

#40Days40FinTechs #LevelOneProject

**CHAMPIONING DIGITAL INNOVATION,
INTEROPERABLE INSTANT & INCLUSIVE
PAYMENT SYSTEMS (IIPS) IN AFRICA.**





CONTENTS

1.	FOREWORD	2
1.1.	40 DAYS 40 FINTECHS - OVERVIEW	4
2.	THEMATIC AREAS	6
2.1.	Interoperability: Speeding up IIPS is imperative	7
2.1.1.	Interoperability and IIPS	8
	Industry Views on IIPS:	8
2.1.2.	Recommendation: Urgent to fast-track IIPS set-up	13
2.2.	Let's get Open: Banking, Data, API enabling PISP	13
2.2.1.	Open Banking and PISP	13
2.2.2.	Industry Views on Open Banking and PISP	14
2.2.3.	Recommendation: From Open API to Open Banking	17
2.3.	CBDC: To advance to a Cash-Lite Economy	18
2.3.1.	CBDC	18
2.3.2.	Industry views on CBDC 19	
2.3.3.	Recommendation: Advance Digital Payments in readiness for CBDC	22
2.4.	Women and Special Interest Groups (SIG): Equity	24
2.4.1.	Gender Equity	24
2.4.2.	Industry views on Women and SIG Inclusion	25
2.4.3.	Recommendation: More equity initiatives must take root	29
3.	DISSECTING THE PARTICIPANTS	30
3.1.	The Corporates	31
3.1.1.	Airtel Money	32
3.1.2.	MTN MoMoPay	33
3.1.3.	MoKash/ NCBA Uganda	34
3.2.	SMEs	35
3.3.	Start-ups	40
3.4.	Women in FinTech	51
4.	DISSECTING THE VERTICALS	56
4.1.	Lending	57
4.2.	Agriculture	62
4.3.	Remittances & Payments	68
4.4.	Aggregators	81
5.	FACILITATORS' TAKE	88
6.	CONCLUSION & WAY FORWARD	95
7.	GLOSSARY	97

FOREWORD

Information and Communication Technology (ICT) has transformed the financial infrastructure worldwide. For example, Africa and other Emerging Markets have utilised ICT-based financial services to enable the delivery of innovative, inclusive, affordable and instant financial products to the poor and vulnerable groups. Digital financial services have helped to bridge gaps in physical banking infrastructure. For traditional financial services and the nascent financial technology i.e. FinTechs, the digital infrastructure has enabled the establishment of closer relationships with customers and the creation of tailored offerings. Customers have benefited from more personalised, secure and affordable financial services. In addition, governments are developing universal financial systems that are vital to sustainable and inclusive growth.

HiPipo is a long-established champion of digital innovation and financial inclusion activities. For example, we delivered a successful Season Two of the 40 Days 40 FinTechs initiative, a premier financial inclusion event. The 40 Days 40 FinTechs initiative offers participants useful tools, such as Mojaloop, and guidance from Level One Project foundational material. The skills gained at the event cover Level One Project Principles, Instant and Inclusive Payment Systems (IIPS), inclusive finance and FinTech in general. Season Two of 40 Days 40 FinTechs covered topics such as Robo-advisor, Payments, RegTech, InsurTech, lending, crowd funding, neo-banking, cryptography, cryptocurrency, Interledger, Blockchain, cross-border payments, remittances, retirement schemes and new ways of operating bonds. Furthermore, the event discussed interoperability, big data, artificial intelligence, deep and thin learning, automated Customer Relationship Management, technology for cash management, lending platforms (formal banking or peer-to-peer), super apps, financial literacy, distributed ledger technology, payment aggregation, amongst others. All are contributing to the goal of a globe that's fully financially inclusive.

From the start, promoting and advocating for digital innovation was at the center of all our actualisations. We cannot forget the more than 2 million email-to-SMS communications that we enabled through www.HiPipo.com. And this was to over 89 destinations worldwide. This worked especially for those that could not afford a direct SMS every day, like students, labourers and informal traders. By 2009, these innovations had already made so many get attached to the inclusion story we are so proud of today.

WE HAVE DEVELOPED A SUSTAINABILITY LIFECYCLE THAT WE USE TO ASSESS FINTECH SOLUTIONS. WE CONTINUE TO REMIND INNOVATORS TO ENSURE THAT THEIR SYSTEMS WILL WORK WHEN AND AS EXPECTED AND ALSO GUARD THEIR USER DATA AGAINST ACCIDENTAL AND DELIBERATE MODIFICATION, INTERRUPTION AND LEAKS.

Importantly, DFSPs, and FinTechs in particular, urgently need interoperability and open-source frameworks, like Mojaloop. Of course, guiding frameworks such as the Level One Project Principles are valuable for solutions that seek to create a sustainable financial inclusion impact. Bettering the lives and livelihoods of the underserved groups, especially women, is a clear roadmap to financial inclusion and independence.

We are working with partners to assist in the development of affordable national and/or regional payment hubs given their value in lowering online real-time transactions. Therefore, stakeholders such as DFSPs, donors, banks, non-banks, FinTechs and regulators should play an active role. We have already seen this implemented successfully in a few economies, and we must not remain behind.

We are grateful for the generous support of the Bill & Melinda Gates Foundation. Special thanks go to Miller Abel (Deputy Director, Principal Technologist) and Kosta Peric (Deputy Director, Financial Services for the Poor); their insight, mentorship and ever

enthusiastic support are invaluable resources we know we can always call on. I am thus delighted to present to you over 40 prime African innovations that are transforming millions of lives using financial technology. millions of lives using financial technology.

Innocent Kawaoya,
CEO, HiPipo





40 DAYS 40 FINTECHS- AN OVERVIEW:

The 40 Days 40 FinTechs, an initiative by the HiPipo Foundation¹, commenced on 7th July, 2021. This was its 2nd edition. The event offers financial technology companies a platform to showcase digital innovations. It also plays a crucial role in helping to solve financial inclusivity challenges and increase participation in the formal financial sector. The initiative features interviews, discussions and exhibitions that increase understanding of how the featured product and/or service supports financial inclusion for everyone.

FACILITATORS' ROLE

The facilitators prepared and directed discussions in accordance with guidelines set by the HiPipo Foundation, Level One Project Principles² and the Mojaloop Foundation³. The HiPipo Foundation required that the content gave a true and fair view of both the state of the country's FinTech ecosystem and the adoption of Level One Project Principles.

¹The HiPipo Foundation focuses on improving women's access to digital financial services, such as mobile money wallets, mobile bank accounts and digital payment systems. URL: <https://www.HiPipo.org>

²The Level One Project is focused on helping the public and private sectors develop pro-poor, digital financial services and markets that work for all. URL: <https://www.leveloneproject.org/>

³Mojaloop Foundation is a charitable non-profit organization, maintaining its free, open source software, Mojaloop, and community as public goods in service of financial inclusion. URL: <https://mojaloop.io/>

ENGAGEMENTS

Financial technology expertise is limited in Uganda, and, indeed, the wider developing world. Therefore, the participants benefitted from an introductory discussion of financial technology (FinTech). The audience also included Primary and Secondary school students.

SOLUTION

The initiative used animated PowerPoint presentations to help break down the discussion topics into concepts relatable to financial inclusion in day-to-day life experiences.

As a result, the presentations improved understanding of Level One Project Principles and how they apply to our daily lives. Additionally, the presentations showed that when implemented through the Mojaloop blueprint, the principles help to solve digital financial infrastructural challenges.

OBSERVATION

The participants described the Level One Project Principles and Mojaloop as invaluable avenues for addressing the challenges of financial inclusion. In addition, the members urged the facilitators to continue to advocate for such solutions to be included in the Government's plans in the bid to create an inclusive economy that benefits everyone.

CONCLUSION

Financial technology has the potential to support the creation of a universal formal financial system that can incorporate the two billion people worldwide that are still unbanked. In areas with poor physical infrastructure, FinTechs offer a unique opportunity to connect them to the formal financial system. FinTech, therefore, has unlimited potential because it creates an ecosystem that benefits consumers, governments and businesses. Level One Project Principles are vital for the creation of an inclusive and interconnected digital economy. In addition, Mojaloop offers a reference model for payment interoperability that can help to overcome barriers to financial inclusion. HiPipo will continue to champion digital innovation and financial inclusion. In particular, we are keen to work with relevant stakeholders to ensure that the technology-based financial services are resilient against cyber-attack.



THEMATIC AREAS

INTEROPERABILITY: SPEEDING UP IIPS IS IMPERATIVE

Across banks, a transfer of as little as 100 dollars can take anywhere from half an hour to an entire day. Real-time Payment is still far off.

INTEROPERABILITY AND IIPS

Significant and commendable initiatives to drive financial service interoperability have been on the agenda of stakeholders for a while now, but with little advancement. The current realities are a mixture of constraints such as lack of real-time payment, heavy costs for transactions, and little effort on merchant interoperability. Extra effort to accelerate real-time payments and interoperability is more urgent than ever before for Uganda and the rest of Africa to achieve full, sustainable financial inclusion. #40Days40Fintechs engagements set out to understand the market realities and then recommend actions geared towards achieving an Instant & Inclusive Payment System (IIPS).



No real time payment across DFSPs: We define real-time payment as completed debit and credit within a max span of 60 seconds. Except for mobile money network payments, the whole industry is far from achieving real-time payment for small value big volume transactions. Across banks a transfer of as little as 100 dollars can take between 30 minutes to 24 hours. Given that consumers normally have immediate need for the funds, they now resort to expensive ways of moving money either by cash or through mobile money operators i.e. a customer needing to transfer funds from bank A to bank B looks at their options as:

1. Travel to the Bank A branch, withdraw cash, and then deposit this cash at the Bank B branch.
2. Or, transfer the money from Bank A to the mobile wallet M, then transfer from mobile wallet M to Bank B.

Both alternatives are costly in terms of transaction fees. Option 1 also requires more time. The less informed will not even be able to understand and navigate option 2. This reality justifies the urgent need to implement an Instant & Inclusive Payment System (IIPS) that will make real time funds movement across DFSPs commonplace.

High DFSP cost: Our finding is that the cost is very high for interbank transfers, with an average transaction costing over USD. 3. Transfers between mobile money operators cost over USD. 1 on average. This is to the tune of over five times higher when compared to NIBSS in Nigeria, which is credited for effectively lowering the cost of interbank transfers to USD. 0.13. With a price sensitive population, the alternative for avoiding high transfer costs is fiat money. We believe that an IIPS implementation will fuel big transaction volumes that would be a good incentive to lower the transfer costs.

Merchant interoperability is nonexistent: While P2P payments are very important, driving a fully cashless economy will need merchant interoperability. But except for the card network driven by VISA and MasterCard, merchant interoperability is non-existent

in Uganda. Most recent mobile payment initiatives which serve the market needs run the risk of being too expensive to scale due to them being modelled on closed loop networks. Effort needs to be put in place to support open loop merchant payments.

INDUSTRY VIEWS ON IIPS:

A number of #40Days40FinTechs participants gave their take on the hindrances, concerns and considerations to achieving interoperability and real-time payments advancements. High price, regulation readiness and the need for collaboration formed a common thread in their observations.



Annet Nanyanzi (Director-Green Shares) asserts that the interaction between players is inadequate, hence collaboration on IIPS is lacking. This is further not helped by low payment systems availability,

citing that payment systems are always down. She urges that improvements in efficiency need to include provisions for spot (real-time) payments and the introduction of a 24-hr operations circle that is not stopped because of DFSP operation processes, such as for reconciliation.



Cleopatra Kanyunyuzi (Co-Founder & CEO-Club Tangaza) appreciates that some level of interoperability exists, citing the fact that we can now send money across telcos. This has boosted trade/commerce and opened a whole new avenue for innovators. But more needs to be done to build on the gains made, starting by reducing the charges of sending and receiving between DFSPs. As it relates to merchant payment, she notes that while there is still difficulty using some international payment platforms, like PayPal, it is good to see continental solutions like Flutterwave taking root.



Damali Ssali (Summit Chief Guest; Co-Founder & Ceo- Ideation Corner; Trade & Finance Specialist) acknowledges that a lot has been done towards putting interoperability in place. However, it is still too expensive to use and this is cutting out most people; and until cost is dealt with, it will not matter how much innovation happens in interoperability. She recommends a round-table discussion with all players, and in the deliberations matters like regulation, who controls what and where etc. can be ironed out, all as open systems are also rolled out in tandem.



Ronald Azairwe (Managing Director- Pegasus Technologies) notes that interoperability needs trust between players that exchange payment information/ instructions. He points out that legislation/regulation is desired to ensure that such trust already has a sound basis. For example, with today's KYC, it is easy to quickly certify that one is a bonafide individual. Banks already had internal transactions amongst themselves, which trust stems from being centrally regulated. Legislation like the National Payment Systems Act (2020) should extend this trust to the other players in the space. The regulation in place should be sufficient, offering a good baseline, and should only need a few tweaks on the way. It should not be forgotten that this is a learning curve for the Central Bank, which is only beginning to regulate FinTechs.

Also, people are shying away from interoperability for a number of reasons, including cost, and the delays that occur as money is moving. If you send money to someone's bank account with the knowledge that it shall take a few days to reflect, then that already distorts the very concept of interoperability.

Another step would be to effect open APIs. We would then be well on the way to interoperability.



Paul Tamale (Manager, Card & Payments- Stanbic Uganda) asserts that interoperability is the inevitable future for any economy, citing that there has been disruption in the social aspects, and right now there are platforms where people interact on a global scale. Payments should thus not be left behind. He observes that traditional banks, which already had a number of limitations, are experiencing severe disruption, and there are now several options for one to bank (i.e. to store and to transact value), including through telecom operators, FinTechs, etc. Banks now see an opportunity for them to work together and build frameworks/ platforms that will serve the bottom of the pyramid and enable them to run payments as a lifestyle, on the go. That is the era we are now in. It means we should be able to pay anytime, anywhere, and on any platform, including the likes of social media and email. For this to happen, all the players need to come together to create a platform that allows for seamless movement of funds so that we interact unhindered from a payments perspective.

He points out that a number of the existing challenges stem from the fact that the players are largely running silo strategies. The way forward should occur as part of a national strategy. The relevant national authorities need to engage and come up with these so as to support real-time payments and interoperability. With that done

it means that a framework will exist to guide all players on each's part. Agreement on issues like entry criteria and subscription would be made. He observes that the era of one-way, top-down direction coming from the Central Bank is over. Today's innovations have seen to it that developers and other players in the space can also approach/ petition/guide the regulators to see how new methods and challenges of doing things can be addressed.



Esther Karwera (Co-Founder & Head of Business Development & Marketing- EzyAgric) informs that for farmers, real-time payment takes on a new perspective. Farmers can take months without receiving money and thus do not appreciate delays of any kind. Still in relation to interoperability, it was observed that mobile money charges are too high for most farmers. And for high volume farmers who deal in large sums, mobile money's present limitations mean that banks have to be used instead. However, this can be cumbersome and time consuming. It thus calls for assessment on the regulations governing mobile money transaction limits. She advises that the various stakeholders (Government, banks, MNOs etc.) need to agree on how to reduce costs. As of now, those with

innovations seeking to serve such segments are taking on extra costs to reduce inconvenience to the clients. It would also help to make transfers between bank accounts and mobile wallets speedier and more seamless. Farmers, for one, need their inputs in real-time.



Nelson Kituuka (Managing Director- Discount Cards Ltd) stresses that the growth of interoperability will be measured by how it eliminates silos, allows all payment platforms to interact with each other, and do so instantly. It is advantageous that platforms like Mojaloop already exist to give guidance on how to progress with interoperability. However, the legislation and technology must be at par to cater for the various scenarios which arise from practicing real-time payments. Also of note is that research shows

that most payments made digitally are converted into cash within half an hour. FinTechs thus need to find a way of becoming more valuable by helping reduce these conversions. Better interoperability would include increasing avenues for people to use digital money, and not have to convert it to cash and incur withdrawal charges. Better interoperability, and the legislation to govern it, would also enable standardisation and a clearer picture of the sector. For example, one has to ask why, when transferring the same amount of money, it costs differently across the different platforms.



Tim Jamieson (Vice President, Payments & Finance Services- SafeBoda) remarks that in places like the United Kingdom and America, the quick adoption of digital and cashless transactions was largely due to interoperability and real-time settlement being factored in early. Banks, FinTechs and the like quickly enabled payments across networks. Unfortunately, in Uganda the above is still far from the case; one can have a number of wallets (MTN Mobile Money, Airtel Money, SafeBoda etc.) but the interaction between them ranges from minimal to non-existent. And

while this friction exists, adoption remains difficult. Cashless will only be adopted when there is a proper value proposition for the consumer, especially along the lines of convenience, security, and price. Even though many know that having your cash in banks, telcos, FinTechs etc. is much safer than holding it physically, at most only 10% of transactions in Uganda are done electronically. He reasons that it is thus not only security that is driving consumer behaviour, but also the lack of interoperability and real-time settlement.



Wendy Nanfo (Country Operations Coordinator- Jumo World Uganda) agrees that progress has been made on interoperability in Uganda, but a lot still needs to be done. There are various companies/entities using the technology, but the final crucial step is for them to plug into each other and share data points. Many Ugandans are on various platforms, for example; NIRA (National Identification & Registration Authority), MTN Mobile Money, banks and so on. It would help if companies like Jumo were granted access to these various points so that they can score and serve customers better.



Vincent Tumwijukye (CEO- FutureLink Technologies) urges that interoperability in the financial system needs to be seen from the context of the people and their lives. One big mistake he observes is to expect interoperability at the tail end where the transaction happens. Interoperability has to occur at the convergence of people's lives e.g. at FutureLink, who work with SACCOs, they knew that it would be practically impossible for each one of the SACCOS to connect to the MNOS. So, FutureLink brought about 300 of them together on a banking-as-a-service platform. Once the SACCOs were connected efficiently, FutureLink then introduced them to the digital channels. It is now possible for every SACCO member, wherever they are, to now access DFS through the likes of MTN, Airtel, and Interswitch. And this all began with the convergence. Convergence also reduces cost: in their case, this saw them reducing the infrastructural cost for connectivity for each institution by about 90% (down from \$200 to \$18 per month). As the conversation on interoperability continues, he believes they will be compensated by including the many. One should thus focus on a big market which also motivates and attracts investors. He asserts that financial access without changing the lives of the people we serve is

useless. No wonder we have the contradictions brought by access and usage; many might access accounts but in the end they turn out to be infrequent users. So, that also needs to be put into account. Usage will only improve with interoperability.

RECOMMENDATION: URGENT TO FAST-TRACK IIPS SET-UP

The 40 Days 40 FinTechs interactions and findings indicate that:

1. Instant (real time) payment is lacking in Uganda (with the exception of MMO).
2. Inclusive payments are still hampered by several silo approaches to payments.
3. Charges for sending and receiving payments are very high.
4. Collaboration on rules and rails is lacking and hence we still see a multiple silos initiative.
5. National strategy and regulation to enable the IIPS is still immature.

Given these findings, we strongly recommend urgent and concerted efforts, collaboration and deliberate investment between government entities, donors, development partners and the private sector to build rails and rules for an IIPS that is Level One Project Principles aligned. This will conclusively address the market challenges and deliver value with faster financial inclusion.



LET'S GET OPEN: BANKING, DATA, API ENABLING PISP

Open banking, Open Data and Open API will spur PISP innovation by unlocking access to consumer data.

OPEN BANKING AND PISP

In 2018, In 2018, MTN became the first MMO to publish an Open API on the Uganda market. While there were some FinTechs with Open API, MTN's move was most pronounced given its standing in the market. This move heightened the discussion about Open Banking, Open Data and Open API,

closely related to how Payment Initiation Service Providers (PISP) could innovate further under an Open Environment. According to CGAP, Open Banking is the exchange of consumer data between banks and other FSPs (i.e. data holders), based on customer consent, with other FSPs and PISP, such as FinTechs (both known as data users).

Open Data is the exchange of consumer data between public and private sector institutions, including financial institutions and nonbank financial institutions such as mobile money issuers, utility providers, and telecoms, with other such institutions based on customer consent.

Open APIs are the proprietary APIs that an FSP makes widely available (over public internet) for other companies to use, allowing these other companies to seamlessly plug into the FSP's system.

Payment initiation is about making payments between FSPs but with the process initiated by any software, apps, or websites, to which the account holder has explicitly provided consent to **Payment Initiation Service Providers (PISP)**.

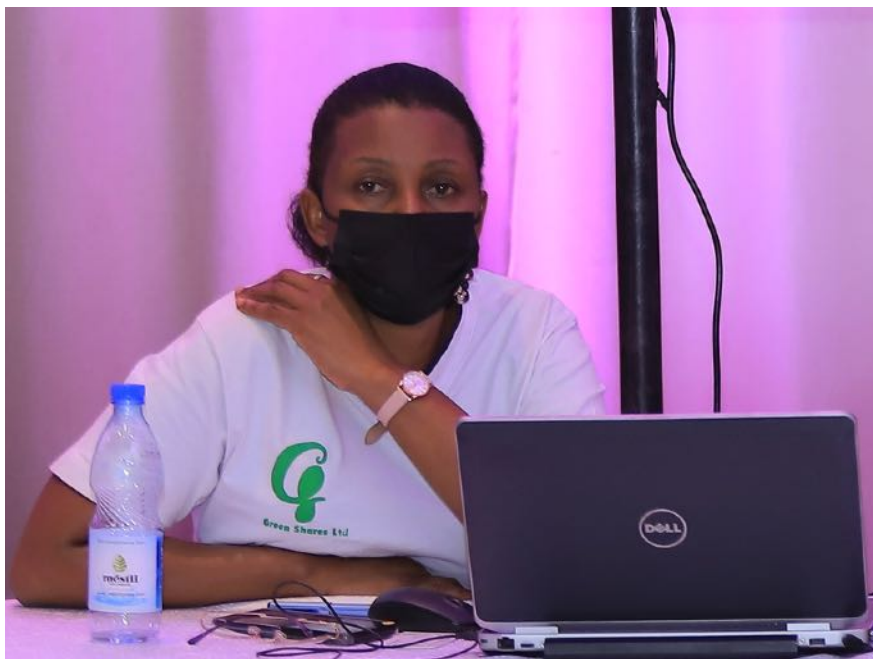
With the revised Payment Services Directive 2 (PSD2) in Europe and India's Unified Payments Interface (UPI), these jurisdictions have led the way in Open Banking. In Uganda and the rest of Sub-Saharan Africa though, the regulatory frameworks for Open Banking are largely yet to materialise. Despite the emergence of micro-lending innovations like MoKash (MTN and NCBA) and Wewole (Airtel and Jumo), which are data centric, we still have data silos that render telco and FinTech-driven products limited in their insight and personalisation capabilities.

