Prepaid Payment Instruments in India-A Journey towards a Digital Economy

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Abstract: Ever since the introduction of Payment and Settlement System Act 2007, RBI is relentlessly working towards creating a digital (i.e. electronic) payment system environment to achieve a less cash efficient economy. Though traditional bank products like debit card, credit cards and net banking have not been overlooked in this process, a lot of effort, on the part of RBI, has been made to promote a relatively newer kind of payment instruments known as prepaid payment instruments which was already widely accepted in many developed countries like USA and European countries. This article attempts to capture India's journey or rather experiment with this innovative payment instrument popularly

Key-words: Prepaid Payment Instruments, m-wallets, prepaid cards, open system instruments.

1. Introduction

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1

2. Concept of PPI

Prepaid Payment Instruments (PPIs), also known as prepaid cards or stored value cards in many countries, refer to certain instruments that facilitate purchase of goods and services against the value stored in them. The value stored in such instruments represents the money paid for it by its holder either by cash, by a debit against the holder's bank account (through debit card or net banking) or by any credit card.

There can be different variants of prepaid instruments ranging from smart cards, magnetic strip cards, mobile wallets or even a simple paper voucher. However, each has its own features and terms of use attached to it.

3. Origin of PPI

Prepaid payment instruments (or prepaid cards or stored value cards) came into existence in USA in 1970s as paper gift cards/certificates. Then in 1980s single purpose (or closed loop/system) prepaid cards, acceptable only at specific merchant location, were adopted by US telecom industry. They were followed by big retail chains in early 1990s. Similar trends were visible in Europe also. Till then, however, there was no sign of any multi-purpose prepaid cards.

In 1996, a federal welfare reform in US mandated that food stamp coupon (which were generally issued by employers and were redeemable at designated merchant locations) to be replaced by EBT (Electronic Benefit Transfer) cards. Soon this EBT cards got wide acceptance and gave rise to multi-purpose (or open loop/system) prepaid cards.

In late 1990s, payroll cards emerged as a convenient mean to US employers to pay the unbanked employees (i.e. employees without any formal bank account). During this period open loop prepaid gift cards made its appearance in Europe. The same was however adopted by USA in 1999. Soon many variants of prepaid cards including travel cards and mass transit cards were introduced in many parts of these two continents. Other developed countries of Asia and Australia also adopted the same in due course thanks to the operations of multinational card companies like visa and master cards.

Table 1: Top prepaid cards and prepaid card providers in Europe and USA

U	SA	Europe		
Prepaid Cards	Issued By	Prepaid Cards	Issued By	
ATPA cards	American Public	Worldcore Prepaid	Worldcore	
	Transit Association	Card		
American Express	American Express	Mneycorp's Multi-	Moneycorp	

Prepaid Cards	Bank	currency Mastercard	
Benefits Direct	Blackhawk Network	Kaiku Visa Prepaid	Kaiku
Prepaid Card.		Card	
Bluebird Prepaid	American Express	Payoneer Prepaid	Payoneer
Card	and Walmart	MasterCard	
Discover Prepaid	Discover Network	Even Card	IDT Financial
Card			Services Ltd
Green Dot Prepaid	Green Dot	Travel Money Card	Clydesdale Bank
Card		Plus	PLC
Chase liquid prepaid	J.P Morgan Chase	Thomas Cook Multi-	Thomas Cook
cards		currency Cash	
		Passport	

4. Types of PPI

Based on their nature or extent of acceptability PPIs can broadly be classified into four types viz. (i) Closed-system payment instruments (ii) Semi-Closed system payment instruments (iii) Semi-Open system payment instruments and (iv) Open system payment instruments.

- (i) Closed System Payment Instruments: These are payment instruments, generally issued by any business organisation for use at that organisation only or for availing some services from a single service provider having a service contract with the organisation. These instruments are generally not re-loadable and never permit cash withdrawal. Examples of such instruments include gift vouchers issued by a merchant establishment, telephone calling cards issued by a telecom service provider etc. Even mobile pre-paid value or talk time may also be considered as closed-system prepaid payment instrument though, in some cases, they can be used for availing additional value added services offered by the same service provider.
- (ii) Semi-Closed System Payment Instruments: These are payment instruments which are redeemable at a group of specifically identified merchant establishments who have entered into a contract with the issuer to accept such instruments. These are generally issued by third party service providers and can be in reloadable or non-reloadable format but do not permit cash withdrawal.
- (iii) Semi-Open System Payment Instruments: These are payment instruments which can be used at any card accepting merchant location (known as Point of Sale or POS). They can be

reloadable or non-reloadable but do not allow cash withdrawal. For example, banks often issue gift cards that are operated and settled through recognised card companies.

