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## *Self Service KIOSKS are Changing Customer Behaviour*

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*Abstract: In banking some operations like opening deposits, fund transfer, Passbook Printing and Cheque Clearing can be access only during in banking hours. The banks have implemented the certain technology in few services to cut down the access time intervention implemented Self Service Technologies. Customers expect instant services and are therefore, opting for automated devices to reduce their manual operating tasks. The seamless performance of the self-service machines enhances the overall customer satisfaction. The facility to provide real time notifications via cloud based network is positively affecting the market of self-service technology products. The remote management feature reduces the maintenance cost and enables the machine to perform uniformly. Self-service kiosks are more than information providing centers. These Internet-connected, full-service shopping assistants help to understand the shopper behavior and support social media activity - while helping customers organize lists, consider ideas, locate merchandise, and pay for merchandise.*

*The Self Service technologies market by types of machines are segregated into three types including ATMs, Kiosks. ATMs' are subdivided into conventional, white label, brown label, smart and cash dispenser types. The value chain of self-service technologies market includes various stakeholders such as component manufacturers, hardware providers, system integrators, network providers, operators, deployment and customers. These stakeholders perform different roles in their specific areas and add more value to the products. Advancements of self-service technologies would create a competitive edge due to initiatives from each stakeholder in the value chain.*

*Keywords: Self Service Banking Technology; Kiosk Banking; Current Trend; Effective Utilization; Pros and Cons.*

### I. INTRODUCTION

Modern banking industry is fully computerized. All the bank branches are networked with Core Banking Solutions (CBS). The customers can access their account in any branch of same bank from anywhere which is known as anywhere banking. The advancement in the technology such as ATM, Internet Banking and Mobile Banking has set a trend for anytime banking.

The bank setup lobbies in their premises and in main business area location termed as E-Lounge to facilitate their customers to access their certain banking services 24\*7\*365 under one roof. It also called as Kiosk Banking. Kiosk banking like a booth access certain banking channels and the bank utilize this for their marketing purposes. It's a low-cost marketing strategy.

### II. KISOK BANKING: AN INTRODUCTION

The Reserve Bank of India (RBI) defines financial inclusion as the process of ensuring access to financial services and timely and adequate credit where needed by vulnerable groups such as weaker sections and low income groups at an affordable cost. In the essence of financial inclusion, KIOSK banking is an important concept and basically developed for rural areas of country where less number of banks are and people can't reach to the bank to use their services.

It is conceived that the kiosks will functions with the support of leading banks in the private, public and cooperative sectors and using the shops as a touch-point for basic banking services such as cash deposits, withdrawals and remittances apart from micro-credit and insurance. Like the ordinary bank branches, the kiosks will offer all the basic services of banking.

### **How it functions?**

A retailer can open a no-frills bank account for a customer by recording fingerprint details and taking a photograph of the customer. The details along with other documents are forwarded to the affiliated bank branch to carry out the know-your-customer process. Once the account is up, a customer can withdraw, deposit or remit a maximum of Rs 10,000 per day through the internet-enabled kiosk branch. A kiosk will usually create attention by attractive display and messages to get new customers. It is one stop point for the bank to their certain targeted clients depending on their needs.

In E-Lounge they installed certain banking channel kiosks are:

- A. Clearing Cheque Kiosk
- B. Passbook Printing Kiosk
- C. Multi-Function Kiosk
- D. Bulk Note Recycling Machine [BRM]

### **Kiosk Banking Technology Services**

#### **Clearing Cheque Kiosk**

Cheque clearing is the process of moving a cheque from the bank in which it was deposited to the bank on which it was drawn, and the movement of the money in the opposite direction. This process is called the clearing cycle and normally results in a credit to the account at the bank of deposit, and an equivalent debit to the account at the bank on which it was drawn. After implementation of Cheque Truncation System [CTS] clearing process, Cheque movement in the form of Electronic Image no need of physical cheque movement as older Clearing House method. It saves more cost and time to bank and Reserve Bank of India. In impact to Self Service Technology and customer to access banking channel 24\*7\*365 for clearing cheque deposit Kiosk has been developed for this channel.

