DIGITAL FRONTIERS
PROGRAMME OUTCOME EVALUATION

Certified Digital Finance Practitioner, Digital Financial Inclusion Supervision, Instant and Inclusive Payment Systems, and Gender Equality Changemakers.

Prepared for

Digital Frontiers

December 2023

LE GROUPE

CONSEIL BAASTEL

Le Groupe-conseil baastel ltée

92, rue Montcalm, Gatineau QC, Canada

Boulevard Adolphe Max 55, Brussels, Belgium

P: +1 (819) 595-1421

E: virginia.moscadelli@baastel.com

W: www.baastel.com

TABLE OF CONTENTS

LIST OF FIGURES

ACRONYMS

APFD	Association des Professionnels de la Finance Digitale
API	Application Programming Interface
ATM	Automated Teller Machine
BK	Bank of Kigali
BMGF	Bill and Melinda Gates Foundation
CBDC	Central Bank Digital Currency
CDFP	Certified Digital Financial Practitioner
CGAP	Consultative Group to Assist the Poor
CoP	Community of Practice
CPC	Consumer Protection Commission
CSA&G	Centre for Sexualities, AIDS & Gender
DF	Digital Frontiers
DFA	Digital Finance Association
DFI	Digital Frontiers Institute
DFIS	Digital Financial Inclusion Supervision
DFS	Digital Financial Services
DFPAZ	Digital Finance Practitioners Association of Zimbabwe
DGRV	German Cooperative and Raiffeisen Confederation

FAPAD	Facilitation for Peace and Development
FSD	Financial Sector Deepening
FSP	Financial Services Provider
FGD	Focus Group Discussion
FSA	Financial Sector Authorities
FSDA	Financial Sector Deepening Africa
GE	Gender Equality
GEC	Gender Equality Changemakers
GIZ	Gesellschaft für Internationale Zusammenarbeit
IIPS	Instant And Inclusive Payment Systems
IIRR	International Institute of Rural Reconstruction
JoMoPay	Jordan Mobile Payment
JoPACC	Jordan Payments & Clearing Company
KIIs	Key Informant Interviews
KI	Key Informant
KYC	Know Your Costumer
LGBT+	Lesbian, Gay, Bisexual and Transgender
LM	Logic model
M&E	Monitoring and Evaluation
MMR	Monitoring and Measurement of Results
MNO	Mobile Network Operator
MSME	Micro, Small & Medium Enterprises

NITA	National Information Technology Authority (Uganda)
OECD	Organisation for Economic Co-operation and Development
POS	Point-of-Sale Terminal
P2P	Person-to-person
RIA	Regulatory Impact Analysis
RTGS	Real Time Gross Settlement
SDG	Sustainable Development Goals
TNM	Telekom Networks Malawi
TOC	Theory of Change
UMRA	Uganda Microfinance Regulatory Authority
UPS	Universal Payment System
UN	United Nations
USSD	Unstructured Supplementary Service Data
ZICTA	Zambia Information, Communication and Technology Authority

1. INTRODUCTION

1.1. Background

Baastel was mandated by Digital Frontiers (DF) to undertake an outcome evaluation of four capacity building programmes funded by the Bill and Melinda Gates Foundation (BMGF): the Certified Digital Finance Practitioner Programme (CDFP), the Digital Financial Inclusion Supervision Programme (DFIS), the Instant and Inclusive Payment Systems Programme (IIPS), and the Gender Equality Changemakers Programme (GEC).

1.1.1. Digital Frontiers

Founded in 2015, Digital Frontiers (DF) is a non-profit specialist organisation based in South Africa, dedicated to enhancing human capacity in line with the United Nations (UN) sustainable development goals (SDGs). With a primary focus on capacity-building, DF aims to address service delivery gaps and foster the emergence of new digital finance professions that drive locally led development. DF strives to support global initiatives in digital financial services, financial inclusion, gender equality, and inclusive digital economies. Through its comprehensive programs, DF seeks to bridge gaps in service provision and facilitate the advancement of these important areas.

