



Maximizing The Digital Dividend.





## ABOUT US

1. HiPipo is keen to promote secure digital financial services because of their vital role in promoting financial inclusion.
2. We work with FinTechs, women in tech, developers, MNOs, Banks, DFSPs, regulators, policy makers, government, political, economic, and social systems and institutions.
3. We support early-stage FinTech companies and work on ecosystem initiatives in the FinTech arena and thereafter promote the most innovative trends.



## HiPipo's 2020 Community Activities

1. 40 days 40 FinTechs Initiative = **DONE**
2. FinTech Landscape Exhibition = **DONE**
3. Women in FinTech Hackathon #WomenInFinTech = **DONE**
4. Women in FinTech Summit #WomenInFinTech = **DONE**
5. 7<sup>th</sup> Include Everyone Summit
6. 7<sup>th</sup> Digital Impact Awards Africa



## Women In FinTech Hackathon and Summit | SUMMARISED

- 6 Days
- 15 Teams
- 5 Mentors
- 8 Facilitators
- 4 Judges
- 8 Hours on Live National TV, NTV, BBS and Smart 24 TV
- Women Led FinTechs Made Main headlines on national news, UBC, NTV, Smart 24 TV
- 53 Online Articles, shining a spotlight on Women Led FinTechs and Our Partners Mojaloop Foundation, ModusBox, Crosslake Technologies, ID8 and Level One Project.
- Sensitizing every Women Led FinTechs about Level One project principles.
- Numerous Tweets saw us trending everyday.
- Numerous Facebook Posts, helpful feedback
- Risen hope for the FinTech Sector.
- Each Women Led FinTech has adapted at least of Level One Principle, we are hopeful one product will go to market in the next month.



## INTERESTING STATISTICS

- 23% of women worldwide are still financially excluded.
- Women are 1.8 times more likely to access informal financial services via their village savings groups and co-operatives than formal services.
- At #40Days40FinTechs 10% of participating FinTechs were women.
- 40% of all small and medium-sized businesses (SMBs) are owned by women.

## COMMUNITY THOUGHTS ABOUT MOJALOOP

FEEDBACK	PERCENTAGE
Excited that we have an OSS to help on interoperability	19 (46.3%)
Mojaloop will help us cut costs and develop interoperable payment solutions easily.	21 (55.8%)
Very excited and thankful, Eager to learn more and see of how we can adapt and contribute, looking forward to learn more about the next steps.	31 (75.6%)
We have started implementing something that can leverage Mojaloop to better serve of target customers.	37 (86.3%)
Eager to contribute code and support community	11 (26.8)

## TESTIMONIALS

### MINISTER OF ICT

It is gratifying to learn that Women In FinTech is a **private sector** led initiative aimed at promoting Women Led Financial Technology Companies (FinTechs) and teams in the country. As the Minister entrusted to support and promote the uptake and availability of ICT services in the country, I commend you for your efforts and pledge increased support towards this very important industry.

### HALIMA BUKIRWA - PARTICIPANT

One of the event participants, Halima Bukirwa, noted that the hackathon provided her and her team with an opportunity they had only dreamed about. “The Women in FinTech Hackathon turned out to be one of the best experiences for myself and my team,” said Bukira. “From the offset, we were given knowledge and mentored to be the best we can be in creating products that provide real solutions. Learning about aspects like the Level One Principles and getting advice on the business side of FinTechs sharpened our thinking and enabled us, in a short time, to create a viable product. To be chosen amongst the best is arguably one of the greatest achievements of myself and my team.”

## CHALLENGES OF THE FINTECHS

- There's still some mistrust from the establishment, born of out of ignorance of the sector
- Lack of facilities like reliable data centers
- Most Women Led FinTechs are start ups, have all the issues associated with start ups
- Limited APIs from Key industry players
- Costs and Taxes of Mobile Money that are slowing down its penetration
- Limited awareness of services such as merchant that leads to poor demand for digital services and payments
- Lack of financing and capital to carry
- The growing need and lack of cyber Insurance packages
- Regulation still makes it harder for start ups etc..

## CURRENT OPPORTUNITIES

- Availability of resources - **Level One Principles**, World Bank publications
- There is fallow ground (still lots of new territory to play in)
- Demand for Mobile Banking Services and proliferation of Mobile Technology makes it possible to grow your customer base in the payments space quicker than other sectors
- Merchant Space where businesses will start accepting payments through Mobile Money.
- Growth in Ecommerce, especially Mobile Commerce. Consumers are increasingly relying on mobile technology to do their shopping and make their payments especially due to increased access to phones.
- Public sector is starting to demand electronic services
- There are players like HiPipo that are supporting the ecosystem
- Covid-19 and “work from home” – creates more demand for digital services
- Cheap/Affordable internet
- High/Fast rising literacy rates
- Large pool of talented and passionate women professionals
- Interoperability/Open APIs (Mojaloop)



