms and election speeches, the mobile is possibly the clear and present opportunity for driving financial inclusion. But would it happen on the existing payment architectures or seed another one altogether lies the key question for this decade?

Six subsections in this segment:

A. The RBI’s Operative Guidelines for Banks for Mobile Banking Transactions
B. Interbank Mobile Payments System (IMPS)
C. New Offerings
D. What’s Hot!

A. The RBI’s Operative Guidelines for Banks for Mobile Banking Transactions

The RBI introduced an Operative Guidelines for Banks for Mobile Banking Transactions in India in October 2008 under the aegis of the Payments & Settlements Act 2007 with a few revisions and clarifications outlined in subsequent releases. The key highlights:

- Only Indian Rupee based domestic services permissible, clearly prohibiting use for cross border inward and outward transfers
- Allowed banks to use the services of Business Correspondent for extending this facility to customers
- Only banks with core banking solutions would be permitted to provide mobile banking services.
- Customer registration for mobile banking mandatory
- The mobile banking service offered by banks should be network operator agnostic
- To ensure inter-operability between banks message formats like ISO 8583 were to be adopted
- To enable a nation-wide mobile banking framework, facilitating inter-bank settlement, a robust clearing and settlement infrastructure operating on a 24x7 basis was considered necessary. However, pending creation of such a national infrastructure, banks were permitted to enter into bilateral or multilateral arrangement for inter-bank settlements
- Transaction limits were placed with a daily cap of Rs. 5000/- per customer for funds transfer and Rs.10,000/- per customer for purchase transactions

B. Interbank Mobile Payments Service (IMPS)

This has been followed up by the introduction of IMPS (Interbank Mobile Payments Service) by the National Payments Council of India,

- Allowing bank’s registered customers to transfer funds between banks via their mobile phones. The earlier models allowed only transfers between customers having accounts with the same bank
- Customers required to register with the participating banks and receive a unique seven digit MMID (Mobile Money Transfer Identified Number)
- No requirement of an Internet connectivity or a personal computer
- The service may be operated via SMS or a special applications developed installed on the customer’s handset
✓ 24x7 real-time service!
✓ Seven banks have gone live with the service including Axis bank, Bank of India, HDFC Bank, ICICI Bank, State Bank of India, Union Bank & Yes Bank

This model can potentially allow over 300 million bank accounts (estimated 200 million active) to transfer funds within 700 million mobile phone connections, possibly making this the largest 24x7 real-time interbank transfer facility in the world!

C. New Offerings

Several offerings have emerged or are around the corner in the coming year.

i. Nokia Money underwent a silent launch in Pune and Chandigarh with Yes Bank.
ii. Airtel, one of the operators that received the nod to issue prepaid instruments in slated to launch their services shortly.
iii. Other mobile operators too are defining models wherein payment and/or transfer enabling instruments would be launched either on their own or with banks leveraging the principles of business correspondents and the benefits available from the issuance of open prepaid instruments by banks.
iv. Citibank, in conjunction with Vodafone & Nokia conducted an NFC based mobile payments trial in Bangalore, which met with considerable success. However the scalability would be dependent on the proliferation and adoption of NFC enabled handsets and acceptance capabilities at merchant outlets.
v. FINO, ATOM, Eko, ALW are some of the players who are operating financial inclusion models offering a bouquet of deposit, cash withdrawal, payment and transfer transactions via the mobile.
vi. Paymate, an SMS based mobile payments service launched ‘Green Money’ with a leading mobile operator Tata Indicom and Corporation Bank, allowing person to person transfers.

D. What’s Hot!

With the imminent entry of mobile operators, fueled by the success of MPesa in Kenya, and a host of other global players, in the arena of payments & transfers, the market is poised to witness several interesting and possibly unique business models and consumer propositions.

Furthermore, with the introduction of 3G services a host of value added products and services will be unleashed, that could potentially be purchased via mobile based wallets managed or even operated by mobile operators.

Two of India’s largest mobile operators have tied up with India’s largest banks to offer a bouquet of mobile based banking & financial services to their customers

A. Airtel (India’s largest mobile operator) & State Bank of India (SBI - India’s largest bank)

A joint venture company has been set up that envisages opening bank accounts, cashless transfers, cashless spending & payment facilities, targeting the rural and urban poor. Customers would be offered a no-frills banking account from SBI, across Airtel’s over 1.5 million + retailer network. Both partners have envisaged investing over INR 1 billion in this enterprise.
The JV plans to acquire over 2 million accounts annually.

