REPORT

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

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DEVELOPMENT WORKS CHANGEMAKERS

MMR 2019: Final Report

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
GSMA	Groupe Speciale Mobile (GSM) Association
MMR	Monitoring and measurement of results
SSA	Sub-Saharan Africa

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Executive Summary

This report covers phase 1 of a 2019 monitoring and measurement of results (MMR) process conducted by Development Works Changemakers (DWC) on the activities of the Digital Frontiers Institute (DFI). This assessment is informed by six key M&E indicators set by DFI's funders:

- Indicator 2.1.1: % increase in degree of institutional capacity for DFS regulation in SSA.
- Indicator 2.3.1: # new DFS regulations / policies / directives developed or existing ones adapted for the financial market by DFI students in SSA. Disaggregated by: Stage of regulation (initiated / fully developed).
- Indicator 2.5.1.a: % of DFS providers who report an increase in cross-sector collaboration as a result of the DFI training and other services (CoP, SWITCH) in SSA.
- Indicator 2.5.2.a: # CoPs implementing country-based initiatives in SSA. Disaggregated by: Type of initiative (policy, private sector).
- Indicator 2.6.1: % of DFS providers and other DFS market actors who perceive they have enhanced DFS capacity (better networked, skilled and informed) as a result of DFI training in SSA.
- Indicator 3.3.4: % DFS service providers reporting increased DFS capacity as a result of DFI training in SSA.

To address these indicators, this phase of the MMR process involved a mixed-methods approach which analysed existing quantitative data gathered from DFI students at 6 and 18 months after their completion of the Certificate in Digital Money (CIDM), and the collection and analysis of new qualitative data from 30 purposively selected practitioners, Community of Practice (CoP) facilitators, and line managers of some of the interviewed practitioners.

Findings:

The analysis of the quantitative data showed that although survey response rates were reasonably low, especially at 18 months, the data provided a valuable overall picture of the outcomes and impact of the CIDM, and associated activities such as CoPs, on practitioners, their companies and broader society. The data shows that the practitioners at both 6 and 18 months felt that their capacity had been significantly enhanced, something which both they as individuals, and their colleagues or managers would be able to verify. Many felt that they had gained significant increases in DFS knowledge and confidence, and that their minds had been opened, which had helped them to become more effective at work. Practitioners also felt that they had become more effective, and better able to contribute new ideas and innovations. The vast majority of practitioners felt that they were using the knowledge they gained from the training, many of these on a regular basis. A significant number indicated that they expect their new knowledge to allow them to make more contributions in their workplace, while a majority also stated that they are already using this knowledge to make important contributions.

Unsurprisingly, given the short time since completion of the training for both surveys, more than half of respondents reported that they had not changed their work situation since graduating. However, among those who had, many reported increased satisfaction as a result of promotion or increased scope of their work, and even increased remuneration.

Lastly, data on the contribution of the CoPs was analysed for both surveys, showing that close to two-thirds of respondents were able to attend CoPs. Of those who attended, most felt that the links they made with fellow practitioners were valuable, and a high percentage were able to stay in touch with these peers in various ways. Practitioners also felt the CoPs gave them significant value which assisted them in the workplace and in their careers. High numbers of respondents mentioned acquiring new skills, feeling more connected, getting involved with new collaboration opportunities, and feeling more confident, motivated or inspired. A high number also stated that they had been able to apply these gains in their workplaces and even in their sector and broader society, although the impact here was largely at an individual and company level.

Overall, the data from the 6 and 18 month follow-up surveys shows that DFI has had a positive impact on the capacity of individual practitioners in several work-related areas, and that this has acted as a catalyst for broader positive change in their workplaces, in their industries and potentially, in their countries.

The qualitative analysis backs up these findings, and delves deeper into the extent to which each of the six indicators has been addressed by DFI. For the indicator on increased DFS capacity among practitioners, the data shows that among the 19 practitioners interviewed there has been a very tangible increase in DFS capacity as a result of their DFI training. Almost all of these individuals are working in important areas to do with DFS in sub-Saharan Africa, and are using their increased capacity to build the sector in various ways. DFI practitioners clearly have gained significantly in terms of knowledge, both general knowledge about the DFS landscape (which has been crucial to their effectiveness at work), and more specialised knowledge which has helped them in particular areas (e.g. payments, blockchain, anti- money laundering, regulation). The knowledge these practitioners have gained has helped many of them to add new skills in developing and managing products and projects in the DFS space, improved consulting with clients, lobbying regulators, and being more confident to develop innovations and collaborations. Around half of these individuals have advanced their careers into new positions and responsibilities, which they attribute clearly to their DFI experience. Some are now driving new strategic directions for their companies as a result of their involvement with DFI. Lastly, around two-thirds of the practitioners also report that their capacity has also been enhanced through greater networks and networking ability, through not only the courses, but also the CoPs and other initiatives which have grown out of the CoPs. Individual capacity development through all these aspects is clearly a very strong impact emerging from the DFI courses.

In respect of the indicator relating to increased DFS service provider capacity, the following was found: Although harder to make a clear judgement on organisational capacity development as a result of the DFI courses, 14 out of 19 practitioners provide some evidence that their individual capacity enhancement has also translated into institutional capacity enhancement of various kinds. Those working for commercial banks in particular have shown great capacity to assist their banks to realise their strategic goals of making their services digital in the coming years. They have done this through understanding the needs of customers more clearly and by developing a range of digital products and services which help their banks to offer DFS to their clients. Other practitioners working in the consulting field or in the non-profit sector have similarly added value to their organisations by leading them to become more effective DFS providers. At larger organisations, such as the Bank of Kigali, the fact that a significant number of key staff have taken the DFI courses has fed directly into the bank's ability to enhance its capacity. They are therefore planning to invest in more employees taking DFI courses and thereby further enhancing their capacity.

On the increase of DFS service provider capacity for regulation, the following findings were made: Although it is difficult to make a conclusive evaluation of how individual practitioners increase their institutions capacity for DFS regulation, at least 14 out of 19 practitioners demonstrate some level of influence in this regard. In some cases, organisations were simply too large, with an already high capacity for such regulatory input, for one or two DFI alumni to make a real difference. But in other cases, DFI alumni were playing key roles which enabled them to contribute to their organisation's regulatory capacity in some way. Consultants working in the DFS space felt that their DFS knowledge had enabled them to help clients with regulatory issues. Similarly, those working for non-profit organisations (often networks of members) also demonstrated increased capacity and understanding for DFS regulation which was helping their organisations and members. Even at large commercial banks, there was some evidence that individuals in key roles could impact the regulatory environment through sub-committees of their bankers associations. The only individual working for a regulator also felt that his increased knowledge of the DFS field could help him to guide regulations from within the Central Bank.

It was also found that almost 60% of DFI practitioners who were interviewed have been involved, in various capacities, by providing input into or developing 30 different initiatives relating to regulation and policy of DFS. Some practitioners are working directly with government regulators (as consultants) to assist them to develop regulations in a range of areas. Others, such as those at the commercial banks, are inputting through committees of their country banking associations. A few have also been heavily involved in developing strategies and policies at country level. A few organisations active in lobbying government are also actively organising national dialogues or preparing policy briefs which influence the regulatory environment. As is evident, this small sample of DFI practitioners is fairly active in attempts to influence and develop DFS regulation in sub-Saharan Africa and beyond. They have thus made an impressive contribution to the DFS landscape through these efforts.

On whether CoPs have implemented country-based projects, it was found that they have been very valuable spaces for practitioners to gain support, new forms of knowledge, networks with people in other areas of DFS and develop other initiatives or collaborations. Most practitioners found them to be extremely useful aspects of their DFI experience, even if they only lasted for the duration of the course. In most countries, alumni groups, associations, or even the more ambitious Digital Frontiers Associations, have been formed and country-based initiatives are being implemented. Such initiatives largely involve the ambition to lobby policy makers and regulators for a better DFS environment, and raising awareness in various ways. In some countries, such as Kenya and Ivory Coast, alumni associations have been formed, but they are currently small, and struggling to become officially registered. Official registration is seen as an important step in order to give the associations a legitimate platform from which to lobby and raise awareness at country level. CoPs and the other bodies growing out of CoPs are seen as hugely useful, with the potential to play a really valuable role, but a key challenge is to get people to commit to them when they are living very busy lives in cities which are often difficult to get around.

Lastly, on the topic of cross-sectoral collaborations, it was found that while most practitioners felt their cross-sectoral networks had expanded and they could draw on these connections when necessary, 11 had achieved more concrete collaborations of various kinds. The consultants had experienced a widening of their client base and scope of work as a result of their DFI experience, while those working in the NGO space also felt they had more connections which were useful to them in their work. Similarly, the two individuals working for government entities collaborated with non-state actors and bodies in the course of their work, having found the DFI courses useful in helping them in these endeavours. Meanwhile, those working for commercial banks found that in developing new digital finance channels and products, it was crucial to collaborate with a wide range of sectors. Overall, the DFI courses did enable these practitioners to collaborate more broadly and more effectively, where previously they did not have as much confidence, or the network, to do so.

In addition to the above areas of investigation, it was also found that practitioners and other interviewees overwhelmingly supported DFI continuing its certification partnership with Tufts University. It was felt that this provides the courses with international credibility and a brand name, which many in Sub-Saharan Africa value greatly.

Recommendations:

Based on the above findings, the following recommendations are given:

1. The content of the courses, those giving them, and the method of delivery are clearly of high quality, with feedback suggesting high levels of satisfaction among practitioners. Most practitioners felt that the DFI courses cover many of the most relevant topics in the sector. However, in reflecting on skills their companies still need, the areas were mentioned for possible inclusion or greater focus in the DFI courses.
2. Some practitioners provided feedback about the current DFI platform, which they said did not allow them to access their old certifications and other information. It is assumed that DFI in the process of upgrading its platform and it is recommended that this is made as attractive and user friendly as possible to keep alumni engaged and positive about DFI and their membership of the community.
3. Based on suggestions made by these interviewees, it is recommended that the marketing of the DFI courses is improved to ensure that individuals, companies and government departments/regulators in SSA are fully aware of DFI and what it has to offer. CoP facilitators recommended providing corporate packages to specific companies or sectors, so companies can send large numbers of their employees. Getting regulators, law-makers and other public sector workers more involved in this way could be highly advantageous, not just in terms of their capacity building, but in the links that they would establish with other industry role players during the course, and afterwards in alumni associations. The alumni associations and DFAs could also play an important role on marketing the course in their countries.
4. On this note, it is clear that not all practitioners have managed to become actively involved in alumni associations as yet. The CoPs themselves are too cohort-specific and short-term to really make a greater impact, but alumni associations (and other bodies such as DFAs) are a key vehicle for greater involvement, collective action and change. However, a key threat is the existing commitments of practitioners, and the distances they need to travel (often through bad traffic) to meetings. Such associations thus need to build their identity and their value-adding potential so that even busy individuals may attend and participate regularly. The facilitators/office holders of these bodies also need more training in how to build an effective association, as well as training and support in registering these bodies officially. In order to have a respected voice, it is clear that associations have to register with the appropriate bodies in their countries. DFI should continue with its present endeavours to assist in these endeavours.
5. Exchange visits between DFAs or alumni associations in different countries may be one way of ensuring that these bodies learn from each other and share ideas about how to develop and collaborate.

6. While collaboration between individuals has happened organically, DFI might also consider introducing various incentives for collaboration, such as a prize for a project implemented by practitioners in collaboration across sectors.
7. The findings of this report very clearly show that there is a need to maintain the Tufts University certification for the DFI courses. For professionals and government officials in SSA, this clearly provides credibility and social/professional capital in a way that DFI certification alone does not. Practitioners also point to the fact that not only does this enhance their career prospects, but that potential collaborators and regulators also take them more seriously with the certificate underwritten by a reputable international university. All of those interviewed, including senior managers, stated that they were happy to pay more for more value of this kind.
8. However, given that there is a strong call for the Tufts University certification to remain and thus for the DFI courses to maintain their relatively high cost – there is a need to explore some alternative funding/costing models. DFI might consider self-certifying some strategic modules, while leaving the larger modules and certificates to be certified by Tufts. One issue raised was that those working in small DFS companies, or in the less formalised sector, may not have as easy access to DFI courses as those whose large companies are happy to subsidise the cost. DFI might thus consider courses which fintech and mobile money operators might find attractive, at a lesser cost (not certified by Tufts).
9. Alternatively, this also provides a strong justification for various of DFI's funders to provide subsidies for certain kinds of applicants, since it is imperative that more people in the sector are exposed to DFI and the knowledge and capacity building it clearly provides. It is not advisable to bring down the perceived quality of DFIs offering, but if more DFS players are to be reached, funding may be crucial for those who cannot afford the full cost.

1. Introduction

Development Works Changemakers (DWC) has, since 2018, been providing monitoring and measurement of results (MMR) support to the Digital Frontiers Institute (DFI), to assist them to showcase their impact to funders, other partners, financial services industry role-players, and the public. In 2018, DWC conducted a wide-ranging evaluation of DFIs impact, drawing on existing survey data from practitioners who took DFI courses, and on primary data collected in Skype interviews and in-country visits (to Malawi, Mozambique, Rwanda, Uganda and Zambia) from practitioners, their line managers, Community of Practice (CoP) facilitators, and employees of financial sector institutions. The evaluation was informed by the evaluation questions and indicators developed by DFI and their funders. In 2019, DWC has followed up this work with more primary evaluative research which seeks to demonstrate the impact that DFI has had on individuals and institutions in the sector, as well as at a more systemic level.

The 2019 MMR process has been conducted in two phases. This report focusses on the first phase of research. The first phase is aimed at gathering and reporting on evidence of impact relating to six key indicators arising from the work of DFI (see below). The second phase of the research focusses on five case studies, two of sub-Saharan African (SSA) countries, and three of SSA-based digital financial services (DFS) companies. These case studies also aim to show the broader impact of DFI at a company and country level. These case studies are reported on in a separate report.

2. Phase 1 approach and methods

Following an inception meeting with DFI to clarify the scope and methods for the 2019 MMR activities, a mixed methods approach was adopted, incorporating the gathering and analysis of both quantitative and qualitative data. Research for phase 1 of the assessment took place over the course of August and September 2019.

2.1 Indicators

This assessment responded to a select list of key indicators of interest shown in Table 1 below. The extent to which these indicators are being achieved in SSA was explored through a combination of the analysis of cross-cutting data sources and the use of data collection instruments. This combined approach aided methodological and data triangulation, which further allowed for the verification of data and a more textured, comprehensive account of DFI's impact.

Table 1. Indicators Required for the Assessment

DFI Funders' M&E Indicators
2.1.1. % increase in degree of institutional capacity for DFS regulation in SSA.
2.3.1. # new DFS regulations / policies / directives developed or existing ones adapted for the financial market by DFI students in SSA. Disaggregated by: Stage of regulation (initiated / fully developed).
2.5.1.a. % of DFS providers who report an increase in cross-sector collaboration as a result of the DFI training and other services (CoP, SWITCH) in SSA.
2.5.2.a. # CoPs implementing country-based initiatives in SSA. Disaggregated by: Type of initiative (policy, private sector).
2.6.1. % of DFS providers and other DFS market actors who perceive they have enhanced DFS capacity (better networked, skilled and informed) as a result of DFI training in SSA.
3.3.4. % DFS service providers reporting increased DFS capacity as a result of DFI training in SSA.

2.2 Methods used

Phase 1 involved the gathering and analysis of both primary and secondary quantitative and qualitative data. For the quantitative data, DWC drew from a database provided by DFI of former Certificate in Digital Money (CIDM) students/practitioners who have completed the insight, exit, 6 and / or 18-month survey. These survey responses were analysed for data relating to the above indicators, around the impact of the course and the CoPs on the professional lives of practitioners. The quantitative data provided an overall view of the impact of DFI, on practitioners from each cohort, who completed these surveys. These findings are presented in section 3.1.

To explore these impacts further, and obtain a deeper qualitative insight into the impact of DFI on practitioners, their work and their workplaces, DWC also conducted in-depth one-on-one interviews with 30 individuals, based in many African countries, as well as some outside of Africa. A total of 20 practitioners were purposively selected from the database to participate in one-on-one Zoom interviews. In addition, DWC sought to interview 10 further individuals who were either CoP facilitators or line managers of the practitioners who were interviewed. An incentive, consisting of a free DFI course, was offered to each Zoom interview participant. After an initial email was sent by DFI to all sampled practitioners and CoP facilitators, inviting them to participate, DWC followed up via email to set interview dates and times. A number of those initially sampled did not respond, or were unavailable for the interviews, and DWC was provided with more names of practitioners and CoP facilitators by DFI. Eventually, a final sample of 19 practitioners, five CoP facilitators and six line-managers participated, as shown on Table 2 (below). Line managers were contacted by DWC after their names were provided by interviewed practitioners.

Comprehensive interview tools / discussion guides were developed for each of these groups of qualitative informant: practitioners, CoP facilitators and line managers. Each tool was based on the tools used in the 2018 assessment, with questions in each tool informed by the assessment indicators given above. In addition, each of the practitioners' previous survey responses were analysed prior to their Zoom interview to build up an initial profile which informed probing points in the interview (please refer to Appendix 2). This enabled the research team to identify and drill down into key impacts and 'stories of change' in the data.

All Zoom interviews were recorded and transcribed for the purpose of analysis. Alternative recordings were also made, and detailed notes taken by the interviewer during the interview. Each interview lasted between 30 and 60 minutes. All interviews were conducted, in English, by an experienced senior evaluator from DWC.

Table 2: Final sample of interviewed practitioners, CoP facilitators and line managers

	NAME	DATE	TIME (GMT +2)	COUNTRY	INTERVIEW CATEGORY
1	Victor Bada	22/08/2019	11:30	Nigeria	Practitioner
2	Munir Bello	22/08/2019	14:00	London	Practitioner
3	Kennedy Kiplagat	24/08/2019	09:00	Kenya	Practitioner
4	Gerald Nyakwawa	26/08/2019	13:15	Zimbabwe	Practitioner
5	Dylan Lennox	27/08/2019	09:00	Australia	Practitioner
6	Faith Kobusingye	27/08/2019	11:30	Rwanda	Practitioner
7	Ritah Kanyana	27/08/2019	14:30	Rwanda	Practitioner
8	Shirley Mburu	28/08/2019	09:00	Kenya	Practitioner
9	Talha Leghari	28/08/2019	12:00	Pakistan	Practitioner
10	Yinka David-West	29/08/2019	09:30	Nigeria	Practitioner
11	Kim Dancey	30/08/2019	12:00	South Africa	Practitioner
12	Rishi Raithatha	03/09/2019	11:00	London	Practitioner
13	Robinson Mbae	03/09/2019	13:00	Rwanda	Practitioner
14	Anna Kondakhchyan	04/09/2019	11:00	UK	Practitioner
15	Juliet Mburu	04/09/2019	17:00	Kenya	Practitioner
16	Joyce Nambasa	06/09/2019	08:30	Uganda	Practitioner
17	Charles Bassey	10/09/2019	15:00	Nigeria	Practitioner
18	Gabriel Kamuge	10/08/2019	20:00	Uganda	Practitioner
19	Ercilio Zimba	12/09/2019	written response	Mozambique	Practitioner
20	Timothy Makuta	06/09/2019	10:00	Kenya	CoP
21	Yves Danielle Dote	06/09/2019	12:00	Ivory Coast	CoP
22	Carmen Ahounou	12/09/2019	10:00	Benin	CoP
23	Ophelia Ama Oni	13/09/2019	10:00	Ghana	CoP
24	Ethel Chiwara	13/09/2019	14:30	Zimbabwe	CoP

	Mupambwa				
25	Kenneth Onyango	03/09/2019	07:00	Uganda	Manager (Joyce)
26	Plounne Oyunge	03/09/2019	14:00	Kenya	Manager (Juliet)
27	Diana Kwarisiima	03/09/2019	15:00	Rwanda	Manager (Faith)
28	Eveque Mutabaruka	09/09/2019	09:00	Rwanda	Manager (Ritah)
29	Kevin Rudahinduka	09/09/2019	16:00	Rwanda	Manager (Robinson)
30	Nika Naghavi	11/09/2019	11:00	London	Manager (Rishi)

2.3 Data analysis and quality assurance

Quantitative data from the various DFI cohort surveys was consolidated, and analysed using Microsoft Excel. Qualitative data from the 30 one-on-one interviews was captured using detailed notes and recording transcripts, and analysed thematically, using a code book which aligns with the MMR indicators. Given the small sample, coding was done manually.

In terms of quality assurance, DWC has the necessary structures and established quality assurance systems in place to conduct, monitor, manage and facilitate data collection from various sources and platforms. The entire assessment process was conducted by a team of senior DWC evaluators, who peer reviewed each other's contributions at every stage of the process. Furthermore, DFI was asked to provide feedback on the tools and methodological approach employed in this evaluation.

2.4 Ethical considerations

This MMR process does not require ethical clearance. However, all DWC team members are qualified researchers/evaluators with up to date ethics training credentials. In addition, DWC incorporates standard ethical considerations in our work, including: confidentiality; voluntary participation; the right not to answer questions participants are not comfortable with; the right to withdraw from the research at any time without any negative consequences for the participant, and with no impact on future services received and benefits derived from the programme/initiative. Adequate measures are in place for data safekeeping; only staff who are directly involved in the research will have access to the data, and only to data that relates to their roles and functions for this research. For this MMR process, all informants were asked to provide verbal consent to participate in the interview, and for the interview to be recorded. Given the nature of the assessment, it was also understood that names would be used in the report.

2.5 Limitations

There are a small number of limitations associated with the research process and the findings of this evaluation.

The most significant limitation has to do with the possibility of both the quantitative and qualitative data being skewed due to selection bias. Given the low response rate of practitioners responding to the 6 and 18 month DFI surveys, it is possible that the most engaged, and possibly better performing, alumni were the ones who completed these surveys, which makes it possible that the data from these surveys represents a more positive assessment than a random survey would provide.

Similarly, the practitioners selected for one-on-one interviews were also drawn from this database of survey respondents, and the final sample included those willing to give up time to discuss their DFI experience. There is also an extent to which the final sample are likely more engaged with DFI and its impact, which would skew the data collected.

Another limitation was that some of the practitioners, line managers and CoP facilitators who were initially targeted were not available, and alternative individuals had to be targeted for the interviews. This, for example, meant that we were not able to interview CoP facilitators from some of the countries we had initially targeted, but had to include some countries where there were no practitioners in our sample (Benin, Ghana, Ivory Coast).

3. Findings

In this section, we present the findings from the first phase of the MMR process for 2019. First, we discuss findings of our analysis of quantitative data from the 6 and 18 month follow-up survey conducted by DFI with graduates of the Certificate in Digital Money (CIDM) from all seven cohorts to date.[1] This analysis provides a broad picture of the perceived impact that the CIDM, including aspects such as the Community of Practice (CoP), has had on the professional lives and contribution of practitioners from these cohorts, and how they have been able to use the knowledge and skills they have gained to enhance their careers, and make contributions in their workplaces. Second, we present the findings from the qualitative primary investigation conducted in 2019 with 30 individuals (practitioners, CoP facilitators, line mangers). This section provides a deeper dive into the impact of the DFI courses (CIDM and others) on practitioners, and focusses on the six MMR indicators discussed above.

3.1 Quantitative findings

The DFI 6 and 18 month follow-up surveys are sent to all practitioners who have completed the CIDM, in order to obtain feedback from them about the value of the course to them, and how it has helped them in the workplace. Over the cohorts, the survey questions have differed slightly, but the surveys have largely focussed on why practitioners chose to do the course; what they learnt; what impact this has had on their working lives; whether they use the knowledge and if so how; whether line managers and colleagues would notice changes in their skills and capacity (and what these would be); how the CoPs helped them; and how useful they found other aspects of the DFI offering such as the SWITCH platform.

Unfortunately, the response rate for these surveys by practitioners has been fairly low, especially for the 18-month follow-up survey (see Appendix 2). Participation rates have also differed by cohort. A total of 138 practitioners in cohorts 1-7 completed the 6-month survey, while only 49 individuals in cohorts 1-5 completed the 18 month follow-up survey. Findings in this section are from these 187

[1] Cohorts 6 and 7 had yet to complete the 18 month follow-up survey, so there was no 18 month data available for these cohorts.

practitioners who completed these surveys. Two-thirds of the survey respondents are male, with only 32.6% (n=61) being female. The respondents on both of these surveys largely come from private business sector (61.5% of 6-month survey respondents are from the private sector, and 65% of 18 months respondents). The development sector (local and international NGOs) is where the second largest group of respondents work (20.2% for six month respondents, 21% for 18 month respondents), while the fewest respondents work in the public sector (16% for the six month survey, 14% for the 18 months survey). In the 6-month survey, two individuals work in academia (see Appendix 2 for full details). Respondents mostly come from a wide range of sub-Saharan African countries, but a minority are located in other countries in Asia, Europe and South America.

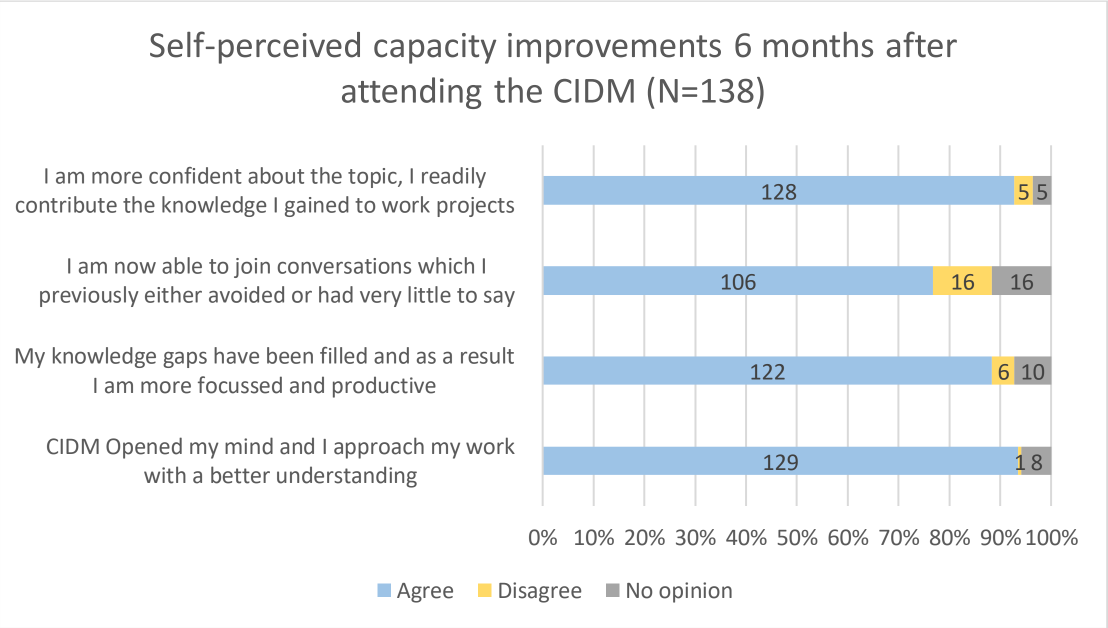
For the purposes of this analysis, data that was relevant to impact or indications of change were extracted from the surveys. The following themes were explored:

3.1.1 Practitioner Capacity Development

Practitioners were asked to reflect on some of the changes and capacity developments that have occurred for them since having completed the course.

The vast majority of six month respondents agreed that their capacity had increased in all four given capacity domains (see Figure 1). As such, most felt that since they took the course they approach their work with a better understanding (93%; n=129), and they are more confident about the topic, which enables them to readily contribute to work projects (93%; n-128). A significant number (88%; 122) felt that their knowledge gaps have been filled and they are more focused and productive, and a large number (77%; 106) feel confident to join conversations they previously avoided or were not able to fully participate in.

Figure 1: 6-month survey respondent perception of capacity enhancement



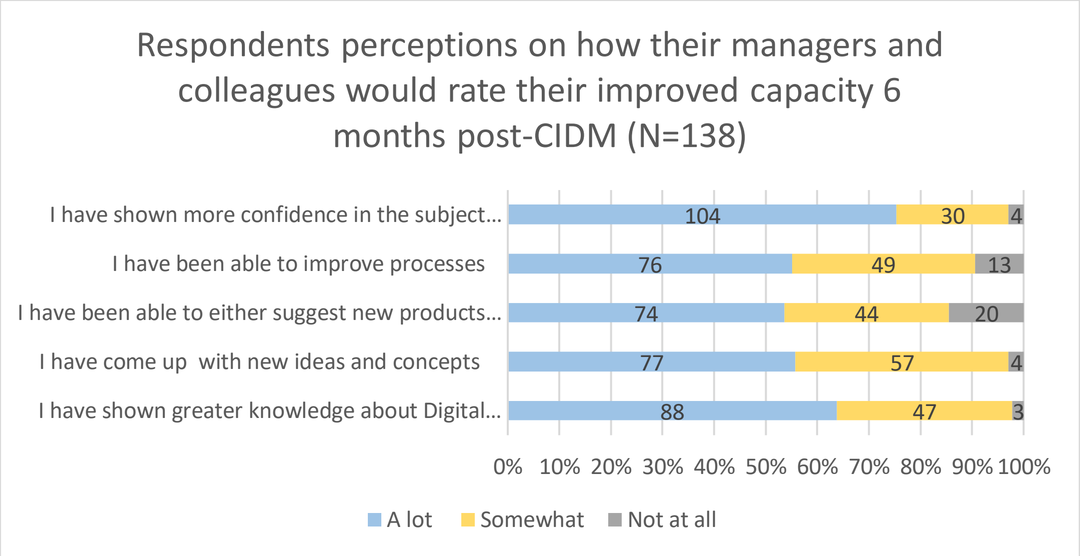
The same question was not asked of 18 month respondents, who were instead asked to reflect in their own words on the following question: "Please share with us examples of the impact completing

CIDM has had on you personally". Like the 6-month respondents, the 18 month respondents tended to focus in their brief reflections on their increased confidence, knowledge, and ability to converse with colleagues about matters related to DFS.

Almost all 6-month CIDM respondents informed others in their organisations that they did the course. Respondents were asked to reflect on and share how they think their line manager, team member or colleague would rate them on particular capacities since having completed the course (see figure 2, below).

Corresponding to 6-month respondents' reports on their changed capacity, most respondents thought that their line manager, team member or colleague would say that they have showed a lot of improvement in the given capacity areas. The domains which most respondents believed had improved a lot were that they have shown more confidence in the subject matter and participate more regularly (75%; n=104); and that they have shown greater knowledge about Digital Financial Services (64%; n=88). Just over half of practitioners believed a colleague would say that to a large extent they have come up with new ideas/concepts (56%; n=77); have been able to improve processes (55%; n=76); or have been able to either suggest new products or participate in the design (54%; n=74).

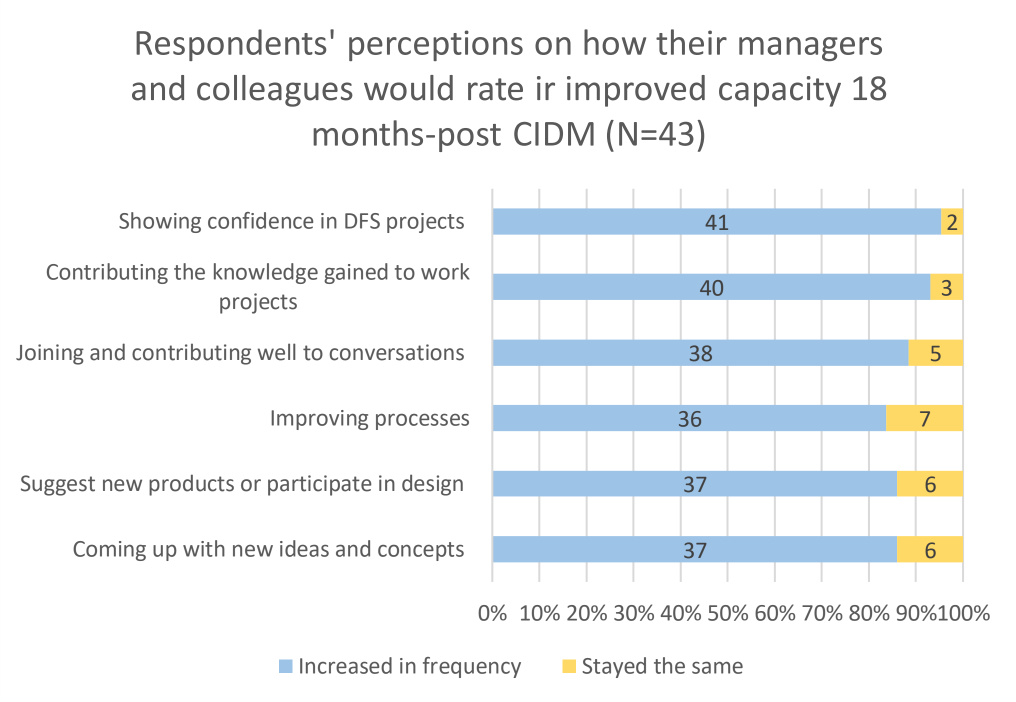
Figure 2: 6-month survey respondent perceptions of others' views on their capacity enhancement



Similarly, 18-month survey respondents were asked to rate their capacity and actions from the perspective of their line manager, team member or colleague (see figure 3, below). As depicted, the vast majority of practitioners expected that their co-workers would have rated their capacity to have increased in the six capacity areas. These capacity areas include:

- Showing confidence in DFS projects (95%; n=41);
- Contributing the knowledge gained to work projects (93%; n=40);
- Joining and contributing well to conversations (88%; n=38);
- Coming up with new ideas and concepts (86%; n=37);
- Suggesting new products or participating in design (86%; n=37); and
- Improving processes (84%; n=36).