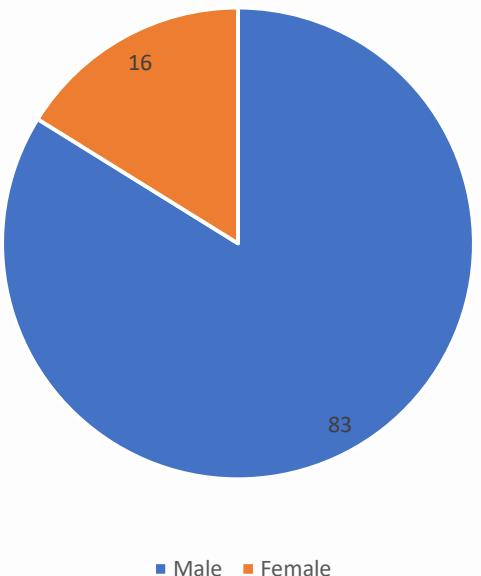


# POLL RESULTS

## QUESTION

Do you think prioritizing women leadership for a FinTech company has a positive effect on developing products and systems that best serve women's needs?

GENDER BREAKDOWN FOR VOTERS



## Poll 1: prioritizing women leadership

[Edit](#)

Poll closed

32 voted

**1. Do you think prioritizing women leadership for a FinTech company has a positive effect on developing products and systems that best serve women's needs?**

Yes

(28) 88%

No

(4) 13%



## FOSTERING LEADERSHIP, INNOVATION & CHAMPIONING WOMEN EMPOWERMENT

#WomenInFinTech #LevelOneProject



# WOMEN IN FINTECH - HACKATHON



# WOMEN IN FINTECH - HACKATHON



## WHO PARTICIPATED?



# SOME OF THE FACILITATORS, MENTORS, SPEAKERS AND JUDGES



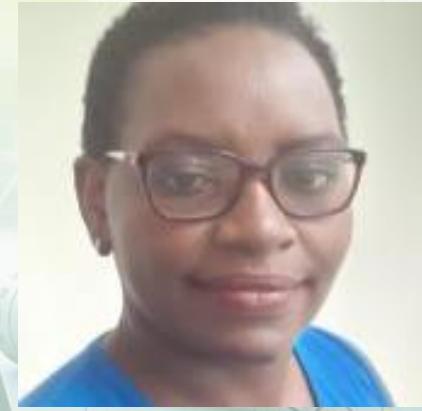
## SOME OF THE MENTORS, SPEAKERS AND JUDGES



**Judit Molnar**  
Program Manager of Mowali implementation and operation. Managing Modusbox Enterprise Support.  
*Role: Mentor*



**Sridevi Miriyala**  
Quality Assurance lead for Modusbox and Mowali implementation, Planning Integration and System Testing strategy and Scope.  
*Role: Mentor*



**Beatrice Wagate**  
Senior Security Consultant for Modusbox, currently Security Lead for Mowali Implementation and contributing to the Mojaloop Code Quality workstream  
*Role: Mentor*



**Desire Kachenje**  
Modusbox Economic and Business Development consultant, managing Tanzania MFI Industry Integration project and supporting Mojaloop advocacy in Africa  
*Role: Mentor*



**Dorota Maskowicz**  
Modusbox Product Manager in Payment Product Solutions, as well as Product Owner in Mowali delivery project.  
*Role: Mentor*

## SOME OF THE MENTORS, SPEAKERS AND JUDGES



**Silvia Hernandez**

ModusBox Product Manager  
of Payment Product Solutions  
Role: Expositor



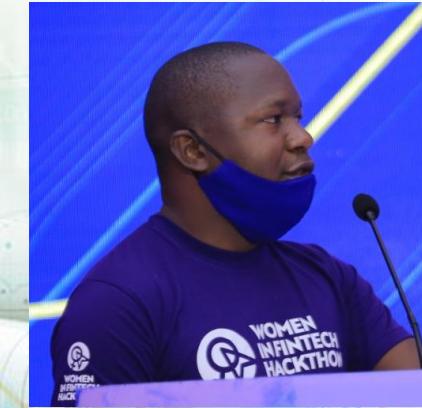
**Nico Duvenage**

Managing Mojaloop Partner  
Program Delivery, Lab  
Management, chair for OSS-DA  
and chair for PSO-DA, DFSP  
Onboarding group  
*Role: Lab Manager*



**Sam Summary**

Program Lead for the  
Mojaloop OSS Funded  
Development projects. CCB  
convenor. Co-chair on  
Mojaloop Community Council.  
Role: Mentor



