



TECHNOLOGIES

INTELLIDRENCH

DRENCHED IN INNOVATIONS

INTELLIDRENCH
TECHNOLOGIES

*(API-Based Systems
Integration Platform)*

BUSINESS PROFILE

MOBILE LENDING

ASSOCIATED WITH



   @bharathbrands



MOBILE LENDING

As mobile platforms become more user-friendly, computationally powerful, and readily available, innovators have begun to develop mobile apps of increasing complexity to leverage the portability mobile platforms can offer. By using cell phones, a range of financial services, including lending can be easily and safely accessed wherever there is cell phone coverage. Building on the success of implementing the turnkey solution,

INTELLIDRENCH has developed an end-to-end enterprise lending solution that allows users to access unsecured micro-loans through their phones. Although mobile banking has taken off in Kenya, micro-lending has not. This is down to several reasons, including a shortage of technical skills, high costs, low levels of funding, expensive security requirements, low repayment rates and judicial bottlenecks for taking collateral.

Why INTELLIDRENCH Mobile lending solution?

This solution is built on three key strengths:

- **Simplicity:**

The ability to remove steps or make a current process easier to perform.



- **Engagement:**

The ability to encourage greater user involvement that will increase loyalty.



- **Contextuality:**

The ability to leverage user insight to improve the functionality of the solution.



- **Availability:**

solution rides on nonstop TIP architecture



- **Integration:**

The solution can expose its services or integrate with any third-party application since it's built on a service orientation foundation



The systems through which mobile banking will be delivered are:-

i. Mobile Front End- customer interface

ii. INTELLIDRENCH TIP – A Software & interface provided by INTELLIDRENCH that allows for connectivity between:

- The bank's core banking system and local Mobile network owners(MNOs).
- Credit Reference Bureau institution to check on credit scoring.
- Government's Integrated population registration system to validate Identity card information.
- Any data warehousing solutions



iii. Core banking system for management of loan contract

The solution is structured as follows:

The app is mainly structured around 5 main aspects namely:

- Front end
- Originations
- Credit Scoring process
- Disbursement
- Collection



1. Front end:

The INTELLIDRENCH Mobile lending suite includes a mobile banking application as well as an interface for the customer as well as the bank/financial institution.

The Solution is accessible through two interfaces i.e.

- **Web interface** – is only available to bank staff and is used for customer registration and customer account management.
- **USSD interface (Unstructured supplementary services Data)** – is only available to the bank’s customers, and forms the interface through which customers access the bank’s mobile banking services. This is complemented by a mobile banking app that allows customers the additional option to carry out mobile banking transactions. The app runs on android, and iOS, and has similar functions as those available via USSD

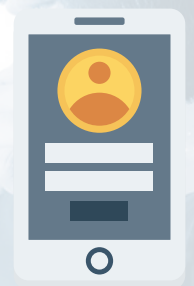


The front end comprises the login screen and the menus available. Once a user has downloaded the app or dialled a USSD code, the registration process is initiated by requesting the customer to accept the terms and conditions. The customer then receives an SMS with the pin.

Mobile banking Account Opening/Enrollment process

The customer should be able to open an account in CBS and this should fulfil the following requirements

- Confirm if the customer already exists using the National ID and if exists proceed to open a new mobile lending account in a preferred bank, if it does not exist request the customer to key in the information correctly or throw an exception ID number not available.
- Once the customer record has been opened now create the CBS Account for the customer after confirming that an account with the provided mobile number does not exist.



Loan origination

This follows the overdraft facility process. The bank will run a scorecard in the background on the account selected by the customer and come up with an approved limit. Banks will make the limited files available regularly via the TIP portal and the customers can check balances and access the same via the respective menus. The overdraft will have an expiry period as set by the scorecard (business rules). Before this time lapses though, the customer can request for a term extension, where it will be at the discretion of the bank to either extend or not based on the account behaviour. Facility fees will be levied based on the used amount and posted to the income account. The maximum term extension period must be set at this level



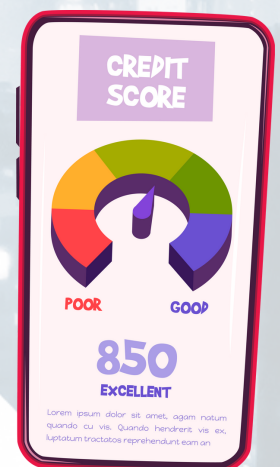
Credit Scoring Process

Credit scoring, sometimes called risk scoring, is a rating process that is used to determine creditworthiness and the likelihood and timeliness of loan repayment. A credit score impacts the loan limit as well as subsequent limit adjustment. Once an account has been activated, the limit is granted based on how the customer transacts/saves in their account. This is separate from the customer's main account transactions.

Alternatively, the scorecard can be based on the customer's main account activities but the overdraft will be based on the customer's main account activities and the overdraft will be marked on the “Blending” account.