Figure 3: 18-month survey respondent perceptions of others' views on their capacity enhancement

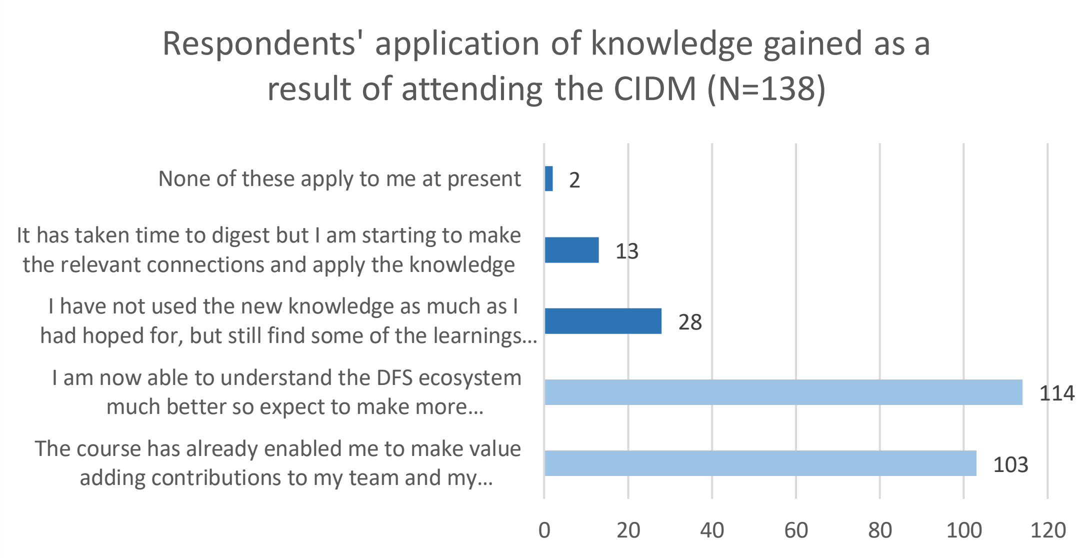


When asked if they are applying their new knowledge in the workplace, the vast majority of practitioners (85%: n=117) indicated in the 6-month survey that they were already using the knowledge gained during the CIDM course in the workplace. The remaining 15% indicated that they expected to use the knowledge in future. Of the 125 practitioners who answered this question, more than two-thirds (36%; n=45) reported that they were applying their CIDM knowledge on a daily basis, while almost a third (28%; n=35) indicated that they were applying this knowledge on a weekly basis (n=16), or usually at least on a weekly basis (n=19). Of the 29% (n=36) who said they were applying their CIDM knowledge on a monthly basis, 14 (n=14) said they were applying this knowledge monthly, and 22 (n=22) said they were usually applying the knowledge at least once a month. Only 7% (n=9) reported that they seldom applied their CIDM knowledge.

In the 6-month survey, practitioners were asked to reflect on how they have been using the knowledge they have gained from completing the CIDM course. They could select multiple options from the available answer choices:

- A significant number of respondents (n=114) reported that they are now able to understand the DFS ecosystem much better, and they expect to make more contributions as a result in future.
- A large number (n=103) said that the course has already enabled them to make value-adding contributions to their teams and organisations.
- A limited number (n=28) of respondents were of the opinion that they have not yet used their new knowledge as much as they had hoped for, but still found some of the learnings useful and said that they do apply it from time to time.
- A few (n=13) mentioned that it has taken time to digest, but they were starting to make the relevant connections and are applying the knowledge.
- A very small number (n=2) indicated that none of the preceding statements applied to them at the time.

Figure 4: 6-month survey respondent application of knowledge



It is clear that the biggest advantage of the course at six months from completion, was in increased knowledge about the DFS ecosystem, which participants expect would enable them to make more contributions in future, and a significant number of practitioners are already adding value to their teams and organisations as a result of their increased knowledge.

It should be noted that a number of participants who selected these two options also indicated that they have not used their knowledge as much as expected yet; and that they took time to digest their new knowledge and are only just starting to make the relevant connections to apply the knowledge. This may indicate that the process of digesting their new knowledge and finding opportunities to apply the knowledge is nuanced: while they may feel confident to already apply some new knowledge (at six months after completion), they may still be grappling with other knowledge areas, or may be looking for opportunities to apply their new knowledge.

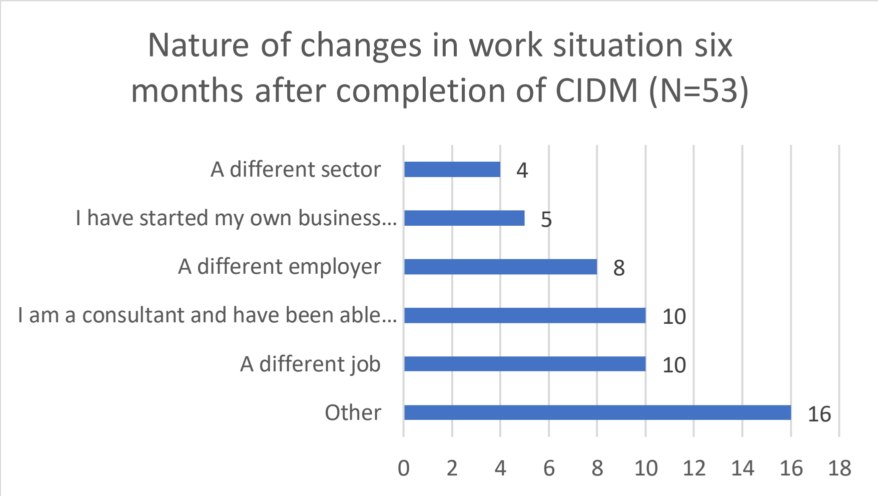
Of the 18-month survey respondents, 88% (n=43) indicated that they are using the knowledge that they gained during the CIDM course in their workplace. Only 12% (n=6) indicated that they are not yet applying their knowledge in the workplace, but they expect to in the future. Furthermore, of the 43 participants who responded to the survey question, 65% (n=28) indicated that they apply this knowledge on a daily basis, while 19% (n=8) indicated that they apply this knowledge once a week, 14% (n=6) indicated that they apply this knowledge once a month, and only one (2%; n=1) said they apply the knowledge seldom. The 18-month survey did not include the same multiple option question on how respondents were using their knowledge, but instead asked them to provide examples of where they used their new knowledge. Answers obviously differed quite widely depending on the kind of position and work the practitioner was involved with. Most indicated that they used the new knowledge to help them to be more effective in their particular spheres of work.

3.1.2 Work Changes after CIDM completion

Of the 6-month survey respondents, almost two-thirds of practitioners indicated that their work situation had not changed in the six months since having completed CIDM (62%; n=85). Of the 53 respondents who cited that their work situation had changed, 30% (n=16) indicated that their work had changed in other ways than those listed in the survey.

As shown in Figure 5, nineteen percent (n=10) of respondents indicated that they had a different job, and the same percentage were consultants who have been able to secure more/different projects as a result of attending the CIDM. Some participants also indicated that they were now with a different employer (15%; n=8), while a minority had started their own business (9%; n=5), or were working in a different sector (8%; n=4). A further 16 individuals (30%) indicated that their work situation had changed in a way not given in the survey responses.

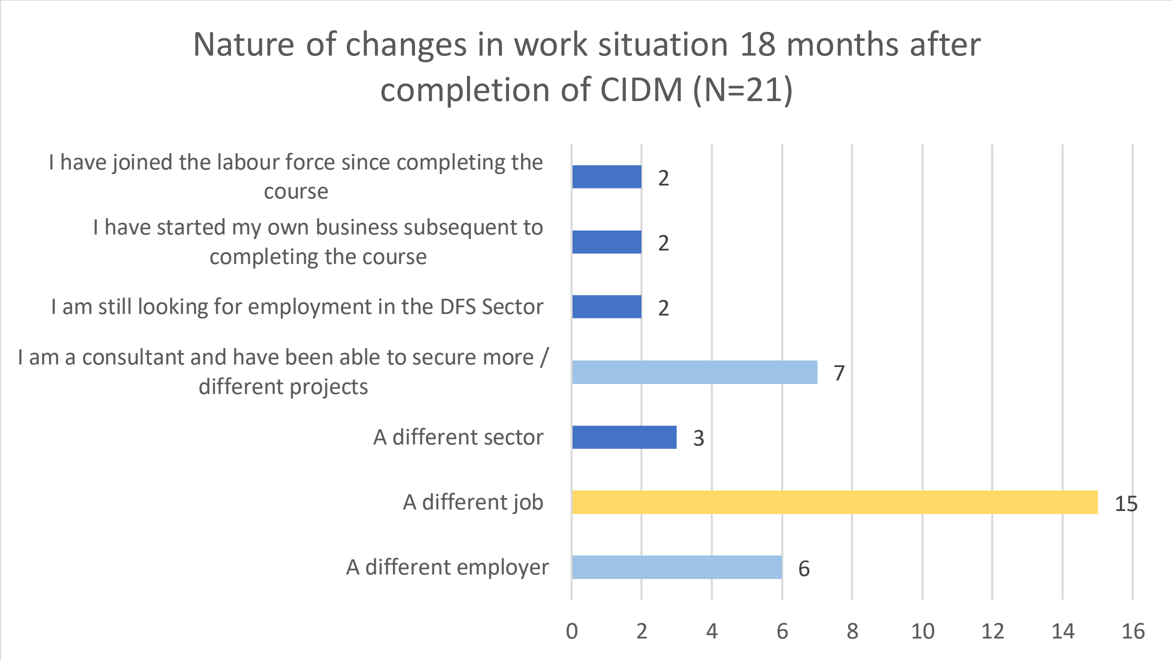
Figure 5: Nature of work changes for 6-month survey respondents



Relative to their work circumstances before taking the CIDM, most six month respondents who cited that their situation had changed, indicated that they experienced an increase in job satisfaction (n=27). Several also indicated that they received a promotion in job scope and seniority (n=18), and that they experienced an increase in total remuneration since having completed the course (n=11). Fifteen mentioned that they experienced other implications as a result of changes in their work situation.

For 18-month survey respondents, slightly more than half of practitioners indicated that their work situation had not changed in the 18 months since having completed CIDM (57%; n=28). It is not surprising that with the passage of time, more practitioners should experience changes in their work situations. Of the respondents who cited that their work situation had changed (n=21), the majority indicated that they were in a different job since completing the course (n=15). Others indicated that they are consultants and have been able to secure more/different projects as a result of the course (n=7) or have a different employer. Smaller numbers said that they were working in different sectors (n=3), or were still looking for employment in the DFS sector (n=2); have started their own businesses (n=2), or have joined the labour force since completing the course (n=2).

Figure 6: Nature of work changes for 18-month survey respondents



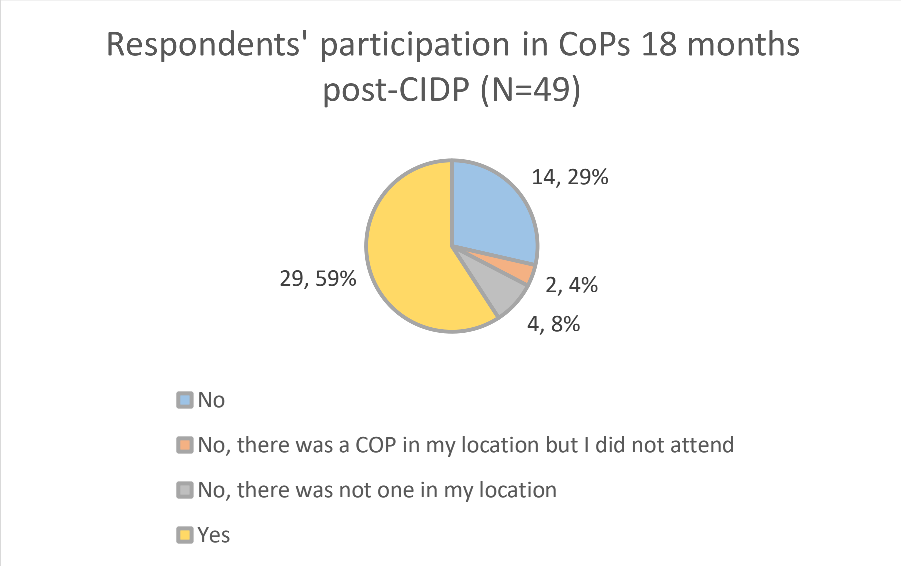
Relative to their work situation before CIDM, most 18 month participants who cited that their circumstances had changed indicated that their new work situation led to increased job satisfaction (n=15), a promotion in job scope and seniority (*n*=13), and/or an increase in total remuneration (*n*=10).

3.1.3 Benefits of the Communities of Practices (CoPs)

Practitioners completing the 6-month survey were asked questions relating specifically to the impact that the CoP meetings had on them. Most of the practitioners indicated that they had attended a CoP during CIDM (64%; n=89). One of the key values for respondents was the links to other practitioners which were formed during CoPs, with most noting that they stayed in touch with colleagues they met at the CoP meetings in some or other way. More than half (52%; n=46) had met with some of them with whom they share a common interest and challenges, and they try to solve them together. Meanwhile, some (13%; n=12) have stayed in touch socially, but not necessarily professionally. Others noted that they have reached out to some of their fellow practitioners when they had a specific problem to solve or issue to deal with (10%; n=9), or that they did not stay in touch with many of these colleagues, but their paths cross in business from time to time (18%; n=16). Only a small number (7%; n=6) had not managed to stay in touch with any of them.

The 18-month survey respondents were also asked questions about their CoP attendance and the value they obtained from the CoP. Most of the practitioners (although slightly less than at 6 months) indicated that they had attended a CoP during CIDM (59%; n=29). Of the 41% who did not attend a CoP meeting, 8% (n=4) said there was no CoP meeting in their location, as shown on Figure 7.

Figure 7: CoP attendance for 18-month survey respondents



Of those 18-month survey respondents who attended, almost two-thirds (65.5%, n=19) stated that they actively stayed in touch with colleagues they met at the CoP meetings. Most of these had met with some fellow practitioners because they have common interests and challenges which they try to solve together (34%; n=10); some met them when they attend alumni CoP meetings (21%; n=6); and others have stayed in touch socially but not professionally (10%; n=3). Some have not stayed in touch actively, but their paths cross with them from time to time (21%; n=6), and only one (3%; n=1) has reached out to some of them when they had a problem to solve or issue to deal with. Only three (10%; n=3) did not manage to stay in touch with any of them.

In the 6-month follow-up survey, practitioners from CIDM-3, -4, -5, -6 and -7 indicated the extent to which they agreed that certain benefits were garnered as a result of attending the CoP. For almost all the benefits (as listed in Table 3 below), most practitioners agreed that these were achieved as a result of attending the CoP. This includes: acquisition of new skills and knowledge; feeling more inspired and motivated; feeling confident in their roles; fostering cross-sector collaboration; feeling part of and being recognised within a professional network; and to some extent achievement of career development. The only exception was increased remuneration, which most participants disagreed had occurred for them. As such, although practitioners' job scope or title may have changed, their salary did not necessarily rise. A lack of a pay increase is not unreasonable given that there had only been a six-month gap since having completed the course. Extended time may be required for practitioners to put the knowledge into practice, and for the project/initiatives to prove effective or successful.

Table 3: 6-month survey respondents' benefits associated with attending the CoP

N=67	Strongly agree	Agree	Strongly agree and agree	
	n	n	n	%
I acquired new skills and knowledge	27	34	61	91%
I feel more inspired / motivated	31	34	65	97%
I am more confident and effective in my role	27	27	54	81%
It fostered cross-sector collaboration	27	31	58	87%
My career developed (promotion, increased scope)	12	23	35	52%
My remuneration increased	5	7	12	18%
I feel part of and recognised within a professional network	25	31	56	84%

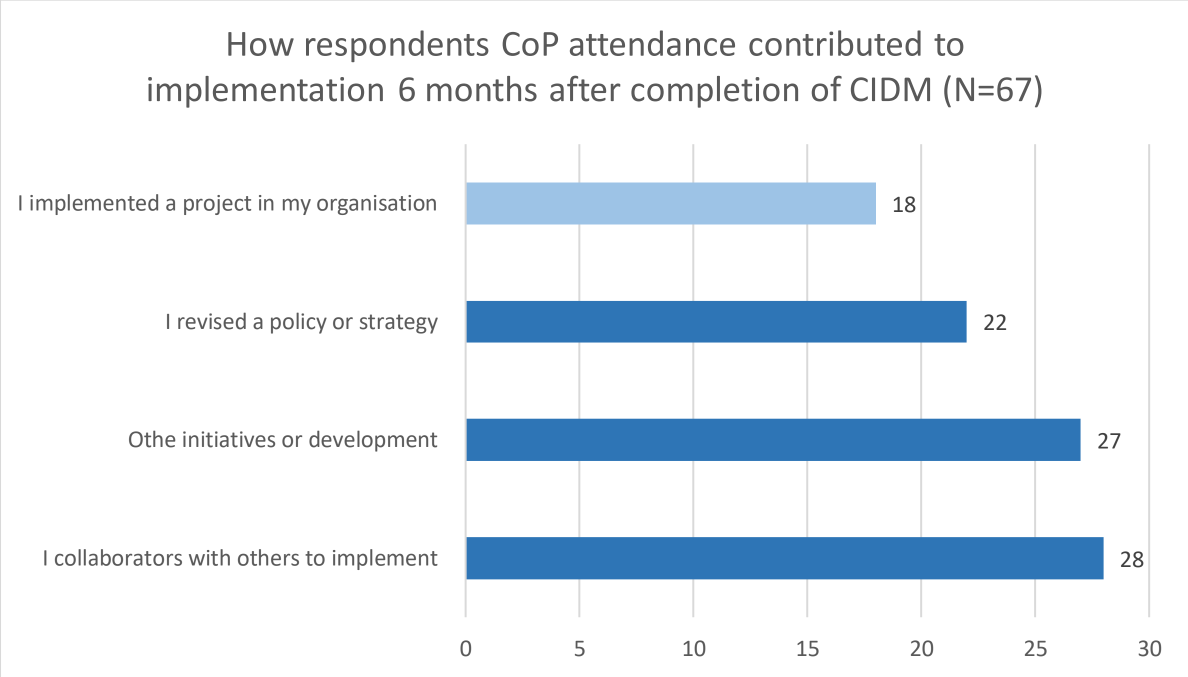
As with the 6-month survey, the 18-month survey asked respondents whether the CoP provided them with particular benefits (see Table 4, below). For six of the seven listed benefits, the majority of practitioners either strongly agreed or agreed that they acquired these benefits. These included acquisition of new skills and knowledge; feeling more inspired and motivated; being more confident and effective in their role; and feeling part of and recognised within a professional network; while it also fostered cross-sector collaboration. The only benefit that they experienced to a lesser extent was increased remuneration, which emerged as the weakest benefit gained by practitioners. While it interesting to compare the differences between the responses at 6 and 18 months (e.g. career development and increased remuneration as a result of the CoPs are more notable at 18 months), the small sample size for the 18-month survey limits the extent that these differences are significant.

Table 4: 18 month survey respondents' benefits associated with attending the CoP

N=29	**Strongly agree**	**Agree**	**Strongly agree or agree**	
	n	**n**	**n**	**%**
I acquired new skills and knowledge	15	13	28	97%
I feel more inspired / motivated	16	10	26	90%
I am more confident and effective in my role	16	9	25	86%
It fostered cross-sector collaboration	16	11	27	93%
My career developed (promotion / increased scope)	9	10	19	66%
My remuneration increased	5	6	11	38%
I feel part of and recognised within a professional network	14	13	27	93%

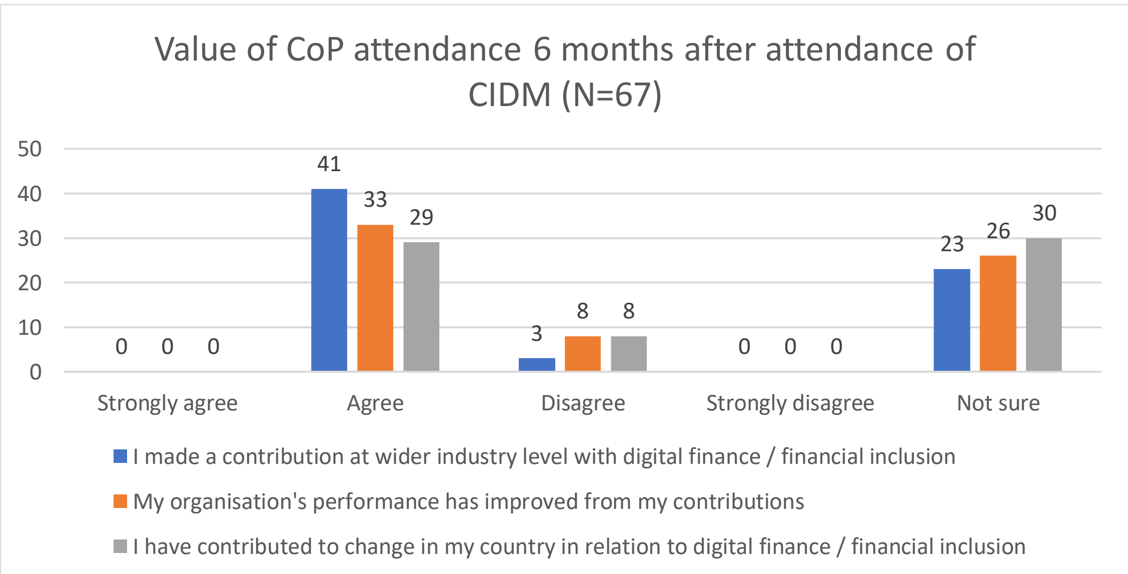
Respondents in the 6-month survey were asked to indicate how they used/implemented what they gained through attending the CoP from a given list (where they could select multiple options). Most practitioners indicated that they collaborated with others to implement what they gained (n=28) and/or had undertaken other initiatives and development (n=27). Many also noted that they revised policy or strategy (n=22) and/or implemented a project within their organisation (n=18). Figure 8 illustrates the findings from this question.

Figure 8: How 6-month survey respondents used the gains from CoPs



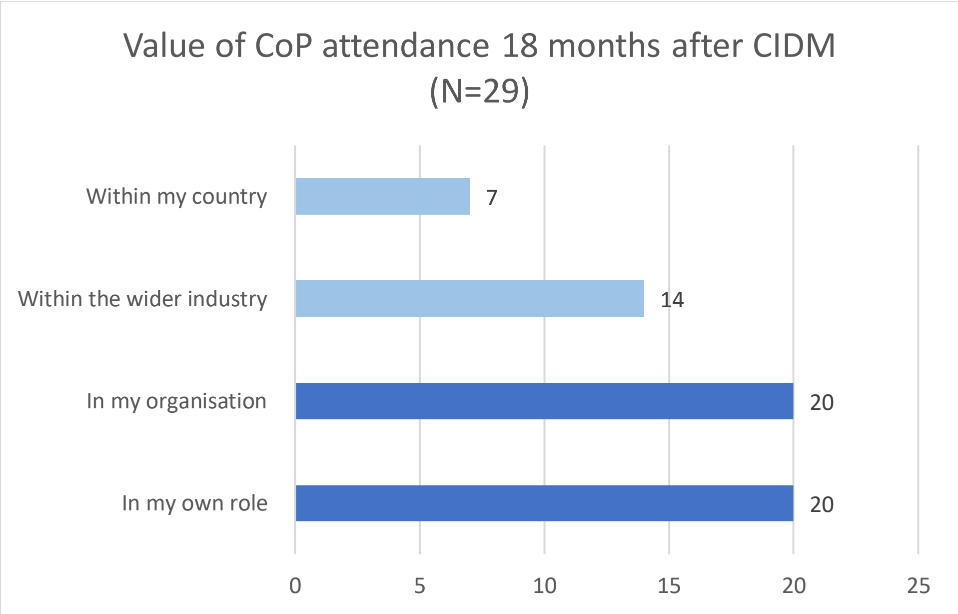
Furthermore, practitioners were asked in the 6 month survey to indicate the value their attendance at the COP had given their organisation, industry or country (see Figure 9). None strongly agreed or strongly disagreed with any of the statements, and with relatively high numbers of respondents indicating that they are "not sure" about any of the statements (ranging from 34 % (n=23) to 45% (n=30), change at this level was tentative at six-months after completion of the CIDM. It is, however encouraging that 61% (n=41) agreed that they had made a contribution at wider industry level with digital finance / financial inclusion; 49% (n=33) agreed that their organisation's performance has improved from their contributions; and 43% (n=29) agreed that they have contributed towards change in their country in relation to digital finance / financial inclusion. This indicates that within the six months post-course, change was unlikely to have a significant effect at a country-level, and influence was contained within respondents' organisations and/or the wider industry.

Figure 9: 6-month survey respondent views on their contributions as a result of the CoPs



For 18-month survey respondents, a slightly different question was asked on the same theme of their contribution as a result of CoP participation. As illustrated in Figure 10, the majority of participants indicated that they have used or implemented what they gained through attending the CoP to make an impact or change in their own role (*n*=20), and the same number indicated that they had made a change within their organisation (*n*=20). A slightly smaller number said they made a contribution within the wider industry (n=14), and the smallest number felt that they made a difference within their countries (n=7). This indicates that the extent of impact within the 18-month period is still likely limited to the confines of an individual practitioner, and in some cases their organisation and industry.

Figure 10: 18 month survey respondent views on their contributions as a result of the CoPs



Summary:

This section has presented data from the 6 and 18 month follow-up surveys implemented by DFI among its graduates. Although response rates were reasonably low, especially at 18 months, these data provide a valuable overall picture of the outcomes and impact of the CIDM, and associated activities such as CoPs, on practitioners and on their companies and broader society. The data shows that the practitioners at both 6 and 18 months felt that their capacity had been significantly enhanced, something which both them as individuals, and their colleagues or managers would be able to verify. Many felt that they had gained significant increases in DFS knowledge and confidence, and that their minds had been opened, which had helped them to become more effective at work. Practitioners also felt that they had become more effective, and better able to contribute new ideas and innovations. The vast majority of practitioners felt that they were using the knowledge they gained from the CIDM, many of these on a regular basis. A significant number indicated that they expect their new knowledge to allow them to make more contributions in their workplace, while a majority also stated that they are already using this knowledge to make important contributions.

Unsurprisingly, given the short time since completion of the CIDM for both surveys, more than half of respondents reported that they had not changed their work situation since graduating. However, among those who had, many reported increased satisfaction as a result of promotion or increased scope of their work, and even increased remuneration.

Lastly, data on the contribution of the CoPs was analysed for both surveys, showing that close to two-thirds of respondents were able to attend CoPs. Of those who attended, most felt that the links they made with fellow practitioners were valuable, and a high percentage were able to stay in touch with these peers in various ways. Practitioners also felt the CoPs gave them significant value which assisted them in the workplace and in their careers. High numbers of respondents mentioned acquiring new skills, feeling more connected, getting involved with new collaboration opportunities, and feeling more confident, motivated or inspired. A high number also stated that they had been able to apply these gains in their workplaces and even in their sector and broader society, although the impact here was largely at an individual and company level.

Overall, the data from the 6 and 18 month follow-up surveys shows that DFI had a positive impact on the capacity of individual practitioners in several work-related areas, and that this has acted as a catalyst for broader positive change in their workplaces, in their industries and potentially, in their countries.

3.2 Qualitative findings

The qualitative findings are organised into sections relating to each of the six indicators informing the assessment. In addition, a section on practitioner views on certification is provided below. The qualitative data and insight presented below backs up the findings of the above quantitative data that DFI has had a significant impact on the professional lives of practitioners, who have been able to multiply this impact through contributions to their companies and broader sectors of work.

3.2.1 Enhanced DFS actor capacity

Indicator 2.6.1: % of DFS providers and other DFS market actors who perceive they have enhanced DFS capacity (better networked, skilled and informed) as a result of DFI training in SSA.

The first thing to note is that of the sample of 19 practitioners who were interviewed one-on-one, all but one are working in the digital financial services sector, or in jobs which are heavily focussed on DFS (see Table 5, below). Six individuals are working for commercial banks, another six are working for a profit-making DSF enterprise or consultancy, four are working for non-profit organisations which are reliant on donor or member funding, one is working at an academic institution, and one is working for a government agency focussed on rural development. This latter individual (Ercilio Zimba) has the job with perhaps the least direct DFS relevance, although his work in rural finance does involve some level of DFS applicability.

Table 5: Location and position of interviewed practitioners

Name	Location	Company	Position
Victor Bada (M)	Nigeria	Wema Bank	Relationship Manager
Charles Bassey (M)	Nigeria	Nigeria Central Bank	Head of Security Research & Development
Yinka David-West (F)	Nigeria	Lagos Business School	Professor
Kennedy Kiplagat (M)	Kenya	Fintech Kenya	Business Development Manager
Juliet Mburu (F)	Kenya	FSD Kenya	Programme manager: Payment
Shirley Mburu (F)	Kenya	BFA	Associate
Gabriel Kamuge (M)	Uganda	DGRV	Head of product development and innovation
Joyce Nambasa (F)	Uganda	Equity Bank	Team Leader: Digital banking
Ritah Kanyana (F)	Rwanda	Bank of Kigali	Digital Product Owner
Robinson Mbae (M)	Rwanda	Bank of Kigali	Product owner for digital channels, internet banking
Faith Kobusingye (F)	Rwanda	I&M Bank	Senior manager for DFS operations
Kim Dancey (F)	South Africa	First Rand International	Head of regulatory risk payments
Ercilio Zimba (M)	Mozambique	National Sustainable Development Fund	Rural finance official
Munyaradzi Nyakwawa (M)	Zimbabwe	Cassava Smartech, Business Development	Account Executive
Anna Kondakhchyan (F)	UK	Cash and Learning Partnership	Global Programmes Coordinator
Rishi Raithatha (M)	UK	GSMA	Insights manager for the agritech team
Munir Bello (M)	UK	GSMA	Senior regulatory specialist and mobile money certification lead
Talha Leghari (M)	Pakistan	Self employed	Independent DFS strategy consultant
Dylan Lennox (M)	Australia	MFX Partners	Director

Of the 19 practitioners interviewed, the majority are based in sub-Saharan Africa (14), while five are based outside of Africa. However, of these five, four are working in jobs which have a fairly significant focus on DFS in Africa.

Perception of the DFI courses

The courses offered by DFI are held in very high esteem by all of these interviewed, including all line managers and Community of Practice (CoP) facilitators. Most practitioners said the content, the method of content delivery, and the people delivering the content were key attractions in taking the courses. For example, Kennedy Kiplagat (Kenya) said the following: "*Through the course content of the CIDM [Certificate in Digital Money] and the reputation of the tutors like David [Porteous] and Ignacio [Mas]: the knowledge they have is very good and the moment you complete your CIDM, what* *you have when you are talking to people, they will keep quiet just to get to what you are trying to say*." Similarly, Faith Kobusingye (Rwanda) commented, "*The content is rich, and the teaching methods are brilliant. You can read and relate it to real life and apply the knowledge in the workplace. The format also helps with a good work-life balance. It is quite practical for people like me in the DFS space who want to grow without having to compromise other areas of life. You are not at risk of missing an exam because it's flexible*." Kim Dancey (South Africa) agreed that the tutors are excellent: "*These individuals are very well known and highly respected. Their names carry a lot of weight. So having them there motivated me to do the course*." She also said that the "*bite-sized*" nature of the courses was very appropriate for busy working professionals.