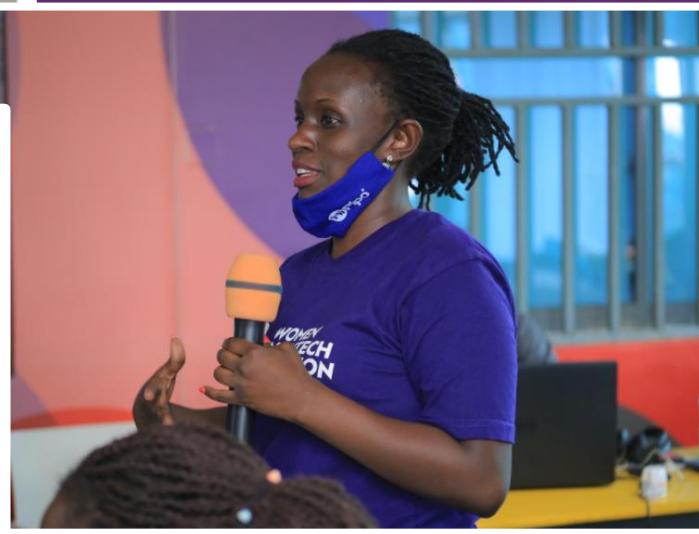
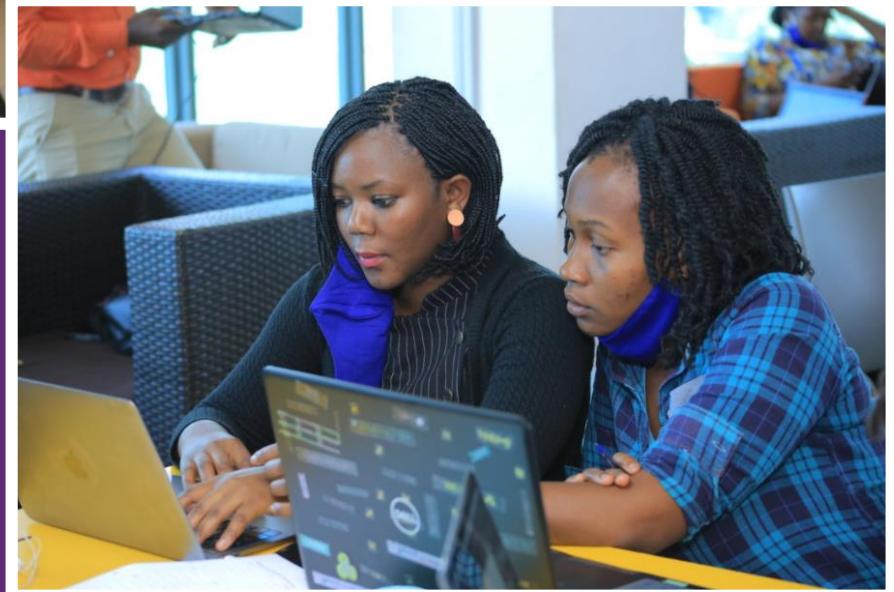
**Simon Kamya**

Programming and Business  
Development consultant, At  
HiPipo.  
*Role: Facilitator*

## SOME OF THE MENTORS, SPEAKERS AND JUDGES



# HOW WAS THE WOMEN IN FINTECH HACKATHON EXECUTED?



## PARTICIPANT DATA

Number of Team: 15

Number of groups: 3-4 members per group

Age range: 13-34 years

School level: Secondary school and University degree holders.

Except for two teams that had one male among, the participants were predominantly female and the team leaders were female.

Introduction to Level One Project Principles and Mojaloop was a main learning from the Hackathon.

1	Yo Uganda
2	W-Sacco
3	UgMart
4	Time
5	Spec
6	Sky Code
7	Kuzimba
8	Kanzu Code
9	Kameeza
10	Hack Girls
11	GreenGrab
12	E-Moments
13	Alpteq
14	Affinity
15	Achors