#### **Pros of clearing cheque kiosk**

- ✓ Reduces Paper work and no need to fill Challans
- ✓ Simple Procedure to Operate
- ✓ Menu Available in English, Tamil and Hindi Languages
- ✓ Acknowledgement with the scanned image to the Presented Cheque no worry about without proper acknowledgement put the cheque in Drop Box
- ✓ Customer feel happy their cheque has been booked and not make delay in clearance by the bank
- ✓ Works as per CTS Clearing Batch Process timings
- ✓ Can book their cheque anytime 24\*7\*365
- ✓ Compare to Manual Booking Process is Quicker
- ✓ Acknowledgement copy is very useful for Record Maintenance purpose – With clear detail
- ✓ For a single a/c can present multiple cheques easily by using add more option by completion of every cheques

**Cons of clearing cheque kiosk**

- ❖ Customer feel little bit difficult to access the touch screen to entry the numbers
- ❖ Some Government Cheques will not pass, need to Present through Paper to Follow Clearing
- ❖ In some banks issuing CTS Cheques but the a/c number in not printed its manual rubber stamp sealed that cheques will not accepted
- ❖ Mostly to clearing cheques are presented in bank by a/c holder shop labours and 3rd party, they won't show interest in book in kiosk, simply put the cheque in drop box.
- ❖ Cheque got stuck inside the kiosk if any network disturbance or place any damaged cheques
- ❖ Acknowledgement receipt print becomes dull after few days.

**Passbook Printing Kiosk**

For Savings bank account holder the main proof and certain details like A/c holder Name, A/c Number, A/c Holder Address, Photo of the A/c holder, IFSC Code, Branch address etc., Passbook provide for the purpose of record of bank a/c transaction of their savings deposit account. Earlier the passbook entries written in manual by the clerical afterwards entries verify by the officer and initials the entries. After became Computerised and CBS environment passbook printer installed and issued computerised passbook, easily generate the report and print the entries.

Now in advancement of technology in banking environment and also implement of self-service technology for Passbook printing Kiosk introduced. It saves more time to customer and transaction cost to banks. By one time simply print details of bank and customer in 1st page place barcode in back of passbook is enough. The customer can took passbook entries print by own in passbook printing kiosk till the passbook become full of entries.

**Pros of passbook printing kiosk:**

- ✓ Kiosk Print text is clear and bold compare to previous pass book print machine
- ✓ Simply by one time print of Barcode in back side of passbook and Print of Front page is enough
- ✓ No need enter details any details, by simply place the passbook it reads the barcode and starts printing
- ✓ Clear voice instruction for to place passbook, printing process and to turn the next page once current page entries are full
- ✓ No need wait in bank so long for passbook print, save lot of time. In older method teller collect the passbook, need to generate entries, print it and hand over to officer and initials the entries.
- ✓ Can access 24\*7\*365
- ✓ Menu available in Languages of English and Hindi.

**Cons in passbook printing kiosk**

- After select language and insert the passbook if any network disturbance passbook struck inside the printer, after few seconds the passbook came return, that moment customer afraid about their passbook
- No Local Language (Tamil) instruction, most of people don't know to operate while using 1st time, need some assistance for few times till get familiar in options.

**Multi-Function Kiosk**

It is the best option to create the awareness about the benefits of Internet Banking and Mobile banking. The leading manufacturers of Self Service Kiosk to banks are Accel Frontline Pvt Ltd and NCR Corporation.

To operate this Customer should have ATM card or Internet banking service to access Kiosk. By the authentication one of these modes, Customer can do their transaction like:

- Open Online Deposit
- Funds Transfer
- Beneficiary Management – Add/View/Modify/Delete
- Inter Bank Transfer
- RTGS (Real Time Gross Settlement)
- NEFT (National Electronic Fund Transfer)
- Cheque Book request
- A/c Statement View
- View their Profile

**Pros of multi-function kiosk**

- Reduce work burden to staff and transaction cost for doing Inter Bank transfer/RTGS/NEFT.
- Save lot of time and Paper work reduce by filling up of Challans and it Save around Rs.15 to 30, RTGS/NEFT transaction Commission and banks transaction costs.
- Customer can View their A/c Statement as the period they want.
- Beneficiary added in 24hours due to security reasons.
- Per transaction can fix the limit up to Rs.5,00,000.
- The every transaction got authorised finally by OTP (One Time Password) to customers Registered Mobile Number.