B. Vodafone (India's 2nd largest mobile operator) & ICICI Bank (India's largest private sector bank)

A similar JV being entered offering financial products ranging from savings accounts, prepaid instruments and credit products through a mobile phone platform.

As we move forward, the key question that stares at us! Will India be posed with vast multitude of standards and approaches or would a few interoperable consumer-merchant-bank/issuer networks emerge? IMPS is a unique and powerful measure, laying the foundation for the transfers market…but what of the face to face payments challenge!?

Possibly ‘the’ landmark document created in the Indian Payments space. A set of well designed recommendations that seeks to establish a financial inclusion format and payment system for the masses, using the mobile phone!

I. The key components proposed:

1. **Account Mapper** A table with three attributes – Mobile No, UID and No Frills Bank account number

2. **INFAST (Interoperable Infrastructure for Accounting Small Transactions)** An additional shared infrastructure for creating & managing mobile no-frill bank accounts. Hence micro-transactions could be routed only to INFAST instead of issuing and receiving banks.

   Could provide a scalable cost efficient alternative to traditional core banking systems and a facilitator for smaller banks to participate in this space

3. **REMIT (Real-Time Micro Transaction) switch** An interoperable central payments switch driving real time transaction routing between BCs, Banks UIDAI, Account Mapper and mobile service providers

   Interface with UIDAI for authentication

   Interface with Account Mapper to derive bank account details

4. **Micro ATM** A small device available with BCs for cash withdrawal and deposits using biometric authentication via UID standards

5. **Mobile Banking POS** A mobile phone with a BC to conduct basic transactions possibly even connected with a printer, speaker

II. The following are the key recommendations of the Inter Ministerial Group (IMG):

1. Mobile linked No-Frills Accounts will be created by the Banks enabling five key financial transactions: i. cash deposit ii. credit customer’s mobile linked no-frills account, iii. cash withdrawal, iv. peer to peer transfer & v. balance inquiry

2. Executed via a mobile based m-PIN system using Mobile Banking POS or through a biometric based system using micro ATMs of the BCs (or sub-agents of BCs)

3. The following common infrastructure to be created for real time transaction processing, to ensure interoperability and to reduce costs

Upendra Namburi : un2400@gmail.com
a. **An account mapper** that provides linkages between UID No, mobile number and the mobile linked no-frills account
b. **An interoperable central payments switch** that will facilitate real time transaction routing amongst BCs (or sub-agents of BCs), Banks (or associated FIs and outsourcing partners of Banks), UIDAI, account mapper and mobile service providers.
c. **Interoperable repositories** at for hosting and managing mobile linked no-frills accounts that may be created and managed by independent third party service providers / organisations on behalf of the participating Banks.

4. **KYC Requirements** : The RBI to simplify KYC requirements for the Mobile linked No- Frills Accounts, based on norms & verification procedures of UIDA

5. **Charges** : Mobile Operators to provide prioritized services with respect to these transactions & the charges levied should be regulated by TRAI (Telecom Regulatory Authority of India)

6. **G2C Payments** : Government to drive social benefit and other G2C payments into these accounts.
A proposed transaction flow in the new framework outlined below:

7. **Guidelines with respect to BCs** :
a. The stipulation that the BC or his sub-agent should be within 30 Km distance of a branch of the sponsoring Bank may be relaxed
b. Organizations allowed to act as BCs may be allowed to act as BCs of one or more Banks in different locations. However, the individual sub-agents to be associated only with one bank with regard to opening of mobile linked no-frills account.

c. The sub-agents of BCs to be allowed to carry out basic banking transactions (except opening of the Bank account) for all banks

8. “For profit” corporate entities be allowed to become BCs of banks.

