

Digital Banking

Project report submitted in partial fulfilment of the requirement for the degree of

BACHELOR OF TECHNOLOGY
IN
ELECTRONICS AND COMMUNICATION ENGINEERING

By

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UNDER THE GUIDANCE OF

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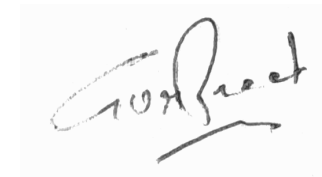
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I hereby declare that the work reported in the B.Tech Project Report entitled “**Digital Banking**” submitted at the **Jaypee University of Information Technology, Waknaghat, India** is an authentic record of my work carried out under the supervision of **Dr. Pardeep Garg** and **Mr. Gurpreet Singh**. I have not submitted this work elsewhere for any other degree or diploma.

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This is to certify that the above statement made by the candidate is correct to the best of my knowledge.



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Shikhar Trivedi (191012)

LIST OF ACRONYMS AND ABBREVIATIONS

RBI	Reserve Bank Of India
MSMEs	Micro, Small, and Medium Enterprises
UPI	Unified Payments Interface
NPA	Non Performing Asset
CRM	Customer Relationship Management
SQL	Structured Query Language
CIF	Customer Identification File
PAN	Permanent Account Number
KYC	Know Your Customer
NPCI	National Payment Corporation Of India
BBPS	Bharat Billing Payment System

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ABSTRACT

Shivalik Small Finance is a rising financial organisation in need of an efficient ticketing solution to optimise its operations. This ticketing system will be created specifically for the bank's branches and corporate headquarters to promote efficiency overall, better internal communication, and improve customer assistance. Shivalik Small Finance's staff will be able to submit tickets for various inquiries, issues, and requests using the cloud-based ticketing application. This application will also enable the tracking of these requests, giving users a thorough overview of the problems encountered and the status of their resolution. The system will be simple to use, and little training will be needed to ensure a smooth installation.

The ticketing tool's ability to standardise communication between branches and the bank's headquarters is one of its main advantages. Employees will be able to classify tickets using the tool according to the severity and urgency of the problem, ensuring that the most urgent problems are handled first. The technology will also make it easier for people to share information and expertise, which will speed up problem-solving. Shivalik Small Finance will be able to answer client questions and concerns more quickly and effectively thanks to the ticketing mechanism, which will help enhance customer service. The application will allow the bank's customer support staff to follow a ticket's development and update consumers on the status of their question or grievance.

The ticketing tool will also give thorough insights into the problems that Shivalik Small Finance's branches are experiencing. The solution will make it possible for the bank's management staff to spot patterns and trends, assisting them in making deft choices that will enhance operations and avert problems in the future. Additionally, this information will be helpful for determining training requirements and enhancing employee performance.

CHAPTER 1

INTRODUCTION

Shivalik Small Finance Bank is a flourishing Indian based financial institution that provides an extensive range of banking solutions for individuals and businesses alike. The bank's core objective is to empower those who have been overlooked in traditional banking practices by providing inclusive financial products that are tailored towards meeting their needs. Registered as a small finance bank with RBI, Shivalik Small Finance Bank puts emphasis on serving rural and semi urban regions' unbanked or underbanked populations specifically. Majorly consisting of MSMEs, farmers along with low income households form their key customer base demographic.

Shivalik Small Finance Bank offers varied product offerings catering to its customers' diverse financial needs such as savings accounts, current accounts fixed deposits recurring deposits personal loans business loans agriculture loans coupled with digital payment solutions like mobile banking internet banking UPI payments. Through a steadfast dedication to fostering financial inclusion this bank has greatly expanded its reach across India's bustling banking industry. Leveraging an extensive array of branches and correspondents strategically dispersed across the nation exemplifies how adeptly they're able to target their preferred customer demographic.

The bank's customer-centric approach and its focus on offering innovative financial solutions have also contributed to its success. Shivalik Small Finance Bank places significant emphasis on the use of technology to improve the customer experience and enhance efficiency. The bank has invested heavily in digital infrastructure, including mobile banking, internet banking, and UPI payments, to enable customers to access its services seamlessly. The bank also leverages data analytics and artificial intelligence to gain insights into customer behaviour and preferences, enabling it to offer customised financial solutions. In addition to its focus on financial inclusion and the use of technology, Shivalik Small Finance Bank is committed to social responsibility and sustainability. The bank has implemented various initiatives to promote financial literacy and education among its customers, empowering them to make informed financial decisions. The bank also places significant emphasis on environmental sustainability, implementing eco-friendly practices across its operations. The bank's focus on providing inclusive financial services and its commitment to leveraging technology to enhance the customer experience have enabled it to gain a significant foothold in the Indian banking sector. As the bank continues to grow and expand its operations, and

is well-positioned to play a significant role in driving financial inclusion and supporting economic growth in the country.