(iv) Open System Payment Instruments: These are payment instruments which can be used at any card accepting merchant location and can also be used to withdraw cash at ATMs. Examples of such cards include travel cards issued by banks which can be operated and settled through recognised card companies.

Mechanism of PPI:

There are different forms of prepaid payment instruments like paper vouchers, prepaid cards, e-wallets, virtual cards etc. Each has its own mechanism.

Table 2: Mechanism of different prepaid payment instruments

Particulars	Paper Vouchers	Physical Cards	E-wallets	Virtual Cards
Type	Closed or semi closed	Any	Closed or Semi	Semi closed
	system payment		closed	
	instruments			
Issued by	An organisation itself	Licensed issuers	Licensed	Licensed
	or by any third party	including banks	issuers	issuers
	with whom the	and card		
	organisation has	companies		
	service contract			
Issued to	Employees or	Anyone	Own customers	Anyone
	customers	(sometimes KYC	(Amazon Pay)	(sometimes
		is necessary)	or anyone	KYC is
			(Paytm/	necessary)
			Mobikwik	
			wallets)	
Re-loadable	No	May be or may	Yes	May be or may
		not be		not be
Technology	Numeric/alpha-	Magnetic strips,	User id and	Card number,
used	numeric identification	micro-chips to	password.	CVV number,
	code	store the	OTPs are also	OTP
		information of the	used in some	authentication
		holder and the	cases.	
		value.		

Redeemable	Own establishment	Depends on the	Own	Designated
at	(closed system),	nature i.e.	establishments	POS terminals
	designated merchant	closed/semi-	if close system	
	establishments (semi-	closed etc.	instrument (e.g	
	closed system)		Amazon Pay)	
			or any	
			designated	
			merchant (e.g.	
			Paytm)	
Example	Metro Railway Smart	Gift Cards issued	Amazon Pay	Virtual gift
	Cards, Bigbazar Gift	by banks, travel	(closed),	cards
	Vouchers (Closed),	cards.	Mobikwik,	
	Sodexo coupons		Paytm,	
	(semi-closed)		Freecharge	
			(Semi-closed)	

5. Advantages of PPI

- a. Minimum Formalities: In most of the cases, prepaid payment instruments are issued with minimum formalities. Closed system payment instruments are not at all issued against any specific user. Semi-closed system payment instruments also require only a valid user id or email id and a mobile number to subscribe. Similar is true for semi open system instruments. However for high denominated fund transfer or transaction above a minimum limit there may be additional KYC (know your customer) requirement. Open system instruments also have the similar requirement.
- b. Convenient: These instruments come either in form of physical coupons or plastic cards (like a debit/credit card) which can be conveniently used in merchant locations. Alternatively, they can be in the form of wallets or virtual cards which can be easily used by logging into the system and making transactions via PIN/OTP authentication.
- **c. Saves Time:** Prepaid cards issued by mass transit system operators (e.g. Metro Railway Smart Cards) helps to avoid standing in long queues to collect fare tickets.
- **d.** No Possibility to Get into Debt: Since these are prepaid instruments the holder can enjoy benefits equivalent to the value stored in it. So the holder can never get into a debt.

- **e. Control Spending Habits:** Unlike debit or credit cards, prepaid payment instruments help the user to control his spending habits. The holder may load only that much money which is actually essential.
- **f.** No Need to Carry Cash: These instruments are substitutes of physical cash. Hence the user can easily load money into the instruments via cash payment, debit to bank account etc. and use the same instead of cash at acceptable locations.
- **g.** Foreign Travel: Prepaid travel cards which are basically some open system payment instruments are immensely helpful in case of cross border travels as these are generally issued by international card companies in association with banks.
- h. Promotional Offers: In many cases, issuers offer promotional benefits to the users which make these instruments further attractive. For example, a semi closed system instrument MOBIKWIK offers cash back (called Supercash) on transaction through their wallet.