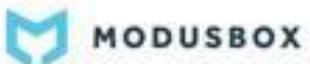
# WOMEN IN FINTECH - WALL OF FAME



W-Sacco



Achors



Team Kameeza



Alpteq Solutions



TEAM SPEC

CROSSLAKE

GreenGrab



Hack Girls

#WomenInFinTech

#LevelOneProject

#WomenInFinTech

#LevelOneProject

#WomenInFinTech

Team Affinity



W-Sacco

Sky Code



Team Time

Kuzimba Services



CROSSLAKE



E-moments



# Program

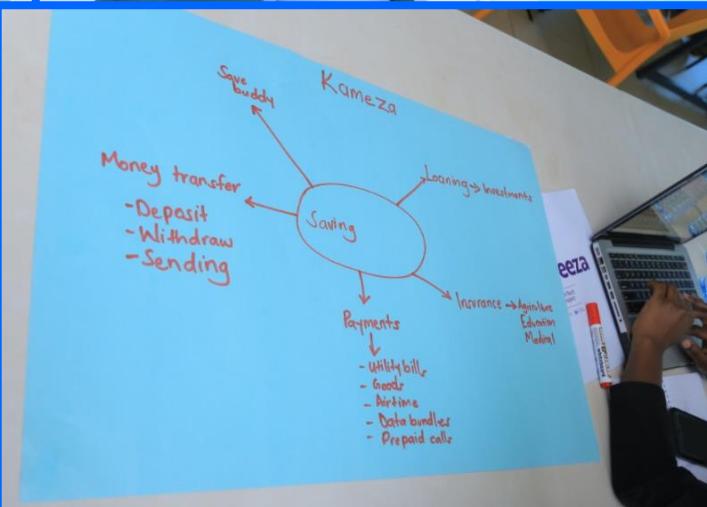
	Day 1 (Saturday)	Day 2(Monday)	Day 3 (Tuesday)	Day 4 (Wednesday)	Day 5 (Thursday)		SUMMIT
	12-Sep-20	14-Sep-20	15-Sep-20	16-Sep-20	17-Sep-20		18-Sep-20
08:00 -8:30 am	Break Fast	Break Fast	Break Fast	Break Fast	Break Fast		
08:30 -9:00 am	Introductions	RTPS App/USSD Tool (M1/F1)	Mobile Money 4Ps API Tool (M1/F1)	DFS Technologies API Tools - (M1/F1)	Financial Inclusion API Tools (M1/F1 )		
09:00 -10:00 am	Why Hackathon (COO/CEO) FinTech - Why Money (M1)	Solution Design & Prototype Design	App with API Integration	App with API Integration	Final Solution Test		
10:00 -11:50 am	Problem Statement and Business Case	Solution Design & Prototype Design	App with API Integration	App with API Integration	Pilot/MVP Dry Run/Demo		
11:50 -12:00 pm	Social Media Moment (LinkedIn, FB,Twitter)	Social Media Moment (LinkedIn, FB,Twitter)	Social Media Moment (LinkedIn, FB,Twitter)	Social Media Moment (LinkedIn, FB,Twitter)	Social Media Moment (LinkedIn, FB,Twitter)		
12:00 - 12:30 PM	Lunch	Lunch	Lunch	Lunch	Lunch		
12:30 - 1:00 PM	Level 1 Principle - Team Discussion (END USER EXPERIENCE)	Level 1 Principle Team Discussion (END USER EXPERIENCE)	Level 1 Principle - Team Discussion "SYSTEM DESIGN"	Level 1 Principle -Team Discussion "SCHEME DESIGN & GOVERNANCE "	Level 1 Principle Team Discussion "GOVERNMENT SUPPORT"		
	Mark & Teams	Mark & Teams	Mark & Teams	Mark & Teams	Mark & Teams		
1:00 -2:00 pm	Problem Statement and Business Case	Business Ideation, Keys to Business Success and Investment	Business financing and Finance Management	Technology, Marketing and Go To Market	Marketing and Customers Acquisition		
		Prof. Maggie Kigozi	Damali Sali	Primela Muthoni	Doreen Lukandwa		
2:00 - 3:00 pm	Team Presentation	Teams Presentation	Teams Presentation	Teams Presentation	Team Presentations		
	Business Case (+L1P)	Solution Design + Prototype (+L1P) +ML	MVP (Phase 1) (+L1P) +ML	MVP (Phase 2) (+L1P) + ML	Pilot Product (+L1P)		
3:00 - 4:00 pm	Team Q&A	Introduction to the Lab, tools to use, the API and use cases	DFSP Boarding Journey (+ Mojaloop use cases)	FOREX cross country use case	TBD		
		Sri	Silvia and Bea	Dorota			
		Hackathon Lab Tools/Scripts to use	Check In if any issues with the Lab + Q & A	Check In if any issues with the Lab + Q & A	Check In if any issues with the Lab + Q & A		
		Sri	Sri	Sri	Sri		
10 Minutes	Social Media Moment (LinkedIn, FB, Twitter)	Social Media Moment (LinkedIn, FB, Twitter)	Social Media Moment (LinkedIn, FB, Twitter)	Social Media Moment (LinkedIn, FB, Twitter)	Social Media Moment (LinkedIn, FB, Twitter)		

Online Tech Facilitator Support Slack (Modusbox, Crosslake, HiPipo, Teams)



## ACTIVITIES

The teams were guided through series of tasks that are involved right from idea generation to publishing a production ready product among which were business, research oriented tasks such as marketing, as well technology tools that are used to build ideas into market ready products.



