

REPORT

Digital Frontiers Institute (DFI) 2019 Monitoring & Measurement of Results

November 2019



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Country Case Study: Uganda

Abbreviations

CIDM	Certificate in Digital Money
CoP	Community of Practice
DFA	Digital Frontiers Association
DFI	Digital Frontiers Institute
DFS	Digital Financial Services
DWC	Development Works Changemakers
FSD	Financial Sector Deepening Uganda
ICT	Information and communications technology
MFI	Microfinance institution
MMR	Monitoring and measurement of results
MNO	Mobile Network Operator
SACCO	Savings and credit cooperatives
SDGs	UN Sustainable Development Goals
SSA	Sub-Saharan Africa
UBA	Uganda Bankers Association
UNCDF	United Nations Capital Development Fund

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1. Introduction

This case study is one of a number of products undertaken by Development Works Changemakers (DWC) for the Digital Frontiers Institute (DFI), as part of its monitoring and measurement of results (MMR) process for 2019. DWC has conducted evaluative research of DFI's impact in two phases in 2019. The first phase explored the impact of DFI on a wide range of Digital Financial Services (DFS) practitioners in Sub-Saharan Africa (SSA), specifically looking at DFI's progress indicators. In the second phase, five case studies have been produced, two of countries, and three of institutions involved in DFS in Africa. The two country case studies are of Zambia and Uganda, while Bank of Kigali, MTN, and Accion were selected for institution case studies.

The key question informing the two country case studies is: "Over the last four years (2016-2019), how has the DFS landscape evolved in the country, and what has DFI's role been in this development, through its impact on practitioners and the institutions they serve?" This question has been explored through three data collection strategies:

- A high-level review of key literature and statistics on DFS in each country;
- An analysis of DFI's data on its activities in each country since 2016;
- Key informant interviews with seven practitioners in important sectors in DFS in each country, including the private sector, former regulators and the development sector (see Appendix 1).¹
- Where appropriate, insights from relevant interviews from the first phase of the MMR process were also included.

It is important to note at the outset that digital financial services globally are in the midst of a revolution which has taken place in the last decade. In 2018 there were 886 million registered mobile money accounts in the world, growing by 143 million accounts from 2017 (an increase of 20%).² Mobile money is where most of the growth in DFS has occurred, with 272 mobile money deployments live in 90 countries in 2018. Out of these, 62 (22.7%) have more than 1 million 90-day active accounts, compared to 54 in 2017 and only 13 in 2013. Africa is at the epicentre of this DFS revolution, boasting almost half of the individual users.³ This has dramatically improved financial inclusion rates across the continent: 43 percent of the population in SSA were financially included by early 2018, and in countries such as Kenya, Tanzania and the Democratic Republic of Congo, the financial inclusion rate more than doubled since 2012.⁴ The dramatic changes in DFS in Zambia and Uganda need to be understood in this broader context.

2. Digital Financial Services in Uganda 2016-2019

This section provides an overview of DFS landscape in Uganda and how it has evolved over the last four years. Uganda has an estimated population of 44.27 million people, of which 67% are below the age of 25. The median age of the population is 16.1 years. Females make up slightly more of the

¹ All interviews were conducted remotely using the Zoom platform.

² United Nations Capital Development Fund (UNCDF) and Bank of Zambia (BoZ) 2019. *State of the DFS Industry 2018, Launch presentation*: (Page 6).

³ International Finance Corporation (IFC) and Mastercard Foundation, 2018. *Digital Access: The Future of Financial Inclusion in Africa*. Report published by the IFC and Mastercard Foundation. (Pg. 6).

⁴ Ibid. (Pg. 11).

population (50.71%) than males (49.29%), and only a quarter of the population live in urban areas.⁵ Indeed, agriculture accounts for 72% of total employment, underlining the importance of agriculture to the economy. In 2017 it was noted that limited phone ownership and lack of digital skills have constrained the growth of digital financial inclusion. Only 54% of adults owned a mobile phone, while 45% reportedly were not able to send or receive a text message.⁶

2.1 Policy and regulatory environment

At the broadest level, the government of Uganda has aligned its policies and development strategies with the United Nations 2030 Sustainable Development Goals (SDGs), in which financial inclusion is recognised as a key enabler of other development goals.⁷ Indeed, eight of the 17 SDGs reference financial inclusion as a key driver of their various aims, such as eradicating poverty; ending hunger; achieving food security and promoting sustainable agriculture; profiting health and well-being; achieving gender equality and economic empowerment of women; promoting economic growth and jobs; supporting industry, innovation, and infrastructure; and reducing inequality. The last decade has shown that digital financial services can and are radically improving financial inclusion across Africa and beyond.

The Ugandan government's core development vision, set down in 2007, has been to shift Uganda from a peasant society, to a modern and prosperous country within 30 years.⁸ Consequently, in 2013 the government launched the Uganda Vision 2040, "a 30-year development masterplan, envisioning transformation from a predominantly rural and low-income country to a competitive and market-driven upper middle-income country, by 2040."⁹ This ambitious document targets a number of development indicators which it aims to shift over the 30-year period. These include per capita income and other poverty-related indicators like inequality; literacy; access to water and electricity, gender equality; and health and human rights indicators.

Vision 2040 also proposes six five-year National Development Plans (NDPs) which define Uganda's medium-term strategic direction, development priorities and implementation strategies.¹⁰ The first, NDPI (2010-2015), focussed on strengthening the foundation of the economy, particularly with regards to future growth and social transformation. The current NDPII (2016-2020) aims to achieve middle-income status for Uganda, by focussing on four objectives across five priority areas. These priority areas are agriculture; human capital development; infrastructure; minerals, oil and gas; and tourism. The four objectives relate to enhancing service delivery, developing human capital, increasing the stock and quality of key infrastructure, and increasing sustainable production and value addition in key growth areas.¹¹

⁵ These figures are taken from <https://www.worldometers.info/world-population/uganda-population/>

⁶ Financial Inclusion Insights, 2018. *Uganda: Wave 5 Report – Fifth annual FII tracker survey*. InterMedia & Bill & Melinda Gates Foundation (Pg. 9).

⁷ See <https://www.uncdf.org/financial-inclusion-and-the-sdgs>

⁸ See GSM Association, 2019. *Uganda: Driving inclusive socio-economic progress through mobile-enabled digital transformation*. (Pg. 11).

⁹ *Ibid.* (11).

¹⁰ GSMA(2019: 12).

¹¹ *Ibid.* (12).