1.1 Shivalik Brand & Logo

The Shivalik Bank logo combines natural elements with the company's objectives. The picture's image symbol represents the earth (the small green mountain/triangle) and the sky (the blue on top). The upward arrow also suggests reaching for the stars. These factors are important to the company's values since Shivalik Bank aspires to reach the sky while keeping its feet firmly planted on the earth. Mountains in abstract form represent stability, strength, and growth. The mountain range visible in the image (mountains behind mountains) indicates the brand's progressiveness. We are interconnected for all of our services, and our collective team effort has the strength of the mountains.

The blue section of the sky represents the universe, which also represents our prospective clients. This reveals a lot about our talents and goals. The smooth edge of the blue half of the emblem represents our humble, courteous, professional, and friendly customer communication skills.

The green colour was inspired by the earthy colours that represent Shivalik Bank's grounded attitude. Despite a clear goal of ongoing growth, we never put anything ahead of our customers. Shivalik Bank's "client first" philosophy stems from our down-to-earth approach. The blank space in between is intentionally left to demonstrate Shivalik Bank's role in encouraging growth.



Fig. 1 Shivalik Small Finance Bank Logo

1.2 Products & Services at Shivalik

→ Accounts

- ◆ **Saving Account** : An interest-bearing deposit account kept at a bank or other financial institution is referred to as a savings account. Although the interest rates on these accounts are often low, their dependability and safety make them a smart choice for storing cash that you wish to have on hand for urgent situations.

- ◆ **Current Account** : Companies, firms, public entities, and businesspeople that typically conduct more frequent transactions with the bank favour current bank accounts. Deposits, withdrawals, and contra transactions are all part of the current account. The Demand Deposit Account is another name for these accounts. The majority of commercial banks allow you to open a current account. Being a zero-account, a current account is frequently linked to significant transactions. These accounts don't pay interest because of the flexibility they offer. Additionally, there is typically no cap on the number of transactions that can be made with these.

- ◆ **Safe Deposit Lockers** : A safe deposit box, also known as a safety deposit box, is an individually protected container, typically made of metal, that is kept in the safe or vault of a bank or credit union that is federally insured.

→ Deposits

- ◆ **Fixed Deposits** : A fixed deposit is an investment option with a guaranteed return that is provided by banks, non-bank financial institutions, and India Post Office. It enables you to invest a one-time lump payment for a predetermined period of time and receive interest at a higher rate than a savings account with a bank or post office. An FD may last for a duration of seven days to ten years. Once you deposit money with your bank, it begins to earn interest based on how long the deposit has been there. The ability to withdraw funds prior to maturity is the primary requirement of a fixed deposit. However, there will be a penalty if you want to prematurely withdraw from your FD.

- ◆ **Tax Saver Fixed Deposit** : Fixed deposits that qualify for a tax deduction under Section 80C of the Indian Income Tax, 1961 are known as "tax saving FDs." Single holder type deposits and joint holder type deposits are the two types of accounts through which these deposits can be made. If you choose a joint method of holding, only the first holder is eligible for the tax benefit. The tax saver fixed deposit has a 5-year maturity period. Both individuals and the Hindu Undivided Family (HUF) are eligible for a deduction under section 80C.

- ◆ **Non-Callable Fixed Deposit** : A lock-in term applies to fixed deposits that are not callable. The money placed in these deposits cannot be withdrawn before the maturity date, with the exception of situations involving bankruptcy, court orders, business winding up, death cases, etc. Additionally, compared to callable deposits, the minimum deposit amount will be small. The funds pay a greater rate of interest since they are locked in for the duration of the maturity period.

- ◆ **Recurring Deposit** :An RD account is a banking or postal service account into which a depositor makes regular monthly deposits for a certain period of time, usually between one and five years.” This arrangement is for those who desire to invest a specific sum each month in anticipation of obtaining a payoff in a few years. The procedure of generating tiny monthly deposits under the recurring deposit plan enables the consumer to accumulate an alluring amount at maturity. The interest rates for recurring deposits are computed on a quarterly compounded basis.

→ Loans

- ◆ **Business Loan** : A business loan is borrowed money that firms utilise to meet short-term costs that they cannot afford on their own. Loans are not given away for free. Lenders impose interest on loans as a cost of borrowing money. It is essential to understand if the interest rate is fixed or variable.

- ◆ **Retail trade loan** : A retail loan is typically given to an individual by a certified financial institution, a commercial bank, or a credit union to help them purchase real estate, vehicles, or other assets such as vital electronics.

- ◆ **Loan against property** : Loan against property, as the name implies, is a loan obtained from a bank against the mortgage on your property. This form of loan is classified as a secured loan. In this situation, the borrower's property serves as security.

- ◆ **Gold Loan** : Loan against gold, is a loan obtained from a bank against the mortgage on your gold. The loan amount provided is a certain percent of the gold, basically it is 80%.

- ◆ **Agriculture Loan** : A farmer may obtain agricultural loans to pay seasonal agricultural operations or related enterprises such as animal farming, pisci-culture, or the purchase of land or agricultural tools. This form of loan also assists in the purchase of inputs such as fertiliser, seeds, pesticides, and so on.

- ◆ **Farmer Finance & Crop Loan** : The loan is granted to cover all expenses associated with growing a specific crop, including various agronomic practices. Farmers farming owned/registered leased lands/sharecroppers are eligible.