## Tasks

### 1. Problem Statement

### 2. Business Case

### 3. Solution Proposal

### 4. Prototype - UX/UI - APP USSD

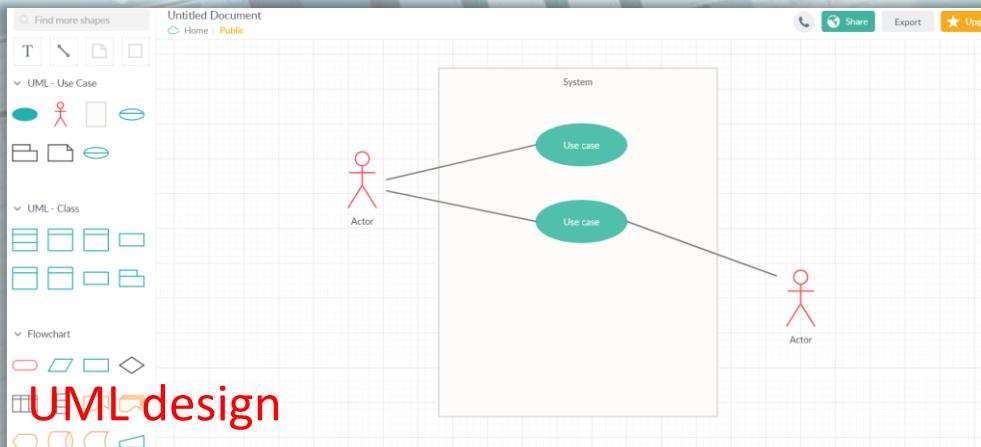
### 5. Solution Design - Flow Diagrams

### 6. Solution Data Model & API programming

### 7. Interoperability solutions

# Technologies Used

MindMap : Have Interoperability and Mojaloop



1. <https://app.creately.com/>
2. <https://www.diagrameditor.com/>

# Task

## 1. Problem Statement

## 2. Business Case

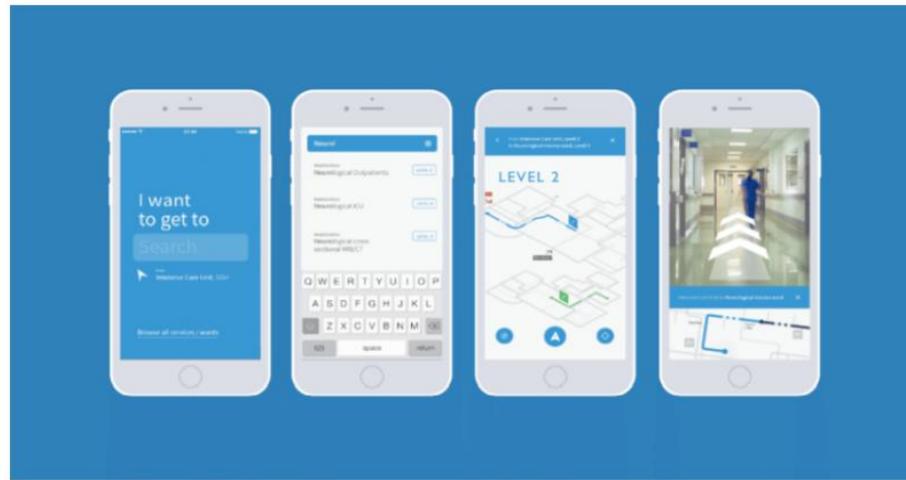
## 3. Solution Proposal

This involved proper requirements gathering when identifying a problem, possible solution and documenting the solution so as to cover scope, time and resources needed to create a solution.

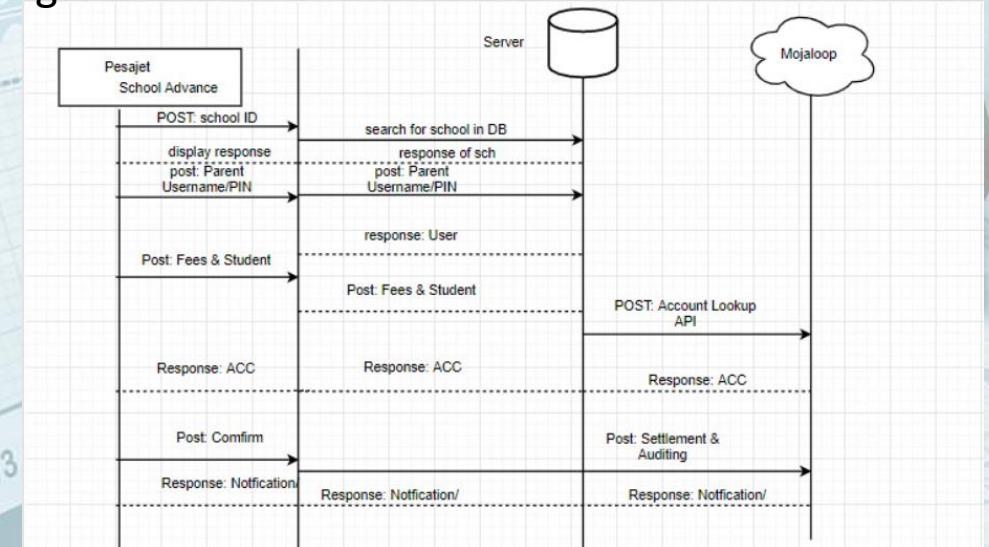
The teams created Mind maps, use case and flow diagram using online tools

# Technologies Used

## App Prototype



Flow diagram for one of the teams



# Task

## 4. Prototype - UX/UI - APP USSD

<https://vectr.com/>

<https://www.justinmind.com>

Adobe Xd (downloaded)