Rishi Raithatha (England) echoed these opinions: "*…They hit the sweet spot. They offer a few bespoke modules and some general ones too. The nature of the organisation allows them to be agile. In my workplace [GSMA] lots of people would benefit from these courses as a 101 for digital finance. New recruits are often moving in from different kinds of jobs or changing careers, so they could do these courses if they want to further their knowledge*." He goes on to explain that DFI's offering is a market leader in this field:

> *They've done a fantastic job of putting together this very unique qualification. It is not something to easily find out there. I mean, there are some of course…you have individual programs offered by universities where they'll give you a few weeks on digital finance. But this course is run by a company based in South Africa, where you have people who have worked in finance and some of the other peripheral issues that surround it such as humanitarian cash…or even, you know, the regulation of blockchain technology. So they're right where the action is. They've got the right people. And as a result, I think they've got the right kind of mix.*

A line manager, Kevin Rudahinduka (Bank of Kigali), who is also a keen DFI alumnus, echoed the thoughts of Rishi and a number of other practitioners who suggested that the DFI courses are leading the way: "*What is the alternative if DFI did not exist? To be honest, I've been in this industry for some time and I have not found such an affordable and easily accessible platform that is DFI. Others are expensive. The collective learning, and the fact it's in the African context, and the relevant readings and so on. There is no alternative to this. It is the best source in the digital space*."

Gains in DFS knowledge and skills

These opinions, along with the quantitative data presented in the previous section, ensure that it is not surprising that every single one of the practitioners interviewed felt strongly that their capacity as DFS actors has been enhanced in various ways through their taking of the CIDM and other DFI courses. In addition, all the CoP facilitators and line managers interviewed also testify to the capacity enhancement of individual practitioners through the course content and other activities which form part of the courses (i.e. interactions with other students, the CoPs, subsequent networking opportunities etc.). The leading comment from practitioners and line managers was that what is of major value is that those who took the courses are given a complete view of the broad DFS landscape, which enables them to develop confidence and capacity in their work in various ways. Several examples illustrate the various ways in which this "*birds-eye view*" assisted practitioners to increase their capacity and develop key skills such as product development and management, communication and negotiation, research, customer consultation and strategic business consulting.

Victor Bada (Nigeria, commercial bank) argued that this knowledge was helpful in helping him to consult with customers effectively: "*It definitely helped me with my job. The nature of my work: I meet with retail and small and medium enterprises (SMEs), I meet with existing customers and so forth. It helped with the way I relate to them. When you look at financial inclusion broadly, the courses helped me professionally, for example with product knowledge and the challenges faced by SMEs. So it helped so much. It also helped me to build my knowledge of digital platforms, and it increased my confidence. It also helped me to empower the people I work with, like my junior colleagues. I gained professionally in terms of upskilling, to be able to develop skills and this has helped in my career*."

Robinson Mbae (Rwanda, commercial bank) also felt that the courses really helped him in consolidating his knowledge and making sure digital products he developed meet customer needs: "*I think it's really has been a good course to do. I mean, the perspectives, the way they bring them together, It's been really, really nice. Normally, the information is not in one place. When we put it that way, you have to…get them from many different sources. So I think the way DFI has put them together, it kind of helps for us to be able to make sense of all the information out there…they consolidate all the information, sort of in one hub for you. Yes, because there are so many sources. So sometimes it can get lost….*" On the way he's been able to apply his knowledge, he says: "*Yeah, I think one of the biggest lessons I've learned is we don't know anything about the what the consumer needs out there. I think we might have an idea [and] we could get it right. But most of the time what we assume in the office is not exactly what is the reality on the ground. I think that that aspect of having an open mind, that you should be able to change your strategy or change how you do things to suit your environment is one of the biggest takeaways I've had from the courses we've done. Sort of adapting your, your practices and your products to the markets*."

Kennedy Kiplagat (Kenya, DFS enterprise) felt that the courses had contributed to building his capacity in a number of ways, such that he could play a number of effective roles for the companies he has worked for: "*Firstly, it really cemented my knowledge base. It broadened it and made me to look like a subject matter expert. For the company I was working with [Cordeck], with the knowledge I was able to bring a couple of innovations in fintech. The same happened at Loki Africa. I was also able to make an impact when doing negotiations and commercial agreements, and customer journeys and the co-creation of products. I had a lot of tremendous uses of the course*."

For Dylan Lennox (Australia, DFS consultancy), the courses were of great value as he set out to launch his own DFS consultancy. Lennox is originally from South Africa and worked for many years in mobile money throughout Africa. In early 2016 he moved to Australia, but wanted to use his experience to get into consulting work in DFS for emerging markets. He took the CIDM in March 2016, and he regards it as a foundational course which set him up:

> *"It gave me a nice spread of everything that was happening in multiple markets and so on. It was a good course to kick start my consulting career. Even though I had been going at it for some years, my experience was very telco focussed and deeply into mobile money. Besides that, I had a wide operational experience, but when I came out of that bubble in Africa and in telcos, you get a bit of fear that there is a lot of stuff you don't know about – and a lot of stuff you don't know you don't know. So the courses gave me a helicopter view of the universe and allowed me get knowledge, like around regulations and understanding the implications, about national payment systems and how they fit – with banking and payments and the wider payment system. And the other things were looking at unique ways*

> *of marketing services and understanding what everyone else is doing. So it was very useful as you get so entrenched in your own point of view, so when you come out of it you know there is a lot of things to learn."*

Munyaradzi Nyakwawa (Zimbabwe, DFS enterprise) likewise said the CIDM gave him "*a 360 degree look*", and said that the difference between "*ordinary online courses*" and DFI courses is the quality of not only the coaches, but also the peer learning that is encouraged. Through this learning, he obtained a good understanding of the DFS environment. He also began to see aspects of the DFS workforce that needs reshaping. He described that he learnt as "*a Damascus moment*", referencing the conversion of the Biblical Saul on the road to Damascus. Munyaradzi also felt that the Gender in DFS course had opened his eyes in a number of ways, not least to new understandings of gender identity.

For Faith Kobusingye (Rwanda, commercial bank), the courses gave her a new understanding of the DFS landscape and showed her that she can have a profession in DFS. Of particular value was what she learnt about payment systems and how they work between the government and the private sector. Similarly Shirley Mburu (Kenya, DFS consultancy) testified that when she was hired by her company, her first project was about payments. She went into her first meeting and found it really tough because they were using many terms she was unfamiliar with (e.g. interoperability, national switch etc.). Thus, she says,

> "*Doing the courses really helped me to know the DFS landscape. If I had done the course before the bedding-in period, it would have been better. I have learnt a lot from the courses, in terms and vocabulary and understanding for my work. It was a foundation so I would have really struggled without it. Now, in various projects, I already know how things work and can focus on providing solutions. I don't have to spend time first finding out the basics. For example, we have one client which is Finmark Trust in South Africa, and we have to advise on the progress of digital ID in Lesotho and Malawi. I had no prior knowledge, but the course happened a month before this assignment, and I was able to contribute meaningfully. I was the key author and everything I proposed was taken on board by the client and our specialists because of my new knowledge*."

Ritah Kanyana (Rwanda, commercial bank) felt that the courses "*Are so well structured and informative*." For her, one of the main benefits was that they "*added structure to the work I do; in terms of understanding not just one component, not just mobile money – but you may not have the complete end-to-end knowledge of why things are priced, or the operational steps needed for operationalising a new business line and so on. So it gave me a 360 degree view of how things are*." Likewise Kim Dancey (South Africa, commercial bank) said the courses gave her an "*overarching view beyond the world of payments*." She said that some aspects of the courses fed directly into her skillset, while others were more general. One further value she raised was that "*It helps prepare you for the fast-changing landscape of DFS and future trends, for example Bitcoin*." Joyce Nambasa (Uganda, commercial bank) echoed this sentiment, arguing that digital banking is only two years old in Uganda, so the product management aspects of the DFI courses were particularly helpful to her in understanding how to develop new products and ensure customer satisfaction and protection in doing so.

For Juliet Mburu (Kenya, non-profit), the value of consolidating and organising knowledge was a key benefit of taking the DFI courses, which had a major impact on her ability to hold high-level conversations:

> "*The biggest thing is it helps organise things. You have all this knowledge in pockets. The CIDM covered many areas, so it helped to organise how I viewed payments. The interesting thing is that there are not many institutions that teach anything on payments. I am a former banker – in the payments team – so I learnt things along the way. But the course formalised and solidified my knowledge. I also gained skills. For example the Digital ID course: I did not have much exposure to that, the entire course, the material was new. There is also some work I am doing with our Central Bank. Being able to facilitate conversations with them, drawing on some learnings around incentives to promote certain kinds of transactions for which you need incentives. So I was able to have those conversations, and I am a lot more confident to do this. Similarly, I can be a lot more confident with our other partners, especially implementing partners who look to us to give opinions on certain issues*."

In a similar way, the work of Anna Kondakhchyan (England, humanitarian sector) has been impacted by the DFI courses. Since taking the courses she has been able to engage differently with key players from the private sector active in the DFS field. As she explains: "*You can speak the same language. Humanitarians are very far from the private sector, so the course allowed me to engage with the private sector. I identified a number of products that Oxfam could trial to move cash digitally to populations in need. And I have been able to run the procurement processes, and tenders for these developments, and to articulate the functional specifications for the products we want. So it helped enormously. Doing the courses was a bit of a gamble, but the learning they were delivering was the right thing at the right time for me.*" Although based in the UK, Anna's work is focussed on populations in need, especially in Africa and Asia.

For Charles Bassey (Nigeria, Central Bank), the courses also helped him "*very strongly*", particularly in being able to talk to different partners on DFS: "*It enables meaningful conversations with different people without wondering what to say or what is expected of me. This is useful on a day-to-day basis and at different forums and meetings. I also am able to mentor others. The anti-money laundering course complemented the other course to strengthen my understanding of the DFS space. It helped me to identify ideas, interventions and opportunities*."

And even for Yinka David-West (Nigeria, Professor), the DFI courses gave her clarity in terms of helping her understand how to frame things and lead conversations in this area. As she explains, "*The DFS sector is still emerging, so one is able to understand where one is coming from. So it helped to define and frame certain things like payment systems and product market fit from the perspective of the consumer. Another thing I liked is that it helps you distinguish the professions of payments and banking. You don't necessarily understand payments – so you get to see the different roles and attributes. Payments are not the same as banking. So you get to distinguish them*." That the courses even enhance the knowledge of a professor in the business studies field indicates their value to go beyond what is normally offered in most business schools.

Although they are not based in Africa, and their work is only peripherally focussed on Africa, both Talha Laghari (Pakistan, DFS consultant) and Rishi Raithatha (England, non-profit) also testified as to how much the courses had contributed to their capacity, in terms of knowledge and skills. For Laghari, the main value was in playing a "vital role" in his understanding of the "ecosystem" of the

DFS space. It also helped him to understand aspects of DFS such as blockchain and payment systems, and gave him an insight into markets such as China. For Raithatha, the courses provided him with a good overall understanding of DFS, as well as important areas such as regulation, all of which has given him confidence to participate in conversations he never used to be part of.

Another area of development commonly cited by practitioners was their learning, through the courses – and particularly from their peers – what is happening in other countries and markets in the DFS space. They found the format of the courses useful in encouraging interaction and co-learning. For example, Yinka David-West (Nigeria, Professor) said "*One of the things is it gave one a perspective of what is going on in other countries and you got to meet others in other countries, so you learnt what other countries went through*." Similarly, Joyce Nambasa (Uganda, commercial bank) put it thus: "*Having a general understanding of digital finance, not just in Uganda but in other places was really valuable. To understand market trends in different environments helps you to know what you can adopt and what you cannot*."

Role changes, promotions or better jobs

One way of judging the increase of capacity in practitioners (in terms of knowledge and skills) is by whether they have been able to progress in their careers as a result of taking the DFI courses (among other things). The previous section discussed changes in jobs or working roles as reflected in the 6 and 18 month follow-up surveys. This qualitative section adds to the above finding that DFI graduates are progressing in their careers in various ways, but explores these dynamics in more detail. Almost half of those interviewed (nine) have changed their working position, and credit DFI for playing a positive role in this.

Munir Bello (England, non-profit) was working for a mobile money operator in his native Nigeria at the time he first took the DFI course. With his newfound knowledge and skills, he was able to apply for and get a job as a senior regulatory specialist and mobile money certification lead at the London-based GSM Association, a trade body that represents the interests of mobile network operators worldwide. As he explains: "*I am now in a global organisation, and I work more globally with operators worldwide. And it had an impact on my finances as it is a better salary. My time in Nigeria helped me in my role now. Taking the course added more credibility to my profile, like it did to my peers. I mean, I want to believe that the certifications did help in me getting this job, because you can talk more confidently, and in an interview you can do well*." Munir has gone on to enjoy several notable successes in his role, according to a senior manager at GSMA. For Kennedy Kiplagat (Kenya, DFS enterprise), success in two other jobs led him to his current job as a Business Development Manager in his company, Fintech Kenya. According to Kennedy, "*My former senior was one who referred me to this company. He told them to take me as I am a person who can really drive their business development*." He credits the DFI courses in helping on this journey through increases in his knowledge and skillset.

Faith Kobusingye (Rwanda, commercial bank), stayed at I&M Bank, but was given a promotion. She argues that her "*current role is because of one of the courses; the Operationalising Digital Money course".* She explains that for her bank, "*The back-end of what we were doing in digital money was always an area of weakness. But through the DFI courses, I got a better idea of setting up and managing this area and now I have the leading role here*." Similarly, Ritah Kanyana (Rwanda, commercial bank) found that her role changed as a result of her new knowledge. Previously, she was a product development manager, a role in which she developed all kinds of products, irrespective of their being digital or not. But her employer, Bank of Kigali, adopted a new strategy in 2018 to become digital, and she has now shifted to digital product development. Shirley Mburu (Kenya, DFS consultancy) is in the same position, but feels like the DFI courses have "*somehow shaped my career in the sense that I am now assigned to a lot of projects related to payments. My seniors assign me these projects based on my expertise. Payments used to be a core area at BFA, but that stopped and we don't have a lot of expertise there anymore. So me taking up the DFI courses put me in a good position to do these payments projects. And now nobody but me does the payments projects as I have the knowledge now, which I got through DFI. So I can support senior people on payments projects*." Juliet Mburu (Kenya, non-profit) also remained in the same position, but she was given more responsibility as a result of her new DFI knowledge.

Joyce Nambasa (Uganda, commercial bank) meanwhile, reports that she has also experienced significant career growth since taking the DFI courses:

> "*Especially after doing the product management course, it has helped me to align my career. I used to want to be a digital consultant, but now I want to do product management for the next five years. So it is different from what I thought I would be doing, and I know how to scale it up and the level of interactions I want to have. In fact, I have changed position several times since starting the DFI courses. When I started I was a support officer, and later on after CIDM I became a projects officer. I got involved a lot in the work of bringing digital projects on board. And in 2017 I was appointed as supervisor for digital banking. So I am hoping I can expand and develop from here. My position has changed three times since starting the journey and I am looking forward to how it develops into product management. My change was influenced by the DFI courses, especially from what I implemented as a result of having the knowledge. At first, I made changes to our way of working alone and getting people to see the value was a struggle. But in implementing they saw the value of what I was doing*."

Talha Laghari (Pakistan, consultant) and Dylan Lennox (Australia, consultant) both report that they had the desire to launch their own consulting businesses prior to taking the DFI courses, but that taking these courses really helped them to launch their businesses and to be successful early on. They were launching these enterprises around the time of taking the CIDM. For Anna Kondakhchyan (UK, humanitarian), she feels strongly that "*I would not have got my current job without the courses*." Anna was working for Oxfam in an ICT role, but taking the DFI courses positioned her excellently to take on a new role that she was very interested in at the Cash and Learning Partnership: "*Had it not been for the DFI course, I don't think I would have landed this job. There is a secretariat for the CLP. They needed a skill set in digital finance as the demand for this from our members is growing. There are not many people in the humanitarian sector who understand both how aid and DFS work and can bridge these two fields. So I was positioned well, having done the DFI courses, and got the job. There is not a shortage of programme managers in the humanitarian sector, but there are not many who understand both the DFI and humanitarian fields. So it was an interest of mine, and it is in demand at the moment, so it is a happy marriage. Humanitarians as a sector are behind the DFS sector –they are behind the curve – so I have an important role to help them come up to speed so they are not playing catch up, and to help them to understand how to engage they can do so responsibly and ethically*."

Others, such as Ercilio Zimba (Mozambique, government agency) have also changed jobs, but not necessarily as a result of their DFI journey, while those such as Munyaradzi Nyakwawa have remained in the same job, but feel that their new knowledge has helped them in many ways.

Increased networking and networks

Increased networking skills and networks are another indicator of increases in capacity for these DFS actors. Of the 19 practitioners, 12 (almost two-thirds) said that the DFI courses definitely led to an increase in their professional networking and networks, while a further three said that this had happened to a limited extent. Only four practitioners interviewed said that the courses had not clearly led to any increase in professional networking or networks.

Practitioners provided various examples of how their networks had expanded. For many, meeting fellow students through the online courses and the CoPs was the main way in which they expanded their networks. For example, Victor Bada (Nigeria, commercial bank) highlighted the value of sharing knowledge with the new people he met during his CoP, especially those from other industries such as agriculture. Two other Nigerians, however, said that they did not really experience an increase in their networks, despite attending the CoP.

Some practitioners talked of the links they made during the course with fellow students outside their home countries, which have helped them professionally in various ways. Kennedy Kiplagat (Kenya, DFS enterprise), for example, reported that the courses did help him with networking as he became known as an expert on his LinkedIn profile and subsequently gained new connections around the world, in addition to global connections he met through the courses. He also joined two groups, one he formed with fellow DFI students called the Digital Disruption Caucus, and another one with high profile DFS industry players in Kenya. Charles Bassey (Nigeria, Central Bank) reported a similar gain: "*I have a few friends who I talked to because of the courses; in Nigeria, Uganda, South Africa and other countries. I have had an interaction from the US as well. So it has expanded my network. Even beyond this, I needed information from Uganda and reached out to one fellow DFI student who I asked for input. I have also moved the network to other platforms like LinkedIn, and we share information across different domains and jurisdictions. So it has expanded my professional network, and if I need information on different countries I know how to get it*."

Munyaradzi Nyakwawa (Zimbabwe, DFS enterprise) also stated that the online classes made him useful connections in other countries: "It has expanded my network. When we are in the classes we do interact. I now have connections in Senegal, Ivory Coast, Lesotho and Ecuador, as well as the ones in Zimbabwe through the CoP. I have also made connections outside my sector – like regulators and NGOs. Through his CoP, Munyaradzi also joined the Digital Frontiers Association they have formed, which is a very useful and exciting forum that he is now part of.

Dylan Lennox said that the courses "*Did absolutely help him*" to network not only with the DFI team (he went on to help develop a course with DFI), but also the other course participants. He also connected to new people through social media platforms after his courses. He explains the value of these networks and his ability to form them: "*Having the broader confidence of knowing a little bit about a lot of things, especially in the regulatory world and with international agencies, has helped my work. So I now feel confident to talk to them. People don't engage unless you are confident, so I got a lot of confidence to kick start conversations like these*."

In Rwanda, Faith Kobusingye (commercial bank) felt that she made cross-sectoral connections through the courses which she would not ordinarily have made, including with people working in the development space, and for regulators: "*I interacted with people in the development space which I would not have ordinarily done. I made connections with people I would not ordinarily have been close to, but I am closer now because of the course*." Similarly, Shirley Mburu (Kenya, DFS consultancy) felt that she had been able to expand both her private and public sector networks through DFI, and that these were highly beneficial to her current role: "*In the world of consulting you always need information from practitioners on the ground. So through the CIDM there were lots of one-on-one meetings, so we linked with a lot of people. I also invite these connections to showcases that we hold from time to time*." Gabriel Kamuge (Uganda, DFS enterprise) feels that he did expand both his local and international networks and has subsequently used these individuals in a number of collaborations. Although he says networks are not "on a broad scale", he has links to people at fintechs and some "strategic linkages" with others who will help him in his new job of supporting financial cooperatives. Meanwhile, Joyce Nambasa (Uganda, commercial bank) also appreciated the interaction with many different presenters at their CoPs (e.g. fintechs, regulators), and she then became one of the founding members of the Digital Frontiers Association of Uganda, which aims to do many projects in future (see below).

Some of those based outside sub-Saharan Africa also reported that their networks had expanded as a result of their DFI involvement. Talha Laghari (Pakistan, DFS consultancy) stated that the courses had helped him to expand his networks, and was connected to people in many different countries. As he explains, "*It helped me to find out about international consultancies, and I expanded my network beyond my focus area, for example into the social development space. I used to be just connected with the DFS space, but now I'm linked more broadly*." Anna Kondakhchyan (UK, humanitarian sector) also reported that "*The format of the courses, and the campus interactions helped to tap into the knowledge of many different people, and it was very valuable as for most of the courses the cohort has been very diverse*." Although not as convinced that his networks have helped him, Rishi Raithatha (UK, non-profit) reported that in his former position on the mobile money team at the GSMA, a number of his classmates from Africa became good kinks in his work. He says, "*I liked hearing other people's views and opinions on DFS, you can't buy that*."

Summary:

This section has shown that among the 19 practitioners interviewed there has been a very tangible increase in DFS capacity among all of those interviewed (100%), as a result of their DFI training. Almost all of these individuals are working in important areas to do with DFS in sub-Saharan Africa, and are using their increased capacity to build the sector in various ways. DFI practitioners clearly have gained significantly in terms of knowledge, both general knowledge about the DFS landscape (which has been crucial to their effectiveness at work), and more specialised knowledge which has helped them in particular areas (e.g. payments, blockchain, anti- money laundering, regulation). The knowledge these practitioners have gained has helped many of them to gain new skills in developing and managing products and projects in the DFS space, consulting better with clients, lobbying regulators, and in being more confident to develop innovations and collaborations. Around half of these individuals have advanced their careers into new positions and responsibilities, which they attribute clearly to their DFI experience. Some are now driving new strategic directions for their companies as a result of their involvement with DFI. Lastly, around two-thirds of the practitioners also report that their capacity has also been enhanced through greater networks and networking ability, through not only the courses, but also the CoPs and other initiatives which have grown out of the CoPs. Individual capacity development through all these aspects is clearly a very strong impact coming out of the DFI courses.

3.2.2 Increased DFS service provider capacity

Indicator 3.3.4: % DFS service providers reporting increased DFS capacity as a result of DFI training in SSA.

As outlined above, all practitioners interviewed, and the line managers reported good capacity development of individuals who took DFI courses. Impact at a broader level on institutions is more difficult to ascertain, but in some instances, it has clearly happened, through having a key person with these new skills, or having whole units or teams trained by DFI and able to drive strategies, develop products, innovate, liaise with partners, influence regulation and so on. In these cases, the DFI courses have often acted as a catalyst to change organisations and institutions, or at least units within these organisations. For genuine and sustainable institutional change of DFS service providers, especially where these are large entities, this may require not only time for such an impact, but also a critical mass of DFI-trained practitioners. For smaller organisations, one individual may be more likely to act as a catalyst for positive change.

Although it may be difficult to measure organisational change objectively as a result of DFI training, a high proportion of those interviewed (practitioners and line managers) reported that there was increased DFS capacity in their organisations as a result of DFI training.[2] Indeed, in only five cases out of the 19 practitioners was there not a very strong feeling of capacity development beyond the individual. In four of these cases, the institutions they are employed by are very large, making institutional change unlikely (Victor Bada, Yinka David-West, Charles Bassey, Kim Dancey), while in the other (Ercilio Zimba), his organisation is not working in the DFS space, although he has clearly added value to his unit with his skills. In the case of Charles Bassey, at the Central Bank of Nigeria, although the institution at large may not have been impacted, he reports that he has made an impact by mentoring his colleagues in various ways.

In the 14 other cases, there has reportedly been some more tangible level of institutional capacity enhancement as a result of one or more members obtaining DFI training. Of the small DFS service providers, such as the consultancy companies run by Dylan Lennox and Talha Laghari, there has clearly been an advance in their capacity due to a key member being trained and capacitated by DFI. For bigger organisations, the enhanced institutional capacity is perhaps most pronounced in the case of the commercial banks in the sample.

Joyce Nambasa (Uganda, Equity Bank) is one of around 10 employees who have taken DFI courses and, according to Kenneth Onyango, the Head of Operations at Equity Bank Uganda, the DFI courses have certainly not only impacted individuals, but also the ability of the bank to drive its strategic aims. As he reports:

> *"What I have noticed is that the teams, their understanding in terms of digitisation of financial services, including regulation, has improved. We have currently a big focus on digitisation; a strategic drive for Equity Bank. So we need a core of people who know about this, who know why we do this and why it is important. I have seen a huge improvement in*

[2] This backs-up the quantitative findings presented in the previous section relating to self-reported contributions to workplaces as a result of DFI involvement (the CIDM and CoPs).

> *these individuals' understanding of what DFS is and what digital products are and how regulation impacts our offerings. We have developed a suite of digital products, led largely by Joyce's team. So for those who have done the course, their capacity is demonstrated by their performance. They are superior to their colleagues. And in the execution of their work, they are more competent in it. I have seen a demonstrated and enhanced approach from those who have done the course. For example, we have developed a corporate internet banking solution, championed squarely by Joyce and another colleague of hers. It did not exist before. The entire journey: the product development, market strategy and entire process has been managed squarely by Joyce all through to completion. This is just one component of the digital suite of products they have developed. Now, most of our corporate partners are using it. Joyce drew from the knowledge that she had from DFI. The other product, on the retail side, is a banking app, the Easy Banking app. It was also developed from zero and it was all led by Joyce and her team. They have done very well. So if we did not have her, we would not have those products now. And if she did not have the knowledge, they would not have performed as well as they have. I have seen a lot of improvement. Their confidence has improved significantly; they know more and are more familiar with the area they are handling. It enables them to drive ideas that they come up with. They become more innovative. They have confidence. They are not timid as they push forward their ideas. They need to have that confidence and not a fear of failure. They can convince the management team to experiment on things. So I have seen a difference, a huge difference. It's like night and day. So we would want to send the others on the courses as well. But for now, for the few who have done it, we try to get them to spread the knowledge through working in teams and knowledge sharing*."

Two practitioners from Rwanda who work as product owners at the Bank of Kigali also provide evidence of a broader increase in capacity in their bank. Although the bank has a total workforce of over 1200 people, Ritah Kanyana, Robinson Mbae and the 32 other colleagues of theirs working in key positions (including senior management) are clearly making a difference in terms of driving the bank's digital transformation strategy. Both of these individuals work in the bank's "Digital Factory" and have developed new digital products for the bank (see Table 6, below). They are also part of an internal DFI group which has been started by Bank of Kigali, which has augmented the impact these 34 individuals can have on the institution. Eveque Mutaburuka, Ritah's manager testified thus on the value of the DFI courses: "*We have seen the value in it for the employees. It helped people to get a basic understanding. The strategy of the bank is to go digital, so it is good that people understand the value of what they are implementing. The knowledge is mainly useful because in the banking industry people are implementing things without knowing where they are coming from. So now these employees know where these products are coming from. For Ritah, the knowledge she acquired is good for her role as a product owner. She is driving the process, and she has acquired mainly the understanding of the other markets so you can see where the world is going and what's happening everywhere*." Similarly, Kevin Rudahinduka, who manages Robinson, believes that the courses provide an important foundation to all employees who have taken the courses. This is important because, "*If you are not on the same page and don't understand the basics, you won't know what to propose. For example, in digitising cash, the systems are complex and you can't just come up with things. You need to know and start from the same page. So it gives direction and you can plan: it becomes fertile and you just throw a seed and it [becomes] excellent*." The Bank of Kigali has invested significantly into getting employees to do the DFI courses, and it is hoping to continue this strategy as it has seen the value it brings.

Although now working for a DFS enterprise, Gabriel Kamuge made a significant impact at Tropical Bank in Uganda, where he previously worked. As he records:

> "*I was previously at Tropical Bank. My task in the bank was in the area of strategy and innovation. This involved product development. When I came in, coincidentally I came in at the time when they were very limited in internal capacity to adopt digital channels. So I was directly in charge of key projects in digital channels. First, I had to execute a mobile banking platform. I had to do a business plan for this and everything. This coincided with my taking of the DFI course. So my first very tangible outcome was to develop a mobile banking platform for the bank. Frankly, it would have been very difficult if I did not do the DFI course. I was head hunted for this in a way. This institution never had this capacity, but I did a lot of reading from the DFI material to develop the architecture for this platform. We could have taken much longer and executed in a much more difficult manner if not for DFI knowledge. So the DFI knowledge was so useful. I learnt so many concepts that people did not know: integration, what steps to take, outcomes of integration, and justifying why you need those channels and what the difference is. Banks need to see a value proposition to see what the channel brings to the bank. The product needs to work with customers and have low risk. But with my DFI knowledge I was able to lead this process and then several others as well*."

Indeed, Kamuge reports that he went on to develop a suite of products, such as an agency banking platform, an e-school fees app, an e-bank assurance and internet banking. He no doubt contributed to his bank's capacity in the DFS space. Although on a smaller scale, Faith Kobusingye (Rwanda, I&M Bank) also added value to her bank because she gained a detailed knowledge of how "*the back end*" of DFS products work, which was a weakness in her company. Consequently, she was able help them to develop a better understanding in this area and reports that, "*My bank has a better idea of how this works and how they can be involved in the conversation at a national level*." Kobusingye describes herself as "*proud*" of her role in this development. She also reports that as one of the older banks in Rwanda, one of their weaknesses was understanding their data, and how to use it. But because of her DFI courses, Kobusingye got her colleagues to discuss how to utilise data to better meet customer needs. They then recruited actual data scientists to work at the bank to implement this. She says, "*We are beginning to change how products are designed to ensure it is human-centred, and how menus are flowing and so on. I was part of initiating this endeavour*."

Other practitioners also report that their increase in capacity has had a broader capacity enhancement effect on their companies. Kennedy Kiplagat (Kenya, Fintech Kenya) was hired by his company to drive their business development, something that he feels he is able to do successfully. He also says that he is now considered a thought leader in DFS in Kenya, which has helped his company and his own career. Shirley Mburu (Kenya, BFA), as the only one in her company with payments expertise, is also adding value to their ability to successfully undertake consulting projects relating to payments. Juliet Mburu, who works for the non-profit FSD Kenya also feels that her knowledge has contributed to her organisation's effectiveness, along with three other colleagues who have completed DFI courses. Meanwhile, Munyaradzi Nyakwawa works for a large company in Zimbabwe (a subsidiary of Econet), but has developed some products which have assisted his company in the area of savings groups.

As recorded in the previous section, Anna Kondakhchyan (UK, CLP) also found herself contributing very meaningfully in her Cash and Learning Partnership role, since her colleagues did not have DFS skills or knowledge. As their Global Programmes Coordinator, she is able to use this knowledge to lead them in developing digital tools for use in reaching vulnerable populations. The two practitioners working for the GSMA also had a minor role to play in developing the capacity of their units, with Munir Bello in particular enjoying success in his role of helping members become certified. Table 6 illustrates some of the key products and projects in the DFS space undertaken by practitioners, which have helped to build the reputation and capacity of their organisations.