→ **Debit Card**

When a debit card is used, money is deducted directly from the consumer's bank account. They have names such as "check cards" or "bank cards," and can be used to purchase products or services, as well as to obtain cash from a cash machine or a merchant who will allow you to add an additional amount to a purchase.

→ Insurance

- ◆ **Life Insurance** : Life insurance is a contract involving an insurance policy holder and an insurance company in which the insurer promises to pay a sum of money in exchange for a premium upon the death of an insured person or after a specified length of time.
- ◆ **General Insurance** : General insurance refers to insurance contracts that do not fall under the purview of life insurance. Fire, marine, motor, accident, and other non-life insurance are all types of general insurance.
- ◆ **Health Insurance** : Health insurance is a sort of insurance that pays for unexpected medical costs brought on by a disease. These expenditures may be associated with the price of hospitalisation, the price of medications, or the cost of medical visits.

→ Digital Banking

- ◆ **Internet Banking** : Internet banking, sometimes referred to as online banking, e-banking, or virtual banking, is a type of electronic payment system that allows customers of banks and other financial institutions to carry out a variety of financial transactions via the financial institution's website.
- ◆ **Mobile Banking** : Mobile banking is the practice of accessing and managing one's banking accounts and carrying out different financial transactions using a mobile device, such as a smartphone or tablet. Without having to stop by a bank branch or ATM, mobile banking apps provide a quick and secure way to manage one's accounts while on the go.
- ◆ **Merchant Business Solution** : It mainly refers to merchant processing services that let a business take a transaction payment via a secure (encrypted) channel utilising the customer's credit card, debit card, or NFC/RFID enabled device.

1.3 About Industry-Banking

India boasts one of the largest banking industries globally which encompasses both public and private segment banks within its ambit. The Reserve Bank of India (RBI), being India's central bank, plays a supervisory role over monetary policies while controlling financial institutions too. It was back in 1969 when nationalisation took place that significant changes were accorded with respect to technological advancements in addition to regulatory frameworks besides market liberalisation being pioneered thereafter. Banking services experienced a sea change with computerization accompanied by mobile banking along with digital payments for customers' convenience following suit thereafter making it more accessible than ever before for all stakeholders alike within this particular field - however notwithstanding these achievements there are some inherent challenges that need attention as well such as high percentage non-performing assets (NPAs) stemming from bad loans which pose potential risks to weaken the financial stability position for quite a few institutional players along with frauds/scams resulting into considerable losses especially within this field. The Reserve Bank of India has been diligently executing novel policies and regulations designed to enhance the steadiness of the sector, while simultaneously adopting proactive measures to avert such scams.

1.4 About Regulating Body - RBI

Established in 1935, the Reserve Bank of India (RBI) is responsible for serving as a central hub for overseeing financial activities within India as well as regulating its monetary policies. In pursuit of promoting economic growth while maintaining exchange rate stability for Indian rupees at their current value level, one duty assigned to RBI pertains to enforcing price stability across all economic sectors via usage channels fashioned from interest rates manipulation through open market operations or reserve requirements implementation.

Additionally mandated with ensuring long-term soundness for Indian banks through prudential regulations compliance monitoring frameworks requiring adequate levels needed by capital reserves maintenance without liquidity shortage risk exposure through supervision stipulations along with management services providing support throughout national payment systems' operational activities including those related lender-of-last-resort programs implemented via loan funding mechanisms.

The RBI not only enforces regulations and supervises operations but also drives India's financial sector development. Its focus on facilitating inclusivity in finance resonates through schemes aimed at providing access to banking services. Moreover it pushes for innovation by supporting emerging financial products.

Maintaining adequate levels of foreign exchange reserves remains one of several imperative functions carried out by the Reserve Bank of India (RBI). This fundamental aspect becomes crucial given that being one among many import dependent economies -India must ensure adequate forex reserves for maintaining long term financial security within its borders. To secure this goal requires constant attention from bank staff and management. Beyond this key function the RBI has also implemented several policies and regulations to supervise banks maintaining price stability while their efforts to develop India's financial markets have helped to support the nation's growth and progress.

1.5 About NPCI

National Payments Corporation of India (NPCI) is recognized as one of the most crucial organisations fostering innovation and growth within India's electronic payments milieu since its inception in 2008. As a non profit entity owned by multiple Indian banks NPCI operates with utmost dedication towards creating an efficient, secure, and accessible digital payment ecosystem for everyone alike. Through its novel payment solutions including Unified Payments Interface (UPI) RuPay card and Bharat Bill Payment System (BBPS) NPCI has been instrumental in propelling India's rapid digitization.

With these dynamic tools at their disposal users have experienced seamless transactions regardless of where they reside or what their financial capabilities may be.