6. Disadvantages of PPI

- a. Not Linked to any Bank Account: A prepaid payment instrument is not a debit card and hence not linked to any bank account. As a result the balance stored in it does not attract any interest.
- **b.** It is Not a Credit Card: A prepaid payment instrument is not a credit card and hence does not allow the user to purchase goods and services beyond the value stored in it.
- **c. Security Threat:** In many cases these instruments are issued without adequate security measures. As a result there are occasional instances of hacking of user data from the issuers' server. This poses a security threat to the identity of the user as well as the monetary value stored in the card.
- **d.** Fees: In case of semi open and open system instruments (like travel cards or gift cards) the issuer may charge fees for issuing the instruments, administering the operations and even making transactions through them. This may, at times, be frustrating.

7. Prepaid Payment Instruments in India

I. The Journey So Far:

a. Introduction of formal guideline: In India, prepaid payment instruments pre-existed the introduction of Payment and Settlement Systems Act 2007. Establishments used to offer simple paper vouchers (say food coupons) to their employees or gift certificates to customers which were redeemable only at the same establishment or with their associated partners. In other words, such instruments were primarily closed system payment instruments. Moreover banks and a few non-bank entities were also experimenting with

the semi closed system instruments in form of pre loaded cards. Both the forms of instruments were slowly gaining acceptance among the users. Though closed system payment instruments were not of much concern, semi closed system instruments issued by non bank entities soon came under RBI's lenses as they were alternative payment systems and thus need to be regulated.

Therefore with a view to ensure an orderly development and operation of this product, Reserve Bank prepared and placed an 'Approach Paper' on **issuance and operation of** 'prepaid payment instruments in India' on its website for public comments on November 07, 2008. Consequently, based on the comments received from banks, existing issuers of pre-paid payment instruments, general public and other stake holders, it prepared the draft guidelines which was also placed on the website for public comments. After taking into account further comments/suggestions received, Reserve Bank finalised the 'guidelines for prepaid payment instruments in India' and made it effective from 27.04.2009 in exercise of the powers conferred by section 18 of the Payment and Settlement Systems Act. 2007.

Accordingly, only banks were permitted to issue all kinds of PPIs including mobile wallets & mobile accounts and NBFCs and other persons were permitted to issue only semi-closed system payment instruments. However, persons authorized under Foreign Exchange Management Act (FEMA) to issue foreign exchange pre-paid payment instruments were exempt from the purview of these guidelines, subject to their being the participants of payment systems authorised by RBI. Additionally non bank-non NBFC issuers were mandated to have a minimum paid up capital of Rs. 100 lakh and positive net owned fund (NOF). The categories of instruments permitted were —

Categories of instruments	Conditions				
Semi-Closed System Payment Instruments	To be issued against any identity document				
up to Rs 1000.	furnished by the customer				
Pre-paid payment instruments up to Rs	To be issued against 'officially valid				
5000.	documents' furnished by the customer				
Semi-closed system payment instruments	To be issued without any KYC				
which permit only payment of utility bills/					
essential services up to a limit of Rs.					
10,000.					
Semi-closed system payment instruments	The institutions/companies must maintain				

issuance by these institutions/companies to their employees or other beneficiaries.

issued to institutions/companies for further the full details of the employees or beneficiaries to whom these are issued and the value must not exceed Rs. 5000.

- b. Other Persons Allowed to Issue Mobile Phone Based Prepaid Instruments: After issuing formal policy guidelines on PPIs, RBI, in its next significant move (circular no. DPSS.CO.PD.No.344/02.1 4.06/ 2009-10 dated 14.08.2009), allowed persons other than banks to issue mobile phone based semi closed prepaid payment instruments (m-wallets) subject to full compliance to the safeguards against money laundering (KYC/AML/CFT) provisions. However, fund transfer was not permitted and maximum value of the instruments was restricted to Rs. 5000. Moreover, reloading via airtime or talk time was also not allowed for these instruments.
- c. Issue of Co-Branded Prepaid Cards and Further Widening of Regulatory Ambit: In its next amendment (circular no. DPSS.CO.No.1041/02.14. 006/ 2010-2011 dated 04.11.2010) RBI adopted a slew of reform measures to widen its regulatory net as well as to introduce new instruments in this field. Accordingly -
 - (i) Banks were allowed to issue and reload semi closed prepaid instruments through agents to the extent of their permissible limits.
 - (ii) Additional guidelines were prescribed for Prepaid (non reloadable) Gift instrument issuance by Banks, NBFCs and Other persons, Prepaid Instruments issued by banks to Government Organizations for onward issuance to the beneficiaries of Government sponsored schemes, Prepaid Instruments issued by banks to other Financial Institutions for credit of one-time/periodic payments by these organisations to their customers and Prepaid Instruments issued by banks for credit of cross border inward remittance. The maximum value on each instrument was kept at Rs. 50000. Fund transfer to bank accounts from the instruments was also allowed in the later three instruments.
 - (iii)All persons permitted to issue prepaid instruments were also permitted to issue cobranded prepaid instruments with corporate, Government organizations etc. for the purpose of promotion and loyalty programmes.
- d. Semi Closed M-Wallets Made at par with Other Semi Closed PPIs: Considering the growing acceptance of m-wallets (mobile based semi closed prepaid instruments) issued by banks and other persons, RBI (via circular no. DPSS.CO.No.2501/02.14.06/2010-11 dated 04.05.2011) made this product at par with other similar instruments by extending its limits to Rs. 50000 subject to customer due diligence by the issuer.

