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# Bank Management And Introduction Of New Technologies

## 1. ICICI Bank- Voice Recognition for Biometric Authentication

ICICI Bank, the largest private sector bank in India, had announced the launch of a voice recognition service which authenticates customers based on their speech patterns and allows them to execute banking transactions through the Bank's Call Centre in a quick, secure and easy manner.

The-first-of-its kind service by a Bank in India, it is available to over 33 million customers of its savings account and credit card. With the voice recognition technology in place, customers are no longer required to enter their card numbers, PINs and answer security questions to authenticate themselves for security reasons. Their voice will now act as the password for banking transactions through the Call Centre instead of PINs.

The voice recognition technology works on voice prints, which are unique to every individual. It comprises 100 plus characteristics which include voice modulation, words speaking pace, accent, pronunciation which are impossible to imitate, thereby enhancing security levels too. The Banks record and check the customer's voiceprint which is unique for every individual, against his account and matches it whenever he calls from his registered mobile number, offering a seamless experience to the customer from any place and also any time.

## 2. AXIS Bank- Iris Scan Authentication

Axis Bank has become the first Indian bank to introduce the Iris Scan Authentication feature for Aadhaar-based transactions through its micro ATM tablets which are convenient for use.

This service of IRIS Scan Authentication, which requires a customer to scan their iris on a tablet at the ATMs, will boost the bank's financial inclusion efforts by making the Aadhaar authentication process hassle-free and offering easier access to digital banking which is a major focus of the government too. Also, it is for consumers especially in the rural parts of the country for their easy use of ATMs.

Micro ATMs completely eliminate the requirement of credit cards, debit cards, passwords, PINs, and user IDs, and empower their users to avail banking services using only their Aadhaar numbers and biometrics (iris scanning or fingerprint scanning). AXIS Bank is providing highly secure and protected iris-powered micro ATM tablets which are STQC certified and UIDAI compliant registered devices with completely integrated iris sensors to not put the privacy and security of their customers at risk.

Iris scan technology is completely contactless, easy to use and provides up to 98.2 per cent authentication success rate (as per the study conducted by the International Centre for Biometric Research), and offers an edge over other prevalent biometric modes that are presently in use.

## 3. HDFC Bank- Humanoid IRA

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India's largest private sector bank by assets, HDFC Bank has become India's first bank to deploy a robot inside their branch and offices for quality customer service purposes. This interactive and efficient functioning humanoid robot, named IRA or Intelligent Robotic Assistant will be able to welcome/greet customers, and then offer a list of banking services which that customer can get accomplished with inside that branch.

HDFC has deployed this robot inside Mumbai's Kamala Mills branch, and this interactive humanoid can guide the incoming customer towards many of these banking operations such as Cash Deposit, Foreign Exchange, Loan services, etc. Once the customer opts for the 'Take Me There' option, the robot will actually take the customer to that particular counter, thereby bringing in ease towards process, saving time and human resources as well.

Nitin Chugh, Country Head, Digital Banking, HDFC Bank in a conference said, "We're excited to announce the deployment of our first humanoid, IRA in the Kamala Mills branch. IRA is quite unique and will serve as a technology demonstrator in the field of artificial intelligence and robotics."

#### 4. HDFC Bank- Eva, Chatbot

Eva, the bank's chatbot is a robot that has a voice that's powered by Amazon's Alexa. The prototype built on Alexa, Amazon's AI-based assistant, was shown to Managing Director Aditya Puri of HDFC Bank in October.

For the present time being, Eva only reads content from a particular website and is able to tell you if there is a bank at a particular location or give information on loans, mutual funds, fixed deposits, and other core banking services. It also recognizes oneself, and asks them what they want to do today and assist them in their tasks of checking account balances, announcing recent transactions performed information and other services.

Eva is not only limited to paying bills of customers or transferring money from one account to another or fetching information. It can also remember when you paid a bill the last time due to its records maintained. In the future, it will remind their customers when the time comes to pay the bills, and if the customers don't have enough balance it will ask them to transfer money to their accounts. Eva Chatbot is recently voted as India's smartest chatbot used in banking industry.