One of National Payments Corporation of India's proudest achievements is its revolutionary Unified Payments Interface (UPI) - an instantaneous funds transfer platform enabling users throughout India to easily move money from bank accounts with only their mobile number or virtual payment address required as identification. With over 200 banks backing it up and over one billion transactions served each month since launch it's no surprise that the UPI system enjoys its status among some of the most convenient and secure digital payment solutions globally. NPCI's other

notable success story is their RuPay card program; this domestic debit card enables ATM withdrawals as well as transactions at point of sale terminals or e-commerce sites throughout the country. Thanks to partnerships with numerous banks and financial institutions providing previously unbanked individuals with access to traditional banking services RuPay has made significant strides in promoting financial inclusion in India. Another NPCI platform well worth investigating is the Bharat Bill Payment System (BBPS) which centralises bill payment interface for utilities such as water, gas and electricity in India into one easy to use location. Thanks to BBPS, bill payments are no longer a hassle for Indian consumers. With over 100 billers supporting the platform, it has become much simpler to settle payments. Furthermore, NPCI is also actively engaged in multiple initiatives that seek to promote financial inclusivity throughout India.

1.6 Problem Statement

Insufficient infrastructure for ticketing and inquiry management has posed significant problems for both bank branches and headquarters. Lacking organised protocols for handling customer complaints makes it challenging to provide prompt assistance efficiently. At branch locations specifically, not having access to an operational ticketing system creates confusion amongst departments leading ultimately leads to delayed resolution times for client issues. For example, customers may have questions that arise at one branch location but expect answers from another location; this could present problems if there is no clear tracking mechanism managing their inquiries properly results into disorienting user experience. If ineffectively managed queries become frustrated with unresolved issues damaging business outcomes. Subsequently the same issue arises at headquarters as well - inadequate tools hinder swift problem solving resulting in misunderstandings between departments that delay resolving consumer issues. Lack of streamlined complaint management results into loss or delay ultimately leading suboptimal client services if clients reports queries that need escalation. A suitable ticketing system is paramount for banks when addressing customer complaints and inquiries. Such a system streamlines the process of submission and management which results in quicker resolution times whilst ensuring accuracy.

Convenience and efficiency are critical concerns when dealing with any bank today; hence using one that lacks its own mobile application presents significant challenges for consumers. The difficulty associated with resorting to physical visits or desktop browsing to execute standard banking operations is not only tiresome but also inconvenient. Thankfully using an app significantly simplifies such tasks by allowing customers to manage their accounts from anywhere.

Unfortunately there is a significant risk of exposure to fraudulent activities and identity theft when using these banks without mobile applications. The absence of specific security precautions that are exclusively available through banking apps, including biometric verification and two factor authentication increases the likelihood of cyberattacks. Furthermore, without mobile applications users may miss crucial updates on their account activity, which could lead to mismanaged funds and consequences such as late fees or reduced creditworthiness.

1.7 Objective

A ticketing facility empowers customers by allowing them to easily raise questions or concerns while keeping up-to-date with the status of their requests without delay. Banks can leverage this tool to boost response times while creating a unified repository for monitoring all customer feedback. Moreover, when banking apps are thoroughly tested prior to deployment on various devices across multiple platforms, it ensures consistent reliability across all channels used by clients. Testing an app can assist banks in enhancing the quality of their applications and lowering the volume of customer complaints and support requests by discovering and fixing issues before they are made available to the general public.

CHAPTER 2

Introduction to Power Apps

Simplicity meets innovation in Microsoft's PowerApps - a low code application development solution empowering users globally to create bespoke applications quickly and efficiently without any particular expertise required. The vast selection of functions available within the application creation tool allows users to craft complete business solutions with ease. By prioritising a low code approach PowerApps enables even those without expert programming skills to employ its features successfully. Further streamlining the process is PowerApps' pre-built components and templates for swift assembly. Its seamless integration with other Microsoft products, including Dynamics 365 Teams, and SharePoint creates a powerful suite of tools tailored to your enterprises specific needs. Users can develop customised applications such as CRM tools, inventory management systems and project management tools with ease. Additionally through Power Apps individuals have access to creating mobile applications compatible with popular operating systems like iOS, Android, and Windows. One may begin building an app by selecting from a pool of existing templates or starting completely afresh utilising the tools available through Power Apps. The platform provides several prefabricated components that can aid in constructing cutting edge apps. Users can add new features and capabilities to the application after the basic framework has been developed using the platform's drag-and-drop interface. One of PowerApps' primary advantages is its ability to link to a variety of data sources, including Excel spreadsheets, SharePoint lists, and SQL databases. This enables users to access and alter data within their apps, making data management and analysis easier.

Amongst its existing data connections feature set Power App includes numerous built-in components designed ultimately to enhance overall user experience satisfaction levels; these include theme customization options as well as branding flexibility possibilities structuring your app's identity while simultaneously offering user authentication options and multimedia contents integration.

When using Power Apps, product development includes testing and deployment processes as these are fundamental steps to creating a successful application. The platform allows for an array of testing tools to be utilised guaranteeing app reliability and security during both manual and automated tests; once the application has surpassed these tests, it is then eligible for deployment through cloud-based systems or on-site depending on your business's needs.

Overall, from SMEs to larger corporations Power App's low-code approach coupled with the seamless integration with other Microsoft services results in a platform that continuously provides users with an effective solution resulting in custom applications that exceed expectations.

In order to build successful business solutions such as CRM tools, inventory management systems and mobile applications; one requires access to advanced tools which provide robust features. Luckily for users, Power Apps stands out as an excellent choice with all needed resources readily available in their stack of features.

