

REPORT

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

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Institution Case Study:

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The MTN Group

Abbreviations

CDFP	Certified Digital Finance Practitioner
CIDM	Certificate in Digital Money
CoP	Community of Practice
DFI	Digital Frontiers Institute
DFS	Digital Financial Services
DWC	Development Works Changemakers
ICT	Information and communications technology
MFI	Microfinance institution
MMR	Monitoring and measurement of results
MNO	Mobile Network Operator
SDGs	UN Sustainable Development Goals
SSA	Sub-Saharan Africa
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 institution case studies is: "Over the last four years (2016-2019), what has DFI's role been in developing the capacity of DFS practitioners working in each institution, and what further impacts are apparent at departmental and institution level?" This question has been explored through three data collection strategies:

- A high-level review of each institution's website and other relevant documentation;
- Key informant interviews with up to seven practitioners working within different units/areas in each institution (see Appendix 1).¹
- Where appropriate, insights from relevant interviews from the first phase of the MMR process were also included.

Case study development followed a rapid qualitative approach. In October 2019, a range of in-depth interviews were conducted with MTN staff in various African countries, to obtain as much insight into the impact of DFI on them and their company as possible. Due to timeframe and budget limitations, it was not possible to include more individuals. Each was interviewed via the online Zoom platform.

Each institution operates in sub-Saharan Africa (SSA), and their work has taken place in the context of the current global DFS 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 work of each of these three institutions needs to be understood in this context.

¹ All interviews were conducted remotely using the Zoom platform. Of the seven interviewees, two were based in Benin, while one individual was based in each of Rwanda, Liberia, Zambia, Madagascar and Nigeria.

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).

2. Company background and role in DFS in Sub-Saharan Africa

The MTN Group Limited was founded in 1994, at the dawn of democracy in South Africa. With headquarters in Johannesburg, it has grown to become a multinational mobile telecommunications company: the largest in Africa and eighth largest in the world. MTN is active in 21 countries, 17 of them in Africa.⁵ Most of these are in west Africa, with some east and southern African countries also hosting MTN offices. The country with the largest number of MTN customers is Nigeria, with over 58 million subscribers.

Along with cellular telephone services, MTN also offers mobile money services to its customers in many countries. In 2009 MTN launched mobile money in Benin, Ghana, Cameroon, Ivory Coast, Uganda and Yemen. This service has since expanded to include 14 countries in Africa with 30 million mobile money subscribers actively using their accounts. The company is currently on a drive to transform “into an interconnected, mutually dependent, multipurpose digital platform offering everything from money transfer to insurance, music streaming, mobile gaming and chat messaging.”⁶ MTN sees an expansion in mobile money services as the most important strategic opportunity, especially since MTN came late into this area compared to others such as Safaricom’s M-Pesa service.⁷ With close to 60 million mobile phone subscribers in Nigeria, MTN realised it had a strategic opportunity to grow its mobile money subscribers significantly almost overnight when it finally was able to launch mobile money services there in 2019. This followed the Nigerian government’s eventual relaxation of regulations to allow telecom companies to provide financial services, and grant MTN a “super operator” license.⁸ MTN is also looking to relaunch mobile money services in South Africa in the near future.⁹

MTN strongly believes that its work in Africa, including various innovations and corporate social investment activities, fosters increased connectivity, digital inclusion, education, employment creation and financial inclusion. It sees itself as an “emerging market mobile operator at the forefront of technological and digital changes... delivering a bold, new digital world to our customers across Africa and the Middle East.”¹⁰ MTN is guided by the belief that “everyone deserves the benefits of a modern, connected life and its vision is “to lead the delivery of a bold, new digital world to our customers.” To realise this vision, MTN has adopted an operational strategy it calls “BRIGHT,” based on six pillars. These are Best customer experience; Returns and efficiency focus; Ignite commercial performance; Growth through data and digital; Hearts and minds; and Technology excellence.¹¹ Each of these pillars is linked to specific key performance indicators, with the company seeking by 2022 to achieve such milestones as growing to 300 million subscribers; achieving 200 million data subscribers; and gaining 100 million digital subscriptions, including 60 million for MTN Mobile Money (all under the Growth through data and digital pillar).

⁵ See <https://www.mtn.com/who-we-are/about-us/>, where the information in this section comes from.