**Cons of multi-function kiosk**

- Standing instruction Mark option not available in Multi-Function Kiosk like Internet Banking
- Branch and ATM Locator not available, it's easy to customer when they need to find out other branch location.
- No Acknowledgement Receipt, so that again stand in counter for a/c statement and not doing any transaction without any record.

**III. BULK NOTE RECYCLING MACHINE [BRM]**

One of the primary reasons a customer visits a bank branch is to deposit cash. For someone who deposits cash on a regular basis, it can prove to be a lengthy and time-consuming process and need to remit in Working hours. Bulk Note Recycling Machine [BRM] is a terminal that uses to deposit cash in a/c without any time dependent and manual staff intervention. Now no need to stand in long queues at the cash counter and filling challans. In BRM deposit the cash very fast and simple. The BRM accepts only good notes and hence reduces the risks of capturing fake currency. All unfit and suspect notes will be rejected by the machine. The currency accepted by the BRM will be sorted and stacked in the cassettes inside the BRM denomination-wise. All cash deposits happen on a real-time basis.

The machine also acts as ATM so it has the facility to provide mini statement, account balance, interbank transfer, Mobile Banking Registration and Cheque Book Request for all card-based transactions.

Nautilus Hyosung, NCR Corporation are Leading Cash Acceptor Manufacturers. To access the BRM, you need to have Bank Debit Card or know the Bank's account number in which you wish to deposit the money. These technologies impress the customers and it increase customer base by word-of-mouth concept.

#### **Pros of BRM**

- ✓ Instant credit in a/c with printed acknowledgement of full details as A/c number, A/c Name, Deposited Amount and Denomination Details
- ✓ No need to fill up the challans and stand in long queues.
- ✓ Independent from Working Hours and Holidays, Can access 24\*7\*365
- ✓ Present acceptable denominations 50,100,500,1000
- ✓ Can accept 200 notes per transaction
- ✓ Can deposit Rs.200000 in single transaction for PAN holders

#### **Cons in BNA**

- No awareness about soil note placed in Retain, have to give manual credit by branch after verify
- Cash got Retract while any disturbance in Network.
- Once Retract Box filled with 200 Notes machine stop accepting and dispense of cash.

### **IV. FINANCIAL INSTITUTION KISOK USER**

#### **1. Provide Access to Website**

Financial institutions have invested heavily in increasing their online presence and providing customers with a plethora of remote/home banking options. By providing customers access to these features within the branch, you can leverage your online capabilities with little to no additional costs.

#### **2. Digital Application Creation**

Allowing customers to fill out forms online can avoid mistakes due to handwriting, and decrease the time taken to process applications for accounts, loans, credit cards, mortgages, and more.

#### **3. Promotion and Community Building**

If you are running promotions, or special offers, it is important to share that information in as varied a method as possible. Displaying ads or offers on an interactive kiosk is just another way to get “impressions” on a particular promotion. Even better, allowing customers to print particular product packages or offers will minimize traditional print costs and increase awareness.

#### **4. Education and Information Sharing**

You can use a kiosk to promote and educate your customers about online capabilities. You can do this via tutorial videos and documents or staff demonstrating and teaching on the kiosk.

#### **KioWare Kiosk Software**

KioWare is kiosk system software currently used by over 350 financial institutions in over 40 countries around the world. Deployments range from over 800 kiosks spread over hundreds of branches to a kiosk in a single branch.

**Reasons to Use Kiosk Software with our Financial Institution Kiosk**

Kiosks have three main components. They start with hardware (a computer or tablet that is secured physically with a kiosk or tablet enclosure). With KioWare, your hardware can be running Android or Windows OS. The second component is the customer facing application. This is the website or application with which customers will be interacting. It is usually the financial institution website, or mobile application, but it can also be a custom built kiosk application that performs a particular function or task and is developed specifically for use on kiosks. If you need a custom kiosk application, the KioWare Custom Development Team can provide expertise to meet your needs. The third piece of deploying a kiosk is kiosk software. This is the underlying technology that protects your device, network, customer, and data. It serves all of the following functions, and more.