CHAPTER 3

Ticketing Tool

With the help of PowerApps it was an easy task to make the ticketing tool that can be user-friendly and has every aspect that a bank needs to have in order to have a streamlined functioning between the bank Head Office and its branches. The overview of the ticket tool is as follow

The branch user can create the new ticket by clicking on the “Add ticket” button he/she can view or edit the previous tickets by clicking on the “View/Edit Tickets” button as shown in fig2

TICKETING TOOL

Hello!
Shikhar Trivedi

ADD TICKET

VIEW/EDIT TICKETS



Fig. 2 Home Page Ticketing Tool

When the user wants to create the new ticket he/she will land on the first page where they have to fill the following fields.

Notice Type: The user has to choose from the dropdown or have to manually type in case the type is not mentioned in the notice type field. This field will define the type of notice received at the branch/HO which helps in smooth flow of the ticket.

Regulator Name: The user has to choose from the dropdown or have to manually type in case the type is not mentioned in the regulator name field. The regulator field helps in defining the letter received by which regulatory body.

Place of Notice Received: This field defines which branch/ HO has received the notice.

Case Date: These fields define when the case or query is registered.

Notice Issuance date: This field defines when the notice/ letter was issued.

Customer Name: This field will contain the name of the customer against whose or who's query was received.

Department Concerned: This field defines the concerned department which will look into the matter.

Notice Receiving Date: This field defines when the notice/letter was received.

Notice Due Date: This field defines the date before which the notice/letter has to be resolved.

Account Number: This field contains the account number of the customer against who's or who's issue is raised

CIF: This field contains the Customer identification file (CIF) of the customer.

Assigned To: this field contains the name of the concerned member looking into the issue.

PAN Number: Permanent Account Number (PAN) filed contains the PAN of the account holder whose issue is raised.

Priority: This field has P1,P2,P3 priorities which has to be set accordingly where P1 means high priority and P3 means low priority.

Current Status: This field holds the current status of ticket raised wherever it is open, details awaited,work in progress or closed.

These instances help the user to raise the ticket with every detail needed. Which further results in the smooth functioning within the departments regarding the queries. The mentioned fields are shown in fig3.

ADD TICKET

* Notice Type Parcel	* Regulator Name RBI	* Place of Notice Recieved Ho Noida
* Case Date 06/05/2023	* Notice Issuance Date 01/04/2023	* Customer Name Shivalik
* Department Concerned Operations	* Notice Receiving Date 05/05/2023	* Notice Due Date 31/05/2023
* Account Number 515541121642132945	* CIF 442154	* Assigned To Pradeep
* PAN Number KDIRP4510W	* Priority P1	* Current Status open

Submit

Fig. 3 Add Ticket Section

When the ticket is raised the concerned person/department can view the ticket in their bucket the raised ticket can be seen by Login -> Dashboard -> My Ticket as shown in the fig4.

Tickets

View Closed Tickets Search

* Customer Name Shreesh AAppppii nnn	* Account Number 12411111111100	* Regulatory Name Cyber Crime
* Notice Issue Date 4/28/2023	* Receiving Date Of Notice 3/9/2023	* Due Date Of Notice 4/27/2023
* Type Of Notice Prohibitory order	* Priority Medium	* Department Name RISK MANAGEMENT
* Closure Remark aaaaaaaaaaaa	* CIF ID 1111111111111111	* Assigned To i:0#.fj membership aryaman@shivali

Fig. 4 My Ticket Section

CHAPTER 4

Shivalik Mobile Bank Application

The majority of transactions can be completed online or using your financial institution's mobile app on your smartphone. You can access your account balances online at any time. You can now detect issues such as unauthorised activity sooner, rather than waiting for your paper statement. You can normally report mistakes to your bank or credit union account via the online or mobile banking app or chat functions.

Deposits and charges that are pending, which means they have not yet been posted to your account, are frequently visible. Most banks and credit unions let you set up automated alerts to help you manage your account and notify you when any of these things happen: a direct deposit is received, a sizable payment is charged, your balance drops below a specific level, your account is in overdraft, and more.

We can see the detailed overview of the **Shivalik Mobile Bank Application** and how it works.

The Registration/Pre-Login page : This is the first page which appears when a new user/customer opens the app. The user needs to click on “Get Started” button in order to move further as shown in fig5

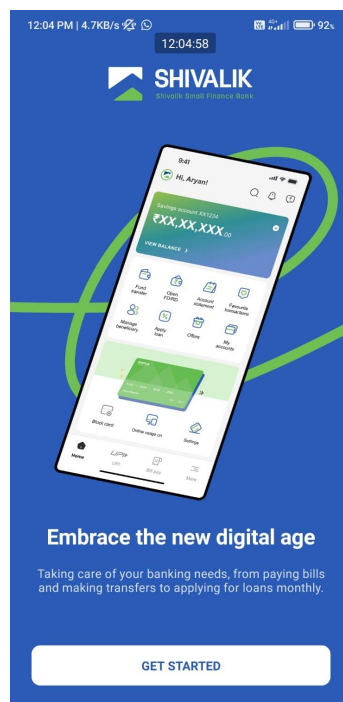


Fig. 5 The Opening Page for first time user

After that the user moves further where they will be asked to login with following methods:

1. Debit card
2. Aadhar Number
3. Branch

As shown in fig6.