While the NDPII does not specifically mention the development of digital financial services as a priority area, it does flag the development of information and communications technologies (ICT) as a major target area for investment and support. It also mentions in several places that mobile money is a growing area in the country. For example, on page 18 it notes the role of mobile money services in enhancing financial inclusion by servicing hitherto hard-to-reach areas where banks could not establish themselves previously. Consequently, the number of financially excluded adults fell from an estimated 4.2 million in 2009 to only 2.6 million by 2013. On page 20 it reveals that mobile money service users grew from less than 1 million in 2009 to over 5 million users by 2013.¹² The plan later notes (pg. 27) that the number of mobile money subscribers “rose steadily from 8.87million in December 2012 to 14.24 million in December 2013.” Along with putting in place measures to increase the ICT infrastructure and usage (including mobile phones and internet), and address various challenges, the plan also mentions the retention of a financial inclusion in rural areas project from the first NDP.

In 2011, Bank of Uganda joined the Alliance for Financial Inclusion (AFI) and made commitments to enhancing financial inclusion in line with the Maya Declaration. Uganda’s financial inclusion policy is thus informed by these global objectives. The National Financial Inclusion Strategy (2017-2022), developed jointly by the Ministry of Financial Planning and Economic Development and the Bank of Uganda, is the policy document under which most DFS-related developments are planned for. It is a holistic strategy for promoting financial inclusion in Uganda, through five main “pillars”, or aims:

- Reduce financial exclusion and barriers to access financial services;
- Develop the credit infrastructure;
- Build the digital infrastructure;
- Deepen and broaden formal savings, investment and insurance usage; and
- Protect and empower individuals with enhanced financial capability.¹³

The vision of the National Financial Inclusion Strategy (NFIS) is that by 2022 that “all Ugandans have access to, and use, a broad range of quality and affordable financial services.” This strategy builds on the government’s 2011 Financial Inclusion Programme which focussed on areas such as financial literacy; consumer financial protection; financial innovations; and data and measurement. This programme enjoyed several successes, namely the development of a financial inclusion strategy (2013-2017); the issuance of the financial consumer protection and mobile money guidelines; and the amendment of the Financial Institutions Act (2004) to allow for Agency Banking and Islamic Banking.¹⁴ Taking the lessons learnt during this period, the Government of Uganda then drew up a new strategy which focussed particularly on the inclusion of women, youth and rural populations. The current NFIS is a very strong document with a clear theory of change, which it seeks to honour through the various pillars and aims proposed. Several working groups were set up to drive this ambitious strategy, which is currently still being implemented.

The Ugandan government’s drive for financial inclusion is led by several public and non-state partner institutions. Most of these institutions are represented on the Inter-Institutional Committee on

¹² Government of Uganda. 2015. *Second National Development Plan (NDPII) 2015/16-2019/20*. Accessed at <http://npa.go.ug/wp-content/uploads/NDPII-Final.pdf>

¹³ Government of Uganda. 2017. *National Financial Inclusion Strategy 2017-2022*. Accessed at https://www.bou.or.ug/bou/bou-downloads/publications/special_pubs/2017/National-Financial-Inclusion-Strategy.pdf

¹⁴ Ibid. (Pg. iv.)

Financial Inclusion (IICFI), which played a critical oversight role in the development of the NFIS. The committee includes regulators such as the Ministry of Financial Planning and Economic Development; the Bank of Uganda; the Insurance Regulatory Authority of Uganda (IRAU); Ministry of Trade, Industries & Cooperatives (MTIC); the Uganda Communications Commission (UCC); the Financial Intelligence Authority (FIA); as well as Financial Sector Associations (e.g. the Uganda Bankers Association); Development partners; and Civil Society representatives. Important development partners include the Alliance for Financial Inclusion (AFI) and Financial Sector Deepening Uganda (FSD).

Although the regulatory environment has become more enabling of DFS in recent years, partners such as FSD Uganda continue to play a vital role in ensuring that the regulatory environment evolves positively, to support the DFS sector. For example, FSD Uganda has found that the regulator mindset is often fairly conservative, especially when it comes to enabling fintechs to develop new innovations. As such, FSD's current Digital Transformation Project is seeking to promote innovation for DFS, and build the capacity of regulators through providing technical assistance to regulators and encouraging them to take calculated risks to help increase the pace of innovation.¹⁵

2.2 Developments in financial inclusion and access to DFS

The most up-to-date figures on DFS in Uganda are provided by a July 2019 report produced by the Alliance for Financial Inclusion (AFI).¹⁶ This report notes that formal financial inclusion in the country nearly doubled since 2009, with 28% being formally included in that year, and 58% being formally included in 2018. This growth, it states, has been driven largely by DFS, mobile money in particular. Men were found to be slightly more formally financially included than women, with 63% of men included, compared to 54% of women. Rural adults were also found to be included more than their urban counterparts. Fifty-six percent of adults were found to use a mobile money services, 11% use commercial bank accounts, and 5% make use of non-bank financial institutions.

Other recent research has indicated that growth in financial inclusion accelerated in 2016-17.¹⁷ Apart from noting similar statistics to those noted in the AFI report, this research states that the percentage of adults who accessed financial services increased by eight percentage points, from 55% in 2016 to 63% in 2017, largely due to the fact that 61% of adults were using mobile money by that stage. The report also shows that 38% of adults were active users of their accounts, having used them in the preceding 90 days. Moreover, the proportion of the population who took up advanced services (beyond basic transfers and cash-in/cash-out) also grew by five percent from 23% in 2016 to 28% in 2017. The authors also note, however, that limited phone ownership and lack of digital skills continue to constrain digital financial inclusion – 46% of adults were reported not to own a mobile phone, while 45% were not able to send or receive a text message.

¹⁵ See FSD Uganda & Busara Centre for Behavioural Economics. 2019. *Shifting the Regulator Mindset in Uganda*. Research Report sponsored by UKAID.

¹⁶ Alliance for Financial Inclusion. 2019. Uganda's Journey to Inclusive Finance Through Digital Financial Services. Found at https://www.afi-global.org/sites/default/files/publications/2019-07/AFI_MS_Uganda_AW_digital.pdf

¹⁷ Financial Inclusion Insights. 2018. *Uganda: Wave 5 Report, Fifth Annual FII Tracker Survey*. Intermedia/Bill & Melinda Gates Foundation.