9. A proposed compensation model for all the players which could serve as the basis for initial assessment and apportionment of transaction fees to be levied to get the system started

<table>
<thead>
<tr>
<th>Stakeholder</th>
<th>Suggested Compensation per Transaction</th>
<th>Paid by</th>
</tr>
</thead>
<tbody>
<tr>
<td>RE MIT</td>
<td>0.4 paise</td>
<td>Bank</td>
</tr>
<tr>
<td>Account Mapper</td>
<td>0.6 paise</td>
<td>Bank</td>
</tr>
<tr>
<td>IN FAST</td>
<td>20 paise</td>
<td>Bank</td>
</tr>
</tbody>
</table>
Mobile Operator | <= Re. 1 per transaction | BC/Account Holder
--- | --- | ---
BC with Mobile POS | Minimum of Rs. 2.25 or 1.4% of txn. amount | Bank
BC with Micro ATM | Minimum of Rs. 3.0 or 2.25% of txn. amount | Bank
Bank | 2% transaction Fees | Account holder
Technology Vendor | Not exceeding Re.1 | Bank

The full report is available on [http://www.mit.gov.in/content/government-approves-framework-provision-basic-financial-services-through-mobile-phones](http://www.mit.gov.in/content/government-approves-framework-provision-basic-financial-services-through-mobile-phones)

5. Credit & Debit – Linear or Exponential!

The acceleration path for credit card issuance picked up in the early half of the decade, whereas 2009-10 was the landmark year for debit card issuance with over 44.5 million debit cards issued in a year! With over 208 million cards in circulation, India has entered the larger league of card issuing countries in the world.

![Graph of Total Outstanding Cards (in Million)](image)

![Graph of Credit & Debit Card Spend Trends (USD Billion)](image)

*Source: Reserve Bank of India Oct 2010; Assumption 1 USD= 45 INR*

The growth rates in spends have been consistently high, with a slight blip in credit card spends in 2009-10, which have picked up again in the current year.

![Graph of Growth Rates in Electronic Payments](image)

*Source: Reserve Bank of India Oct 2010*

The decline in spends was also on account of the over 30% reduction in credit cards in circulation in the period, as banks and financial institutions focused on profitable customers and addressed customer delinquencies.
The healthy onward surge of debit card spends continues to fuel the penetration and usage of plastic within the larger Indian population and promises to soon be the torchbearer for retail spends in India.

Though the ATM & POS infrastructure have expanded to significantly greater levels, the growth opportunity continues to remains large.

i.  The Card Acceptance Perspective

The key challenge for acquiring banks and processors has been in achieving profitability in a stand-alone business model as the merchant rates had been driven to low levels on account of competitive forces. As multiple acquirers focused on similar merchant sets in the larger towns, the volume per acquirer was drastically impacted, and coupled with lower volumes, the profitability too was impacted.

However in recent years, the merchant charges have been increased again, showing signs of profitability for existing and new POS acquirers. The entry and growth of third party processors in the space has also facilitated the focus on profitability in this channel.

However, the cost factors still make the model sensitive, leading to the classical chicken and egg situation. When should the issuance be accelerated in new segments & towns?...and when then should the acquiring infrastructure be deployed.

The large scale issuance of debit over the last couple of years, appears to have addressed that dimension, as PSU and other banks have commenced charting their growth plans again.

ii.  The ecommerce Conundrum

The launch of India’s first low cost carrier Air Deccan in 2002 and the Indian Railways online booking platform irctc.org prior to that, proved to be the impetus required to boost large scale adoption of the Internet for online bookings. This in turn fueled the need for payment instruments that could be used online.

Estimated at over INR. 100 billion in 2009, this is possibly the tip of the iceberg. Though the demand for tickets, books and discounted garments via the Internet prevails across India, the limited penetration of card products has been one of the impediments for this industry. With cash on delivery proving to be an inefficient & expensive option, the industry’s quest for opening up debit was answered in 2009. However the expected explosion is yet awaited.

Though Internet banking has been leaping in access and usage, credit & debit would possibly remain the mainstay ‘source of ‘funds’ to fuel remote transactions in the years to come.

iii.  Profitability

The credit card industry has been plagued with delinquencies and losses for several years. However with annual and related fees making their comeback, the basic profit lines are being shored up again. Segmented strategies and product propositions for the mass affluent and premium segments are bound to create more evolved customer usage levels.

With consumers gaining an evolved understanding of revolving charges and the effects of a poor credit performance track record, the industry would need to see if customers would revolve as in the hey days. The industry has however moved into the next level, with the basic aspects of convenience of payments via cards have been well established with the urban affluent and the mass affluent as well. The next frontier
lies in profitably increasing penetration in the urban mass affluent and the rural poor for the credit card players.

iv. Driving Usage

As debit issuance has become a de-facto norm for most leading banks in India, the objective of moving customers away from branch based withdrawals to ATMs has been quite successful. However, with large investments in issuance, card management and transaction processing networks, card activation and usage become imperative. As transaction revenue offers a clear and scalable line of risk free income, banks would be investing greater resources in segmented spend enhancement strategies.