Table 6: Key products developed by practitioners

Practitioner	Products Developed
Munyaradzi Nyakwawa (Zimbabwe, Cassava Smartech):	Developed a product after submitting a paper on digitising savings groups, also developed products for NGOs and stokvels
Robinson Mbae (Rwanda, Bank of Kigali)	Developed several channels relating to internet banking
Ritah Kanyana (Rwanda, Bank of Kigali)	Built a digital wallet for farmers in Rwanda using cheap mobile phones
Gabriel Kamuge (Uganda, Tropical Bank)	Developed a mobile banking platform for his bank Developed an agency banking platform Developed an e-school fees app Developed e-bank assurance Developed internet banking platform
Joyce Nambasa (Uganda, Equity Bank)	A suite of digital products: Corporate internet banking solution; Easybanking App
Anna Kondakhchyan (UK, CLP)	Led the development of a number of digital products for Oxfam to move cash to beneficiaries
Shirley Mburu (Kenya, BFA)	Led key projects on digital ID in Malawi and Lesotho and works on payments projects
Talha Laghari (Pakistan, independent consultant)	Worked on several projects, including helping to develop a business model and technology for a project using DFS in agriculture in Kenya

Summary:

Although harder to make a clear judgement on organisational capacity development as a result of the DFI courses, 14 out of 19 (73.7%) practitioners provide some evidence that their individual capacity enhancement has also translated into institutional capacity enhancement of various kinds. Those working for commercial banks in particular have shown great capacity to assist their banks to realise their strategic goals of making their services digital in the coming years. They have done this through understanding the needs of customers more clearly and by developing a range of digital products and services which help their banks to offer DFS to their clients. Other practitioners working in the consulting field or in the non-profit sector have similarly added value to their organisations by leading them to become more effective DFS providers. At larger organisations, such as the Bank of Kigali, the fact that a significant number of key staff have taken the DFI courses has fed directly into the bank's ability to enhance its capacity. They are therefore planning to invest in more employees taking DFI courses and thereby further enhancing their capacity.

3.2.3 Increased institutional capacity for regulation

Indicator 2.1.1: % increase in degree of institutional capacity for DFS regulation in SSA.

As with judging the increase of institutional DFS capacity, it is difficult to assess accurately the extent to which institutional capacity for DFS regulation has increased among the organisations included in this evaluation. Nevertheless, from interviews with practitioners and line managers, it is evident that 14 out of 19 (73.3%) practitioners show clear evidence that their DFS role has increased, or at least positively influenced, the capacity of their institutions for DFS regulation. Of the five who do not report any gains in regulatory capacity, Victor Bada (Nigeria, commercial bank) argued that his company is merely a commercial bank and does not really get involved in influencing regulation.

Perhaps this bank is a relatively small player, because the larger banks in this study certainly do seek to influence regulation in various ways, particularly through their country banking associations. Kennedy Kiplagat (Kenya, DFS enterprise) stated that his company is very well established with lots of existing capacity for DFS regulation, which had not been affected by his influence or work. Munyaradzi Nyakwawa (Zimbabwe, DFS enterprise) similarly explained that his large organisation already has a compliance team which meets with the Central Bank weekly on regulation issues. Although he personally learnt about regulation in his courses, he did not feel this had any influence on these high-level engagements. Furthermore, Nyakwawa felt that the polarised political climate prevents meaningful engagement with regulators at present. Kim Dancey (South Africa, commercial bank) did not report much of a role in DFS capacity, and while her multinational company does high-level regulation engagements in various countries in which they operate, she has not had an influence. For Ercilio Zimba (Mozambique, government agency), his rural development agency inputs into rural development policy only.

For the other practitioners, whose organisations do show evidence of increased DFS regulation capacity, there are a range of contexts and contributions. The specific inputs into regulation will be outlined in the next section. For now, some examples of the role each DFI practitioner is playing in increased regulatory capacity will be discussed.

Munir Bello (UK, non-profit) has a role at the GSMA (Senior Regulatory Specialist and Mobile Money Certification Lead) in which regulatory aspects are central. He works with many GSMA members in sub-Saharan Africa to both lobby for better regulations and to comply with existing regulations. He has also run workshops for several central banks and inputted into policy briefs and other areas designed to influence regulation. Also working in the non-profit sector, with a humanitarian network, Anna Kondakhchyan (UK, humanitarian) similarly plays a role in her organisation's efforts to lobby and advocate for favourable regulations in the humanitarian field. For example, members of her network lobby African governments on issues relating to humanitarian payments and cash transfers, which are becoming key ways in which aid is being distributed. Their members lobby specific governments, and the secretariat of her network also lobbies where it can. Kondakhchyan also says she plays a role in helping her colleagues to understand the regulatory environment and how regulation of DFS works in their context. Working in the non-profit sector in Africa, Juliet Mburu (Kenya, FSD Kenya) does a lot of work related to regulation. Although FSD already has a high capacity for regulation, this being a key role they play (through lobbying, writing policy briefs, commenting on draft bills), Juliet has also been involved in several such projects, and plays a growing role here.

Among the DFS consultants, Dylan Lennox (Australia) has also had his personal capacity for DFS regulation increased significantly by the DFI courses. His consultancy does a number of projects with regulators and clients hoping to influence regulation in emerging markets in Africa. As he says, "*My company has a number of clients where we do advise on regulation issues, including a central bank and others trying to influence the policy*." Although there are several other senior partners of Lennox's company with very high DFS regulation experience and capacity, his increased capacity in this area has helped the company to build its capacity here. Talha Laghari, also running a DFS consultancy in Pakistan, often gets hired to work on projects to open up the regulatory space for DFS. As he explains: "*My capacity to participate in regulatory matters has been enhanced. Currently, with USAID I am working with the regulator here in Pakistan. Our challenge is to try to move regulation towards a functional approach, looking at the why, what and how. Regulation should not be just to control, but to facilitate. So we are trying to get them to enable rather than control and constrain. Most of the regulations are outdated and there are new business models and ways of* *working which are not covered. So regulations don't accommodate new innovations. So this is the area in which I am working with a number of clients*." Shirley Mburu (Kenya, DFS consultancy) also works for a consultancy which has a very high capacity for DFS regulation and participates in a number of regulatory projects. She gained a number of DFS regulation insights and skills from her DFI courses and now plays a leading role in several such projects (see the next section).

Professor Yinka David-West teaches at Lagos Business School and runs an institute, the Sustainable and Inclusive Financial Services Institute, which plays a key role in DFS regulation in Nigeria. David-West and her institute already had a very high capacity for DFS regulation, but David-West's DFI courses and role as a CoP facilitator has fed into this role positively. As she explains, the institute is in the position to play an important role because it is respected as a neutral body which can facilitate conversations and lobby the government: "*We are actively engaged with regulators, helping them to see different things. We did some other work with Dalberg and displayed the results through an exhibition, which gave voice to the people. And the regulator invited us to speak and share our findings at one of their working groups, to help them understand perspectives on consumer segmentation. So it is not that we are doing the policy change, but there are active conversations driving policy which we facilitate. The conversations have to be had from a multi-disciplinary and dimensional framework. If that conversation is only involving regulators and operators, it is limited, but we bring all stakeholders together, then they can engage*."

For those practitioners working in large commercial banks, it is quite difficult to judge their specific contribution to their company's DFS regulation capacity. For Ritah Kanyana and Robinson Mbae (Rwanda, Bank of Kigali), although they gained some knowledge in this area, Bank of Kigali as one of the oldest and largest commercial banks in Rwanda, already has lots of high-level capacity to input into regulation. The bank is always asked to make inputs into regulation through the Rwanda Bankers Association, but it is mostly senior managers who are involved with this work. However, because more than 30 Bank of Kigali employees have taken DFI courses, including senior managers, it is likely that DFI has positively impacted the bank's capacity for DFS regulation indirectly. The DFI alumni at the bank also have an internal association which helps them to discuss issues and share ideas – a body which also may help the bank to contribute in this area. For Faith Kobusingye, at another Rwandan commercial bank, she similarly obtained regulation knowledge and skills through DFI, and was linked with a number of regulators where with her on her course. Her bank (I&M Bank) already had lots of capacity, but through her role as a Senior Manager for DFS Operations, Kobusingye has been involved in various projects relating to regulation, especially with the Bankers Association.

Gabriel Kamuge (Uganda, formerly at Tropical Bank) testified as to what the DFI courses added to him in terms of DFS regulation capacity: "*DFI helped me to understand the importance of the regulatory environment, and I sat on several committees when I was with Tropical Bank, so I did make an impact. The DFI course helped me to input into the regulation space. Regulation defines what is allowed in the digital space; I got that understanding from DFI as well as the importance of compliance. I saw that DFS players need to invest in relation to what is possible in the regulatory environment, and that the regulatory framework defines what kind of channels can operate. So we need to understand how to be compliant*." Kamuge made inputs into several regulatory areas while working with Tropical Bank, and appears to have increased their capacity in this area greatly. He also shared some lessons he learnt through these endeavours:

> "*One important lesson I have learnt, and I always argued with our central bank, is the common understanding that innovation is moving faster than regulation. We have a whole new sphere of innovations that are lacking proper regulations…It takes too long to get regulations done and also it is too confusing to have too many regulations. With Crypto currencies, nobody knows about it, central banks are ignoring the issue. But people are trading in it and attesting to its benefits. And some areas are just subsumed under broader regulations...But these regulations are not conducive to what innovation is bringing on the table. So regulation will not catch up on innovations, it will simply ratify what is in place already. So we always press the central bank to develop the regulations, and they always respond. For example, we worked for a couple of years and started pushing for agency banking and mobile banking a long time ago. They are slow because of lack of capability – technical knowhow and so on. But they do respond*."

Joyce Nambasa (Uganda, Equity Bank) also works for a bank which is very well-established and influential in Uganda. Yet she has been able to contribute to their DFS regulation activities, especially through being the bank's representative on the Uganda Bankers Association's DFS sub-committee. As Kenneth Onyango, her senior manager stated: "*There is some improvement in our DFS capacity. Banks are key stakeholders so we are definitely involved in regulatory matters. When a draft bill is ready there are workshops for stakeholders and banks are selected or go under the umbrella of the Bankers Association, and they make contributions to the regulations. So for us, with the DFS sub-committee, Joyce is our representative. And we give contributions to shape regulations. Law makers are not experts, so they take inputs from industry role-players. And the DFI courses have helped to enable us to authoritatively comment on a subject in a bill. We can challenge or support the legislation*." As will be outlined in the next section, the DFS sub-committee even took lawmakers to Nairobi to see how agency banking works in Kenya, so that they would allow it to be introduced in Uganda. This duly happened six months later.

Lastly Charles Bassey (Nigeria, Central Bank) works for the main DFS regulator in his country, and says he gained many insights through the DFI courses he took. He feels that he can comment more effectively on regulations developed by his colleagues since he took the courses: "*My DFI training gives me greater insight into the impact a policy has, and I can comment accordingly. I loved that the CIDM was so self-reflective in terms of my work and role at the Central Bank. So I used it as a lens to see what is happening in Nigeria and other parts of Africa, to understand if we are getting it right or not. It increased my capacity to understand linkages and intersectionality of how things link, and to see if the policy is connected to what is happening out there in terms of applicability*." Thus, although just one individual, Bassey feels that he can help the Central Bank to make sure that regulations are relevant and enabling for the DFS sector.

Summary:

Although it is difficult to make a conclusive evaluation of how individual practitioners increase their institutions capacity for DFS regulation, at least 14 out of 19 practitioners (73.3%) demonstrate some level of influence in this regard. In some cases, organisations were simply too large, with an already high capacity for such regulatory input, for one or two DFI alumni to make a real difference. But in other cases, DFI alumni were playing key roles which enabled them to contribute to their organisation's regulatory capacity in some way. Consultants working in the DFS space felt that their DFI knowledge had enabled them to help clients with regulatory issues. Similarly, those working for non-profit organisations (often networks of members) also demonstrated increased capacity and understanding for DFS regulation which was helping their organisations and members. Even at large commercial banks, there was some evidence that individuals in key roles could impact the regulatory environment through sub-committees of their bankers associations. The only individual working for a regulator also felt that his increased knowledge of the DFS field could help him to guide regulations from within the Central Bank.

3.2.4 Contribution to regulation and policy

Indicator 2.3.1: # new DFS regulations / policies / directives developed or existing ones adapted for the financial market by DFI students in SSA. Disaggregated by: Stage of regulation (initiated / fully developed).

As discussed in the last section, three-quarters of DFI practitioners showed some level of contribution to DFS regulation capacity of their companies. This section outlines the specific regulations or policies developed or adapted by DFI students, or with their significant input. As Table 7 (below) shows, 11 practitioners out of 19 had participated in developing DFS regulations or policies. Such participation was seldom simply pure individual endeavour, but often represented collective efforts of their companies, of committees or other groups to influence the regulatory landscape. Nevertheless, these efforts are a significant contribution to the DFS regulatory environment in Africa and in other emerging markets.

Table 7: Practitioner involvement with DFS regulation development

Practitioner	New DFS regulations / policies / directives developed or existing ones adapted for the financial market by DFI students in SSA.	Stage of regulation (initiated / fully developed).
Munir Bello (GSMA, UK)	The GSMA works on policy and the self-regulation of members. • They have developed a code of conduct of best practice for mobile money operators. • Developed a cyber security and data protection code. • They do workshops for central banks, and feed into policy through writing briefs.	• Fully developed • Fully developed • Ongoing.
Dylan Lennox (MFX Partners, Australia)	• They have been working in Tanzania, Kenya and other East African countries on an inter-operability programme with the World Bank, to find the right business models and to ensure the right incentives are there. • In Tanzania they have been working for the Central Bank to help them to roll out a new national mobile money service, and to develop the right regulations. They have been aiming to change the regulatory supervisory regime from being bank-led to non-bank led, as mobile money operators can't get licences. • In Yemen, a client is aiming to launch a national switch and mobile money service. They are lobbying government to draft rules for these initiatives.	• Still being developed • Still being developed • Still in progress
Faith Kobusingye (I&M Bank, Rwanda)	• Developed a crypto currency blockchain payment product. They worked with the regulator around their fear of blockchain implications. Engaging regulators also taking the DFI courses helped greatly with this process. • Setting up the Rwanda National Digital Payment System. Inputted into the design etc.	• Already adopted and commercially available • In last stages (awaiting letter of no-objection)
Shirley	• BFA has been hired to develop the National Payments Strategy for	• Strategy currently

Mburu (BFA, Kenya)	Kenya (next 5 years) and the 10 year vision. She led the project and consultations with stakeholders, central bank etc. • Her company also developed the Ghana DFS policy. • BFA also worked on a GSMA project to map people to government payments in Kenya.	out for final comment. • Completed • Completed
Talha Laghari (independent consultant, Pakistan)	• Working with USAID on a project with the State Bank of Pakistan to develop regulations on crowd funding and micro-finance, as well as payments. • Also developing the first regulatory sandbox for fintechs in Pakistan.	• Ongoing • Ongoing
Yinka David-West (Lagos Business School, Nigeria)	• Institute has brought government and private sector together in a stakeholder workshop to influence financial inclusion. Their resulting communique on how regulations need to change is adopted now by the Central Bank. • Also lobbied to enable the playing field to be level– telcos used to be barred from operating independently, but now they are allowed and some are registering. • Do policy briefs and seminars. • Also reviewed payment systems framework.	• Adopted • Regulation issued • Ongoing • Being finalised
Gabriel Kamuge (formerly Tropical Bank, Uganda)	Input into many policies which are now active through being in the Digital Finance Committee of the Uganda Bankers Association. Input into regulations supporting development of recent delivery channels in Uganda, including: • Agency banking, • Mobile banking, • E-banking assurance. • He was also in the committee which helped develop Sharia compliant channels for the Islamic banking.	• All are now fully operational
Anna Kondakhchyan (Cash and Learning Partnership, UK)	She does not specifically contribute, but has made her colleagues more aware of regulation and its implications. Her network: • Lobbies at country level with members like the Uganda mobile operators association – e.g. to get local registration authorities to allow humanitarian papers to be legally used to open a bank account and receive cash through mobile apps. • They also work with cash groups in the Philippines, and have DFID and USAID as members – so lobby through them.	• Ongoing • Ongoing
Juliet Mburu (FSD Kenya)	• FSD is working on the Digital Economy Strategy for Kenya with the ICT ministry. • She is working with the Central Bank around incentives to promote certain kinds of transactions. • She is working on a new project with National Treasury, helping with a Digital Finance 2.0 strategy, to makes Kenya a cash-light economy.	• In progress • In progress • Early stages
Joyce Nambasa (Equity Bank, Uganda)	• The Digital Finance Association (she is a key member) has lobbied regulators and MPs on the tax on mobile digital transactions. They got it reduced from 1% to 0.5%. • With the sub-committee on DFS, Joyce was part of the initiative which flew parliamentarians to Kenya to see how agency banking worked there. When the Parliamentary group came back, within seven months they passed a law allowing agency banking.	• Completed • Completed
Charles Bassey (Nigeria Central Bank)	• There was an inter-agency forum on financial flows and he was the key person reviewing Nigeria's national security strategy and developing a critical framework for the country in fighting money laundering. • He also made inputs into the Payment Systems for Banks Policy as	• Completed • Completed

	it was being developed.	

Summary:

As Table 5 clearly shows, almost 60% of DFI practitioners who were interviewed have been involved, in various capacities, in inputting into or developing 30 different initiatives relating to regulation and policy of DFS. Of these, 18 are fully developed, and 12 have been initiated are ongoing work. Some practitioners are working directly with government regulators (as consultants) to assist them to develop regulations in a range of areas. Others, such as those at the commercial banks, are inputting through committees of their country banking associations. A few have also been heavily involved in developing strategies and policies at country level. A few organisations active in lobbying government are also actively organising national dialogues or preparing policy briefs which influence the regulatory environment. As is evident, this small sample of DFI practitioners is fairly active in attempts to influence and develop DFS regulation in sub-Saharan Africa and beyond. They have thus made an impressive contribution to the DFS landscape through these efforts.

3.2.5 Community of Practice (CoP) role and initiatives

Indicator 2.5.2.a: # CoPs implementing country-based initiatives in SSA. Disaggregated by: Type of initiative (policy, private sector).

Role of the CoPs

As seen above, in the quantitative analysis, and in the qualitative section on networking, the CoPs play an important role in enriching the course content and building knowledge and networks for practitioners. Only four of the practitioners interviewed did not have the opportunity to participate in a Community of Practice (CoP) during their DFI studies. These individuals were based in the UK, in Australia and in Abuja, Nigeria, where there were no CoPs available at the time they took their courses. They did benefit from interacting with fellow students during their courses through the online campus, however. All of the other 15 practitioners participated in CoPs during their courses, with many testifying that the CoPs provided them with an important opportunity to meet fellow practitioners face-to-face and learn from people in different companies and sectors within the DFS field.

According to COP facilitators interviewed (Kenya, Benin, Ivory Coast, Ghana, Zimbabwe and Nigeria), CoP attendance varied, with most indicating that around 60 percent of any one cohort generally attended meetings. In some cases, however, very few students attended, which undermined the effectiveness of the CoP. Practitioners indicated that they attended most of the meetings during their course duration, with a number saying that they mostly discussed course content and shared ideas with other practitioners during these meetings. Some raised the poor turnout of practitioners as a drawback, with busy working and family lives preventing many from making the time to attend, and the bad traffic congestion that characterises many Africa cities also contributing negatively. Nevertheless, there was a common feeling that the networking opportunities, the cross-pollination of ideas and perspectives from different sectors, the addition of new knowledge through guest speakers, and the assistance that peers often gave each other with the course were of great value. The following are additional comments on the CoPs made by practitioners:

Victor Bada (Nigeria): "*We had meetings every quarter. People are so busy in Lagos, so the meetings can't be more often. The value for me is networking, career development and professional development. We tend to be in different walks of life; banking, agriculture, people in policy and the regulatory environment. We work together and give feedback on what is happening in each other's industry. This has helped to develop the whole landscape of financial inclusion*."

Faith Kobusingye (Rwanda): "*The main value of the CoP as a participant, and even as a facilitator of some sessions, was having real-life examples of what we studied and seeing how it relates to our local market. Learning from our classmates how some of these things are designed and finding windows that are relatable has been an exciting aspect of our community of practice. I have a peer who I can talk to about what I am thinking and they understand it from the way I understand it. The largest CoP I have attended there were about 13 participants. We met weekly, face-to face, and another one where we met bi-weekly. The CoP is still ongoing, we have a whatsapp group and email, but the WhatsApp group is more active. The numbers depend on how many students are doing what course. I think it's good. The reason I say that is for the kind of discussions we have, when you have someone who is a familiar face facilitating and guiding discussions, it is a lot easier and we have a lot of support from our sponsors and facilitators. Usually there is someone from DFI who is participating in the conversation*."

Ritah Kanyana (Rwanda): "*I attended the CoP during my courses. We had a very active leader called Jimmy Rutabingwa. He even follows up on us and shares reading material and other things of interest. It is absolutely valuable to be part of the CoP. For example in one of the meetings they had they invited someone from the Central Bank and he gave us a very good understanding of the regulatory framework around things we were struggling with. So there is great value in the networking and information you can get*."

Yinka David-West (Nigeria): "*The COP was a useful tool and activity because it gives and supports face-to-face peer learning, which is important in an online course environment. It gave a blended approach to the product. If you get five or six people to a meeting, you were doing well. The number of cohort participants from Nigeria is not that many, so our CoPs were also small. It does allow the students to gain more knowledge and skills. Online coursework can be very systematic and clinical, so with the CoP you are able to bring different perspective and share experiences with each other. For example, someone in the gaming field was there and we were able to learn more about gaming activities in Nigeria. So it brings different perspectives to the fore*." David-West was also a CoP facilitator in Lagos, whose perspective is shaped by her role as a facilitator and mentor.

Juliet Mburu (Kenya): "*I attended my CoP in Nairobi. It was easy for me because we hosted them at my office. Traffic is bad, so we hosted them after work on Fridays to allow for people to get there. They were valuable because we got to discuss Kenya-specific issues because everyone was working on some Kenyan problem. We could share what was the scene in the market. There was also an external person who came in to present on her experience of implementing an inter-bank switch. Improvements: It was useful and the idea was good. It was a good forum you could build on, but we have not done that yet*."

For Timothy Makuta, the CoP facilitator in Nairobi, Kenya, the CoP are valuable because of the additional knowledge and ways of sharing knowledge that they facilitate: "*In both CoPs I facilitated, we invited external speaker who are experts in their domains. And the students also did cross-pollination of ideas because they all came from different backgrounds. We also went off the script – we had guidelines from DFI, including things like discussing common challenges – but we also went* *off the script to discuss anything that a member would want to share, to get that cross-pollination*." He, however, was frustrated because in 2019 there has not been a CoP due to the fact that the cohort is too small. He suggested better marketing, including to corporates, to ensure cohort numbers are always high. And even when there was a CoP running, he shared that the numbers tended to drop over the duration of the course.

Yves Danielle Dote the facilitator in Abidjan, Ivory Coast, also felt that the CoPs provided a forum for people from different DFS sectors to meet and learn from each other: "*It is a plus for their careers. They work in the DFS field every day, but the DFI courses help them to have another kind of knowledge so they understand the landscape of DFS better. The COPs are a place where they can share knowledge as all of them come from banks or mobile money operators. So they share their knowledge and also to understand the other practitioners habits. Sometimes they don't understand each other, so that was the main plus. We also had guest speakers at times but in Abidjan these are difficult to find*." In Ghana, the Accra CoP facilitator Opelia Ama Oni echoed this sentiment: "*Some of the students have high knowledge in an area, so they share this with others, and we also bring guest speakers to share knowledge and experience. We have brought regulators, the CEO of a fintech, and someone from Erikson mobile money platform. We also had a debate at the last one, about the future of remittances and how money is now being terminated into digital wallets, so existing platforms like Western Union might be done. So the CoP gives them additional insight. In almost every cohort there is someone who has knowledge on something unique. For example, one talked about Bitcoin and he explained, because it was like Greek to me. So you get other people explaining what is out there. The COP gives people a chance to ask questions they could not ask on the platform and it opens their eyes to lots of things*."

Ethel Mupambwa, the CoP facilitator in Harare, Zimbabwe, also feels that the main benefit of the CoP is knowledge, but that the mutual support and encouragement is just as important: "*The main benefit is knowledge, but the other benefit is that with online studying, people need to realise I am not alone doing this in Zimbabwe. And when you physically meet you feel the cohesion and excitement. I even celebrate birthdays of students at our meetings just to build the community. It is unfortunate that if you don't have enough cohort members you can't do the COP, because even the few students would still benefit. I might actually still do it casually for the others who are not in a CoP this year*."

Country-based Initiatives arising from CoPs

It is clear from the above that the CoPs have been a valuable forum for learning and networking. In addition, DFI M&E data shows that in all 20 CoP locations across Africa, alumni groups have been established, most meeting regularly to discuss issues within the DFS space in their country. Moreover, two-thirds of these groups (65%) have also undertaken country-based initiatives, such as launching associations or lobbying the government on various issues. The sample of practitioners interviewed did not necessarily provide insight into these activities because a number were located in places where there were not CoPs. To get a broader sense of CoP activities, we included facilitators from Benin, Ivory Coast and Ghana in our interviews, even though there were no practitioners from those countries in our sample. We also drew on DFI M&E data on the CoP activities.

In some of the countries represented in our broader sample, country-based initiatives have taken the form of formal alumni associations, which facilitators are hoping to officially register so that they may undertake focussed activities, such as lobbying regulators. Kenya, for example, has an alumni association which was initiated in 2018 and met twice in that year and three times in 2019. However, the Kenyan practitioners interviewed did not seem to know a lot about their alumni association, since they did not yet participate. The CoP facilitator, Timothy Makuta, explains that there are many different DFS conferences and talkshops in Nairobi, and consequently he hopes to grow the alumni association slowly and to identify a specific focus that could hook alumni in. According to the practitioner from Mozambique, there is a group that still meets, and which organises workshops and seminars on DFS, which he does not participate in.

In Ghana, an alumni group has also been established, which now has its own WhatsApp group and meets three times per year. According to the CoP facilitator, Ophelia Ama Oni, they have 74 members in the group and at their last meeting, there were 20 practitioners present. However, this meeting was called at short notice, before the establishment of the WhatsApp group, which should assist in mobilising more attendees in future. The new WhatsApp group shares information and opportunities in the DFS sector, as well as links to conferences, scholarships and jobs. It is thus aiming to be a relevant community tool for the group. The next step of the group is to formalise the alumni association so that it can be a recognised body which can undertake lobbying and advocacy in the DFS sector. A committee has been established to set up the association's objectives and to take it to the next level of formalisation. From there, the desire is to influence policy and regulation, among other things.

Similarly, in Benin and Ivory Coast, the CoP facilitators (Carmen Ahounou and Yves Dote respectively), have been very active and enthusiastic, setting up alumni groups with similar aims to the one in Ghana. In Benin there are already many members and they invite guest speakers to their meetings, including a high-level government official who talked to them about inter-operability. At the next meeting, the facilitator hopes to invite a guest from Ecobank to tell them about agency banking. The main challenge in Benin is that it is very difficult to register such associations properly because of all the paperwork and bureaucratic requirements. In Ivory Coast the association is still in its infancy and does not have a lot of active members, although there are over 100 DFI alumni in the country. Yves Dote therefore wishes to build a core of a few enthusiastic members "*who are really invested to create the association*." Once the association is established, they wish to inform the government and lobby for the inclusion of all stakeholders, as Dote explains: "*From our point of view, government does not understand what financial inclusion is. They have created an agency for financial inclusion but not everyone has been included. So we want all the different people in the sector to be included, but we need to set up the association first*." It is thus clear that in these West African countries, groups of alumni have identified the need for alumni associations which could lobby the government in various ways, particularly over policy and regulation. They recognise that for this to be effective, large groups which are officially registered will be the most effective platform for this endeavour.

In Rwanda, while there was no mention of an alumni association by any of the Rwanda-based practitioners interviewed, DFI M&E records show that there is an alumni group who met three times in 2019, and who have a WhatsApp group. And according to Faith Kobusingye (I&M Bank), a group of DFI practitioners in her cohort did develop a concept paper on the assessment of the current national inter-operability initiative of the Rwandan government. As she explains: "*We did a concept paper looking for pros and cons, areas to look out for, have the following aspects been considered, and just a concept paper towards having that assessment done. So it was developed. I don't have the* *status of that now. I know it was discussed with some key stakeholders and I believe some of ideas we had put forward have been considered in the design of the policy*."

Uganda, Zambia and Senegal have initiated the most exciting step of establishing Digital Frontiers Associations (DFA[3]), which include and are driven by alumni, but can also be joined by others in the DFS space. In Uganda Joyce Nambasa (Equity Bank) is one of the leading practitioners in this initiative, being part of the interim committee which is currently putting together this association. They have 60 members and are hoping to attract more through their upcoming activities. Indeed, they are extremely active already. They have undertaken awareness campaigns, for example on a law taxing over the top services. They brought together stakeholders, including lawyers, to discuss how members of the DFA will be affected by this tax. The association also lobbied MPs on the tax on mobile transactions and had this reduced from 1% to 0.5%. The also held a debate earlier in the year about innovation in the DFS sector, and in September they are holding a conference for regulators, NGOs and others on innovation and regulation. Their aim is to build slowly, but to take action, not just use the DFI as a talkshop. In Zimbabwe they have an alumni association, but are also planning to launch an association, which they are very excited about. At their next meeting, members will be presented their draft constitution. As with Uganda, they hope to use this body constructively to develop the DFS sector. A number of other countries (seven) have also developed draft constitutions for associations, which they hope to get off the ground soon.

Summary:

The Communities of Practice (CoPs) have been very valuable spaces for practitioners to gain support, new forms of knowledge, networks with people in other areas of DFS and develop other initiatives or collaborations. Most practitioners found them to be extremely useful aspects of their DFI experience, even if they only lasted for the duration of the course. In some countries, alumni associations, or even the more ambitious Digital Frontiers Associations, have been formed, and country-based initiatives are being implemented in 13 out of the 20 CoP locations. Such initiatives largely involve setting up groups with the intention of lobbying policy makers and regulators for a better DFS environment, and raising awareness in various ways. In some countries, such as Kenya and Ivory Coast, alumni associations have been formed, but they are currently small, and struggling to become officially registered. Official registration is seen as an important step in order to give the associations a legitimate platform from which to lobby and raise awareness at country level. CoPs and the other bodies growing out of CoPs are seen as hugely useful, with the potential to play a really valuable role, but a key challenge is to get people to commit to them when they are living very busy lives in cities which are often difficult to get around. Nevertheless, across all locations where CoPs have been held, there is enthusiasm for some form of alumni network, and examples like Uganda, Zambia and Senegal will serve as models on which other countries can bas their associations in the future.

3.2.6 Cross-sector collaboration

Indicator 2.5.1.a: % of DFS providers who report an increase in cross-sector collaboration as a result of the DFI training and other services (CoP, SWITCH) in SSA.

[3] In Zambia's case, it is called the Association of Digital Finance Practitioners (ADFP).

Over half of the practitioners interviewed (11), reported increased collaboration of various kinds as a result of their DFI involvement. A few others stated that they did draw on cross-sectoral links from their DFI community in the course of their work, but were not really collaborating with them in the true sense of the word. The 11 practitioners who are collaborating across sectors are doing so in different ways, depending on their role and interests.

For Kennedy Kiplagat (Kenya, DFS enterprise), his collaboration came about through some fellow students he met at his CoP. They realised that there was a "*convergence*" in their interests, and that they had "*a synergy in different domains*", and so formed what he calls a "*caucus*" of four of them. They have a WhatsApp group on which they share information and look for consulting opportunities suitable for their skills. One member of this "caucus" has now returned to Turkey with her husband, where she is looking for opportunities they might explore with the Gates Foundation. They are also involved with a project to assist a Tanzanian start-up on its digital product development. Munyaradzi Nyakwawa (Zimbabwe, DFS enterprise) is involved in his country's DFA, but he also undertook another kind of collaboration, which has assisted DFS players in his country. In 2018 he went to Luxembourg for a course about law and regulation of DFS. While there, he met people from the Smart Campaign (a global effort to unite microfinance leaders around the common goal of client protection). He had a discussion to persuade them to come to Zimbabwe to train micro-finance institutions on data protection and consumer protection. He reports that his company had spent almost five years trying to get them to come to Zimbabwe, but when he spoke to them, within six months they came to Zimbabwe, and by December 2018, three micro-finance institutions were certified. This is a collaboration which Nyakwawa is proud of facilitiating.