According to another recent report on DFS in Africa, Uganda was one of the first countries in Africa to adopt DFS at scale: by 2018 there were seven non-bank DFS providers serving 7.6 million users.¹⁸ The same report records that by 2016 the value of mobile money transactions was worth US\$9 billion, a rise of 34% on the previous year. The number of transactions also rose by 40% during the same period. The authors state that “Uganda has a relatively mature DFS market offering consumers a range of complex services including interest-bearing savings, and micro-loans with credit ratings based on DFS account history and usage of the mobile network.”¹⁹ Two mobile network operators (MNOs), MTN and Airtel, are responsible for more than 90% of all DFS transactions, through their MoKash savings and loan service (MTN/Bank of Africa) and the Wewole microcredit service (Airtel/JUMO). In the last few years agent banking has also been introduced, and banks have been establishing their own agent networks in order to take advantage of mobile banking. Century Bank and Equity Bank have been at the forefront of these moves, with other banks now following suit. The Uganda Bankers Association has also been very active, establishing an interoperable platform in partnership with several banks called the Agent Banking Company. Because of Uganda’s predominantly agricultural economy, the last few years have also seen new endeavours to digitise agricultural value chains in order to allow remote farmers (coffee, tea, palm oil, sugar etc.) to grow their enterprises through DFS of various kinds.²⁰ It is also noted that as Uganda’s DFS landscape has developed, it has become the target of fraudsters, with fraud continuing to be a major challenge today.

Key statistics relating to the growth in DFS over the last four years are provided in Table 1.

Table 1: DFS growth in Uganda

Number of registered DFS accounts: 18.9mill (2016); 22.5 mill (2017); 22.7 mill (2018); 24.3 mill (2019)	Number of agents per 100 000: 540 mobile money agent outlets per 100 000 (2015)
Number of agents: 110 000 (2016); 140 000 (2017); 160 000 (2018); 200 000 (2019)	Value of transactions (Uganda Shillings): 3,361.8 bill (2016); 4,969.3 bill (2017); 6,795.0 bill (2018); 5,869.9 bill (2019)

In 2016, Uganda had 25 licensed commercial banks, and there are eight MNOs with the market leaders being MTN and Airtel. The country has five licensed microfinance institutions (MFIs). Other nonbank financial institutions include cooperatives, Post Office (Savings) Banks and savings and credit cooperatives (SACCOs).

¹⁸ International Finance Corporation (IFC) and Mastercard Foundation, 2018. *Digital Access: The Future of Financial Inclusion in Africa*. Report published by the IFC and Mastercard Foundation. (Pg. 124).

¹⁹ *Ibid.* (Pg. 124).

²⁰ *Ibid.* (Pg. 124); Mbale, A. & Ogwal, I.H. 2015. “Uganda’s Tea Payments Profile: An Opportunity for Digital Financial Services.” *Digital Financial Services in Uganda – Briefing Note 7*. UNCDF & Bill & Melinda Gates Foundation.

3. The Role of the Digital Frontiers Institute (DFI) in Uganda

This section provides a summary of the role of DFI in Uganda, as shown on Table 2.

Table 2: Key statistics of DFI activities in Uganda since 2016

<p>Number of students trained</p> <h1>178</h1>	<p>Number of courses taken</p> <h1>344</h1>
<p>Sectors in which students work</p> <p><i>Private Sector: 104</i></p> <p><i>Public Sector: 27</i></p> <p><i>Development Sector: 47</i></p>	<p>Face-to-face activities of students</p> <p><i>Community of Practice meetings: 52</i></p> <p><i>Alumni Meetings: 10</i></p> <p><i># unique students attending COP meetings: 71</i></p> <p><i># unique students attending Alumni meetings: 178</i></p>

As indicated on Table 2, a fairly large number of practitioners (93) have taken at least one DFI course in Uganda. Between them, they have taken 169 courses, an average of 1.8 courses each. This compares well with countries such as Zambia, where there has been a very good uptake of DFI courses among practitioners.

Most of the DFS practitioners who have taken DFI courses come from the private sector (commercial banks, MNOs, fintechs etc.). Fifty such individuals have taken the courses. The development sector (NGOs such as FSD Uganda etc.) has also supplied a large number of individuals, at 31. Only 12 public sector practitioners (working mainly for regulators) have taken the DFI courses in Uganda. Although this is a good start, it is important that more individuals in key positions in the regulators take the DFI courses so that they can become part of the practitioner community that is emerging.

DFI has seen 119 community of practice (CoP) meetings take place since 2016, and ten meetings of the alumni. In addition, alumni have launched a very active association, known as the Digital Frontiers Association (DFA), which has drawn a broad membership of practitioners and made several important interventions in the DFS landscape so far.

4. Impact of DFI’s work in Uganda

In this section, we explore the broad impact of DFI’s role in Uganda since 2016. We examine how key role-players from the regulators, Financial Sector Deepening (FSD), the broader DFS industry, and the Association of Digital Finance Practitioners (ADFP) view DFI’s contribution to systemic change in the DFS space since 2016.

4.1 DFS evolution from the perspective of practitioners

Most of the practitioners interviewed reflected the fact that Uganda has a fairly mature DFS landscape in which the fundamentals have been established, but that over the last four years there has been rapid growth in second generation products and services. Interviewees focussed on the challenges of building consensus between practitioners working in different spheres, and on aspects such as customer security and satisfaction. Joseph Lutwama, of FSD Uganda, put it simply; *“A lot has changed in Uganda in four years. DFS is becoming mainstream. A number of commercial banks are investing in technology. Two banks are now offering remote account opening.”* Edwin Byaruhanga, a consultant working in the DFS space, also felt that growth had been experienced in several areas: *“I think in the last four years, we've had a steady growth. We've seen more growth of practitioners, but we've also seen a very big growth in the fintech sector. We have more fintechs now. And more regular discussion with the regulators, which was not there before. So, yes we've grown leaps and bounds.”*

Ann Muhangi, who works for a private DFS consulting company, but was previously with a regulator (the Capital Markets Authority), went into more details about the kind of growth that is taking place, and its associated risks:

“In just about three years, the last three years, there's a lot of rapid development. The growth is amorphous, it's not even linear. It's growing in every, every kind of direction. We have the fintechs that have produced lots of products going out. Uh, we have the telecoms that have produced so many products, especially the one that is very... that brought a lot of joy, but also has a lot of risk: the MoKash, where people can be able to borrow. It's called MoKash. MoKash means that I can be about to sit in my comfort and borrow money off my phone. And that was unheard of, where, like, I mean, we used to have to go queue to the bank, fill in so many papers to be able to just get a loan or you go to a loan shark or you go to a SACCO. But now on your phone, you can be able to borrow small amounts of money that can be able to help you do stuff. Right now, I don't have to go and queue in a bank to pay for my electricity or water or name it, I just have to sit on my phone and do all these things. So, there's so much that has happened and that has gotten the regulator in a bit of panic. But because so much is going on, the regulation is very slow at catching up. But the fear, the challenge is that the growth is so amorphous, that people need to understand it faster than later. Because then they will be... people may get hurt because of the growth that is going so fast and some products carry a lot of risk. Yes. So, that is the area that there's a lot of challenges, but the growth is growing too fast at the same time. I had a friend of mine who said, those who have an investment club, and they, they got [Uganda Shillings] 19 billion, which is about, US\$5,000 off their phone because we have people who are hacking into systems and things like that. So it's, it's the growth is very rapid, the challenges are many, but I think always change comes in a place that is unregulated and it's always a good thing.”