⁶ <https://www.businesslive.co.za/bd/opinion/editorials/2019-08-12-editorial-mtn-pushes-into-mobile-money-services/>

⁷ Ibid.

⁸ <https://www.fin24.com/Companies/ICT/mtn-launches-mobile-money-operations-in-nigeria-20190829>

⁹ <https://techcentral.co.za/mtn-sa-looks-to-rival-cash-with-mobile-money-relaunch/91742/>

¹⁰ <https://www.mtn.com/who-we-are/about-us/values/>

¹¹ See http://www.mtn-investor.com/mtn_ar2017/our-bright-strategy.php

In the sections that follow, we examine the role DFI has played in assisting The MTN Group to achieve its vision and strategic goals in Africa.

3. Impacts of DFI courses on MTN

In this section, we detail the impacts that the DFI courses have had on MTN employees, and on MTN generally in Sub-Saharan Africa. Such impacts were identified, where possible, from seven qualitative interviews with DFI employees based in six African countries. However, it must be noted that because of the small sample, and the fact that MTN operates numerous subsidiaries all over Africa, it is not possible to obtain a clear picture of impact at a company level. However, within specific countries, for example MTN Mobile Money in Benin, it is clear that there has been an impact, and MTN Mobile Money Benin has in fact made it mandatory for any new employee to take the DFI CIDM course. Table 1, however, shows the number of MTN employees who have taken DFI courses across SSA, providing an indication of DFI’s broader footprint on the company.

Table 1: Details of DFI courses taken by MTN employees

<p>Number of MTN employees trained</p> <p>89</p>	<p>Number of courses taken by MTN employees</p> <p>118</p>
<p>Number of employees on CDFP journey</p> <p>14</p>	<p>Gender split</p> <p>18F/71M</p>

3.1 Impact on MTN Employees

MTN employees based in Benin, Rwanda, Nigeria and Zambia, as well as a former MTN employee now based in Madagascar, all demonstrate that the DFI courses had a positive impact on their personal development and their ability to perform their jobs well.

Hermann Ahouandjinou is from Benin, where he works for MTN Mobile Money in the Sales and Distribution department, as the Manager of Financial Services Sales & Ecosystem. He is in charge of MTN Mobile Money’s agent network management and merchant ecosystem development, ensuring that agents are recruited, trained, monitored, and managed effectively. It is an important role as MTN is a major mobile money operator in Benin with a market share of 80% and a value share of 88% of the market.

Ahouandjinou completed the CIDM, Leading Digital Money Markets, and a course exploring DFS in India. He has since registered for the Certified Digital Finance Practitioner journey. On the impact of these DFI courses on him and his work, Ahouandjinou says, *“The DFI courses definitely had a high impact, firstly on my ability to understand how the DFS industry and the whole ecosystem is working, with the language and stakeholders. Because through the courses there are experiences from many*

markets, so leveraging on those experiences, I then start to see how I can adapt some experiences from another markets to the Benin market. And the second one is sometimes...even if you are good at execution and achieving your activities, you need to know and have good knowledge in theory. So the DFI courses also brought that knowledge to me of how mobile money is deeply working. I use those experiences to see how I can improve my work."

A colleague from MTN Mobile Money Benin is Dieudonne Ore, who works in the Mobile Financial Services Department as a Products and Services Coordinator. His job is to ensure that the product or service that has been developed is the best it can be before being launched. His team designs the customer journey and tests the product to see how it will impact the customer. Such products have included MTN Mobile Money's savings and lending product and their electricity bill payment product. Ore completed the CIDM, Mobile Money Operations and the Digital Transfers course with DFI. Like Ahouandjinou, he is enthusiastic about the impact of the DFI courses on him. These courses, he says, have enabled him to discover things in the digital domain that he did not previously know. As he explains:

"I've learnt too much by being part of this class. To be frank, I learnt a lot of things. The first course was Mobile Money Operations. Let me tell you something: when I was taking my first class with DFI it was so exciting and I noticed that before starting working in the mobile money domain, this type of course is a key one that everyone who is working in that domain should take. Just after I completed it, I noticed that this type of course is important for everyone who claims to work in mobile money. It helps you to know the background of mobile money, where it came from, the story of how money transfer works. The last course I did was on money transfers. I learnt the many ways they used to send money in the past, by train or even with people. If you want to transfer to a relative, you give it to a person and they take it."

