|  |
| --- |
| BUSINESS REQUIREMENT DOCUMENT FOR MOBILE BANKING |

|  |  |
| --- | --- |
| Name of Bank | ECOBANK Kenya Limited |
| Approval | Susan Gichia |
| Role | Project Manager |
| Date Approved | 10th April 2012 |

# PROJECT SCOPE

What are the business requirements?

**Yes No**

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| For a new application development |  | ✓  +-----------+++++++  -+  - |  |  |  |
|  |  |  |  |  |  |
| To enhance an existing application |  |  |  |  |  |
|  |  |  |  |  |  |
| *If above answer is Yes, specify which application:* | | | | | |
|  |  |  |  |  |  |
| To replace an application development |  |  |  |  |  |
|  |  |  |  |  |  |
| *If above answer is Yes, specify which application:* **WALLET 3** | | | | | |

# NEW APPLICATION DEPLOYMENT SERVICES

Please specify the services you would like:

|  |  |  |  |
| --- | --- | --- | --- |
| **Yes** | **No** | **No. on Menu** | **Read on menu as (160**  **character limit per screen)** |

|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Funds Transfer |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Across own account/s* |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *To other customers’ account within bank* | ✓ |  |  |  |  |
|  |  |  |  |
| *To customer account/s across bank* | ✓ |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Balance Enquiry |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Mpesa Funds Transfer |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Mpesa to own bank account(C2B)* |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *From own account to Mpesa(B2C)* |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Mini Statement request |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Full Statement request |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Forex rates requests |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Bill payment for merchants (electricity, water) |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Merchant payment (e.g. supermarkets) |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Cheque Book request |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Stop Cheque payment |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Credit Alerts |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Debit alerts |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Airtime top up purchase |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *To own number* |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *To other numbers* |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Agency banking |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Withdrawals* |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| *Deposits* |  | ✓ |  |  |  |  |  |  |
|  |  |  |  |  |  |  |  |  |
| Card payment (Top up card a/c from own bank a/c) |  | ✓ |  |  |  |  |  |  |
| Account to Western Union |  | ✓ |  |  |  |  |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Account to Rapid transfer |  | ✓ |  |  |
| Western Union to Bank account |  | ✓ |  |  |

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| Western Union to Mpesa |  | ✓ |  |  |
| Western Union to ATM withdrawals |  | ✓ |  |  |

The Mobile banking web based interface should include the following features;

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Customer Registration** |  | ✓ |  |  |
| New customers |  | ✓ |  |  |
| Existing Customers |  | ✓ |  |  |
| Deregistrations |  | ✓ |  |  |
| Additions and deletions |  | ✓ |  |  |
|  |  |  |  |  |
| *Bill pay Enrolments (For frequent bill payments)* |  | ✓ |  |  |
|  |  |  |  |  |
| *Nominations (To store frequently used numbers)* |  | ✓ |  |  |
|  |  |  |  |  |
| *Notifications (Alerts on account activity )* |  | ✓ |  |  |
|  |  |  |  |  |
| *Manage Accounts* |  | ✓ |  |  |
|  |  |  |  |  |
| *Manage profiles/PIN* |  | ✓ |  |  |
|  |  |  |  |  |
| *Manage customers* |  | ✓ |  |  |
|  |  |  |  |  |
| *Language selection* |  | ✓ |  |  |
|  |  |  |  |  |
| **Manage users/user-groups/groups and their permissions** |  | ✓ |  |  |
|  |  |  |  |  |
| **Audit** |  | ✓ |  |  |
|  |  |  |  |  |
| *Report viewing/generation* |  | ✓ |  |  |
|  |  |  |  |  |
| *View audit logs* |  | ✓ |  |  |
|  |  |  |  |  |
| *View record history* |  | ✓ |  |  |
|  |  |  |  |  |
| **Reconciliation** |  | ✓ |  |  |
|  |  |  |  |  |
| **Mpesa** |  | ✓ |  |  |
| B2C monitoring |  | ✓ |  |  |
| C2B Monitoring |  | ✓ |  |  |
| Reconciliations |  | ✓ |  |  |
| Manual reversals |  | ✓ |  |  |
| Other channels Mpesa requests – ATMs, Online Banking, |  | ✓ |  |  |
| **Airtime** |  | ✓ |  |  |
| B2C monitoring |  | ✓ |  |  |
| C2B Monitoring |  | ✓ |  |  |
| Reconciliations |  | ✓ |  |  |
| Manual reversals |  | ✓ |  |  |
| Other channels Mpesa requests – ATMs, Online Banking, |  | ✓ |  |  |
|  |  |  |  |  |
| **Agency Banking** |  | ✓ |  |  |
|  |  |  |  |  |
| *Manage agents* |  | ✓ |  |  |
|  |  |  |  |  |
| *Manage agents Regions* |  | ✓ |  |  |
|  |  |  |  |  |
| *Manage agents Shops* |  | ✓ |  |  |
|  |  |  |  |  |
| *Manage agents Tills* |  | ✓ |  |  |
| *Reconciliations* |  | ✓ |  |  |
| *Settlement* |  | ✓ |  |  |
|  |  |  |  |  |
| **Bulk SMS** |  | ✓ |  |  |
|  |  |  |  |  |
| *Quick SMS* |  | ✓ |  |  |
| *SMS to Email* |  | ✓ |  |  |
| *Email to SMS* |  | ✓ |  |  |
|  |  |  |  |  |
| *Bulk Contacts* |  | ✓ |  |  |
|  |  |  |  |  |
| *Bulk targets* |  | ✓ |  |  |
| *Delivery search* |  | ✓ |  |  |
| *Triggers for Birthday/ Special Occasions* |  | ✓ |  |  |
| *Alerts from all systems ATMs, Online Channels* |  | ✓ |  |  |
| *Registrations on internet Banking – (Pin Mailer)* |  | ✓ |  |  |
| **Failure Reasons** |  | ✓ |  |  |
| *Show all failed transactions* |  | ✓ |  |  |
| *Reasons for failures* |  | ✓ |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
| **Contact Center** |  | ✓ |  |  |