We believe that Open Banking, Open Data and Open API can spur PISP innovation by unlocking access to consumer data. That said, an open framework comes with vast security and privacy concerns that can only be addressed through proper regulation.



INDUSTRY VIEWS ON OPEN BANKING AND PISP

The 40 Days 40 FinTechs participants shared their views about getting 'Open', this time with the readiness of regulation as being key to consumer protection being the standout observation.



Annet Nyanzi, Director of Green Shares, which interacts with farmers and other small-scale traders deep in rural areas and effects payments using mobile money, believes that an Open ecosystem would help increase the points where payments, loans and other financial services can be completed.



Ronald Azairwe (Managing Director- Pegasus Technologies) clarifies that we are already experiencing openness to a point, as is being seen with agents, where an agent of Bank A can serve a customer of Bank B; however, this is still overly complicated and expensive. He cites that there is an issue of protectionism, as is being seen with ATMs and agent banking. A bank will feel aggrieved to simply share information and systems it set up at a cost (not that this is the reason for the high costs). He believes that it would be good to introduce agents that are independent of banks, who are at terminals where they have access to all necessary information. He adds that even FinTechs, aggregators and the like, who are already helping in the movement of money between banks, are asking the Central Bank to see if they can now also directly transfer monies between banks without it going through the Central Bank. They can already move money in real time. That too would be a positive step in Open Banking.



Paul Tamale (Manager, Card & Payments- Stanbic Uganda) agrees that Open Banking is the way forward. Technology has revolutionised finance and is providing tons of innovations. As banks, they welcome innovations that are adding real value to the sector, and would readily integrate, and share the ideas and resources/infrastructure they have built over the course of time with these new players. New entrants would simply have to follow the desired standards/regulations.



Esther Karwera (Co-Founder & Head of Business Development & Marketing- EzyAgric) notes that Open Banking is key to both the innovators and the direct consumers. For the former, it reduces the cost of starting from the bottom, enables you to test and create various iterations of the product, and come up with a better value proposition for the consumer. Also, by its very nature, Open Banking positively impacts inclusivity, for it opens many new portals/ways for one to acquire and operate an account. Noting that while there are security concerns, legislation like the National Payment Systems (NPS) Act will plug the loopholes and should therefore not hinder adoption of Open Banking.



Nelson Kituuka (Managing Director- Discount Cards Ltd) discloses that one of the reasons there is still low uptake of credit in our economy is because the various providers are still operating with their own silos of information. Banks have their own, Tier IVs have their own, and the Credit Reference Bureau (CRB) has its own, and so on. Then there are other organisations, like the National Identification & Registration Authority (NIRA), also with their own information. If all these organisations had access to each other's general data, so that at the very least it can be crosschecked, Open Banking would be possible and enable decisions to be quickly made. He cites that one of the biggest queries in banking is, 'Yes, I could lend you money, but who else have you borrowed from?'

Open Banking would thus also enable the building of products which serve the population better. He notes that in places where Open Banking is better implemented, especially in regard to assigning credit scores, interest rates are much lower and those economies thrive more. For now, our lack of Open Banking is contributing to high-risk premiums. The NPS Act can help in putting Open Banking into effect, for the regulation it provides gives people, like those in hard-to-reach areas, the assurance to seek financial services from places other than traditional banks.



Vincent Tumwijukye (CEO- FutureLink Technologies)

submits that Open Banking and its consideration also comes from the deeper question of 'What is the compelling factor for the end consumer?' The belief was that it is efficiency, but in his experience that is not the truth, having dealt with people who are comfortable being inconvenienced spending a lot of time in long queues at banks. He thus believes that in Uganda and continentally there are two other compelling drivers for DFS: access to affordable credit and access to markets for their produce. He thus believes that Open Banking would provide the much-needed clarity on how access to affordable credit can be provided in Uganda. We still have unacceptable occurrences where people borrow from moneylenders at rates as high as 20% per month/240% per annum. So, he believes Open Banking offers a unique opportunity to leverage on credible data to understand the consumer better and be able to give them appropriate, community-responsive financial solutions that best speak to their livelihoods and needs.

RECOMMENDATION: FROM OPEN API TO OPEN BANKING

Following #40Days40FinTechs deliberations, we believe that we are still some way from Open Banking, but we can shortcut this by embracing Open APIs and Open Data as part of a natural evolution to Open Banking. We recommend 3 parallel but phased growth stages:

1. **Open API:** All banks, FinTechs and the like should start to practice and deliver their proprietary API to be accessible on the public internet. This will enable the industry to build a body of knowledge and practices with self-regulation to be secure and compliant.
2. **Advance to Open Data:** The Open APIs should among them provide for data exchange points, hence advancing to an Open Data regime.
3. **Embrace Open Banking with proper regulation:** While 1 and 2 above happen, the regulatory framework will shape up to provide for Open Banking recommendations for standardisation of API and data protection.



CBDC: TO ADVANCE TO A CASH-LITE ECONOMY

Central Bank Digital Currency (CBDC) will revolutionise the way money is created and distributed, but Africa still needs some cash notes to work with when the power goes off for spells!

CBDC

Society has always relied on trade, the exchange of goods and services. This trade historically included using gold, silver or copper, sometimes even salt, until coins and paper currency came into circulation. The era of digital with mobile money has hidden some touch of fiat currency (paper money that is not backed by gold but by trust). New mediums of exchange, including a decentralised Bitcoin, have also emerged.

CBDC is a new type of currency, issued in digital form rather than paper, and on ledger technology such as blockchain. One of the CBDC objectives is to complement, but can even eliminate, banknotes. Cost considerations play a role in the motivation for CBDC, with banknotes and coins being expensive to produce, distribute, handle, and replace. Additionally, bank notes allow anonymous transactions. Hence a reduced use or elimination of banknotes can help fight illegal activities.

CBDC may revolutionise both the way money is created and distributed and shake up the present two-tier financial system of central and commercial banks.

Proponents of CBDC see the currency as a solution to ensuring real-time transfer of value. And importantly the game changer would be if CBDC is issued in retail fashion, from central bank directly to private persons and businesses.

While CDBC will lead to more digital adoption and cash-lite economies, the ecosystem needs more maturity in payment infrastructure for cashless to be a realistic expectation. We need some cash notes that work when without things like electricity for long spells. Hence, the elimination of cash is currently viewed as an unrealistic idea since an African economy entirely based on electronic payments is subject to infrastructure disruption. This is contradictory to the digital first view and is a reality check.

INDUSTRY VIEWS ON CBDC

Participants in the 40 Days 40 FinTechs initiative voiced their views about CBDC, and cited the need for deep digital inclusion as a natural step to CBDC adoption. They also raised concern on how the regulatory framework would function once the central bank starts to offer CBDC directly to retail consumer and business accounts.



Annet Nyanzi (Director- Green Shares) believes that CBDC can only take root once more is invested in the digital payment ecosystem, specifically in acclimatising rural and small-scale traders to digital as a primary mode of payment.



Damali Ssali (Summit Chief Guest; Co-Founder & CEO- Ideation Corner; Trade & Finance Specialist)

expresses that a lot of the innovation on digital currencies is happening on the African continent, and they have a lot of promise. She states that if, for example, Bank of Uganda (BOU) decided to issue digital currency based on national IDs, many Ugandans would automatically now have (digital) accounts. Thus, she believes it is the quickest way to effect instant financial inclusion. Adding that unlike other cryptocurrencies, like Bitcoin, CBDC would be centrally controlled and backed by a real economy. It would thus be both instant and safe. However, issues would arise from BOU being both an implementer and a regulator. So who regulates them and implements the necessary checks and balances would need to be decided. And this is partly in consideration to the fact that they would be going into retail banking, issuing accounts and so forth, which is something they historically have never done. So, they would have to do an incredible amount of disruption and shift, especially upon themselves, to make it work. China, one of the countries that has implemented a CBDC for example, is yet to fully reveal how it is working for them. Damali thus recommends a hybrid, where BOU partners with

FinTechs, other DFSPs, the private sector and other stakeholders, and together they come up with a framework on how CBDC could work here. In the end, it would probably be BOU supervising and regulating while the private sector implements.



Paul Tamale (Manager, Card and Payments- Stanbic Uganda) thinks that we are on the way to readiness for digital currencies. Banks are building digital platforms for their customers to use; the economy is fast adopting and integrating mobile technology; and thus the idea of digital operations is no longer new to the people. And so with CBDC one has to ask 'How do we involve the digital evolution in the payments in our landscape?' He cautions that we still have several hurdles to overcome. Cash is still king for several reasons: it is still the most trusted, best understood and widely accepted. Adding

that there is still a lot to do towards educating the people, a lot of empowering needs to be done and a lot of equipment put in place to run digital devices. We also need to have the platforms that allow for digital currencies to operate and deliver adequately, especially to the person at the bottom of the pyramid, anywhere and always.



Esther Karwera (Co-Founder & Head of Business Development and Marketing- EzyAgric) notes that digital is how things are increasingly being done worldwide, not just with cashless payments but in many other aspects. It cannot be a shock that national currencies are following this trend. Thus, at the very least, CBDC needs to become part of the conversation. However, speaking in regard to the agriculture sector where she operates, attention has to be paid to those still getting used to digital payments in the first place. The gap between them

and those fully adapted should not widen. So, introducing CBDC would need adequate awareness/ education, and education that is human-centered, mindful of the fact that many of those you approach still keep/hide their money in granaries. So 'pivoting' to a new form of currency could be far from smooth. However, the advantages CBDC would bring in reducing production costs and increasing security cannot be ignored.



Nelson Kituuka (Managing Director- Discount Cards Ltd) observes that one problem with (physical) cash is that printing and minting it comes at a cost. It also exists within a system of a bank needing to be physical, needing a building, staff, bullion vans and so on, to handle it, all of which create costs. Occasionally, as can be seen with coins, the face value of the money is even less than the physical value of the (materials in the) coin. It is no wonder that worldwide the general thinking is of going cashless and digital, which makes CBDC a valid consideration. He notes that the COVID pandemic has also aligned thoughts towards cashless economies. Places like China, Singapore, France, Switzerland, the EU, Brazil, and Nigeria in Africa, have been some of the forerunners in CBDC. He argues that once CBDC are

built, they will replace cash, and that is a good thing. He further notes that the best CBDC environment is an interoperable one, so gains have to be made in that direction as well. Key access issues such as what one would need to access the CBDC to ensure no exclusion for the likes of the disabled should also be addressed.



Tim Jamieson (Vice President, Payments & Finance Services- SafeBoda) believes that CBDC have extremely noble benefits. When you look at it from a consumer perspective, they would remove the need to have intermediaries in any transaction. And if based on blockchain they would guarantee security. He adds that you can also understand why governments might be keen on them, as they allow for the ability to control monetary policy and enforce taxation and the like. However, the major question is how they can be delivered and implemented. And in his experience, he is yet to see governments taking the lead in mass technology delivery, adoption or innovation. So, although he knows there is widespread enthusiasm for them, he is sceptical of governments being able to deliver. What he finds more interesting in the crypto space is 'What will blockchain (and CBDC) do to remittances?' If you can disintermediate the

need for banks, FinTechs etcetera, and you can do it instantly, securely and cheaply, then he believes that will be the main game changer.



Vincent Tumwujukye (CEO- FutureLink Technologies) believes that CBDC will only be discussed and developed better by the central banks if they take time to also familiarise themselves more with cryptocurrencies in general and address all fears they currently have. The radical shift of the American Federal Reserve from the gold standard in the 70s is a yardstick to show that Central Banks have the authority and can execute a shift to CBDC. An added advantage is that they also possess comprehensive information on the state of the economy.



Innocent Orikiiriza (Founder & CEO- KaCyber Technologies) bemoans the fact that the cost of having a bank account in Uganda is still too high. But CBDC can mitigate this and enable many more to have them.

RECOMMENDATION: ADVANCE DIGITAL PAYMENTS IN READINESS FOR CBDC

Considering the industry views, Uganda and sub-Saharan Africa must advance the cash-lite agenda, and below are the key considerations of parallel advancements.

1. Promoting financial inclusion with usable accounts by providing for more incentive to spend digitally and not only do cash in and cash out. These incentives include more merchant payment adoption.

2. Government, normally the biggest payer, must lead with a digital payments first agenda where all government payments should move from legacy payment tools to digital payments.
3. Following and in parallel to the above, Government should provide policy guidance and a roadmap for CBDC, articulating the role of the central bank and other players.
4. Adoption of digital assets, crypto currencies, as well as CBDC, will need to be integrated intelligently to fuel the digital economy, creating a new standard of exchange. The uptake however needs to be based on trust and any trade-offs would need to be well assessed, essential, non-discriminatory, transparent and proportionate for a cash-lite and the ideal cash-less society.



WOMEN AND SPECIAL INTEREST GROUPS (SIG): EQUITY

Programs such as HiPipo's Women-in-FinTech Hackathon & Summit are fundamental to advance advocacy for women and SIG inclusion.

GENDER EQUITY

As viewed by the United Nations, gender equity is the process of being fair to people of all genders. To ensure this, strategies and measures must often be available to compensate for the historical and also ever-present disadvantages that are preventing the genders from operating on a level playing field. Equity leads to equality. And at HiPipo, through our different programs, we ensure we apply equity in our initiatives and approaches. We believe that this needs to be extended to special interest groups (SIG), like refugees for example, who for different reasons are otherwise disadvantaged and need that lift.



INDUSTRY VIEWS ON WOMEN AND SIG INCLUSION

Annet Nanyanzi (Director- Green Shares) stresses that a lot more needs to be done for inclusivity, including that for special interest groups. Issues such as high device and high transaction costs, amongst others, are factors still affecting even general inclusivity. Additionally, the question of financial outreach is still deserving of attention, because while traditional players like banks and MFIs have innovated with services like agency banking, and telcos continue to broaden the reach of their digital financial services, a lot of the hurdles special interest groups face are still intrinsically linked to the fact that the financial economy, digital or otherwise, is virtually still non-existent in many areas.



Cleopatra Kanyunyuzi (Co-Founder & CEO- Club Tangaza) believes we need to look at the economic and financial status of those we are intending to include, for that is a major factor. It is good creating digital finance platforms and products, as we continue to do, but if people cannot afford the technology to on-board them in the first place then it is a problem. She adds that the government can play a major part in improving the situation, by nurturing an economic climate that fosters income generation, for example, and setting up sufficient infrastructure, backed by coherent policies, that guarantee affordable, reliable internet.

Innovators also have to play a part in inclusivity by creating products that are adopted easily. They should thus take time to undertake market studies about the people they are innovating for.



Damali Ssali (Summit Chief Guest; Co-Founder & CEO- Ideation Corner; Trade & Finance Specialist) observes that innovators are covering the bare minimum by ensuring that their products can be accessed through either USSD or on smartphones, and are thus accessible to people in lower income brackets. However, there is a lot that still needs to be done to bring the physically disabled into the space, and that must now also form a major part of the conversation. Relatedly, the issue of language and translation should also come into play, so that even those who are not speakers of English, the dominant language, are brought into the digital fold. Another consideration is that access to the internet is still curtailed for many due to its high cost. And the same goes for phones. Affordable internet goes hand-in-hand with affordable phones.



Ronald Azairwe (Managing Director- Pegasus Technologies) states that it cannot be ignored that a lot has been done to further inclusivity, starting with the fact that when literacy levels go up, with more people understanding the technologies, language and numbers involved, their uptake, and in turn inclusivity in general, increases.

Relatedly, smartphones are becoming more affordable, and their proliferation is encouraging app developers and the like to create even more. However, more needs to be done. For example, last year's increase (in Uganda) in the cost of data was a step in the wrong direction. It is important to understand that even though taxes are a necessity, it should not be done at the expense of excluding many from (digital) financial services. It must be remembered that the more the people there are accessing these services, the larger the tax base. There is need to lower the tax. Government used this technology to distribute pandemic funds, so it cannot claim ignorance of its benefits. Government can also bring up legislation that empowers those who use these technologies.

It should also pass laws that erase/reduce the use of cash. For example, this should be the case at Uganda Revenue Authority (URA) and other government

service points, like hospitals. The likes of (power distributor) UMEME have done this, leading many to have mobile wallets, and this has fostered inclusion. The same should be adopted by the likes of schools, especially considering the conditions existing today. However, the drive to cashless (and thus greater inclusivity) has to be a deliberate, properly executed effort.



Esther Karwera (Co-Founder & Head of Business Development and Marketing- EzyAgric) believes that the key stakeholders are making efforts towards inclusivity, and indeed on that note one can think of the Open API MTN provided, which has helped them link with farmers rural and far. And in her space (agriculture), it has been refreshing to actually make payments directly to women. What needs to be done, though, is to improve on inclusivity. If, as is the case here, one needs a NIN (national identity card) before you can acquire a bank account, such measures are excluding many, especially those at the bottom of the pyramid, including women and PWDs. There is also a need for more infrastructure. This can

include something as simple as placing agents in the right areas. For example, in many of the places of the underserved, you might also not even find a mobile money agent. So, one then incurs transport costs to go to a trading centre to withdraw. An inconvenience like this can make them go back to keeping money in their mattresses. What they, as EzyAgric, did, was to partner with specific agents who do the payment outreach for them. However, of course, the onus should not fully be on their side, and the major stakeholders can do a lot more in this regard.



Nelson Kituuka (Managing Director- Discount Cards Ltd) urges that it is not just for the banks, telcos and other players to foster inclusivity. The people as well, through their (political) representatives (Members of Parliament, local councilors and the like) need to demand for it. Once inclusivity is sanctioned by law then it will soon be implemented by the players.



Wendy Nanfo (Country Operations Coordinator- Jumo World Uganda) asserts that the Ugandan economy is on the right path to inclusion, for example through the provisions in the NPS Act that allow for collaborations amongst entities like Jumo to provide services like savings and insurance, for example, in partnership with licensed providers, in their case Airtel (**Editor's note: Jumo's services have since also been added on MTN Uganda**), which meant that Jumo did not need to go through another round of licensing in order to enter market.

And speaking in regards to what Jumo offers, it should be stressed that, from the start, their products are designed to be easily adopted by their target market - the women, the unbanked, the underserved - people who ordinarily might not have the requirements to get credit from a bank, who might be deep in rural areas, and who are not literate enough to understand the documentation and language involved. But Jumo, using the minimum KYC they acquire, build the customer's profile and provide him/her with tailored products.

And thus, with the above in mind, it is a given that the more data they have access to, the better they can create customer profiles and further tailor their products. This thus ties in again with Open Banking and interoperability.



Eunice Namugenyi (Co-Founder & Business Lead- Kuzimba Services) strongly recommends that to drive inclusion we should be having more on the ground, practical initiatives, like 40 Days 40 FinTechs, and (the HiPipo) Women-in-FinTech (Hackathon & Summit) in particular. This will improve on inclusivity. People of all shades will come together, exchange ideas, as they do in such initiatives, and create the products needed to include everyone.

RECOMMENDATION: MORE EQUITY INITIATIVES MUST TAKE ROOT

Considering the voices and views aired from different stakeholders and HiPipo's experience in spearheading inclusion, we recommend that more deliberate effort driven by equity approaches should take root and be supported to drive inclusion especially for special interest groups and women. The initiatives should address:

- Economic uplift of special interest groups by empowering them to participate in revenue generating projects.
- Access to devices and internet comes at more affordable costs.
- Literacy advancement through formal training and hands-on experience.
- Level One Principles alignment for identity to ensure minimum and adoptable KYC approaches.
- Promotion of digital driven saving, credit, and insurance products.
- Sustainability and indeed scaling of advocacy programs, such as the HiPipo Women-in-FinTech Hackathon & Summit.

DISSECTING THE PARTICIPANTS





THE CORPORATES

Featuring Airtel, MTN, NCBA

No talk about financial inclusion in Uganda, and how many have successfully been brought into the formal financial ecosystem, is complete without mentioning the impact of mobile money financial services.

While Uganda has about 25 traditional banking institutions, with some boasting as many as a 100 years' presence in the country, as of 2015 the entire banking ecosystem was responsible for only about 4 million transaction accounts. Mobile money services, on the other hand, are responsible for creating more than 23 million transaction accounts within a period of 14 years.

It is also important that the banks are realising that the time to fight with FinTechs has ended. They are now thinking about how to leverage financial technology, and to collaborate with FinTech innovators. This trend has to continue to ensure that FinTech becomes part of normal banking practice, and not an element for antagonism.

As 40 Days 40 FinTechs organisers, we were pleased to host some of the biggest players in the FinTech business space, all of whom have recently been structured into separate, incorporated mobile financial service providers, as required by the recently enacted National Payments Systems (NPS) Act. This happened with Airtel, MTN Uganda and NCBA. NCBA today, by virtue of the number of transaction accounts on its books, is Uganda's biggest bank, with them managing more than 9.7million of them. And this' thanks to MoKash, the mobile financial product they offer through

their partnership with MTN Uganda. The others are also doing lending, enabling saving, enabling payment of utilities and taxes, plus facilitating many other remittances and payments for multitudes of services. They are giving users a chance to experience the power of leveraging financial technology. Importantly, digital financial services are enabling more seamless products, more accountability, and more user-friendly interfaces. Our economy cannot do without enabling the user at the bottom of the pyramid, and at the very least it should be ensured that everyone has USSD access to a transactional account, and can thus experience the transformative capacity of digital services. The big players that we hosted are not only proud to be a part of an initiative that showcases the life-changing capacities of financial technology, but they were also ready to share stories of how their innovations, strategic partnerships and investments worked in tandem to create an enabling environment for financial inclusion to flourish. The future of financial inclusion and digital financial services rests on ensuring that mobile technology is given top priority, and is understood as the major option for guaranteeing financial inclusivity in our economy, as has been seen elsewhere. Indeed, practices are changing worldwide, and even in places like America innovators are focusing on mobile technology. And closer to home, in South Africa, which was also a predominantly card environment, many are now using the mobile phone. Payments are now becoming barcode enabled. Such seismic shifts are sure signs directing us to place focus on a mobile-first innovation approach. This will allow for innovators in the FinTech space, no matter their size, to continue creating products that Include Everyone.



AIRTEL MONEY

Airtel Mobile Commerce Uganda Limited's low transaction costs, innovative products and a wide network built to avail these products and services to everyone, no matter their location, has seen it make significant inroads as a 'bank for the unbanked'.

While most Ugandans were excluded from the financial system and financial services were out of reach, especially in rural areas, Airtel Mobile Commerce greatly invested in increasing the coverage of its financial services to counter this very situation. As of now, it has a network of 110,000 agents and 1,400 Airtel Money branches across the country.