A slew of models and technologies including real-time rewards at POS, online point redemption at merchant stores, integrated debit/credit cum loyalty programmes are emerging, in attempts to increase the usage levels.

The larger challenge posed for the industry however is making card usage the norm for daily grocery purchases, which is the metaphorical 800 pound gorilla. With over 200 million cards in circulation, there is a sufficient cards / retailer opportunity ratio that exists to make the neighborhood start accepting payments. The challenge would possibly lie in convincing them to pay the traditional merchant discount rates that prevail. Is there a possible lower interchange for debit in these segments that may emerge and prevail.

Or would government incentives for card acceptance be essential?
C. Shakers!

As is evident, this is poised to be an interesting, challenging and eventful decade in the electronic payments space. Outlined below some trends and events that are likely to emerge and influence this space

1. Financial Inclusion

Can we move from the 200 million + active account mark to the 500+ in the next five years? Should the metric of financial inclusion be only a bank account, or can other products and services issued by non-bank entities be considered for the same? Will the BC network be financially viable?

It would seem quite apparent, as both the regulator & the Inter ministerial group have clearly validated the same via its initiatives, regulations and recommendation, that universal financial inclusion would clearly not be achieved by banks alone.

The active and profitable participation of non-banking entities, MFIs, NGOs and the retail channel would be critical. Allowing the underbanked customers the opportunity to walk into their neighborhood store to both deposit and withdraw cash via a vis stashing it below the pillow is the logical bedrock and inflection point for penetration & adoption of ‘banking’ services.

Allowing BCs to operate as access points across banking institutions, rather than serving a single sponsor bank would be a crucial turning point. Revenue & profitability analysis of BC systems or entities performing roles similar to BCs have clearly shown the limited direct revenue opportunities. Hence the solution perhaps lies in widening the network of banks serviced and in enhancing the no. of products sold.

Could a plan be conceived, allowing the creation of a default bank account for every unbanked UID holder with a designated institution, hence assuring both identity and financial inclusion in one shot! The account could then be activated subsequently by the customer or switched to another banking relationship.

The question that remains to be answered? Would card plastic remain the sole means of customer authentication and transaction authorization, or would the mobile platform truly deliver on its promise of achieving both? Can the financial inclusion wave offer the sufficient scale of customers into the funnel to drive the growth of electronic payments?

The Inter-Ministerial group report appears to resonate in that direction!

2. Domestic Payments Standards & Network

Though the structure and format is evolving, the country is poised to witness the formation of a domestic transaction switching networks for POS, ATM and remittance transactions, possibly inspired by China & Singapore. This network is likely to co-exist with the existing global card networks of Visa, MasterCard and American Express.

With ATM & POS device costs already at possibly the lowest levels available globally, the case rests on:
- reducing switching & settlement costs &
- fueling card issuance by banks on the other end.
ATM white-labeling by non-banking entities may be a game changer and expected to be around the corner. The entry of global processing majors is likely to influence the market as much as the large scale POS & ATM expansion of India’s largest banks.

The questions that linger:

a. Could a card-based payments network be overtaken or coexist with a new approach/standard to payments emerging from India. Can REMIT deliver that promise?
b. How quickly would the pure mobile-based transaction+remittance system emerge that would transform the classical payments DNA?

India is poised to occupy a unique global position, as it could be the only country establishing two payment architectures supporting card & mobile payments respectively. This is perhaps the significant departure from models that have developed in Kenya & Phillipines, wherein in India the government & regulator are steering the direction and shaping the course of a new framework.

3. **Device Penetration Levels**

By when will India achieve the 200 ATMs per million penetration or 2000 POS per million milestones? The question however to be asked, as in the above two points?

*Is traditional POS & ATM penetration the milestone metric to be chased?*

Card acceptance has already commenced in Electronic Cash Registers in the large organized retail formats, where separate POS devices are not required to be installed. This could possibly be the direction adopted in these segments.

Can low end card readers linked to mobile phones be the next step of evolution for card acceptance?

With cash withdrawal via POS machines already being permitted for debit cards, the confluence of low cost card reading access devices linked with mobile phones and the activation of the retail channel as BCs could spur or limit the requirements for large and expensive ATM devices. Technologies and systems to support the same have already arisen in North America and other markets. So would low cost POS devices over-ride the need for ATMs?