Further comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

# Business rules

Registrations:

* To be done on the Flex cube system, Internet Banking channel, Contact Centre
* It is to be an immediate sync with a maker checker process
* Maker Checker processes on Flex cube or any other systems
* PIN reset

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *The Bank staff will verify the customer before entering the data in the system* |  | ✓ |  |  |
|  |  |  |  |  |
| *The Bank staff will create the requested notifications, enrolments and nominations in the Wallet maker.* |  | ✓ |  |  |
|  |  |  |  |  |
| *The user can only link a maximum of 3 accounts to a profile* |  | ✓ |  |  |
|  |  |  |  |  |
| *The details will be verified by a different and independent individual (the checker)* |  | ✓ |  |  |
| *On confirmation an SMS will be sent to the customer with a randomly generated onetime PIN* |  | ✓ |  |  |
|  |  |  |  |  |
| *No transaction can happen (other than language change)with the OTP apart from PINreset* |  | ✓ |  |  |
|  |  |  |  |  |
| *The new PIN must be a 4-digit number. It must be entered twice so that system confirms capture* |  | ✓ |  |  |
|  |  |  |  |  |
| *There will be checks on the user pin complexity( Minimum Characters, special characters e.t.c)* |  | ✓ |  |  |
|  |  |  |  |  |
| *The default language will be English* |  | ✓ |  |  |
| *Pin Block every 3 failed logins* |  | ✓ |  |  |
| *Responses on the App* |  | ✓ |  |  |
|  |  |  |  |  |

**Yes No**

Comments:

* Distribution of APPs – needs to be secure. Delivery over an SMS with a unique link.
* Distribution of APP on APPstore either android or Nokia Ovi-Store

##### 

##### Balance Enquiry

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *The balance is obtained in real-time from the Bank CBS system. Balance is assumed to be correct* |  | ✓ |  |  |
|  |  |  |  |  |
| *Balance will be displayed in Kenya shillings (KES)* |  | ✓ |  |  |
|  |  |  |  |  |
| *A transaction in progress which affects the balance enquiry will not appear* |  | ✓ |  |  |
|  |  |  |  |  |
| *The balance will not display the charge for the service* |  | ✓ |  |  |
| *If the customer has more than one account, the system will list the different options and allow the customer to select which one to get the balance of.* |  |  |  |  |
|  |  | ✓ |  |  |
|  |  |  |  |  |
| *There is no limit to the number of balance enquiries a customer may make in a day* |  | ✓ |  |  |
|  |  |  |  |  |
| *The service will not operate independently of the balance in the customer’s account- customer must have funds to support the transaction* |  | ✓ |  |  |
|  |  |  |
| *The customer will get the following message to display the balance* ***“Available Balance for account Trizah - Salary Account is kes. 24830.9. Last activity on this account is on: 13-01-2011 Thank you for banking with us.*** |
|  |  |  |  |
|  |  | ✓ |  |  |
|  |  |  |  |  |
| *The date format will be in DD-MM-YYYY* |  | ✓ |  |  |
|  |  |  |
| *Balance (9,999,999.00) this will show the running balance on the account. Limit to be open to show to a billion* |  | ✓ |  |  |