#### 5. RBI- Unified Payment Interface (UPI)

Unified Payments Interface (UPI) is an instant and easy real-time payment system developed by the National Payments Corporation of India facilitating inter-bank transactions. The interface is regulated and operated by the Reserve Bank of India and works by instantly transferring funds between two bank accounts on a mobile platform. Unified Payments Interface is a banking system that not only powers multiple banking accounts into a single mobile application (of any participating bank) but also merges several banking features, logical fund routing & merchant payments into one hood. It also serves as the "Peer to Peer" collect request which can be scheduled and paid as per requirement and convenience. Each Bank has and provides its own UPI App for Android, Windows, and iOS mobile platforms. a) Virtual Payment Address (VPA) or UPI ID: Send or request money from/to bank account mapped using VPA. b) Mobile number: Send or request money from/to the bank account mapped using a mobile number. c) Account

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number & IFSC: Send money to the bank account. d) Aadhaar: Send money to the bank account mapped using the Aadhaar number. e) QR code: Send money by QR code which has enclosed VPA, Account number, and IFSC or Mobile number.

On August 16, 2018, UPI 2.0 was launched which enabled users to link their Overdraft accounts to a UPI handle.

## 6. SBI- SIA-AI Powered Chat Assistant

SBI, India's largest public sector bank has launched SIA, which is an AI-powered chat assistant that addresses customer enquiries instantly and assist them with everyday banking functions just like a bank authority or representative. SIA was developed by Payjo, a startup based in Silicon Valley and Bengaluru. According to Payjo, since its launch, the Chatbot has answered to millions of queries from thousands of customers which is 25% of the queries and questions handled or uploaded on Google every day. SIA has the capability to handle nearly 10,000 enquiries per second.

Deployment of this size is surprisingly the first of its kind in India and even across the globe. SBI also proudly claims the fact that SIA continuously learns with each interaction and gets better with every query solved. Currently, SAI can address queries based on banking products and services of the particular bank. It is also trained with a large set of past customer queries and issues and is said to efficiently handle frequently asked questions.

## 7. AXIS Bank- National Language Processing & AI App

Axis Bank had just recently launched an Artificial Intelligence & Natural Language Processing (NLP) enabled app, Conversational Banking, to assist customers with their financial and non-financial transactions, to answer Frequently Asked Questions (FAQs), and get in contact with the bank for a loan and other products. The main focus is to provide 24x7 assistance, instant gratification, and convenience to our customers in an intuitive and native way.

To help reduce The Turnaround Time (TAT), the bank has used AI across 125 plus processes and cognitive automation in around 90 processes, which needed repetitive manual labor and also consumed much time. Presently, Robotic Process Automation (RPA) is completed for most of the processes, including account maintenance and service to customers, loan disbursements, bulk transaction processing, and ATM support.

Axis bank is seeing significant improvement in its functioning efficiency, time to solve queries, and cost savings. With RPA there's a visible reduction in TAT – savings account opening has reduced by 90 percent, on current accounts by 92 percent, and on other processes by 50 percent-80 percent.

## 8. Yes Bank Partnering with PhonePe

YES BANK which is India's 5th Largest Private Sector Bank, has partnered to launch India's first UPI (Unified Payments Interface) based mobile payments app, in a move aimed mainly to significantly use the disrupting the digital payments landscape across India. The existing digital payment solutions in use today, such as net banking, debit cards and digital wallets force Indian customers to choose between a highly secured plan or an easy payment experience. PhonePe

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offers its customers an experience that is both fully 100% secure and also lightning fast to use. And the best part is that now a customer's money will always stay in their bank account safely, until they wish to spend it.

PhonePe allows its users to link their bank accounts securely to their smartphones using NPCI's encrypted libraries in a legal manner. Once the users are linked, they can legally send or receive money transfers or merchant payments instantly by simply entering their personal 4-6 digit MPIN. Money is automatically transferred directly from the sender's bank account to the receiver's bank account. There's no need to enter a Time Password to authorize a transaction anymore and is also a safe process. And such transactions take less than 10 seconds to complete.

## 9. ICICI Bank Rural Penetration

ICICI Bank realized the need of penetrating into the corners of the country i.e., the rural areas, and turning them into cashless cities and villages. Banks are working towards initiatives and programmes in alliance with the Pradhan Mantri Jan Dhan Yojana of the Modi Government, which promotes the opening of accounts with zero balance for rural people to empower them to use banking services. ICICI Bank has been making inroad maps, ensuring that technology is accessible in rural areas and also easy for them to use. The bank recently announced the setting up of the ICICI digital village at Akodara in the Sabarkantha district of Gujarat and also adding that it has turned the village into a cashless economy and setting up an example for the rest of the developing country.