Passbooks to Passwords – The Evolution of Personal Banking in Modern India

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ABSTRACT

This research article chronicles the growth of personal banking industry from the customer's point of view. It looks at the evolution of regulation, technological innovation and customer acceptance as modern delivery systems outpaced the old. The research article's emphasis is on how the customer has found it easier to perform personal banking transactions over time. From the passbook era to the password era, the article archives a timeline of events over the past three decades.

It begins with the process of cash withdrawal and money transfers in the 1980s, leading to the introduction of ATMs and MICR cheques in the 1990s, to the Internet revolution and its impact in the new millennium. The article does not purport to be a study of Indian banking industry but a compilation of events that made personal banking a friendly and time-saving process.

Keywords: Banking, Evolution, Password, Passbook

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Introduction

Like any human generational change, personal banking too has embraced change over the last three decades. While banking regulators gave the initial impetus, information technology (IT) and the communications revolution in India spurred the growth of personal banking sector to its present incarnation. Presented here are the milestones that helped the personal banking sector to where it is today.

The Passbook Period

My parents send me money every month for my boarding and lodging expenses. The money reaches my account in under 2 hours even though my parents live thousands of kilometres away. A remarkable feat indeed. But was it the same when my parents went to college, around 25 years back?

Apparently not. Personal banking was a tedious process then. Take, for example, withdrawing money from a bank. To begin with, one had to stand in a queue with either a cheque or withdrawal slip. Once you reached the head of the queue, the clerk at the bank would find your ledger, manually enter the transaction, place the withdrawal instrument on that page and pass on the ledger to a senior manager. You, in turn, would get a numbered token, which was to be submitted at the cashier counter.

Meanwhile, the senior manager would verify your signature and pass on the withdrawal instrument to the cashier. Your token would then be called by the cashier and you would eventually receive your money. For your own personal record, all the transactions were recorded in a Passbook.

The whole process had many flaws. Your ledger could already be in use since it had more than 100 other accounts. Personnel managing counters would often go missing. Passbooks were often taken and kept by the bank and had to be collected later after updation. To top it all, it could take an hour to receive your money, and maybe more at the beginning of the month, when salaries were credited. And mind you, you could only bank at the branch where you had opened your account and not at any other branch of the same bank.

The transfer of money was equally time consuming. If one issued a cheque, it could take 3-5 days before it got credited into the recipient's account in the same city. For outstation cheques, it could take 7-10 days or more for the money to reach. And top of it, some banks placed a charge for issuing outstation cheques. But change was around the corner.

The pace of cash transactions was slow and tedious and thus there was a need for better tools in personal banking to increase the satisfaction of bank users.

The Need for Speed

Obviously, there was a pressing need to increase the speed of money flow for personal banking customers. And the impetus came from the Reserve Bank of India.

In 1984, the country's central bank set up the Committee on Mechanisation in the Banking Industry. Its recommendations included:

- Banks should set up service branches at centres where they have more than 10 branches. The service branch so set up would exclusively be devoted to clearing operations of the bank at that particular centre.
- Banks to be in readiness for the introduction of MICR Clearing at the four metropolitan cities by assessing their requirements for encoders, adopting standardised cheque forms and reorganising work procedures where necessary, and training staff down to the branch level. (Dr. C. Ranga Rajan, 1984).

According to information available on

"*In the first phase of computerisation spanning the five years ending 1989, banks in India had installed 4776 ALPMs (Advanced Ledger Posting Machines) at the branch level, 233 mini computers at the Regional/Controlling office levels and trained over 2000 programmers/systems personnel and over 12000 Data Entry Terminal Operators. The Reserve Bank too had embarked upon an ambitious program to bring about state-of-the-art technology in the clearing process and had introduced MICR clearing at 4 centres and computerized clearing settlement at 9 centres.*" (Kannan, n.d.)

Based on this success, yet another committee was set up by the Reserve Bank of India, the Committee on Computerisation in Banks, in 1989.