Further comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### Mini Statement/FULL STATEMENT

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *There is no limit to the number of mini statements a customer may make in a day* |  | ✓ |  |  |
|  |  |  |  |  |
| *The system will show the last five transactions for a mini statement* |  | ✓ |  |  |
|  |  |  |  |  |
| **The mini statement will display the following fields** |  | ✓ |  |  |
|  |  |  |  |  |
| *Date (DD-MM-YYYY)* |  | ✓ |  |  |
| *Debit/ Credit: A debit will be represented by a “-” and a credit by a “+”* |  |  |  |  |
|  |  | ✓ |  |  |
|  |  |  |  |  |
| *Balance (9,999,999.00) this will show the running balance on the account* |  | ✓ |  |  |
|  |  |  |  |  |
| The mini statement will display the following message  **“ECOBANK Mini stat: 23/01/12, 10000 Ksh,**  **Cash Deposit .23/01/12, 118000 Ksh,**  **Cash Deposit. 18/01/12, -2.5 Ksh, Charges –**  **Cash Withdrawal. Available Bal: 128012.29 .**  **Thank you for banking with us.ECOBANK**” |  | ✓ |  |  |
|  |  |  |  |  |

##### 

Mini statement to show

* 10 Transactions on APP,
* show 5 transactions on SMS

##### Check Book request

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *The cheque book request will be sent to CBS* |  | ✓ |  |  |
|  |  |  |  |  |
| *The customer will choose the number of leaves for the cheque book (Bank to provide options)* |  | ✓ |  |  |
|  |  |  |  |  |
| *The system will not provide a reference number as the request will be reflected in the CBS* |  | ✓ |  |  |
|  |  |  |  |  |
| *It will indicate the branch at which they should check for the cheque book after processing. Change can be made by calling the contact centre (provide the calling details).* |  | ✓ |  |  |
|  |  |  |  |  |
| *The customer can order as many cheques as they like.* |  | ✓ |  |  |
|  |  |  |  |  |

Further comments:

* Cheque book request to remain as it is, a service request
* Should check whether an account is supposed to order for a cheque book
* Alert when the cheque book is ready
* Show the number of pages on a cheque book – for customers to select 25, 50 and 100.
* Report generated to monitor the requests.

##### Stop Cheque

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *The customer will key in the cheque number to be stopped* |  | ✓ |  |  |
|  |  |  |  |  |
| *There will be validation of the cheque number to be stopped on the CBA (core banking application)* |  | ✓ |  |  |
|  |  |  |  |  |
| *The customer can stop as many cheques as he/she would like. Customer to be advised to call the call center* |  | ✓ |  |  |
| *The customer will get an SMS confirmation that cheque was stopped (in addition to any USSD message). This message will state: “****Dear customer, your cheque number 1234567 has been successfully stopped.****”***Thank you for banking with us. ECOBANK**” |  |  |  |  |
|  |  | ✓ |  |  |
| *If the cheque cannot be stopped the customer will get the following message: “****Dear customer, your cheque number 1234567 cannot be stopped.****”***Thank you for banking with us. ECOBANK**” |  |  |  |  |
|  |  | ✓ |  |  |
|  |  |  |  |  |
| *No additional information will be provided why a cheque cannot be stopped* |  | ✓ |  |  |
|  |  |  |  |  |
| *The SMS will be sent once the stop chequerequest has been received by the CBS* |  | ✓ |  |  |
|  |  |  |  |  |
| *The customer will not be able to check the status of their stop cheque request* |  | ✓ |  |  |
|  |  |  |  |  |

Comments

* Failure of the cheque
  + Already stopped
  + Cheque range doesn’t belong to the customer
  + Cheque has been cleared
  + Insufficient funds
* Reasons for stopping the cheque
  + Wrong issue
  + Stolen
  + Lack of Cash
  + Other ---(allow for reasons)
* Unblock the cheque
  + Allow the blocked cheques to proceed