More insights into this growth and the associated challenges and opportunities are presented in the sections below.

4.2 DFI Role in capacity increases, work effectiveness and innovations for practitioners and their organisations

All of the Ugandan practitioners interviewed testified very strongly of how their participation in DFI courses had led to them gaining new knowledge, skills or networks which had helped them to become more effective in their work, and to lead important innovations and projects for their companies. Many of those interviewed are already fairly experienced and knowledgeable, but their DFI experience contributed to their ability to lead key strategic interventions in their field.

Edwin Byaruhanga is a consultant for a fintech called Greenfingers Mobile, which works across seven African countries. He has completed several DFI course and is on the journey towards becoming a DFI Certified Digital Finance Practitioner. Byaruhanga had the following to say about his DFI experience: *“The contribution has been very massive and positive in terms of skills and knowledge. I managed to upgrade my skills to a very technical level. In terms of networks it was also fantastic. I have grown my DFS network and got to know a number of people in different organisations. But the main impact is on my knowledge and skills. With the knowledge, it has allowed me to express myself in a more confident way and to teach others what I have learnt. The knowledge can be used practically, so I have made a big step forward. I now know about DFS and can practice it, so it’s been very positive. I’ve also been able to share with other cohorts that have come in after mine...and I’ve been able to address the fintech community in the innovation space in Kampala as well as have a few discussions with government regulators as well.”* Byaruhanga also commented that learning from students in other countries was extremely important and valuable: *“When you are exploring a case study from the courses on your country’s experience it is very interesting to read on the DFI platform what people are doing in different countries. And you bring all these experiences back to your local setting and you compare and contrast. And then we can advocate and challenge regulators and telecoms and others. So the whole interaction brings you experience and brings you to a point where you can do a localised version of what other experiences have been.”*

Joseph Lutwama, the Head of Business Environment at FSD Uganda, has also completed a number of DFI courses. Lutwama was instrumental in initiating an important FSD programme called the Digital Transformation Project, which focusses on enabling the key DFS regulators to better respond and adapt to technological innovations in Uganda. He was motivated by the realisation that the regulators *“Did not have capacity in understanding the DFS environment and DFS products”*. Lutwama is thus working with four regulators (the Central Bank; the insurance regulator; the securities markets; and the Uganda Communications Commission), and he attributes part of his knowledge from the DFI courses in helping him to design this project and also to ensure that he was able to influence and get regulators to come on board. He says: *“DFI have played a very fundamental role in what I do. I don’t think I could have managed to make the progress I did if it were not for them. I could have maybe done it because it is part of my work, but what DFI has done is that it has helped me to be able to access the body of knowledge around emerging technologies, and different expert opinions through the faculty, which has the wealth of experience from other countries, and has very good background information which makes the work I do quite easy with not much hassle.”*

Pamela Nyamutoka is the Regional Director at the International Institute for Rural Reconstruction, which works in five African countries, including Uganda. A lawyer by training, Nyamutoka has completed six DFI courses starting off, she says, *“From a point of curiosity”*. Her institute partnered with the Ugandan Ministry of Finance to run a project promoting financial inclusion in rural areas. The idea behind this project is to promote village loans and savings associations (VLSAs), and to link them to formal institutions so as to make them more connected and effective. However, when they met with banks, they found them reluctant to provide finance to these informal VLSAs because of the lack of credit records of their members. Nyamutoka’s institute then realised that a solution was to approach a fintech company to digitise the financial records of VLSAs, so that they can also access

bigger loans through the commercial banks. At this time Nyamutoka did not know much about DFS, but in talking to the CEO of FSD Uganda, she recommended the DFI courses which would help her to understand the concepts better. As Nyamutoka elaborates, she found the courses very useful:

“When I looked at the courses I saw a very strong relationship with what I'm actually involved with and a huge opportunity to introduce innovations in what we're doing. For example, we are working in the agriculture sector, we are working with currently over 20,000 farmers and I thought courses like digitizing agriculture, you know, speak directly to what we do – in terms of how we can innovate in the sector. And then the agri-insurance course, money transfers and all the rest of them. I have actually got in touch with some organizations here that support agri-insurance to discuss with them how they can share information on insurance products through mobile phones, for example. So I've got a lot of innovative ideas. And these other innovations were being spurred on by the course material, the knowledge that we were gaining from that. I don't think I would have thought of this if I had not done the DFI courses. Honestly. Yeah, because this, this is like an eye-opener because most of this information was really like new for me. Because I'm not from, you know, a banking background or finance background. So, this was new. But I think the very strong link between financial services and development is something that I got. In terms of the way the DFI courses are structured the link comes out very clearly, and so I'm able to position my work very well with the knowledge being on numerous studies about how financial inclusion assists every other development indicator hugely.”

Nyamutoka also appreciated the links she gained with fellow students in diverse sectors. Through her new networks she was even able to link farmer groups with Equity Bank, which has a number of DFI graduates in key positions and has an interest in DFS for rural farmers. She further reflects: *“For me being part of the DFI courses and especially also exploring challenges around bringing financial inclusion in, especially in rural areas where you hardly have it. These insights have been very helpful. Even in how I support the design of these projects. At least now I understand the landscape very well and understand the challenges and even how to go about addressing those challenges....I think for me directly, this has influenced our acceleration drive in working with agents to provide this financial inclusion. So I'm sure the groups we are working with which represent over 20,000 farmers, would benefit because definitely they know how important it is to provide such linkages and how important the question of financial inclusion is...for economic development.”*

Diana Akullu, who works for DFCU Bank and is the current Digital Frontiers Association (DFA) chairperson also gained much from her DFI participation. Although she only took two DFI courses (CIDM and Operationalising Mobile Money), these have been very important for her work. Akullu now manages the Contact Centre at DFCU Bank, but prior to this she was leading the unit which was responsible for the rollout of the bank's online banking platform, which was a key aspect of their strategy to go digital. Akullu puts the rich contribution of DFI thus:

“What DFI gave me was the knowledge, the product knowledge, in understanding how the different systems in the bank interact. For example, we have the IT systems, then we have the products at the front basically integrating them. So the knowledge that I got from the DFI courses helped me in the implementation of the [online banking] project because at the time I was the team leader. I was championing the user acceptance, testing of the products before I roll them out. So the knowledge I got helped me to define the processes. For example, if you want to have utility bills, because you are looking at different products to be used by our different customer segments. So the knowledge I got helped me to design process flows that have to be embedded into the systems so that it's user friendly. So that played a key, a key

role in giving me the knowledge on how to design a product from the customer's perspective, especially when it comes to the user interface. For example, if you, if a customer is willing to pay for their electricity bill, what are the parameters that you feed into the system? Is it user friendly? Is it easy to navigate? So that knowledge helped me in that implementation. It also helped me in stakeholder engagement because we needed a lot of stakeholder engagement during the implementation of the project. We needed people from risk, we needed people from the IT department, the people from the business... and through the knowledge that I had I realized that we needed to bring all the stakeholders on board from the onset and not wait until the end of the project and only then you involve a risk person or an IT person. So I was able to bring all those parties together at the beginning of the project. So by the time we went into pilots, we had ownership of these features and whatever was going to be deployed into production. We had ownership from all departments, simply because they had been involved from the onset. So the knowledge really helped me, and that also led to the success of the project."

From her perspective as the chairperson of the first DFS industry association, Akullu also feels that DFI has helped other practitioners to make a contribution: *"Yes, greatly because those who've done the DFI course understand the whole digital finance concept better. Because right now, you know me coming from a banking industry, we do understand that a lot of collaboration is needed between the banks and the regulators and the telcos. So when we're meeting, discussing, you really see that a person who's done the course is more knowledgeable and can articulate the different reasons why we should integrate with the different parties as opposed to going through it alone. So there is a much, much, big difference between those who have done the course and those who haven't. So it's helped...It does help to have a colleague who's also done the course, but it would probably be good, if more of you only could also do the course. So I have reached out to two or three others in my company to enrol for this course."*

Like Akullu, Abaho John Bosco has completed the CIDM and Operationalising Mobile Money courses. Abaho works for the Rkiga Savings and Credit Cooperative (SACCO) in rural southwestern Uganda, an area of small-scale farmers producing potatoes, sorghum, rice, vegetables and beans. The SACCO has 18,239 members, of whom 86% are farmers. For Bosco, the DFI courses "excited" him as they gave him a way of responding to some of the challenges which their members are facing. Bosco elaborates: *"We have seven branches, all in rural areas, but our members need to get to the branches from their homes. The journey to and from our branches costs them around US\$5. So this was a transport cost. I realised that we could support them to save this money instead. The SACCO was using a cash system before. A farmer brings money he or she wants to save to the SACCO branch, and we write the amount in a ledger book and write it in the farmer's pass book. Everything was paperwork and it was more hectic. So instead I started the journey of digitisation and wanted to integrate all activities of the SACCO into a new digital system."*

Bosco and his colleagues obtained support from funders in the Netherlands and Denmark to computerise their system in 2017. After a few challenges they had developed a stable system by the end of 2018. To integrate this system with all their work, Bosco realised that they need strong partnerships. The SACCO thus formed partnerships with a management information system and a mobile network operator (MTN). The latter partnership allows members to use mobile wallets for all their business with the SACCO. Bosco describes how the SACCO management and directors took some persuading to adopt this integrated system due to their fear of change and the associated perceived risks. He was instrumental in convincing them to give their blessing to the project. On the 26th of April 2019 they launched this mobile money system and over 500 members signed up at the

first meeting. At the end of the month, only four days later, they had already registered 34 successful transactions – which between them represented savings of 4.29 Ugandan Shillings.

In May 2019, more activity was witnessed; both “pull” transactions from savings accounts, and “push” transactions to mobile wallets. The month saw 113 transactions to the value of over 33 million Ugandan Shillings. In June, they recorded 254 transactions, to the value of 89.3 million Ugandan Shillings. In July, they recorded 369 transactions to the value of over 160 million Ugandan Shillings. Having used these months as a pilot phase, the SACCO then started to market the product on the basis of these impressive results. This brought even more uptake among their members. In August they recorded 545 transactions to the value of over 356 million Ugandan Shillings, while in September there were 453 transactions to the value of 195 million Ugandan Shillings. As Bosco reflects, *“So, if you look at the transactions, lots were registered: around 1510 transactions in six months. This is quite interesting and exciting too. This means is that from the farmers’ perspective, they are no longer spending US\$5 on transport, and they can conveniently save their money on the mobile platform. There is a small charge for the service: each transaction is 2000 Ugandan Shillings. This is an income for the SACCO which we have never had before. So the farmers used to pay 20 000 Ugandan Shillings on transport to come to the office and now they are spending just 2000. So there is a cost saving on their side and we make some income.”*

Bosco strongly believes that the DFI courses had a significant impact on him as it *“changed my thinking and my attitude.”* In turn, this has enabled him to make big changes at his SACCO which are having a direct positive impact on the financial inclusion of rural farmers in an area not well serviced by formal banks.

Ronald Namawa is the Regional Supervisor for the Digital Banking Department at Equity Bank, one of Uganda’s oldest and largest commercial banks. He has completed eight DFI courses and *“is looking forward to being certified”*. Namawa is effusive about what DFI has done for him and his work: *“My role is quite interesting, whereby I have to digitize the platforms for our corporate clients. That’s one. On the business side also I involve myself in product management from the initiation stage to the market strategy. With DFI I can happily say...to me, it has shown me the way, it has added knowledge. I can say that I knew much before this course, but it has helped me to see the journey, to see the roadmap for which it can help me to really pursue my goals as a person who loves digital finance. Actually, I can tell you, I’m happy to tell you I’m so, so much interested and I so much love digital. I love doing work on online, doing work in this field.”* Namawa goes on to explain: *“I can say in terms of knowledge I gained a lot. One, for example, maybe in product management. I can say in such courses like product management – I didn’t know...the qualities of a product manager, how you can use that product management in the business side. And they have really exposed me to really good types of knowledge... and I have been able to apply this knowledge in the projects that I do. Because like I told you, we were as a family, we really connected, looking at the digital platforms. To me in the industry, I can say Equity Bank is one of these banks that have really looked at digital as being the force.”*