- e. Banks Allowed Issuance of Prepaid Instruments to Corporate for Onward Issuance to their Employees: In continuation of its earlier stance RBI permitted (via circular no. DPSS.CO.PD.No. 225/02.14.006/2011-12 dated 04.08.2011) banks to issue prepaid payment instruments to listed corporates for onward issuance to their employees. Fund transfer was also allowed from the instruments to the bank account on request.
- f. Domestic Money Transfer Norms Relaxed for Card to Card Transfer of Funds: In its next major policy amendment with respect to PPIs, RBI (via circular no. DPSS.PD.CO.No. 62/02.27.019/2011-2012 dated 05.10.2011) relaxed norms for domestic card to card fund transfer for PPIs. Accordingly, transfer of fund (with per transaction cap of Rs. 5000 and a monthly cap of Rs. 25000) from open system PPIs to other open system PPIs, semi closed system PPIs (bank/ non bank), bank account, debit card and credit card (for repayment of dues only) was permitted. However transfer from semi closed system PPIs to debit or credit cards was not allowed.
- g. Extension of Value Limits on Semi Closed PPIs: In line with its aggressive stance, RBI first extended the value limit on first category semi closed PPI from Rs 1000 to Rs. 2000 on 14.06.2012 and then completely went away with the requirement of official documents of customers to issue semi closed PPI to customers up to Rs. 10000. Monthly re loading was also raised to Rs. 10000. Similarly, non reloadable PPIs with value of Rs. 10001 to Rs. 50000 were allowed with officially valid documents and only loadable PPIs with the same denomination was mandated full KYC.
- h. Open System Prepaid Instruments Were Allowed for Cash Withdrawal at POS: On 05.09.2013, RBI permitted cash withdrawal from open system PPIs at any POS considering these PPIs a subset of debit cards. The limit was kept similar to debit cards i.e. Rs. 1000 per day.
- i. Issue of Consolidated Policy Guidelines: On 28.03.2014 RBI issued Consolidated Revised Policy Guidelines brining in some timely and well deserving changes to further strengthen the product. The changes included raising the capital requirement of issuer, restricting the eligibility to Indian corporations only, tightening the operational norms, initiating new measures for customer protection etc.
- **j. General Permission to Issue Co-branded Prepaid Instruments:** On 13.05.2014 RBI, through an amendment in the Consolidated Revised Policy Guidelines, allowed banks a general permission to issue rupee denominated co-branded prepaid instruments. Earlier a onetime approval was needed in this respect. However, persons other than banks were still to seek approval from RBI before issuing similar instruments.

