



ORIGINAL RESEARCH PAPER

Commerce

DIGITAL BANKING IN INDIA

KEY WORDS: e money

Dr. C. Venkateswarlu

M.Sc., Ph.D Academic Consultant, Dept. Of Anthropology, S.V. University, Tirupati 517502

Dr P. Thiripalu

Academic Consultant, Dept. Of Anthropology, S.V. University, Tirupati 517502

Dr. Morusu. Siva Sankar

M.Sc., (IT) MBA M Tech (CSE) M. Com., Ph.D., PDF (Post-Doctoral Fellow UGC) Academic Consultant, Dept. Of Commerce, S.V. University, Tirupati 517502

ABSTRACT

Digital banking is part of the broader context for the move to online banking, where banking services are delivered over the internet. The shift from traditional to digital banking has been gradual, remains ongoing, and is constituted by differing degrees of banking service digitization. Digital banking involves high levels of process automation and web-based services and may include APIs enabling cross-institutional service composition to deliver banking products and provide transactions. It provides the ability for users to access financial data through desktop, mobile and ATM services. A digital bank represents a virtual process that includes online banking, mobile banking, and beyond. As an end-to-end platform, digital banking must encompass the front end that consumers see, the back end that bankers see through their servers and admin control panels, and the middleware that connects these nodes. Ultimately, a digital bank should facilitate all functional levels of banking on all service delivery platforms. In other words, it should have all the same functions as a head office, branch office, online service, bank cards, ATMs, and point-of-sale (POS) machines. The reason digital banking is more than just a mobile or online platform is that it includes middleware solutions. Middleware is software that bridges operating systems or databases with other applications. Financial industry departments such as risk management, product development, and marketing must also be included in the middle and back ends to truly be considered a complete digital bank. Financial institutions must be at the forefront of the latest technology to ensure security and compliance with government regulations.

HISTORY OF DIGITAL BANKING

The earliest forms of digital banking date back to the advent of ATMs and cards in the 1960s. As the internet emerged in the 1980s with early broadband, digital networks began to connect retailers with suppliers and consumers to develop needs for early online catalogs and inventory software systems. By the 1990s, the Internet had become widely available and online banking started becoming the norm. The improvement of broadband and e-commerce systems in the early 2000s led to what resembles the modern digital banking world today. The proliferation of smartphones through the next decade opened the door for transactions on the go beyond ATM machines. Over 60% of consumers now use their smartphones as their preferred method for digital banking.

What Digital Banking Means For Banks

A study conducted in 2015 revealed that 47% of bankers see the potential to improve customer relationships through digital banking, 44% see it as a means to generate competitive advantage, 32% see it as a channel for new customer acquisition. Only 16% emphasized the potential for cost saving.

The Major Benefits Of Digital Banking Are

Business Efficiency - Not only do digital platforms improve interaction with customers and deliver their needs more quickly, they also provide methods for making internal functions more efficient. While banks have been at the forefront of digital technology at the consumer end for decades, they have not completely embraced all the benefits of middleware to accelerate productivity.

Improved Competitiveness - Digital solutions help manage marketing lists, allowing banks to reach broader markets and build closer relationships with tech savvy consumers. CRM platforms can track customer history and provide quick access to email and other forms of online communication. It's effective for executing customer rewards programs that can improve loyalty and satisfaction.

Enhanced Security - All businesses, big or small, face a

growing number of cyber threats that can damage their reputations. In February 2016 the Internal Revenue Service announced it had been hacked the previous year, as did several big tech companies. Banks can benefit from extra layers of security to protect data.

Back End Banking Architecture

A key way in which digital banks can gain a significant competitive edge is by developing a more robust IT architecture. By replacing manual back-office procedures with automated software solutions, banks can reduce employee errors and speed up processes. This paradigm shift can lead to smaller operational units and allow managers to concentrate on improving tasks that require human intervention.

Direction Toward Digital Cash

Digital cash eliminates many problems associated with physical cash, such as misplacement or the potential for money to be stolen or damaged. Additionally, digital cash can be traced and accounted for more accurately in cases of dispute. As consumers find an increasing number of purchasing opportunities at their fingertips, there is less need to carry physical cash in their wallets.

The concept of an all-digital cash economy is no longer just a futuristic dream but it's still unlikely to outdate physical cash in the near future. All digital banks are possible as a consumer option, but people may still have a need for physical cash in certain situations. ATMs help banks cut overhead, especially if they are available at various strategic locations beyond branch offices

Emerging Digital Solutions

Emerging forms of digital banking are
 BaaS - Banking as a Service (allows for third party integration)
 BaaP - Banking as a Platform (for integrating core systems with software)
 Cloud-based Infrastructure (allows less reliance on IT staff)
 White Label Banking (such as co-branded credit cards)
 Online banking, also known as internet banking, virtual

banking, web banking or home banking, is a system that enables customers of a bank or other financial institution to conduct a range of financial transactions through the financial institution's website or mobile app. Since the early 2010s, this has become the most common way that customers access their bank accounts.