##### Fund Transfer – Intra-bank & Inter-bank funds transfer

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
|  |  |  |  |  |
| *If there are some nominated accounts, these will appear in a menu list.* |  |  |  |  |
| ✓ |  |
| *Ensure that that the amount being transferred is within a logical range. The maximum amount will be KES 40,000 Per day and a maximum of KES 20,000 Per transaction. These amounts are subject to regulatory laws.* |  |  |  |
| ✓ |  |
|  |  |  |  |  |
| *If the Bank passes the validation checks it will debit the customer and credit the destination account. If the transaction is successful the customer will get the following message:* ***“Transfer of Amount: 50000 from account: Trizah to Rehema was successful. New balance is 850574.0 TranCode: 314606.0 Thank you for banking with us. ECOBANK”*** |
| ✓ |  |
|  |  |  |  |  |
| ***“Transfer of Amount: 50000 from Trizah to Account: Cheque Plus Savings Accounts successful. New balance is 850574.0 TranCode: 314606.0 Thank you for banking with us.ECOBANK .”*** |
| ✓ |  |
|  |  |  |  |  |
| *Account Nominations on the mobile platform with an Alias option*  *Account nomination on the Wallet3 – for customer care to setup* |  |  |  |
| ✓ |  |
|  |  |
| *If the transaction fails to go through, the bank will automatically reverse the entire transaction and send the following message to the customer:* ***““Dear Trizah, your transfer of KES 3000 to Rehema was not successful. Thank you for banking with us .ECOBANK ”*** |  |  |  |  |
| ✓ |  |
|  |  |  |  |  |
| *The customer will only be able to make one transaction at a time. If the customer should try and make another transaction before the previous transaction is complete they will get the following message:* ***“Dear customer, your transfer of KES 1000 is in progress. You cannot transfer any funds until the transaction is complete. Thank you for banking with us.ECOBANK .”*** |
| ✓ |  |
|  |

Comments:

* Show all the Kenyan banks and branch codes on the APP for ease of use.
* Failure reasons for funds transfers – lack of funds, invalid accounts, wrong PIN

##### Airtime transfer – own Phone & other Phones (Different Networks)

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *On selecting the appropriate option, CBS will debit the customer’s bank account and transfer airtime to the user’s phone account. SMS to customer on successful transactions* |  |  |  |  |
| ✓ |  |
|  |  | | |  |
| *The selected account has sufficient funds for the transaction. If there are insufficient funds (which may be defined by a threshold value) the following message will be displayed and the customer will be taken to the main menu. “****Dear customer, you do not have sufficient funds in account. Thank you for banking with us.ECOBANK****”* |  |  |  |  |
| ✓ |  |
| *Own network & Other networks* |  |  |  |  |
|  |  | ✓ |  |  |
| *If the transaction fails to go through, the procedure call on wallet will automatically reverse the entire transaction and send the following message to the customer:* ***Dear customer, your airtime transfer of KES 500 to Mobile No 0722 345789 was not successful . Thank you for banking with us.ECOBANK”*** |  |  |  |  |
|  |  | ✓ |  |  |
|  |  |  | |  |
| *The customer will only be able to make one transaction at a time. If the customer should try and make another transaction before the previous transaction is complete they will get the following message: “****Dear customer, your transfer of KES 2000 to Mobile No 0722 3456789 is in progress.”*** |  |  |  |
| ✓ |  |
|  |
|  |

comments:

* Allow other channels i.e. Internet Banking & ATM to access the channel, POS at merchants
* Monitoring of the service whenever there are delays on the service
* Monitoring of the balances to guarantee uptime of the service – the balance at the MNO end.

##### 

##### Customer Administration

Only makers will be allowed to create customer registrations while checker will approve actions done

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Change the associated enrolments* |  | ✓ |  |  |
|  |  |  |  |  |
| *Change the customer notifications* |  | ✓ |  |  |
|  |  |  |  |  |
| *Upon a successful change the customer will get an SMS with the updates* |  | ✓ |  |  |
|  |  |  |  |  |
| *The customer SMS will be sent out in the selected language of the customer* |  | ✓ |  |  |
| *If there is a transaction in progress the Checker will get the following notification: “****The customer is currently performing a transaction. Please wait until the transaction is complete before continuing with this update.****”* |  |  |  |  |
|  |  | ✓ |  |  |

Further comments: \_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### Alerts