- **k.** Urban Co-operative Banks (UCBs) Allowed to Issue Semi Closed System PPIs: On 27.05.2014, RBI allowed UCBs (which have installed ATMs and issued ATM-cum-Debit cards) to issue 'Semi-Closed Pre-paid Payment Instruments' permitting payment of utility bill/ essential services up to a limit of Rs. 10000.
- I. Further Extension of Value Limit on Specified Semi Closed System PPIs: With a view of further promoting the semi closed system PPIs to facilitate digitization, RBI, on 03.12.2014, further extended the value limit of reloadable KYC-compliant semi closed PPIs to Rs. 100000 from Rs.50000. The validity period of gift cards was also raised from 1 year to 3 year. Additionally, banks were permitted to issue multiple open system PPIs (in electronic form only) against a single fully KYC-compliant bank account to accommodate dependent/family members. Banks were also permitted issuance of rupee denominated non-reloadable (a) PPIs to NRIs and foreign nationals visiting India & (b) PPIs co-branded with exchange houses/money transmitters (approved by RBI) to NRIs and foreign nationals visiting India subject to the certain conditions.
- m. PPIs for Mass Transit System (PPI-MTS) Introduced: With the objective of bringing in the micro and small value cash payment transactions in mass transit system (such as metro railways, bus services etc.) under the ambit of digitization, RBI, on 09.07.2015, allowed introduction of PPIs for Mass Transit System (PPI-MTS) to be issued by mass transit authorities as a semi closed system PPI. Apart from mass transit system such instruments can be used only at other merchants whose activities are allied to or are carried on within the premises of the transit system. These will be reloadable with a minimum validity of 6 months and maximum value limit of Rs. 2000. Accordingly, Delhi Metro Rail Corporation (DMRC) has already given a PPI-MTS wallet licence from the Reserve Bank of India in February 2017.
- n. Raising Value Limits Following De-monetization: In order to facilitate the adoption of digital payments following de-monetization, RBI, on 22.11.2016, extended the existing value limit and monthly reload limit of Rs. 10000 on semi-closed instruments issued without any official document to Rs.20000. It also allowed PPI providers to issue PPIs to small merchants on minimum documentation.
- o. Banks Allowed to Further Extend their Client Base for PPIs: On 27.12.2016, RBI allowed banks to include other entities / 'employers' such as unlisted corporates / partnership firms / sole proprietorship / public organizations like municipal corporations, urban local bodies, etc. (employers) for onward issuance of PPIs to their staff / employees / contract workers, etc.

p. All Co-operative Banks Allowed to Introduce Semi Closed PPIs: Revising its earlier stance, RBI, on 27.05.2017, allowed all co-operative banks (having their own ATM network) to introduce semi closed PPIs for payment of utility bills / essential services upto a limit of Rs.10000.

II. The growth statistics:

Under the able regulatory supervision of RBI, prepaid payment instruments have emerged as a significant alternative to cash transactions in a number of fields. Such transformation is clearly visible from its immense growth over the last few years, especially from 2011-12, when a number of telecom companies and other persons first started providing m-wallets. (Note: All data in this section have been compiled from 'Payment System Indicators' available in Database on Indian Economy; RBI's Data Warehouse. For compiled dataset see Annexure)

- **a. Prior to the De-monetization Drive:** PPIs registered a steady growth in both the number and value of transactions on a yearly basis from 2011-12 to 2015-16. The average monthly transactions also grew substantially up to October 2016.
 - (i) Total No. and Value of PPI Transactions: In India, PPI transactions grew enormously over the years. From a mere 30.60 million total annual transactions in 2011-12 it reached to a whopping 748.02 million total transactions in 2015-16, registering a compounded annual growth rate of 122%. In terms of value, the transactions grew from Rs. 62.01 billion in 2011-12 to Rs.487.58 billion with a CAGR of 67.45%. The year-on-year growth in value was the most in 2014-15 while that in number was the best in 2015-16. The same trend was visible in the first seven months (i.e. prior to de-monetization announcement) of 2016-17. Transaction during these seven months reached around 80% of the previous full year (2015-16) figures.

Figure 1: Total no. of PPI transactions

Figure 2: Total value of PPI transactions

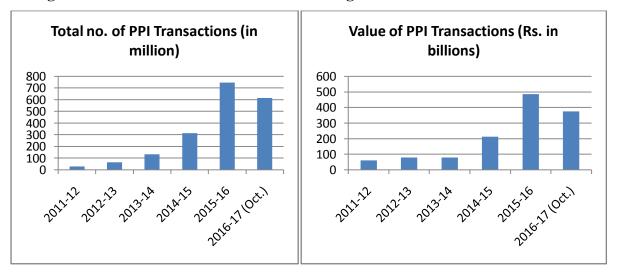
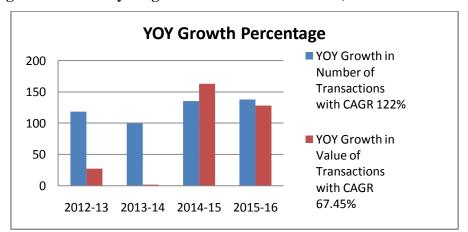


Figure 3: Year on year growth in PPI transactions (total no. and value)



Further, as evident from the monthly average statistics, it can be seen that the growth was quite consistent on intra year basis. The coefficient of variation (i.e. Standard deviation as a percentage of mean) of both the actual monthly number and value of all PPI transaction has come down considerably up to 2015-16. Consistency is, however, found to be more in case of number of transactions than the value.