Its recommendations included:

- Computerisation of the settlement operations in the clearing houses managed by Reserve Bank of India at Bhubaneshwar, Guwahati, Jaipur, Patna and Thiruvananthapuram.
- Operationalisation of MICR technology and the National Clearing of inter-city cheques at the four metropolitan cities.
- Introduction of one-way collection of cheques drawn on the 4 metros received from Ahmedabad, Bangalore, Nagpur and Hyderabad.
- Framing of Uniform Regulations and Rules of Clearing Houses.
- Branch level computerisation and the establishment of connectivity between branches.
- Improvements in customer service – introduction of on-line banking.
- Standardisation and rigorous security features to ensure an efficient and risk free transfer of funds electronically.
- Setting up a network of Automated Teller Machines (ATMs) in Mumbai. ATMs to be strategically located at airports, railway stations, hospitals, important commercial centres, as well as bank branches, to be used by the customers to perform a variety of functions such as deposits, withdrawals, balance enquiries, statement of accounts, etc., at any point of time during the day.
- Introduction of a single 'All Bank' credit card and advocated the need for its widespread acceptance by merchant establishments and usage by customers to reduce the load on cash and cheque transactions (Dr. C. Rangarajan, 1989).

In hindsight, three critical terms in the recommendations set the pace for personal banking to be more swift and forward-looking – online banking, ATMs and credit card.

Another hurdle were the banking unions who felt threatened by the automation of banks. However, after protracted negotiations, the Indian Banks Association (IBA) representing bank managements and the trade unions arrived at a settlement in 1993. It heralded a major breakthrough in the introduction of computerised applications and development of communication networks in Banks.

In other words, the RBI acknowledged the fact that the passbook system is a slow and tedious process. They issue recommendations to use new technology for benefit of bank users.

Money Moves

ATM Arrives

The introduction of ATMs in the early 1990s marked a major change for the personal banking industry. While foreign banks and private banks were first of the block (due to the restrictions on the number of branches imposed on them), they were soon followed by the public sector banks.

At first, ATMs were popular as cash dispersing machines. With the aid of bank-issued ATM Cards, one could only withdraw money from ATMs of banks where one had a banking relationship. For example, State Bank of India (SBI) customers could only take out money from SBI ATMs. However, as networking evolved banks came interconnected and inter-bank use of the ATM became the norm (with the restriction of free withdrawals from your non-bank ATMs).

The number of ATM installations in India has seen an explosive and exponential growth in India. The compounded average growth rate (CARG) was 29% in the period 2005-2010 and expected to be 34% in the period 2010-2016. In sheer numbers, it meant that the installation of base of 16,750 in 2005 increased to 60,153 in 2010 and was expected to touch nearly 175,000 in 2015 (Hota, 2013).

While dispensing cash was the first function of the ATM, technological revolutions would enable to perform various other tasks. However, from the personal banking perspective, the introduction of the ATM represented a cataclysmic change. It brought personal banking out of the branch and nearer to the customer.

Evolution of Features and Functionalities of ATMs

1988-1994	Deposit of Cash, Withdrawal of Cash (Initial Period)
1995-1999	Mini Statement, Balance Enquiry (Early Developments)
2000-2001	Coupon Dispensing (First Extension)
2002-2004	Fulfilling Requests from customers (Cheque Book)

2004-2006	Ticket Booking-Railway and Airlines, Bill Payments , Mobile Recharges (Non-Banking Services)
2007 to date	Check Deposit with Scanning, Customized ATMs, Ubiquitous Multifunction, ATMs Biometric ATMs.

Personal Banking becomes easier for cash withdrawals with the advent of ATMs. All the features and functions provided by the banks during this period were all helpful for bank users. It made life for bank users easier as they could do all these functions from anywhere at anytime.

MICR and CTS – 2010

"Many of you would have seen the magnetic inks bar codes printed on the bottom of your bank's cheque leaves. These bar codes are known as MICR code, an abbreviation for 'Magnetic Ink Character Recognition'. Actually, the MICR is the name given to the technology used in printing the code. In India in 1980 this unique system of MICR based cheque clearing system was introduced first time. Apart from being a security bar code to protect your transaction, the MICR code is also an indispensable part for online money transfers. Every bank branch is given a unique MICR code and this helps the RBI to identify the bank branch and speed up the clearing process." (simplydecoded, 2012)

The introduction of MICR cheques speeded up the transfer of money for intra-*bank, inter-bank, intra-city and inter-city transfers.* This technology was later upgraded to CTS 2010.