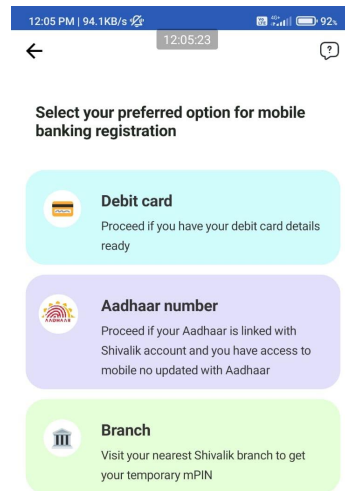


Fig. 6 Preferred Way to login

If the user wants to login using the debit card then they can click on the debit card option they will move to a further page where they have to fill in their details like.

1. Debit card Number
2. Expiry Month & Year
3. ATM Pin

We can see this in fig7

Fig. 7 Debit card Details

If the user wants to login using the aadhar number then they can click on the aadhar number option and they will move to a further page where they have to fill in their details like.

1. Customer ID
2. Aadhar Number

We can see this in fig8

Fig. 8 Aadhar Details

If the user wants to login using the branch then they can click on the branch option and they will move to a further page where they have to fill in their details like.

1. Temporary Pin received from bank

We can see this in fig9

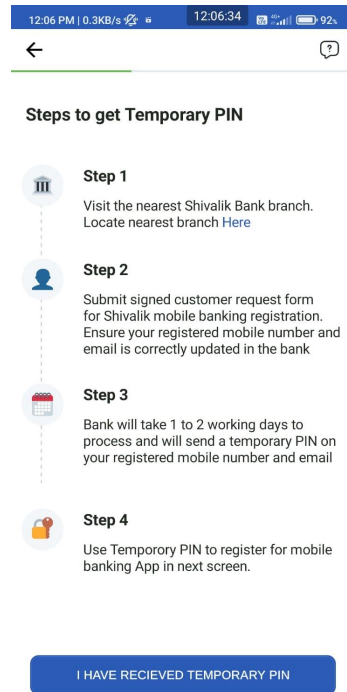


Fig. 9 Branch Login

The Home page : Once the user logged in they can see the page where their name will appear on the top left corner. They can check their quick balance. There are many more options like.

1. Fund Transfer
2. Open FD/RD
3. Account Statement
4. Favourite Transactions
5. Manage Beneficiaries
6. Apply Loan
7. Exclusive Offer
8. My Accounts

The following can be seen in fig10.

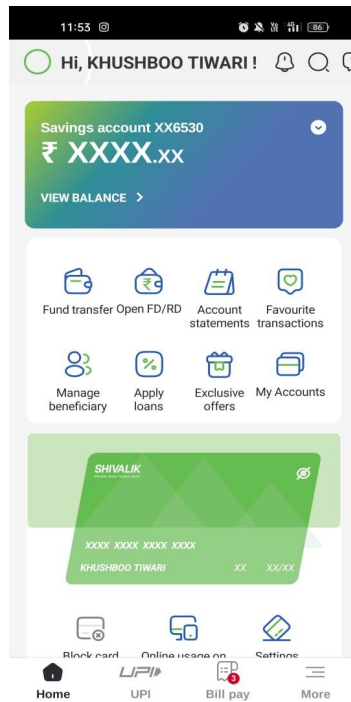


Fig. 10 Home Page

When the customer wants to see their quick balance they have to click on the ‘View Balance’ button. A page will appear where it asks to link their account whose balance they want to see after that it will get linked. Everytime a user needs to check balance they have to enter their mPin ater that. Following can be found in fig11 & fig12.

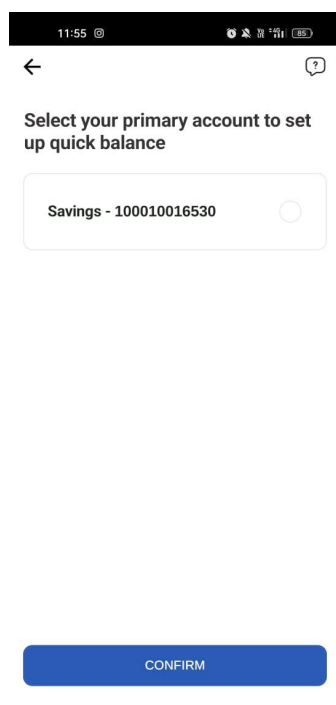


Fig. 11 Bank Account Linking

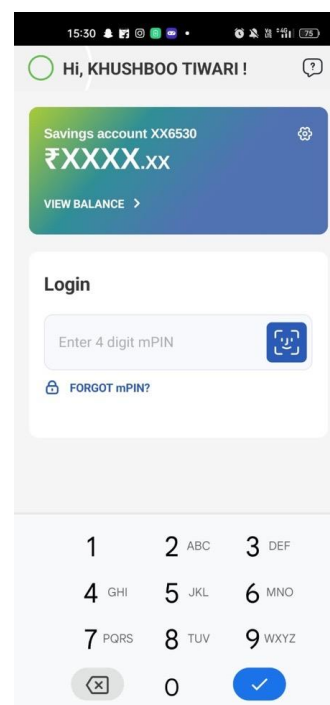


Fig. 12 mPin Generation

On successful entry of the mPin the quick balance is shown. Same can be seen in fig13.