A screenshot of Frankfurter Volksbank Showing E-banking transactions

The online banking system will typically connect to or be part of the core banking system operated by a bank to provide customers access to banking services in addition to or in place of historic branch banking. Online banking significantly reduces the banks' operating cost by reducing reliance on a physical branch network and offers convenience to some customers by lessening the need to visit a bank branch as well as being able to perform banking transactions even when branches are closed, for example outside the conventional banking hours or at weekends and on holidays.

Internet banking provides personal and corporate banking services offering features such as making electronic payments, viewing account balances, obtaining statements, checking recent transactions and transferring money between accounts.

A 1985 AT&T Home Banking console.

The first home banking service was offered to consumers in December 1980 by United American Bank, a community bank with headquarters in Knoxville, Tennessee. United American partnered with Radio Shack to produce a secure custom modem for its TRS-80 computer that allowed bank customers to access their account information securely. Services available in its first years included bill pay, account balance checks, and loan applications, as well as game access, budget and tax calculators and daily newspapers. Thousands of customers paid \$25–30 per month for the service

The developers of United American Bank's first-to-market computer banking system aimed to license it nationally, but they were overtaken by competitors when United American failed in 1983 as a result of loan fraud on the part of bank owner Jake Butcher, the 1978 Tennessee Democratic nominee for governor and promoter of the 1982 Knoxville World's Fair.

Internet And Customer Reluctance And Banking

When the clicks-and-bricks euphoria hit in the late 1990s, many banks began to view web-based banking as a strategic imperative In 1996 OP Financial Group, a cooperative bank, became the second online bank in the world and the first in Europe

By 2018, the number of digital banking users in the U.S. reached approximately 61 percent.[The penetration of online banking in Europe has been increased as well. In 2019, 93 percent of the Norwegian population access online banking sites, which is the highest in Europe, followed by Denmark and Netherlands. Across Asia, more than 700 million consumers are estimated to use digital banking regularly, according to a 2015 survey by McKinsey and Company

In 2001, Bank of America became the first bank to top 3 million online banking customers, more than 20% of its customer base. In comparison, larger national institutions, such as Citigroup claimed 2.2 million online relationships globally, while J.P. Morgan Chase estimated it had more than 750,000 online banking customers. Wells Fargo had 2.5 million online banking customers, including small businesses. Online customers proved more loyal and profitable than regular customers. In October 2001, Bank of America customers executed a record 3.1 million electronic bill payments, totaling more than \$1 billion. As of 2017, the bank has 34

million active digital accounts, both online and mobile In 2009, a report by Gartner Group estimated that 47% of United States adults and 30% in the United Kingdom bank online

The early 2000s saw the rise of the branch-less banks as internet only institutions. These internet-based banks incur lower overhead costs than their brick-and-mortar counterparts.

**First Online Banking Services by region
The United Kingdom**

Online banking started in the United Kingdom with the launch of Nottingham Building Society (NBS)'s Homelink service in September 1982, initially on a restricted basis, before it was expanded nationally in 1983 Homelink was delivered through a partnership with the Bank of Scotland and British Telecom's Prestel service

The United States

In the United States in-home banking was "is still in its infancy" with banks "cautiously testing consumer interest" in 1984, a year after online banking went national in the UK. [At the time Chemical Bank in New York was "still working out the bugs from its service, which offers somewhat limited features".

India

In 1998, ICICI Bank introduced internet banking to its customers India's online banking system includes the National Electronic Funds Transfer (NEFT) and Real-time Gross Settlement (RTGS), which are overseen by the Reserve Bank of India (RBI) and the Immediate Payment Service (IMPS), which is run by the National Payments Corporation of India (NPCI).

Criticism And Problems

The increase in popularity of online banking with a concomitant closure of local bank branch offices or reduced retail opening hours discriminates against people who cannot use online banking, for example, elderly or disabled people who prefer to deal with banking issues face-to-face.

In 2022, a retired Spanish urologist with Parkinson's disease gathered more than 600,000 signatures in an online petition asking banks and other institutions to serve all citizens, and not discriminate against the oldest and most vulnerable members. In Spain, the number of bank branches had shrunk to about 20,000 in 19 years since the bailout of 2012 and with the Coronavirus pandemic another 3000 branches closed in 2 years. "They are excluding those of us who have trouble using the internet." In February 2022, Spanish banks signed a protocol at the Ministry of Economy (Spain) pledging to offer better customer services to senior citizens, for example by "extending again their branch opening hours, giving priority to older people to access counters and simplifying the interface of their apps and web pages

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