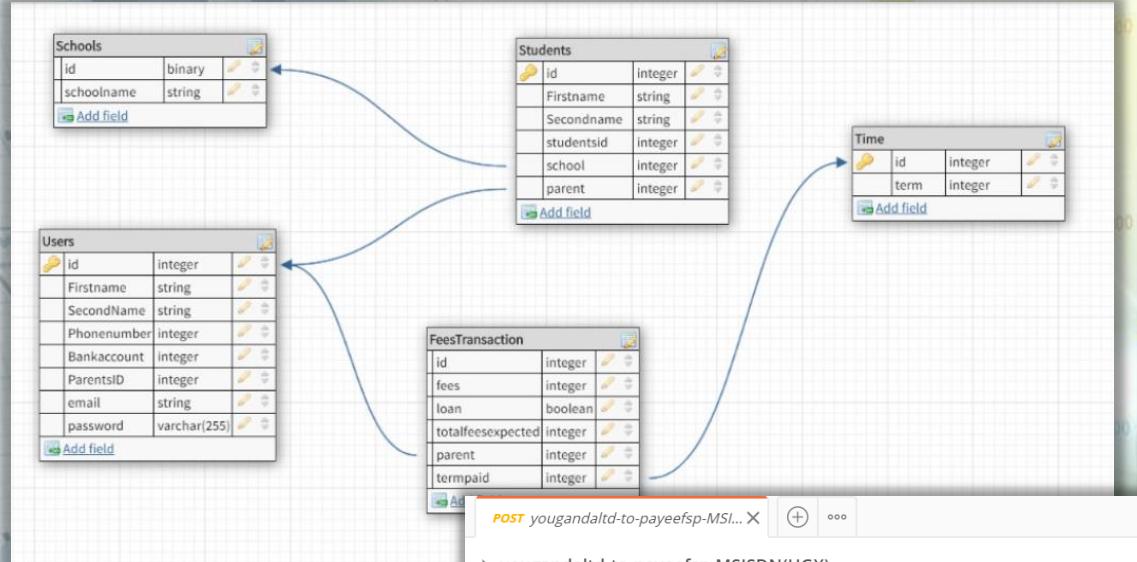
## 5. Solution Design - Flow Diagrams

<https://www.diagrameditor.com/>

Creating a visual impression and indicating a good connection of devices, servers and interoperability tools required teams to use design and prototype tools as well flow models to indicate a user journey before the final application development. This involved prototype designs for Web, Android, iOS and USSD devices.

# Technologies Used

Data Model for one of the team



Postman collection  
for one of the team

The Postman collection interface shows a POST request to the URL `http://yougandaltd.hipipo.mojaloop-hackathon.io:4101/transfers`. The Body tab is selected, showing the following JSON payload:

```
1 "from": {  
2     "displayName": "Penny Hilima",  
3     "idType": "MSISDN",  
4     "idValue": "256222222222"  
5 },  
6 "to": {  
7     "idType": "MSISDN",  
8     "idValue": "17039811907"  
9 },  
10 "amountType": "SEND",  
11 "currency": "UGX",  
12 "amount": "10000",  
13 "transactionType": "TRANSFER",  
14 }
```

# Task

## 6. Solution Data Model

- <https://app.dbdesigner.net/>
- Laravel open source code

## . API programming

- Post Man
- <https://heroku.com>

Teams had to identify how the API integration and data exchange should occur, this involved creation of data models to identify the necessary URLs and required fields exported in the data structure to support record and exchange of data.

## Level One Project Principles

Financial inclusion and interoperability as key factors were integrated with the given tasks.

Level One Project principles were a base line used for the application development.

Interoperability among DFSPs was a key focus and its realization with Mojaloop.

The Level One Project Principles were explained in line with

- System design and attributes.
- End user experience.
- Scheme design and governance.
- Government support.



## Technologies Used: Mojaloop

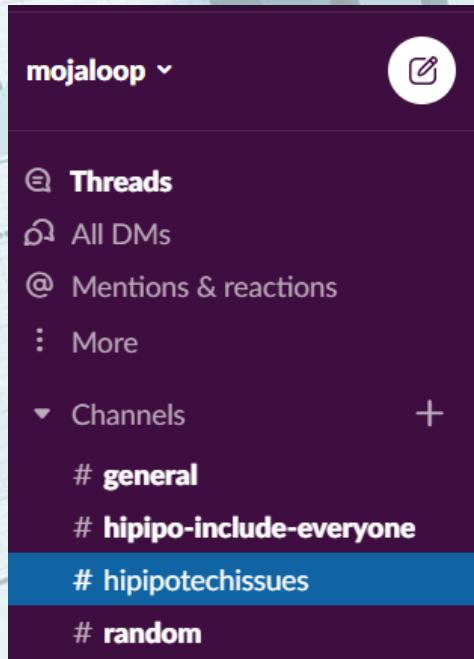
```
1
2   "from": {
3     "displayName": "PayerFirst PayerLast",
4     "idType": "MSISDN",
5     "idValue": "256111111111"
6   },
7   "to": {
8     "idType": "MSISDN",
9     "idValue": "17039811907"
10 },
11   "amountType": "SEND",
12   "currency": "UGX",
13   "amount": "10",
14   "transactionType": "TRANSFER",
15   "initiationStatus": "INITIATED"
```

# Task

## 7. Interoperability Solutions with Mojaloop

To create interoperable applications, a Mojaloop simulation was done by each. Using the ModusBox test lab, each team was created a unique Mojaloop test URL with a unique transaction number batched into different currency and transaction country codes such as UGX, EUR for peer to peer tests as well bank account number for enabled to simulate foreign exchange among the teams.

## Collaborative Tools



Online sessions were held to coordinate and collaborate the learning and follow up the teams.

- Teams uploaded their daily submissions on ID8.
- Mojaloop sessions with ModusBox on Zoom online.
- Technical issues about the test and other mechanical as well programming were forwarded and responded to the Mojaloop slack channel under the #includeeveryone community.
- A WhatsApp group was used to instantly share and communicate with the teams.

