**PROBLEM STATEMENT**

**INTRODUCTION**

It is obvious that entrepreneurs with established business may also need a sudden cash to keep the business operation going.

One of the option which they can employ to cover major cash flow issue is taking out a small business loan.

These are funds borrowed from a lender like bank that must be re-paid with interest and it is one of the most common way to fund a business.

Small business loan are typically of lower interest and offer more flexible terms than many other loans.

**PROBLEM DEFINITION**

It is perceived that most of the small businesses, most times, do not really have access to loan based on the proof fog guarantee of payment or other factors which has really killed many small businesses.

If small start ups and businesses have easy access to loan with little interest and with the proof of paying back, then it is possible for small businesses and startups to thrive which will be an advantage to the society.

We will be building a mobile application that can easily grant small businesses loan with very little interest.

We have identified some ways that can enable us to be sure of pay-back from small businesses. Some of these ways include:

* Verifying user details with their Bank Verification Number
* Collecting proof of evidence of their businesses
* Gathering information about where they resides.

**BENEFIT OF THE APP**

* Small businesses can easily access capital for their businesses.
* Very low amount of interest will be charged
* There will be different types of loan for different needs.

**PROJECT MANAGEMENT TOOLS**

For this project we will be using **Basecamp3** as our project management tool

**REQUIREMENT ANALYSIS**

Since we have been able to identify the problem we are about to solve, if we then poorly and inaccurately define the requirements, it can make solving the problem an uphill for us. That is why we will be exploring one of this requirements types.

**FUNCTIONAL REQUIREMENT**

The basic functional requirement of this our proposed application are stated below:

* Verify business owners and their businesses
* Verify their imputed details with their bank details through their Bank Verification Number.
* Gets the accurate information about where the business owner resides
* Collects information about their businesses
* Business owners access loans with low interest.
* Access to different types of loans for different needs.

**NON-FUNCTIONAL REQUIREMENT**

* The application will be available in form of a mobile application
* Users need to provide internet access to access the application
* The application can be used anywhere and anytime

**POTENTIAL SOFTWARE VENDOR**

We are grateful and fortunate to have Africa-hacks as our potential software vendor which we believe are able to solve some of our organizational challenges such as funding and mentorship.

**SELECTED TECHNOLOGY**

For this project, we will be building a mobile application in which we will be using PHP to write script to connect with the mobile application as an API.

We will also be implementing some other API’s also such as payment API and bank verification API.

**COMPETITIVE ANALYSIS**

Some of our competitors are FairMoney, GKash, O-Kash, sokoloan.

Our target customers are small business owners who needs to get loan for their start up and businesses.

Our key strength is that we make getting loan easier for start-up and small businesses with a very little interest.

Our key success factors are:

* Access to loan
* Lower interest rate
* Different loans for different needs.

**IDENTIFIED TECHNOLOGIES USED IN THE**

**SYSTEM DEVELOPMENT**

For this project we have identified some technologies in which we will be using in the system development which are stated below:

* The programming languages we will be using to develop this system include: html & css(bootstrap),flutter,javascript,php and sql.
* For the database administration , we will be using phpmyadmin with structured query language to connect with our code.
* For the font end , we will be implementing flutter and web development tools like html,css and javascript for the front end design.
* For the back end, we will be implementing php to write the logics for the system functional requirement. We will also be implementing Asyncronous javascript And XML(AJAX) for real time response on the system.
* For the database administration, we will be implementing PhpMyAdmin for the database implementation.
* We will also be implementing BVN verification API to verify users details with their bank details.

**HOW artificial intelLigence CAN BE USED IN OUR PROJECT.**

The implementation of artificial intelligence tour system will help to analise user records on their reactions towards the app which will be a basis for predicting how we the administrators should respond to users. Some of these records may be:

* How often the user gets loan
* How quick the user pays back his debt.
* Reasons why the user wants to get the loan.
* Range of loans collected. E.t.c

All of these details will be gathered based on individual basis which will be analyzed with artificial intelligence which will make the system to be able to predict the best response to users in various situations.

**HOW BLOCKCHAIN CAN BE USED IN OUR PROJECT.**

[Blockchain technology](https://www.salesforce.com/eu/blog/2020/01/how-does-blockchain-technology-work.html) is a decentralised, distributed, and public ledger that is used to record transactions across many computers within a network. Because of its design and properties, blockchain is secure, transparent, and nearly impossible to alter.

Ways in which blockchain technology can be used in our project include:

* Money transfers: Transferring money to other countries presents many problems and challenges for consumers and financial institutions. People send billions of dollars internationally each year, and the process is usually expensive, laborious, and error prone.

### Inexpensive, direct payments: Most funds move through financial institutions, such as banks or credit card processing centres. Each of these steps adds a layer of complexity, along with fees that can become costly.

### Reduced fraud: Blockchain stores information in a ledger with transaction information within each block, along with a unique hash that refers to the previous block. Every person within the network receives a copy of the transactions as well. Because of these features, blockchain technology is resistant to distributed denial-of-service attacks, hackers, and other types of fraud.

**SOCIAL AND ECONOMIC IMPACT OF EASY LEND**

Some of the impact of loan for small businesses includes:

* It create job opportunity for youths and start ups
* It reduces rate of poverty in the country as people are given the opportunity to turn their ideas into reality.
* It reduces the rate of unemployment in the country
* Youths are given freedom to try new ideas
* They are given the freedom to indirectly solve some other problems too.
* It gives youth the ability to have financial freedom which will reduce the rate of corruption in the country.
* It reduces the rate of insecurity as everyone will be given the privilege to explore their ideas.

**WAYS IN WHICH VIRTUAL REALITY OR ROBOTICS CAN IMPROVE OUR PRODUCT.**

With the implementation of robotics on our product, here are some if the improvements it can bring to our product:

* It will be used to validate users to ensure that they are eligible to get the loan and automatically gives then the loan without the need for the intervention of the administrator.
* It will be used to notify each debtors that their due time is about to elapse and for them to pay up.
* It will be used to put a constant reminder on our customers so as to put the debt in mind and to pay as at when due.
* If a customer refuses to pay as at when due, a period of grace will e given again, after that, the robot will automatically sends a complaint to the BVN administrator about the debtor and the debt will be automatically deducted from his account connected to the BVN.

**OUR TARGET AUDIENCE**

* Our major target audience are youth with great business ideas and start-up who have resource constraint especially financial constraint and are ready to turn their idea into a solution and are ready to take risk.
* Also our solution focuses on any individual who has a small business or start-up but have financial constraint and are willing and ready to take loan to further their businesses.

### The url to the admin dashboard is <https://www.dlcffuta.com/competition/admin>.

### The admin email is [samuelfemi85@gmail.com](mailto:samuelfemi85@gmail.com)

### While the admin password is omolade