As the mobile no-frill account ecosystem crystallizes, we are set to witness the creation of a non-card based ATM & POS network which would surely catapult the payment device penetration levels into another orbit.

4. **Role of Non Banking Entities in the Payments & Transfers Ecosystem**

Apart from the BC network, the scope of opportunity for non-banking entities can clearly extend beyond payment processing, network management and device installation and support. The entry of several other global majors in the services & infrastructure layer is imminent.

- White-labeled ATM services has been in the wings for a while. Could potentially be a game changer if and when introduced.
There have been several inroads provided with co-branded opportunities and the guidelines on prepaid card issuance, allowing customer acquisition, issuance, reload and even transaction processing to be undertaken by non-banking institutions. This measure in itself, as it evolves and expands in scope, could be the game changer this decade.

The potential partnership and alignment between banks and mobile operators would evolve interesting permutations impacting the framework of BCs as operate today.

Other large categories including the FMCG sector may be enthused to leverage their retail distribution networks as well. There have been considerable efforts to convert cash into electronic formats for transactions between corporates and their distributors/retail chains. The last transaction leg between retailers and consumers may be of interest to these manufacturers seeking to gain transactional level insights into their consumers and enhancing the revenue opportunity for their retail base.

With UIDAI, no-frills bank account and mobile operator customer relationships, there would be an enhanced understanding of the customer profiles, offering fertile ground to offer targeted value added services and loyalty offerings for third party companies.

As banks and operators move towards establishing low cost payment networks and BC chains, a slew of technologies would emerge connecting the current mainframe based legacy systems in the cards based ecosystem with the new age solutions. Will the two worlds meet?

5. Micro Payments

Constituting over 98% of all retail payments in India and currently dominated by cash! Quite clearly the apple of the eye, this is the arena of game changing proportions.

A melee of technologies, standards, end uses and devices ranging from mobile, Internet, NFC, smart cards, contactless targeting transit, grocery or even utility payments is going to emerge in a heady concoction of ground up innovation. Look forward to path breaking approaches to payment based solutions delivering trust and reliability and hopefully questioning the basis and framework of payments as we know it today.

The challenge remains...can a ‘Paypal’ emerge in the face to face payments space? Can a single standard emerge that would make processing sub INR50 transactions economically viable for the players. Would the no-frills mobile payment system be that answer?

Would like to think that a payment system emerging from a transit payment format would be the ideal approach for large scale card based micro-payment proliferation, in the urban areas. Octopus, NETS & Oyster have addressed both scalability and economic viability. Would the National Payments Council charter the course for such a system in India?

This is possibly the most influential piece in the jigsaw puzzle that would steer the penetration of electronic micro-payments.

6. Incentivize Electronic Payments

The one large opportunity that remains is incentivization for usage of electronic payments. The timing however is the crucial question.

Should tax breaks for merchants and customers be put in place, as in South Korea for card payments? Can these incentives be extended across all electronic purchase transactions or even on C2G payments? Considering the huge costs incurred by the government in processing payments received...
from consumers, this could be the vital stimulus required and a sufficient business case. This could also be the necessary impetus to trigger wide scale adoption.

The impact of electronic payments on GDP growth has been researched and documented globally. This could possibly be the single largest impact point that the electronic payments industry could look forward to in this decade.

7. Redefine & Start from Scratch

Quite clearly the need to re-engineer is going to be offset by the larger opportunity to redefine and create a new slew of user interfaces, processes and systems to tread forward in the new payments world that is emerging.

Approaching the mobile and retailer channels as ‘Alternate Channels’ is in itself a recipe for failure. Banks, which have traditionally evolved as primarily branch based institutions, would need to make efforts in evolving and designing strategies that view these as ‘equal’ channels if not the future ‘dominant’ channels.

As other industry categories play a greater role in the erstwhile ‘bank’ dominated payment systems, look forward to new approaches for addressing customer needs and redefining the method in which the boring payment leg has traditionally been approached. Location based services are gaining ground, offering immense opportunities to bundle payments with value added delights including real-time rewards and offers that may be offered by marketers.

The economic and social benefits of electronic payments, though obvious, are destined to witness a decade of remarkable participation and partnerships between the Government, regulator, banks, mobile operators and a slew of players, which would have been considered untenable a few years back.

Here’s looking forward to making payments ‘fun’.