1. Company Overview

SharpMonie is a dynamic Nigerian fintech company committed to revolutionizing financial services through its innovative mobile application, SharpMonie. Established to enhance financial inclusion, SharpMonie provides a diverse array of services that cater to the financial needs of individuals and businesses across Nigeria.

1.1 Mission

Our mission is to empower individuals and communities by simplifying financial transactions, promoting accessibility, and fostering economic growth through cutting-edge technology.

1.2 Vision

To be a leading force in the financial technology sector, driving positive change and setting new standards for convenient, secure, and inclusive financial services.

1.3 Core Values

- Innovation: We continuously seek innovative solutions to improve and expand our services.
- Inclusivity: We provide financial services accessible to all, irrespective of location or socioeconomic status.
- Integrity: Upholding the highest ethical standards in all our interactions, transactions, and operations.
- Collaboration: Fostering partnerships and collaborations to create a robust financial ecosystem.

2. Ecosystem Overview

SharpMonie's ecosystem is a dynamic and interconnected network that revolves around the SharpMonie mobile app, linking various stakeholders to provide comprehensive financial services. This ecosystem is designed to promote financial inclusion, convenience, and accessibility across diverse user segments. Here is an in-depth overview of SharpMonie's ecosystem:

2.1 Core Components

2.1.1 SharpMonie Mobile App

The SharpMonie mobile app serves as the central hub of SharpMonie's ecosystem. It acts as a versatile platform, facilitating a wide range of financial transactions for users, agents, and merchants. Users can seamlessly access services such as mobile recharge, bill payments, funds transfer, and peer-to-peer transactions through the intuitive and user-friendly interface of the SharpMonie app.

2.1.2 Agent Banking Network

SharpMonie's agent banking network is a key element in extending financial services to communities where traditional banking infrastructure may be limited. Independent agents, including small shop owners and kiosk operators, play a crucial role in providing services such as cash deposits, withdrawals, and fund transfers on behalf of customers. Super agents oversee and manage multiple independent agents within specific regions, contributing to the efficiency and scalability of the agent network.

2.2 User Interaction Flow

1. User Engagement:
    - o   Users download and install the SharpMonie app on their smartphones or tablets.
    - o   The app provides a user-friendly interface, making it easy for users to navigate and access various financial services.
2. Service Selection:
    - o   Users choose from a menu of services, including mobile recharge, bill payments, funds transfer, and peer-to-peer transactions.
3. Agent Interaction:
    - o   For users in areas with agent banking services, they may interact with independent agents or super agents for cash-related transactions.
4. Transaction Processing:
    - o   The SharpMonie app processes transactions initiated by users, ensuring swift and accurate execution.
5. Record Keeping:
    - o   Electronic records of all transactions are maintained to ensure accurate and secure tracking.
6. Agent Banking Services:
    - o   Agents perform a range of financial services, including cash deposits, withdrawals, and fund transfers on behalf of customers.

2.3 Geographic Presence

The ecosystem is designed to cater to users across various geographic locations in Nigeria. The emphasis on both urban and rural areas aligns with SharpMonie's commitment to bridging the financial gap and providing services to underserved communities.

2.4 Technology Integration

Technology plays a pivotal role in the ecosystem, with the SharpMonie app, POS terminals, and mobile devices serving as key tools for transaction processing. The seamless integration of technology ensures efficient and secure financial transactions.

2.5 Financial Inclusion Impact

SharpMonie's ecosystem brings financial services closer to people who may not have easy access to traditional bank branches. The agent banking network, coupled with the SharpMonie app, enables individuals to perform basic financial transactions conveniently.

2.6 Regulatory Compliance

The ecosystem is designed with a strong focus on regulatory compliance. Know Your Customer (KYC) procedures are implemented to verify the identity of users, ensuring security and compliance with regulatory requirements.

2.7 Future Development

The future development of the ecosystem involves continuous enhancement of the SharpMonie app, expansion of the agent banking network, and exploration of emerging technologies to further improve the accessibility and scope of financial services. SharpMonie is committed to evolving its ecosystem to meet the changing needs of its users and the dynamic fintech landscape.

3. Actor Personas

3.1 User Persona

3.1.1 Adebayo, the Everyday User

- Role: Everyday User
- Background: Adebayo is a 28-year-old professional living in Lagos.
- Scenario:
  - Regularly uses the SharpMonie app for mobile recharges.
  - Seamlessly pays bills such as electricity and internet subscriptions through the app.
  - Sends and receives funds from external bank accounts in real-time.
  - Engages in peer-to-peer transactions with friends and family using the SharpMonie app.
  - Funds his betting account securely and quickly through the app.
  - Enjoys instant cashback and discounts through promotional offers on the SharpMonie app.
  - Has the flexibility to withdraw cash from his SharpMonie wallet at designated agents or partner bank ATMs.