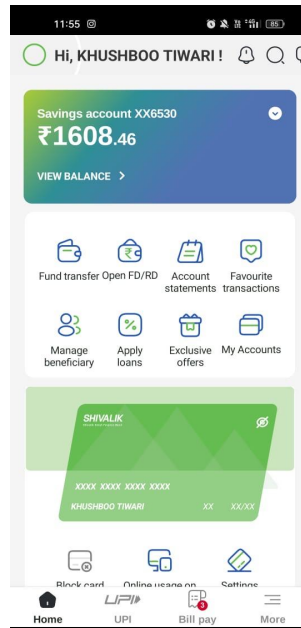


Fig. 13 Quick balance Shown

When we click on fund transfer on the home screen of the app the following appears.

1. Quick Transfer
2. My shivalik account (transfer from one shivalik account to another)
3. Transfer to Beneficiary
4. UPI
5. Manage Beneficiary
6. Schedule Transfer

The following can be seen in fig14.

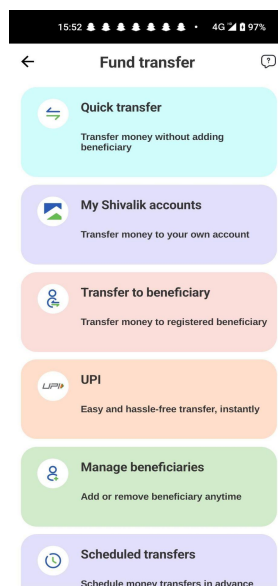


Fig. 14 Fund Transfer

When we click on the open fd/rd option on the home screen of the app. The following can be seen.

1. Fixed Deposit
2. Recurring Deposit
3. Tax Saving Fixed Deposit

The following can be seen in fig 15.

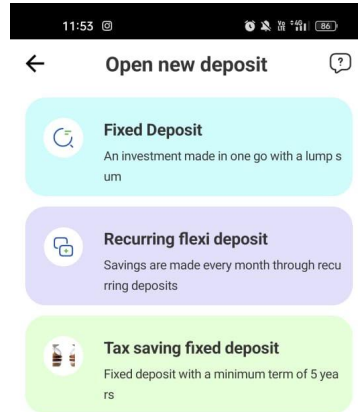


Fig. 15 Open FD/RD

When we click on Manage Beneficiary we can see all the beneficiaries added to our accounts. Or we can add a new beneficiary in it. Following can be seen in fig16.

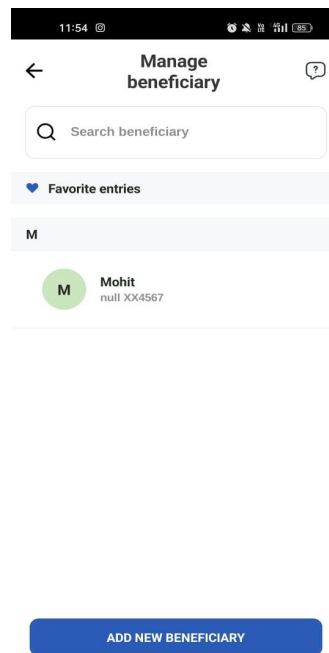


Fig. 16 Manage Beneficiary

When we click on the accounts section on the home screen we can see our balance and other account details. If we have a savings account we can see its details. If we have any term deposit account we can check its details. Following can be seen in fig17 and fig18.

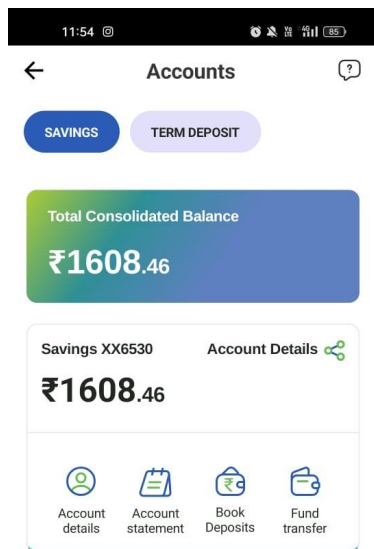


Fig. 17 Saving Account

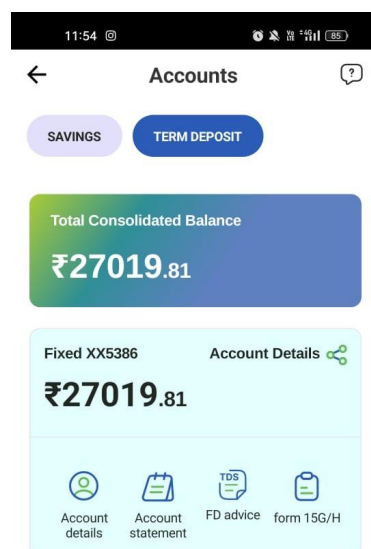


Fig.18 Term Deposit

There is a Calculator where we can check the amounts of followings:

1. Loan Calculator
2. Deposit Calculator

The following can be seen in fig19.