In conformity with the National Payments Systems (NPS) Act, Airtel Mobile Commerce was created as an entity separate from Airtel Uganda, the telecoms service provider. Airtel Mobile Commerce recently received its payment services license from Bank of Uganda, the sector regulator. And now, apart from offering the standard mobile money services, it has also branched into savings and loans.

Its thinking behind this is that people at the bottom of the pyramid need savings and loan products just like everyone else. However, their requirements are simpler: they desire products that are convenient, safe and affordable. Airtel Mobile Commerce's products are thus designed with those requirements in mind.

And it is such design and products, governed by customer-centricity, which it believes will help guide the country towards achieving its financial inclusion agenda.

Today, its loan and savings products are offered in partnership with the likes of JUMO and Kenya Commercial Bank. With its savings product, the institution offers a 5% interest rate on daily average finances as it seeks to maximise the benefits to its customers while guaranteeing convenience and safety of their money. In addition, the organisation is in the process of launching Quick Loans, a check-out loan product that will be accessible across the country.

At Airtel Mobile Commerce, there is an appreciation that while the COVID-19 pandemic has disrupted businesses across the continent, it has also propelled

the digital financial services industry forward a number of years, placing FinTech at the center of ensuring financial inclusion happens at the bottom of the pyramid. Cashless is now the new normal as we seek to prevent spreading the virus through contact.

Going forward, the factor that is core to achieving full financial inclusion remains the need to build an entire ecosystem so that one does not have to withdraw the money from their mobile money account to complete a transaction but simply continue the digital journey by paying using their mobile wallet. There is also a need for more digital savings and credit products.

As the ecosystem continues to be built, partnerships with the various merchants, banks, savings and credit organisations, those with loan products and the like, will become more critical.

For Airtel Mobile Commerce Uganda Limited, taking part in the 40 Days 40 FinTechs initiative has further created visibility that will accelerate uptake of the various innovative solutions on the market to further boost financial inclusion. With the NPS Act and BOU guidelines in place, there should be more excitement from all the players, for Uganda now has a stronger base on which to build one of the most vibrant FinTech industries on the continent.



MTN MOMOPAY

MTN Mobile Money Uganda Limited's MoMoPay platform goes beyond simply enabling you to receive digital payments and make your business more efficient. It also creates new lines of business for enterprise owners to earn extra income.

A merchant that uses the MoMoPay platform now enjoys a full end-to-end proposition. They can now also sell airtime and earn 4% commission; they can also facilitate the payment of school fees, utility bills, pay TV, among others. So, wherever one sees a MoMoPay merchant, no matter how informal or small they seem, that is a business in a box.

MTN Mobile Money Uganda Limited was recently carved out from MTN Uganda Limited (the telecoms service). This

followed the enactment of the National Payments Systems (NPS) Act in 2020. The NPS Act required telecommunications companies to separate their mobile money services from voice and data services and run them independently, under Bank of Uganda as the regulator. That said, MTN Mobile Money Uganda Limited is 100 percent owned by MTN Uganda Limited.

The company applies a tiered Know-Your-Customer system which makes it easy for businesses to use the MoMoPay platform. Someone doing MoMoPay for their small business for instance only needs to have a fully registered SIM card while a big organisation needs to provide more documentation.

They have made the process as seamless as possible either way, including by availing digital on-boarding kits that pick all the required information easily.

This is part of how the company puts the customers foremost in mind throughout the product development process and aligns its workings to their needs. Its belief is that for them to enjoy the full benefits of the cashless economy, they should be able to transact digitally anywhere: be it at a local hardware outlet, a shop or at the salon. For them to use cashless, the service must be relevant to their lives.

The firm also runs the MoKash product in partnership with NCBA bank, where it offers unsecured micro-loans and savings products. (There will be more on MoKash and NCBA bank, as it too featured on 40 Days 40 FinTechs). MoKash uses the information detailing one's usage of the various MTN services to determine their creditworthiness.

The company is also in the process of launching more products, including those that specifically target businesses. Amongst them will be MoMo-Business, which builds on MoMoPay by availing businesses with more capabilities revolving around invoicing, payments, and collection.

For MomoPay and the like to be adopted by many and to fulfil the greater financial inclusion agenda, there is need for more financial literacy, which would include translating FinTech material into local languages, plus enhancing safety to build people's trust to use digital payment platforms.

Additionally, there is need to make it easier and faster for entrepreneurs with innovative ideas to on-board on open APIs. These open-APIs have standardised some of the key functions of mobile money, like payments, collections, remittances, and bulk payments. That way, someone with a great idea will not get stuck while trying to digitise it. MTN intends to continue doing a lot in that area.



MOKASH/ NCBA UGANDA

NCBA Bank Uganda Limited is helping millions of people access low-cost unsecured credit in the shortest time possible through MoKash, a money lending and savings platform hosted by MTN Uganda, based on a partnership the two entities have enjoyed since 2016. Anyone with a registered MTN Mobile Money number is eligible for MoKash, and they can thus save and borrow on their phones.

With 9.7 million MoKash accounts as of today, NCBA has automatically become Uganda's biggest bank in terms of number of accounts. It must be emphasised that these loans and savings are registered in NCBA's books, and thus the customers enjoy the benefits of being dealt with by a traditional bank, including having their deposits secured by the Deposit Protection Fund. All one needs to do to open an account is dial *165*5# on their MTN Mobile Money registered phone and enter their PIN.

NCBA's partnership with (what is now) MTN Mobile Money Uganda Limited allows the bank to fulfil its ultimate agenda, which is financial inclusion. It thus intends to continue extending financial services through this mobile channel to the millions of Ugandans that are eligible.

As with every FinTech of note, NCBA used the challenges posed by the COVID-19 pandemic to come up with innovative ways to engage their customers and provide solutions for them, even as many were finding it difficult to repay their MoKash loans.

So, as part of their process of managing the pandemic challenges, they worked with MTN to increase customer engagement with a view of gaining an appreciation of the changes that happened within the environment, and thus adapt better.

This increased customer engagement helped NCBA maintain the momentum on customer repayments. Additionally, under the aegis of Bank of Uganda, NCBA provided relief to several customers, enabling them deal with the new realities brought on by the pandemic.

NCBA also recently opened an escrow account with MTN Mobile Money Uganda which provides float management services to MTN mobile money agents and customers. The account can be accessed remotely by them and enables them acquire float on credit to keep their businesses running.

It is a result of NCBA's learning from the pandemic, and its commitment to continue innovating in the space to ensure that it continues to positively impact Ugandans.

A lot of this bright outlook is also fuelled by the introduction of the new regulation, the National Payment Systems (NPS) Act of 2019. At NCBA, there is a strong belief that it will help boost innovation in the FinTech space, and transform Uganda into a financial services hub.

SMEs

We featured a wealth of FinTech SMEs whose innovations are transforming the industry. We are proud to remain that space which is a level playing field for them.

40 Days 40 FinTechs, as we always say, is that platform that enables the small, the big, and the multinational, entrants new and old, to have a chance to shine and to showcase what they do in the space. Additionally, it is also a space for grooming and helping start-ups grow to SME level, at the very least, as our faith in the transformative capacity of FinTech and e-commerce services continues to be rewarded with ever more players in the space. We believe that e-commerce can play an even stronger role in embedded finance i.e. payments. Some of the SMEs we hosted this time, after being a part of the initial 40 Days 40 FinTechs initiative, are thinking of creating custom payment wallets, systems and solutions that allow their clients to conveniently pay anyone from anywhere, whether they are using a card, a bank account, a mobile money wallet or any other payment method that is acceptable within the ecosystem.

This is not only an enabler for digital transactions or for creating digital marketplaces, but is also an enticer for those that are still doing things the old way, so to speak i.e. by opening physical shops, and waiting for customers to come through the door. Electronics and other appliances continue to shift major volumes in sales, with fashion and accessories doing the same. And it is also seen that when it gets to products that are not fast moving or for daily consumption, and/or are tagged as luxury items, customers can be willing to wait for a day or two.

But what we are now advocating for as HiPipo and 40 Days 40 FinTechs is to see the players able to sell and deliver the products in real time (same hour, same day, as may be applicable). This would add value and credibility to the ecosystems. The feeling with which one pays for something and then has to wait for 5 days before receiving is

not as fulfilling as that of someone who acquires it from the shop and uses it, all within a few moments. Such immediacy should happen within the e-commerce space.

Also, the SME participants we featured are still finding challenges from a regulatory cost point of view. For instance, many of those that enable payment services that leverage USSD still find its infrastructure very expensive, and it ends up costing them a lot and hurting their margins. They also believe that communication with SMS modes with portals that are not zero rated by operators brings a higher cost as well. Although they are innovating in the same space with the mobile network operators, the cost for an operator like Airtel or MTN to send an SMS might be as low as 9/=, but on the side of the SME it might be as high as 50/=, or more. This is far from competitive. We believe that these SMES should be given a better environment to operate affordably so that the cost-saving trickles down to the consumer. Picture a scenario where there is no single operator that allows for the selling of airtime for all the networks, but we have an SME that allows that to happen. So you can buy airtime for any single SIM card around the country. However, the airtime is way more expensive than usual. The innovation is thus highly demanded, but cost curtails its use. So, the consumer is left in the same sorry situation, having to carry many SIM cards, buying airtime separately for each, yet one is using the same wallet.

Focus at 40 Days 40 FinTechs will now shift from lamenting that the USSD infrastructure is expensive to demanding that regulators actually put in place facilities that allow for SMEs to access affordable USSD infrastructure and as such enable the trickle-down of

affordable financial services. We also continue to disseminate information about designing affordable interoperable systems. Part of this is through leveraging blueprints like the Mojaloop OSS, and sharing guiding information like the Level One Project Principles, all to better facilitate an ecosystem favourable for the creation of affordable payment solutions.



Trade Lance:

Trade Lance provides a variety of digital solutions for businesses, ranging from integration, aggregation, software development and utility payments, among others, enabling them to address day-to-day challenges and indeed thrive. The company has integrated with Uganda's major telecommunications companies (i.e. MTN and Airtel) to facilitate smooth mobile money transactions.

Furthermore, it has also aggregated with MTN, Airtel, and Lycamobile, and additionally offers third-party integrations to various companies, such as Smile Communications, Roke Telkom, Absolute Energy, Cloud Core, Quick Tap, Bright Life and Alliance Africa Insurance.

With the software experts at their disposal, Trade Lance also provides customised software development. For instance it has developed micro-loans software for financial institutions, and some of its products in this regard include the Yetu Loans Software, HCH Financial Services, Hot Cash, Sukuma Loans and the Yellow SACCO software.

Other software solutions it has developed include the E-Voting Software for POA Star Search, a counselling registration software for Strong Minds Uganda and the Boda-Boda Loans Software. Additionally, the firm offers a bulk payments solution to mobile money registered numbers. Among its clients here are Roke Investments and Fireworks Advertising.

Trade Lance is also known for its *252# financial inclusion USSD and website, which allows for the sending of money across networks at affordable rates, and is a rare case of interoperability in the sector.

Their other solutions include facilitating utility payments, client-relations management, mobile ticketing, school fees payments and the Katala online marketplace.

Part of the reason Trade Lance participated in the 40 Days 40 FinTechs initiative was for the takeaways in implementing financial inclusion best practices. It already implements some, including those relating to Low-Cost User devices and Pricing Transparency.

However, due to deficiencies with some of their partners, they are yet to fully implement Real-Time Settlement, but acknowledge it is of utmost importance especially for those at the bottom of the pyramid, including informal traders for whom cash has to be at hand to facilitate their transactions.

For Trade Lance, the 40 Days 40 FinTechs initiative has provided a platform that brings together

all players to share experiences and challenges, and devise solutions. This is key for the FinTech sector to grow, and is helping reduce the scepticism some in the public still have for digital platforms. That should continue the positive growth in the number of transactions performed.



Jumia:

Jumia has been at the forefront of Africa's growing e-commerce sector; the firm, which connects customers across Africa to different vendors, currently has over 5,000,000 items on its platform, and is also integrated with logistics and digital payment services.

Jumia's range of products and services has grown: having started with the traditional electronics, apparel and appliances, it expanded to food and groceries (and their delivery), and now also pharmaceutical products, which has been handy in the pandemic.

From the onset of the first lockdown in March 2020, Jumia put its partners, both vendors and customers, at the forefront, primarily to ensure business continuity. Their measures included the aforementioned expansion of their services, in order to get more vendors on board and keep them operational. They also ensured restaurants remained open by delivering to them foodstuffs and other requirements. Furthermore, they also provided warehousing services to a number of their businesses to ensure consistency in supply.

Jumia has also made inroads towards supporting women-led businesses. In partnership with organisations like the Kampala Capital City Authority and United Nations Development Fund, the firm has trained women entrepreneurs in various skills, including in digital and business management. Further endeavours towards levelling the entrepreneurial ground has seen Jumia advocate for and enable women access loans. At the firm itself, efforts have been made in the logistics department to hire more women drivers.

For Jumia, 40 Days 40 FinTechs has helped highlight the country's technological innovations. Indeed, such innovation is what is needed to help pull Uganda out of the challenges of the slow economic growth which was triggered and is being further exacerbated by the global COVID-19 pandemic. The platform thus serves not only to highlight the different ideas but also share them with interested parties, which is good for the ecosystem.

Having participated in the 2020 initiative, Jumia picked a number of key financial inclusion lessons which it has since implemented. This includes a strict adherence to its transparency policy, especially in regards to maintaining privacy across what is more often than not a number of parties involved in every transaction.

Also, it ensures that it settles with vendors in time as per the agreed timelines, and additionally acquires the right documentation in form of Know-Your-Customer (KYC) from the vendor to guarantee

smooth business transactions between the two.

Jumia has borne witness as to why it is important to follow best practices like the Level One Project Principles. Many of the businesses they deal with do not have a lot of capital, and Jumia is cognizant of this; that is why it has flexible payment terms, and urges all market players to respect the Same-Day Settlement principle, given that the ecosystem is heavily reliant on cash flows.



UgMart:

UGMart seeks to ease the work of traders by virtualising their cash, making it much safer for them to travel and to pay for goods without having to unduly worry about their safety.

The firm provides Business-to-Business, Business-to-Peer and Peer-to-Peer solutions, and partnered with both mobile money service providers and UBA Bank to provide a virtual e-wallet in the form of a pre-paid

card. One simply deposits onto mobile money, and the deposit is then placed onto the card. This can be done no matter where one is in the world, and they can thus continue their transactions.

The card features two-factor authentication, is thus highly secure, and the owner need not worry if it is misplaced or stolen. It also eliminates other risks and concerns, such as those related to forgery/counterfeiting, fluctuating exchange rates and having to pay insurance.

In its operations to boost financial inclusion countrywide, UGMart has also targeted vulnerable, underserved groups, such as women, Persons with disabilities (PWDs) and people in hard-to-reach areas i.e. those with no access to the internet and/or financial services providers. UGMart on-boards them using basic Know-Your-Customer (KYC) requirements. This works very well for the many people at the bottom of the pyramid who had remained financially excluded, partly because they were turned off by the lengthy processes and stringent requirements involved.

UGMart has simplified the process: all one needs to access financial services is a national identity card and have a phone number that can be verified through the existing platforms. This has proved especially convenient for those who have to make regular SACCO contributions. Uganda has over a thousand SACCOS, and most operate over a large area. It can thus be expensive for someone with a small business deep in a rural area to travel over a significant distance simply to save a small sum with their SACCO. UGMart has enabled them to perform these deposits through mobile money.

For UGMart, 40 Days 40 FinTechs is a platform that has supported the FinTech industry to operate better and safer, especially by enabling interactions amongst industry players and keeping them abreast with the latest technologies.

For UG-Mart, 40 Days 40 FinTechs is a platform that has supported the fintech industry to operate

better and safer, especially by enabling interactions amongst industry players and keeping them abreast with the latest technologies.



Buladde Financial Services:

Buladde Financial Services is a cooperative society that was started by the Buganda Land Board to help people improve their security of tenure on land. Members can save voluntarily, and also have access to affordable credit facilities.

The overall goal and intention of Buladde is for its members to have such confidence in the ownership of their land that they use it as an asset to develop themselves. This, of course, is best understood within the context of the rampant malpractices revolving around land which occur all over the country. These include wrangles over ownership, document forgeries and, in many cases, violent land grabs and displacements.

But when one is armed with the right documentation for their land, they can access credit from financial institutions, or find partners to develop it.

The cooperative is currently serving 3,650 customers in Kampala and Wakiso, with 58% of them being women. And it has been noted that the women are the ones showing greater interest in making savings and accessing soft loans with Buladde, and many are actually involved in entrepreneurial activity at varying scales.

Now, although the cooperative is able to serve its existing clients immediately, it still takes at least a week to on-board new clients as it still has to perform time-consuming background checks.

That is one of the reasons Buladde Financial Services set out to streamline service provision by embarking on a digitisation journey last year (2020, at the time) as it sets up to serve its clients in a more convenient and efficient manner. Already, all client information has been uploaded onto the new system, and plans are in place to create a mobile platform for members to quickly access information and services.

This drive was partly informed by Buladde's participation in the inaugural 40 Days 40 FinTechs. It now seeks to make improvements on KYC, and make inroads on Real-Time Settlement. Indeed, it is with the former where it still faces a number of challenges: a lack of reliable information, and the systems for it to be accessed through interoperable platforms, means that Buladde always has to be on the lookout for forged documentation, and those that have already defaulted elsewhere.

The above, and other issues, are some of the challenges Buladde knows it will address better once its digitisation drive is complete.



START-UPS

On several occasions, HiPipo has predicted that in the near future one of the most disruptive innovations in African payments in particular and in the digital space in general is going to come from a start-up, and a Ugandan one at that. The 40 Days 40 FinTechs initiative is a clear testament to this. For example, for the first time we had an innovator lending units of electricity to customers. And we are not only talking about the things that could be described as commonplace in the space. Other innovators are causing major disruption with digital ticketing, be it for events, going to the movies or booking a seat on the bus. More are leveraging cryptography, blockchain technology and cryptocurrencies, going as far as thinking of creating a localised Bitcoin of some sort, a Ugandan made cryptocurrency. A number of them are thinking of creating micro-insurance products that allow for different users to on-board onto insurance rails that serve their most immediate problems. An insurer that helps a family with a policy that grants the children access to medical care for common ailments like malaria and typhoid is not only providing a solid, long-term solution to a global problem, they are also

turning these individuals into persons that see the value of having themselves and their families on-boarded onto digital rails, becoming active participants in the ecosystem.

Having start-ups and niche innovations in digitisation further ensures that there is another avenue for education and advocacy for the adoption and use of digital financial services. For when an innovation arrives on the scene and is solving a unique problem in the space, like if it eases the process for SMEs to go online and market their goods, or aids small traders that want to shop stock from China with a single rail for them to do their purchases, it will soon be adopted by many others. This' because we live in what can be called an ideal adaptive economy, where people prefer a solution that makes sense and which already works for others, rather than experimenting on something which might backfire for their business. This' especially true for those in the micro capital bracket.

Relatedly, 40 Days 40 FinTechs fits in by ensuring that we disseminate foundational material that guides the users, innovators, regulators, big operators, and the like, to understand the best practices in the space. This includes facilitating understanding on how to leverage the Level One Project Principles to create user-friendly and affordable payment systems, further clarifying to those we host, start-ups included of course, how the Principles can further help them achieve the margins which will scale their businesses and afford them a satisfactory standard of living.

We were glad to have a participant that brings to the fore the core role education plays in creating new innovators in the FinTech, and indeed STEM, space. They are teaching and training children from the age of 4 upwards to code and design digital solutions, information systems and services. HiPipo believes that hosting such players and enabling them access the right information pays off as they disseminate the same to the children in their charge. Teaching is definitely one of the

assured ways to guarantee that within a decade's worth of 40 Days 40 FinTechs initiatives, we will be well on the way to achieving a thriving ecosystem; it will be full of not only informed developers of payment solutions, but also those that from practice understand the basic innovations and disruptions that help solve the payment problems of an economy, and thus also create avenues that Include Everyone.



Yassako/Mallan:

Yassako is an instant micro-credit facility for utilities and is a product of Mallan Company Limited, a firm which specialises in value added and advanced credit services in the mobile payments space. At the moment, Yassako is just for electricity, but the hope is for it to be scaled and expanded to other utilities, including water and pay TV.

For Mallan, which took part in the inaugural 40 Days 40 FinTechs in 2020, the exposure brought by the initiative directly boosted the uptake of Yassako, increasing its test customers by 100% (from 50 to 100), even though it was still in the pilot phase at the time.

However, the growing interest in the product was/is doubtless a testament to how FinTechs are increasingly being used to solve the day-to-day challenges facing millions of Ugandans.

Today, Yassako is offered in partnership with Airtel Money, and is a solution that enables users to recharge their pre-paid electricity on credit at any time. The product was introduced after it was noticed that people were running out of electricity, especially at inconvenient times, like late in the night, after the prevalent power distributor shifted its metering system from post-paid to pre-paid, a move many were not prepared for.

Yassako enables a user to get electricity units on credit and pay back within a maximum of 30 days. They can get a minimum of UGX. 2,000 worth of units and a maximum of UGX. 10,000, with each purchase attracting a 15% service fee. These low figures are intentional, given that Yassako is intended for emergency situations, and it would be foolhardy to dispense sums that many in the end might fail to clear.

Yassako helps carry one through that small fix they might be in at the moment, like to have lighting overnight to study. It is expected that one should be able to quickly settle the amount the next day and then make a larger purchase.

For one to qualify for Yassako, they need to have been an Airtel subscriber for at least three months. And to qualify for a certain amount of credit, one must have spent at least twice the credit value they are requesting for.

Yassako has been lauded as the kind of product that helps to attract one to on-board onto digital rails, and take the first crucial step to financial inclusivity. Furthermore, it is well aligned with the Level One Project Principles, enabling low income earners to become part of the digital economy. Some of the principles it adheres to include Real-Time Payment and Same-Day Settlement. Additionally, the Know-Your-Customer (KYC) principle is also key as they cannot extend credit to someone they do not know.

It is the first product of its kind on the African continent and offers great opportunity for home businesses and SMEs that might need critical assistance at vital points of their production chain. At the moment Mallan is in talks to expand the Yassako service beyond Airtel Money users. Further rollouts are hoped for pay TV users.

Additionally, Mallan intends to introduce Yassako for water, as the main service provider is also in the process of introducing a pre-paid metering system. For Mallan, 40 Days 40 FinTechs has given it a platform to reach more customers, plus interact and engage with other key stakeholders. The initiative further serves as a validation platform for FinTechs, and helps quickly remove barriers to investment and funding. It can also be an asset in attracting the talent the industry needs.

However, start-ups of its size are wary of some of the provisions in the recently enacted National Payments Systems Act: the stringent requirements and high fees demanded for one to get a license might deter small start-ups and lead to a sector monopolised by a few, more often than not, multinational entities.