**Benefits of Kiosk Software for Data Security**

1. Reduces Kiosk Down Time – Ensures Application is Running
2. Protects User Privacy by Deleting Cache & Temporary Files
3. Resets Between Users Completely Resetting Computer to its Initial State
4. Provides Customizable Content, Branding & Graphics
5. Controls User Activity by Controlling Browser & Application Access and Navigation
6. Restricts Access to the OS & File System
7. Monitors Kiosk Usage & Health
8. Scales for Easy Deployment and Updates
9. User Session End Based on Time or Motion
10. Controls Addition and Removal of Data from/to External Device
11. Helps to ensure PCI compliance
12. Option to Block Pop Ups
13. Supports Retractable Printers
14. Option to Block Access to Email & Email Links

**Financial Institution Kiosks – Uses & Examples**

1. Check Account Balances
2. Apply for a Credit Card
3. Open an Account
4. Transfer Funds
5. Account Access
6. Print Product Information/Brochures
7. Financial Management Tools
8. Request an Appointment
9. Apply for a Loan or Mortgage
10. Run a Credit Report

11. Watch a Video Tutorial (on topics like online bill pay, for instance)
12. Share Current “promotions” or Other Digital Signage Content
13. Provide Access to Exchange Rate Information
14. Order checks
15. Place an Order for Currency Exchange
16. Pay Bills
17. Highlight Upcoming Branch Events
18. Share Current (up to the minute) Interest Rates for Various Loan Types

Financial institutions have invested heavily in increasing their online presence and providing customers with a plethora of remote/home banking options. By providing customers access to these features within the branch, you can leverage your online capabilities with little to no additional costs.

#### **V. USE KIOSK TO PROMOTE AND EDUCATE CUSTOMERS ABOUT OUR ONLINE CAPABILITIES**

Most simply, you can set up kiosks to share your mobile application or website with customers. With a kiosk that is locked down only to access your online presence, the bank website and/or application is being promoted and shared, and bank personnel can assist customers with setting up their first time account access or educate customers on how to utilize online features. By securing a kiosk to display a video, you can also share tutorials or other educational content with customers via an unattended bank kiosk

#### **Benefits to customers**

- A 'No Frill Accounts' through KIOSK Banking Model
- General purpose Credit Card (GCC)/Kisan Credit Card (KCC)
- Term Deposit/Recurring Deposit
- Regular SBI Saving Bank Account
- Loans against Term Deposit Receipt (TDR) etc
- Hassle free opening of savings account.
- Less KYC documents.
- No Queues.
- No Travel expenses
- Easy deposits, withdrawals & cash remittances.
- Easy opening of R.D. & F.D Account.
- Deposits can be made from anywhere.
- Transfer Subsidies , Scholarships and other Benefits can be directly credited to the account

#### **VI. CONCLUSION**

More Paperwork reduced, more burdens reduce to both Customers and Banks. If the Bank wants to render best service to customer and the customer want to get good service from the bank, both of them have to think “Technology Service” and access

the Kiosk banking channels. Expect Loan process and Locker operation customer fulfill their banking needs in E-Lounge itself. Banks have to advertise about these technology service features on their website like SBI, Indian Bank, HDFC Bank, Axis Bank and ICICI Bank and the bank have to conduct a special awareness campaign and open E-Lounge in potential places, So that the customers base increases to the bank and people will get familiarization, access with the technology and adopt the same.

#### References

1. [www.kioskmarketplace.com/topics/banks-financial/](http://www.kioskmarketplace.com/topics/banks-financial/)
2. <https://hbr.org/2015/03/how-self-service-kiosks-are-changing-customer-behavior>
3. [www.atmmarketplace.com/.../banks-new-self-service-kioskatm-solution-puts-custome..](http://www.atmmarketplace.com/.../banks-new-self-service-kioskatm-solution-puts-custome..)
4. [www.bccresearch.com](http://www.bccresearch.com) › Market Research › Information Technology
5. [www.prnewswire.com/.../self-service-kiosk-market-growth-driven-by-smart-cities-to](http://www.prnewswire.com/.../self-service-kiosk-market-growth-driven-by-smart-cities-to)