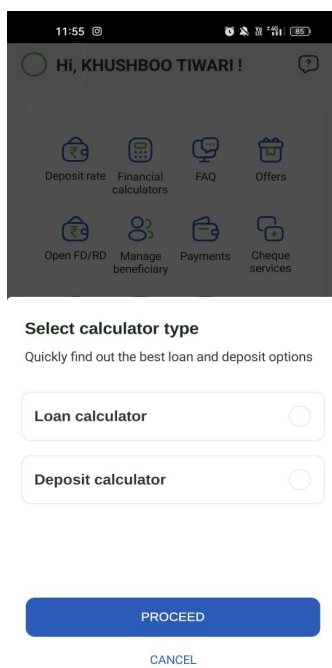


Fig.19 Calculator

On clicking the loan calculator one can check different types of loan amounts to be paid by individuals on filling the Loan amount, interest rate and the loan tenure. Following can be seen in fig20.

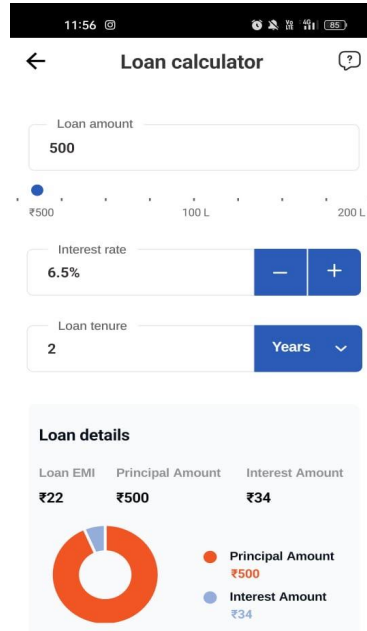


Fig.20 Loan Calculator

On clicking the deposit calculator we can check the different types of amounts to be paid on the different types of deposits on filling the investment amount and the tenure. Following can be seen in fig21.

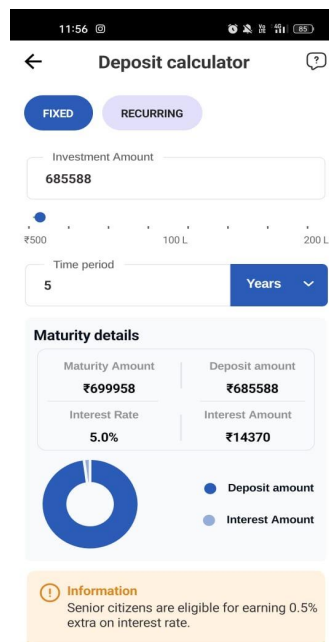


Fig.21 Deposit Calculator

CHAPTER 5

RESULTS & DISCUSSION

It's hard to imagine banking without the convenience of mobile applications. The ability to manage finances anytime anywhere has become essential for modern day consumers. Our report examines the efficacy of a bank's mobile app as well as its ticket tool functions across head office and branch operations.

Evaluating the mobile app required a comprehensive assessment of various parameters like user interface (UI), navigation aspects, functionality and security provisions included in the app's design architecture. We discovered that its UI provided a clean yet intuitive layout - designed to cater to multiple demographics' needs.

The mobile banking app's versatile functional capabilities indeed impressed us as the customers could perform procedures ranging from simple services like viewing balances up to more complicated processes like inter account money transfers without requiring bank visits physically.

One critical area we deemed important was its robust security framework embedded with two-factor authentication and biometric verification systems - essential privacy features that give customers confidence while interacting with their bank accounts via their phone or tablet devices.

In addition, we also tested this mobile application under high usage traffic capacity- results showed no deterioration in responsiveness or speed whatsoever during these experiments.

Nonetheless minor challenges surfaced: Some pages took longer than expected to load occasionally; others needed improvement regarding intuitiveness for smooth service delivery flow- relatively insignificant issues considering how well this mobile banking application performed overall.

To ensure thoroughness during our inspection of the banking institution's services, we also included an assessment of their ticketing system utilised for managing customer requests or complaints by branch or head office employees. Our findings confirmed that this system was well-designed with ease-of-use being one of its key features. Notably, this tool allowed personnel to track processed tickets while efficiently communicating updated statuses back to customers when necessary - all in a streamlined manner.

Furthermore, there were exceptional reporting options available which offered insightful analytics on ticket activity that could be used for creating action plans leading towards better performance outcomes resulting in improved customer experiences overall. Ultimately then - determining it as an effective resource for managing requests or complaints since it demonstrated dependability alongside offering beneficially multiple functions.

CONCLUSION

Managing finances from mobile devices was made easy with the secured mobile app provided by the bank while customer requests and complaints were handled efficiently through its ticket tool used by branch and head office staff. Although there were some minor glitches discovered during testing, these did not significantly impact either tool's usability or effectiveness.

The bank should continue investing in these innovative tools with regular updates that will maintain their relevance moving forward. Addressing those minor glitches will offer an enhanced user experience.

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