Namawa went on to explain how the bank is now using DFS for humanitarian payments, given that Uganda has one of the largest refugee populations in the world. He says that he has played a role in helping to develop the systems and channels for these payments, drawing on knowledge he gained through DFI. Namawa further argues that the fact that at least 10 staff members of Equity Bank have done the courses has also helped the bank: *“The impact has been both indirect and direct. For us who have done the DFI courses, it has really impacted on our ability to develop the go to market strategy and so on. It has really impacted on the company: it has helped us to evolved products in a more effective manner. For us, the organisation has gained and benefited in the long run.”*

4.3 DFI role in building capacity of government regulators

As noted above, only 12 public sector employees have participated in DFI courses thus far in Uganda. By contrast, 39 public sector employees have participated in Zambia, their participation helped considerably by FSD Zambia's policy of providing DFI course sponsorship to employees from key regulators. FSD Uganda has sponsored a few regulators, but not at the same scale as in Zambia. Despite Uganda having a fairly advanced DFS landscape, a common refrain among interviewees was that the regulators tend to need a lot of capacity development, and are not always able to respond to the needs of the sector.

Ronald Namawa of Equity Bank explains the situation thus: *"We do try to lobby the regulators, but the Bank of Uganda is made up of people who are a bit old and not tech savvy. So this is a major challenge. Fintechs are rising up and they are even faster than the regulator. They wake up late and say 'oh' and are running to catch up. It is the student running faster than the teacher! It is the age group and composition of the people working in the regulators. The heads of department who pass resolutions and guidelines are not tech savvy and don't even think about digital finance. But in time, new blood will come in – like us – and it is just a matter of time. But we have to take it one step at a time. We even lobbied the government on agency banking: we took them to Kenya to see and it taught them how the model works. They are too traditional in their thinking and the younger employees are holding small positions."* Ann Muhangi (Wholesome Consult) agrees, saying that *"The regulators are a bit fuzzy – sometimes they have no clue at all!"* Joseph Lutwama (FSD Uganda) also testifies that although his organisation works closely with the regulators, it is frustrating that there is no specific team in key regulators that deals with digital finance. For instance, he explains, even the Central Bank has a financial innovation office, but it is not staffed. He agrees that the regulators in Uganda are used to regulating traditional financial services, so they need a lot of education and capacity development to regulate DFS properly.

For Lutwama, sponsoring them to take DFI courses is an important strategy. FSD Uganda has thus sponsored some employees working in regulators such as the Central Bank, the National Information Technology Authority, the Ministry of ICT and the National Identity Registration Authority to take the CIDM. Unfortunately, so far this is only a small number, albeit some of them working in key positions. Edwin Byaruhanga (Greenfingers Mobile) feels that the pressure put on regulators by bodies such as the Digital Frontiers Association is important in this regard: *"We have been challenging the regulator, so they have started sending a few of their people for the courses. The number is not impressive yet but there is an effort being put in to send a few representatives from the regulators, local government, the Central Bank, and the Ministry of Finance. So the number is steadily growing and the association is playing a role of pushing them to do it more."*

Besides sponsoring regulators, FSD Uganda is also playing a crucial role through the abovementioned Digital Transformation Project, of which Joseph Lutwama is a key driver. As he explains, *"The reason we are undertaking this project is so that we can encourage the industry to adopt innovation. We want the regulators to be enablers rather than hindrances to the innovations. So we are taking a lot of time to help them grow their capacity, and to help them to understand the risks, and to help them to understand market conduct and all these things. Unless you have a strong regulator that enables but also understands the risks, you won't be able to evolve the market. So we have taken a market systems approach – to look at all the different actors like infrastructure, policy, human capacity etc."*

So we are looking at the whole system. I was one of the key people who initiated this project within FSD Uganda and sold it to the regulators.”

For each of the four regulators FSD is working with (the Central Bank; the insurance regulator; the securities markets; and the Uganda Communications Commission), there is a two-year journey that is broken down into three phases. The first phase involves a diagnostic of the regulator to identify what laws and regulations currently exist, and what their internal capacity, in terms of people and systems, is like. In phase two FSD provides each with appropriate tools to transform into an effective regulator (for example, sandboxes and fintech offices). In the third phase, over a period of six months, FSD provides hands-on support to help them to increase capacity through the transfer of knowledge and skills. So far they have completed phases one and two with the insurance regulator. FSD is looking to develop a risk assessment tool which the insurance regulator can use. Lutwama explains further how this work has progressed: *“As part of our preparations for the Digital Transformation Project, we conducted behavioural science analysis to see what mindset needs to be in place in order to effectively sponsor technology and innovation. So as part of the project, we are not only looking at risk management tools and so on for them, but over and above this we have interventions around changing the culture in the insurance regulator through, for example, putting in place systems and activities in the regulator to create a culture that is not averse to risk and technology, but that instead evolves it.”* They are currently on phase one with the Central Bank and their goal after the two year process with each regulator is completed, is to have totally transformed the regulatory landscape so that it is very attuned to technology and DFS.

Although DFI has not played a direct role in building the capacity of regulators – aside from the 12 individuals so far trained – practitioners such as Joseph Lutwama of FSD are playing an influential role through capacity development projects they are undertaking. As will be explored in much more detail below, the Digital Frontiers Association is also playing its part in building the capacity of the regulators, changing their attitudes and evolving the regulatory environment for DFS in Uganda.

4.4 DFI role in improving the regulatory environment

While there has been a slightly understated role for DFI in directly building the capacity of the regulators in Uganda, the role of DFI graduates in shifting the DFS regulatory environment has been significant. In their individual capacities, various DFI graduates have participated in efforts to lobby the regulators since 2016, and had some success. Possibly the best examples have been Joyce Nambasa of Equity Bank, and Gabriel Kamuge, formerly of Tropical Bank, as recorded in the report for phase 1 of this MMR process. These two individuals played a key role in representing their banks on various committees of the Uganda Bankers Association (UBA). For example Kamuge sat on the Digital Finance Committee of the UBA, which strongly and successfully lobbied the government to adopt agency banking, mobile banking, Sharia banking and banking assurance. The efforts of the UBA even extended to flying Members of Parliament to Kenya to see for themselves how agency banking works. Equity Bank was heavily involved in this endeavour because their Kenya offices had been a leader in this department for some years. A few months after this trip, Uganda allowed agency banking.