"CTS 2010 is the prescribed standard by the RBI for cheques issued by all Indian banks to facilitate faster clearing. Instead of the collecting branch sending the physical cheque to the paying bank, an electronic image of this cheque with relevant information like the MICR code, date of presentation, presenting banks etc. is transmitted to the drawee branch by the clearing house, hastening the entire cheque clearing process." (Shyam, 2013)

The CTS 2010 system further cut down the time for cheque clearing and made life much easier for transferring money. While the ATM and the modern cheque clearing systems enabled faster withdrawal and transfer of money, further revolutions would take place once the Internet took root in the country. Transferring funds to friends or families becomes

much easier for bank users. There is no need to waste a lot of time on waiting in bank offices.

Buy Now, Pay Later

Personal banking took another leap with the introduction of credit cards. Though they were introduced in the early 1980s, it wasn't till a decade later that their attraction started meeting their potential. If you met some financial conditions, banks would issue you a credit card with a prescribed limit. The banks had tie-ups with credit card companies like Visa, Mastercard and Diners, for example, to bring you the service.

At first, credit cards were limited to withdrawal of cash and for shopping at retail stores. Payments could be made later to credit card companies at fixed dates or later dates at a rate of interest. This heralded the 'buy now, pay later' culture among bank customers. More importantly, personal banking now brought the concept of short-term loans into its ambit.

It is basically short-term unsecured loans which is very helpful for some people who need money urgent. This is for people who may want to buy something who may not have cash at that particular time or have not received their salary, payment yet.

Debit Card

Many Indian customers shun the idea of debt. Enter the Debit Card. It signaled the movement away from the cash-based economy to an easier system for purchases. Essentially, a debit card allows you to withdraw cash or purchase goods or services by directly debiting your bank account. Not only did it keep spending habits in check but more importantly it got rid of the need to keep large piles of cash in your wallet. It is estimated that by 2017, debit cards will constitute nearly 90% of all card usage in India. (Wizbowski, 2014).

People do not like to keep a lot of cash in hand because it is not secure. Debit card users can swipe for any product or service they want to buy at anytime. The money will directly be deducted from the bank account.

Internet Innovations

Home Banking

Banking on the Internet has revolutionized personal banking as it brought the bank to your home. There is no need of waiting in lines or adjusting to bank hours any more, you can access your bank account online any time you want. It helps one to keep a tab on their money even on a daily basis. By keeping a close eye on your funds one always knows what is going on in your account.

Account Information is one of the functions provided by online banking. This provides a summary of your bank accounts. It also allows easy tracking of previous transactions. One can also enquire about their account balances and transfer money from one account to another if needed. This is also useful to check their savings account and also to pay of loans if needed. All this information is available anytime online which is a boon to all account holders. People can also ask for an E-statement which includes all transactions which have occurred during a particular period of time.

Pay Bills from Home

With banks and customers connected, the next logical step was to complete the triangle with service providers to make life easier for customers. Thanks to the Internet, a wide variety of utility bills and periodic payments can now also be made directly with a push of a button.

By using the "Pay Bills" facility, consumers can pay all their bills from their PC. This saves time and also travel cost to different service providers. Moreover, it serves as a link between the service providers and the consumers and benefits both of them. Telephone Bills, Electricity Bills, Internet/Landline Charges are a few common examples that can all be paid online. A standing instruction can also be made to pay these bills at a particular date on each month. Insurance Premium and credit card bills can also be paid directly to the respective insurance companies or banks. (CIBC, n.d.), (Shodhganga).

ECS

"ECS is an electronic mode of payment/receipt for transactions that are repetitive and periodic in nature. ECS is used by institutions for making bulk payment of amounts towards distribution of dividend, interest, salary, pension, etc., or for bulk collection of amounts towards telephone/electricity/water dues, cess/tax collections, loan installment repayments, periodic investments in mutual funds, insurance premium etc. Essentially, ECS facilitates bulk transfer of monies from one bank account to many bank accounts or vice versa."