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| ***Notifications:*** *These are SMS alerts that are sent to customers when specific events* happen. These notifications are listed below: |  | ✓ |  |  |
|  |  |  |  |  |
| *Debit Alerts; Any debit to the account. No limit on the alerts* |  | ✓ |  |  |
|  |  |  |  |  |
| *Credit Alerts: Any credit to the account. No limit on the alerts* |  | ✓ |  |  |
|  |  |  |  |  |
| *Salary Alerts: On arrival of direct debit salary* |  | ✓ |  |  |
|  |
| ***Nominations:*** *This configuration allows the customer to have a list of pre-configured accounts to choose from to prevent the need for keying in the account number. This adds convenience to the process and reduces the turnaround time of a transaction.* |  |  |  |
| ✓ |  |
|  |  |  |  |  |
| ***Enrolment:*** *This configuration enables the user to allow the customer to pay bills to certain utility providers (e.g. power, water, etc). This offers both security and convenience to the user and reduces the potential for errors* |
| ✓ |  |
|  |

Comments:

* Loan Alerts & repayments
* Loan applications monitoring
* Quick - Loan Applications
* Advance Loan applications
* Cheque book ready
* Card ready
* Bill alerts from Merchants
* Notifications for News services

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### TECHNICAL INTEGRATION

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Connectivity to Hub** |  |  |  |  |
|  |  |  |  |  |
| *Connection protocols (P2P)* |  | **🗸** |  |  |
|  |  |  |  |  |
| *VPN* |  | **🗸** |  |  |
|  |  |  |  |  |
| **Integration Mode.** |  |  |  |  |
|  |  |  |  |  |
| *ISO* |  | **🗸** |  |  |
|  |  |  |  |  |
| *Stored Procedures* |  |  |  |  |
|  |  |  |  |  |
| **Communication to CBS** |  |  |  |  |
|  |  |  |  |  |
| *Asynchronous* |  |  |  |  |
|  |  |  |  |  |
| *Synchronous* |  | **🗸** |  |  |
|  |  |  |  |  |
| *Hybrid (mix of asynchronous and synchronous)* |  |  |  |  |
|  |  |  |  |  |
| **Hardware** |  |  |  |  |
|  |  |  |  |  |
| *Live servers - - to be ordered based on the specification from Cellulant* |  | **🗸** |  |  |
|  |  |  |  |  |
| *Test Servers - to be ordered based on the specification from Cellulant (high-end PC for initial test period)* |  | **🗸** |  |  |
|  |  |  |  |  |
| *Monitoring Servers - to be ordered based on the specification from Cellulant* |  | **🗸** |  |  |
|  |  |  |  |  |
| *DR servers - to be ordered based on the specification from Cellulant* |  | **🗸** |  |  |
|  |  |  |  |  |

Further comments: \_\_\_\_\_\_See the attached server list\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_\_

##### CHARGING MECHANISM (BILLING)

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *The CBS handles Mbanking transaction charging (charging is not logic applied).* |  | ✓ |  |  |
|  |  |  |  |  |
| *The CBS does not handle Mbanking transaction charging (Charging is logic applied).* |  |  |  | ✓ |
|  |

Comments

* Cellulant will configure billing to happen on release3
* Reversals will include the billed amounts

##### AGENCY BANKING

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Agents** |  | ✓ |  |  |
|  |  |  |  |  |
| *Deposit Funds* |  | ✓ |  |  |
|  |  |  |  |  |
| *Change PIN* |  | ✓ |  |  |
| **Bill Payments** |  | ✓ |  |  |
| Biller codes |  | ✓ |  |  |
| Settlement |  | ✓ |  |  |
| Manage Agents |  | ✓ |  |  |
| Register Agents |  | ✓ |  |  |
| Agent Reconciliation |  | ✓ |  |  |
| Float Management for Agents (Quick loans for floats) |  | ✓ |  |  |
| Special agents – pick Cheque books, |  | ✓ |  |  |
| POS agents |  | ✓ |  |  |
| **Airtime & Mpesa** crediting to customer accounts |  | ✓ |  |  |
|  |  |  |  |  |
| **Customers** |  | ✓ |  |  |
|  |  |  |  |  |
| *Withdraw Funds* |  | ✓ |  |  |

Comments:

* Agent requests will be configured on the mobile banking, POS

##### Mpesa/ Zap transfer – to own Phone & other Phones (Different Networks)

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *On selecting the appropriate option, CBS will debit the customer’s bank account and transfer mpesa to the user’s phone account. SMS to customer on successful transactions* |  |  |  |  |
| ✓ |  |
|  |  | | |  |
| *The selected account has sufficient funds for the transaction. If there are insufficient funds (which may be defined by a threshold value) the following message will be displayed and the customer will be taken to the main menu. “****Dear customer, you do not have sufficient funds in account. Thank you for banking with us. ECOBANK****”* |  |  |  |  |
| ✓ |  |
| *Own network & Other networks* |  |  |  |  |
|  |  | ✓ |  |  |
| *If the transaction fails to go through, the procedure call on wallet will automatically reverse the entire transaction and send the following message to the customer:* ***Dear customer, your airtime transfer of KES 500 to Mobile No 0722 345789 was not successful . Thank you for banking with us.ECOBANK”*** |  |  |  |  |
|  |  | ✓ |  |  |
|  |  |  | |  |
| *The customer will only be able to make one transaction at a time. If the customer should try and make another transaction before the previous transaction is complete they will get the following message: “****Dear customer, your mpesa /Zap transfer of KES 2000 to Mobile No 0722 3456789 is in progress.”*** |  |  |  |
| ✓ |  |
|  |
|  |

comments:

* Allow other channels i.e. Internet Banking & ATM to access the channel, POS at merchants
* Monitoring of the service whenever there are delays on the service
* Monitoring of the balances to guarantee uptime of the service – the balance at the MNO end.

##### Mpesa/ Zap transfer – to own Bank account or other acccounts

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Mpesa/ Zap will send transaction to wallet that a particular number has credited the account on Mpesa/Zap. The Wallet will check for the mobile number, Account to credit and check with the Flex-cube to credit on the core banking. SMS to customer on successful transactions* |  |  |  |  |
| ✓ |  |
|  |  | | |  |
| *If the customer is not registered, the customer is requested to send an SMS to the system notifying the wallet of the account that they were crediting. If the account is wrong, refund the amounts to the sender. “****Dear customer, the account that you are crediting is not available, we shall credit your mobile number in less than 48hours. Thank you. ECOBANK****”* |  |  |  |  |
| ✓ |  |
| *Transfer to accounts mapped on our billers system (Biller names is alphanumeric)* |  |  |  |  |
|  |  | ✓ |  |  |
|  |  |  |  |  |
|  |  |  |  |  |
|  |  |  | |  |
|  |  |  |  |
|  |  |
|  |
|  |

comments:

* Monitoring of the service whenever there are delays on the service
* Monitoring of the balances to guarantee uptime of the service – the balance at the MNO end.

Cheque Book Requests integration to the system APIs,

|  |  |  |  |
| --- | --- | --- | --- |
| **Fields** | **Length** | **Default Value** | **Description** |
| Sort Code | 9 |  | varchar |
| Account Number | 14 |  | varchar |
| Account Name | 255 |  | varchar |
| Account Type | 30 |  | varchar |
| Currency Name | 30 |  | varchar |
| Number Of Books | 3 |  | decimal |
| Number Of Leaves | 4 |  | decimal |
| Start Number | 7 |  | decimal |
| Ending Number | 7 |  | decimal |
| OrderDate | datetime | NULL | YYYY-MM-DD |
| AlternateAcccountNumber | 20 |  | varchar |

Integration to other systems

* Standard APIs should be provided to the following channels to integrate later to the Cellulant system
  + ATMs – airtime, Billers, Zap (deposit) & Mpesa (deposit)
  + OMNI ( internet Banking) - – airtime, Billers, Zap (deposit) & Mpesa (deposit), C2 B transactions
* The wallet should allow for
  + Reversals
  + Requests
  + Bulk payments