Figure 4: Coefficient of variation of monthly PPI transactions

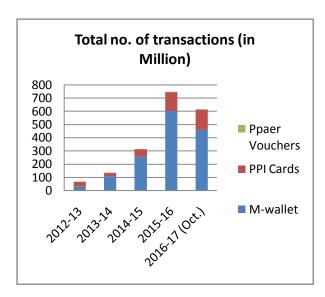
(ii) Category-wise performance:

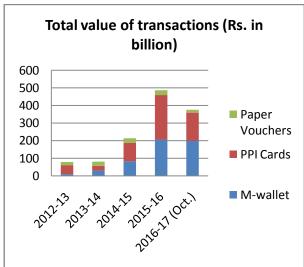
Category-wise performance of PPI instruments is also found to be quite interesting. However, category-wise data is available separately for m-wallet, prepaid cards and paper vouchers only. Accordingly, it is not possible to identify how close system, semi-closed system and open system PPIs performed over the years as the prepaid cards may comprise all the three types.

The data shows that out of the total number and value of transactions, m-wallets constitute the most in all the five years from 2011-12 to 2015-16 and also in the seven months prior to de-monetization announcement. Additionally, m-wallet is found to have an increasing contribution in the total number of transactions meaning that the growth rate in the number of transactions of this type of instrument is the highest among all the three. In terms of value, however, the same is observed for PPI cards. The share of paper voucher is found to be relatively stagnant in both the number and value of transactions. (Figure 5 and 6).

Figure 5: Category wise performance (No.)

Figure 6: Category wise performance (Value)





b. After the de-monetization drive: De-monetization of Rs. 500 and Rs. 1000 notes and subsequent cap imposed on daily and weekly withdrawals from banks and ATMs had given a significant push to the digitization initiatives in India overnight. Moreover, the delayed process of re-monetization made digital transactions a forced choice for many. As a result, a significant rise in various modes of digital transactions, in almost all formats including PPIs, was visible just after the de-monetization announcements.

As evident from the monthly data, the total number and value of PPI transactions went up remarkably from November 2016 (de-monetization was made effective from 08.11.2016). The effect was more prominent from December 2016 onwards. (Fig.7 and 8).

Figure 7: Total no. of PPI transactions

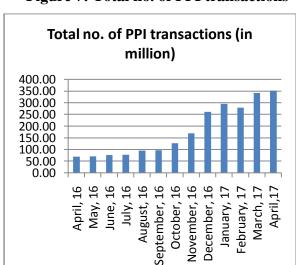
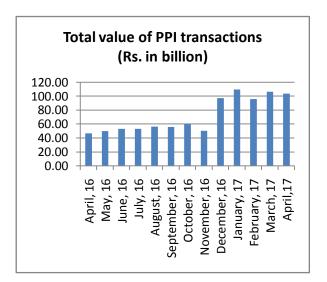


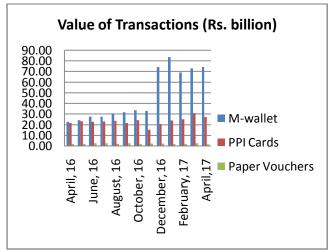
Figure 8: Total value of PPI transactions

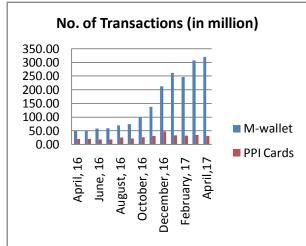


Further, among all the three variants of PPI, the increase was the most for m-wallets both in terms of number and value of transactions, thanks to Paytm, Mobikwik, Freecharge and many more mobile wallet providers. (Fig. 9 and 10).

Figure 9: Category wise performance (Value)

Figure 10: Category wise performance (No.)