It is thus necessary for the Uganda Government to provide incentives to the local FinTechs, e.g. tax holidays, capital etc., for at the end of the day it is local start-ups that best come up with solutions for an area's unique problems.



Tiqteq:

Ticteq provides a crowd-funding platform that enables anyone to share their cause, garner support, and then receive contributions from well-wishers to address it. One's cause could involve anything, from asking for educational support to pleas for medical assistance to calls for social events, among others.

And when one donates, the benefactor receives the money automatically and instantly at no cost. Ticteq, however, does perform comprehensive follow-ups to ensure that the donated funds are used for their intended purpose.

The portal is also fully transparent in its operations: you can always know who donated, the total number of people who did so, and the total amount involved. The receiver can then withdraw the money and deposit it onto their

mobile money or bank account at any time. It has been noted, though, that Ugandans in general are yet to fully appreciate the dynamics of crowd funding. Most still associate such drives for instances where one's situation is dire e.g. when they desperately need funds to travel abroad for medical care.

To popularise the innovation the firm is undertaking an awareness drive on its website to generate interest from the public.

Besides crowd funding, Ticteq also has an online ticketing platform. It is intended to bring event organisers and revellers in one place, allowing the former to sell tickets to the latter for sports events, theatre shows, music concerts, the cinema, comedy shows, and festivals, among others.

Using the platform, event organisers can contact people who have bought tickets, and a customer can also get a refund in case they are unable to attend. It thus offers a complete solution for someone who wants to successfully organise an event, without them having to worry about handling physical tickets and cash/coins, and further negates the dangers of counterfeit versions of both. Again, one simply visits www.ticteq.com to buy a ticket using either mobile money or a credit card. However, this function has, of course, been greatly affected by the COVID-19 pandemic, and its associated restrictions and lockdowns.

Ticteq is taking part in 40 Days 40 FinTechs for the second year running and has an appreciation for the initiative because it has helped place a spotlight on the great solutions created by Uganda's various innovators which most people did not know about and yet they are to solving everyday challenges.

The appeal is for the Uganda Government to increase its support to the FinTech industry, for the latter holds the answer to boosting financial inclusion. Otherwise, as of now, the two are yet to move on the same footing.



Her Duuka/Computing Palace Technologies:

Women still largely lag behind men when it comes to STEM involvement in general, and digital skills in particular. This includes a lower chance of them having their businesses online compared to their male counterparts.

To help address this, Computing Palace Technologies, an ICT firm that specialises in software development, development of financial products, websites design and hosting services, ICT consultancy, internship training, and customised ICT training, is introducing 'Her Duuka', a web-based e-commerce platform that will enable women entrepreneurs post and sell their products online.

This should enable women-led businesses, many of which have been adversely impacted by the COVID-19 pandemic and the resultant restrictions, to stand a chance of getting back on their feet. Indeed it has to be noted that many collapsed due to their proprietors' lack of digital skills, and it is imperative that this deficiency is addressed.

Thus, over the past few months, Computing Palace has been imparting digital skills to these ladies to enable them use the digital channels, and Her Duuka in particular, to market and sell their products. Many businesses that had not adopted social media and other digital platforms have now done so and on-boarded.

At the moment, being on the Her Duuka platform is free for the women businesspersons. However in time a small subscription fee might have to be considered in order to sustain it.

Also, financial inclusion has been fully considered as the business owners shall only receive their payments through mobile money.

Her Duuka is the latest of a number of innovations by Computing Palace Technologies. Over the years, the firm has developed different management systems, including those for SACCOs, schools, hospitals, and churches, among others, all to enable these varied establishments operate more efficiently.

For Computing Palace Technologies, taking part in 40 Days 40 FinTechs for the second year running, the initiative has opened avenues for new partnerships and has also broadened their perspective in respect to financial inclusion and interoperability, which are now being integrated better into their product and systems development.

KYC is another aspect on which they have improved, and now better informs how they sell to a customer they are targeting.

For the wider FinTech industry, there is an acknowledgement that more needs to be done to address the existing gender gap. Also, at the moment the COVID-19 pandemic is still wreaking havoc, and firms continue to lose clients, staff and resources. It would thus help if the Government steps in with a number of incentives for the sector.



Merchandise UG:

Merchandise Uganda is an online marketplace and business community that supports Ugandan businesses to get exposure and market their products. Because of the platform, many micro and small enterprises in Uganda that had lacked an online presence, often due to their proprietors lacking digital skills, now have such a presence. This has exponentially increased create their business and product visibility. The businesses are now connecting to buyers across the world, and are tapping into the global financial system.

The platform was established due to the realisation that multitudes of Ugandan businesses have no form of an online presence at all.

Merchandise Uganda continues to gain prominence in Uganda, and as of now has supported over 200 businesses – these establishments now have online shops and thus have an opportunity to interact with their buyers globally.

The platform allows merchants to create mini-showrooms in which they display and market their products to potential buyers. They do this by posting product photos, videos, reviews and tips, and even outright advertisements. It also has chat features where prospective clients/customers can inquire about products from the merchants themselves.

Today hosts variety of enterprises, including agricultural, construction, manufacturing, legal, logistics, hotels/hospitality, educational, family, general merchandise and health, among others. The platform has also enabled the merchants to directly connect to their suppliers and manufacturers, especially those in China. The merchants can make orders and resupply without having to travel to China. This has greatly reduced their cost of operations.

The benefit of being on Merchandise Uganda was seen when the COVID-19 lockdown and restrictions were hastily imposed: the businesses on the platform to remain connected to both their suppliers and customers. Those subscribed to Merchandise Uganda still had their shops open, and used delivery teams to take products to the buyers.

One can subscribe to Merchandise Uganda using their Google details, and it costs from UGX. 50,000/= to 200,000/=, depending on the category chosen. One can then upload quality pictures of their products.

And in a bid to support women, Merchandise Uganda trained 30 members of the Uganda Women Entrepreneurs Association in digital skills to enable them promote their businesses online. They also offer three months of free services to all women-owned enterprises that subscribe to the platform, particularly helping them to brand their businesses and providing support for them to create social media accounts.

Merchandise Uganda is taking part in 40 Days 40-FinTechs for the second year in a row, and for

them the initiative has created visibility. Indeed, from participating in the inaugural edition they attracted the attention of a partner who connected them with the American Embassy, and they now do business with Ugandans in the Diaspora.

To further support the growth of the Uganda's FinTech industry, it is requested that the government puts in place enabling policies, especially in relation to providing easily accessible and affordable internet, and offering tax incentives. That way FinTechs will be incentivised to play a bigger role, and continue the drive to a cashless economy.



Alpteq:

Alpteq was established in 2019, and specialises in software development, delivery and maintenance, with a bias for solutions that serve the underserved and improve financial inclusion. The firm thus takes a customer-centric approach when developing products,

this to ensure that what it brings to the market addresses the target audience's needs.

This explains why the firm, in a bid to include as many people as possible, introduced web-based products. They are keeping in mind the fact that most people, specifically the average African that remains largely underserved, do not use high end devices.

Alpteq's solutions include POS UG, UG Clinics, School Novas and Ease-Lend. With the latter, Alpteq has automated a number of SACCOs run by women, including Self Sustainable Graduate and Mayenze Traders, among others.

Prior to the COVID-19 pandemic, the School Novas product was strictly a management tool for schools. But following the outbreak, and the subsequent lockdowns and school closures, Alpteq used the opportunity to revamp and re-design it to now include an e-learning option, which enabled learners to continue with their studies from home. They also made effort to include as many female teachers as possible. And to enhance financial inclusion, the payment for e-learning is done through mobile money. It's just another example of how FinTech in particular and technology in general adapted to the new normal and mitigated the effects. To enable businesses watch their costs so as to survive the pandemic, Alpteq rejigged its POS UG solution to enable the businesses prioritise their expenditure better and lower their expenses where possible.

For Alpteq, the 40 Days 40 FinTechs initiative was an opportunity increase their visibility in the market, and also introduced them to new technologies, like Mojaloop. This thus shall definitely have a direct positive effect on their products.



YTIB Capital:

One of the issues blockchain technology has faced in Uganda is that of it being confused with cryptocurrency. That is not necessarily a bad thing. However, as anyone familiar with the situation will readily reveal, cryptocurrency has been at the centre of a number of pyramid schemes and other such related scams, not only in Uganda but indeed worldwide. Of course there is nothing wrong with cryptocurrency, it is just that a number of unscrupulous people continue to try to illegally benefit from the confusion surrounding it.

So, when blockchain is conflated with cryptocurrency, as has happened in Uganda, there has been trepidation, in spite of it being a wholly separate technology, in spite of their interconnectedness.

YTIB Capital is a financial markets software

company that deals in several software initiatives, especially for financial markets in Africa. And dealing with the suspicion around blockchain is one of the major issues it continues to face as it seeks to bring the ordinary person into the ranks of the technology's users in ways that will meaningfully impact their lives. This it seeks to do through its SMS-to-blockchain API service, which is as easily accessible to the person deep in the village as it is for the tech-savvy city dweller.

Crucially, YTIB Capital is slowly bridging the gap. Indeed, with their service one can actually harness the power of Blockchain without realising it. One can store their records, or even transfer ownership of an asset, simply by using an SMS, and a binding document will be created electronically to document the transfer. With your phone you also send an SMS query/request to a server or a network. From the responses you can then incorporate this query capability into your business. One of YTIB Capital's clients, which promotes communal gardening, is using this capability to monitor and document land dealings on their platform.

Another product of YTIB Capital is Ubuntu FSX, which is an aggregation software for stock exchanges in Africa.

Other than the negative publicity surrounding blockchain, it has also been noted that the country has a limited number of blockchain developers, plus there is an absence of funding directed towards related projects.

In its attempts to build capacity, YTIB Capital has through one of its trading platforms commenced a blockchain training course, where its clients are taken through the basics in order to improve their understanding of the technology.

For YTIB Capital, the 40 Days 40 FinTechs initiative is crucial, and it is necessary for there to be more like it, primarily for the awareness it creates about and around the technology, blockchain inclusive.



KaCyber:

KaCyber is a digital transport and logistics technology company that builds digital ticketing and payment systems for public transport operators, including for buses, trains, and ferries. The motivation behind the KaCyber innovation was due to the fact that Uganda's transport operators lacked reliable and cost-effective ticketing systems. As revealed by KaCyber's own survey, the losses incurred due to the prevalent method of dispensing tickets manually were regularly as high as between 30% to 40%.

Their digital platform serves both the transporters and passengers; on the operator side, KaCyber provides point-of-sale machines that allow for instant ticket issuance and payment collection, as well as real-time sales reconciliation. And on the passenger side, there is an Android mobile application and a website.

KaCyber's online ticketing is currently being used by the Uganda Railway Corporation (URC) on the Kampala commuter train, and by a number of local buses companies including Star Link and Highway Coaches. Other than addressing the issue of losses, the solution has also increased efficiency and convenience, especially as passengers can now book a ticket online, and only arrive to travel at the required time. This has greatly worked for women and Persons with disabilities.

The company actively implements a number of Level One Project Principles, including when it comes to security implementation in its product ecosystem. Their products are developed with bank-grade security controls.

They have also established strong partnerships with companies that comply with global payment standards at all levels. Their systems are connected to payment processors, banks, and mobile networks, and that they are also in discussion with payment schemes and integrators that offer not only real-time payment settlements but also cater for real-time cancellations and reimbursements. KaCyber's main challenge, which is indeed the main challenge of the sector, is that it is largely informal. They are thus still finding it difficult to introduce their solution to more transport stakeholders. But optimism remains high for adoption as in Uganda, like largely elsewhere, digital solutions are being promoted.

Affected by the pandemic like many other businesses, KaCyber mitigated their situation by leveraging their solutions to start providing delivery services.

For KaCyber, taking part in 40 Days 40 FinTechs was highly beneficial, as the initiative enables start-ups to get a lot of exposure at next to no cost, and opens up connections to a wide network of potential partners at both local and international scale.

It was noted, however, that while the FinTech industry continues to grow worldwide, Ugandan start-ups continue to struggle to bring their solutions to market due to low adoption of technology and limited resources to break through these barriers.

In that vein, collaborations with the banks and telecommunications companies are needed now more than ever to create favourable platforms, and will allow for exponential growth of Uganda's FinTech industry.



Club Tangaza:

Coding is about giving instructions to your computer using a coding language. In this age of the 'Internet of Things', devices interact through code; it is thus no wonder that coding has thus been referred to as the literacy of the 21st century. It is thus imperative that coding, and the skills required to execute it, are introduced at an early age.

Serving this purpose is Club Tangaza, which is an online coding platform for children and beginners. The company set out to teach the young generation coding skills so that they develop both love for and proficiency in it early in life. They have a variety of programs based on age and skill level: so a learner simply enrolls where appropriate, and starts.

And in the process of doing this, Club Tangaza have ended playing another vital role. Normally when one talks about software engineering, and indeed anything in relation to STEM in general, many people, including females themselves, will tell you that it is the preserve of males. And a lot of thinking and way of doing things starts in childhood, where children are told they can or cannot do this or that.

Club Tangaza have set out to demystify such gender constructs, and operate on the belief that anyone, be it a girl or boy, woman or man, whatever their age or profession, can acquire software development skills and excel at them.

Both the boys and girls are exposed to the same tools, environment, curriculum, equality in assessment and opportunities. However, enrolment is still higher for males than females, and the males also tend to stay committed to completing the course in its entirety more than their female counterparts.

To address the gender disparity, and indeed encourage more girls and women to enrol, Club Tangaza provides discounts for them. However, this is far from enough, seeing as how they are just a small, private entity.

There is thus a call for more incentives from both the private and public sectors. Leading females in technology can play a front-row role in advocacy. The government can contribute to the cause by rolling out similar programmes in schools. It is important that such knowledge is not only left to the people who can afford it, but even those at the grassroots. There is that young person who prior might not have ever seen a computer but given

the opportunity would end up contributing to the country's technology sector.

For Club Tangaza, taking part in the 40-Days 40-FinTechs initiative is ideal opportunity to join hands with others that are championing digital inclusion. By shining a light on local start-ups, 40 Days 40 FinTechs is helping to provide a platform for the digital solutions that will ultimately automate the country's business processes.



Insure Small-Small:

Insurance penetration in Uganda remains below 2%, and efforts by the traditional players to increase its uptake have not yielded much. A lot of this is due to them supplying the same products, albeit through different channels, showing no regard for innovation or delivery and never considering the majority of those in the population.

However, the situation is changing as InsurTech comes into the market, and with the potential for a raft of fresh innovations.

One these InsurTechs is Insure Small-Small, which is banking on a micro insurance strategy that targets the "forgotten consumer", the forgotten consumer being that individual who is economically active but who has been mostly priced out of the (traditional) insurance coverage. These include the likes of motorbike taxi riders (popularly referred to as boda-bodas), members of SACCOs, and many others.

The hope is that by focusing on the forgotten consumer and building user generated demand, they will contribute to the greater ecosystem. The COVID-19 pandemic has also wrought all manner of economic shocks, and brought to the fore how access to life-saving care, including medical insurance, can be too highly priced for even the most well to do. The need to carve out niches attuned to the average customer is starker than ever.

Insure Small-Small is helping to service this need: they have launched Bomba-MED, a micro-insurance product to cater for the treatment of malaria and typhoid. The statistics speak for themselves when it comes to those diseases: malaria, for example, affects up to 10 million Ugandans, and takes up almost a quarter of all outpatient visits.

And while the cost for treating malaria can be manageable, sickness can strike at the most inopportune moment, hence the need for insurance protection. The Bomba-MED plan costs UGX. 5,000 (slightly under USD. 2) monthly.

And the platform works by fusing five verticals into one application: across disease diagnosis, treatment, logistics, e-commerce and technology. A user can self-on-board through a USSD application, through dialling *284*89#. They can buy a policy using mobile money, and are on-boarded after a few days. And should they need to, they can then file a claim, again on the platform. Insure Small-Small's partner

clinics and pharmacies also use the same USSD code to verify the claim, and an instant payment is disbursed to the partner's wallet via mobile money.

Insure Small-Small has integrated a number of the Level One Project Principles. This includes making use of the low cost USSD technology, weaving it into a futuristic technology, which enables them to programmatically create a USSD-smart contract and thus make an instant payment possible upon verification of a claim. And, of course, since USSD can be accessed on low cost devices (dumb phones), the service is fully accessible to the target audience.

Innovations like the ones being ushered in by Insure Small-Small have benefited from a number of reforms ushered in by the (Ugandan) Insurance Regulatory Authority (IRA), specifically revolving around micro-insurance and risk-based supervision.

It must also not be ignored that InsurTech like Insure Small-Small can play another crucial role: the data generated by it, and other such tech, has the potential to positively contribute to financial inclusion. It can be used to readily identify the underserved but potentially profitable niche markets which are best served using low cost technology tools.

However, Insure Small-Small is grappling with a number of challenges, chief of which is the lack of access to strategic partnerships. Indigenous local insurers have little appetite for innovation and the foreign firms, who dominate the market, envelop themselves with layers of red tape.

Additionally, the insurance structure presents other bottlenecks: one needs an underwriter and a reinsurer. Unfortunately the latter are still conservative and resistant to the new thinking InsurTech is bringing in. Then there's the regulatory structure, which, in spite of a number of reforms, still hampers (especially) small, start-

up players, who now need deep pockets to cover the new demands aligned around covering risk. For Insure Small-Small, the 40 Days 40 FinTechs initiative, and the arena it places all the participants and stakeholders in, serves as a catalyst for teamwork and networking. Players can cooperate with and complement each other. There are thus also opportunities for established teams to acquire smaller ones, merge with others or get acquired, thus strengthening the ecosystem.



WOMEN IN FINTECH

The HiPipo Include Everyone program, as is known, is actually a number of intertwined initiatives, projects and events geared towards stimulating innovation at various levels and in a variety of groups. We bring on board start-ups (who one might refer to as newcomers), them being the FinTechs we believe have the capacity to scale upwards and go on to serve many. And we of course also maintain a strong relationship with the big players and others already established in the space.

Then there are our efforts targeting the underserved, and in this case, women specifically. That is the Women-in-FinTech Hackathon, and the Women-in-

FinTech Summit that quickly follows it: the latter being the prime event for in-depth discussion and insight on how to foster even more women-centric innovation, especially in financial technology. And now we have also commenced the Women-in-FinTech incubator: over 3 months HiPipo mentors over 20 of these outstanding lady programmers and innovators on what it takes to become entrepreneurs, managers and leaders of big/national standing and impact.

Part of the long-term success of the first ever Women-in-FinTech Hackathon is seen through HiPipo celebrating the fact that a number of the participants, who had been required to come up with Minimum Viable Products (MVPs), went on to further develop them, and also registered as companies. Now full FinTechs in their own right, these start-ups came back as participants of the 2nd season of 40 Days 40 FinTechs and showcased innovations that are solving unique problems and serving unique segments. One specifically targets students, getting them low-interest loans for their tuition, which allows them to stay in school. Another is building capacity to integrate payment system into the hardware industries and allow for hardware products to be distributed easily. The other is aiming for SACCOS to be interoperable, allowing their subscribers to make payments using mobile money; and they are creating a banking solution that leverages Mojaloop to ensure payments in real time. This will enable easy and secure payments of micro savings and loan instalments.

We are proud of the fact that these solutions came about in large part due to their creators being hosted in our hackathon environment. Of special significance, naturally, is that all these products are heavily leveraging the Level One Project Principles, designed as interoperable, real-time retail payment systems that are seamless and secure. This allows for users to trust and have confidence in them.

These are genuine, women-led enterprises, and we doubtless see them continuing to grow and scale and increase their capacity to serve millions of people. We indeed hope to see more 'graduates' in the next 40 Days 40 FinTechs. Hopefully they will increase from the three we had to half a dozen, or more.



Kanzu Money/ Kanzu Code:

Kanzu Code is a software development company that builds digital solutions that seek to improve businesses and the communities they operate. Their products include Kanzu Banking, Kanzu Jobs, online stores and a number of other custom digital solutions. And after taking part in the inaugural 40 Days 40 FinTechs, the team from Kanzu Code came up with another solution. Theirs was actually the winning MVP, Kanzu Money.

Many businesses find themselves entangled in non-core business functions and end up giving little time to core operations, which affects their operations. Payments are one of those non-core operations that they tend to spend a disparate amount of time on. That is where Kanzu Money comes in: it is an aggregation solution that enables MSMEs to manage

their daily payments needs without interrupting their core business operations, and also conveniently, effectively and securely make bulk payments- they can do so to their employees, suppliers and vendors, among others, in a single click. This also effectively eliminates the risks that come with carrying huge amounts of physical cash around.

The system uses a Comma Separated Values (CSV) file where all the details, including particulars to the people to be paid and the respective amounts are input and then uploaded onto the web-based application system to accordingly effect the payments.

Furthermore, the solution is an interoperable one as it uses the Mojaloop software. This means that payments can be effected from the system to any mobile money service provider or bank, effectively and at the same cost.

By its very nature i.e. it being an effective solution for MSME operations, Kanzu Money has an innate bias towards supporting women's financial inclusion. This' due to the statistic that four out of every ten MSMEs are owned by women. And unlike many other products on the market, Kanzu Money serves their needs.

There are further plans in the Kanzu Money rollout strategy where more initiatives specifically tailored for women will be introduced so that more of them can on-board.

Kanzu Money implements real-time payments and same-day settlement, and will implement tiered KYC with subsequent releases.

For Kanzu Code, being part of the 2021 40 Days 40 FinTechs continues its firm relationship with HiPipo. The initiative plays a major role in publicity and raising awareness about the crucial role FinTechs play in the country, especially now in a pandemic where digitisation is of utmost necessity. It is also pleasing to see a Woman-in-FinTech

MVP graduate into a full product that qualifies to showcase at 40 Days 40 FinTechs.

Their observation is that though Uganda's FinTech industry is still growing, its progress is hampered by a number of factors. Chief amongst these is the lack of funding/capital; and when an innovator gets access to a line of credit, it's more often than not too high. Another issue is trust, with many Ugandans still predominantly only comfortable using physical cash, and wary of digital finance.

It is further noted that the Ugandan market is still small, a situation further exacerbated by the fact that competition for it also comes from the large, multinational telecommunications firms.

Lastly, the regulations and policies are prohibitive in places. However, in spite of all this, it cannot be denied that there is a lot of opportunity for the sector. Cash transactions still take up over 90%. To digitise these is where the challenge, and the reward, lie.



PesaJet/ E-Moments:

E-Moments are a multi-business company whose various activities include events management, a confectionery, and a payments business application called PesaJet. They are the second team that stand proud as alumni of the inaugural Women-in-FinTech Hackathon & Summit, who went on to further develop their MVP, the aforementioned PesaJet, into a product satisfactory enough for the 40 Days 40 FinTechs showcase. Today it can be used to make transactions and payments anywhere and anytime, and offers services in agriculture, utilities and education.