In the case of the two DFS consultants Dylan Lennox (Australia) and Talha Laghari (Pakistan), as outlined above, their DFI training opened them up to clients and partners from a range of sectors, who they now collaborate with. For example, Lennox was made more connections with regulators and does more work in this area now, while Laghari says he has expanded his area of practice and does more work collaborations with fintechs and in other areas. For example, he collaborated on a project developing digital tools for farmers in Kenya, which he would not have done without his DFI training. Juliet Mburu, in the NGO sector with FSD Kenya, is collaborating with her country's Central Bank on incentives for certain kinds of transactions. Her organisation always works with relevant partners on key projects, but Juliet reports that she obtained the confidence to collaborate with the regulator from DFI. Also in the NGO sector, Anna Kondakhchyan believes she is now able to be a "*credible convener*" to bring the humanitarian and DFS sectors together. Her collaborations are more internal to build her network's capacity across the DFS and humanitarian spaces, but they are still significant.

Those working in government have also reported greater collaboration as a result of their DFI experience. Charles Bassey (Nigeria, Central Bank) reports that he collaborates on the Security Industry Forum with people from different sectors. He is the assistant regional vice president of this body. He also collaborated with the anti-corruption commission, which sent him a European Union report to review as they knew of his expertise through DFI. Meanwhile, Ercilio Zimba (Mozambique), in his old role of Rural Finance Head for the National Directorate for Rural Development explains that one of his key duties was collaboration with many role players. He thus collaborated with the Bank of Mozambique, the insurance regulator, insurance companies, telecom companies, and FSD Mozambique while working in this capacity.

Some of those working for commercial banks have also collaborated with various others outside their sectors, often in the course of developing digital financial products for their various clients. For example Ritah Kanyana (Rwanda, Bank of Kigali) collaborated with the agricultural industry as she developed a digital wallet for farmers. Her colleague at the bank, Robinson Mbae, also stated that had to collaborate with various stakeholders in working on various projects to do with payments and the national switch. Similarly Gabriel Kamuge (Uganda), who developed a number of products when working at Tropical Bank, stated that most of these required collaboration with fintechs, the Bankers Association and with NGOs like FSD, with whom he worked on an evaluation of a rural financial inclusion project. Joyce Nambasa, also from Uganda (Equity Bank) says that through the newly established DFA she is collaborating with fintechs and helping them to understand how to ensure that their innovations are in line with regulations. She also collaborates with the Innovation Hub and other organisations on their projects. Lastly, Faith Kobusingye (Rwanda, I&M Bank), as mentioned above, has initiated some projects with government regulators, helped by the links she established on her DFI courses. She also has collaborated with a couple of students from her CoP, as she explains: "*Most of the other projects that have come out of the CoP are more bilateral discussions, where I am supporting a product which someone else has come up with and as a bank we are providing infrastructure and sponsorship, which is quite good because it sets the pace for incubation of payments. So I've seen a couple of collaborations which have come out of the Community of Practice in the larger environment*."

Summary:

While most practitioners felt their cross-sectoral networks had expanded and they could draw on these connections when necessary, 11 had done more concrete collaborations of various kinds. The consultants had experienced a widening of their client base and scope of work as a result of their DFI experience, while those working in the NGO space also felt they had more connections which were useful to them in their work. Similarly, the two individuals working for government entities collaborated with non-state actors and bodies in the course of their work, having found the DFI courses useful in helping them in these endeavours. Meanwhile, those working for commercial banks found that in developing new digital finance channels and products, it was crucial to collaborate with a wide range of sectors. Overall, the DFI courses did enable these practitioners to collaborate more broadly and more effectively, where previously they did not have as much confidence, or the network, to do so.

3.2.7 Certification by Tufts University

Although not covered in a specific evaluation question, practitioners were also asked a set of questions around DFI course certification and whether they felt the courses should be certified by an expensive external institution such as Tufts University, or whether there was a cheaper or better alternative. A large majority of the practitioners interviewed felt strongly that DFI should continue having their courses certified by Tufts University, especially to ensure that the qualifications would attract more students, and that the certificate would maintain the highest level of credibility among people working in the DFS sector. They pointed out that although the courses were of the highest quality, the perception in Africa of quality is important, and is significantly enhanced by a certification from a recognised American University. The following are a selection of comments by practitioners on the issue:

Victor Bada (Nigeria): "*Having the courses certified by Tufts University is a good attraction. It enhances its credibility. DFI was quite young at that time I did the course, so the brand was not well developed. So the Tufts University brand was important*."

Kennedy Kiplagat (Kenya): "*Tufts University gave me a lot of mileage. The reputation of Tufts is incredible. So if it stays with Tufts that is a very strong validation. Even though quite expensive, it is worth it*."

Ritah Kanyana (Rwanda): "*It is good for credibility: it is a plus. Especially if for example locally I'm working with someone but I know that when we have to present our credentials for a big grant they look at our papers and see the Tufts certificate*."

Munyaradzi Nyakwawa (Zimbabwe): "*I think they should continue with the Tufts connection. We want that in Africa – people always ask who the course is certified by. So it's critical that its certified by a reputable partner. DFI certification by itself would not work. With the content, we the students are happy, but the certificate would not be trusted*."

Dylan Lennox (Australia): "*To have a certified course behind your name is worthwhile. You need to have this behind your name. I did not have one before, so it helped me a little bit. But it depends on the customers. I love the fact that it is backed up by Tufts. It is international and costs a bit more, but it is valuable. I don't want it to be low-cost, low-benefit. Maybe in 10 years' time DFI will be a strong enough brand. But for now, I prefer to see Tufts do it for the global recognition*."

Faith Kobusingye (Rwanda): "*They need to keep the Tufts certification. It is expensive but it lends credibility to the certificate itself. And it helps people to keep on track; it helps people to keep up their studies as they see there is worth in it*."

Rishi Rathaitha (UK): "*it is a good thing it is certified. It is fine for DFI to offer courses and certify it themselves. But when you charter something, it is endorsed by someone external. It lends it credibility and weight. If Tufts endorses and upholds the qualification – with Tufts on the certificate, that piece of paper is worth more*."

Juliet Mburu (Kenya): "*I think it is important. In the field of payments there is not a degree, so having something from a recognised university adds a lot of weight to your profile. I would have done it anyway, but this makes it nicer; it adds some gravitas*."

Interestingly, the practitioner with the least strong feelings on Tufts certification was Yinka David-West, a professor with a PhD, to whom further certificates are probably not as important. Still, she reflects: "*DFI is a commercial entity. But with academic knowledge, you need grounding. So Tufts gives them access to research and scholars that they would not otherwise have. It is a value proposition that has to be managed effectively. The cost is one thing. I would recommend that they stay with Tufts, but the cost is a limitation*."

Meanwhile, Kenneth Onyango, a senior manager at Equity Bank (Uganda) points out that a prohibitive cost might be alright for those working in big companies whose employers can subsidise the cost. However, if the aim is for people in small companies to have greater access to the course, a different model might be needed. "*If more people are able to do the course it would be good. Very many people in the area should do it. Maybe the cost is an issue. Without the bank subsidising and* *part sponsorship they would not be able to do it. There are so many people in the fintechs and other small entities who may not be able to do the course because of cost. So if it is brought down in cost, more people would be able to do it and the knowledge would be used more widely*."

Given that there is a strong feeling that the Tufts certification should remain, there is a case to be made for funders to support DFI so that they can subsidise the cost for students, and ensure that it can be as accessible as possible, while maintaining its international high reputation. As some practitioners also pointed out, regulators in government and other DFS partners also take them more seriously when they have this globally recognised certificate. It is thus important for DFI to maintain the link to Tufts, while also looking at ways to ensure accessibility.

4. Conclusion & Recommendations

Phase 1 of the 2019 MMR process involved the analysis of both quantitative data, from the DFI 6 and 18 month follow-up surveys, and primary qualitative data collected from 30 practitioners/CoP facilitators/line mangers. Both of these datasets have shown that DFI has made a major contribution to the professional lives of the majority of practitioners who have taken its courses. Practitioners themselves feel that they have grown considerably in confidence, knowledge, ability to contribute to conversations and innovations, networks, collaboration opportunities and in other areas. Even more telling, observers such as CoP facilitators and those line managers interviewed speak very highly of DFI and its impact on the practitioners who have taken the courses. Aside from people's perceptions, the above report has presented further evidence of actions taken by practitioners which are having a major impact on their companies and in their professional sectors, and on the DFS landscape in SSA generally. For example, many DFS products have been developed, regulations have been developed or improved, and associations have been formed which have the potential to transform the DFS landscape in the countries in which they are located. More collaboration is also taking place among practitioners who are truly empowered to be thought leaders in their fields.

Based on the above findings, the following recommendations are given:

1. The content of the courses, those giving them, and the method of delivery are clearly of high quality, with feedback suggesting high levels of satisfaction among practitioners. Most practitioners felt that the DFI courses cover many of the most relevant topics in the sector. However, in reflecting on skills their companies still need, the following areas were mentioned for possible inclusion or greater focus in the DFI courses:
   - Blockchain and artificial intelligence;
   - Cyber security for mobile money ("Although it is covered, it would be good to have it as a single course");
   - Need for more on cloud computing;
   - More on big data is needed, on data analytics in fintechs and how to make use of data to improve or launch new projects;
   - More on the future of money is needed, not just how it moves but what it is and how the business model for new currencies like Libra work.
   - A course focussing on agri tech is needed;
   - More on bank "derisking" and its impact on the humanitarian sector;

- More content is needed around open banking and finance, open API, and digital currencies, including how governments could issue digital currencies.

2. Some practitioners provided feedback about the current DFI platform, which they said did not allow them to access their old certifications and other information. It is assumed that DFI in the process of upgrading its platform and it is recommended that this is made as attractive and user friendly as possible to keep alumni engaged and positive about DFI and their membership of the community.
3. Some practitioners and CoP facilitators felt that the DFI courses are not marketed as widely or effectively as they should be, with the result that cohorts in certain countries fluctuate year-by-year. This has a negative impact on the CoP activities and alumni associations, and causes loss of momentum for these projects and the people involved in leading them. Based on suggestions made by these interviewees, it is recommended that the marketing of the DFI courses is improved to ensure that individuals, companies and government departments/ regulators in SSA are fully aware of DFI and what it has to offer. CoP facilitators recommended providing corporate packages to specific companies or sectors, so companies can send large numbers of their employees. Getting regulators, lawmakers and other public sector workers more involved in this way could be highly advantageous, not just in terms of their capacity building, but in the links that they would establish with other industry role players during the course, and afterwards in alumni associations. The alumni associations and DFAs could also play an important role on marketing the course in their countries.
4. On this note, it is clear that not all practitioners, even where they live in a CoP location, are able to regularly attend the alumni groups which have so far been formed. The CoPs themselves are too cohort-specific and short-term to really make a greater impact, but alumni associations (and other bodies such as DFAs) are a key vehicle for greater involvement, collective action and change. However, a key threat is the existing commitments of practitioners, and the distances they need to cover (often through bad traffic) to meetings. Such associations thus need to build their identity and their value-adding potential so that even busy individuals may attend and participate regularly. The facilitators/office holders of these bodies also need more training in how to build an effective association, as well as training and support in registering these bodies officially. In order to have a respected voice, it is clear that associations have to register with the appropriate bodies in their countries. DFI should continue its commendable role of supporting these associations to grow by sharing constitutions amongst them, and funding the registration fees of associations.
5. Exchange visits between DFAs or alumni associations in different countries may be one way of ensuring that these bodies learn from each other and share ideas about how to develop and collaborate. At present, DFI hosts CoP facilitator Zoom meetings every three weeks when cohorts are active where information is shared. DFI also got the majority of CoP facilitators together for an event in 2019 where best practice at facilitating CoP meetings and forming associations was discussed over three days. DFI plans to do this again in 2020, and it is recommended that this cross-pollination continues into the future.
6. While collaboration between individuals has happened organically, DFI might also consider introducing various incentives for collaboration, such as a prize for a project implemented by practitioners in collaboration across sectors.
7. The findings of this report very clearly show that there is a need to maintain the Tufts University certification for the DFI courses. For professionals and government officials in

SSA, this clearly provides credibility and social/professional capital in a way that DFI certification alone does not. Practitioners also point to the fact that not only does this enhance their career prospects, but that potential collaborators and regulators also take them more seriously with the certificate underwritten by a reputable international university. All of those interviewed, including senior managers, stated that they were happy to pay more for more value of this kind.

8. However, given that there is a strong call for the Tufts University certification to remain and thus for the DFI courses to maintain their relatively high cost – there is a need to explore some alternative funding/costing models. DFI might consider self-certifying some strategic modules, while leaving the larger modules and certificates to be certified by Tufts. One issue raised was that those working in small DFS companies, or in the less formalised sector, may not have as easy access to DFI courses as those whose large companies are happy to subsidise the cost. DFI might thus consider courses which fintech and mobile money operators might find attractive, at a lesser cost (not certified by Tufts).
9. Alternatively, this also provides a strong justification for various of DFI's funders to provide subsidies for certain kinds of applicants, since it is imperative that more people in the sector are exposed to DFI and the knowledge and capacity building it clearly provides. It is not advisable to bring down the perceived quality of DFIs offering, but if more DFS players are to be reached, funding may be crucial for those who cannot afford the full cost.

5. Appendices

Appendix 1: Summary of Findings on Indicators

- **Indicator 2.1.1: % increase in degree of institutional capacity for DFS regulation in SSA.**

Of the 19 practitioners interviewed, 14 **(73.7%)** showed clear evidence that their DFI training and experience has increased the capacity of the organisations for DFS regulation in SSA.

- **Indicator 2.3.1: # new DFS regulations / policies / directives developed or existing ones adapted for the financial market by DFI students in SSA. Disaggregated by: Stage of regulation (initiated / fully developed).**

Among practitioners interviewed, it was found that 60% had been involved in varying capacities with developing or adapting **30** different DFS regulations / policies / directives, of which **12** were still in their early stages of initiation/ongoing development, and **18** were fully developed.

- **Indicator 2.5.1.a: % of DFS providers who report an increase in cross-sector collaboration as a result of the DFI training and other services (CoP, SWITCH) in SSA.**

Of the 19 practitioners interviewed, 11 **(58%)** showed clear evidence of cross-sector collaboration as a result of the DFI involvement.

- **Indicator 2.5.2.a: # CoPs implementing country-based initiatives in SSA. Disaggregated by: Type of initiative (policy, private sector).**

Among the practitioners and CoP facilitators interviewed. It was not possible to obtain a clear enough picture of additional initiatives, since practitioners had varying engagement and experiences of the CoPs. However, DFI M&E data indicates that of the 20 CoPs established, **13 (65%)** have so far implemented country-based initiatives. Of the 13 initiatives, only one relates to policy, while the remaining 12 involved the formation of professional associations/groups or initiatives with the private sector.

- **Indicator 2.6.1: % of DFS providers and other DFS market actors who perceive they have enhanced DFS capacity (better networked, skilled and informed) as a result of DFI training in SSA.**

Of the 19 DFS providers/market actors interviewed, all 19 **(100%)** perceived and showed evidence of enhanced DFS capacity as a result of DFI training.

- **Indicator 3.3.4: % DFS service providers reporting increased DFS capacity as a result of DFI training in SSA.**

In 14 out of the 19 cases **(73.2%)** there was clear evidence of the DFS service providers at which DFI graduates worked experiencing an increased DFS capacity.

Appendix 2: Qualitative Research Tools

ASSESSMENT OF THE IMPACT OF THE DFI TRAINING COURSES ON PRACTITIONERS

PRACTITIONER DISCUSSION GUIDE

Interviewer	
Interviewee Location (City, Country)	
Interview Date (dd/mm/yyyy)	
Length of interview (hh:mm)	

Step 1: Read information below to participant

Step 2: Ask permission to record the discussion

Step 3: Turn on audio recorder

Step 4: Complete questions

Step 5: At the end of the discussion, thank the participant and ask if they have any further questions about the assessment.

Thank you for your willingness to speak with me today. As explained, during our discussion I'm going to ask you some questions about the DFI training course/s you have completed. Specifically, I'm going to ask you about the impact these course/s have had on you and your work.

Do you have any questions regarding your participation in this focus group?

Please take note that our conversation will likely take up to 60 minutes. I will give you as much time as you wish to tell me about your views and experience.

Please note that you can skip any questions that you do not feel comfortable answering and can request a break at any time.

I would like to record our conversation so that I can remember what you say. Is that okay with you? If you do not wish to be recorded, I can take notes instead.

START AUDIO RECORDER

Introduction

1. Are you involved in the Digital Financial Services (DFS) sector?
    a. Which sector do you work in? *Public (all government entities); Private (both for-profit and not-for-profit entities); or Development (NGOs, donor, philanthropic)*
2. What is the name of your current employer and what position do you currently hold?
3. What DFI courses have you completed?

Capacity Development, Networking, and Cross-Sector Collaboration

4. Have the DFI course/s contributed to your **DFS capacity**, in terms of your knowledge and skill set?
    a. *Probe: Can you give me some examples of how you have* ***applied*** *the knowledge and skills you gained from the course/s in the workplace?*
    b. *Probe: Are there any* ***achievements****, insights or progress you would like to share with us?*
5. Have the DFI course/s encouraged you to **expand your network and your ability to network**? *Probe: Wider network within their sector, wider network outside sector, personal or career networking, increased confidence to network*
6. Have you been able to **collaborate across sectors** since attending the course/s?
    a. *Probe: If yes, what sector/s have you collaborated with?*
    b. *Probe: If yes, what has enabled this?*
    c. *Probe: If no, what are the barriers preventing you from collaborating across sectors?*
7. Is there **any other value** that you think you gained from the course/s besides knowledge, skills, and networking? *Probe: Space for problem-solving, innovation hub, etc. Participants must provide examples.*
8. Has your **work situation changed** in any way since completing the DFI course/s?
    a. *Probe: If yes, how? E.g. different employer, different job, job promotion, started own company; different sector, improved salary, improved job satisfaction, etc.*

Communities of Practice

9. How **actively do/ did you participate** in the Community of Practice (CoP)?
    a. Do/ did you find the CoP to be **valuable**? Explain. *Probe: knowledge and skills, networking, space for problem-solving, innovation hub, etc. Participants must provide examples.*
10. Is your CoP implementing country-based initiatives?
    a. *Probe: By country-based initiatives, I'm talking about anything that the CoP did over and above discussing the course. E.g. Has the CoP established an alumni forum that meets regularly, a Facebook group, a Whatsapp group, made changes in policy or*

regulation, advocated for changes, acted as consultants. Note: Must be acting as a group or consulting one another.

  b. *Probe: What initiatives is it implementing? How many?*
  c. *Are these initiatives related to **policy** or the **private** sector?*

11. Is there anything that you think can be improved about the CoP?
    a. *Probe: What changes do you think should be made so that this/these are no longer challenges?*

DFS Policy and Regulatory Frameworks

12. Have you developed/participated in developing new DFS regulations, policies or directives or adapted existing ones for the market since having completed the course/s? (e.g. individually, or as part of a committee, working group, CoP etc) **Yes** or **No**? Explain.
    a. *Probe: Please talk me through what products or policies you have developed or adapted? NB to probe for the organisation they are with.*
    b. *Probe: At what stage is this policy/regulation/directive? Is it **fully developed** and has it been **implemented** yet?*

Institutional Capacity for DFS Regulation

13. Can you tell me about your organisation's capacity for DFS regulation? By capacity, I mean the level of DFS regulatory skills, knowledge and understanding with your organisation.
    a. On a scale of 1 to 5, how would you rate your organisation's capacity? 5 meaning that your organisation has high capacity and 0 meaning that your organisation has low capacity.
    b. Has this capacity changed since you attended the DFI course/s?
    c. How much more competent has your organisation become in DFS regulation over the last 2 years? Probe: *Do you have more regulators or do you have more colleagues that are skilled in regulation?*

Certification

14. Is it important to you that the DFI courses are certified by an academic institution? Please explain why.
    a. Would you have enrolled if it was not certified / if there was no university partner?
    b. Going forward, how important is it for you for future courses that they are certified?
    c. Would you recommend the course/s you completed to other colleagues in your field?
    d. Do you trust DFI to provide quality non-certified short-courses?
15. Can you please tell me what you think are the **most critical domains / technical skills you believe your organisation needs** right now?

16. Is there anything else that you'd like to talk about that we have not covered in our discussion?

ASSESSMENT OF THE IMPACT OF THE DFI TRAINING COURSES ON PRACTITIONERS

CoP FACILITATOR INTERVIEW GUIDE

Interviewer	
Interviewee Location (City, Country)	
Interview Date (dd/mm/yyyy)	
Length of Interview (hh:mm)	

Step 1: Read information below to participant

Step 2: Ask permission to record interview

Step 3: Turn on audio recorder

Step 4: Complete interview questions

Step 5: At the end of the discussion, thank the participant and ask if they have any further questions about the assessment.

Thank you for your willingness to speak with me today. During our discussion I'm going to ask you some questions about the DFI training courses for which you were a Community of Practice (CoP) facilitator. Specifically, I'm going to ask you about the in-country CoP which you facilitate here in [name of country], and what impact this has had on the participants.

Do you have any questions regarding your participation in this interview?

Please take note that our conversation will likely take 45-60 minutes. I will give you as much time as you wish to tell me about your views and experience.

Please note that you can skip any questions that you do not feel comfortable answering and can request a break at any time.

I would like to record our interview conversation so that I can remember what you say. Is that okay with you? If you do not wish to be recorded, I can take notes instead.

START AUDIO RECORDER

1. Can you start off by telling me a little bit about the **CoP** that you facilitate as part of DFI's CIDM course? *Probe: How often are they run, how many people attend, how they are rolled out, what topics are discussed.*
2. How do you think the CoP has positively contributed to increasing **students' DFS capacity** (i.e. an increase in their knowledge, skills and understanding)?
    a. Are there any achievements, insights or progress you would like to share with us?
3. Has the CoP encouraged students to **expand their network and their ability to network**? **Yes** or **No**. *Probe: Wider network within their sector, wider network outside sector, personal or career networking, increased confidence to network*
4. Do you think that there have been any changes in the students' ability to **collaborate across sectors**? **Yes** or **No**? Explain (must give examples – which sector/s?).
5. Is there **any other value** that you think the students gain from the CoP besides knowledge, skills, and networking? *Probe: Space for problem-solving, innovation hub, improved confidence, etc. Participants must provide examples.*
    a. Over the duration of the course, did students show an increase in **confidence** to use their new knowledge and to participate in the CoP? **Yes** or **No**? Explain (must give example).
6. Is your CoP implementing **country-based initiatives**?
    a. *Probe: By country-based initiatives, I'm talking about anything that the CoP did over and above discussing the course. E.g. Has the CoP established an alumni forum that meets regularly, a Facebook group, a Whatsapp group, made changes in policy or regulation, advocated for changes, acted as consultants. Note: Must be acting as a group or consulting one another.*
    b. *Probe: What initiatives is it implementing? How many?*
    c. *Are these initiatives related to **policy** or the **private** sector?*
7. What qualities about the CoP help it to **work well**?
8. Is there anything about the CoP that you think is **not working well**?
    a. What **changes** do you think should be made so that this/these are no longer challenges?
9. Is there anything else that you'd like to talk about that we have not covered in our discussion?

ASSESSMENT OF THE IMPACT OF THE DFI TRAINING COURSES ON PRACTITIONERS

LINE MANAGER AND HR MANAGER INTERVIEW GUIDE

Interviewer	
Interviewee Location (City, Country)	
Interview Date (dd/mm/yyyy)	
Length of Interview (hh:mm)	

Step 1: Read information below to participant

Step 2: Ask permission to turn on audio recorder

Step 3: Turn on audio recorder

Step 4: Complete interview questions

Step 5: At the end of the discussion, thank the participant and ask if they have any further questions about the assessment.

Thank you for your willingness to speak with me today. During our discussion I'm going to ask you some questions about the DFI training course/s. Specifically I'm going to ask you about how the course/s have impacted your employee(s) who have participated in the course.

Do you have any questions regarding your participation in this interview?

Please take note that our conversation will likely take 45-60 minutes. I will give you as much time as you wish to tell me about your views and experience.

Please note that you can skip any questions that you do not feel comfortable answering and can request a break at any time.

I would like to record our interview conversation so that I can remember what you say. Is that okay with you? If you do not wish to be recorded, I can take notes instead.

START AUDIO RECORDER

Introduction

1. Can you start off by telling me the name of the organisation/business where you are from, and the position you have there?
2. How many of your employees have participated in DFI courses?
    a. What were some of the courses they completed? When did they participate in or complete the course/s? *Probe: month and year (2016-current).*
3. What is your relation to the employee(s) who completed the course within your organisation? *Probe: Direct Line Manager, Director, HR Manager, Team Member etc.*
4. Did you send your employee on the DFI course/s?
    a. If yes, why at the time, did you support / send your employee on the course?
    b. If no, did the employee inform you that he or she was going to do the training? What were their reasons for wanting to do the course?

Capacity Development, Networking and Cross-Sector Collaboration

5. How do you think the DFI course/s have contributed to your employee/s **DFS capacity** (i.e. knowledge and skills)?
    a. Can you please tell me about how your employee(s) have **applied** the knowledge and skills they gained from the course/s in the workplace?
    b. Are there any achievements, insights or progress you would like to share with us?
6. How do you think the DFI course/s have encouraged **students' networking**? *Probe: Wider network within their sector, wider network outside sector, personal or career networking, increased confidence to network*
7. Do you think that there has been any changes in your employee's ability to collaborate across sectors among those who participated in the DFI course/s? **Yes** or **No**? Explain. Must give examples. *Probe: Which other sectors have they collaborated with?*
8. Is there **any other value** that you think was gained from the DFI course/s besides students' having improved knowledge, skills, and networking? *Probe: Space for problem-solving, innovation hub, any other behaviours / competencies etc. Participants must provide examples.*

DFS Policy and Regulatory Frameworks

9. Have your employee/s developed or helped develop any new DFS regulations, policies or directives or adapted existing ones for the financial market since having completed the course? **Yes** or **No**? Explain.
    a. Please talk me through what they have developed or adapted?
    b. At what stage is the regulation, policy or directive? (Is it still being developed, or is it fully developed, and has it been implemented to date)?

Institutional Capacity for DFS Regulation

10. Is your organisation involved in any way in regulating the DFS sector? **Yes** or **No?**
11. If yes, can you tell me about your organisation's capacity for DFS regulation? By capacity, I mean the level of DFS regulatory skills, knowledge and understanding with your organisation.
    a. On a scale of 1 to 5, how would you rate your organisation's capacity? 5 meaning that your organisation has high capacity and 0 meaning that your organisation has low capacity.
    b. Has this capacity changed since your employee/s attended the DFI course/s?
    c. How much more competent has your organisation become in DFS regulation over the last 2 years? Probe: *Do you have more regulators or do you have more colleagues that are skilled in regulation?*

Certification

11. How valuable has the DFI training been to your organisation?
    a. *Probe: What about the course do you find most beneficial?*
12. How do your employee(s) who completed the DFI course/s compare with those who have not done the course/s?
    a. *Probe: Employability of those employees – are these employees more employable? Are the employees better at their jobs now than they were before the course?*
    b. *Probe: On recruitment, would you favour someone with DFI certification?*
    c. *Probe: Have employees who have completed DFI courses become more likely to be promoted to more senior positions in your organisation / business?*
13. Is it important to you that the courses are certified? Please explain why.
14. Would your company be interested in sponsoring employees to take a cheaper course that was not certified, or would you prefer to pay a higher fee to maintain the university certification?

15. We have come to the end of the interview. Is there anything else you would like to add or discuss?

Appendix 3: Additional quantitative findings

Summary of CIDM Follow-Up Survey Data

Electronic surveys were administered by DFI to CIDM graduates at six month and 18-month intervals. The surveys collected primarily quantitative follow-up data from CIDM graduates to find out how the course has impacted their work, organisation and the sector over time.

The survey data for the six-month interval was analysed[4] for Cohorts 1 to 7; and for the 18-month follow-up for Cohorts 1 to 5. Course dates and the timeframes when surveys were completed, as well as the number of respondents per survey and cohort is presented in the table below.

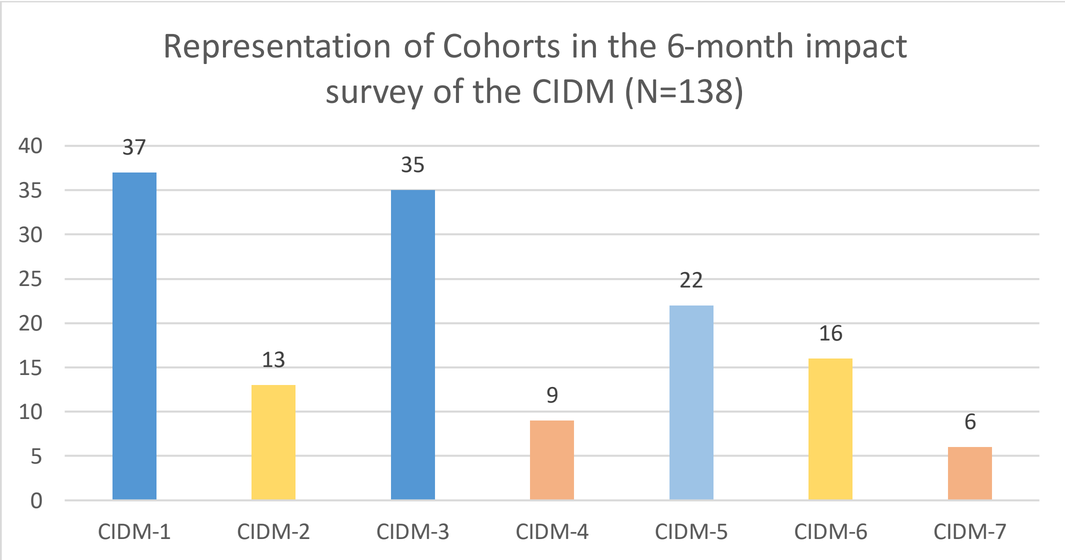
Cohort	Course date	6-month Follow-up Survey				18-month Follow-up Survey			
		Date	M	F	Total	Date	M	F	Total
CIDM-1	February to April 2016	October 2016	22	15	37	August 2018	3	1	4
CIDM-2	July to September 2016	February 2017	9	4	13	August to September 2018	5	5	10
CIDM-3	January to April 2017	May 2018	25	10	35	March to July 2019	6	5	11
CIDM-4	May to August 2017	May 2018	3	6	9	March to July 2019	9	5	14
CIDM-5	September to December 2017	July 2018	17	5	22	July 2019	8	2	10
CIDM-6	April 2018	March to July 2019	13	3	16	No data	0	0	0
CIDM-7	September 2018	July 2019	6	0	6	No data	0	0	0
Total			95	43	138		31	18	49
Percentage			79%	31%	100%		63%	37%	100%

Data that was relevant to impact or indications of change was extracted from the surveys[5]. To present an overall depiction of CIDM's impact across all its alumni, the findings below present data from all CIDM markets, including both SSA and non-SSA markets.

[4] This analysis includes all surveys completed in English, and excludes a data from seven (n-7) participants form C-6 who completed the survey in French.

Six Month Follow-Up on CIDM Impact

At the time of this assessment, CIDMs-1 to 7 had completed a six-month follow-up survey[6]. The survey data of 138 practitioners was analysed for this assessment (N=138)[7]: 37 participants were from CIDM-1; 13 were from CIDM-2; 35 were from CIDM-3, 9 were from CIDM-4; 22 were from CIDM-5; 16 were from CIDM-6; and 6 were from CIDM-7. The findings below must be interpreted with cognisance that the perspectives of CIDM-4 and -7 practitioners are particularly underrepresented (with less than 10 respondents each), while CIDM-2 and -6 also have low representation (with less than 20 respondents each).



Sixty-nine percent (n=95) of participants were male, and 31% (n=43) were female.