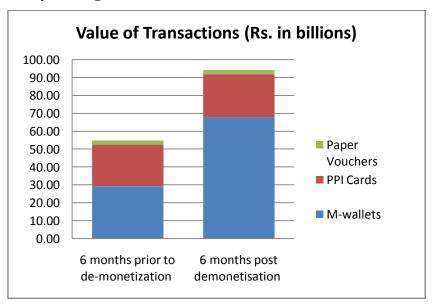
The monthly average of total and category-wise number and value of transactions (for six months pre and post de-monetization) also proves the above impact of de-monetization on the use of prepaid payment instruments. (Figure 11 and 12).

Monthly Average No. of Transactions

300.00
250.00
200.00
150.00
100.00
50.00
6 months prior to demonetization
demonetisation

Figure 11: Monthly Average Number of PPI Transactions Pre and Post De-monetization

Figure 12: Monthly Average Value of PPI Transactions Pre and Post De-monetization



It is important to note in this context that, even though, re-monetization process is almost at its end, the number and value of PPI transactions has not deepen anymore but is maintaining a steady level across months. This shows a clear trend of increasing adoption of prepaid payment instruments in India given a choice between cash and non-cash modes of transactions. This is definitely a very good sign.

(Note: All data were compiled from 'Payment System Indicators' available in Database on Indian Economy; RBI's Data Warehouse. For compiled dataset see Annexure)

III. The Current State of PPIs in India:

As mentioned earlier, PPIs in India exist in three forms- closed system, semi-closed system and open system PPIs. However, semi-closed system PPIs contributes the majority of the transactions.

As regards to closed system PPIs, no specific data is available. However, a number of govt. and non-govt. organizations are using the same. For example, a number of metro railway service providers issue smart cards to the customers. Many organizations also issue meal coupon to their employees which are redeemable at their canteen. Very recently RBI allowed Amazon a PPI issuance license against which a closed system PPI 'Amazon Pay' has been issued by the company for its customers.

As regards to semi-closed system PPIs, there are a wide variety of instruments available in India on different formats. These include mobile account or mobile wallets such as- Paytm (very recently migrated into Paytm Payments Bank), Mobikwik, Freecharge, Phonepay, Vodafone m-pesa, Olamoney, various paper vouchers or cards such as Sodexo coupons, Ticket or Ticket Restaurant etc. as well as various co-branded cards issued by banks. A very new entrant in this category is the PPI-MTS (Mass Transit Syatem) card.

As regards to open system PPIs, banks are the main issuers. Examples include ICICI Travel Card, SBI Foreign Travel Card, State Bank Achiever Card, State Bank Smart Payout Card, State Bank e-Z Pay Card and State Bank Gift Card etc.

As per the recent RBI publication, currently, there are 54 authorized non-bank entities who can issue different categories of PPI instruments subject to the available RBI guidelines and terms of license issued to them.

8. Future of PPIs in India

It is true that de-monetization has given all the digital modes of transactions an unexpected momentum. However, a consistent growth of these instruments and more specifically PPIs (mainly semi closed m-wallets) even after re-monetization clearly suggests that these modes are increasingly getting accepted by Indian public. This is because there exists a considerable number of factors that are accelerating this growing adoption of digital modes of transactions including different variants of prepaid payment instruments. These are:

- a. Transactions at bank branches and even ATM withdrawals are becoming costly. Even public sector banks such as SBI is imposing charges for various types of branch transactions or cap on ATM withdrawals. On the other hands different digital modes and especially PPIs (m-wallets, prepaid cards) are ushering additional benefits in form of discount, cash back or reward points making these instruments more attractive.
- b. Transactions via cash and cheque are increasingly becoming hazardous due to a number of regulatory measures including adhaar linkage with PAN, requirement of quoting adhaar for branch transaction beyond Rs.50000, mandatory disallowance of expenses

- beyond a given limit for taxation purpose etc. All these are making digital modes such as PPIs a forced choice.
- c. The digital ecosystem in India is looking really impressive. Information and Communication Technology is making communication easier, average internet speed is increasing, even in the rural sector 4G technology is penetrating really fast. All these are creating a conducive environment for the growth of digital payment modes including PPIs.
- d. Growth of PPIs issued on electronic format such as m-wallets largely depends on smart phone penetration as in most of the cases these are used via mobile applications (apps). For the past few years smart phone penetration in India is taking place at a remarkable pace. Availability of technology is making the adoption of these instruments really fast.
- e. During the past few years the gap between India and Bharat has really narrowed down. Though they are still miles apart in terms of quality of life, at least they have come closer in terms of digitization thanks to numerous initiatives on the part of the government. Literacy rate has also improved considerably. All these have made these digital payment instruments acceptable to the rural population.
- f. Opening and operating a semi closed system PPI account or subscribing a prepaid card is much easy and hassle free as compared to opening even a basic service savings account. This is giving these instruments an edge over traditional bank accounts and associated digital modes like debit/credit cards and net banking.
- g. Last but not the least, government is really looking aggressive in its approach to make India a less cash digital economy. Introduction of new instruments and relaxation of existing guidelines have paved the way for a faster adoption of all the digital payment modes including PPIs. However, security seems to be a big concern for quality transactions.