In fact, in relation to the latter, is a service called School Advance. It is built to address the challenge many parents/guardians face when it comes to paying their children's school fees, where many times failure to do so results in the unfortunate child being dismissed from school until the dues are dealt with, with the learners suffering disruption to their education.

With School Advance parents can access low-interest loans in order to pay their children's school

fees and the inconveniences of school disruption.

The low-interest loans are part of how PesaJet/E-Moments are promoting a financial inclusion agenda, making them affordable and accessible to everyone. In this, too, they go further to encourage women to on-board: they are offered loans at a slightly lower rate to the men, 3% to 5%.

PesaJet is built on technology that includes Java, API programming and Mojaloop. They used the latter to encrypt with the open-loop systems so that everyone is able to transact cheaply, irrespective of the digital financial service provider they are using.

Additionally, PesaJet is also using the account lookup service and notifications provided by Mojaloop to enable people get updates and transaction alerts through SMS.

PesaJet has been commended for its smooth and easy-to-use interface, which is an element they were mindful of from the start, and continue to improve.

Other Level One Project Principles that PesaJet caters to include Pricing Transparency as you perform transactions, and its usability on Low-Cost Devices, such that it is accessible and affordable to the person at the Last Mile.

For E-Moments, the 40-Days 40-FinTechs programme provides a platform for a FinTech to enhance its visibility, which can translate to more customers. Also, the opportunities to learn and interact are practically immeasurable: one listens to many great stories and gets many good ideas from those in the industry and other stakeholders.

The challenges the Ugandan FinTech sector has to contend with include issues of fraud and the high costs associated with registering and running one as an enterprise. Of concern as well is the low literacy many still have on matters digital, with some going as far as to believe that using services like PesaJet is a trick to lead one into indebtedness.



Kuzimba Services:

Kuzimba Services is an online web application which aids estate, site or home building by making purchases of building and construction materials easy and providing access to the associated professionals.

Whether one requires bricks, cement, doors or bathroom fixtures, or the builders, carpenters, plumbers and painters to place them properly, anyone undertaking a construction project can now access all of them under one roof, just with the click of a button.

One no longer needs to physically move around looking for building materials, or be stressed about how to get them to the site, as they can now be accessed online and delivered at their construction site.

And by providing connections to architects, construction/building experts, carpenters, interior designers, cleaners and engineers, plus travel insurance, among others, Kuzimba can practically cater for everything from the time one has a vacant lot to when the building is complete.

Once one visits the website (www.kuzimbaservices.com) they simply have to register and create an account by inputting all their details. They can then proceed and add to their cart by making the purchases they need.

When an order is made, Kuzimba gets a message that someone has initiated a purchase. Kuzimba replies to the client with an RFQ and a work plan, depending on the material they have requested for. The client then needs to sign on the documents sent, and from there the necessary arrangements are made for them to receive their order in the fastest time.

They have taken time to make the aesthetics of the site appealing, so that browsing it is a pleasant and hassle-free. They are taking on clients, and feedback remains positive.

Kuzimba Services participated in the inaugural Women-in-FinTech Hackathon in September 2020. It was this participation which spurred them to start transforming what was still an idea into something concrete. This they did by developing a cash management system, which is a fundamental requirement for any online business, and has enabled them operate efficiently.

For Kuzimba, the 40 Days 40 FinTechs initiative has created for them visibility and is exposing them to latest trends and technologies. The platform is definitely an opportunity for them to continue growing.



DISSECTING THE VERTICALS

LENDING

Mobile lending, especially with matters to do with micro-lending, has been great for alerting users of mobile financial services to the greater capabilities of a digitised system. For many years banks and other players in Uganda's formal financial system failed to achieve a target of more than a few million people uniquely borrowing money. And one of the major reasons for this was the KYC requirements, which were unattainable for many. Someone would need to have collateral, evidence that they are employed, and proof of a salary that is channelled through a bank. For farmers, they would need to have records of sales they have made over years. These requirements meant that many of those that might have had the capability to pay back these loans still could not qualify simply because they have no formal financial records. But we now are witnessing a seismic shift in how lending is done; first it was the mobile network operators partnering with banks, as we are seeing with NCBA and MTN Uganda, and Jumo's partnership with Airtel. The latter have, for example, introduced micro-loans as low as USD. 2, which you get on your phone in real time, and can pay back at just 9% interest after a period of a month. A borrower is even allowed to repay within a week at the same fixed interest rate. Many other players, big and small, have joined the space, including the likes of Numida, for they see the tremendous opportunity in serving the underserved. The attitudes that governed lending for long are being erased: the players in the micro lending space have no qualms about offering credit lower than 300 dollars; they readily target the long underserved, like farmers, as long as, say, the village chairperson knows them. We are thus seeing a fair bit of modification in what counts as KYC. And as we speak about matters relating with the Level One Project Principles, it is pleasing to see them helping reshaping what constitutes KYC. Every single community is unique in its own needs, and thus our advocacy has always revolved around enabling every single player in the space understand the needs they intend to serve. They would thus adjust their conditions, especially with matters to do with KYC, based both on the unique needs of

that community and how it understands financial services. As HiPipo we believe that micro-lending, and especially mobile lending, informs of and advocates for the value that exists in digital financial services. If we want to have many more people onboarding and acquiring formal financial transaction accounts, either using their mobile accounts or banks, we need to show them the value of keeping their money in the digital space. Lending comes in handy in this regard. For someone who needs capital, if they get to borrow it through that channel and it works for their business, they would want to continue using the same service. And opportunities would soon spring for other services: for example, think of those selling clean energy, like solar. They would be able to leverage the same space easily. One would be able to buy solar using hire purchase, for example. Who knows, next we might see people borrowing and getting cars using mobile money, simply because both trust and convenience are now embedded in the system. Soon to follow will be other financial services, like insurance. We have already seen governments and related agencies launching products with telecom operators, allowing people to invest using mobile money.

What have we learnt going forward, as HiPipo and 40 Days 40 FinTechs? The 2 seasons have reminded us that it should remain a core objective for us to support the players in the lending space by, first of all, helping them better appreciate the kind of needs that exist in the market; secondly, by ensuring they access the tools and technologies that help them scale profitably, which will directly translate into them giving out as many loans as possible; and, thirdly, we are going to advocate for bigger investments in the space. We have seen such investments happening in different countries across the continent to great effect. Thus we are finding ways of encouraging the big players, like banks, multinational organisations and other institutions that seek to invest money to direct a good amount to micro-lending, for it will be transformative for many.

One of the things which impressed us as we went

through their profiles and products was discovering the amount of disruptiveness. It is greatly encouraging to see how it is now possible for people to get those small sums of money. One of the people we interviewed talked of them as working loans: they are not acquired to buy a car or build a house. What they are is that little amount which helps you keep the business running and close the deal, like enabling you fuel your pick-up so that you can make a big delivery, or buy more flour so that you can bake all the loaves a school client ordered. Those little sums can be highly impactful.

Another prospect for micro-lending is how it can be an important accelerator for enabling digital identity systems by governments all around Africa. We very well know that one of the biggest barriers for lending is identity. If you do not know someone, and the government does not know them either, they are literally non-existent. And there could be a time when they need a letter from the local authorities, but those might not know them either. But having a line to micro-lending can serve to give assurances of someone's national identity. Having it proves one's national identity as a registered citizen, giving a guarantee to the people that are willing to give out these loans that they will not be defaulted on.

So scaling digital identities will save governments a lot of money, which it is at the moment using to print many documents, plus the entire process of managing, distributing and securing these national identities.



Finablr/Enabling Finance Ltd:

Enabling Finance Limited has created a solution that links borrowers to professional money lenders, drastically reducing the time and requirements the everyday person uses to access capital.

The solution is called Finablr, and it is custom-built to conveniently, affordably and safely serve people who were previously underserved by the traditional finance sector. Most Ugandans are unable to qualify for Tier 1 Commercial Bank Loans, for reasons that include them being judged as not possessing what is deemed adequate security and not having audited cash flow records, amongst other procedural roadblocks. However, because Finablr is operating in the Tier 4 sector, it can advance credit for the borrowers if the collateral put forward qualifies against the credit's worth.

Furthermore, the firm also imparts basic financial management skills to its clients such as cash flow management, budgeting and financial reconciliation, among others, enabling them to do business better.

To access a loan, one only needs to download the Finablr App, set up an account and submit a loan request, which is then relayed to all the lenders registered on the system. Physical contact only occurs at the Enabling Finance after an offer with acceptable terms is received.

Loans range from UGX. 100,000 to UGX. 20 million, while repeat clients can access up to UGX. 50 million. The borrower is also assured to get their money as soon as the loan is approved, and the monies are disbursed that day. Even if the lender is wiring cash using a system that requires 2-3 working days, Enabling Finance has an agreement in place with its lenders to immediately release the agreed sum to the borrower. In time, Enabling Finance is reimbursed by the lender.

Unlike the traditional financial service system which requires qualifications and experience, with Finablr even one without these can sign up and start lending. This' because the Enabling Finance team will manage the entire process on their behalf, from pre-qualification of borrowers, linking the lenders to the borrowers, and managing the repayments systems all the way to the recovery. So, even with as little as UGX. 100,000, the firm has the tools to help you become a lender.



Numida Uganda

Access to credit is what micro and small business owners need to expand their enterprises and improve on their standard of living. However, it is difficult for them to access bank loans because they lack collateral, in spite of the fact that they employ the majority of Ugandans and contribute about 30% of the country's Gross Domestic Product.

Numida seeks to close this gap by helping them access unsecured capital.

Using historical behavioural data and business performance to predict risk, Numida is able to extend digital, unsecured and affordable working capital loans to these businesses through their mobile application.

The loans require neither paperwork nor collateral, and are disbursed within two hours for first-time borrowers and in a matter of seconds for repeat customers.

Numida are working towards being the first and largest mobile platform in Africa by focusing on offering convenient, responsible digital financial services to semi-formal African micro and small businesses. Their target is to enable at least a million small business owners on the continent to achieve their dreams by 2030.

Unlike banks that ask for a multitude of requirements for one to access a loan, Numida only requires three things: one must own a business, have a national identity document (ID, passport or driving permit) and a mobile money number registered in their name.

The applicant is required to download the Numida App, fill in their business details, and upload photos. Once the loan is approved, money is sent to the applicant's phone through mobile money. Numida offers working capital loans ranging from UGX. 300,000 to UGX. 10 million, payable within one to six 6 months.

Same-Day Settlement is a core principle of Numida's product, as it gives convenient loans and services within 24 hours and transactions are settled on a near-instantaneous basis.

Women business owners account for a third of Numida's clients. Having observed that women are significantly less likely to access capital and are more likely to be informal, Numida has ensured that lending to female-owned businesses, and building services to support them, alongside other overlooked segments, is a core part of what they do.

Numida continued operations throughout the pandemic and lockdowns, and saw its portfolio grow during that time. This occurred even as Numida froze interest, extended and/or waived fees for those existing customers negatively impacted by the pandemic. The acquisition of new customers ensured that collections remained steady.

Numida is now partnering with SafeBoda to roll out a capital and micro credit product for the latter's clients. SafeBoda vendors will now enjoy increased access to the financing needed to grow their businesses and should increase their loyalty and engagement with SafeBoda.



CardPesa

Many Ugandans, especially the youth, are running small businesses, partly as a measure to rescue themselves from unemployment, the rate of which remains high. Uganda is actually on record as one of the most entrepreneurial countries. However, the business failure rate is also exceptionally high, and this is in large part due to the business owners not being able to access credit. Again, this occurs in large part due to the formal financial players' insistence on collateral, which most budding entrepreneurs do not have.

Discount Cards Limited's product, CardPesa, offers a solution. It is an online platform that enables ordinary people to access revolving credit on their mobile devices and/or digital wallets. Borrowers access collateral-free working capital loans instantaneously to invest in their businesses so as to maintain or increase their earnings.

The CardPesa mantra is to help you 'fund your hustle'. They thus do not go the route of lending for large

investments, like buying a house, land or car. They will instead enable you to fuel your vehicle so that you can get started with work. They will give you money to perform your daily activities and not be hindered by a lack of that small input you need to get going.

CardPesa Using The 5Cs:

Instead of asking for physical collateral, CardPesa assesses the borrower's credit worthiness and loan limits using five Cs – the borrower's **character**, **capacity**, **capital**, available **conditions in the environment** and **collateral**. Collateral in this case being one's bio data, references and proof of the existence of one's business or workplace.

The borrower is also required to subscribe to the platform via www.cardpesa.com/signup, and the subscription lasts a year. If one is given a monthly limit of, say UGX. 500,000, they can borrow UGX. 20,000 today and then even another UGX. 30,000 tomorrow. The important thing is for none of one's borrowings to go beyond 30 days. Such a borrower thus has access to the tune of UGX. 6,000,000 annually, as long as they pay back each sum borrowed within 30 days.

One's credit history on the platform thus begins to serve as the basis on which their limit can be increased.

To increase their service avenues, CardPesa integrated into Airtel Money, MoMoPay and several banks to easier provide instant credit to its clients.

For safety, the CardPesa platform uses two factor-authentication. A user is thus required to have a secret PIN to remove the money off the platform. They also need an operator PIN. For instance, if one uses Airtel Money or MTN Mobile Money, they will need that secret code or that of their bank account before the money can be released.

While a third of CardPesa's clients are women, it has been observed that women are still less likely to take loans, primarily because they are

more risk averse. However, to raise women's loans uptake, CardPesa are seeking to partner with women empowerment organisations and together demonstrate how the CardPesa credit model can help them build their businesses and increase their revenues.



Wewole:

Jumo's Wewole product is a micro-credit solution that provides a convenient way for mobile money subscribers to access loan facilities via the mobile money platform.

Jumo specializes in social impact financial products, which it offers in partnership with Mobile Network Operators (MNOs) and Financial Service Providers (FSPs) to especially enable Small and Medium Enterprises (SMEs) access to credit, savings and insurance products.

Wewole is offered in partnership with Airtel Uganda and can be accessed via USSD. You simply dial *185# and select option 8.

Customers can access loans ranging from UGX. 1,500 to UGX. 800,000, depending on their credit score.

The loan is payable between 7 and 30 days. Defaulting within the agreed period attracts a penalty and may affect one's creditworthiness and future borrowing. So far, the firm has disbursed over \$3 billion worth of loans to over 18 million customers and SMEs in seven markets across Africa and Asia, with a 97% repayment rate and a reduced cost risk of 4%.

The company uses advanced data science and machine learning to create the fastest and leanest financial services infrastructure. Wewole is an unbiased product: anyone above 18 years can access a loan if they have a registered mobile money SIM card. No other documentation, paperwork or collateral is required.

At the moment women form a third of Jumo's customers, up from a fifth, and they constitute almost 40% of disbursements. Wewole has performed well during the COVID-19 pandemic, with an increase in loan disbursement to the tune of UGX. 100 million, which has been attributed to product flexibility, meeting specific needs of the market segment and demand.

This was a demonstration of Jumo modifying its strategies to suit the needs and conditions of its customers in the current times. This included, among others, the continuing to disburse loans to repeat customers, waiving late payment fees for the lockdown periods, extending loan repayment terms and continuous customer engagement.



AGRICULTURE

Agriculture is the backbone of our economy and contributes over 60% of our net sales as a nation. And this is a similar case with many other economies around Africa. This' because agriculture arguably has the easiest entry; almost every one that is willing to farm can do so, either by using their own land, or renting that of someone else. For many years in our society there was no formal training for people to do agriculture. Most people learnt on the job, doing things their way and producing what they could.

Due to the COVID pandemic, and the disruptions it wrought on the economy, we saw sudden and extreme fluctuation of commodity prices. For example, pineapples were being sold in batches of 10 at just UGX. 10,000 shillings, and yet earlier that same amount could only get you a single large one or two small ones! That is a big loss to the farmer who either way spent a lot of time and effort to attain that yield. Having innovators that are coming and bundling digital and payments in one space, connecting and bridging the gap between the farmer and the consumer, is not only a way to keep farming as a sustainable and profitable source of livelihood, but is also a way to add more value to agriculture as a sector. This happens in a number of ways: you can think

of the person wants to have produce brought fresh from the garden directly to their home; another has a factory, and although they were able to buy from so many farmers they still have no single way of connecting with all of them and knowing where they are. Awareness about digital's capabilities to create an e-market place for agricultural products, a node that becomes an inclusive ecosystem for everyone, one that what we could call a hub for agricultural payment and sales, means that here we can have a web portal (which we may ideally call an e-commerce platform) that can connect many farmers in one place. This would allow them to reach millions of customers without them having to first know each other or have to travel anywhere. And it can assist in democratising pricing for agricultural products. A farmer that has not been able to break even in the past years, once able to leverage digital communities and platforms, should be able to perform much better financially in the coming years, and leave enough for the payment enabler and transporter to use the remaining percentage to deliver the goods. And in the end many other players in the space will be enabled: agriculture is directly involved in the transport business, with those who deal in agro-inputs, manufacturing, hospitality, and many others. Once these are all put together, imagine an innovation that allows all these players to be thought about as participants. Whether this comes about as a public private partnership, or is done directly private, it must always be remembered that the action of produce coming into a home always starts from a farmer having a seed.

It is thus necessary that the innovations bundle up and connect the different participants, and incorporate the transport business, which is key to agricultural operations. What would soon happen is you would have an agricultural post office of sorts, which would allow for anyone to buy something using their phone, and a vehicle would be stationed to receive and then deliver from certain areas. The farmers will get their money paid in real time and the transporters will have business every single day. And all of us that will be consuming these products

shall be confident that we are getting the best. This will be thanks to two things: creating an enabling digital environment and ensuring that we have interoperable seamless payment systems that allow for the payer and the buyer to trust the system of payment. A farmer should trust that they are going to be paid for their products, be it a cow, goat or cabbage, and the payee should trust that the one they are sending to is the right farmer. That is the benefit of having ecosystems.

It was encouraging for the 40 Days 40 FinTechs initiative to see a rise in the number of agriculture-related FinTechs from a single one last year to four this year. And they are all operating differently: one helps farmers access buyers big & small; the other delivers agricultural produce fresh and straight from the garden to your home or business; another is enabling those that want shares in the agricultural space to invest in it; and the other is lending to farmers, specifically catering to their agro-input needs, fertilisers inclusive. And for the latter, all they need to know in order to lend the farmer is who their local council chairman is, and the location of their land. A number also provide agricultural outreach and financial services to assist the farmers. The issue of pricing food prices in Uganda has always been of concern due to the multiple hands produce normally goes through. Between the farmers and the consumers are all manner of transporters and middle-men. And yet it is the two at either end of the chain who benefit the least, the farmers getting little for their produce, and the consumer paying exorbitantly to cater for multiple handlers. A digital financial ecosystem that links the two and cuts out these middle-men automatically ensures that both the farmer and the customer are the ones to benefit the most. This direct link should also serve as motivation for the farmer to produce more.

Also of concern for long have been the promises to finance small-scale subsistence agriculture which are yet to yield much. It is encouraging to see that for a number of these FinTechs the small-scale subsistence farmer is actually their main target and focus, and they are thus bridging a vital gap in agro-finance.

Moving forward, we shall seek to continue to normalise the links between agriculture and technology. As we speak about agro-tech from a FinTech perspective, it is our desire to make sure payments are enabled seamlessly. We know the ecosystem has donors, regulators, large corporate entities like banks, and even telecom operators. And in the entire value chain, in one way or another all of these are consumers and all have customers. We thus need to normalise agriculture and agro-tech and make it a part of every kind of technology that we innovate. We also need to ensure that as we think of creating payment hubs and systems, we create well thought out agricultural use-friendly cases that allow for enabling payments within the space. They would possess an understanding of the dos and don'ts of the ecosystems so that we can enable everyone and include everyone in the broad case.



EverLend

It is a given that every business needs credit at one point or another to support enterprise growth and other operations. However, most Ugandan Micro, Small and Medium Enterprises (MSMEs) and farmers have been deprived of this, mainly because they lack the collateral and financial records that most formal lending institutions require before giving out a loan.

To bridge this gap, however, EverLend Uganda has innovated a non-collateral credit services model that is expected to on-board this initially excluded category of borrowers. They have started with farmers and small businesses in Ibanda district, Western Uganda. Established in 2020, EverLend offers a range of digital credit

services, ranging from SME loans, agricultural loans and enabling the acquisition of farm-inputs on credit. It does not require for one to have security to access credit services. Everyone thus qualifies for a loan, which is the epitome of inclusivity. For one to access a loan, they simply must download the EverLend App onto their mobile phones or signup via their website, www.everlendug.com, and answer a few questions. Basing on the answers, the system determines one's loan limit.

However, if one desires to exceed their given limits, they can request so. They will be gotten back to within half an hour to provide more information for an assessment to determine if they qualify for the amount requested. If one can

complete the entire process online, the money is disbursed there and then.

EverLend also extends market information to its clients and further provides them with record management systems, enabling them to improve their business management.

While the solution is still being piloted in only one district, the significant uptake within this short period of time is indicative of the credit-drought small businesses and farmers have been facing. EverLend have served over 100 clients to date, and 90% of them are women.



Greenshares

It is estimated that at least 80 percent of Ugandan farmers are smallholders and despite their everyday challenges, they still contribute the most to agricultural production. To help them boost their production and incomes, Green Shares, a social enterprise which started operations in 2019, is leveraging technology and providing a range of

services to help the farmers unlock their potential and become part of the financial ecosystem.

Green Shares' services include market linkages, agronomy, savings and provision of micro-loans through partnerships to helping agro-processors find quality raw materials, among others.

Once the farmer takes their produce to the community agent, it is verified for quality and quantity, logged onto the Green Shares platform and then payment is triggered, approved and effected in real time using mobile money.

For the farmers who do not have access to phones and mobile money services, the platform has a feature that enables them access their money through their next of kin.

Currently, Green Shares mainly deals in the maize, soybeans and rice value chains, and operates in the districts of Luwero, Kiryandongo and Kasese.

To date, they have on-boarded 180 farmers, earning UGX. 30 million, with the volume sourced from farmers estimated at 35 metric tonnes.

Green Shares also provides a platform where investors can inject some money in the company's Trading Fund for a return.

Furthermore, the company also leverages partnerships with micro-finance companies where it operates to help the farmers of the area access credit.

In Luwero for instance, this partnership is with Micro Credit for Development and Transformation (MCDT), which provides loans mainly to women to enable them to buy farm inputs and pay labour costs.

It has been observed, though, that the small-sized farms which dominate the sector have reduced commercial viability, and this increases aggregation costs.