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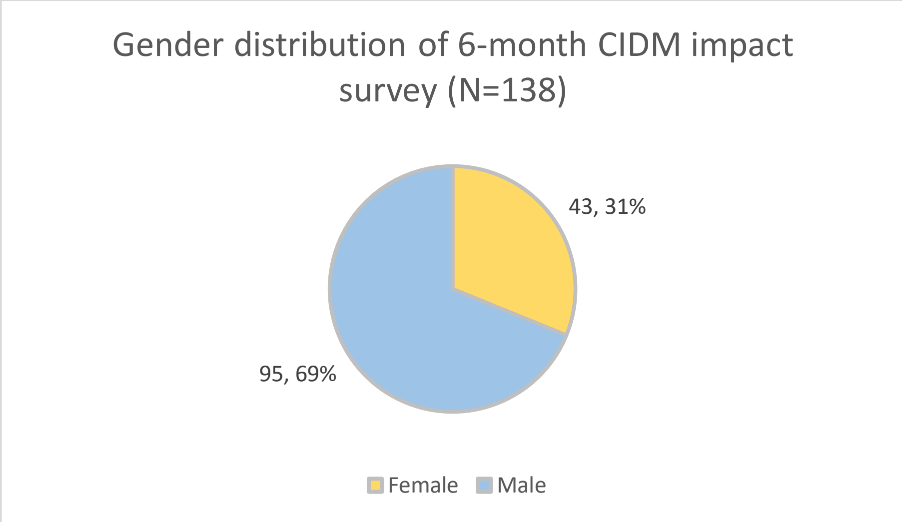
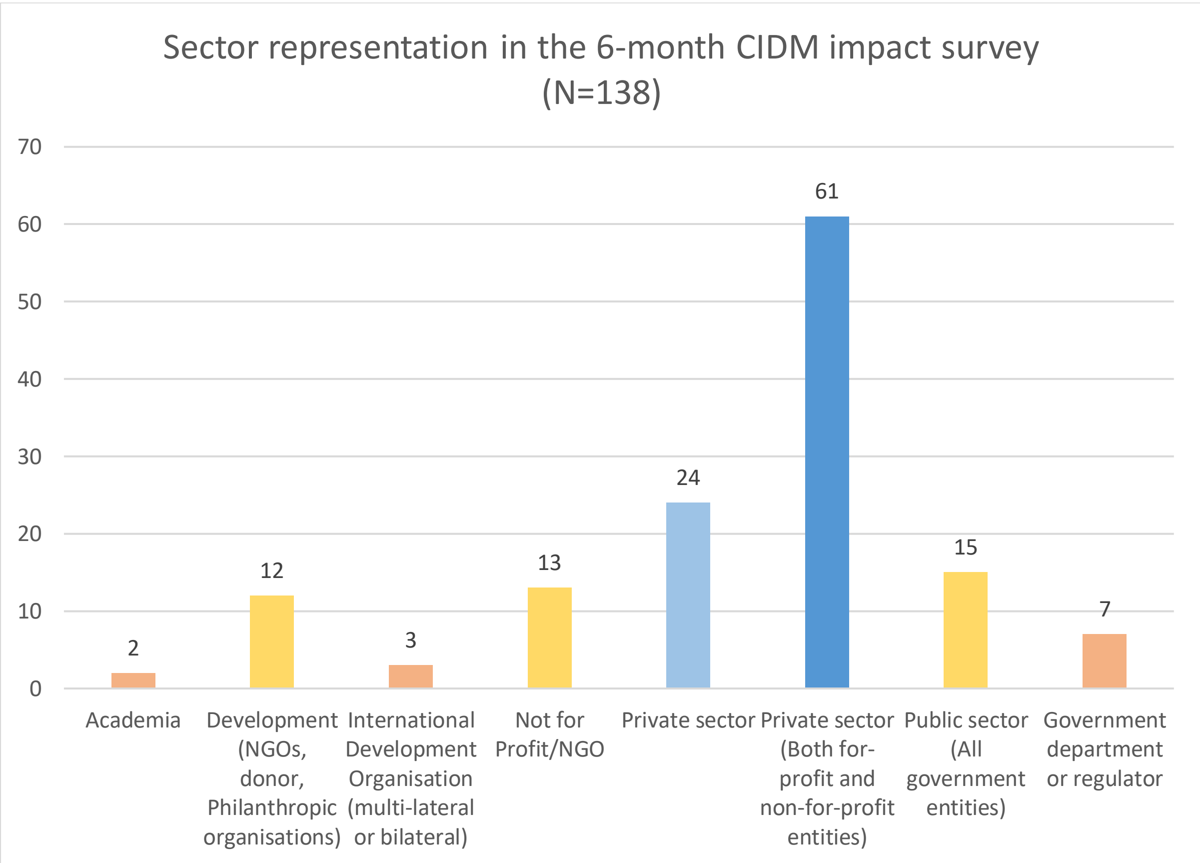
[5] I.e. Demographic information, suggestions for course improvement etc. is not reported herein.

6 There were some differences between the surveys administered to the respective cohorts. Thus, some findings presented above are not answered from the full perspective of Cohorts-1 to -7.

[7] One CIDM-5 alumni, and one CIDM-6 Alumni each completed two six-month follow-up surveys. For these participants their latest survey responses were retained in the dataset, while the earlier responses were removed from the analysis, to avoid bias created by duplicate responses.



Participants represented various sectors, with most participants (62%; n=85) from the private sector. 20% (n=28) NGOs, donor organisations and the development sector, 16% (n=22) from government / the public sector, and 2% (n=2) from academia.

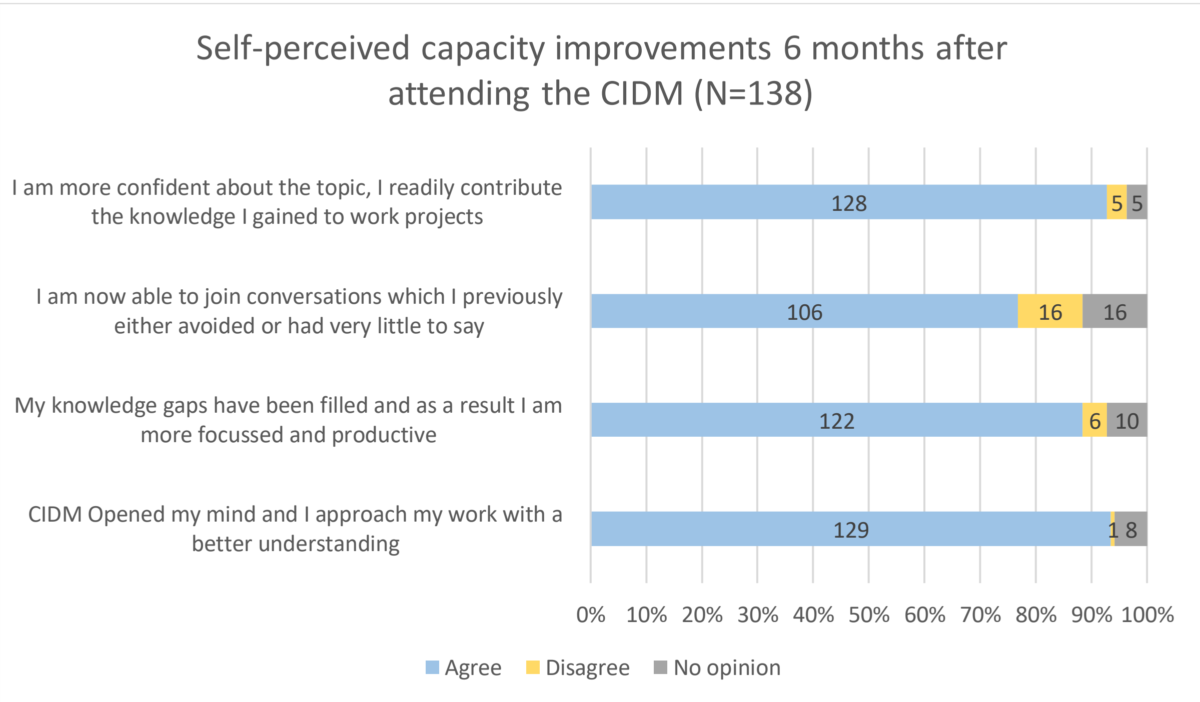


Capacity Development

Practitioners were asked to reflect on some of the changes and capacity developments that have occurred since having completed the course. See the table below.

The vast majority of participants agreed that their capacity had increased in all four capacity domains. As such, most felt that since the course they approach their work with a better understanding (93%; n=129), and they are more confident about the topic which enable them to readily contribute to work projects (93%; n-129). A significant number (88%; 122) felt that their knowledge gaps have been filled and they are more focused and productive, and a large number (77%; 106) feel confident to join conversations they previously avoided or were not able to fully participate in.

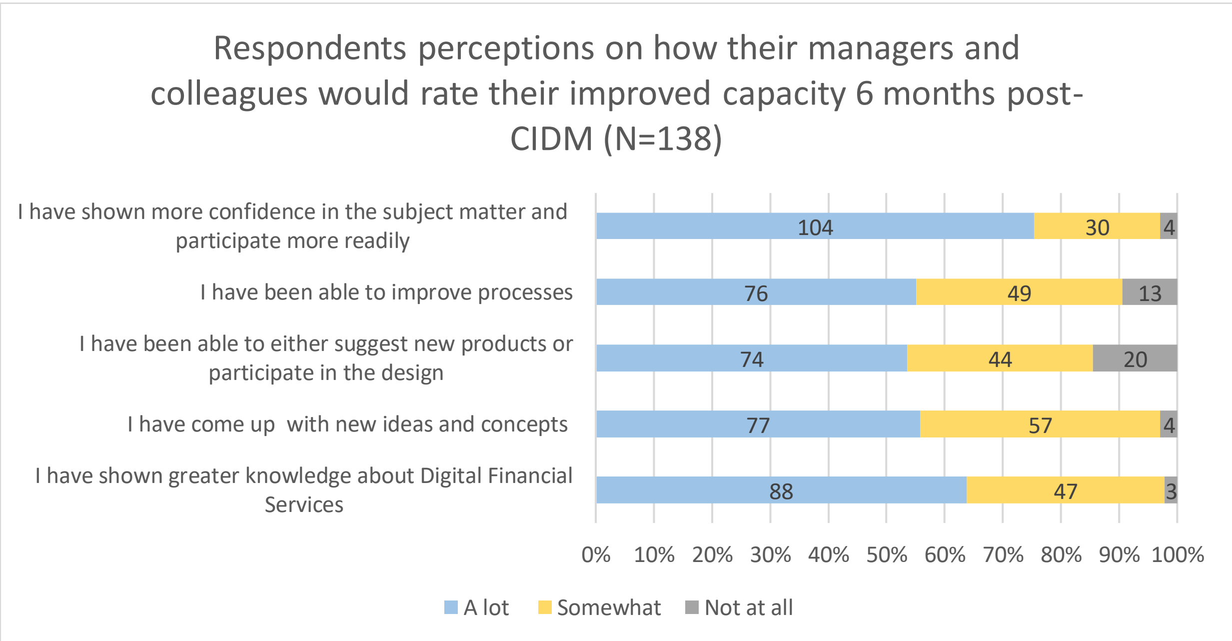
N=138	Agree		Disagree		No opinion	
	N	%	n	%	n	%
CIDM Opened my mind and I approach my work with a better understanding	129	93%	1	1%	8	6%
My knowledge gaps have been filled and as a result I am more focussed and productive	122	88%	6	4%	10	7%
I am now able to join conversations which I previously either avoided or had very little to say	106	77%	16	12%	16	12%
I am more confident about the topic, I readily contribute the knowledge I gained to work projects	128	93%	5	4%	5	4%



Almost all CIDM participants have informed others in their organisations that they did the course. Participants were asked to reflect on and share how they think their line manager, team member or colleague would rate them on particular capacities since having completed the course. See the table below.

Corresponding to participants' reports on their changed capacity, **most respondents thought that their line manager, team member or colleague would say that they have showed a lot of improvement in the given capacity areas.** The domains for which most participants believed had improved *a lot* was that they have shown more confidence in the subject matter and participate more regularly (75%; n=104); and that they have shown greater knowledge about Digital Financial Services (64%; n=88). Just over half of practitioners believed a colleague would say that to a large extent they have come up with new ideas/concepts (56%; n=77); have been able to improve processes (55%; n=76); or have been able to either suggest new products or participate in the design (54%; n=74).

N=138	A lot		Somewhat		Not at all	
	N	%	N	%	N	%
I have shown greater knowledge about Digital Financial Services	88	64%	47	34%	3	2%
I have come up with new ideas and concepts	77	56%	57	41%	4	3%
I have been able to either suggest new products or participate in the design	74	54%	44	32%	20	14%
I have been able to improve processes	76	55%	49	36%	13	9%
I have shown more confidence in the subject matter and participate more readily	104	75%	30	22%	4	3%



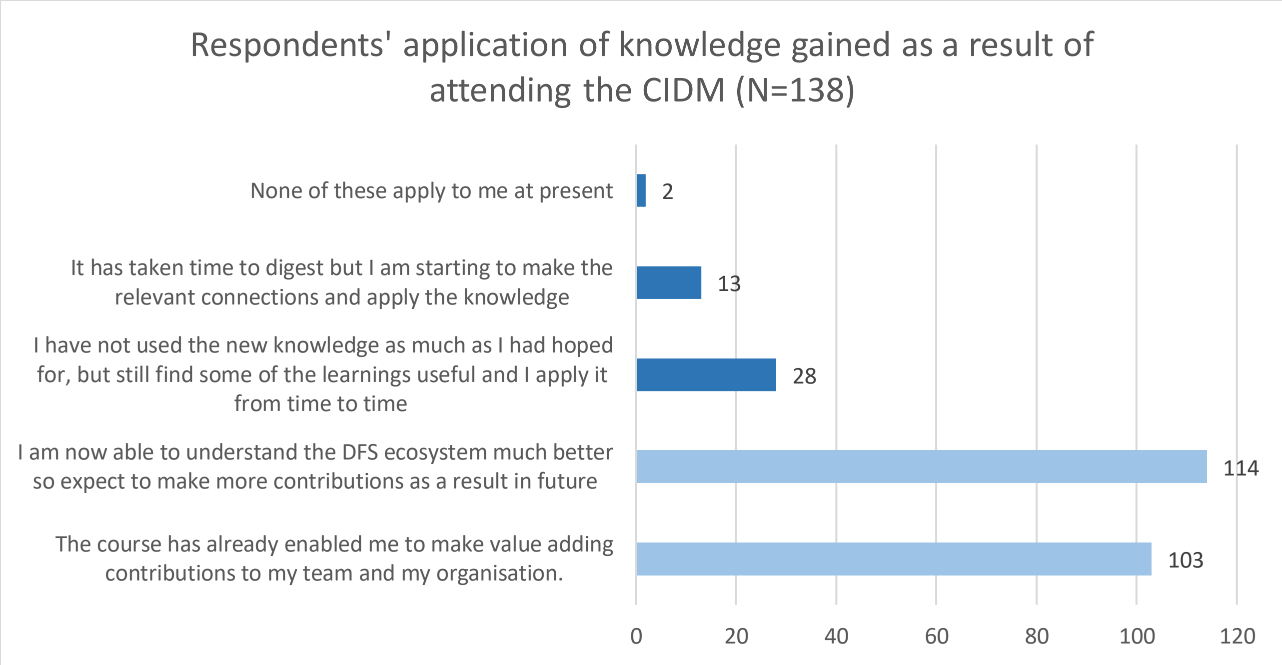
Practitioners were asked to reflect on how they have been using the knowledge they have gained from completing the CIDM course. They could select multiple options from the available answer choices:

- A significant number of respondents (n=114) reported that they are now able to understand the DFS ecosystem much better, and they expect to make more contributions as a result in future.
- A large number (n=103) said that the course has already enabled them to make value-adding contributions to their teams and organisations.
- A limited number (n=28) of respondents were of the opinion that they have not yet used their new knowledge as much as they had hoped for, but still found some of the learnings useful and said that they do apply it from time to time.
- A few (n=13) mentioned that it has taken time to digest, but they were starting to make the relevant connections and are applying the knowledge.
- A very small number (n=2) indicated that none of the preceding statements applied to them at the time.

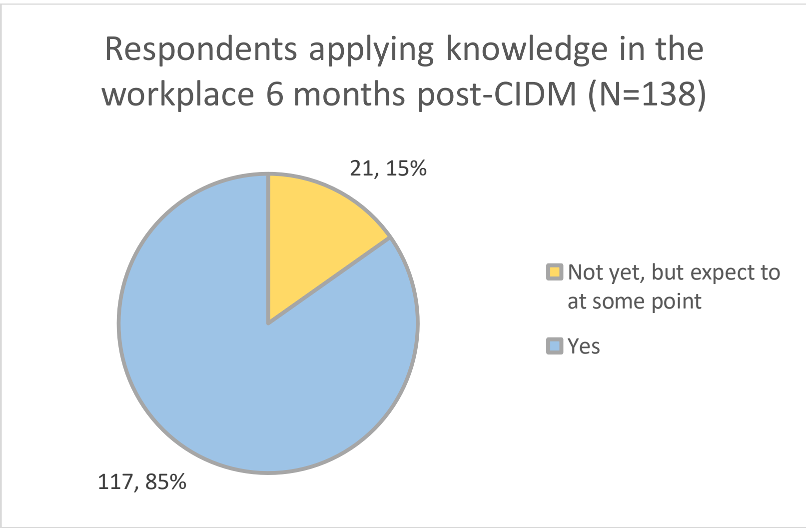
It is clear that the biggest advantage of the course in increased knowledge about the DFS ecosystem, which participants expect would enable them to make more contributions in future, and a significant number of practitioners are already adding value to their teams and organisations as a result of their increased knowledge.

It should be noted that a number of participants who selected these two options also indicated that they have not used their knowledge as much as expected yet; and that they took time to digest their new knowledge and are starting to make the relevant connections to apply the knowledge. This may indicate that the process of digesting their new knowledge and finding opportunities to apply the knowledge is nuanced: while they may feel confident to already apply some new knowledge, they may still be grappling with other knowledge areas, or may be looking for opportunities to apply their new knowledge.

N=138	n
The course has already enabled me to make value adding contributions to my team and my organisation	103
I am now able to understand the DFS ecosystem much better so expect to make more contributions as a result in future	114
I have not used the new knowledge as much as I had hoped for, but still find some of the learnings useful and I apply it from time to time	28
It has taken time to digest but I am starting to make the relevant connections and apply the knowledge	13
None of these apply to me at present	2

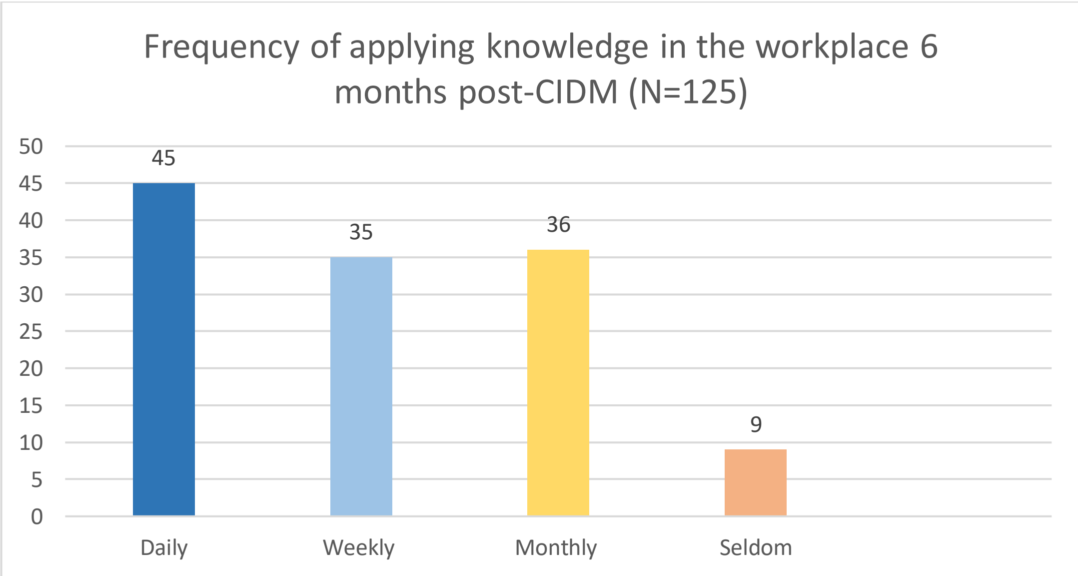


When asked if they are applying their new knowledge in the workplace, the vast majority of practitioners (85%: n=117) indicated that they were already using the knowledge gained during the CIDM course in the workplace. The remaining 15% indicated that they expected to use the knowledge in future.



Of the 125 practitioners who answered this question, more than two-thirds (36%; n=45) reported that they were applying their CIDM knowledge on a daily basis, while almost a third (28%; n=35) indicated that they were applying this knowledge on a weekly basis (n=16), or usually at least on a weekly basis (n=19). Of the 29% (n=36) who said they were applying their CIDM knowledge on a monthly basis, 14 (n=14) said they were applying this knowledge monthly, and 22 (n=22) said they were usually applying the knowledge at least once a month. Only 7% (n=9) reported that they seldom applied their CIDM knowledge.

N=125	n		%
Daily	45	45	36%
Once a week	16	35	28%
Usually at least once a week	19		
Once a month	14	36	29%
Usually at least once a month	22		
Seldom	9	9	7%
Total	125	125	100%



Considering participation in knowledge strengthening activities after completion of the CIDM course:

- Almost all respondents (97%; n=129) reported that they were able to directly apply CIDM knowledge in their work: 48% (n=64) applied their CIDM knowledge often, and 49% (n=65) sometimes applied their knowledge.

Apart from direct application of knowledge, keeping in touch with individuals or organisations whom they met at CIDM seemed to be the most engaged in activity, followed by going back to course material and other readings:

- 87% (n= 115) did refer back to their course material or other readings, although only 11% (n=14) did so often, and the other 77% (n=101) only sometimes referred back to these materials.
- 79% (n=104) of respondents kept in touch with individuals or organisations they met at CIDM: more than a third (36%; n=48) often had contact with individuals or organisations they met at CIDM, while another 42% (n=56) said they sometimes had contact with individuals or organisations they met at CIDM.

More than half engaged in further training, either through DFI, or through other online or in-person training:

- 66% (n=74) participated in further training (seminars, courses, webinars) through DFI: 27% (n=35) participated often, and 30% (n=39) participated sometimes.

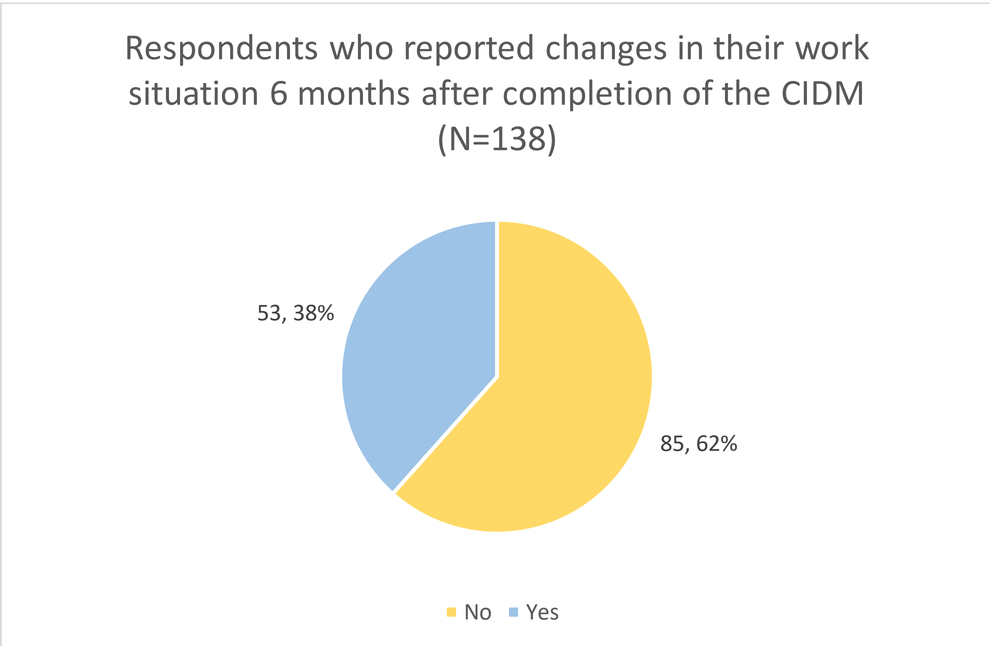
- 64% (n=71) have done further training online or in person in Digital Financial Services (DFS): 26% (n=34) did this frequently (often), and 28%(n=37) occasionally (sometimes).

Overall respondents are engaging in various knowledge enhancement activities after the completion of their CIDM course.

N=132	Often		Sometimes		Never	
Since completing the CIDM course participants...	n	%	n	%	n	%
Have gone back to readings or other course material or other readings	14	11%	101	77%	17	13%
Directly applied CIDM knowledge at work	64	48%	65	49%	4	3%
Had further contact with individuals / organisations whom they met at CIDM	48	36%	56	42%	28	21%
Participated in further training through DFI (seminars, courses, webinars)	35	27%	39	30%	58	44%
Have done further training online or in person in DFS	34	26%	37	28%	61	46%

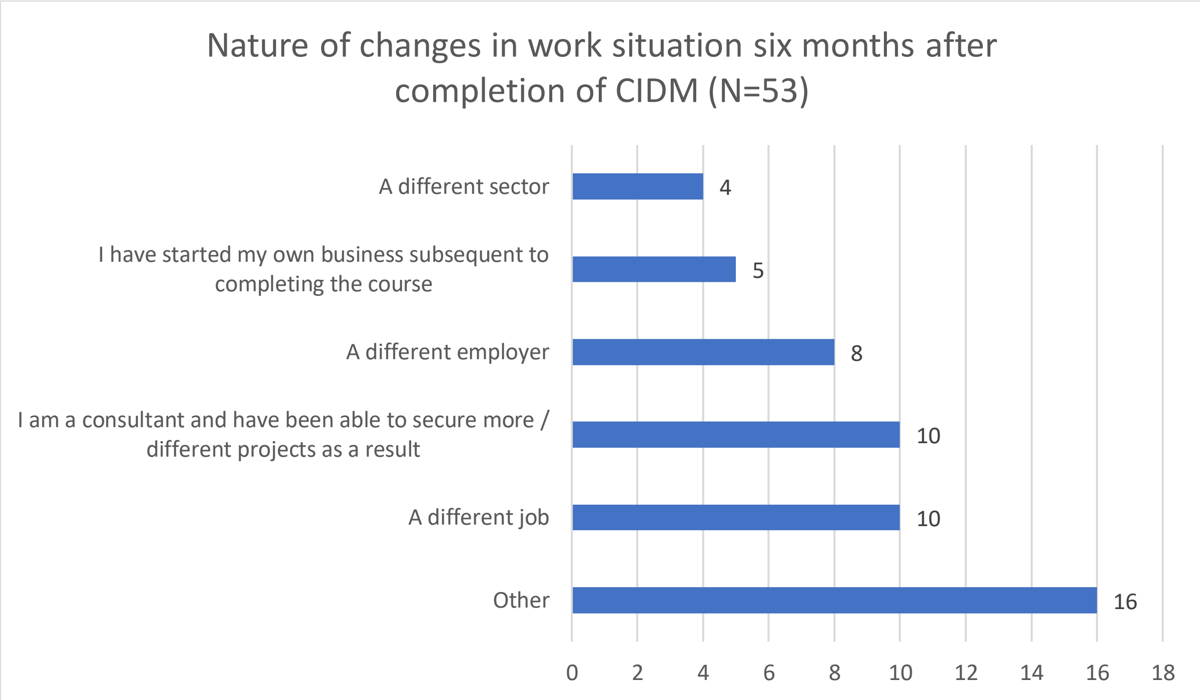
Work Changes

The majority of practitioners indicated that **their work situation had not changed in the six months since having completed CIDM (62%; n = 85).**



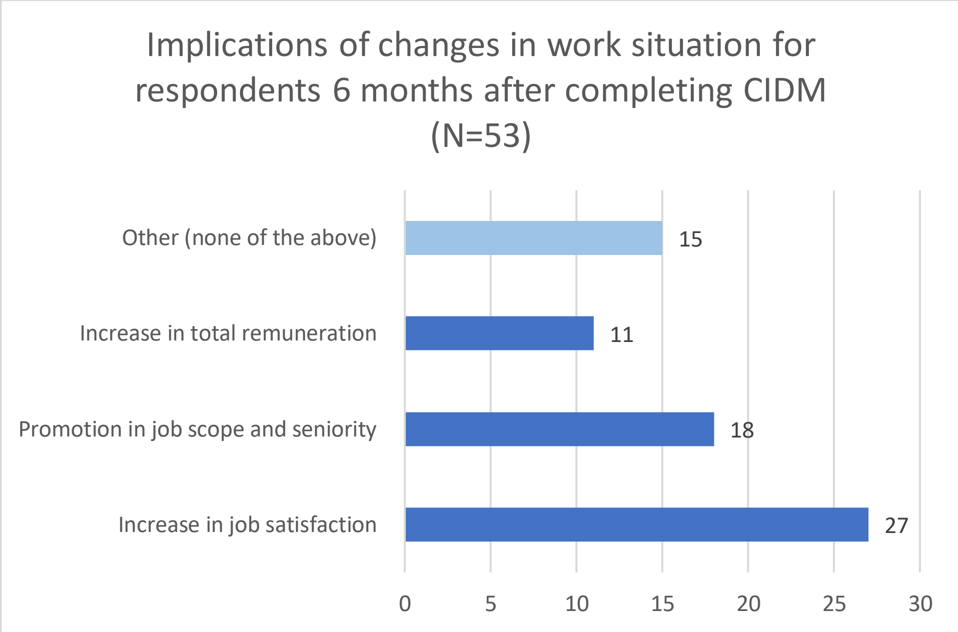
Of the 53 (N=53) respondents who cited that they their work situation had changed, 30% (n=16) indicated that their work had changed in other ways than that listed in the survey.

Nineteen percent (n=10) of respondents indicated that they had a different job, and the same percentage were consultants who have been able to secure more/different projects as a result of attending the CIDM. Some participants also indicated that they were now with a different employer (15%; n=8), while a minority had started their own business (9%; n=5), or were working in a different sector (8%; n=4).



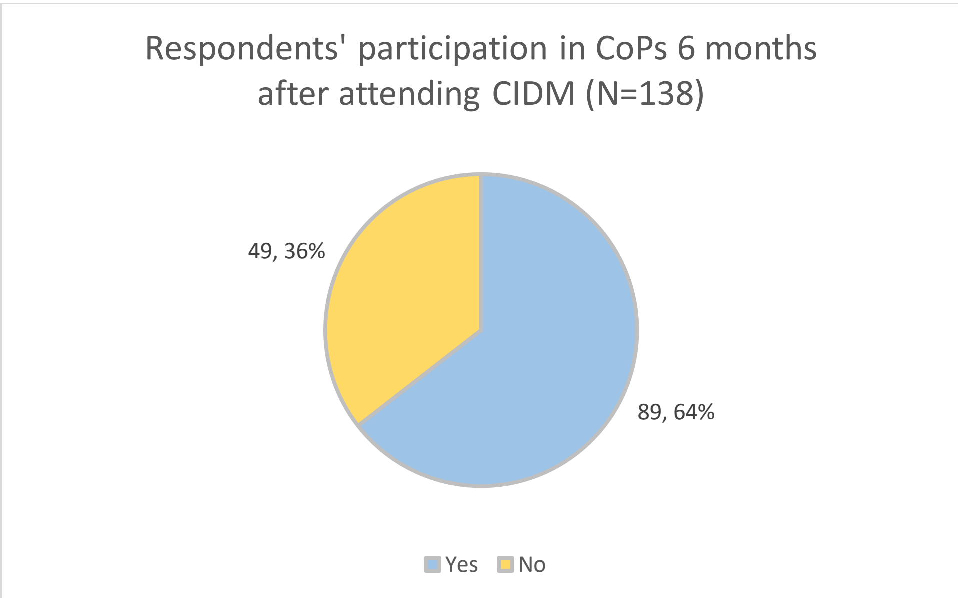
Relative to their work circumstances before CIDM[8], most participants who cited that their situation had changed, indicated that they experienced an increase in job satisfaction (*n*=27). Several also indicated that they received a promotion in job scope and seniority (*n*=18), and that they experienced an increase in total remuneration since having completed the course (*n*=11). Fifteen mentioned that they experienced other implications as a result of changes in their work situation.

[8] Percentages are not calculated for this analysis as respondents could select more than one option from the presented list of potential areas job change. As such, percentages are irrelevant here.