# Assessment and Results

“It was extremely difficult to rate as all are exceptionally good. Some have strong business cases while others try to solve wider social issues by introducing clever ways for drawing people to an app.” Jury Comment

## Assessment Results

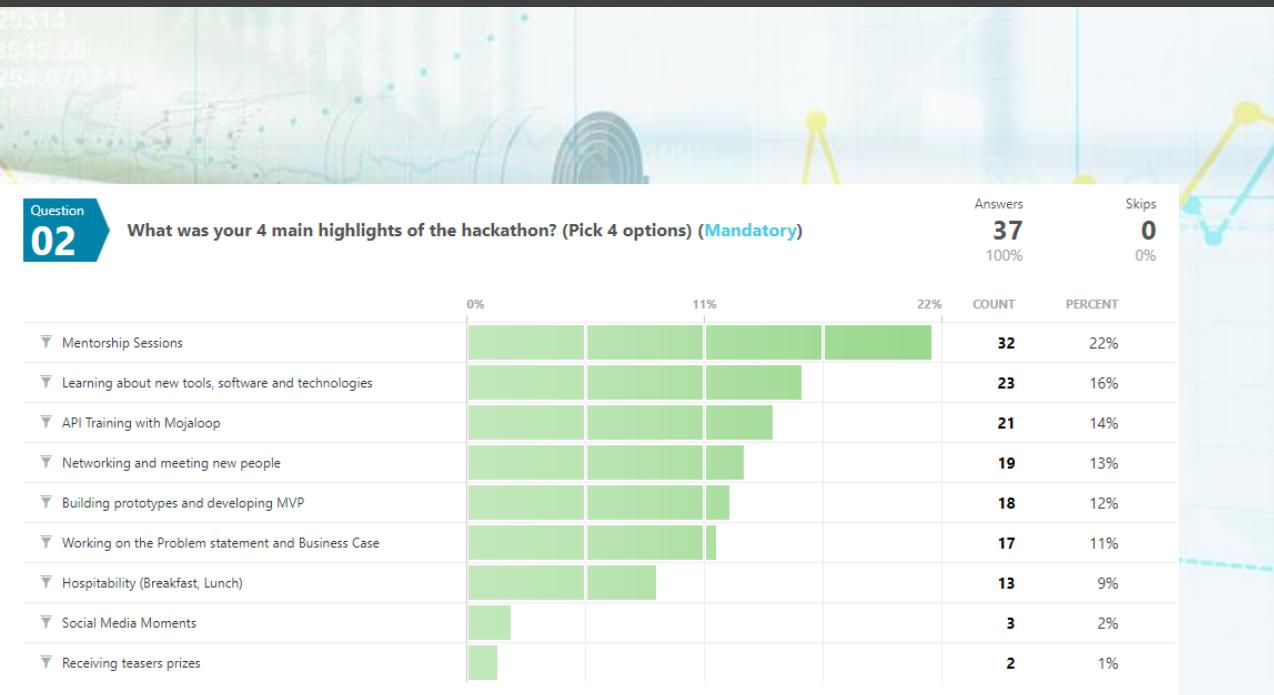
Fair	3
Fair Good	4
Good	5
Very good	6
Impressive	7
Very	
Impressive	8
Outstanding	9
Exceptional	10

		MVP Channel	MVP Focus	
1	E-Moments	App	Payments	Impressive
2	Kanzu Code	Web	Payments	Impressive
3	Achors	Web	Sacco	Impressive
4	Hack Girls	USSD	Payments	Very Good
5	Affinity	Web	Agri	Very Good
6	Kuzimba	web	Payments	Very Good
7	Sky Code	App	Agri	Very Good
8	Team Time	Web	Sacco	Very Good
9	Kameeza	App	Sacco	Good
10	Team Spec	Web	E-commerce	Good
11	UgMart	Web	E-Commerce	Good
12	Yo Uganda	USSD	Payments	Good
13	W-Sacco	Web	Sacco	Good

## Assessment Topics

Problem Statement	Novelty and innovativeness of the idea Relevance of pain points that the idea addresses
Business Case	Quality of the Figures Validity of Assumptions
Solution Proposal	Practical usability potential of the application Viability on a nationally or global scale Relevance to the masses
Solution Prototype - UX/UI - APP USSD	Design Use of current technologies such as ReactJS, etc. Eletron.atom.io, AngularJS, Material Design, Flat Icons, etc. Subtle patterns/Textures /Elegant design/Icons/Typography
Solution Design - Flow Diagrams	
Solution Data Model	
Solution Security Architecture	Effective Security Consideration for the Product
Code quality, technology used, and architecture	Creative and innovative usage of technologies , APIs, logic, framework, demo URL,
Solution Go Live Deployment	Comprehensiveness of the app in terms of functionality and working given the idea/concept
Solution L1P - Index Mapping	Applicability of Level One Principles
Solution - Mojaloop -Adoption	How the solution may adopt and use Mojaloop
Go to Market	The marketing 4Ps, 7Ps
Female Impact	How the solution would positively impact women