All the above factors are likely to contribute a lot for a consistent growth of various digital transaction modes and more specifically PPIs (semi closed or open system instruments). Thus the future of these instruments is really looking impressive in India.

References:

- All relevant circulars of RBI from 2010-11 to May 2017.
- Approach Paper on Pre-paid payment instruments, issued by RBI on 07.11.2008.
- Consolidated Revised Policy Guidelines for issuance and operation of Prepaid Payment Instruments in India, issued by RBI on 28.03.2014.

• Issuance and Operation of Pre-paid Payment Instruments in India (Reserve Bank)
Directions, 2009 and subsequent amendments, issued by RBI.

Web resources available from

- http://www.iibf.org.in
- http://www.livemint.com
- https://en.wikipedia.org
- https://rbi.org.in
- https://www.economictimes.indiatimes.com

Annexure 1
Total no. (in million) and value (in Rs. billion) of PPI transactions

	А	All .	m-w	allet	PPI (cards	Paper V	ouchers
Year	No.	Value	No.	Value	No.	Value	No.	Value
2011-12	30.6	62.01	N.A	N.A	N.A	N.A	N.A	N.A
2012-13	66.93724	79.22204	32.6986	10.00937	33.75654	49.62317	0.484644	19.59855
2013-14	133.6304	81.04546	107.5076	29.05403	25.59606	28.36022	0.526822	23.63122
2014-15	314.4633	213.4218	254.9994	81.83847	58.9108	105.3484	0.55317	26.23501
2015-16	748.0174	487.5832	603.985	205.8416	143.4706	253.7735	0.561793	27.96815
2016-17 (Up								
to Oct. 2016)	615.34	376.51	462.71	199.11	152.31	160.99	0.33	16.40

(Compiled from Database on Indian Economy; RBI)

Annexure 2
Co-efficient of Variation of monthly no. and value of PPI transactions

Year	No. of Transactions (in million)	Value of Transactions (in Rs. billion)
2011-12	38.21833	30.70462
2012-13	37.70623	18.17049
2013-14	21.35665	17.04546
2014-15	41.28144	35.98983
2015-16	12.74656	21.83148

(Compiled from Database on Indian Economy; RBI)

Annexure 3

Total no. (in million) and value (in Rs. billion) of PPI transactions

	А	II	M-wallet		Prepaid Cards		Paper Vouchers	
Month	No.	Value	No.	Value	No.	Value	No.	Value
April, 16	69.30	46.72	48.76	22.93	20.49	21.68	0.04	2.11
May, 16	70.95	49.95	50.31	24.35	20.60	23.43	0.04	2.18

June, 16	76.98	53.47	58.63	27.74	18.29	23.01	0.05	2.71
July, 16	77.85	53.40	59.45	27.60	18.35	23.09	0.05	2.71
August, 16	96.28	56.46	70.68	30.74	25.56	23.69	0.04	2.03
Sept, 16	97.07	56.28	75.30	31.92	21.72	21.74	0.05	2.62
October, 16	126.90	60.22	99.57	33.85	27.29	24.34	0.04	2.03
November, 16	169.32	50.74	138.09	33.06	31.19	15.34	0.04	2.34
December, 16	261.09	97.70	213.11	74.48	47.93	20.89	0.05	2.32
January, 17	295.80	110.01	261.67	83.53	34.08	24.22	0.05	2.26
February, 17	280.02	96.28	246.95	69.11	33.03	25.19	0.04	1.98
March, 17	342.09	106.77	307.45	73.12	34.58	30.88	0.06	2.77
April,17	352.23	103.71	320.87	74.42	31.32	27.45	0.04	1.85

(Compiled from Database on Indian Economy; RBI)