Ore also highlighted that he learnt important things about how regulation of DFS works through DFI: *"You know, I was working in mobile money for maybe eight years, but it is with DFI that I learnt the regulatory factors of mobile money. It is with DFI that I worked out all those regulatory aspects and how it can rule the mobile money system, and how banks can help mobile money operators to do transfers through e-wallets. Because you know before, the regulatory aspect was not very important for me, but through taking DFI I realised it is very important for someone who is supposed to work in mobile money to understand. I also learnt that the advent of Bitcoin and these kinds of currencies, how they are about to impact mobile money."*

At MTN Mobile Money in Rwanda, Lilian Tumushabe works in service management. Like Dieudonne Ore in Benin, Tumushabe's role entails ensuring that every service or product provided to MTN Mobile Money customers suits the customers' needs, and is improved based on their feedback. Her team makes sure that suitable systems are in place to support their products. For example, if a link to a bank is required, they ensure that the connectivity is adequate. They capture customer complaints and put measures in place to address them. Tumushabe says that MTN Mobile Money is leading the way in Rwanda especially with payments. They enable all kinds of digital payments, including for hospital fees and transport, using mobile wallets. She explains that MTN Mobile Money is assisting the Rwandan government with its vision of a cashless society. Due to time constraints, Tumushabe took only the CIDM so far. She feels that it was useful, especially in showing her how things work with mobile money elsewhere in the world. She also gained knowledge on the entire mobile money ecosystem, which helped her perform better in her role.

Bobby Lekyee is based in Liberia, working for MTN Liberia in the Mobile Money and Mobile Financial Services department. As in the above countries, MTN is the largest telecommunications company in Liberia, and has a 95% market share of mobile money. As such, it plays an important role in the DFS landscape. Lekyee's role is as the Ecosystem Coordinator, where he monitors systems and makes sure everything is working well; providing support to the distribution and compliance teams on anything technical. If agents are having problems with the system, this team will work with the distribution team to resolve it.

Lekyee has completed three DFI courses: the CIDM, Leading Digital Money Markets, and Artificial Intelligence in Finance. He is also effusive about the impact these courses have had on him:

"Honestly, I don't know how these courses were put together, but it was very exciting, especially with the CIDM. It gave me so much insight into payment systems and value chains and it just broadening my horizons, and it got me more interested in global courses. I always use the three courses in my work. They allowed me to take a global tour around so many countries in DFS and apply some of these lessons in Liberia. It put me in the position to really understand things like AI and its dynamics. I use all of what I learnt in my actual work space by applying them when necessary. And I am making sure that the lessons gathered from all other countries I can apply them in Liberia. You learn so much about agent management and how things are done in country X, Y, Z and you are in position to assist your colleagues with ideas, and your company as a whole benefits from it."

In Zambia, Moonga Chinika works as the Compliance Manager for MTN Zambia Mobile Financial Services. Again, MTN is the largest MNO in Zambia and the largest mobile money provider. In contrast to the above practitioners, Chinika's role is to ensure MTN is compliant with all applicable laws governing their operations. He thus works in the regulation space as the point of contact between MTN and two regulators in particular: the Bank of Zambia and the Financial Intelligence Centre. He is MTN's designated officer for compliance and issues such as money laundering. Apart from liaising with the regulators, Chinika is also responsible for training MTN personnel and sensitising them on regulator requirements, so as to ensure that their operations are in line with what the regulators need. He also undertakes risk management for MTN Zambia, including for operational risk, compliance risk and fraud investigations.

Chinika has completed three DFI courses, the CIDM, Mobile Money Operations, and another course exploring DFS in China. He has also found the courses very helpful in allowing him to grow his knowledge about DFS: *"The main thing of value was the understanding of money and also the evolution of what money is and how digital finance has emerged. Also, the importance of digital finance and best practices on how to manage this space. I also gained some insights on risk management, emergent trends and the future of digital finance."* Chinika is a Chartered Accountant by profession, so these issues were not entirely new, but they added value to his existing knowledge. He explains further, *"It helped me directly: looking at the CIDM and the evolution of money and what has succeeded, it helps me to do risk assessments and grade different risks separately. Also, looking at risk with different products and services, it allowed us to gain insights into risks associated with particular products and what would work and not work. Like you might think you have developed an innovation, but the customer does not need it – that is a risk. So the course helped in that area."* Related to this, he argues that needs-based product development is important, and to understand product life cycles when developing a product. This, he says, is a mindset that was strengthened by his DFI knowledge.