The limit is predetermined in advance and is only made available upon customer request. This a continuous process and limits are increased automatically for customers exhibiting good behaviour but will only access the additional limits upon request (apply top-up). A charge is levied against the topped-up amount. The appraisal criteria are purely based on the bank's business rules coupled with the risk appetite strategy. Below are a few of the recommendations:

- A bank customer for at least the last 6 months
- Customer not listed with CRB
- Average credit turnover for the last 6 months. To eliminate abnormal credits, take the last 6 months' turnovers, drop the highest turnover month and calculate the average for the remaining 5 months. (can be used to determine limit amount e.g. 50% of average credit turnover last 6 months)
- If the customer has a running loan with the bank, the turnover is to be discounted by say 20% before a limit is determined.
- In case a customer has a running loan, it should not be in arrears for more than 30 days
- No existing overdraft in the transactional account
- No returned cheques for the last 3 months
- No excesses for the last 3 months



To avoid unnecessary delays, in appraisals for top-ups, where possible, the maximum approved limit will be marked as a silent OD. Then the amount to be made available will be say 80% of the same. If the customer meets certain criteria and applied for a top-up, then the 20% will also be made available.

Disbursement

Customers will be able to draw from the amount available via any member bank. They will be able to move funds from their phones to MLending accounts and even to their main transactional accounts. As long as there is an available limit, the customer can take the same. But anytime there is a withdrawal, a % facility fee will be charged including the top-up amount above.



Collection

Customers are allowed to make payments for their loans either in full or in partial payments which can be before or on the due date

A week before to limit expiry date, the customer with a debit balance on their MLending account should send a reminder to fund their account before then to avoid late payment penalties. The same should be done on the due date as well indicating that nonpayment will result in a penalty of XYZ amount. If the account is still not funded, the limit will be expired and the account will now be considered to be in excess.



The penalty process should be initiated and levied on the account. The system will keep a counter of several days in excess and after the expiry of the grace period, say 30 days (based on business rules), the bank can move to recover from the other accounts based on the terms and conditions as agreed.

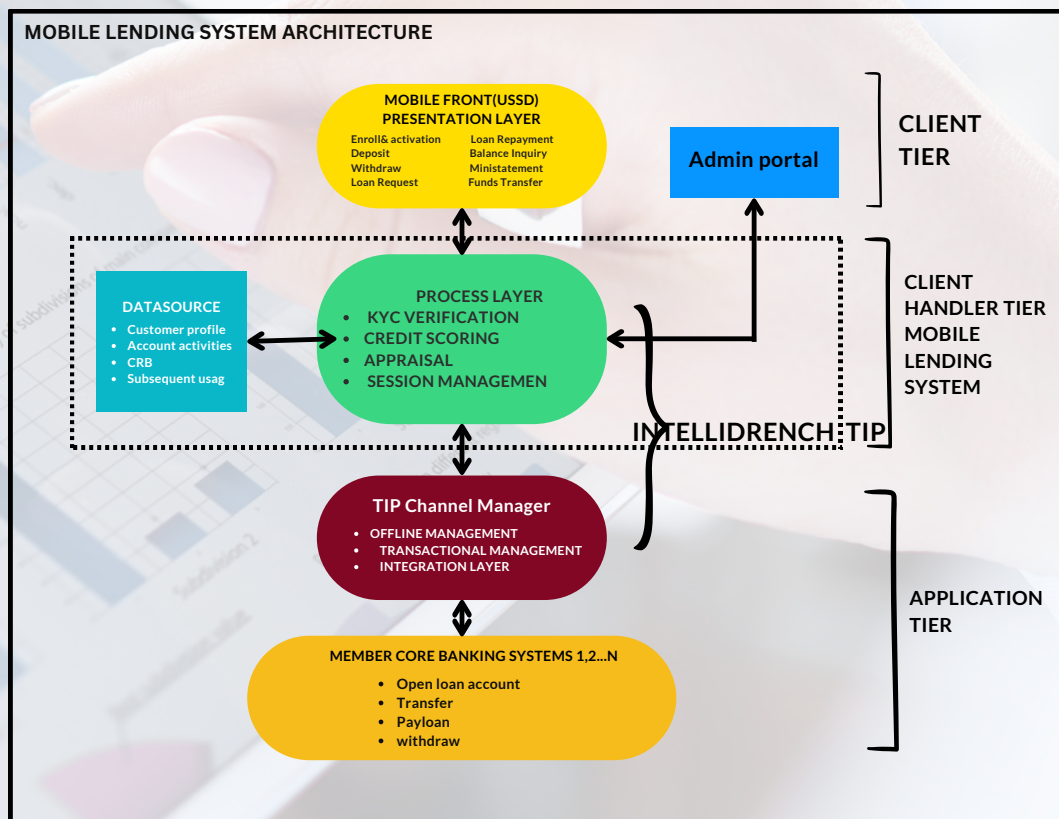
However, if a customer has exhibited good behaviour and the bank would like to extend the OD expiry, that should be done silently beforehand and the customer can be sent a message saying a week before the expiry being notified of an impending limit expiry but can extend the limit for a certain period upon request. This will attract a charge at a % of the outstanding balance.

System generates daily reports in loan repayment

Other Supported Features:

1. Clearing process functionalities
2. Reconciliation
3. Settlement
4. Reporting

Technical Architecture





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