On this ATM, OMNI channels

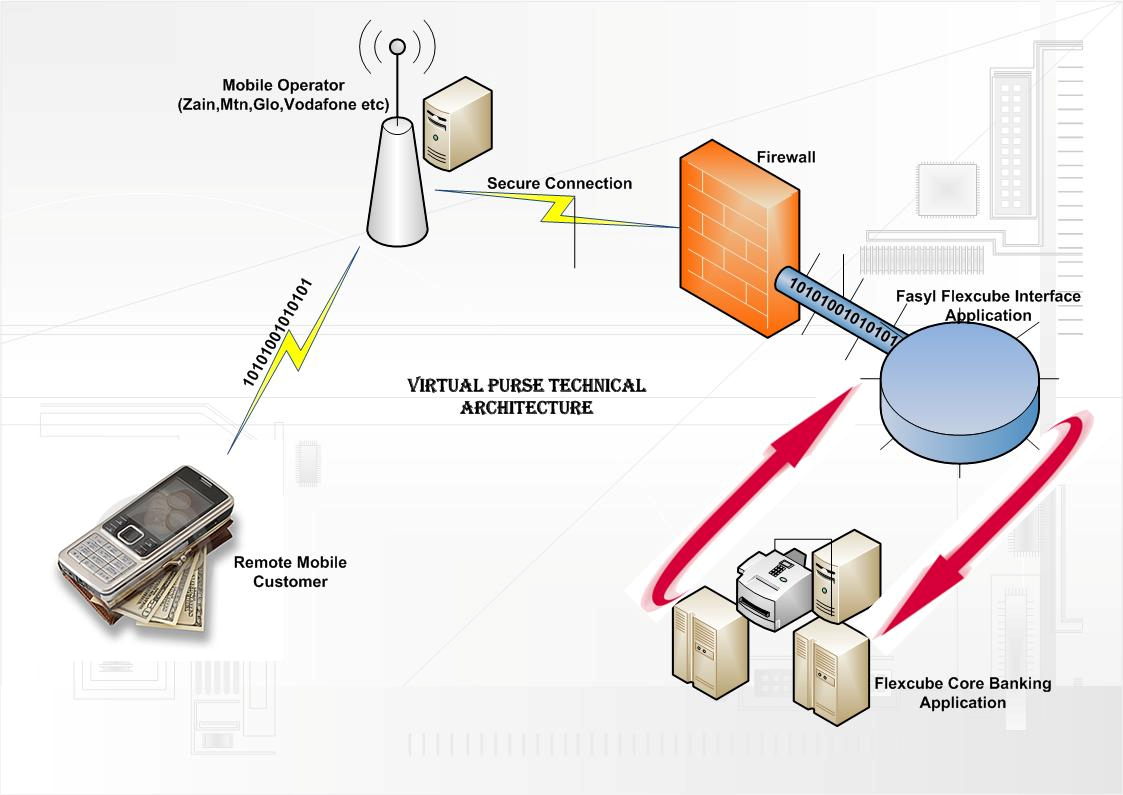
* Create unique IDs for the different systems – so that reconciliations are possible.

# Key Assumptions and Constraints

This section describes major assumptions that were made prior to or during the Business Requirements gathering and documentation.

* Cross currency
* Cellulant has connectivity to the Safaricom and Airtel systems in Kenya
* Release 3 can serve multi-countries
* We can connect to WAP & USSD at a later date with no extra cost
* ISO integrations to the X-net (bridge between core-banking and release 3.0) system.
* Cellulant has billers connected to their network.

# Technical Framework



# JAVA & Android APPlication

Deployment of an ECOBANK APPs

**Registrations**

Steps in rolling-out the Mobile APP

* Download APP from an APP store or OviStore
* When the customer logs onto the APP, the customer is requested for the following information;
  + Surname
  + Middle Name
  + First Name
  + ID number
  + Mobile Phone Number
  + Birthday
  + Include Account number
  + Last transaction type/ date and Amounts
* App will submit the information to the Release 3.0 platform at ECOBANK for Verification
* Verification happens at the Core Banking Application
* If the details are correct?
  + The customer will get a 2 responses on the SMS with a
    - PIN
    - User name.
  + The customer will log into the APP
  + The APP will request for the Login details
    - User Name
    - PIN
    - Change PIN
    - NO OPTION TO SAVE PIN/PASSWORD
  + Full suite is displayed on the service.
* If the details are incorrect? (One detail or All )
  + The APP will refresh and allow the customer to start the process all over again – Refresh the entries
  + It should have the functionality to inform the customer about the contact centre details – Call the contact centre for Help.

**Get APP on a Link**.

* Customer will request for an APP through Branch or calling contact centre.
* If through contact center, FLEXCUBE/ RELEASE3 will generate random questionnaire for the representative to ask the customer.
* The answers will determine whether the customer will be sent the link or not.
* If link is sent
  + Customer will open the link (It is only clicked once to enable downloading)
  + Link cannot download 24 hours since it was sent
  + On the page, the customer will choose the type of mobile that one has and the phone make.
  + The system will generate and appropriate APP for downloading. Customer will download the APP.
  + Customer will also receive an SMS with the PIN for activation.
  + The customer will read the Terms & Conditions and agree to proceed to the next level.
* If link is not sent
  + The customer has to visit the Branch for verification. The customer will be asked which mobile phone that he has to determine the APP to send to him.