Another area he gained knowledge in was in how other countries in Africa are approaching DFS regulation. The courses provided Chinika with many opportunities to interact with other students from outside Zambia. For example, he partnered with a student in West Africa and they learnt from each other about their respective countries. As a founding member of the newly formed Association of Digital Finance Professionals, Chinika also values the opportunities to gather with other DFI alumni, learn from them and share ideas.

Roland Main is from Ivory Coast. He completed his CIDM while he still worked at MTN there, but has since moved to a company based in Madagascar which works in trying to transform microfinance through digital tools. The course had two major impacts on him pertaining to his understanding of digital money, and his ability to grow his DFS network. Coming from an IT background, Main now says he has an enhanced understanding of the background of DFS and mobile money for fintechs. He left MTN because he received a very exciting offer to work in digital microfinance in Madagascar. Unfortunately he was unable to put his newfound knowledge into practice before he left MTN, but he feels that the course contributed to his ability to land the new job, and so far has helped him in his new role. His new role is in management, in which he oversees a large team. Main feels that having the DFI course listed on his CV may have contributed to him getting the position. In his new role, he has been able to draw on fellow DFI alumni when he needs consultants on digital transformation of microfinance. His new company also launched a digital money lending service recently, and Main was able to use knowledge he learnt in the CIDM relating to Know Your Customer rules to lobby the Central Bank to change their approach. He obtained permission to conduct a pilot and they have now fully launched the product. Although MTN has sadly not gained, Main's new company has clearly benefitted from the knowledge he brought in from DFI.

Abubakar Shehu works for MTN Mobile Money in Nigeria, where he is a Senior Manager whose department (Sales & Distribution) is responsible for mobile money operations, including building the agent network. While MTN is the largest telco operator in Nigeria, its growth as a mobile money provider has been limited by the regulatory environment, which has until recently favoured banks as providers. However, the recent change in regulations to allow MTN to be a "super-agent" for mobile money will fundamentally change this situation.

Shehu completed the Mobile Money Operations course, before taking the Leading Digital Money Markets course, followed by the Gender and Digital Finance courses. At the time of the interview he was in week nine of the CIDM.

Like all the other practitioners interviewed, Shehu feels that the DFI courses have enriched him personally and professionally. As he explains:

"Personally it has enriched my understanding of digital finance and how I can adapt myself to the emerging changes in digital finance. And professionally, the Mobile Money Operations course was timely for me as most of the modules were materials that are directly applied to the agent network build in Nigeria. So most of the materials have added knowledge and insight to make valuable contributions to the building of the agent network in Nigeria. For instance the mobile money agent build in some countries would not suite Nigeria, especially because of the level of literacy in those countries, or even how the retail system would work. Particularly how mobile money failed in South Africa was useful because this insight showed me how to do it in Nigeria. On the level of literacy, for instance, it required that we have more field officers to engage the agents in educating them or resolving issues for them because of their low level of awareness. Secondly to create a lot of awareness means you need to adopt a lot of local languages and co-opt influence groups in remote villages to help

people to embrace mobile money quickly...Here you need to do a lot of promotion to encourage people to adopt...The country I saw that suited Nigeria very well was Kenya. The MPESA case works very well in Nigeria in terms of how we build our agent model."

Shehu also feels that the knowledge has helped him grow personally in a way that can *"even revolutionise me into a different professional."* By this, he means he has become interested in other areas of DFS and may look for positions in these areas. He has also improved his DFS network through being involved with the DFI community of practice and alumni association. He appreciates the fact that he has made connections in the regulation space, as well as those working in banking and fintech. In the next section, we turn to the broader impact of this knowledge on MTN Mobile Money in the above countries.

3.2 Broader impact on the Company

While it is not possible to provide an accurate picture of the impact of DFI on the MTN Group as a whole with this case study, the individuals interviewed show that in various countries, MTN Mobile Money has experienced some positive gains as a result of its staff taking the DFI courses.