However, Green Shares is working on an intervention

that will see it scale up by leveraging farm leasing solutions for farmers. For example, several landowners are in urban areas and their land in rural areas. It is hoped that such land can be leased to the farmers through Green Shares for a return.

Green Shares also plans to launch digital farms, starting in the districts of Nwoya and Luwero. Individuals without land or time will be able to invest in agriculture, owning these digital farms with Green Shares managing them.

The investor will be able to choose a value chain of preference to invest in, be provided the GPS coordinates of the farm and receive timely updates on how it is performing. They will also have crop insurance to reduce risk. The company also plans to promote an integrated farming model, which will enable the farmers to earn income all-year-round.

They also have in development a farmers' platform. With it they intend to profile farmers, track their yield, income, and costs of production, making it possible to devise appropriate interventions for higher production and incomes.



Enimiro Online

Customers wary of buying vegetables, fruits and meats that have stayed long on market stalls and lost their freshness now have reason to smile. Enimiro Online brings a guarantee of freshness as they acquire directly from the garden/farmstead and deliver straight to your home.

Enimiro Online was established to aid last-mile financial inclusion through connecting farmers directly to consumers. They thus target customers that are interested in purchasing and consuming foods freshly harvested from the garden, including grains, vegetables and fruits. They also provide animal products like poultry, livestock, fish and honey, amongst others. Plans are also underway to add coffee and herbal products.

Enimiro have been fine tuning their products and operations for the past year and believe that they are at a critical point where they have gathered the market information and contacts, plus engendered the necessary goodwill, to deliver 100 percent organic foods to their customers.

They believe what they have brought to the e-commerce space is a unique product which leverages technology to improve the livelihood of both the consumers and farmers.

Their motivation revolved around the fact that although Uganda is an agro-based country, most farmers are struggling to get a ready market for their produce, the very produce they struggle to bring forth in the first place. This brings forth the even more unfortunate scenario that after

harvest the produce can go to waste and often is disposed of at giveaway prices.

The Enimiro Online platform uses Level One best practices such as real time payment and same day settlement. To enforce this they have signed strict contracts with suppliers. They believe that the same way they expect pay from customers is the same way the farmers should be remunerated, immediately.

Their orders and payments are managed by Flutterwave, an African FinTech unicorn with operations across the continent, which has also featured in both editions of 40 Days 40 FinTechs.

EzyAgric

Smallholder farmers have for long suffered exploitation and/or been cheated outright at various stages of their production chain: be it when buying inputs, where they have been sold counterfeits; or when selling their produce, where they have been exploited by middlemen who offer them very low prices. This has played a great deal in keeping them poverty-stricken.

However, a group of four software and computer engineers have set out to make things better for the farmer. The group developed the EzyAgric mobile and web application to provide a platform for farmers across the country to access genuine agricultural inputs, get markets for their produce, and acquire information to improve their overall operations, and raise their living standards in the process.

Through the App, the platform

provides a one stop centre for everything a farmer needs, right from garden mapping and planning, buying inputs to market access.

The platform is built to address gaps around soil quality/testing, provide for the availability of quality seeds, fertilisers and farming tools and other inputs. It also provides information on best farming practice, like on weeding, harvesting and post-harvest handling. In effect, EzyAgric is an agricultural extension and advisory service: say, after getting appropriate advice on soil testing, a farmer will apply the right type of fertilizers, do garden mapping for estimation of input quantities and have an awareness of the expected yields.

Also, EzyAgric provides linkages to profitable produce markets, introduces farmers to reputable suppliers, and connects them to financial institutions. And once one sells their produce through EzyAgric, they can also receive



their payment through mobile money. They are also in the process of integrating with banks so that those who prefer receiving their money on such accounts do so.

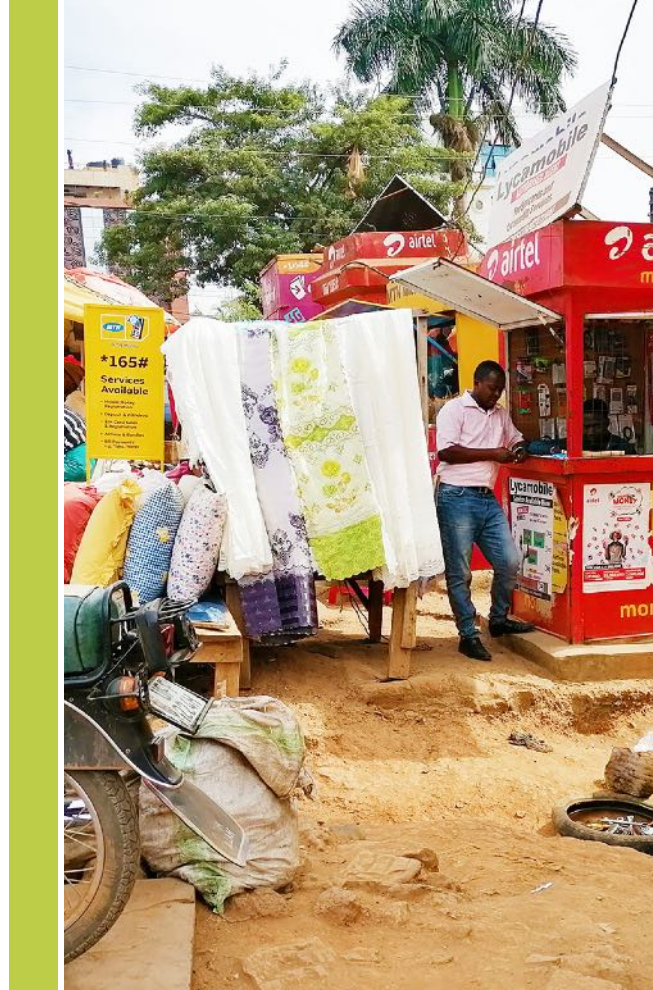
EzyAgric believes their app presents a less laborious approach to agriculture. It was previously thought that for one to do agriculture, they needed to have a hoe and a garden, and make a variety of moves to access (genuine) inputs and then wait for the market. However, EzyAgric is rewriting how farmers operate at all levels and at all occurrences. For example, if a farmer's crops are infested by a certain pest, all the farmer needs to do is to take a picture of the pest and send it to the app. They will soon receive feedback on possible pesticides to apply, and which suppliers can supply a genuine product.

As of now 250,000 farmers have accessed services through the EzyAgric platform, with 40% of them being women; and over 30,000 of them are financially active i.e. they are buying agricultural inputs and selling their produce on the app. EzyAgric are also developing EzyCredit: here, the farmers' data being will be used as the basis for access to affordable credit from EzyAgric or a partner financial institution.

To use the platform, one needs to download and install the EzyAgric Farmer app from the Google PlayStore onto their smartphone and then register for an account using their mobile phone number. However, even farmers without smartphones can access the app through a network of village agents EzyAgric have put in place.

But the best and most seamless option for the farmer, of course, remains the one where they access and interact on the platform themselves, using their own smartphone.

It has also been noticed that many rural areas still have connectivity challenges: there is need for improvement on infrastructure to ensure the right digitization of the value chain, and further lower production costs.



REMITTANCES & PAYMENTS

That every single transaction must end with a payment should not be a surprise to anyone. And that many of those that travel out of the country remit a lot of money back to their home- which has become a vital component of African economies, used to pay health care bills, to build houses, to bulk up savings, to keep spouses in comfort and children in school- is not a surprise either, because to seek work is the primary reason people become part of the Diaspora. And thus, any talk about secure digital financial services is not complete without mentioning about remittances and payments. Indeed, payments take

up almost 100% of everything money-related that happens in every economy. Whatever transaction that is made somewhere is normally a payment for something. Yes, a few might go out as savings, but they still also end received as a payment somewhere by someone. A loan is not a payment because it is a debt; whoever receives a loan gets into a journey of having to make payments until the original debt and its interest is cleared. So payments become vital for anything that we are supposed to run as a transaction in the economy.

We are advocating to see that the 1.7 billion people worldwide that lack them get transaction accounts, get formal into using money, and learn to use what we the call digital money. Thus, in time, they will directly contribute to us progressing first to a cash-lite economy, and later on to a cashless one.

We were thus delighted that in this, the second season of 40 Days 40 FinTechs, we hosted over 10, all active in the space. Some are facilitating payment for SACCOS, thus enabling millions to pay using mobile money. Others are enabling merchants, shop and salon owners, and motorbike and vehicle taxi operators to be able to pay. There are those that ease restocking for commodity traders, while a few are making headway in the field of education, making it easy for parents to pay school fees for their children, deposit pocket money for them, and also pay for other school requirements, if and when needed.

We were also proud to host an African unicorn, Flutterwave: it has received a lot of investment because of its disruptive interventions in the payment space, and has also enabled easy integration of payments with different platforms. And indeed many online service providers have been able to integrate with players like Flutterwave, and will attest to the fact that the process is so simple. Putting aside the issues of OTP, which is supposed to be a security measure and approach, because we advocate for ensuring that we disseminate secure financial services of

course, we can always find better ways of operating this. Some are going to work with bar codes, allowing you to scan a code and be able to make a payment, and that is seamless. But of course payments cannot go so far digitally without setting in place a number of conditions. First of all, it has to be guaranteed that users realise that these payment modes are trustworthy. Also, it needs to be made sure that they do not become more expensive than fiat money. For as long as digital payments are more expensive than ordinary cash payments then potential on-boarders will keep away from using digital rails, a common challenge we witnessed with all the participants we hosted. The issue of taxation also needs to be quickly addressed; it is fast becoming the top barrier for the innovators.

So, going forward as HiPipo, as conveners of some of the best innovators and policy makers on the continent, part of what we intend to do in matters of payments is ensuring that we direct discussions with regulators to appreciate both the benefit of having money in a digital ecosystem as a government and how we can enable many more payments by allowing affordable payment services. So how do we achieve this? For one, even though it might not be of interest for some if a central payment hub is created that allows us to apply to one payment switch, the truth is that this cuts costs. For instance running a normal functional payment hub costs about USD. 5 million for each player each year. But you can imagine a situation where all of us share a single payment hub, and thus all collectively spend that USD. 5 million dollars. We will save millions, still operate in the same way, and create so many more opportunities.

Also, on the other side as you talk about local payments, because these happen every single day, they happen for almost everything money; on the side of growing our economies and on the side of growing foreign direct investments, payments usually go hand-in-hand with remittances. People travel far and wide to go earn a living and make things better for themselves and their families. Remittances are to the tune of more than USD. 500 million every single year, money that is transferred to multitudes

of places. However, as is known, these remittances cost a lot to send. And thus, although the existing players like Western Union and Money Gram, plus the traditional banks, have been able to deliver real-time payment and transfer systems that allow for a sender to remit money and the receiver to immediately get it, the process is still far from cost-effective. It is unheard of that someone sends 100 dollars and those 100 dollars are received at the other end.

So when you see innovation hubs, and initiatives like Mowali, which are advocating for the creation of a continental payment hub, specifically in charge of making sure remittances happen everywhere mobile telecommunications exist, they are already thinking in the same direction as 40 Days 40 FinTechs. Our hope is that whoever enables payments and wants to do remittances can all work with the same payment channels, can create a switch or work with an existing hub that allows inter operable payments. This shall cut down the cost of innovating and/or reinventing the rails, actions that make remittances more expensive, and make governments miss out on a lot of investment money/resources, which would have been used to further develop the ecosystem and the wider economy.



Xente Tech Ltd:

Africa must take advantage of the exponential growth in digital finance it is enjoying to leap into the future. Adopting digital payments will allow for faster financial inclusion, trade and other opportunities that should not be missed.

The COVID-19 pandemic accelerated people's adoption of digital payment methods, and cross-border payments are on the increase. These combined factors provide a sound basis on which it is imperative for African FinTechs to take the lead.

And Xente Tech Limited is one of those doing so. It is a mobile financial services and e-commerce platform that offers an all-in-one business account that helps business owners and finance teams manage expenses, make payments to team members

and suppliers, and collect payments.

Key among the solutions Xente offers are disbursements: this entails sending mobile money, airtime or data to groups of people; and payment collections, which is the collecting of money from mobile money, Visa or MasterCard, on behalf of businesses.

Xente is also in the process of launching two other solutions. This will include an online payments solution that will enable businesses to make online payments with virtual Visa cards. And an expense management solution to cater for operational costs like fuel, meals and per diem. Both will obviously help make inroads towards a cashless economy and save businesses from the present practice of managing their expenses manually using cash or cheques, where if one needs money for everyday

expenses they have to walk to the accounts department. Such direct contact is indeed hardly possible as people more and more work remotely.

Xente's solution ensures businesses continue to do everyday payments, not hamstrung by the strictures of the pandemic, and guaranteeing the health and welfare of staff and suppliers alike. Xente has a number of corporate clients, including Jumia, M-Kopa and UAP. And about 70% of those they provide services to are women. They also strongly believe that partnership and collaboration will move the FinTech industry forward.

Xente implements the Level One Project Principles on real time movement and settlement of transactions, which are especially important for those at the bottom of the pyramid. They also put emphasis on things like progressive Know-Your-Customer (KYC), instant payments, same day settlements and ensuring that their customer care is immediate. For them, following the Principles is a direct line to one having a competitive advantage.



Pebuu School Product/Pebuu:

It is widely documented that cash is one of the channels through which COVID-19 spreads.

While most parents are used to giving their children pocket money in cash, this, given the current pandemic, greatly exposes them to the virus.

Offering a cashless solution, however, is Pebuu Limited; the company created the Pebuu School Product, which replaces the cash with an electronic wallet.

The product has been piloted in a number of schools and is working well. Using Point-of-Sale (POS) machines or the mobile app, students can access their wallets using their thumb print or a unique number, greatly reducing the use of physical cash in the school environment.

The firm, which trades as Pebuu Africa, started off five years ago with

just four agents, who were dealing with only airtime. Currently it has 2,400 merchants countrywide, with 80% of them using the POS machines and the remaining 20% using a mobile app on their smartphones. And the majority of these agents are women.

Pebuu has also partnered with mobile telecommunications companies, including MTN, Airtel, Africell and UTL, to, through its payment platform, distribute their products and services like mobile money, airtime, data and OTT (the Over-the-Top tax, which was recently discontinued).

It is also partnering with banks, three of which— Stanbic, GT Bank and Centenary- have already on-boarded. And they are in the advanced stages of adding others onto the platform. So now, when you visit a Pebuu agent, you are able to cash-in or cash-out mobile money, pay your bills or do banking at the lowest cost possible.

Pebuu also offers the Pebuu Care product, which is a micro credit solution that focuses on women and youth. It enables the agents to borrow money in real time and pay back the loan in 24 hours or 30 days.

The firm uses Level One Project Principles such as Know-Your-Customer (KYC) and real-time settlement. And when on-boarding agents, Pebuu relies on KYC from telecoms or banks as every agent is required to have either their own registered mobile phone number or that of their company's director, or a bank account.

The main reason why Pebuu participated in 40 Days 40 FinTechs is because the initiative is now seen as an avenue by which Ugandan FinTechs are opened up to the global space, thereby creating opportunities for global partnership, partly in form of grants, equity or low interest financing.

And the latter element is crucial, for though the FinTech space in Uganda has greatly evolved over the past 5 years, many still face the active threat of liquidity challenges. Solving this will ensure many have the resilience needed not only to survive but to thrive.



Flutterwave:

Flutterwave has set out to simplify payments to enable businesses within Uganda and beyond to trade globally, and have the ability to make and receive payments.

The firm serves over 10,000 merchants in Uganda, including 3,000 businesses. However, Uganda is just one of 33 countries Flutterwave operates in, and indeed it is a certified continental giant, and was recently qualified as just Africa's fourth unicorn, with a valuation of over a billion US dollars. It operates in partnership with companies such as PayPal, MasterCard and AliPay, among others. Flutterwave's goal is to change the way businesses transact with their customers

both in Uganda and in the rest of the world.

In addition to providing a payments gateway, Flutterwave has also built a number of other products such as the Flutterwave Stores which provides a platform for businesses to sign up, upload and sell their products free of charge, without having to build a website.

Furthermore, in a bid to support the growth of women-owned businesses, Flutterwave now offers Women's Day grants. These are annual and run in March, and involve Flutterwave choosing 5-10 woman-owned enterprises in each of the markets they operate in. These chosen businesses each receive a non-refundable grant of between 5000-10000 US dollars to help them grow their enterprises, improve their

competitiveness and raise their bottom-line.

Flutterwave were amongst the firms that participated in the inaugural 40 Days 40 FinTechs, and recognise the platform as one that helps shine a light on the industry by creating public awareness and gradually building the trust needed for the growth of the sector. The financial space operates on trust, and its customers have to be comfortable with those they choose to hand their hard-earned money to.

While it currently does next-day settlements, Flutterwave is exploring how to speed up, how to accept all devices, and to incorporate USSD, so as to involve all businesses that want to transact with them.

A lot of Flutterwave's growth has sprung from it viewing the existing market challenges as opportunities for FinTechs to innovate upon. And it further recognises that a lot more needs to be done to improve inclusivity. In Uganda, for example, 70-80 percent of Ugandans are still unbanked. But, as is the Flutterwave way, this counts as a fantastic opportunity to build on. And one thing all in the ecosystem can collectively do is increase public awareness about financial technology to help boost its usage.



PayClide/Cytrone Limited:

Cytrone Limited is a payment technology company which offers a domestic, open-loop multilateral system that facilitates electronic payments. Its product is called PayClide, a solution which has made access to financial services safe and more convenient.

Part of PayClide's appeal lies in its web and mobile applications, which provide a merchant aggregation system and peer-to-peer mobile payment platform that can be accessed anytime, anywhere.

PayClide comes with a wallet which allows people to save money, send it to friends and family, or withdraw it at their

convenience, and also pay utility bills and access banking services. The firm has partnered with mobile telecommunication companies (MTN and Airtel) and, as of now, KCB bank. It has integrated with Interswitch for bank settlements.

PayClide further enables merchants to accept payments from mobile money and cards, plus also deposit the monies received without necessarily having to travel to the bank. And money transfers on PayClide are currently free, with only a small percentage charged to settle funds into the bank.

People have been struggling to keep their cash secure given the long distances to formal financial

institutions on the one hand, and the high transfer and withdrawal fees, plus taxes, which are levied on mobile money services, making it unappealing to use.

For PayClide, being part of 40 Days 40 FinTechs was an opportunity to showcase its product and gain visibility in Uganda's nascent FinTech industry. Also appreciated was being introduced to financial inclusion best practices such as Pricing Transparency and use of Tiered Know-Your-Customer (KYC), in addition to latest technologies such as Mojaloop, which are powerful enough to spur whole economies.

Initially, telecoms had required agents to have certain kinds of documentation, including trading licenses, bank accounts and certificates of registration in order to run an agency business. This was not possible for many.

But now, with the Tiered KYC, PayClide are amongst those that have several agents because the number of necessary documents was reduced to one having either a national identity card or a trading license. This, in particular, has benefited women.



SafeBoda:

SafeBoda, which is based in Nigeria but headquartered in Uganda, started off as a simple ride-hailing app for clients to access motorcycle taxis, known in Uganda as 'boda-bodas'. From then, it has continuously added various services to its platform, starting with enabling its customers to shop for food and groceries, buy airtime and make payments for things like fuel, among others.

And over the coming year, as it awaits a National Payments Systems (NPS) license from Bank of Uganda, the company has continued to build its payments ecosystem, plus open-loop and savings products. Also, its pilot for working capital loans will soon be launched so as to extend credit to

the firm's merchant partners to help them grow their businesses. This will enable more people to access financial services easily and affordably. And with this loans product priority will be given to female-run enterprises, which will boost inclusivity for women, and reduce their marginalisation in the market.

Indeed, SafeBoda's ultimate goal is to provide an affordable ecosystem that allows its customers both to send money across networks for free and to withdraw at a greatly reduced rate.

Mobile money ecosystems today form a crucial and large part of Uganda's and Africa's economies

as a whole, and having affordable fees is one of the major ways on which they need to be improved.

This becomes doubly significant when one considers that while cash is still a predominant method of payment in Uganda and across the African continent, the COVID-19 pandemic is drawing people towards cashless transactions. This presents a great opportunity for FinTechs to grow. But there is a critical need for all stakeholders to work together as an industry to share knowledge, technology and the regulatory stack in order to solve existing problems. That is the only way Africa's huge unbanked and underserved population will be served.

Bank of Uganda has been commended for the NPS Act, which has provided a stringent regulatory framework that should give customers the assurance they need to transact with FinTechs and other DFS providers in a safe and secure way.

This will not only drive industry growth but will also offer huge opportunities for partnerships, and should make for exciting times as more companies start being funded and cooperating. This should see FinTechs ably covering the gaps left by commercial banks, especially when they facilitate cross-network financial transactions at minimal risk.

For SafeBoda, the 40-Days 40-FinTechs initiative offered an opportunity for them to share with the world the solutions they are working on and also hear from others what they have in the offing to solve the challenges of the day.



PayTota:

While the outbreak of the COVID-19 pandemic was majorly disruptive and brought setbacks to most sectors, for PayTota Uganda it was an opportunity to innovate, something that became a common theme for FinTechs of note.

The pandemic and the lockdown(s) that followed thereafter proved important in revealing the pain-points that existed in the market, especially in terms of purchase, payments, and automation when it comes to on-boarding and same-day settlements.

The desire to create a solution to these pain-points, now exacerbated by the pandemic, saw the birth of PayTota Uganda Limited in 2020; it is a white-label brand that is building Africa's next generational platform to solve problems over mobile and the web. The firm seeks to deliver convenient and hassle-free purchase, payments and on-boarding services across the markets where it operates.

PayTota is scaling its operations and as of now, in addition to Uganda, it has established offices in Tanzania and is setting up shop in Ghana, Zambia and Kenya.

It is building a platform where anyone interested simply plugs in, with their own branding, and with due diligence done can go to market even the next day. PayTota have established partnerships in Uganda and across their target countries to ensure that they meet their promise of delivering seamless services.

On-boarding their platform is automated and as soon one logs in and their details, their contract is sent on the same day, for what they guarantee is a seamless and fast service. Their products chiefly target the real estate and the travel industry, especially tours & travel players.

PayTota is also in the final stages of developing and launching a product for expectant mothers, which it will deliver in partnership with a number of financial institutions and insurers. It can be activated right from the day one's pregnancy is confirmed, and indeed a pilot of the same is already being run in Ghana.

For PayTota, taking part in 40 Days 40 FinTechs was to leverage on the initiative's ability to showcase Uganda's FinTech sector, and the belief it will bring favourable attention to their platform. It was also acknowledged that Bank of Uganda's passing of the National Payments Systems (NPS) Act will create confidence in Uganda's FinTech industry, and help attract much needed capital for the sector, enabling it develop on par with that one in the likes of Kenya, Nigeria, Rwanda and South Africa, who have made better progress simply because they instituted regulation much earlier.