DFI has successfully trained more than 10,250 professionals from over 4,950 organisations in the public, private, and development sectors across 183 countries. The organisation remains committed to offering ongoing opportunities for professionals and capacity development through various channels such as its knowledge bank, webinars, podcasts, blog posts, and diverse events.

Approach to capacity building.

In pursuit of its mission to equitable economies, the Digital Frontiers (DF) approach is centred on capacity building and continued professional development. For capacity building, DF offers the following programmes:

- Certified Digital Finance Practitioner (CDFP)
- Digital Financial Inclusion Supervision (DFIS)
- Gender Equality (GEC)
- Instant Inclusive Payment Systems (IIPS)
- Digital Payments in Healthcare
- Certified Digital Practitioner (CDEP)

Within this range of programmes, DF provides a selection of courses, with some of the most popular being the Certificate in Digital Money, Leading Digital Money Markets, and Mobile Money Operations. Collaborations with subject matter experts, including the University of Pretoria for the GE programme, CGAP (Consultative Group to Assist the Poor), and the Toronto Centre for DFIS, underscore the collaborative approach in developing these programmes.

For the continued professional development of its community, DF facilitates the Leagues of Professionals, Communities of Practice (CoPs), and maintains a knowledge bank. The League of Professionals for both Digital Finance and Gender is maintained by the Digital Frontiers Institute (DFI) for current students and alumni to come together and share knowledge and experiences, discuss ideas and new developments, and ultimately help increase the knowledge base and cultivate peer learning opportunities for professional development and advocacy.

The CoPs are distributed across the world, meeting face-to-face and virtually, and discussing industry-wide issues and challenges, these communities put students in direct contact with their peers in the industry and foster communication, cooperation, knowledge sharing, and innovation. Finally, DFI maintains an extensive and free-to-use knowledge bank of all the resources used in their courses including a wide number of blogs, articles, research papers, and webinars.

1.1.2. The BMGF- Funded Programs

Certified Digital Finance Practitioner Programme (CDFP)

The CDFP programme is a career-linked professional certification programme offering 22 digital finance courses ranging from digital money, leading digital money markets, and customer use of digital payments, to regulation of digital financial services, and technology, and operational enablers for digital finance. The portfolio is structured into a multi-year professional certification, certified by The Fletcher School of Law and Diplomacy at Tufts University. The CDFP programme, in its seventh year, stands as the oldest active programme within DF.

The outcome evaluation assessed the progress towards the achievement of the programme's intermediate outcomes, and long-term outcomes, as follows:

<u>Intermediate outcomes</u>

- Increased innovation, design and development of financial service products offered to financially excluded/underserved consumers.
- Increased drafting and improvement of enabling inclusive finance policies and regulations, in line with international best practices.
- Business models, operations & promotional activities are adapted to suit financially excluded/underserved consumers.

Long-term outcomes

- Improved reliability of financial technology and infrastructure, relevant to low-income consumers.
- Improved pro-poor business models and operations of digital financial services for financially excluded/underserved consumers.

Digital Financial Inclusion Supervision Programme (DFIS)

DFIS is offered in two parts, DFIS 1.0 and DFIS 2.0. A total of 10 alumni cohorts have been trained under these so far. DFIS 1.0 is a paced online course for financial regulators and supervisors that covers the foundational aspects of a risk-based approach to the supervision of digital financial services. It aims to equip regulators and supervisors with the skills to answer questions like: How can DFS supervisory functions be carried out effectively and proportionately based on the size, scope, and risk profile of the financial services provider (FSP)? For inclusive DFS supervision, how are financial stability and soundness issues, as well as authorizations (licensing), financial inclusion, distribution, innovation (product and delivery), integrity, and consumer protection considered? For inclusive DFS supervision, how can the gender and financial inclusion lenses be considered?

