

# Include Everyone

**INTEROPERABILITY AND OPEN API HACKATHON #HACKONCE**  
**INLINE WITH LEVELONE PROJECT**

**HACKATHON, EXPO, SUMMIT, AWARDS AND RESEARCH.**



**WE WANT TO MAKE IT EASIER FOR FINANCIAL PROVIDERS TO ACHIEVE INTEROPERABILITY BY PROMOTING MOJALOOP.**









# INTEROPERABILITY AND OPEN API HACKATHON #HACKONCE

Include Everyone program is a collection of related financial inclusion outreach projects including hackathon, expo, summit, awards and research. The projects are managed in a synchronized way to obtain maximum benefits of ensuring impactful engagement of financial inclusion stakeholders to effectively promote approaches that will enable financial inclusion for everyone.

We believe that an economy that includes everyone benefits everyone. As such, the program sensitizes operators and service providers to bring financial services to the poor through the use of innovative business models, and mobile technology. We also believe that successful and impactful financial inclusion efforts must be well researched, modeled, positioned, promoted, marketed, distributed, and critiqued as well as celebrated and awarded where possible. One of the Include Everyone program projects is the **Interoperability and Open API Hackathon aka #HackOnce**.

**#HackOnce** embodies our views and belief that we should develop once and integrate for many using open APIs and interoperability technology. #HackOnce brings together FinTechs and developers with innovative ideas to create new, compelling interoperable financial applications and products using published OPEN APIs, GSMA APIs and Level One Project Mojaloop Technology. #HackOnce challenges FinTechs and developers to create new business models, applications and products that are interoperable among all players including mobile money operators, banks and micro finance institutions. The hackathon targets to deliver interoperable business models and products in 6 thematic areas:

1. Interoperable Merchant and Bill payments
2. Interoperable CashIn/CashOut and Transfers
3. Interoperable Remittances and Bulk Payments
4. Interoperable Consumer/Merchant Saving, Lending and Insurance.
5. Interoperability with Mojaloop
6. Interoperable Digital Finance to empower Women in informal cross-border trade



# #HACKONCE TOPICS AND PROBLEM AREAS

- 1. Interoperable Bill and Merchant payments:** Account to vendor/merchant interoperability means that a customer could use their mobile money wallet or bank account to pay for goods and services at any vendor or store, even when the vendor's mobile point of sale system is enabled by a different network/bank. This needs standardization around how mobile payments are collected at point of sale, with networks using a range of solutions such as QR codes, PINs, or verification codes. The private sector's task in the age of interoperability is to collaborate by applying standards and sharing investments, with the goal of giving customers the power to transact with any person or institution. This calls for interoperable bill and merchant payments both in country and across the boarder and this will eventually facilitate African Continental Free Trade Agreement (AfCFTA). #HackOnce will challenge participants to develop business models and products that deliver Interoperable Bill and Merchant payments.
- 2. Interoperable CashIn/CashOut and Transfers:** Interoperability models and systems based on bilateral agreements are challenging to scale efficiently or evenly while also the market with mobile money have liquidity challenges to support cashin, cashout, transfers at all times. Regulators in some markets are starting to call for interoperability that in not just bilateral agreements to a standardized platform open to all providers and banks. This will enable providers, from incumbents to newcomers to have equal access to national interoperable payment schemes, as well as to the core software technology that enables it. This interoperability would therefore make it simpler for anyone to transact with anyone else with an account, regardless of their service provider or bank. With this expectation #HackOnce will challenge participants to develop business models and products that are Interoperable CashIn/Cashout and Transfers
- 3. Interoperable Remittances and Bulk Payments:** Organizations are digitizing remittances, wages and social disbursements, which ensures that payments aren't skimmed on their way to the recipient. Interoperability would connect these digital streams to others in the ecosystem, so that the account with which someone receives their money is the same one they use to buy food, pay bills and exchange money with friends and family. #HackOnce will challenge participants to develop business models and products that are Interoperable Remittances and Bulk Payments
- 4. Interoperable Consumer/Merchant Saving, Lending and Insurance.** With current advanced products being served on closed loop networks, opening up the space will enable across networks/banks services for end consumer lending and insurance.

# #HACKONCE TOPICS AND PROBLEM AREAS

## 5. *Interoperability with Mojaloop*

Mojaloop is open-source software for financial services companies, government, and others taking on the challenges of interoperability and financial inclusion.

#HackOnce will explore proof of concept for use cases where Mojaloop can be deployed as a payment switch

Ahead of the hackathon, select and interested Participants from #HackOnce will be challenged to understand the working of Mojaloop and provide an abstract of how they would deploy Mojaloop to function as a payment switch for the use cases.