**Features of the App**

* Every App needs a unique ID to enable it to communicate to the system. The ID number is transmitted to the system whenever there is a transaction and helps with the security of transactions
* Use IMEI numbers to identify Apps, clarification required
* Every APP before installing onto a phone it will check whether there is an existing file of its nature on the PHONE. If there exists, the APP will request whether to overwrite the existing software.
* Contact Centre details should form part of the menu as Help Desk
* Two different phones using one mobile number cannot download an APP.
* Two sim cards on a similar phone can only download one APP.
* 2 different sim cards on different phones can access the same account if they are proven to be from the same account. Pin always sent to the same number used in the initial registration.
* A user can add a new account on the same bank, same APP and same mobile phone number.
* Western Union transfers will happen on the system for ECOBANK customer and non registered ECOBANK staffs - to register they enter their information on the mobile banking APP.
  + Customer enters the unique transaction code (MCTN) – Western union system will check whether the code exists or not and respond by requesting for more details
  + Details requested include Senders Country, Senders last name, Amount, test Question Answer. Send Date,
  + Response from the system on whether the transaction is correct/ valid.
  + If successful, the customer is given an option to select whether to receive the cash through ATM, through Mobile Wallets
    - Mpesa,
    - ZAP)
    - Rapid Transfer
    - Agents
  + If through Mobile Wallet the customer will enter the following details
    - Mobile Number
    - Transferred amount – ALL, Kshs, Enter Amount
  + If through the Branches – customer will be asked for
    - ID number
  + If through Agents, customer will be requested to enter
    - Agent number
    - Amount to transfer
  + Allow customer to send the money to send to rapid transfer and withdraw at a branch or ATM
* If the customers is registered on the mobile banking platform,
  + Select western union on their APP after log-in.
  + Customer enters the unique transaction code (MCTN) – Western union system will check whether the code exists or not and respond by requesting for more details
  + Details requested include Senders Country, Senders last name, Amount, test Question Answer. Send Date.
  + Response from the system on whether the transaction is correct/ valid.
  + If successful, the customer is given an option to select whether to receive the cash through ATM, through Mobile Wallets or submit it to the bank account
    - Mpesa,
    - ZAP)
    - Rapid Transfer
    - Agents
  + If through Mobile Wallet the customer will enter the following details
    - Mobile Number
    - Transferred amount – ALL, Kshs. Enter Amount
  + If through Agents, customer will be requested to enter
    - Agent number
    - Amount to transfer
  + If through the bank account, the customer is allowed to select either of his/her accounts and the money is pushed to the specific account.
* PIN Reset
  + This process is treated like a new registration
  + The customer can also call the Customer centre and be asked the questions that are validated before activation.
  + Activation is an SMS sent to the customer on their mobile number. The default registered number.

##### bank Account to Western Union & Rapid Transfer

* The customer can be able to transfer money from their mobile APP to the western union & rapid transfer services.

**Yes No**

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *On selecting the appropriate option, CBS will debit the customer’s bank account and transfer float to the user’s account. SMS to customer and recipient on successful transactions* |  |  |  |  |
| ✓ |  |
|  |  | | |  |
| *The selected account has sufficient funds for the transaction. If there are insufficient funds (which may be defined by a threshold value) the following message will be displayed and the customer will be taken to the main menu. “****Dear customer, you do not have sufficient funds in account. Thank you for banking with us.ECOBANK****”* |  |  |  |  |
| ✓ |  |
|  |  |  |  |  |
|  |  | ✓ |  |  |
| *If the transaction fails to go through, the procedure call on wallet will automatically reverse the entire transaction and send the following message to the customer:* ***Dear customer, your Western union/ rapid transfer of KES 500 to Mobile No 0722 345789 was not successful . Thank you for banking with us.ECOBANK”*** |  |  |  |  |
|  |  | ✓ |  |  |
|  |  |  | |  |
| *The customer will only be able to make one transaction at a time. If the customer should try and make another transaction before the previous transaction is complete they will get the following message: “****Dear customer, your Western union/ rapid transfer of KES 2000 to Mobile No 0722 3456789 is in progress.”*** |  |  |  |
| ✓ |  |
|  |
|  |

**Sign-offs**

|  |  |  |  |
| --- | --- | --- | --- |
| Prepared by: | Product Owner | Name: **Susan Gichia**  Function: **Product Development** | Sign:………………………………………………  Date:…………………………………………………. |
| Reviewed and recommended by | Product Owner | Name: **David Mutinda** Function: **Alternative Channels EAC** **cluster** | Sign:………………………………………………  Date:…………………………………………………. |
| Approvals by | Mobile Banking | Name: **Edgar Andagalu**  Function: **Head of** **Mobile - ECOBANK group** | Sign:………………………………………………  Date:…………………………………………………. |