DFIS 2.0 is a more advanced paced online course for financial policymaking, regulatory and supervisory authorities; enrolment to DFIS 2.0 requires either the completion of DFIS 1.0 or the approval of an exam about the foundations of DFIS. DFIS 2.0 aims to equip regulators and supervisors with the skills to identify the new or increased risks associated with DFS business models, products, and technologies; explore advanced methodologies and tools that enable DFS supervision to be aligned with financial stability and inclusion and incorporate different approaches to policymaking, regulation, and supervision of inclusive digital finance, among others.

The outcome evaluation assessed the progress towards the achievement of the programme's intermediate outcomes, and long-term outcomes, as follows:

Intermediate outcomes

- Enhanced capacity of financial sector regulators and supervisors to effectively regulate and supervise financial services with a gender and financial inclusion lens.
- Enhanced organisational resource awareness and utilisation.
- Enhanced regulatory harmonisation among different jurisdictions and regulatory bodies.

Long-term outcomes

- Increased development of regulatory & supervisory frameworks that foster financially inclusive products and services.
- Enhanced financial sector stability with a focus on gender and financial inclusion.

Instant and Inclusive Payment Systems Programme (IIPS)

The **IIPS Programme** was designed with the goal of advancing the development of instant and inclusive payment systems, contributing to the transformation of a country's financial landscape. These systems create a more cash-like experience by adopting technology that allows clients with different financial service providers to send and receive money. IIPS enable real time and same-day settlement, are open loop and accessible, and facilitate high volume, low value transactions. Ultimately, they have the potential to catalyse financial inclusion and positively impact financial behaviour.

This outcome evaluation collected evidence with regards to the progress towards the achievement of the programme's intermediate and long-term outcomes, as follows:

<u>Intermediate outcomes</u>

- Increased use of inclusive and sustainable digital payment systems by financially excluded/underserved consumers.
- Increased policy development and regulation related to IIP systems.
- Enhanced collaboration among IIP system stakeholders to innovate, develop and implement effective regulation, operation, and technology solutions.

<u>Long-term outcomes</u>

- Improved efficiency and security of digital payment systems, reducing transaction costs and risks for financially excluded/underserved populations.
- Increased payment innovation leading to the development of new payment use cases in the digital economy.

Gender Equality Changemakers Programme (GEC)

The **GEC Programme** aims to mobilise a league of gender equity champions across Africa, in particular. The 5-part programme is an immersive learning experience that equips participants with the knowledge, tools, attitudes and practice needed to undertake gender equality change projects, ignite change in their organisations, and beyond that, have a significant impact in addressing inequalities at a systems level.

This outcome evaluation helped determine if the programme has made contributions to the achievement of its intended intermediate and long-term outcomes, as follows:

<u>Intermediate outcomes</u>

- Increased participation of women in decision-making processes and leadership positions within participants' organisations.
- Increased development and adoption of policies and practices that promote gender equality within organisations.

<u>Long-term outcome</u>

- Improved gender inclusive organisational culture that embraces diversity and encourages gender parity.

1.2. Evaluation Objectives and Scope

1.2.1. Purpose and objectives of the evaluation:

The main purpose of the evaluation is to contribute to DF's and BMGF's understanding of DF's progress towards the achievement of its expected intermediate and long-term outcomes, as well as of the effects that DF's GEC, DFIS, IIPS and CDFP programmes have had in the contexts they operate in.

Accordingly, the objectives of the evaluation are:

1. To assess DF's progress towards the achievement of the intended intermediate and long-term outcomes of the GEC, DFIS, IIPS and CDFP programmes

2. To identify attributable effects these programmes have had in the contexts in which they operate.

1.2.2. Evaluation scope

This outcome evaluation focused on four specific DF programmes: GEC, DFIS, IIPS and CDFP. It has a strong emphasis on effectiveness, focusing on progress towards the achievement of the expected intermediate and long-term outcomes. Additional OECD evaluation criteria such as relevance, sustainability, and efficiency considerations, are included to complement the analyses.

The evaluation included all the four programmes' target countries in Africa and Asia although data was predominantly received form participants working or living in Africa.