Benefits of CoP

Practitioners were asked questions relating specifically to the impact that the CoP meetings had had on them. Most of the practitioners indicated that they had attended a CoP during CIDM (64%; n=89)

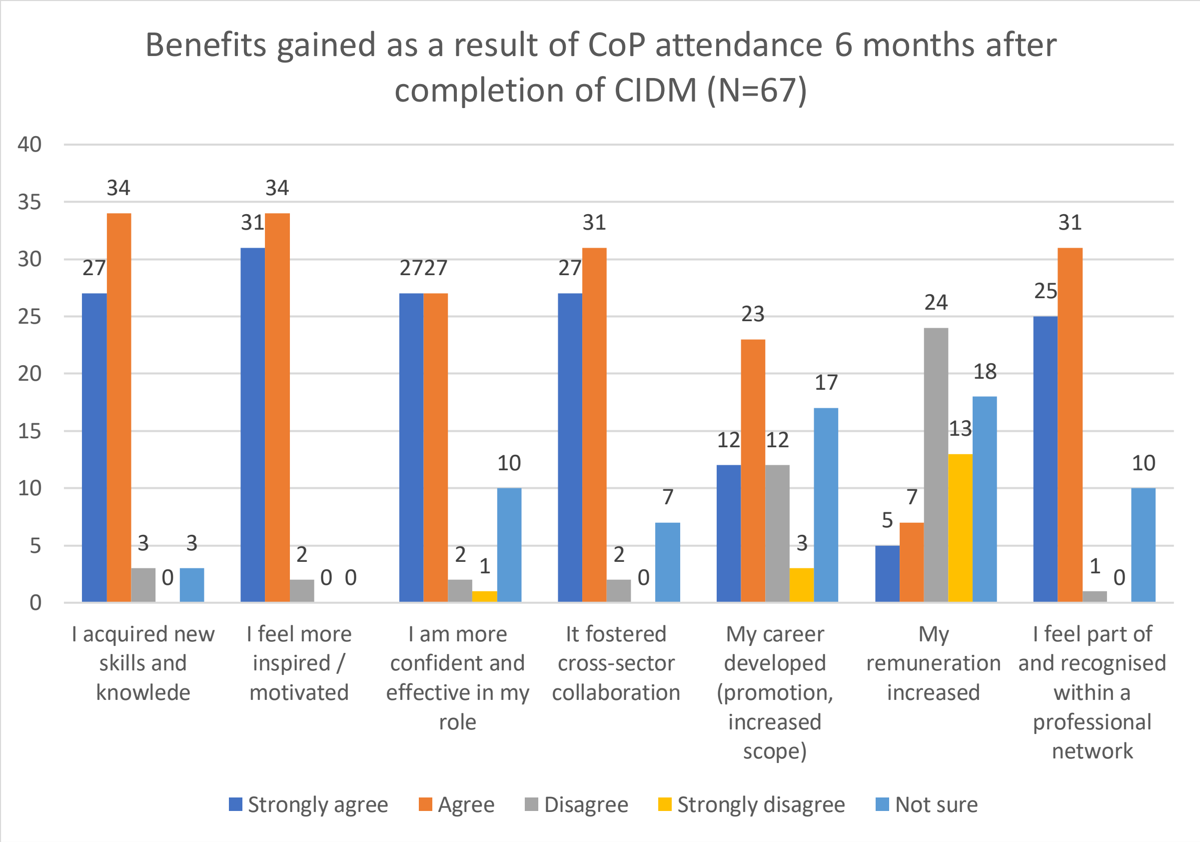


Of those who attended, most noted that they stayed in touch with colleagues they met at the CoP meetings in some or other way. More than half (52%; n=46) had met with some of them given that they have common interest and challenges and they try to solve them together, and some (13%; n=12) have stayed in touch socially, but not necessarily professionally. Others noted that they have reached out to some of them when they had a specific problem to solve or issue to deal with (10%; n=9), or that they did not stay in touch with many of these colleagues, but their paths cross in business from time to time (18%; n=16). Only a small number (7%; n=6) have not managed to stay in touch with any of them.

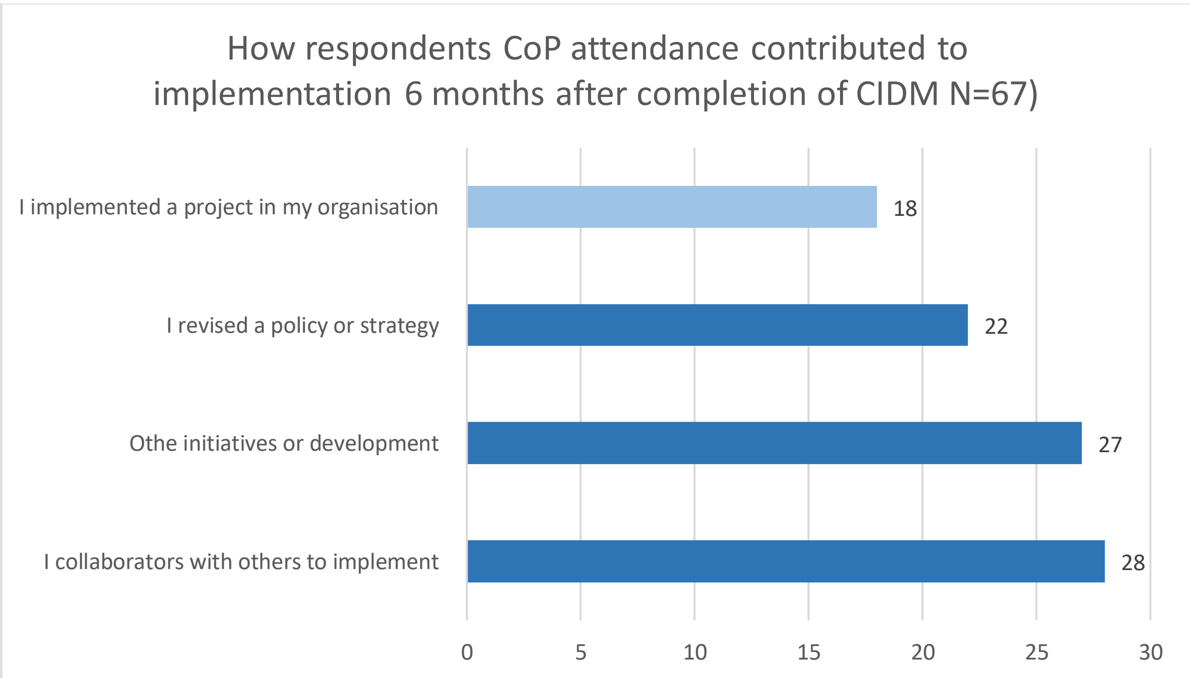
N=89	n	%
Yes, I often meet with some of them as we have common interest and challenges and we try and solve them together	46	52%
Yes, I have stayed in touch socially with some of them but not professionally	12	13%
Not really, but have reached out to some of them when I had a specific problem to solve or issue to deal with	9	10%
Not really, but our paths cross for business purposes from time to time	16	18%
No I have not managed to stay in touch with any of them	6	7%

Practitioners from CIDM-3, -4, -5, -6 and -7 indicated the extent to which they agreed that certain benefits were garnered as a result of attending the CoP. **For almost all the benefits (as listed in the Figure below), most practitioners agreed that these were achieved as a result of attending the CoP.** This includes: acquisition of new skills and knowledge, feeling more inspired and motivated, feeling confident in their roles, fostering cross-sector collaboration, feeling part of and being recognised within a professional network, and to some extent achievement of career development. **The only exception was increased remuneration, for which most participants disagreed that this had occurred for them.** As such, although practitioners' job scope or title may have changed, their salary did not necessarily rise. A lack of a pay increase is not unreasonable given that there had only been a six-month gap since having completed the course. Extended time may be required for practitioners to put the knowledge into practice, and for the project/initiatives to prove effective or successful.

N=67	Strongly agree	Agree	Strongly agree and agree	
	n	n	n	%
I acquired new skills and knowledge	27	34	61	91%
I feel more inspired / motivated	31	34	65	97%
I am more confident and effective in my role	27	27	54	81%
It fostered cross-sector collaboration	27	31	58	87%
My career developed (promotion, increased scope)	12	23	35	52%
My remuneration increased	5	7	12	18%
I feel part of and recognised within a professional network	25	31	56	84%

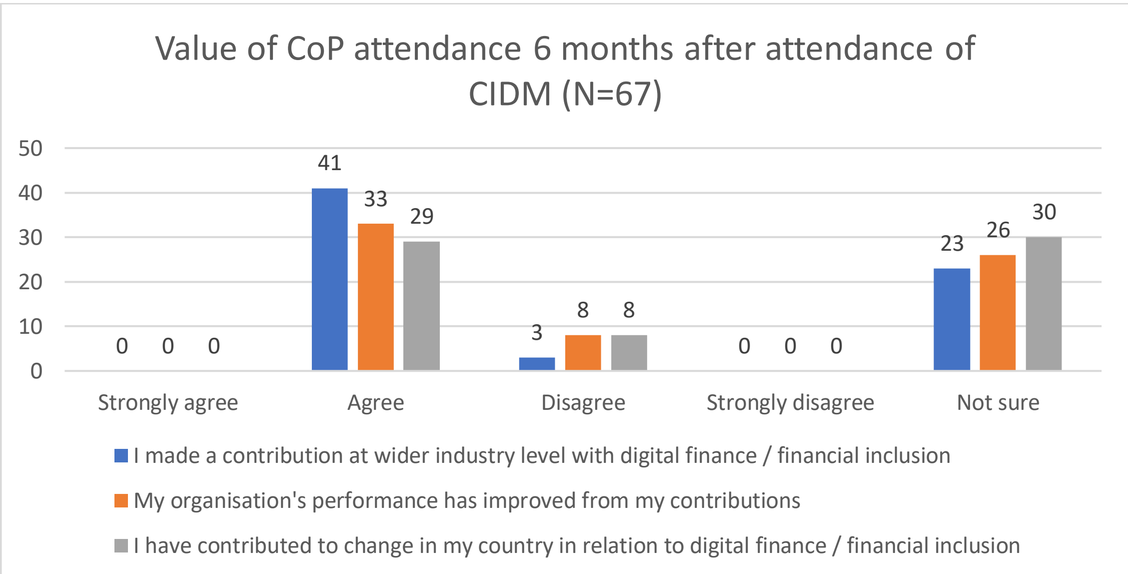


Participants were asked to indicate how they used/implemented what they gained through attending the CoP from a given list (where they could select multiple options). Most practitioners indicated that they collaborated with others to implement what they gained (*n*=28) and/or had undertaken other initiatives and development (*n*=27). Many also noted that they revised policy or strategy (*n*=22) and/or implemented a project within their organisation (*n*=18).



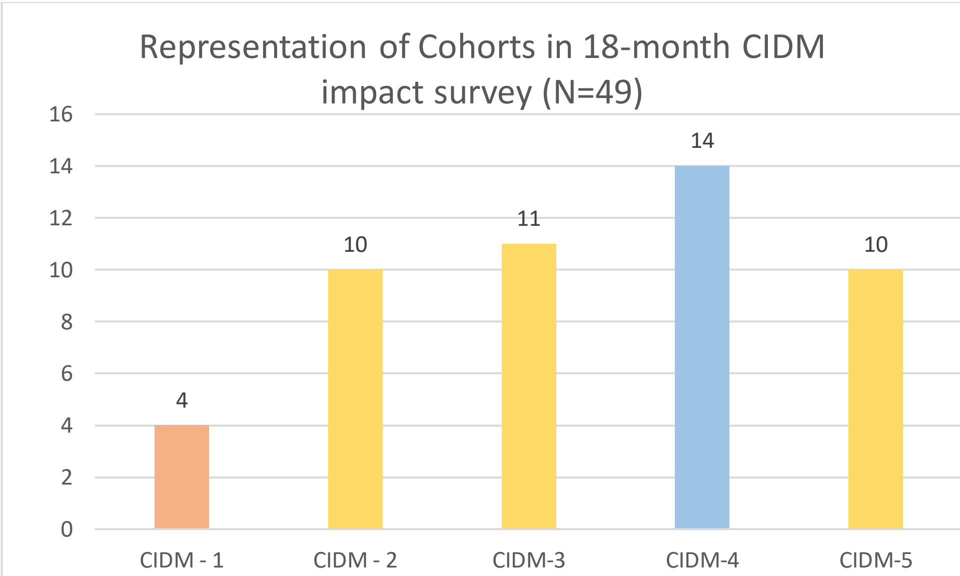
Practitioners indicated the value their attendance at the COP had given their organisation, industry or country. None strongly agreed or strongly disagreed with any of the statements, and with relatively high numbers of respondents indicating that they are "not sure" about any of the statements (ranging from 34 % (n=23) to 45% (n=30), change at this level was tentative at six-months after completion of the CIDM. It is, however encouraging that 61% (n=41) agreed that they have made a contribution at wider industry level with digital finance / financial inclusion; 49% (n=33) agreed that their their organisation's performance has improved from their contributions; and 43% (n=29) agreed that they have contributed towards change in their country in relation to digital finance / financial inclusion. This indicates that within the six months post-course, change was unlikely to have a significant effect at a country-level, and influence was contained within respondents' organisations and/or the wider industry.

N=67	Strongly agree		Agree		Disagree		Strongly disagree		Not sure	
	n	%	N	%	n	%	N	%	n	%
I have made a contribution at wider industry level with digital finance / financial inclusion	0	0%	41	61%	3	4%	0	0%	23	34%
My organisation's performance has improved from my contributions	0	0%	33	49%	8	12%	0	0%	26	39%
I have contributed to change in my country in relation to digital finance / financial inclusion	0	0%	29	43%	8	12%	0	0%	30	45%

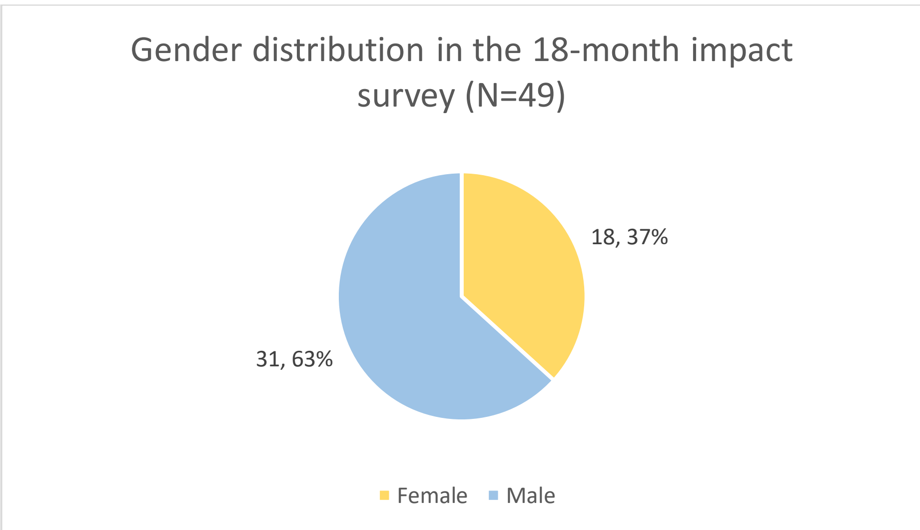


18 Month Follow-Up on CIDM Impact

At the time of this assessment, only CIDM-1, -2, -3, -4, and -5 had completed an 18-month follow-up survey. The survey data of 49 respondents[9] were analysed for this assessment (N=49). Four (n=4) participants were from CIDM-1, 10 participants were from CIDM-2, 11 participants were from CIDM-3, 14 participants were from CIDM – 4, and 10 participants were from CIDM-5. As such, the findings below must be interpreted with cognisance that the perspectives of CIDM-1 practitioners are particularly underrepresented.

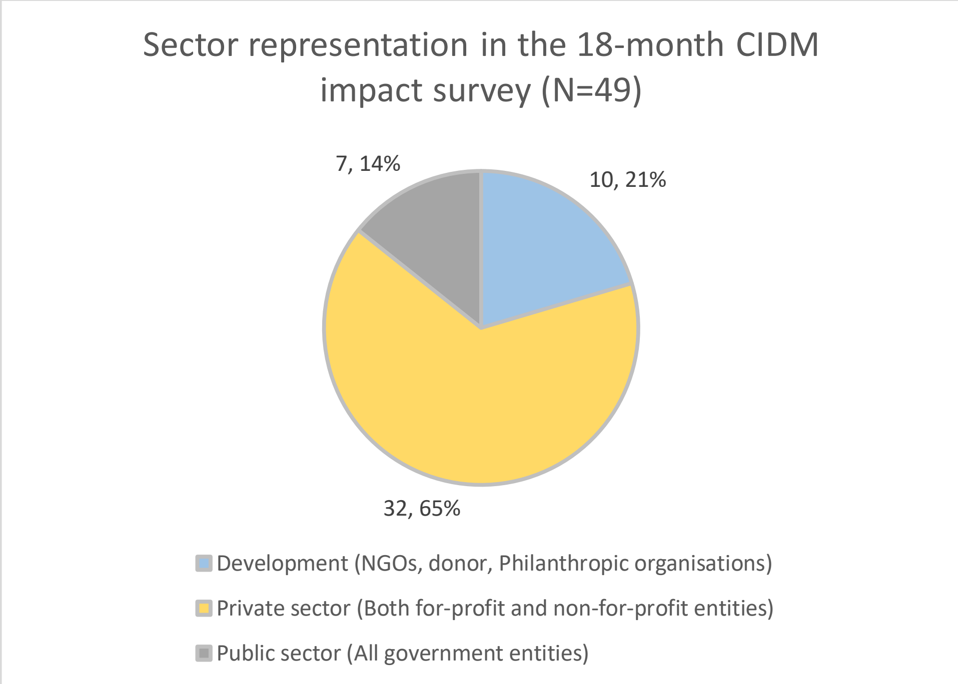


Sixty-three percent (n=31) of respondents were male; and 37% (n=18) were female.



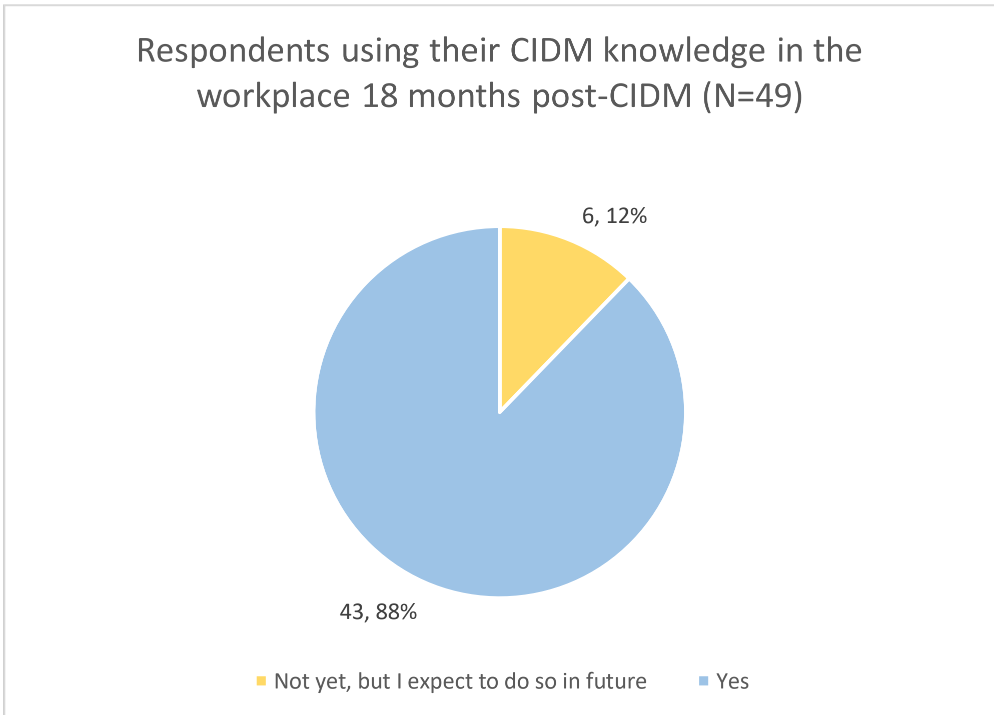
[9] Two respondents, one from CIDM-3 and one from IDM – 4 completed duplicate surveys. Their earlier responses were removed from the analysis, to avoid bias created by duplicate responses.

Sixty-five percent (n=32) of participants were from the private sector, 21% (n=10) were from the development sector, and 14% (n=7) were from the government sector.



Capacity Development

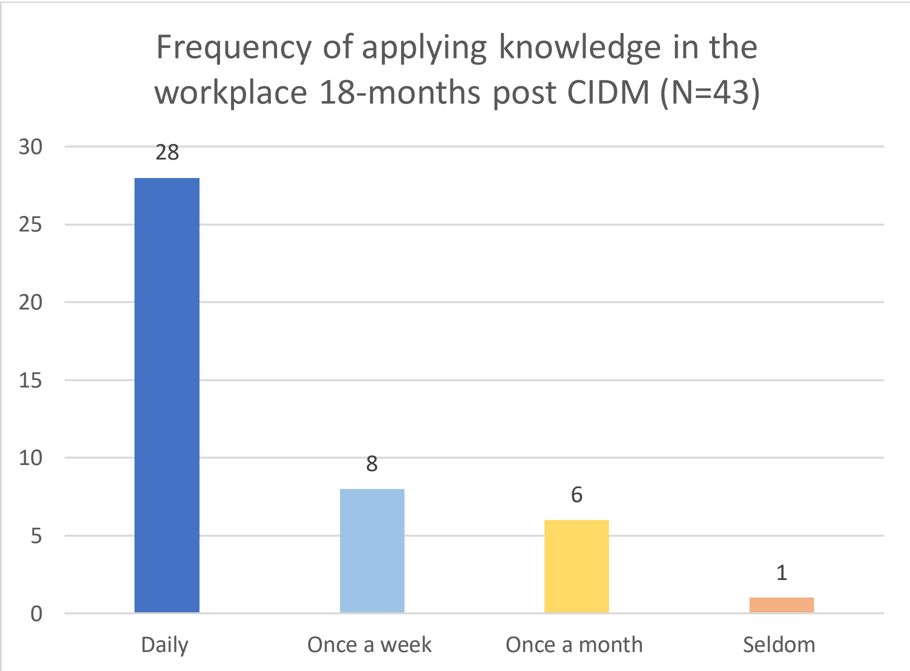
Of the responding participants, **88% (*n*=43) indicated that they are using the knowledge that they gained during the CIDM course in their workplace**. Only 12% (*n*=6) indicated that they are not yet applying their knowledge in the workplace, but they expect to in the future.



However, it is inferred that if these participants have not yet applied the knowledge at this stage post-course, it is likely that the CIDM content is not relevant to their current position or organisation.

Furthermore, of the 43 participants who responded to the survey question, **65% (n=28) indicated that they apply this knowledge on a daily basis**, while 19% (n=8) indicated that they apply this knowledge once a week, 14% (n=6) indicated that they apply this knowledge once a month, and only one (2%; n=1) said they apply the knowledge seldomly.

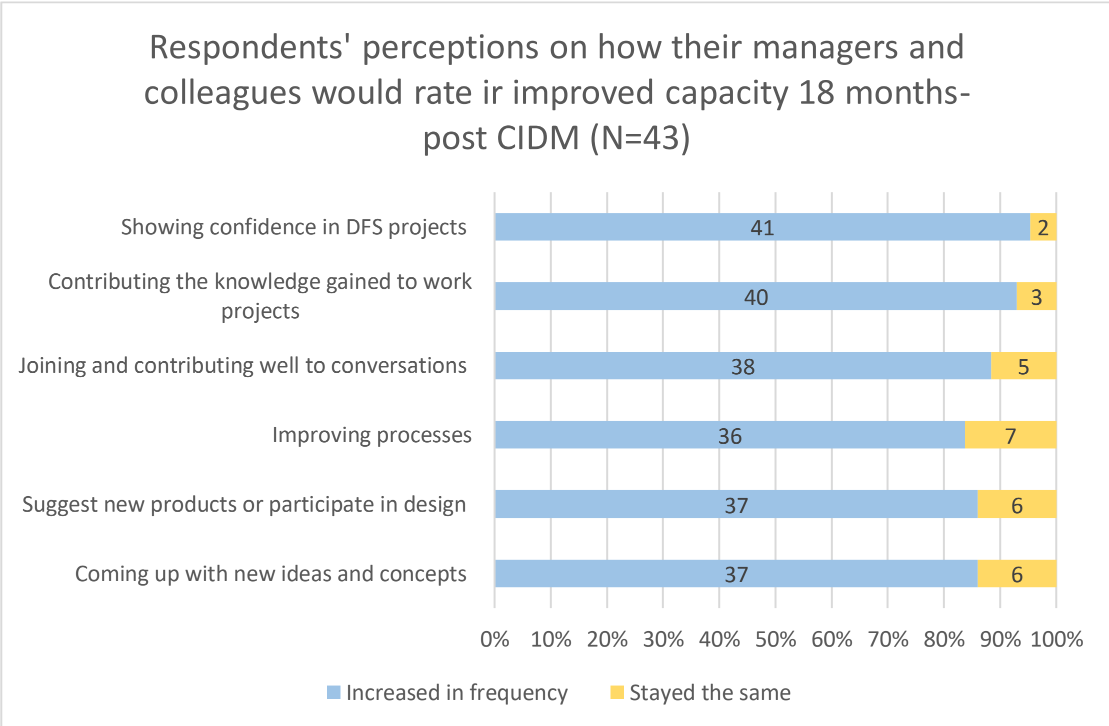
N=43	N	%
Daily	28	65%
Once a week	8	19%
Once a month	6	14%
Seldom	1	2%



The practitioners were asked to rate their capacity and actions from the perspective of their line manager, team member or colleague. Findings are presented in the table below. As depicted, the vast majority of practitioners expected that their co-workers would have rated their capacity to have increased in the six capacity areas. These capacity areas include:

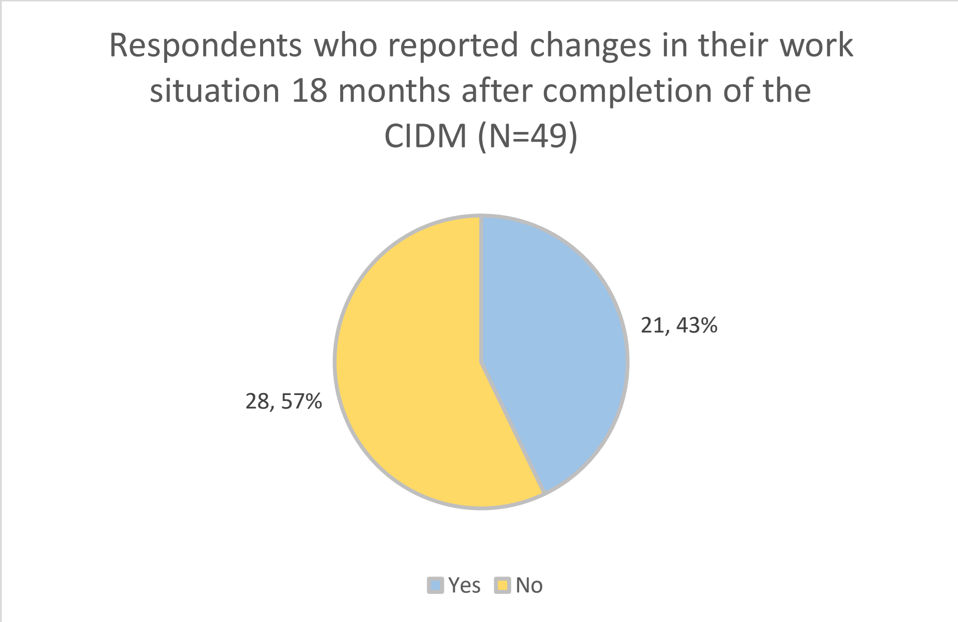
- Showing confidence in DFS projects (5%; n=41);
- Contributing the knowledge gained to work projects (93%; n=40);
- Joining and contributing well to conversations (88%; n=38);
- Coming up with new ideas and concepts (86%; 37);
- Suggesting new products or participating in design (86%; n=37); and
- Improving processes (84%; n=36).

N=43	Increased in frequency		Stayed the same	
	n	%	n	%
Coming up with new ideas and concepts	37	86%	6	14%
Suggest new products or participate in design	37	86%	6	14%
Improving processes	36	84%	7	16%
Joining and contributing well to conversations	38	88%	5	12%
Contributing the knowledge gained to work projects	40	93%	3	7%
Showing confidence in DFS projects	41	95%	2	5%

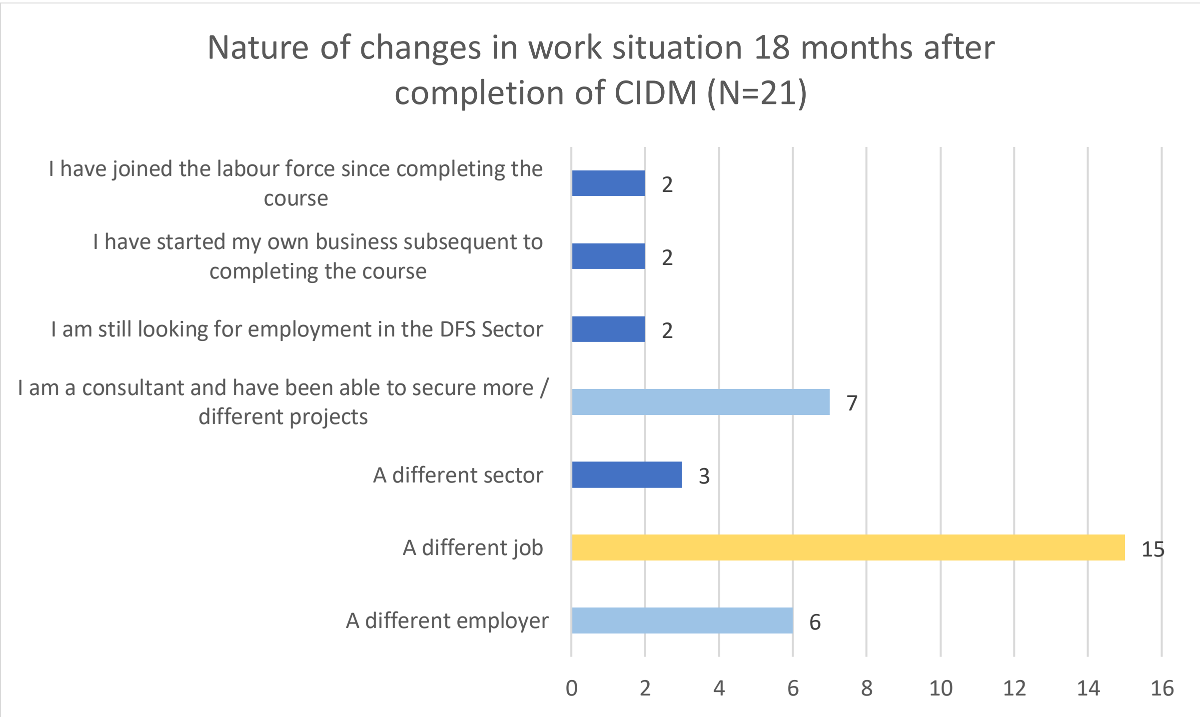


Work Changes

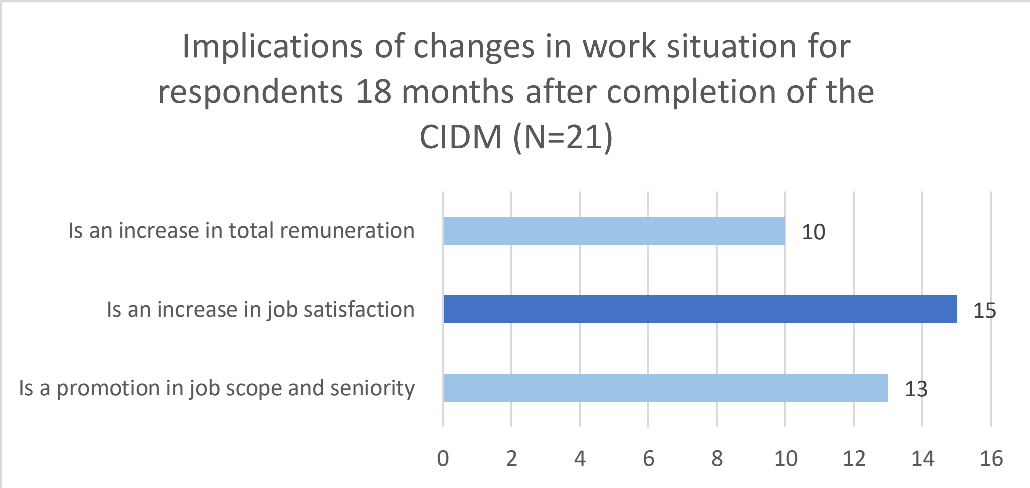
Slightly more than half of practitioners indicated that their work situation had not changed in the 18 months since having completed CIDM (57%; n=28).