Using a test lab, the team during the hackathon will be challenged to develop applications that simulate their interoperable payment models utilizing Mojaloop.

## 6. *Interoperable Digital Finance to empower Women in informal cross-border trade*

Cross-border trade refers to goods that are traded, typically informally, across international borders. Cross-border trade contributes to food security, poverty alleviation, and employment creation. Of significance is the high numbers of women involved in the sector. According to a study by the United Nations Food and Agriculture Organization in 2017, 70 per cent of the informal traders in the Southern African Development Community (SADC) region are women. This cross-border trade, which is driven by increasing population, growing urbanisation and agriculture, provides the foundation for a diversified and globally competitive economy. These women working in informal commerce employ more than one person in their businesses and support the needs of at least six people. Revenues from this trade are a source of social safety, provide basic needs (like health, education, nutrition, and housing) for families and improve the resilience of communities. The African Development Bank has established its five strategic and operational priorities: encapsulated in Feed Africa, integrate Africa, industrialize Africa, light up Africa and improve the lives of people in Africa. Gender has been identified as a cross-cutting theme, systematically integrated into each of these priorities. Thus, through a gender perspective applied to the different priorities, the African Development Bank places women at the heart of development. This brings to the fore the important role that women play in the agricultural value chain and cross boarder trade. The women traders are at the heart of this agricultural value chain and thus constitute an essential link in the structural transformation of African economies.

Cross border Trade supports financial inclusion by promoting the use of remittances. To the extent trade supports regulatory convergence and mutual recognition, financial services can become simpler to navigate. Coordination between countries can also open up cross border payment channels, as well as increase the speed and reduce the cost of these payments.

While African women are frequently over-represented in cross-border trade; their specific needs are insufficiently addressed.

- Female traders require greater security to conduct trade and more information regarding their rights. Training and capacity building would be beneficial for business development.
- To support trade, financial integration should focus on developing the regional financial infrastructure. This includes developing and harmonizing regional payment systems to further facilitate cross-border payments; creating swap arrangements across central banks and a multicurrency clearing center in the region to reduce risks from trading in several different regional currencies; and further coordinating the supervision of pan-African banks that can facilitate intraregional trade. Such an expansion would need to be accompanied by adequate prudential frameworks to manage the corresponding risks.

In order to address the need for more secure cross-boarder trade that is prominently occupied by women, **we propose to develop interoperable solutions that enable more secure movement of cross boarder trade funds coupled with value additions e.g. saving, credit and insurance for these women informal traders.**

# CROSS BORDER WOMEN INFORMAL TRADERS #FACTS AND #FIGURES

1. Uganda has over 40 official borders and more than 100 unofficial borders.
2. Busia, Malaba, Elegu, Mpondwe, Mirama, Katuna, and Mutukula are the busiest borders in terms of enabling women informal traders activities.
3. TradeMark East Africa has constructed One Stop Border Posts in:
  - Busia
  - Elegu
  - Mutukula
  - Mirama Hills
  - Malaba was constructed by World Bank.
4. Some 6,450 women informal traders crossed the Elegu/Nimule border in 2018.
5. Some 2555 women informal traders on average crossed each of the 40 formal borders in 2018.
6. An estimate total of 102,218 women informal traders crossed the 40 borders in 2018, trading.
7. Some 8517 women informal traders transacted at least \$1,073,224 USD working for 23 days per month in 2018.



# UGANDA MAP SHOWING 40 OFFICIAL TRADE BORDERS POSTS

1. Afogi
2. Bibia
3. Ngom-orum
4. Oraba
5. Odramachaku
6. Lia
7. Vurra
8. Paidha
9. Goli
10. Wanseko
11. Tonya
12. Runga
13. Kaiso
14. Ntoroko
15. Busunga
16. Kayanja
17. Mpondwe
18. Kizinga
19. Ishasha
20. Butogota
21. Bunagana
22. Cyanika
23. Katuna
24. Kamwezi
25. Mirama Hills
26. Kikagati
27. Mutukula
28. Entebbe
29. Portbell
30. Lolwe
31. Sigulu
32. Wayasi
33. Busia
34. Malaba
35. Lwakhaka
36. Suam
37. Amudat
38. Kanyapirpirir
39. Kidepo Airfield
40. Madi opei