# Top Highlights

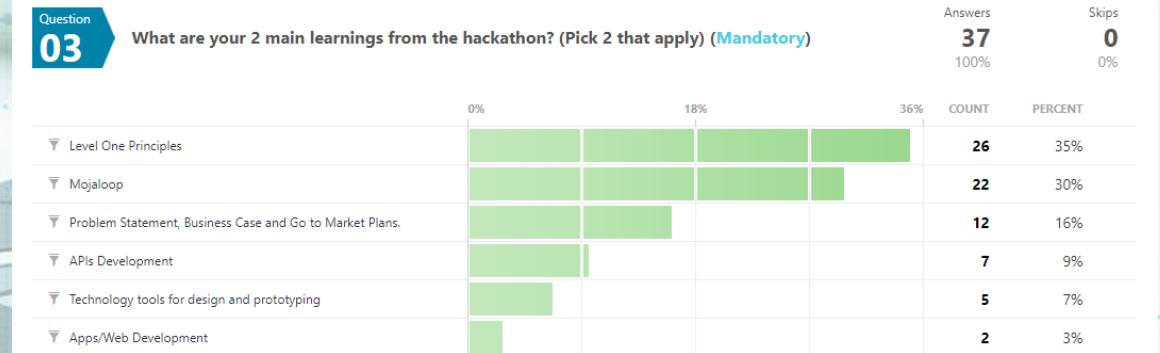


# Main Learning

## Level One Project

Question  
**03**

What are your 2 main learnings from the hackathon? (Pick 2 that apply) (Mandatory)



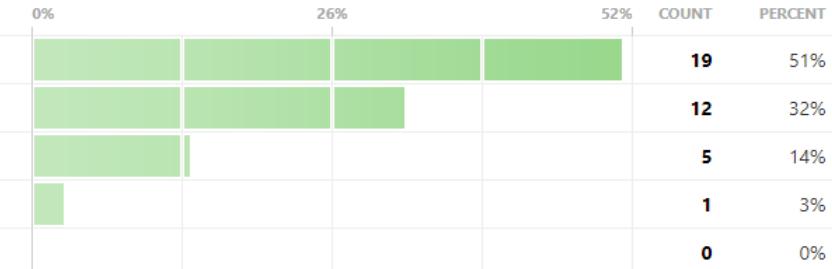
# Expectations and Future Views

Question  
**04**

How were your expectations met? (Mandatory)

Answers  
**37**  
100%

- ▼ Excellently (Hackathon delivered far beyond your expectations)
- ▼ Very Good (Hackathon delivered slightly beyond your expectations)
- ▼ Good (Hackathon delivered your expectations)
- ▼ Fairly (Hackathon delivered few of your expectations)
- ▼ Poorly (Hackathon delivered none of your expectations)

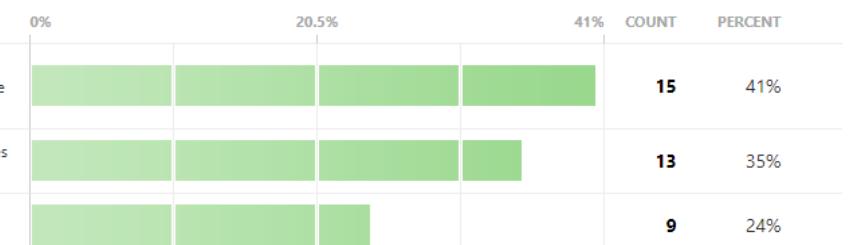


Question  
**06**

What do you think next hackathons should focus more on? (Mandatory)

Answers  
**37**  
100%  
Skips  
**0**  
0%

- ▼ inspiring participants to consider the "art of the possible," to think up and imagine futuristic forward-thinking solutions with technologies that are not available or haven't been created
- ▼ developing realistic working prototypes and solutions for the challenges presented
- ▼ creating an atmosphere where people with different skill sets can brainstorm together and learn about a problem/challenge





# Next Steps



# WOMEN IN FINTECH SUMMIT, PANEL DISCUSSIONS, 5 PANELISTS



# MEDIA



## How can the community support?

- Get technical and some non-technical people as well with teams to attend.
- We need Judges, mentors, facilitators and some non-technical participants
- Support by making tools such as GSMA Lab, Mojaloop Testing Toolkit, Mojaloop in a Box, Sandbox environment, Simulator UI available for our participants and events.
- Help in Onboarding, training, getting participants up and running both on the theory and technical side of Mojaloop. We can structure these as online activities, pre-sessions over a couple days (or weeks) preceding the event for the Hackathon and for other activities make information and pre recorded briefs for the stakeholders we will engage.

## What's next?

- Continued Community Engagement
- Women In FinTech Hackathon + Summit
- 7<sup>th</sup> Digital and Financial Inclusion Summit (**Include Everyone Summit**)
- 7<sup>th</sup> Digital Impact Awards Africa



## Community Opinion

Do you think prioritizing women leadership for a FinTech company has a positive effect on developing products and systems that best serve women's needs?

1. Yes
2. No



# DIGITAL IMPACT AWARDS AFRICA



- The annual research-based awards project celebrates and promotes the impact and excellence in products, services and innovations for Financial Inclusion.
- We have seen several organizations adopt better digital and financial inclusion strategies having been challenged and inspired to improve as part of the awards program.
- In 2020, we aim at growing the event yearly, bringing together more stakeholders to celebrate and critic financial inclusion innovations and development.
- Since their inception, the Digital Impact Awards Africa (DIAA) have enjoyed increasing international recognition. Today they are among the most respected and sought-after prizes bestowed.
- Their prestige, acknowledged within Africa and rest of the world, has grown over the years because the public and digital industry recognizes the DIAA as an award based on technical achievement and because care has been taken to preserve the integrity of the DIAA.

# Thank You to our Sponsors

The Bill & Melinda Gates Foundation.

## Contact US

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thank you

mojaloop

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