Of the respondents who cited that their work situation had changed (*n*=21), the majority indicated that they were in a different job since completing the course (*n*=15). Others indicated that they are consultants and have been able to secure more/different projects as a result of the course (*n*=7) or have a different employer. Smaller numbers in numbers said that they were working in different sectors (n=3), or were still looking for employment in the DFS sector (n=2); have started their own businesses (n=2), or have joined the labour force since completing the course (n=2).

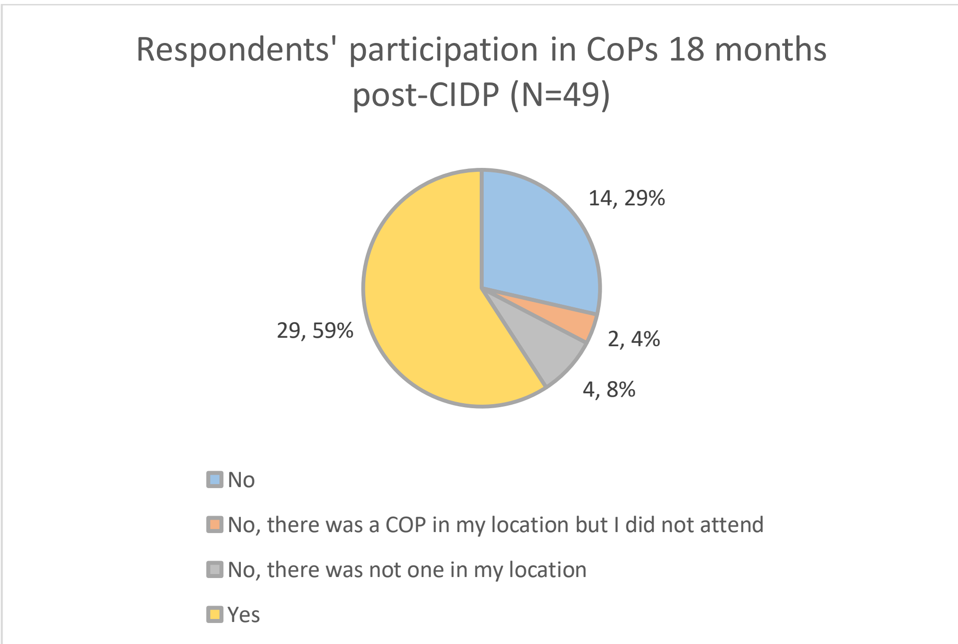


Relative to their work situation before CIDM, most participants who cited that their circumstances had changed indicated that their new work situation was increased job satisfaction (n=15), a promotion in job scope and seniority (*n*=13), and/or an increase in total remuneration (*n*=10).



Benefits of CoP

Practitioners were also asked questions relating specifically to the impact that the CoP meetings had had on them. Most of the practitioners indicated that they had attended a CoP during CIDM (59%; n=29). Of the 41% who did not attend a CoP meeting, 8% (n=4) said there was no CoP meeting in their location.



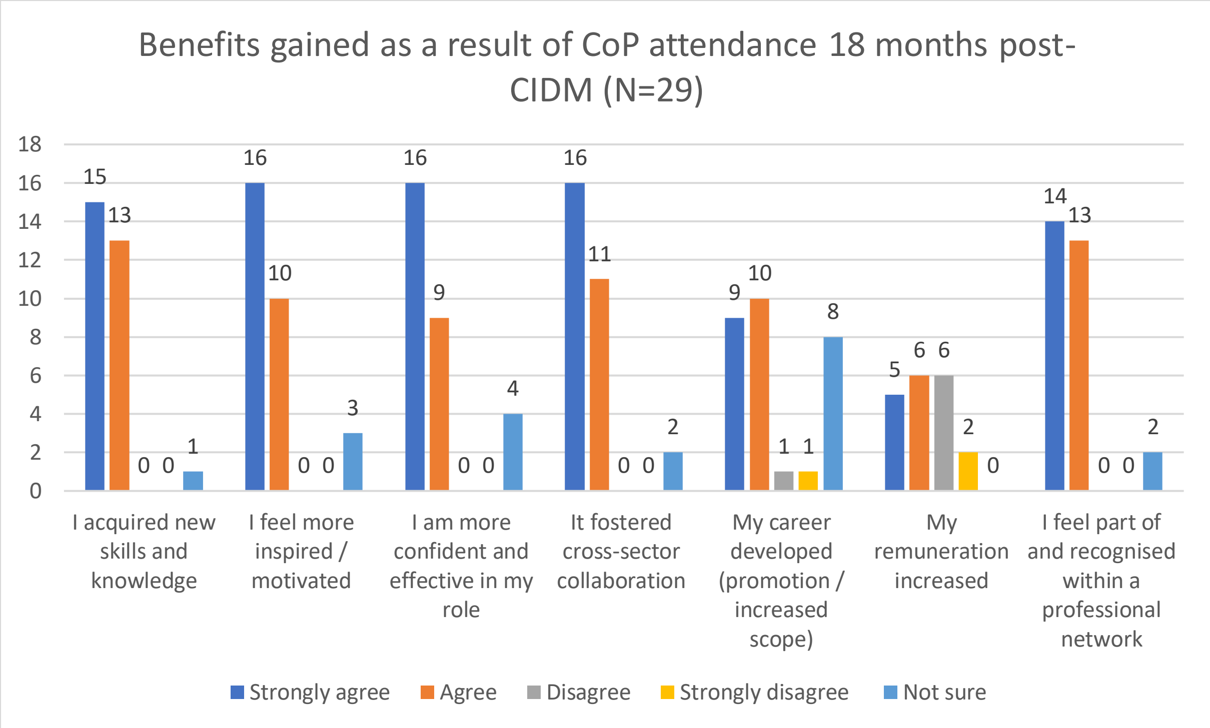
Of those who attended, **most noted that they stayed in touch with colleagues they met at the CoP meetings**. Most had met with some of them given that they have common interest and challenges and they try to solve them together (34%; n=10), some met them when they attend alumni CoP meetings (21%l; n-6), and others have stayed in touch socially but not professionally (10%; n=3).

Some have not stayed in touch actively, but their paths cross with them from time to time (21%; n=6), and only one (3%; n-1) has reached out to some of them when they had a problem to solve or issue to deal with. Only three (10%; n=3) did not manage to stay in touch with any of them.

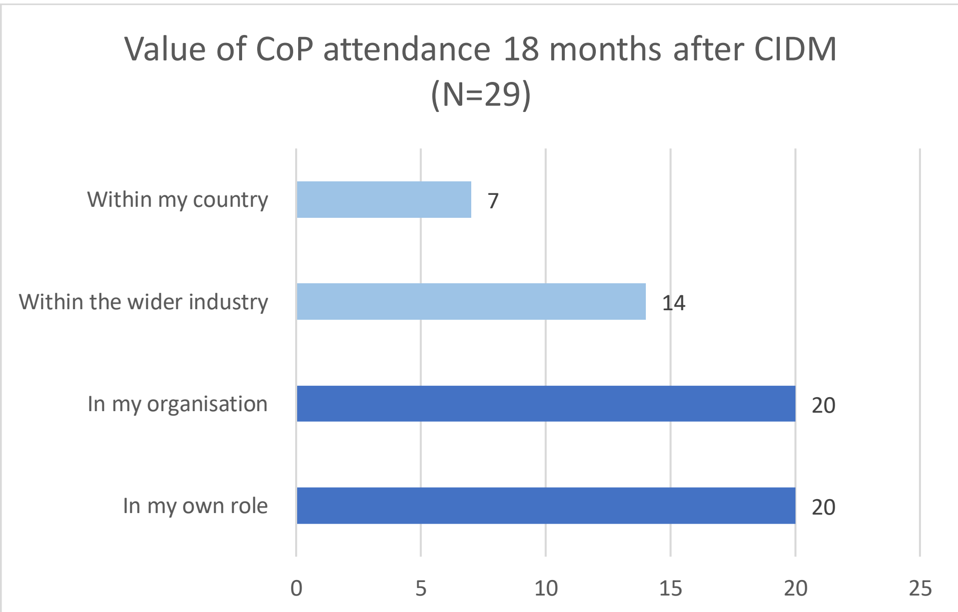
N=29	n	%
Yes, I often meet with some of them as we have common interest and challenges and we try and solve them together	10	34%
Yes, I meet with them when I attend alumni COP meetings	6	21%
Yes, I have stayed in touch socially with some of them but not professionally	3	10%
Not really, but our paths cross for business purposes from time to time	6	21%
Not really, but have reached out to some of them when I had a specific problem to solve or issue to deal with	1	3%
No, I have not managed to stay in touch with any of them	3	10%

Participants were asked whether the **COP provided them with particular benefits**, indicated in the table below. **For six of the seven listed benefits, the majority of practitioners either strongly agreed or agreed that they acquired these benefits.** This included Acquisition of new skills and knowledge, feeling more inspired and motivated, being more confident and effective in their role, and feeling part of and recognised within a professional network, while it also fostered cross-sector collaboration. The only benefit that they experienced to a lesser extent, was increased remuneration. and as such emerged as the weakest benefit gained by practitioners.

N=29	**Strongly agree**	**Agree**	**Strongly agree or agree**	
	n	**n**	**n**	**%**
I acquired new skills and knowledge	15	13	28	97%
I feel more inspired / motivated	16	10	26	90%
I am more confident and effective in my role	16	9	25	86%
It fostered cross-sector collaboration	16	11	27	93%
My career developed (promotion / increased scope)	9	10	19	66%
My remuneration increased	5	6	11	38%
I feel part of and recognised within a professional network	14	13	27	93%



The majority of participants indicated that they have used or implemented what they gained through attending the CoP to make an impact or change in their own role (*n*=20), and the same number indicated that they had made a change within their organisation (*n*=20). A slightly smaller number said they made a contribution within the wider industry (n=14), and the smallest number felt that they made a difference within their countries (n=7). This indicates that the extent of impact within the 18 month period is still likely limited to the confines of an individual practitioner, and in some cases their organisation and industry.



Appendix 4: Indicator tracking table

Name and details	Increase in degree of institutional capacity for DFS regulation in SAA.	New DFS regulations / policies / directives developed or existing ones adapted for the financial market by DFI students in SSA. (by: Stage of regulation (initiated / fully developed).	DFS providers who report an increase in cross-sector collaboration as a result of the DFI training and other services (CoP, SWITCH) in SSA.	CoPs implementing country-based initiatives in SSA. Disaggregated by: Type of initiative (policy, private sector).	DFS providers and other DFS market actors who perceive they have enhanced DFS capacity (better networked, skilled and informed) as a result of DFI training in SSA.	DFS service providers reporting increased DFS capacity as a result of DFI training in SSA.
Victor Bada (M), Nigeria **Wema Bank, Relationship Manager**	No – says his company is just a profit making company – not active at all in regulation	No – company not active here	No – he increased network and was in COP, networks across sectors, but no specific collaborations.	No - Says the Lagos COP is active in meeting and networking. But no projects – people busy.	Yes – he leads a team working with bank clients. Increased their ability to understand customer's needs etc	Did not develop products, but advised colleagues who did
Munir Bello (M), UK (from Nigeria) **GSMA, Senior regulatory specialist and mobile money certification lead**	Well, he moved to an organisation responsible for DFS regulation in SSA and globally. Training allowed him to make the move.	Yes - The GSMA works on policy etc. Self regulation of members – code of conduct of best practice for mobile money operators. And cyber security and data protection code. And they do workshops for central banks, and feed into policy (policy briefs) etc, as a representative.	No - Not much collaboration reported. His COP was small, in Abuja and not cross-sectoral.	No - Not the Abuja one. It was very small. Did not do any projects.	Yes – better skills and profile as a result. Enabled him to get a job in London. Also in his old job, he was able to enhance their agent networks management. And as head of audit and risk man the learnings gave him more skills to see gaps and policies etc	Yes- It did increase his organisations capacity as he applied his skills.
Kennedy Kiplagat (M), Kenya **Fintech Kenya, Business Development Manager**	His company if very old and has a lot of capacity for regulation already. Lots of connections too to top government officials.	Has not done anything like this yet. Has a group that wants to. But his company does input into policy on a higher level.	Yes – he collaborates with a number of others. They formed a group and are looking to do projects. They are in other parts of the world.	COP did not do projects – members too busy. But him and three others formed a "caucus" and have done some projects.	Yes – has a broad knowledge and is considered an expert. He brought a couple of innovations in the fintech space in his company. And he consulted with one in Uganda to help them. He also got his current job on the strength of the knowledge he gained, and he says he has been shortlisted for	Yes – has much more capacity. He started his own venture but could not get funding. But he has done very well in interviews and is waiting to see if he got a job he made it to the last round on. With

					other high-profile and highly competitive jobs because he became recognised as a subject expert who can drive things forward. He is also considered a thought leader in Kenya so gets a lot of requests to share advise and input. Gets asked by credit unions under micro finance.	knowledge he gained. His current company higher him because they were advised that he could really drive their business development.
Munyaradzi Nyakwawa (M), Zimbabwe **Cassava Smartech, Business Development, Account Executive**	His personal capacity has been increased. But the environment is polarised. But he did go to Luxembourg and did a course on regulation and met the Smart campaign and asked them to come to Zim to train micro finance orgs in data protection etc. And they came because of him. So he had an indirect impact.	His org has a compliance team that meets the Central Bank regularly. So they do influence policy – but he does not have anything to do with that. Their capacity is large but the govt is not good.	He has made connections with people in other parts of the world. Wanted to collaborate but the Colombian was looking for a regulator.	COP has done projects – the alumni and Digital Frontiers Assoc they are putting together. But not done any other kind of projects because difficult to do so because of the economy. Wanted to, but nothing yet.	Yes – did lots of courses and feels he gained hugely. Says he had a Damascus moment. Was able to use the knowledge in developing new products like Digital Humanitarian Payments. And a product for Stokvels. Helps with financial inclusion. Also working on savings groups in Africa.	His capacity improved a lot – wants to work for a regulator one day and do a PhD. He has helped develop products and linked people etc.
Dylan Lennox (M), Australia **MFX Partner, Director**	Yes – his in particular. Deals a lot with regulators and regulator strategy with clients. His company has a number of clients where they do advise on regulation issues – including a central bank and others trying to influence the policy. His partners have their own expertise in regulation too.	Yes - has been operating is inter-operability and changing a regulatory supervisory regime from being bank led to non bank led. Worked in Tanz, Kenya and East Africa on an inter-operability programme with world bank. In Tanzania – been working for Central bank as rolling out new national mobile money service etc – and making the right rules etc. Also client in Yemen.	Yes - His world was opened up to more than just telecoms world. Learnt a lot about regulatory environment and so on and now his company works with central banks and humanitarian orgs and World Bank etc.	There is no COP where he is in Australia and he has not participated.	Yes – he did the course at the time of launching his own consultancy working in SSA in DFS, so it was a great springboard.	He learnt a lot especially to enable him to help clients navigate and influence the regulatory environment.

Faith Kobusingye (F), Rwanda **I&M Bank, Senior manager for DFS operations**	She gained skills, but her company has a lot of capacity in this area. She also made lots of connections from course – regulators in DFI courses. Which helps.	Yes - two initiatives: Setting up the Rwanda national digital payment system, design etc. (last stage) And setting up a crypto currency blockchain payment product (now live). Worked with regulator around fear of blockchain implications.	Yes – The COP allows cross sectoral dialogue and collab – a number of regulators also on the COP.	Yes – COP did a concept paper for assessment of the current national interoperability landscape. To feed into policy. Not sure where it has got to now.	Yes - Much better idea of the DFS landscape and how everything fits together. Her current role is because of DFI operationalising mobile money. Got a promotion.	The courses got her to see she can develop a career focussing on this sector. She got a better idea of the back end, which was a weakness at the company. And she has the role of leading this. Her bank has a better idea of how this works and how they can be involved in conv at national level.
Ritah Kanyana (F), Rwanda **Bank of Kigali, Digital Product Owner**	Bank of Kigali has lots of capacity and participates in forums on regulatory issues. More than 30 employees have done DFI courses so may have contributed to this capacity. But its done on executive level.	They do get consulted when govt develops policy, and there are high level inputs, but none she has been part of. The Bank only contributes indirectly through forums, not developing any regulations.	No – through the COP and other forums she networks, but not collaborates as such. But did develop the digital wallet for farmers, so collaborated with stakeholders from agri.	No - COP did not do any projects. But lots of knowledge sharing and the regulators are part of the COP, so lots of cooperation.	Yes – got an end to end 360 view of how everything fits. EG: she was able to understand digital wallet and develop a good product for farmers. She was driving the project with developers. She shifted to specialise in digital product development last year when bank strategy focussed here. And her skills allowed her to be part of this team.	The bank has staff who now know the landscape and can help implement digital strategy. Lots come without the basic skills. Without the course, Ritah would be struggling – to get the context. Six on her team did it.
Shirley Mburu (F), Kenya **BFA, Associate**	It's a consultancy – they already have a lot of capacity to contribute to reg – esp in mobile money. She has gained some skills which also contribute.	Yes – Her company hired to develop national payments strategy for Kenya (next 5 years) and 10 year vision. She led the project – stakeholders, central bank etc. It is currently out for final comment. Her company also did the Ghana DFS policy. Also worked on GSMA project to map people to govt payments in	Not so much collaboration, but made networks and when she needs govt input on research areas like payments, she reaches out to them. Helps with her consultancy work. Contacts can open doors to get info.	No - COP did not do projects. Mostly to discuss the course. They did have speakers, but have not met in 2019. The facilitator only learnt more about the role in 2019 and is growing the alumni slowly.	She got a good grounding and to understand vocab and landscape. So it enhanced capacity. Works in a consultancy. Now the company draws on her expertise on payments as there are few with this expertise. Also has govt networks which help open doors.	She did one course that she then directly applied in a project: Did Digital ID course and then worked on digital ID for Malawi and Lesotho. Was able to do well in it. She is now the only one with payments expertise in her company.

		Kenya				
Talha Leghari (M), Pakistan **Independent DFS strategy consultant**	Yes – he is able to make an impact in regulation – as an individual consultant	Yes – with the USAID project working with the State Bank of Pakistan to dev regulation on crowd funding and micro-finance. Also developing the first regulatory sandbox for fintechs in Pakistan. Trying to get state to have more enabling regulations, not just controlling. Regulations are out dated.	Yes – he does more with fintechs now - It helped him to collaborate more broadly. His area was DFS only but now into fintech space and entire technologies. And digital banks– he has moved and grown a lot because of DFI certification. He has expanded his area of practice. Also did a project in Kenya – DFS for agriculture.	He did have a COP in Pakistan. But badly attended and did not get much out of it –and no projects.	Without the DFI courses – its 50-50 – before the DFI thing he had concepts, but post FDI they got clear. So he was hoping to go out already, but it helped him with more info and knowledge. How to understand payment systems etc.	He definitely gained in capacity – moved into new areas of practice and gained knowledge. Before DFI he had concepts, but now he can see the links and can put into practice.
Yinka David-West (F), Nigeria **Professor, Lagos Business School**	Yes – her institute plays a role in regulation. Has high capacity. She manages the Sustainable and Inclusive Financial Services Institute, Lagos school of Business. Do lots of facilitating convos and lobbying and input into regs. Trusted to bring people together as impartial.	Yes – her institute has brought govt and private sector together, stakeholder workshop, to influence financial inclusion. Communique on how regs need to change – adopted now by central bank. Also lobbied to enable to playing field – telcos used to be barred but now allowed – some registering. Do policy briefs and seminars. Also reviewed payment systems framework.	Her institute does lots of collaborations, but not her personally. She is in the academic space and is happy with that. Her institute was already playing that role.	No. Not even alumni. She was a COP facilitator. Did not implement projects. No time and people did not step forward to lead it. People busy. Only good forum for sharing.	She already is a professor with a PhD, but she feels that DFI added value. Learnt about what happening in other countries, gave her clarity to be able to frame things and lead conversations. Helped her distinguish the professions in the sector – like payments and banking.	She uses the payment systems framework in her teaching and research – got from DFI. The knowledge has contributed to her knowledge generation role and the role they have in advancing financial inclusion. But she had high capacity already.
Kim Dancey (F), South Africa **First Rand International, Head of regulatory risk**	No – it is a multinational bank with a lot of capacity, so DFI did not impact here. They do make inputs into regulations in many countries. But not her personally. They do lobby mainly. She has to educate	No – none.	No – she did not do any collaborations. Met a few people, but not linked for long.	No – the COP she attended but did not meet many people and they ended when her course was finished. She says there is a missed opportunity	Learnt a lot about payments (her field), and other courses gave her a very good overview of landscape. Pushed her knowledge outside of just payments. Also taught about crypto currencies. Not really increased networks.	Did lots of courses – on journey to practitioner. Not applying day to day, but was anticipating future trends and the rapid evolution of the sector.

payments	internally in her bank.			to use it to bring people together from different sectors.		
Gabriel Kamuge (M), Uganda **DGRV, Head of product development and innovation**	Yes – he sat on the Digital Finance Committee of the Uganda Bankers Association - they pushed the govt in terms of regulation since innovation was always ahead of regulation. He input into regulation through this body – which his employer was a member of. DFI helped him to understand importance of regulatory environment.	Input into many policies which are now active – development of recent delivery channels in Uganda – agency banking, mobile banking, banking assurance. Also in committee which helped dev Sharia compliant channels for the Islamic banking. These are now all fully operational.	Yes – he collaborated on most of the projects he did at Tropical Bank. Fintechs or sector bodies like the bankers association. Also FSD collaboration on rural financial inclusion project (evaluation) and now he also knows fintechs for his new job. Not broad networks, but strategic linkages.	?	Yes – did lots of projects at Tropical Bank and now has a new job as a result of his knowledge and experience – and the confidence to move into a new sector. Bank had very limited capacity for adoption of digital channels, and he was in charge of developing. Did the CIDM at this time and it really helped. He was able to dev a mobile banking platform. Used DFI – “We could have taken much longer and executed in much more difficult if not for DFI knowledge.”	Through his knowledge he was able to develop agency banking for his bank, and three very strong payments channels, an e-schoolfees App, and e-banking assurance. He drew on his DFi knowledge a lot and on the first platform – doing the business plans well was key. Agency banking business case was first homegrown one in Uganda. DFI tutors gave him an info pack.
Rishi Raithatha (M), UK **GSMA, Insights manager for the agritech team**	No - His organisation has a lot of capacity and involvement, but not him specifically. His unit does not participate in regulation.	GSMA has units which do a lot of regulatory work. Their members get support on driving issues. For example, the work that Munir Bello does with central banks etc. But not Rishi’s unit.	No – he did not do any.	No – no COP in London, but interacted in the course – got some messages from people in other parts, but no collaborations.	Yes - Used to work on mobile money team, but now agri tech. Feels his overall knowledge has improved and what is happening if different countries and areas of DFS (eg payments, RTGS). Got confidence to speak about DFS. Got priceless info about context in SSA countries that are not well banked.	Yes - His manager reports that the DFI students get a good foundational knowledge and understanding of linkages. Other coming in don’t have this knowledge, so it helps a lot with their work.
Anna Kondakhchyan (F), UK	Their members and their secretariat do lobby for regulatory change. There is a high capacity. But she	They lobby at country level with members like Uganda mobile operators assoc – eg: to get local registration authorities to allow	Yes – she is now a “credible convener” – bring humanitarian and DFS players together.	No – there was an attempt for the COP in London, but did not work out. But	In Humanitarian sector at Cash and Learning Partnership (hosted by Oxfam). Global Programmes Coordinator – they work with	Yes - Oxfam interested in using cash transfers but no capacity to see how the digital tools

Cash and Learning Partnership, Global Programmes Coordinator	still plays a role of explaining to colleagues the role of regulators and how to approach them – she learnt through DFI.	humanitarian papers to be legally used to open a bank account and receive cash through mobile apps. Also work with cash group in Philippines, and have DFID and USAID as members – so lobby through them.	Got DFS skills in to build tools for Oxfam etc. Not many programme managers who understand both DFS and humanitarian fields. Their network is multi-sectoral, so does this anyway – and now has knowledge on who to get involved.	enjoyed linking with others in campus.	network who give assistance using cash vouchers. Says: "Had it not been for the DFI course, I don't think I would have landed this job." Done lots of DFI courses. Was in ICT before with Oxfam. Also helps the humanitarian sector catch up to DFS arena.	could be handled. She had interest but no skills – then did DFi courses. Since then, she identified a number of digital products for Oxfam to move cash to beneficiaries. And she knew how to get the right people on board to develop these. Introduced colleagues to NB of cryptocurrencies.
Robinson Mbae (M), Rwanda **Bank of Kigali, Product owner for digital channels, internet banking**	Bank of Kigali. Established (50 years) and large bank. Since over 30 have done DFi courses it has surely made an impact at some level. But have to change many employees because they are shifting to a digital brand. So lots need training.	The regulator is very open in Rwanda and invites comments on any regulations from the banks. They issue draft regulations for comment and inputs and they do comment. EG: Agency Banking regulations. They have been passed now.	He did increase his networks and collaborates when developing products of various kinds. There are a lot of things being developed in Rwanda – payments and national switch, and they collaborate with others in the sector to improve the environment. And he advises at times.	He did attend the COP and appreciated meeting others. But not much follow up after courses. There were no country based initiative done by the COP.	Yes - He is product owner for digital channels focusing on internet banking. He did a lot of DFI courses. It really consolidated his knowledge of DFS and showed what he still has to know. Really saw things from the consumers perspective – normally don't get to see this. And adapting products to markets. Also helps in strategically developing products and steps to follow. He learnt new terms and has confidence to participate. Saw what's possible in other countries like China and India. Put him in a good position to work on Bank's new strategies.	Yes – there have been quite a number of employees who did DFI – deliberately as it helps develop staff in the skills needed for digital transformation strategy. They needed a pool for resources to drive their strategic agenda to transform to a digital brand, and now over 30 have done DFI courses which has been significant. Even some senior managers did DFI. They have their own DFI alumni group in the bank.
Juliet Mburu (F), Kenya	Yes - FSD does a lot of work with many sectors on deepening financial	Yes – they are working on the Digital Economy Strategy for Kenya with the ICT ministry.	Yes – She is working with the Central Bank on incentives and got the	No - Was a COP in Nairobi. FSD used to host the meetings.	Yes - Works at Financial Sector Deepening (FSD) Kenya. Programme manager – payments.	Yes - FSD Kenya has a small staff and her knowledge has helped

FSD Kenya, Programme manager: Payment	inclusion. Has good capacity for regulation but could improve. She is playing an important role in a project with the Central Bank on incentives, and she was prepared by DFI. They are also on the working group developing the national payments strategy – still ongoing.	Make lots of inputs here. FSD worked on Africa strategy too and now Kenya is drafting one, which they are inputting into. And her work with the Central Bank. Both of these are works in progress that they are inputting into. And a new project with Nat Treasury – Helping with Digital Finance 2.0 strategy – to makes Kenya a cash light economy.	confidence to do this from DFI. For each area they work, they select the best partner – eg: agriculture, regulation, construction, fintechs.	Difficult due to traffic. Had lots of speakers, but she does not know about it now. Did not do projects. No active alumni either.	It helped organise and consolidate knowledge around payments. Not many teach on this. Digital ID course was new to her. Working with Central Bank around incentives, and now has confidence to talk to them in this area. Also more confident with other implementing partners. Also learnt about other markets and countries. Work situation changed as a result of DFI – more responsibility.	her take on new challenges and responsibilities. So it has increased their capacity. Around four of them have done DFI courses and it has helped them.
Joyce Nambasa (F), Uganda **Equity Bank, Team Leader: Digital banking**	Equity Bank is the oldest bank in Uganda and had high capacity and lots of input into regulations already. They pushed the government to allow Agency Banking un Uganda. Took MPs to Nairobi to see how they did it. Also lobbying on digital credit and for people to get an account without paper s – include the nat registrations body as well. They lobby as a block through the Bankers Association. Joyce represents them on DFS committee.	Yes – her DFA lobbied on the tax on mobile digital transactions. And got it reduced from 1% to 0.5%. Also involved MPs in this discussion. Equity: When the Parliamentary group came back, within seven months they passed a law allowing Agency Banking. Group CEO pushed this – have to push regulators.	Yes – through the DFA she has collaborated with fintechs and helped them to understand how to innovate in line with the regulations. And DFA has many members from other areas – FSD, Innovation Hub etc. Wants the DFA to have a regulator, FSD and other sectors all represented.	Yes – got to interact with regulators and fintechs etc. And formed the Digital Frontiers Association of Uganda. They now have 60 members and she is on executive committee. They are developing a plan, and doing awareness around taxing over the top services – got a lawyer to present. Brought together stakeholders to discuss regulation and innovation etc.	Yes - Equity Bank Uganda – Team Leader, Digital Banking. Is on journey to Certificate in DM. Gained general understanding and outside country perspective and consumer protection, also can make good business cases etc. Changed her career path away from digital banking to product management. Now its aligned to that. She is also interim secretary of DFA, founded by her cohort. She has changed position 3 times because of her new knowledge.	Yes - Almost 10 have done the courses now. Kenneth: Equity has a strategic drive around digitisation of services. So they need a core of people who know DFS well and aspects like regulation. So DFI courses have been crucial. Also developed a suite of DFS products – led by Joyce. Those who did DFI are superior to their colleagues in way they executed tasks. EG: Joyce championed corporate internet banking solution.
Charles Bassey (M), Nigeria	Is at the Central Bank of Nigeria. His position is	Yes - Had an inter-agency forum on financial flows etc and he was	Yes – he is part of the security industry forum	No – he did not have one in Abuja at	Yes - The anti-money laundering course was helpful. It has helped	He is seen as a role model and mentor for

Nigeria Central Bank, Head of Security Research & Development	Head of Security Research and Development. He has shared his knowledge about how to protect yourself to colleagues. He does comment on draft policies and finds he can make good practical inputs due to his DFI knowledge. As he knowns the whole landscape. He can see the implications a policy might have. They have lots of capacity but need to liaise with others in making regulations.	the key person reviewing countries national security strategy and developing a critical framework for the country and fighting money laundering. For example, he made inputs into the Payment Systems for Banks Policy as it was being developed.	with people from different sectors. He is the assistant regional vice president. He met some other DFI students too who he linked with but no collaborations. He also reviewed an EU report which the anti-corruption commission sent to him. They knew him as a subject expert through his DFI work.	the time. Just set up a Whatsapp group only.	him strongly – enabled meaningful conversations in workplace and in forums. He is also seen as a subject expert now by his seniors and others in his workplace. He gets higher ratings. He is in the same position, but has been given additional responsibilities. It has happened "following my enhanced performance due to DFI."	other younger employees. Large organisation, so not clear its capacity was significantly enhanced, except that their head of security research was clearly developed and is a role model and mentor.
Ercilio Zimba (M), Mozambique **National Sustainable Development Fund,**	No - Says his organisation does not really play any role in DFS regulation. They are not in the DFS field at all.	No - He says he can meaningfully influence policy formulation and exchange ideas as well post solutions. Works in government, so has a role in policy. But he says he has not been involved in any DFS regulation.	Yes – in his old position, collaborated with Bank of Mozambique, Insurance Regulator, Insurance Companies, Telecom companies, FSDMoz. One of his key roles was collaboration with these players.	He does not attend the COP much – but says it is doing projects like workshops, discussion forums and seminars.	Was Rural Finance Head for National Directorate for Rural Development. Still works for government – National Sustainable Development Fund. This was a shift which improved his salary. Not DFS sector but promote financial literacy and innovations. He provided training to farmers in DFS and promoted use of digital money.	Not clear – but by having his skills the NSDF likely gained, since most rural people now use digital money and this is growing in importance. He says his organisation needs to learn more about DFS and innovations relating to rural development.