MTN Mobile Money in Benin is certainly a good example of this wider positive impact, as Hermann Ahouandjinou explains: *"The knowledge you gain of theory and what is happening outside of Benin is why MTN Benin made all of its staff take the CIDM. In Benin up till now all persons who are a newcomer in MTN Mobile Money have to complete the CIDM course. It is mandatory for newcomers in our company in Benin."* Thus, around 20 of the 22 employees in mobile money section have taken the course thus far, including the CEO. Ahouandjinou also argues that at MTN group level, it is highly recommended that employees take DFI courses, resulting in high numbers of DFI students across Africa: *"MTN is a good client of DFI, we pay for these courses 100%."*

Ahouandjinou says that he has noticed changes in his colleagues after they have completed the CIDM: *"They are like new persons because that course is very important. The CIDM and Mobile Money Operations both give a global knowledge of how mobile money is working. If you work here you have to know this, so after completing those courses definitely my colleagues have a better understanding of the ecosystem and industry. For example, you come from marketing and the first time you hear about agents and merchants you don't know what that is or what they do. And you don't know about the customer. You are like a blind person. But after those courses you are now in an area where you really know what to do."*

Ahouandjinou also provides examples of how the DFI knowledge is helping MTN Mobile Money to deliver on its mandate. He commented that they are currently building an e-commerce platform for mobile money users, which draws on lessons from the example of China that was learnt in a DFI course: *"What I have learnt about how we can give a better experience while caring about how we protect the subscribers' details was important. So we are very careful to implement services that are secure."* He continues: *"The second example is for the agent network management. One of the DFI courses, Leading Digital Money Markets, showed that there are some partnerships we can have with some fintechs and banks to improve the e-cash accessibility for loans. That is great because for many times the agents are requesting some loans to improve their transactions and cash flow. So we looked for a company with that kind of solution to help us. And now we are working with that company to give credit to agents to improve their floats so they can improve their cash flow in our channel."*

He thus argues that *“The DFI courses are like an enabler or a starter... for our group. Because if you have that background understanding of what you are doing, you will improve your performance. You will do it better. If your boss just asks you to do things it is not the same as if you really feel what you are doing. So the DFI courses really help you to get that feeling. We cannot quantify it, but it is like an enabler for the business.”*

Ahouandjinou’s colleague in Benin, Dieudonne Ore, likewise feels that he and his colleagues were made more effective in their jobs due to the new knowledge they gained: *“We had never heard about these things and we saw that the course should be compulsory for everyone working in the mobile money industry. It impacted on our daily jobs and how we handle complaints from subscribers.”* He argues that the fact that even the senior managers and the CEO took the courses has meant that the whole organisation in Benin has benefitted. Ore also provides examples of how they have applied the knowledge from DFI: *“For example, I was about to launch a remittance service with MTN Guinea Conakry. There are lots of people from Guinea in Benin, they come and work here and send money back home. So I contacted my superiors and said it was an opportunity to send money and tap into this market. But Guinea Conakry and Benin are not in the same financial zone. So DFI opened my eyes to see that we do not belong to the same Central Bank, so it was a blocking point to do this project. This was one of the things that DFI made clear to me.”* He thus feels that the DFI courses have helped MTN Benin to be more effective due to the positive impact it has made to him and his colleagues.

Lilian Tumushabe, of MTN Mobile Money Rwanda, feels that she was able to pass some of the knowledge she gained from DFI to her colleagues in the mobile financial services department. Using some examples from other countries she had come across through DFI, Tumushabe was able to help her colleagues to come up with a facility to assist clients to access e-money from microfinance institutions. They then engaged with microfinance institutions and regulators on the barriers to providing such a service. She also testified that she has been able to ensure that MTN has a lot of partnerships with banks in Rwanda, and that *“The negotiations are very easy because I understand what I am talking about,”* as a result of her DFI experience.

For MTN Mobile Money Liberia Bobby Lekyee also feels that the DFI courses had a broader impact. As he explained: *“One of the challenging aspects of mobile money has to do with agent management. So what we learnt in Leading Digital Money Markets, especially the techniques to monitor agents and rebalance funds, some techniques from that course, I use them to give ideas to the team managing our agents. I give them ideas of what works in other countries: like we can get an sms notification if an agent falls below a certain threshold in their account. Then we can contact them and take action. This helps the agents to transact in an effective manner.”* Lekyee also says he has made key suggestions to the information and analytics team on what he learnt in the artificial intelligence course. These pertain especially to their reporting, and how AI can assist them to produce better reports. These suggestions have since been adopted by the team. In these small ways, DFI has had a broader impact on MTN Mobile Money Liberia, even though few employees have completed DFI courses.