3.2 Agent Persona

3.2.1 Funmi, the Independent Agent

- Role: Independent Agent
- Background: Funmi is a 35-year-old entrepreneur running a small kiosk in Ibadan.
- Scenario:
  - Assists Mrs. Johnson, a regular customer, in depositing cash into her SharpMonie wallet.
  - Helps a customer withdraw cash using the POS terminal.
  - Sets up the SharpMonie app for a new customer, Mr. Ade, providing guidance on its usage.
  - Offers a range of financial services, including cash deposits, withdrawals, and fund transfers.

3.3 Merchant Persona

3.3.1 Nkechi, the Merchant

- Role: Merchant
- Background: Nkechi operates a small business and is a registered merchant with SharpMonie.
- Scenario:
  - Accepts payments from customers using the SharpMonie app.
  - Utilizes the POS terminal provided by SharpMonie for convenient transactions.
  - Benefits from promotional offers and discounts to attract more customers.
  - Enjoys a streamlined and secure process for handling customer transactions.

4. OLTP Activities

SharpMonie's OLTP (Online Transaction Processing) activities form the core of its operational model, ensuring that users can conduct a wide range of financial transactions seamlessly through the SharpMonie app and associated services. These activities encompass various aspects of financial interactions, providing users with convenience and flexibility in managing their finances. Here is an in-depthview of SharpMonie's OLTP activities:

- Mobile Recharge and Data Purchase

- Bill Payments

- funds Transfer

- Peer-to-Peer Transactions

- Betting Account Funding

- Withdrawal

- Agent Banking Services

- Independent Agents

- Super Agents

- Promo and Discounts

- ransaction Processing

- POS Operations

- Record Keeping

5. Data Dictionary

5.1 Table: cards

- CardID (INT): Unique identifier for each card.
- Types (VARCHAR(50)): Denotes the type of the card, e.g., debit or credit.
- Networks (VARCHAR(50)): Specifies the network associated with the card.
- Methods (VARCHAR(50)): Indicates the methods supported by the card.

5.2 Table: lgas

- LGAID (INT): Unique identifier for each Local Government Area (LGA).
- LGA (VARCHAR(50)): Name of the Local Government Area.
- StateID (INT): Foreign key linking to the states table.

5.3 Table: states

- StateID (INT): Unique identifier for each state.
- States (VARCHAR(50)): Name of the state.

5.4 Table: account_category

- ID (INT): Unique identifier for each account category.
- AccountCategory (VARCHAR(50)): Denotes the category of the account.

5.5 Table: account_type

- TypeID (INT): Unique identifier for each account type.
- Name (VARCHAR(50)): Name of the account type.
- Suitable (INT): Indicator for suitability.
- CategoryID (INT): Foreign key linking to the account_category table.

5.6 Table: customers

- CustomerCode (VARCHAR(50)): Unique code for each customer.
- CustomerType (VARCHAR(10)): Type of customer (individual, agent, sales representative contact for the merchant).
- Prefix (VARCHAR(10)): Customer's title or prefix.
- FirstName (VARCHAR(50)): Customer's first name.
- MiddleName (VARCHAR(50)): Customer's middle name.
- LastName (VARCHAR(50)): Customer's last name.
- Suffix (VARCHAR(10)): Customer's suffix.
- RegistrationDate (VARCHAR(20)): Date of customer registration.
- Password (VARCHAR(50)): Customer's password.
- Gender (VARCHAR(10)): Customer's gender.

5.7 Table: accounts

- AccountID (INT): Unique identifier for each account.
- CustomerID (VARCHAR(50)): Foreign key linking to the customers table.
- CustomerType (VARCHAR(10)): Type of customer (individual, agent, sales representative contact for the merchant).
- RegistrationDate (VARCHAR(20)): Date of account registration.
- ModifiedDate (VARCHAR(20)): Date of the last modification.
- AccountTypeID (INT): Foreign key linking to the account_type table.
- Limit (BIGINT): Limit associated with the account.
- Status (VARCHAR(20)): Status of the account.
- AccountNumber (VARCHAR(20)): Unique account number.

5.8 Table: phone_type

- PhoneTypeID (INT): Unique identifier for each phone type.
- PhoneTypeName (VARCHAR(50)): Name or type of the phone.

5.9 Table: phone

- PhoneID (INT): Unique identifier for each phone.
- PhoneNumber (VARCHAR(50)): Customer's phone number.
- ChangeDate (DATETIME): Date of phone number change.
- UserID (VARCHAR(50)): Foreign key linking to the customers table.
- PhoneTypeCode (INT): Foreign key linking to the phone_type table.

5.10 Table: address_type

- AddressTypeID (INT): Unique identifier for each address type.

- AddressTypeName (VARCHAR(50)): Name or type of the address.

5.11 Table: addresses

- AddressID (INT): Unique identifier for each address.
- AddressName (VARCHAR(50)): Name or label for the address.
- LGAID (INT): Foreign key linking to the lgas table.
- StateID (INT): Foreign key linking to the states table.
- CustomerCode (VARCHAR(50)): Foreign key linking to the customers table.
- AddressTypeCode (INT): Foreign key linking to the address_type table.