ChapChap/ ChapChap Africa:

Despite contributing immensely to Uganda's Gross Domestic Product (30%) and employing a sizable number (over 2.5 million), the country's Micro, Small and Medium Enterprises (MSMEs) face a multitude of challenges, primarily that of having limited access to credit. The conventional commercial banks choose not to extend credit to them as they are considered risky, have no collateral and are largely not registered.

On identifying this gap in the market, ChapChap Africa, which is a low cost mobile payment application, sought to bridge it by bringing MSMEs into the digital age and enabling them and their customers enjoy financial inclusivity. The foundation for this was through ChapChap Africa rethinking and redefining what constitutes a MSME: while for conventional financial institutions they are merely viewed as businesses on a balance sheet, on interacting with their proprietors ChapChap Africa identified them as the means by which the owners catered for their basic needs, including food, shelter and education.

With the ChapChap Africa app, MSMEs are in just five minutes able to tap into financial services such as mobile money, and do deposits, withdrawals, plus bill payment services. A great barrier has thus been removed for the MSMEs: even now, if one wanted to access mobile money as a service, 90% of businesses would fail simply because they do not have formal documents,

like a bank account that has been operational for six months, let alone being registered. Majorly, they would also fail to raise the minimum of \$ 400 needed to be able to access the lines.

ChapChap Africa has aggregated the MSMEs, and in partnership with the telecommunication companies, lowered these requirements almost to zero, and in so doing increased the uptake of the solution they offer. All that is needed is an application fee of \$5 (about UGX. 20,000) and a simple Know-Your-Customer (KYC). They do not need to have a bank account.

And in a span of three years, ChapChap Africa have on-boarded about 17,000 businesses.

For the businesses there has also been an added benefit: by being introduced into the digital economy and being part of it day-to-day, they now possess credible financial profiles, which has opened for them multiple credit opportunities, directly and indirectly. The businesses can today approach formal financial institutions for credit, and there is now a level playing ground for all to operate in.

And all this falls in line with ChapChap Africa's goal of ensuring that all enterprises, especially MSMEs, have visibility, enjoy equitable access to manufacturers, financial institutions and government, and have a fair advantage to compete. Ultimately, this will improve the livelihoods of women and youth by providing employment and ushering in sustainable development.

For ChapChap Africa, the 40 Days 40 FinTechs initiative is a much needed opportunity for a FinTech to enjoy visibility. Developing a product can be easy, but marketing it can prove to be hard and prohibitively expensive. Most start-ups do not possess a huge marketing budget, let alone having the resources to run advertisements on the mainstream media.

ChapChap Africa, which mainly serves the low income market, is under no illusion that it can charge its customers highly for the service. They would undoubtedly shy away from it. The charge thus has to be affordable to the target bracket.



Xuldime:

Xuldime provides a digital platform for parents and/or guardians to remotely manage all the school finance-related affairs of their children, including fees/tuition, academic and extra-curricular activities, school requirements, health, amongst others. The parents can access these services through the Xuldime Parents app or by dialling the USSD code *270*7#.

Xuldime also offers a digital wallet that enables parents/guardians to send pocket money to their child, money which is then stored on the child's wallet smartcard for them to use at their school canteens. Xuldime enabled this by integrating their system with the mobile money platforms, MTN and Airtel, and

thus there's real-time reflection of funds once they have been deposited on the child's account. Banks are now also in the process of integrating.

Furthermore, still through the app, from wherever they are parents can buy scholastic materials and other school requirements for their children. The parent simply needs to go to the platform, select the items they want to purchase and pay. The items are then delivered to the child at school, who then uses their smart card to authenticate delivery and receipt of the items.

The Xuldime platform also addresses truancy and academic performance: it has the ability to monitor class attendance and academic performance of the student. It also has hybrid conferencing and event management abilities, enabling schools to manage their occasions e.g. like parent-teacher meetings, where those who cannot attend in person can still follow and contribute to proceedings. Also, they can disseminate reports and do targeted communication to particular parents.

As was seen throughout the FinTech community, Xuldime also innovated to confront and mitigate the effects of the COVID-19 pandemic. This they did by upgrading the attendance aspect of their application, and, in partnership with the Ministries of Health and Education & Sports, enabled it to digitally monitor school-based COVID-19 occurrences. This enabled schools to quickly comply with the requirement for them to report any COVID-19 related information, especially by reducing the time the schools would have spent capturing data manually.

For Xuldime, 40 Days 40 FinTechs shines a light on the innovations in the industry and also exposes FinTechs to venture capitalists and other market stakeholders. It also offers an opportunity for them to network and learn from their peers.

And for Uganda's FinTech industry to grow, it advised that the government needs to avail more money to the industry for research, and also fund more

innovation hubs. This will stir up more FinTech innovations and provide more solutions to the day's challenges.



SoftPay/ NewLife Technologies:

NewLife Technologies Sarl, a Cameroon-based mobile application and website development company, created SoftPay, which is empowering businesses with a variety of financial solutions across the different functions to improve efficiency.

Using a mobile application for smartphone users and a Point of Sale (POS) option, their SoftPay Business platform offers a variety of solutions: businesses can manage their inventory, create invoices and distribute them to their clients and collect payments. They can also sell tickets while event organizers can create an event, sell it out, manage check-in and collect payments.

The SoftPay Business' Inventory and Service

Management solution, for instance, enables businesses take advantage of a multitude of tools to improve efficiency by ensuring that their inventory and sales are in tandem while the Sales Management system enables businesses to manage every sale they make and receive payments through standard payment methods such as mobile money, Visa and Master card.

Its Human Resource Management system enables a business to link its business account to other SoftPay users and pay them easily while the Ticketing and Bookings Management solution helps businesses sell tickets on multiple channels while reducing check-in-time at entry to the business site.

The PayForms Management solution allows a business to sell products, services and tickets online without having to build an e-commerce website. Using an SMS or social media, one can simply share with potential clients a link generated on the platform for the product or service on offer.

The SoftPay Business platform thus seeks to help firms manage their interactions with both current and prospective customers better. The system acts as a record of interactions across all business customer-facing touch points, organising, automating and synchronising them and enabling a business both service all its existing customers and also respond quickly to issues that, including new business.

The user can use the mobile app a few seconds after downloading it because the on-boarding procedure has been eased. And the procedure takes less than 15 minutes for those using SoftPay Business.

Using the MTN Mobile Money and Orange Money APIs, users can easily load their SoftPay accounts from any of these service providers as well as withdraw funds from their SoftPay accounts using their mobile network service provider.

It was noted, however, that Africa is still grappling with a number of challenges, including the dominance of cash as a means of business transaction, limited talent in the industry and lack of collaboration and support.



Silicon Pay/ Silicon Savannah Ltd:

Silicon Savannah Limited, with its Silicon Pay solution, offers a fully integrated suite of payments products, including collection, bulk payments, utilities, bank transfers and crowd funding through its Application Programming Interface (API).

The API also provides a platform for mobile money and credit card services, which merchants, individuals and companies can leverage by integrating it into their websites and mobile applications and start receiving payments in real time. But before that, however, they are able to test these services in a sandbox provided for the purpose. And when satisfied, all they need to do is provide the relevant

KYC and, once verified, can start the digital transacting.

And with the way COVID-19 has affected businesses, digital payments have grown as businesses seek e-value by resorting to online tools to replace physical meet-ups and collections.

Silicon Savannah has also set out to increase the online presence of women-owned businesses. It does this by offering low-cost website development services to women entrepreneurs to enable them move their businesses online and enjoy the benefits of reaching a wider customer base. These websites are also integrated with Silicon Pay payment options to enable them have a fully modern e-commerce store where they can collect and control their funds in real time.

Silicon Savannah have also done the same with several women SACCOS, integrating the Silicon Pay solution to help them ease collection of money through the platform and enhance accountability. Silicon Pay is regularly updated and integrated with new products and services to meet its clients' evolving financial needs. For instance, it integrated mobile wallets to cater for customers who receive money in different currencies from across Africa. It also forged partnerships with key service providers such as e-commerce platform players.

To make it easy for businesses to on-board, the company uses the tiered Know-Your-Customer (KYC) principle, which also helps guard against fraud. This includes taking extra steps by asking prospective customers to prove their identity and clarify their nature of business to make sure the source of their funds is legitimate.

Furthermore, their system has the capability to monitor funds on their dashboard in real time. Additionally, the platform enables users to transfer funds instantly to their preferred bank accounts on request and receive the funds in a few hours depending on the time the request is made. For Silicon Savannah the FinTech industry is viewed

as one that's young, with extraordinary potential, and it thus offers a multitude of opportunities for growth, especially now that businesses are steadily picking interest in digital payments and e-commerce as they seek to reach a wider customer base.



FutureLink Technologies:

FutureLink Technologies has set out to build the financial resilience of low and medium income earners in Eastern Africa through financial inclusion. Their intention is to level the financial playing field and create opportunities for all.

The firm leverages the outreach and impact of SACCOS and Micro-Finance Institutions (MFIs) to enable the low-income earners grow personal savings, access affordable credit and make payments using digital channels.

And through its Ecosystem Core Banking product, the

company de-risks the SACCOS and MFIs it works with. Furthermore, it also manages their network and server infrastructure, which has helped them tremendously lower their monthly infrastructural expenses down to \$18 from \$200.

FutureLink also offers a mobile banking switch, which enables end consumers to access a variety of services provided by its partner SACCOS, empowering and enabling them to choose the products that best serve them. Indeed, at one of the SACCOS, members access credit at just 9.75% per annum. This the first time that a financial service provider of any kind is offering credit at an interest rate as low as 9.75%, and is highly commendable, especially in consideration of the bracket those it is assisting belong to. It clearly illustrates the power of leveraging technology.

As of now, FutureLink serves 300 SACCOS and MFIs across the country, and has a customer base of about 1.2 million, of whom around 390,000 are women. Their lower number is attributed to the fact many do not have phones of their own, and this has unfortunately contributed to their lower uptake of digital financial services overall.

FutureLink's services can be accessed on a feature phone through the USSD, on the app with smartphones, and via the web. They have also integrated with leading mobile money providers and Interswitch to ensure real-time transactions. This is especially to build trust among users, for they quickly noted this as being highly important for the end-consumer in the village; the moment there was a slight challenge or delay in verification or reconciliation, their confidence in the product was affected. FutureLink knew this had to be fully and conclusively resolved.

FutureLink possess a positive outlook on Uganda's FinTech industry, owing to, among others, the enactment of the National Payments Systems Act. As hinted at, this' helping to see more trust come in from the different stakeholders, which is vital for the financial inclusion agenda.

However, it was also noted that going forward there is a big need for the government to fight corruption and offer space for value creation. But this must come in tandem with the government understanding that FinTech is a platform upon which the economy can stand. The approach should thus not be to tax it, but instead to support its growth, and then tax the services built on the platform.



AGGREGATORS

40 Days 40 FinTechs is a gathering of greatness! And aggregators remain pivotal in the ecosystem, many times heroic in their innovation, even though what they do goes largely uncredited. They remain amongst the primary creators of what, in the web technology language, are called Content Management Systems

(CMSs). They are also the creators of innovations that allow easy manufacturing of similar products and thus create a multiplier effect of usage. And how do they do this? Many of the aggregators in the space are enablers of either merchant payments or bulk payments. They, for example, can enable you, a company owner, to pay your workforce more effectively, even when they number in the 100s, shifting you from time-consuming, manual payments to using means like mobile money, through a bank and/or other digital means. It is thus always special for us at 40 Days 40 FinTechs to host these giants that are enablers of some of the biggest and the most successful utility and merchant payment models; in all probability they are on their way to becoming the next African unicorns. And enabling real time retail payment systems that are interoperable never goes wrong. How does this happen? Let us say, an ordinary Kampala shopkeeper might be able to serve about 50 people every single day. Now, in our city, where you have over 300,000 registered merchants, after you do the math you consider that 15 million people/transactions can occur by day's end.

You thus imagine if we are able to work with aggregators in the space and allow dissemination and creation of digital payment models that are tailored to every single need and are very easy to use, it would quickly translate into 15 million transactions in Kampala, unique or not, with services paid for directly. You then look at things like utility payments: HiPipo has run a number of studies on the time saving capabilities of digital financial services, and one of the best bits about it is the convenience of being able to pay for electricity, water and TV subscriptions anytime and anywhere. And who are the 'heroes' enabling this? It is the aggregators. A number of the players we had this year

are specialising in making sure data is better managed. As we speak of the internet of things, of big data, of leveraging information to create enabling digital payment systems, where solutions like those on lending and insurance are created, plus modes of allowing people to purchase goods on hire purchase, on that and more, data will always be a part of discussion. How are governments going to know your transactions when there is no one aggregating your data? How are multinational organisations and other related authorities going to allow operations across borders without such vital information? Crucially the players in the space already have the capacity for and the access to a lot of this data. Governments need the same information to plan, including on what and how to tax, the structures for managing that sector of the economy, and what to use the acquired funds for in order to boost the wider economy. So we would be excited seeing an aggregator enabling an e-commerce platform and an e-commerce platform also enabling a 1000 e-shops. So the journey of allowing e-commerce to prevail because they allow for easier and seamless payments might soon create another Amazon in Africa, or even a Netflix, all because integration of payments would not be an issue any more. What we need is for them to be interoperable: if I am using bank X or Z, I should be able to pay any one. And if I am coming from operator Y or P, I too should be able to pay any one.

That is where we are headed- a situation where the aggregators should be able to play a leading and fundamental role in creating things like an interoperable payment hub or switch. They have the information and the data, and some of them have already integrated with some of the biggest financial players. Of course such an initiative would need a big player, probably a lead operator, to be a part of the discussion and implementation of the technology because they own the back bit of these customers that work with the ecosystem. Having these people that have been working with a lot of data and information in the space, letting them lead in the implementation in the payment hub or switch, would ease the achievement of both interoperability and of a low cost payment system. This will place affordable digital financial services well within reach for our country, which is a very important goal for our advocacy and for all those that seek to see that the world achieves full financial inclusion as soon as possible.



Beyonic-MFS Africa:

Business has been massively disrupted globally by the COVID-19 pandemic, especially with the restriction of movement and lockdowns instituted by respective governments to tame the spread of the virus. The situation instantly took away the livelihoods of millions, and continues to cause adverse effects to the world economy. Beyonic-MFS Africa, a fintech which facilitates payments integration across Africa, used the opportunity to innovate, and refined its operation to assist businesses to continue operating amidst the lockdown challenges, giving them a shot at survival.

Beyonic noted that in the current lockdown many businesses were asking themselves how they could continue to make money while reaching their customers in the safest and most affordable way possible. They were also thinking about how to scale their businesses beyond the confines of one district or country, all while considering the new normal of working remotely and not directly interacting with their customers. Beyonic's innovations enabled them to do that.

Now, to Open a Beyonic account, all one has to do is provide basic Know-Your Customer (KYC), and they will soon be able to continue operating their business without having to deal with physical cash. They only need to have the mobile money numbers of the people they want to send money to or receive money from, and then communicate widely that transactions can pass through the platform, no matter the volume.

Beyonic implements a number of LevelOneProject principles, including effecting all its outstanding payments within minutes. This is as it seeks to ensure that its digital platforms and available infrastructure make market challenges obsolete.

Beyonic recently merged with MFS Africa, enabling it to increase the number of markets available for businesses to operate across the continent.

It facilitates payments across the African continent, having integrated all telecoms in Uganda and in the other African countries where it operates. And once one connects to the Beyonic platform, they will have access to all the networks across all countries where it operates, enabling access through a single log-in.

Its intention is to be a solution provider to the challenges its partners face; no matter the size of one's business,

one should be able to guarantee real time settlements to facilitate its growth.

And Beyonic's ethos goes beyond making borders matter less and enabling one's business to access many other markets; issues like equality and gender are also of importance. Beyonic-MFS Africa is thus women-centric, and 53% of its employees are women. It is also deliberate at encouraging more women-owned and women-led businesses to access the platform to enable their businesses to thrive.



Raxio:

While there has been growth in the number of FinTechs seeking integration and aggregation links with the likes of telecoms, banks, government institutions etc., as they seek to better facilitate payments, remittances and other services, many will attest that the process has difficulties.

Not only does it involve a number of bureaucratic bottlenecks, as the FinTech has to hold discussions with the various agencies before they can agree to pair (peer) with them, there was also the question of infrastructure, specifically in regards to handling the amounts of data involved.

In regards to the latter issue, however, a lot is set to change for the better following the establishment of Raxio Data Centre in May this year. It is the first Tier III data centre in Uganda, is a carrier-neutral operator, delivering colocation, cross connect, fibre and IT infrastructure services, and promises fast and uninterrupted services to its clients.

What Raxio is offering is the opportunity to scale. By using Raxio's internet exchange point FinTechs can now integrate and aggregate at will, readily and directly peering to allow cross-connection with banks, telecoms and government organisations under the same roof. This will also eliminate the cybersecurity risks that come with peering over the internet, reduce on the red tape and bureaucracy, and improve on performance and latency.

Data centres that provide carrier- and cloud-neutral services are playing an increasingly bigger role in most organisation's and nations' digital revolutions, acting as the connectors in the globe's internet ecosystem.

For anyone to thus play a major role in the Fourth Industrial revolution, they must have their equipment in a location that is predictable, stable and ensures endless connectivity to their customers. A data centre ticks all those boxes.

And when a Ugandan FinTech takes up cloud service it no longer needs to worry about interruptions. Raxio provides an environment where a client can bring their own servers, and install and integrate them at Raxio, or it can acquire a cloud service from the data centre, provided by one of Raxio's cloud service providers.

Of vast importance to the FinTechs, and others in the ecosystem, is that they will be able to use the vast data that they will gather to analyse and innovate accordingly,

and bring forth the right products that meet the consumer's very needs

Relatedly, Raxio is also in discussion with global cloud service providers, like Amazon Web Services, Microsoft Azure and Google Cloud, to have them extend their networks into Uganda, given that Raxio meets global standards.

Uganda is the first of 12 countries Raxio Group plans to set up data centres, and they have already broken ground in Ethiopia and the Democratic Republic of Congo.



Pegasus:

The delay in settling digital money transactions is among the reasons most people in Uganda prefer cash, to the tune of almost 80%, over electronic transactions.

However, Pegasus Technologies continues to enable the shift from cash to cashless by supporting businesses and entities that adopt digital payments, and has gained prominence in the development of financial solutions for companies. It has emerged as a leading payment services aggregator in Uganda with vast experience in development, configuration, deployment, support and maintenance of financial and billing solutions for businesses and institutions.

Their solutions include bill payment, mobile money aggregation, mobile payments and remittances, loans and savings, card payments, software development and value added services such as SMS, airtime and data loading. And over the course of their existence they have created a variety of payment systems, including for ticketing, school fees and for remuneration of farmers.

Pegasus emphasises that reliability is a key aspect that must be adopted and delivered by industry players if people are to shift from cash. In other words, digital payments must be as instantaneous and as straightforward as putting cash into the payee's hand. Guaranteeing that assuredness and immediacy is the only way that those who provide goods and services will readily adopt cashless.

Relatedly, another crucial aspect Pegasus puts into account is to provide sufficient support to its clients in case any issues arise. Those who provide digital payments services must quickly erase any scepticism, lest those who adopt the technology go back to using cash.

In this vein, Pegasus has positioned itself to support anyone that adopts digital payments by providing a number of platforms to aid them, including by being one of the few FinTechs to be PCI DSS certified, giving them the ability to implement card payments. Its PegPay payments platform is currently being used by several institutions including banks, telecoms and utility companies, retailers, Pay TV providers and schools, to aggregate and manage financial transactions for both internal and external purposes.

With their mobile money aggregation solution, an organisation is able to collect money through a USSD, mobile application or web application. Organisations are also able to effect payments to their end user beneficiaries, using the Pegasus platform or through their own platforms after being integrated with an API.

And much as the government is to be commended for the move to regulate electronic money, as this will boost public confidence to use currency in that form, the government itself needs to take the lead in its appreciation and use. At the moment there is no law in place that allows the government or most of its agencies to recognise e-value as money. And thus, as of now, one cannot pay a government institution using e-cash and it is accepted. Such money has to first go to a bank account before being credited.

The desired scenario is one where digital payments are recognised as value and accepted by the government in real time, with the government re-using that collected e-value to make onward payments. Such a move would go a long way in closing the loop.

Merchants also have a part to play, and more need to participate—the more the merchants close cash offices and opt for digital payments, the easier it will be for the ordinary person to do the same.



Yo! Uganda:

Cashless digital payments are playing an increasingly significant role in ensuring safety, speed, convenience, and seamlessness in global business operations. This was being witnessed even before the COVID-19 pandemic emphasised the need for people to practice social distancing.

For Yo! Uganda Limited, what is necessary is for such services to be extended to underserved businesses and underserved populations, like rural farmers, across Uganda, in order to improve their efficiency and imprint on the global economy.

Yo! Uganda entered the market in 2006 by initially offering low-cost international calls before venturing into mobile technology to provide Value-Added-Services. These included solutions like mobile money, bulk SMS, USSD gateways, Interactive Voice Response (IVR), voice solutions, and custom-developed applications, developed and tailored to suit customers' needs.

This was at the time East Africa took the lead in developing and implementing digital payments services, and followed the launch of M-Pesa in Kenya in 2007 and MTN Mobile Money in Uganda in 2009. Initially, when mobile money was first launched, the focus was on person-to-person and the recipient would immediately go to a

nearby agent to withdraw cash. Yo! Uganda saw an opportunity to enable businesses and other organisations to take advantage of the mobile money service in a way that would enable them to reduce their costs and lower the risks of keeping cash at their premises.

They later ventured into the mobile payments space, launching Uganda's first online, publicly available mobile payments gateway in 2010. Businesses could now receive payments from their customers via mobile money as well as make mobile money payments to any mobile money account holder.

Since then, Yo! Uganda has enabled more than 50,000 small, medium and large enterprises and over 150,000 farmers to integrate digital payments into their day-to-day operations.

It has to be noted that while mobile money was already popular by 2010, there was still a big gap especially in rural areas where farmers were sceptical about adopting digital finance. It is through the efforts of FinTechs like Yo! Uganda that many have been converted, especially through the offering of tailor-made services and products.

Their Digital Payment Acceptance solution facilitates businesses to transition and to accept digital payments for their goods and services while their Bulk Digital Payment Disbursement solution enables various players, both for-profit and non-profit, to transition to digital disbursement of funds such as salaries and vendor payments.

Its integration of financial institutions with mobile money networks provides a service that allows for the seamless transfer of funds between the two and allows for a bank account holder to transfer funds from their bank account directly to their mobile wallet and vice versa.