# UBS Report - Cross border Funding and Support

Figure 6: Institutions offering services to cross border traders

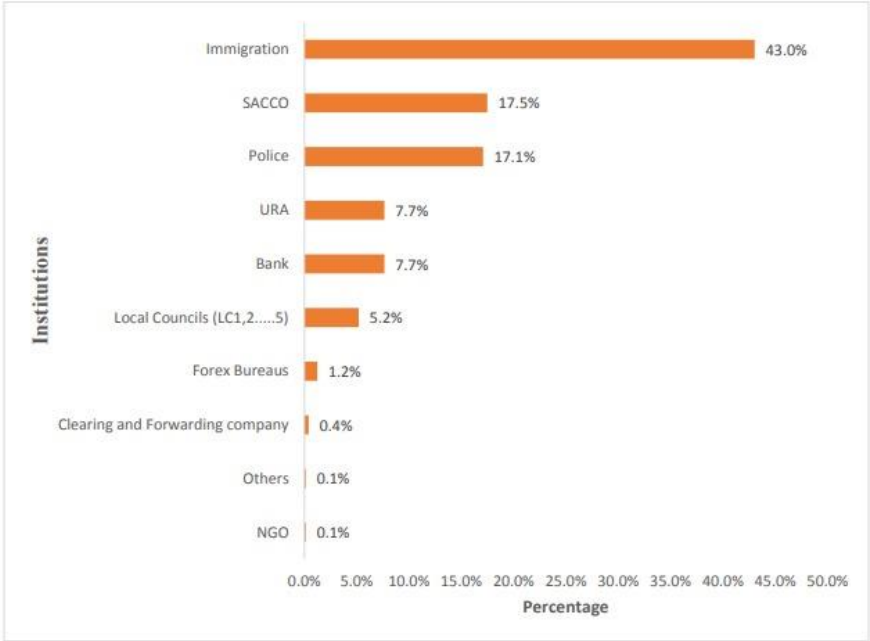


Figure 5: Main Sources of funding for Traders

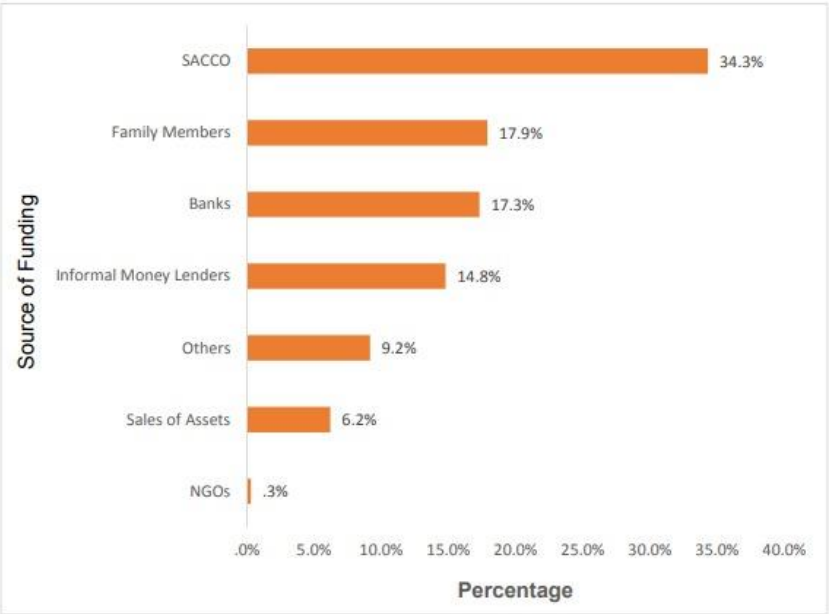
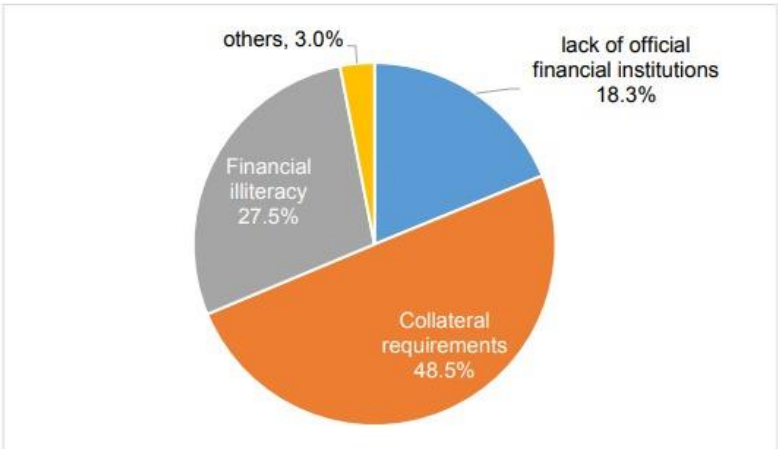