In Zambia, about five employees in the digital money unit have taken DFI courses, according to Moonga Chinika. He does feel that this has had a positive impact in helping MTN Zambia to be a market leader. The main impact for MTN Zambia, however, has been Chinika’s own increased knowledge and links to regulators through DFI, which has helped him to lobby effectively. He has not only met several regulators through the DFI courses, and been able to build relationships informally through this network, but it has helped him in his official capacity as the point of contact between MTN Zambia and the regulators. Chinika sits on several committees and working groups with

regulators, and his lobbying is both through official and unofficial channels. He also organises workshops and training sessions for regulators, through these committees. He thus tries to maintain continuous engagement and build good relationships and mutual trust to make it easier to work on regulatory issues collaboratively.

One such issue is around the limit to the amount of funds that customers can keep in their e-wallets. Chinika's team did a customer survey to see what amount worked best for the customers. He then lobbied the regulators so that they could increase the limit. Similarly, he often engages regulators on issues of risk. Chinika explains that the CIDM provided good information on regulation which was useful. He also learnt about inclusive and interoperable payment systems, which is something that is currently being set up in Zambia, along with the national switch.

Lastly, Abubakar Shehu of MTN Mobile Money in Nigeria also says that a number of his colleagues have benefitted from the DFI courses. He has noticed a difference in their knowledge, which is contributing to their work positively. Shehu points out that without DFI, it would be difficult for them to access this knowledge: *"Without DFI I don't think such resources would be available to us. I don't think there is any school in Africa that offers such a specialised body of knowledge in terms of DFS. Even in the world. Apart from China, I don't think there is any institute that offers such specialised knowledge. And they have accumulated such vast resources around DFS."*

4. Conclusion

This case study has shown that the DFI courses have had a positive impact upon all of the DFS practitioners working for MTN around sub-Saharan Africa. At an individual level, MTN employees felt that their knowledge of the DFS ecosystem, and theory around DFS had been improved, as well as their practical knowledge of what is happening in other countries. Many of them said they could apply this knowledge to their local context and everyday working life, which helped them greatly. Although it is not possible to know the extent to which DFI has impacted the MTN Group in Africa, and assisted it in realising its vision, subsidiaries in the countries covered certainly benefitted, especially where several employees took the courses. This was most evident in Benin, where all MTN Mobile Money employees are required to take the CIDM. This has created a critical mass of practitioners speaking the same language and in-tune with the same issues. It is certainly helping them to drive MTN's role in Benin forward. Practitioners in the other countries were also positive that their role at a more senior level allowed them to apply their learnings at a more strategic and impactful level.

Examples of such impacts included practitioners in Benin developing an MTN Mobile Money savings and lending product, and an electricity bill payment product, having been helped through knowledge gained in DFI courses. Practitioners also noted knowing about the background of mobile money, which regulatory factors affect mobile money, and what is happening around the world in the field of mobile money as being key areas of insight they gained through DFI. Other products that were developed with the use of DFI knowledge include an e-commerce platform for mobile money in Benin (based on a model used in China), and new partnerships between MTN, banks and fintechs to improve e-cash accessibility through loans to MTN agents. In Zambia, a practitioner whose job involves liaising closely with regulators was assisted greatly through knowing a number of government officials through DFI networks. DFI has thus clearly contributed to MTN Mobile Money in these countries in various ways, and likely other countries in which MTN is operating.

The other two institution case studies, along with the two country cases studies (Zambia and Uganda), reflect common impact across a wide range of Sub-Saharan African countries. These include the clear enhancement of capacity in practitioners who take the DFI courses, the creation of a common DFS language and understanding among colleagues, which helps them in their work and strategic thinking, and the new tools for collaboration and policy influence, such as the Communities of Practice and various online forums and associations which have been initiated as a result. Together, these have been contributing significantly to the growth and development of the DFS landscape in many countries in Africa.

5. Appendix 1

List of MTN interviewees:

Name	Gender	Position	Location
Hermann Ahouandjinou	M	Ecosystem Manager	Benin
Lilian Tumushabe	F	Service Management.	Rwanda
Bobby Lekyee	M	Ecosystem Coordinator	Liberia
Moonga Chinika	M	Compliance Manager	Zambia
Roland Main	M	No longer with MTN, working in microfinance	Madagascar
Dieudonne Ore	M	Project, Product and Service Coordinator	Benin
Abubakar Shehu	M	Senior Manager: Sales and Distribution	Nigeria