5.12 Table: bill_category

- CategoryID (INT): Unique identifier for each bill category.
- Categoryname (VARCHAR(50)): Name of the bill category.
- ModifiedDate (DATETIME): Date of the last modification.

5.13 Table: biller

- BillerID (INT): Unique identifier for each biller.
- CategoryID (INT): Foreign key linking to the bill_category table.
- Provider (VARCHAR(100)): Service provider or company name.
- Modified (DATETIME): Date of the last modification.

5.14 Table: biller_transaction

- BillPaymentID (INT): Unique identifier for each bill payment transaction.
- BillerID (INT): Foreign key linking to the biller table.
- Amount (BIGINT): Amount of the bill payment.
- TransactionDate (VARCHAR(50)): Date of the transaction.
- ModifiedDate (VARCHAR(50)): Date of the last modification.
- Status (VARCHAR(50)): Status of the bill payment transaction.

5.15 Table: merchants

- MerchantID (INT): Unique identifier for each merchant.
- CustomerCode (VARCHAR(50)): Foreign key linking to the customers table.
- MerchantCategory (VARCHAR(50)): Category or type of the merchant.
- MerchantName (VARCHAR(100)): Name of the merchant.
- BillerID (INT): Foreign key linking to the biller table.
- ModifiedDate (VARCHAR(50)): Date of the last modification.

5.16 Table: balance

- BalanceID (INT): Unique identifier for each balance entry.
- AccountID (INT): Foreign key linking to the accounts table.
- Limit (BIGINT): Account limit.
- Balance (FLOAT): Account balance.
- ModifiedDate (VARCHAR(50)): Date of the last modification.

5.17 Table: agent

- CustomerCode (VARCHAR(50)): Foreign key linking to the customers table.
- AgentCode (VARCHAR(50)): Unique identifier for each agent.

- AgentType (VARCHAR(50)): Type or category of the agent.
- CommissionRate (FLOAT): Commission rate for the agent.
- AgentStatus (VARCHAR(50)): Status of the agent.
- JoinDate (DATETIME): Date when the agent joined.
- AddressID (INT): Foreign key linking to the addresses table.

5.18 Table: pos_terminal

- TerminalID (VARCHAR(50)): Unique identifier for each POS terminal.
- Type (VARCHAR(50)): Type or category of the POS terminal.
- AccountID (VARCHAR(50)): Foreign key linking to the accounts table.
- Status (VARCHAR(50)): Status of the POS terminal.
- SetupTimestamp (VARCHAR(50)): Timestamp of the terminal setup.
- AddressName (VARCHAR(50)): Name or label of the address associated with the terminal.
- StateID (INT): Foreign key linking to the states table.
- LGAID (INT): Foreign key linking to the lgas table.

5.19 Table: bvn

- BVN (VARCHAR(50)): Unique identifier for each Bank Verification Number.
- CustomerID (VARCHAR(50)): Foreign key linking to the customers table.
- RegisteredDate (VARCHAR(50)): Date of BVN registration.

5.20 Table: other_banks

- FundID (INT): Unique identifier for each fund entry.
- SharpMonieAccountID (INT): Foreign key linking to the accounts table.
- BankName (VARCHAR(50)): Name of the other bank.
- AccountNumber (VARCHAR(50)): Account number in the other bank.
- AccountHolderName (VARCHAR(50)): Name of the account holder.
- TransactionDate (VARCHAR(50)): Date of the transaction.
- Status (VARCHAR(50)): Status of the fund entry.
- ModifiedDate (VARCHAR(50)): Date of the last modification.

5.21 Table: transactions

- TransactionID (INT): Unique identifier for each transaction.
- AccountID (INT): Foreign key linking to the accounts table.
- Purpose (VARCHAR(50)): Purpose or nature of the transaction.
- Status (VARCHAR(50)): Status of the transaction.
- TransactionDate (VARCHAR(50)): Date of the transaction.
- PaymentMethod (VARCHAR(50)): Payment method used.
- DEBIT (FLOAT): Debit amount.
- Credit (FLOAT): Credit amount.
- DebitTo (FLOAT): Debit-to amount.
- FundID (INT): Foreign key linking to the other_banks table.
- BillPaymentID (INT): Foreign key linking to the biller_transaction table.

5.22 Table: email

- ID (INT): Unique identifier for each email entry.
- CustomerID (VARCHAR(50)): Foreign key linking to the customers table.
- Email (VARCHAR): Email address.

5.23 Table: wallet

- WalletID (INT): Unique identifier for each wallet.
- AccountID (INT): Foreign key linking to the accounts table.
- WalletType (VARCHAR(50)): Type or category of the wallet.
- Limit (BIGINT): Wallet limit.
- CreationDate (VARCHAR(20)): Date of wallet creation.
- Status (VARCHAR(20)): Status of the wallet.
- ModifiedDate (VARCHAR(20)): Date of the last modification.