However, even more important for Uganda has been the establishment of the Digital Frontiers Association (DFA) by alumni of DFI. All but one of those interviewed are members, a number of them are founding members, of this association which seeks to play a leading role in changing the

regulatory environment for the better. The DFA, was launched in 2017, and officially registered in late 2018. Diana Akullu, the current Chairperson of DFA explains the genesis of the association: *“During our CIDM course we realised that in this country there is a gap in the area of collaboration. We realised that there is a lot of regulation happening, but regulators are not anywhere near others who can assist to guide innovations. So we saw the need to come up with an association that brings together all these players as we realised that an umbrella association that brings all these players into one room does not exist.”* The DFA was officially registered with the Uganda Registration Services Bureau, with Akullu pointing out that official registration and recognition has been crucial: *“It is important to be registered so we can approach regulators and Members of Parliament and really get them to take us seriously. So for example at our conference, we had the Executive Director of the Bank of Uganda. And we got the Uganda Communications Commission Director of Communication and Industry Affairs too, so we managed to get the decision makers around the table.”* Edwin Byaruhanga, another founding member, agrees: *“The DFA needs to be officially registered and have formal links with DFI and other stakeholders. It must be recognised as a think-tank and has to be licensed too. It was challenging to get it registered, but we managed to get it done.”*

Besides the conference which the DFA has decided to host every year on an important DFS topic (the last had around 100 participants), the association has also come up with quarterly activities targeting key stakeholders from the DFS practitioner and regulator community. These events, dubbed the “digital coffee place” involve discussions about challenges within the digital space in Uganda. So far, these digital coffee places have proved popular, attracting between 40 and 50 people each time. As Akullu elaborates, *“We have been hosting a lot of coffee places where we have invited the Bank of Uganda, and the Uganda Communications Commission. We invited the regulators and informed them on how to get on board when it comes to innovation. We got fintechs, microfinance institutions, telcos and the regulators to sit at the same table to understand how to move forward as a country on innovation. And through this, the regulators gave us assurances that they are on board when it comes to enabling innovation. They also gained knowledge and agreed that they will let innovation happen for a while before coming in and regulating. This is in line with our objective which is to influence policy on digital finance.”* The DFA also recently organised a town hall-style debate for telcos and regulators on the question of whether mobile money truly represents financial inclusion or is merely another form of financial exploitation. This event was very stimulating and informative for all who attended. All of these events have been supported in various ways by DFI. They have adopted a low-cost approach which has proved highly effective so far.

The DFA currently has close to 30 members, all of whom are DFI graduates. But as Diana Akullu explains, their goal is to keep growing and recruit DFS practitioners from a wide range of DFS organisations, not restricted to DFI graduates. Once they are part of the DFA, she argues, they can take the DFI courses.

Besides this relationship and knowledge building in the sector, the DFA has also already influenced policy very directly. As Akullu explains, *“Last year there was a mobile money tax approved by parliament. So we invited them into the digital coffee place and told them that the tax was not enhancing financial inclusion as people would not afford to use mobile money anymore. The DFA then found a sympathetic MP and assisted him to write a paper, which he took to Parliament and got them to cut the tax in half. So we were able to influence policy and enlighten them, especially of the need to consult before introducing policies.”* Edwin Byaruhanga calls this *“a major contribution”* since *“We got a reduction from the 1% on all transactions which was being mooted by the Ministry of Finance, and got it reduced to 0.5% on the amount withdrawn.”* Akullu also celebrates the fact that

now, MPs are starting to circulate draft policies like the National Payments Bill with the DFA for their comment, something they would not normally send to individual practitioners. She commented that it is important for them to read these bills and make sure the interests of all stakeholders are covered in such bills.

Ann Muhangi, also a committed DFA member, stressed that their strategy to be formalised yet bring regulators and practitioners together in a relaxed, non-formal and flexible way was important. She argued that this encouraged regulators to attend so that the DFA members can engage them on a range of issues. Muhangi further commented that the fact that some regulators had taken DFI courses had really opened doors, and that their efforts were leading to a shift in regulator mindset in Uganda:

“The regulators...they’re always big people, they feel they don’t need advice from people. However, what happened is that for the first time when we got someone from, for example, the Minister of ICT, then we had a few, about five people coming from the Bank of Uganda and then we had two people from the Ministry of Finance coming to take up the courses. That opened big doors for the association and other people like the Bankers Association to be able to engage the regulator. Before, the regulator was the big brother, ‘you don’t come into my space, I tell you what to do’. However, because we had these people and some of them were commissioners. We even had at some point, a PS; a Permanent Secretary and the Minister of ICT, who dropped out unfortunately. But because we brought them on this round table, when we have our meetings, no one feels very big, at that time we were all practitioners, we are discussing the issues that are there, we are discussing innovation, we are talking to ourselves. So that informal talking, the informal discussion created a lot of excitement and when we next knocked on the doors of the regulator, it was so easy. Because then we have them involved and they know what is at stake. Two; when we’ve had our meetings: the breakfast that we had recently, and actually engaged these regulators to come, to hear from us and tell them what is it that is happening in the sector. When they came, they were amazed at what is going on. So now the doors are slowly getting opened and, they can be able to take advice, they are willing to be able to sit on the table and see what is going on and we have committed to continue engaging them, so that we can be able to understand the sector and grow the sector together. So the regulator is becoming a bit more accommodative of the ideas and what is going on.”

Edwin Byaruhanga sees the shifting regulatory landscape, thus highlighting the need not only for enabling regulation, but also for tight regulation in some areas: *“The main things we have changed is that we have started now pushing for more regulations in sections in the DFS industry. For example, mobile money has always been its own animal and done what it does. But now we have studied it and put the MNOs under the spotlight. There is also more talk of national digitisation of systems, national payment systems: a national payment systems plan is in the pipeline. And we are looking at a national digital plan to digitise different sectors. So all this is because we have now been exposed to what other markets are doing and seen what others are doing, and we are seeing what works for us.”*

Joseph Lutwama, of FSD Uganda, reflects on DFI’s role in changing the DFS landscape in the country: *“What DFI has done is it has increased the pool of experts or specialist within financial markets who have a fairly good understanding of how DFS work. A number of these are working with fintechs or financial institutions. So there is an increased awareness about DFS and that I believe partly explains the increased reception of DFS both in the financial industry as well as within the government space. We work with a lot of government agencies and I can tell you for a fact that getting the Central Bank*

to sign up for our Digital Transformation Project – we had ‘ambassadors’ within the Central Bank who have done the CIDM, so when we were talking about digital transformation and how regulators need to upscale their skills and embrace technology it was much quicker. We were not hitting hard ground. We had some members already exposed to DFS, so it prepared the way. It did take time to get them to buy in, but the fact we had someone inside who appreciated what we are talking about ensured that we got buy in.”