Though not yet where it would want to be, Yo! Uganda exemplifies Uganda's FinTech industry optimism for the future, characterised

by a generally improved marketplace and work environment which continues to nurture advancement and innovation, especially given the enactment of the National Payments System Act, 2020, which not only seeks to protect the rights and privileges of payments systems and solutions users but also streamline the industry overall.

That is why we are seeing the various players now go beyond the initial focus on payments and on to the other various verticals like Insurance and AgriTech.

A photograph of three men in a discussion, overlaid with a blue tint. The man in the center is a Black man wearing a light blue short-sleeved button-down shirt, looking towards the right. The man on the left is a white man with curly hair, wearing a blue and white checkered shirt, looking towards the center. The man on the right is a man with a beard, wearing a red and white striped shirt, gesturing with his hands while looking towards the center. The background is blurred, showing what appears to be a large room with many people seated.

FACILITATORS TAKE:



Innocent Kwoyaya- HiPipo

On HiPipo's behalf and also my own, I would like to graciously thank all our 2021 participants: to the new ones, I say welcome on-board, and to the many that came back, I say it remains a great pleasure working with you. We cherish and respect you as partners and friends, and pray that long may it continue. Your appearance was, without a doubt and as expected, extremely engaging and insightful. Our appreciation cannot be overestimated.

Gratitude also goes out to our 2021 team of facilitators: Sam Kummary, Lewis Daly, Damali Ssali, Yvonne Mpanga, Francis Barenzi and George Kasakya. May the good Lord continue to bless your endeavour.

The 2nd edition of 40 Days 40 FinTechs, and the FinTech Landscape Exhibition after, proved just as ground-breaking- full of discussion, ideas, insight and, of course, tonnes of impactful innovation. HiPipo, & all who participated, again extend thanks to the Gates Foundation for making this

happen. It is from your support that a lot of good is growing, and gives us the confidence to say that yes, FinTech is changing the world for the better.

I was pleased to present on various facets of the Level One Project, including but not limited to 'The Level One Core Components'. I explained how Level One aligned systems are those that facilitate immediacy of transactions on all sides, and enable easy access for all to the formal financial ecosystems and all their inherent services. I further touched on what a Level One aligned environment entails, explaining elements like RTRP, RTGS & DFSPs, amongst others.

Other presentations of mine included an overview of the Gates Foundation's Financial Services for the Poor (FSP) plan (of which the Level One Project is a part); talks about Enhancing Women's Economic Empowerment through Digital Cash Transfers while following the D3 criteria- Digitise, Direct & Design.

We also elaborated on the various wider spheres that are connected to the FinTech ecosystem. These included cases on the G20 and its Principles for Innovative Financial Inclusion; the World Bank Group, and its Universal Financial Access 2020 that hopes to deliver over a billion transactional accounts to help bridge the exclusion gap; and the UNSDGs, of which 5 of the 17 have a direct Digital Financial Services connection. This was part of what made Season Two more fulfilling for me: the opportunity to share these aspects of financial literacy that are geared towards achieving full financial inclusion.

Several participants lauded HiPipo for continuing to take its advocacy role seriously by using the support it receives from the Gates Foundation optimally in service to furthering the cause for 100% Financial Inclusion through enabling FinTechs. They were also thankful for a space for stakeholder engagement that brings FinTechs closer to their customers. 40 Days 40 FinTechs was further hailed for seeking to improve the operating environment of Uganda's FinTechs, including in regards to calling for favourable laws and regulations.

Others thanked HiPipo for giving FinTechs much needed audience and visibility, and also sharing on Financial Inclusion best practices (like the Level One Project Principles and interoperability) and latest technologies (Mojaloop), both of which are being made use of to good effect.

It was also sobering to hear how a lot still needs to be done on the ground. That in spite of the availability of mobile money (MM) services, many of those in rural areas with low-incomes, in Uganda and all over the continent, still find access to them difficult due to having to travel long distances to agents and the prohibitively high transaction fees. But always better to hear were the solutions: for example, we hosted participants that are offering small-scale loans to farmers and small businesses. They also enable the former to acquire agro-inputs on credit, without asking for much by way of collateral. These are focusing on helping people earn; thereby creating a business model that stakes its claims on integrity and not (the farmers'/ borrowers') financial history.

The key themes of interest for discussion by the majority of this year's participants included: creating enabling policy & regulatory environments; building technology & infrastructure; promoting advocacy, earning & information exchanges; and setting global standards.

Hosting participants like Wendy Nanfo from Jumo was such an honour; players like her and Jumo are a prime example of what backs up our belief that FinTechs are going to form the bulk of the disruptive technology in the coming years. Their model of mobile lending perfectly aligns with the Level One Project i.e. enabling financial inclusion for the underserved.

Many participants also acknowledged that lack of identification remains one of the major hindrances to financial inclusion; in regards to this I actually held a discussion on the Modular

Open Source Identity Platform- a framework for building databases that are both digital & synchronised.

And of course HiPipo was honoured to host the brilliant Damali Ssali as a facilitator in the 40 Days 40 FinTechs discussions, and later as the Chief Guest at the FinTech Landscape Exhibition, held at Mestil Hotel on September 2nd. Indeed we are proud for this to have been her first Chief Guest accolade. Damali is a true Ugandan asset, one of our best trade and finance experts, and a true FinTech warrior. With us she has already served as a facilitator, panellist, speaker and mentor; she remains a strong advocate for financial inclusivity and women empowerment, and is an ever-ready ally with whom we share similar hopes for a better world.

Among the many things Damali discussed, both during 40 Days 40 FinTechs and at the FinTech Landscape Exhibition, was 'How to Build Digital Solutions for the Most Needy'. She advised that to improve the livelihoods of Africa's most impoverished, FinTech developers need to revolve their innovations and solutions mostly around 3 areas: education, health and agriculture. Agriculture is the prevalent livelihood amongst the world's poor, health is where they are grossly underserved, and education will enable them to widen their horizons and improve their options.

As part of HiPipo's advocacy and discourse, and as covered in another section of this report, we are excited that we were able to share thoughts on the following elements, all to add to the knowledge the sector can use to bring all on an equal financial footing: Interoperability, & the future of real-time payments; Readiness for CBDC- What is the quickest way to achieve a cash-lite & later a cashless economy?; Women & special groups- Is regulation blocking many from the formal financial ecosystem?; What role would PISP & 3 PPIs play in accelerating digital payments, remittances and financial inclusion as a whole?; and Insights on how to build an African FinTech unicorn.

Insights on the above and more were part of more than a month of fruitful discussion. And we promise to continue the discussion, the advocacy, and the empowerment. So, see you again next year, and God bless.



Loving Mojaloop - George Kasakya

40 Days 40 FinTechs was an enjoyable excursion into truly exciting and impactful technology. I enjoyed interacting with all the multitalented participants. Their interest and curiosity bodes well for the future of FinTech, and technology in general. I helped give familiarising talks on what financial technology entails, giving explanation on what APIs are, and linking how the Mojaloop OSS fits perfectly to facilitate payments, and other financial interactions, involving low-income earners, who, as is known, are still being left out today. I conducted daily Loving Mojaloop presentations, demonstrating how it's purposely built to aid innovators create digital solutions that are technically sound, user-friendly and, above all, interoperable.

And the more I discussed Mojaloop, the more I fell in love with its potential: it was designed to provide a reference model for payment interoperability that can be used to overcome barriers that have slowed the spread of digital financial services. Whole, adapted, or as a blueprint – the Mojaloop Foundation's OSS can be used by individuals, organisations and nations alike to build interoperable, digital payment systems that enable seamless, affordable financial services between individual users, banks, government entities, merchants, mobile network operators, providers, and technology companies – connecting the underserved with the emerging digital economy.

I further realised that to many, 40 Days 40 FinTechs is like a showroom, providing much-needed exposure. It truly has helped many FinTechs whose works might have remained unknown. It casts a broad internet shadow.

On my own behalf, and on behalf of HiPipo I would like to thank and congratulate this year's participants for their participation and contribution. We applaud you for sharing with us the vision of establishing a sustainable African FinTech landscape, accessible and beneficial to all.

And to our partners and sponsors, our efforts and enthusiasm are really because you continue to walk firmly hand-in-hand with us. Your support makes the endeavour worth it. Thank you.



Yvonne Mpanga- HiPipo

More than 400 online and print news articles can be traced to the different participants that featured in the 2nd 40 Days 40 FinTechs initiative, in which banks, mobile network operators, insurance service providers and start-ups were represented at the event. From my viewpoint, as someone steeped in marketing and strategic communication, that was a fantastic outlay.

And this vein of attention continued at the culmination, the FinTech Landscape Exhibition, held at Mestil Hotel on Thursday, September 2nd. The strong presence of FinTech and what it entails on all the various media platforms, including print, broadcast and social, bodes well. We need people to learn not just about the fantastic solutions out there, but also to get into the digital groove, to accept that it is no longer just the future, but an active, ever-changing present set of circumstances that need to be approached masterfully in order to reap the full dividend.

I was honoured to personally hold a number of sessions during the course of 40 Days 40 FinTechs, all to highlight the need for the innovators to not stop at creating these solutions, but to also have a strong element of marketing and communication in their overall business strategy. As is well illustrated in the Level One Project and its Principles, profitability is key to sustainability. So aptly adopting the technical elements of the Level One Project is only half of what it is expected.

Testimonies from the previous year's participants indicate that at least 15 of them enjoyed increased customer engagement, increased profitability and greater brand visibility. This' proof enough of the power of association, with 40 Days 40 FinTechs in this case, but overall a clear illustration of how the various elements players/elements in the FinTech ecosystem can support each other. Indeed, as was stressed in every session, it is all about collaboration and not competition. Indeed, in the end, you could say that is the beauty of FinTech.

Lewis Daly- Crosslake & Mojaloop Foundation

This year, I had the honour of being asked to volunteer some time and brain power towards the 40 Days 40 FinTechs event by HiPipo.

While I could not be there in person, I was delighted to be given the opportunity to share with the HiPipo community about Mojaloop's upcoming features for FinTechs, 3rd Party Payment Initiation APIs.

3PPI is a leap forward in open banking design, and has led to new innovative FinTech products in a number of markets. Its inclusion as a feature set in Mojaloop will pave the way for more open banking initiatives and open up a new class of use cases for FinTechs where Mojaloop is deployed. During my time at the event, I had the chance to hear from Ugandan FinTechs, and hear about the exciting new businesses that are springing up.

One presentation that sticks out was from Nelson (Kituuka) at CardPesa, a micro-lender with the motto "We Fund Your Hustle". In my last two-and-a-half

years as a developer on the Open Source Mojaloop project, I have noted that the most valuable feedback is from users on the ground, facing real world problems. The opportunity to hear and learn from FinTechs solving these problems on the ground in Uganda was and will always remain fascinating to me, and critical to the success of the Mojaloop Community.

To the HiPipo FinTech community and beyond, best of luck in your endeavours, and I will continue to follow your progress with great interest.



Damali Ssali- Ideation Corner

I had the pleasure of attending the HiPipo Fintech Exhibition Landscape that was held on 2 September 2021 as the Chief Guest. I was so proud to see that the 40 Days 40 Fintechs initiative is in its second year running and it is already clear that this initiative is delivering a real impact on Uganda's FinTech ecosystem.

Illustrated below are my observations of the #40Days40Fintechs initiative from my perspective, an ardent follower of the FinTech space, a champion of technology and keen supporter of financial inclusion.

First is visibility; the FinTechs that are showcased during the 40 days regularly talked about how the visibility that they received was so important for them and a major contributor to their business continuity because they do not have the resources and capacity to showcase and inform various stakeholders of their solutions. These FinTechs greatly appreciated the role the visibility played in the success of their solutions.

Next of note is the high cost of digital transactions; one of the major points discussed was the current cost of transacting, moving funds, from one network provider to another, which is very high. As a result, most Ugandans, to the tune of over 80%, prefer to transact in cash even if they do have the means (phone) and knowledge to make digital transactions. This high cost continues to slow down the pace of financial inclusion as poor Ugandans continue to hold cash, transact in cash, and save in cash.

It was a big eye Opener for me when the Managing Director of NCBA Bank, that has the highest number of bank accounts (9.7million), noted that it collaborated with MTN to provide loans to its account holders, but the account holders always withdrew the total loan amount as soon as it was received (in cash) even if that loan amount was sent directly to their mobile money wallets.

I became hopeful when a panel discussion that included the network providers (MTN and Airtel) that control most digital transactions, agreed to work together on ensuring the interoperability of their networks which would lower the cost of digital transactions.

The next observation is on collaboration; I noted the improvement in collaboration amongst the cross

section of FinTech players, from the big dogs to the new entrants. This transition is quite significant because if I compare it to two years back, there was a lot of fragmentation and unhelpful competition in the FinTech space. I vividly remember when the banks wanted to muzzle the FinTechs seeing them as competition; these banks tried to lobby government technocrats and use regulations to abate the pace at which FinTechs were growing.

However, I am now seeing a new mood that encourages collaboration; I greatly attribute this sea change to HiPipo. It has time and time again demonstrated that all players across the FinTech value chain benefit if they work together in improving the ecosystem through collaboration.

Finally, there is exhibition; on the day of the event, there was a live exhibition of some of the FinTechs and I found this extremely interesting as we the guests were able to talk to the different teams and ask them questions as they explained their solutions. I do hope that at the next one we will have more time, at least half a day, dedicated to all the 40 FinTechs, and give people an opportunity to go to their stalls in the Exhibition Hall and engage with the teams on whatever is interesting the guest about the solution

RECOMMENDATIONS

Facilitate policy discussions with all stakeholders

There is need for stakeholder engagements between policy makers, FinTech solution providers and FinTech beneficiaries, with a strong focus on the people at the bottom of the pyramid and those operating in the informal sector, so that the high cost of digital transactions is addressed. That's a crucial step towards getting the majority of Ugandans engaged in the digital economy.

Continue to support the collaboration in the fintech ecosystem

HiPipo continues to register tremendous progress, but much more still needs to be done to build on and consolidate these gains. Crucial to this is

seeing more collaboration in the FinTech ecosystem so that policy and infrastructure developments can be aligned to ensure that most Ugandans enjoy financial inclusion, and this shall majorly happen through reduction in the cost of transactions and cost of access to the digital economy.



CONCLUSION & WAY FORWARD.

We are now living in the Age of Interoperability; and to this end we must work as hard as possible towards achieving full financial inclusion. We thus need to build the real-time payment platforms needed to support the more than 400 million unbanked adults across Africa. This will help achieve scale; scale, in turn, is a major requirement to enable low costs, increase digital liquidity, and reduce the use of physical cash. Scale thus justifies the need for interoperability. The likes of Governments, regional bodies, DFSPs etc. can use Mojaloop, a reference implementation of the Level One Project (L1P) principles. The L1P is catalysing Financial Inclusion. As a result, its role in the DFS space is evolving as expectations and the knowledge levels of stakeholders change. It is increasingly influencing the design of scalable and sustainable low-cost digital financial services.

Modern payment platforms and providers, big and small, are now reimagining the role of technology to better their chances of success. Now, more than ever, stakeholders need to collaborate on rules and rails in order to remain relevant in the market, even as they compete on accounts and apps.

Digitisation, digital transformation and innovation are three distinct but related categories that are necessary for a true technology evolution. And the world cannot achieve full inclusion without ensuring that the processes that aid both digital inclusion and financial inclusion are facilitated in tandem. This is because at many instances many users will need to have access to mobile money services in order to acquire their first hire-purchased mobile device. Everyone will need a mobile phone, be it feature or smart, plus a SIM-card, in order to acquire their first mobile money transactional account.

The digitisation of traditional payment models, processes, products and services will soon become a matter of survival in the 'digital economy'. And this will revolve around choosing and using the right technology to bring about the speed and efficiency needed to support the creation of interoperable Real-Time Payments Systems; ensuring

automation processes; and creating centralised national directories- all will play a role in making interoperability work. And the risk for fraud will be minimised through collaborating in a shared investment towards fraud detection.

And as financial providers digitise more, so will the possibilities to leverage emerging tools, blueprints and technologies to more efficiently create new cost effective schemes, services, products and profitable revenue streams, keeping innovators active in the space.

It is always important to remember that innovation is about disruption. It is about challenging the status quo and, in so doing, leveraging emerging tools and technologies towards the creation of that which is compelling, unique and new. Such offerings shake-up the marketplace, open up even more markets, but, most of all, can carry millions of lives into prosperity and dignity.

It is therefore important that the technology experts are not left to craft their strategy alone, without the input of those in business. Similarly, those in business must not craft their strategy without the involvement of their colleagues in technology. In the long run, you will see this helps in minimising the digital debts of governments, organisations and individuals alike, and steer the world towards maximising the digital dividend!

So, of course we are already thinking of next year(s)! What the HiPipo team and I promise is that our Include Everyone initiatives shall remain at the vanguard of the drive towards 100% Financial Inclusion. #40Days40FinTechs has quickly grown into one of the world's premier showcase events for the innovations that are enabling ever more people to join the digital economy space. That is surely going to remain the case, in large part due to the inspiration and collaboration that the Level One Project & Mojaloop generate, but mostly because of the continuing, generous support of the Gates Foundation. Thank you for reading and see you soon.

GLOSSARY:

FINTECH LANDSCAPE EXHIBITION THEMATIC INTERVIEWEES:

- Damali Ssali - Co -Founder & CEO, Ideation Corner; Trade & Finance Specialist.
- Esther Karwera - Co-Founder & Head of Business Development & Marketing- EzyAgric.
- Paul Tamale - Manager, Card & Payments, Stanbic Uganda.
- Nelson Kituuka - MD, Discount Cards Ltd.
- Tim Jamieson - VP, Payments & Finance Services, SafeBoda.
- Cleopatra Kanyunyuzi - Co -Founder & CEO, Club Tangaza.
- Ronald Azairwe - MD, Pegasus Technologies.
- Wendy Nanfo - Country Operations Coordinator, Jumo World Uganda.
- Vincent Tumwijukye - CEO, FutureLink Technologies.
- Patrick Kizito - CEO, UG-Mart.
- Annet Nyanzi - Director, Green Shares.
- Ephrance Eunice Namugenyi - Co -Founder & Business Lead, Kuzimba Services.
- Innocent Orikiiriza - Founder & CEO, KaCyber Technologies.

THE 40 DAYS 40 FINTECHS CONTRIBUTORS:

- Amit Kapur - CEO, Airtel Uganda.
- Stephen Mutana - MD, MTN Mobile Money Uganda Limited.
- Anthony Ndegwa - CEO, NCBA.
- Nelson Mandela Ewolu - Sales & Marketing Analyst, Trade Lance.
- Timothy Mugume- Country Lead, Jumia Food Uganda.
- Patrick Kizito - CEO, UG-Mart.
- John Mark Ernest Golooba - Financial Services Manager, Buladde.
- Malcolm Kastiro - Co-Founder & CEO, Mallan Company Limited.
- George Katuramu - Director, Ticteq.
- Felix Balitumye - Team Lead, Computing Palace Technologies.
- Nurudin Busingye - GM, Merchandise Uganda.
- Fred Musisi- CEO, Alpteq.
- Michael Katerega - Founder & Team Leader, YTIB Capital.
- Innocent Orikiiriza - Founder & CEO, KaCyber Technologies.
- Cleopatra Kanyunyuzi - Co -Founder & CEO, Club Tangaza.
- Oscar Ofumbi - Founder & CEO, Insure Small Small.
- Emily Sonia Nakabuye - Co -Founder & CEO, E-Moments Limited.
- Ephrance Eunice Namugenyi - Co-Founder & Business Lead - Kuzimba Services.
- Luke Yyeyo - CEO, Enabling Finance Limited.
- Wendy Nanfo - Country Operations Coordinator- Jumo World, Uganda.
- Ana Grajales - Country Director, Numida Uganda.
- Nelson Kituuka - MD, Discount Cards Ltd.
- Danson Nahabwe - CEO, EverLend Uganda.
- Annet Nyanzi - Director, Green Shares.
- Sarah Gimogoi - GM, Enimiro Online.
- Esther Karwera - Co -Founder & Head of Business Development & Marketing - EzyAgric.
- Laban Jemba - Enterprise Leader, Xuldim.
- Ngala Cyprian Mufor - Co -Founder & CEO, NewLife Technologies.

- Patrick Setuba - CEO, Silicon Savannah Limited.
- Vincent Tumwijekye - CEO, FutureLink Technologies.
- Allan Rwakatungu - CEO, Xente Tech.
- John Paul Semyalo - CEO, Pebuu Limited.
- Nielsimms Sangho - Country Lead, Flutterwave Uganda.
- Bob Moses Oyuru - Founder & CEO, Cytrone Limited.
- Tim Jamieson - VP, Payments & Finance Services, SafeBoda.
- Erasmus Okurut- CEO, PayTota Uganda.
- Emmanuel Emodek - Team Lead, ChapChap Africa.
- Agatha Kyozi - Customer Support Team, ChapChap Africa.
- Doreen Lukandwa - VP, Global Enterprises, Beyonic/ MFS Africa.
- James Byaruhanga - GM, Uganda, Raxio Data Centre.
- Ronald Azairwe - MD, Pegasus Technologies.
- Gerald Begumisa - MD, Yo! Uganda.

THE HIPIPO TEAM:

- Innocent Kawooya - Cofounder & CEO, HiPipo | Producer
- Nicholas Kalungi - COO, HiPipo
- Steven Kimuli - Creative Director, HiPipo
- George Kasakya – Chief Coding Officer, HiPipo
- Charlotte Neeza – Events Manager & Facilitator
- Emmanuel Kintu – Director of Photography, CEO, MET Media
- John Mark Ssebunnya - Certified Digital Finance Practitioner, Fintech Architect, Engineer, Entrepreneur! Guest Facilitator
- Nicholas Ntulume – Digital & Community Manager, HiPipo
- Francis Barenzi – Chief Editor, HiPipo
- Sam Kummary - Program Lead, Modusbox, Guest Facilitator
- Lewis 'Kasule' Daly - Information Technology Consultant - Crosslake Technologies, Guest Facilitator
- Richard Nolton Ssekiwunga | Camera, Editor & Colorist
- George William Ssevubya | Camera, Editor and Sound Mixer
- Emmanuel Kintu | Camera, DOP, Editor & Sound Recorder
- Arthur Mwesiga - Transport & Logistics.
- Derick Kasasa - Transport & Logistics.
- Rita Naiga - Events & Planning Coordinator
- Doreen Nanfuka – Events & Planning Coordinator
- Doreen Semakula - Events & Planning Coordinator
- Yvonne Mpanga - Facilitator

#40Days40FinTechs #LevelOneProject

www.HiPipo.org

www.digital-impact-awards.com