ECS Credit: ECS Credit is used by organizations as a tool to pay employees or investors having their bank accounts in different locations. It was introduced by RBI and allows customer to directly get their salary, pension, dividend and interest into their bank account. The ECS credit payments can be initiated by anyone who needs to make a lot of payments to beneficiaries. The user has to give details of the beneficiaries and the transaction amount, date when it has to be done. This is known as the credit-push facility and is divided in parts of the year like quarterly half yearly or monthly.

ECS Debit: ECS Debit is used by an organization for raising debits to a large number of accounts (for instance, consumers of utility services, borrowers, investors in mutual funds etc. It is useful for payment of telephone, electricity bill water bills, cess/tax collections, loan installment repayments, periodic investments in mutual funds, insurance premium, etc., It can be used by anyone who has to receive or collect huge amounts from a large number of people. It takes care of automatic debit to customer accounts on due dates. Customers don't need to keep a track of when they need to pay their bills. It also saves time and money. It is known as debit–push–facility or many to one and payment can be easily made through institutions either corporate or government. (Rajan, 2008) (RBI, 2012)

NEFT and RTGS

"National Electronic Fund Transfer (NEFT) and Real Time Gross Settlement (RTGS) allow individuals, companies and firms to transfer funds from one bank to another. You can check the RBI website for a list of NEFT and RTGS-enabled branches of your bank. These facilities can only be used for transferring money within the country. To opt for these, you need to fill a

form providing your or the beneficiary's details — name, bank branch where the account is held, the Indian Financial System Code, a unique code for identifying the branch, and the account number and type. You have to submit a cheque while opting for this facility. You can also transfer funds through net banking. These are third-party transfers and the option is available under the same header on your net banking home page." (Gupte, 2011)

Transferring funds to friends or families becomes much easier for bank users. There is no need to waste a lot of time on waiting in bank offices.

Mobile Madness

The advent and rapid growth of mobile phones in India offered another platform for banking services using the Internet medium. Nearly all banking applications on PCs and laptops soon found their way to the mobile phone. In other words, all Internet Innovations were now ported to the smartphone.

"According to 2011 figures, a mere 7 percent of Indian customers used Internet banking. Mobile banking has also been on a low-volume high-growth trajectory – the user base in 2013 was 22 million, up 74 percent over the previous year, though transaction value grew 228.9 percent over the same period." (Mallya, 2014)

Moreover, mobile banking increases the depth and breadth for personal banking services. Especially in rural areas where the number of phones easily outnumber computing devices.

The mobile platform helps more consumers to enter as one can bank from anywhere as well as everyone has smartphones and an internet network with the emergence of 3G and 2G.

The Next Transactions

While information technology and communications technology will continue to drive customer-friendliness and ease-of-use of personal banking services, new devices would create new platforms for the delivery of these services. While the PC and laptop allowed customers to operate out of their home, the mobile aided them in banking on the move. Other innovations are also gaining ground.

Take for example, biometric ATMs. Introduced just a couple of years back, it is making rapid inroads in rural areas, where illiteracy is high. Villagers can now use their thumbprint instead of a PIN number to access their bank accounts. Add this to the Prime Minister Narendra Modi's initiative to expand the depth of bank accounts to reach every Indian as well as the Aadhar Card's biometric database, personal banking is poised for a leap in rural India.

Yet another milestone in personal banking is being crossed with the introduction of the Digital Mobile Wallet. It is essentially a mobile device that allows an individual to easily subscribe to and browse through many services, including payment cards, offers, vouchers, loyalty programmes, tickets and other items they need in their daily lives. The wallet will also be able to launch an application from a retailer, bank, transport operator or another service provider.

The next stop lies with Artificial Intelligence (AI). Take, the smart watch for example. Add voice recognition facilities. So in the future, you can speak into your watch and say "Transfer Rs. 50,000 to mom". The AI in your watch will translate the message into a personal money transfer service and execute the order. A few minutes later, a message from mom, "Thanks son". A far cry from the time you live in or your parents lived in.

Conclusion

From passbooks to passwords, personal banking has come a long way in modern reformist India. However, the pace and momentum of change is not slowing but increasing day by day, aided and abetted by technological changes in communications and information technology. Which in the end for the personal banking will only result in more customer choice and customer delight.

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