Figure 7: Constraints to Financial access





# PROJECT PLAN BRIEF

When	<ol style="list-style-type: none"><li>1. Call for Hackathon Entries July 1st</li><li>2. Publish Hackathon Entries August 30th</li><li>3. Shortlist Finalist Entries September 20th</li><li>4. 6 day Hackathon 21/26<sup>th</sup> October</li><li>5. Announce Hackathon Results and Prizes</li></ol>
Who	FinTechs and developers <ul style="list-style-type: none"><li>• Uganda: five-eight teams</li><li>• East Africa: five-eight teams</li><li>• Rest of Africa: five-eight teams</li></ul>
Teams and Members	45-72 (3 members per team)
Tutors and Moderators	6-9
Resources Budget	150,000 USD
Publish	Hackathon Learning Reports
Follow Up	Accelerator Program; Following the #HackOnce , wining teams will join an accelerator program to support grow ideas into a business
Other	Participation in Summit and Awards Event #HackOnce prize will be announced at the awards event.
Key Stakeholders	Bill & Melinda Gates Foundation, FSD Uganda, GSMA, CGAP, MNO, Banks, MFIs, Fintechs

# #HackOnce

## An Include Everyone Interoperability and Open API Hackathon

7 days, October 2019, Kampala

1. Interoperable Merchant and Bill payments
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**Digital and  
Financial Inclusion  
Summit**

**Digital Impact  
Awards Africa**

**BOOTCAMPS (2 WEEKS)**

**FINTECH ACCELERATOR (6 MONTHS)**

**Find product market fit**  
(Funding of up to \$100K USD)

**Secure series seed funding**  
Fundraising strategy to secure 12-18 months

**Build out your team**  
Assemble world-class teams



# IMPLEMENTATION STAGES:

The hackathon will consist of majorly 4 stages

**Stage 1: Collection of Abstracts** – During Stage 1, We will collect the abstracts or potential hackathon participants. The abstracts should include describe use case as part for developers/fintech submission. A developer may use available Open API, GMSA API, or Mojaloop as available and applicable. Registrations will be by sending the abstract via an online submission.

**Stage 2: Implementation and Selection** –The best abstracts will be chosen from the stage 1 submission and will be announced at the project website. The abstracts will be chosen by the judging panel. The qualified abstracts will also be notified by email and invited to participate in the onsite 7 day hackathon

**Stage 3: 7 day onsite hackathon** – Finalist team to be hosted for the seven day interoperability and open API hackathon in Kampala.

**Stage 4: BootCamp and Accelerator Program** – A BootCamp and an accelerator program will be extended for the best products with potential be sustainable disruptors.

# PRODUCTS & APPLICATIONS KEY CONSTRUCTS

- **Centered on the customer.** Product should be focused on a customer process or journey and supports a clear target to deliver a breakthrough cost effective customer experience.
- **Deeply cross functional teams.** Hackathon participants will include product designers, user experience specialists, graphic designers, architects, developers and coders among others
- **Starting from scratch.** Participants will reimagine an idealized method for addressing a given customer need, into a simple, self service digital process.
- **Concrete and focused on output.** Sessions will start with ideas but end with a working prototype that people can see and touch, such as apps. Output also will includes a clear development path that highlights all the steps needed, including regulatory, IT, and other considerations, to accelerate production and implementation. After an intense design workshop, which includes sketching a minimum viable product and overnight coding and development of the prototype, the hackathon will conclude with presentation by each team.
- **Iterative and continuous .** Once teams agree on a basic experience, designers and coders will go to work creating a virtual model that the group vets, refines and rereleases in continual cycles until the new process or app meets the desired experience criteria.



# CRITERIA OF ASSESSMENT

Evaluation in the hackathon will proceed in two phases – as follows:

## **Phase one evaluation of ideas/Abstract:**

- Elaboration of Use Case
- Appropriate selection of APIs
- Quality and clarity of presentation

## **Phase two evaluation of implementation:**

- Innovativeness Market relevance – is this an exciting application for subscribers or businesses
- Functionality – is the application/product useful
- Overall User Experience
- Potential impact on financial inclusion
- Innovative use of API
- Ease of use – is the application easy to use and has good ergonomics appropriate selection of APIs
- Cost – how much will this cost users? (Free, non free, advertising)
- Quality and clarity of presentation the format, color schemes, design, etc

**Business viability** in terms of the possibility of an investment(and Accelerator program). The analysis will include:

- the capacity to build effective business model, ensuring the commercialization of the highlighted solutions;
- ability to define leaders who would be responsible for the implementation of the investment;
- defining of the investment strategy, which should ensure the development of a satisfactory rate of return.

**An economy that includes everyone,  
benefits everyone!**

**\*BE A PART!\***