Lutwama also revealed that his unit within FSD Uganda has supported the establishment of an association that brings together fintechs in Uganda, called the Financial Technology Service Providers Association. This has given a voice to the fintechs, which has meant that different regulators and other DFS role-players are beginning to recognise fintechs as a major player in the financial system. The regulators have responded by putting together a draft law that will govern payments, including how fintechs may be involved in this area. FSD Uganda is currently also partnering with this association to host the Africa fintech festival in Kampala. And they are in the final stages of hiring a consultant to work with them to develop an industry code of conduct for fintechs in Uganda.

4.5 Role of DFI in bringing DFS practitioners together

As is apparent in the above sections, DFI has brought a large number of practitioners together in Uganda, fostering a common understanding of issues facing the DFS space. The Communities of Practice (CoPs) in which DFI students participated during courses have clearly fostered such interactions and networking. Interviewees also appreciated being linked more broadly to DFI students in other countries. As some of the quotes recorded above show, they appreciated learning from the experiences of practitioners in other countries and bringing these ideas and models into the Ugandan context.

The formation of the DFA in 2017 has also played a key role in bringing practitioners together, and linking them to regulators and other role-players in DFS in Uganda. The work and achievements of the DFA are presented above. Edwin Byaruhanga reflects on this association: *“They are doing a fantastic job. Thank God we have an umbrella association that brings us together. But it would also be good for us to have an exchange – some form of physical interaction with other students in other countries. Maybe an exchange programme where people come from Zimbabwe or Mozambique or elsewhere and we go there to learn from them. Maybe DFI or someone could organise this to share experiences that just bring us closer together as DFI alumni. It would be nice to host someone from another alumni association.”* This, he says is important for the following reason: *“It is really clear that when people start having their eyes opened and seeing things the same way, and learning from others on the course, it can have catalytic changes. It makes people also passionate about being involved.”*

Ann Muhangi, meanwhile, expressed the following opinion about the role of DFI in bringing DFS practitioners together:

“Oh my God! If there was no DFI, I think first of all, we would have each and every sector, player, in their different organisations sitting and doing their different things. And you know, when you can't work together, then growth can be so difficult and challenging. Two, I think, in terms of knowledge and exposure, we will not have so many people change things at their workplace and see things differently, because most people did, ja, they do a course and, some

of them are IT guys, some of them are bankers, and then they go and sit, they think, 'well, I know this whole thing'. They just go for a few workshops. But every one of them when they read, when they start taking up the course, they open up to something bigger than what they expected and their view to digital finance definitely changes. So DFI has brought about, we're going to bring professionalism to the digital finance space, which I think, in my opinion, was lacking. And it had bits of little things. But this is systematic, it is well organised and the knowledge comes in such a way that it will enhance your performance, wherever that you'd be. So I think DFI, the big thing that it brings is professionalism and also it puts in place a platform where these practitioners have a reference point. For example, I'm looking forward to when we have certified practitioners. Now people will start speaking with authority when you say you are a certified digital finance practitioner or profession. Then we will have people respecting that space and therefore we'll be able to work with many other players that you know didn't think it was important to have professionals in that area."

Uganda is fortunate to have DFS practitioners who are extremely passionate about linking up with each other to purposefully coordinate their efforts to influence policy and develop the DFS space. DFI has clearly played a key catalytic role in this area, as such coordination between passionate practitioners would not have happened without the CoPs and DFIs encouragement and support to develop an alumni association.

5. Conclusion

This case study has shown that DFI has played a significant role in the evolution of the DFS landscape in Uganda over the last four years. By training close to 100 practitioners, many of them working in influential positions within the DFS space, DFI has enabled a critical mass of professionals to emerge and begin to collaborate. As Diana Akullu argues, *"The key contribution of DFI is awareness. Most people did not know about DFS before 2016. Most people did not know how it worked. So DFI played a key role. This has led to the improvement of services and the quality of services in the DFS space."* Edwin Byaruhanga, who sees himself as being extremely passionate about DFS in Uganda, feels that the DFI courses stimulated him to develop himself and his country in the realm of DFS. He says the following about the role of DFI in Uganda: *"It is not too much to say that they have played a major role. Because if one goes back to the time of the first cohort. I know some people who were there in that first cohort. Before we got this knowledge from DFI, we were lagging behind. So if it was not for the exposure that we got there we would probably still be doing the things the way we used to do them."*

Because many of the Ugandan DFI alumni have been in influential positions in the private sector or in developmental organisations, they have been able to initiate and influence very important projects which are taking DFS in Uganda to the next level. A number of these projects have been discussed in this case study, such as the International Institute of Rural Reconstruction's partnership with the Ugandan Ministry of Finance to promote rural financial protection; the Rkiga SACCO's shift from a paper-based system to a digital system which has resulted in significant savings for farmers and created a new demand for DFS in rural Uganda; and the lobbying of the Uganda Bankers Association which resulted in agency banking being adopted in the country. Although still small in number, the DFI practitioners working for regulators have also opened doors to their institutions, so that meaningful change can take place. The Ugandan CoP has also played a major role in bringing practitioners from different sectors together (including regulators), especially through the formation of the DFA, ensuring that the DFS regulatory framework keeps up with the fast-changing DFS

landscape. The DFA has been able to be influential because of its credibility and the creative and sensitive way it has approached its role in Uganda.

There are, however, many challenges remaining which will require similar levels of commitment and creativity. As Ronald Namawa reflects, the platform that has been established has great potential to address such challenges: *“I think what we have established through DFI can lead to change. Here in Uganda people really want to use physical cash still. We are trying to get people to change that mindset through really knowing what banks offer and that there are other platforms they can use. Even one of my corporate customers, I had to convince them for two weeks as they wanted a traditional banking channel. They had security concerns with a digital channel. But I built rapport with them, educated them and persuaded them to use a digital channel. So the DFA is about educating the population so they buy into a cashless way of doing payments and other services. We are doing a great job, and we have to keep on going.”*

6. Appendix 1

List of Ugandan interviewees:

Name	Organisation	Sector	Industry	Gender
Edwin Byaruhanga	Greenfingers Mobile	Private	FS	M
Joseph Lutwama	FSD Uganda	Development	FS	M
Pamela Nyamutoka	Institute of Rural Reconstruction	Development	Development	F
Diana Akullu	DFCU Bank	Banking	FS	F
Ann Muhangi	Wholesome Consult	Private	FS	F
Abaho John Bosco	Rkiga SACCO	Banking	FS	M
Ronald Namawa	Equity Bank	Banking	FS	M