2. APPROACH AND METHODOLOGY

The evaluation team employed a practical and collaborative approach in this outcome evaluation. The team worked closely with DF staff to ensure an adequate understanding of DF and its programmes, as well as the evaluation needs of key project stakeholders.

The evaluation tested a series of hypotheses derived from programme results statements at intermediate and long-term levels, focusing on stakeholder contributions to the achievement of those results. The evaluation assessed the degree to which the programmes are producing their intended effects on the target population's behaviours and capacities, and the extent to which expected outcomes are being met.

The design was guided by the logic models from each of the programmes under review. The evaluation questions and sub-questions were based on the programme's results statements, and on sets of evaluation questions proposed by DF (please see the evaluation matrices in Annex 2). The evaluation identified evidence and results in alignment with the evaluation questions and indicators to demonstrate DF's contribution to the expected changes. Review and analysis of data was performed following the principle of triangulation to ensure consistency.

2.1.1. Data collection

Qualitative and quantitative data collection methods and analysis techniques were used to strengthen the validity and reliability of data and to triangulate preliminary findings, as follows:

Desk review: Systematic review covered relevant documents and online resources provided by DF. During the inception phase, this informed understanding of the project, supported refinement of the evaluation questions and helped define the data collection approach. Subsequently, the team collected data and information from the documents to assist in answering the evaluation questions and triangulate with other sources. Please see Annex 3 for a list of documents reviewed.

Key Informant Interviews (KII): Between September 1 and October 31, 2023, 48 interviews[1] were carried out with DFI alumni, 12 per programme, involving 50 individuals. DF personnel facilitated outreach via introductory emails and communication efforts through other channels. Semi-structured interview questionnaires tailored to each of the programmes allowed the team to consult with various stakeholders on the same topics to facilitate triangulation while also exploring other issues as they arose. A list of interviewees can be found in Annex 5.

[1] A total of 50 KIs were interviewed, three of them were interviewed together.

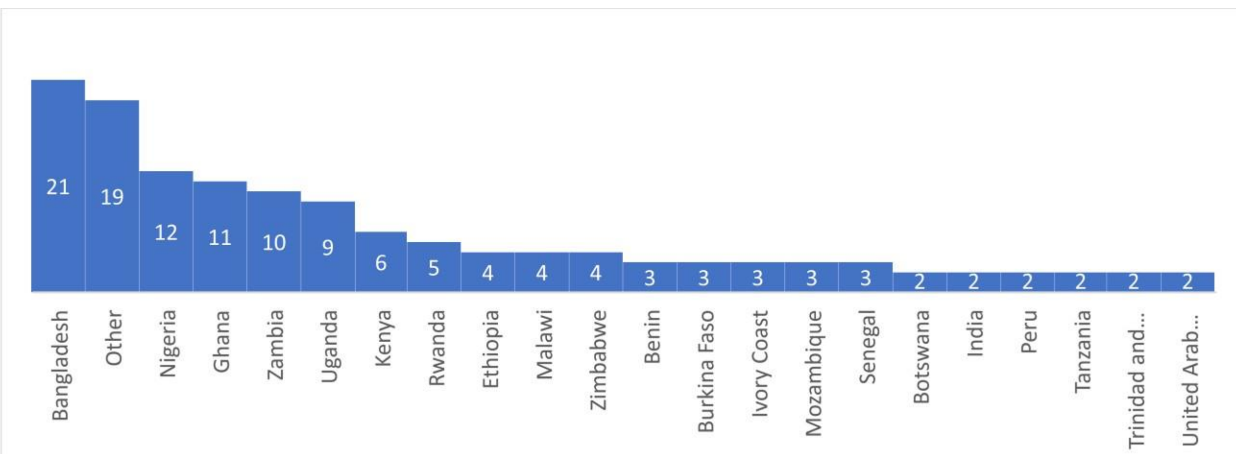
Moreover, relevant stakeholders for all 4 programmes were engaged, as outlined in Annex 4. Nine interviews were conducted with Digital Frontiers (DF) staff, employing a SWOT approach to assess DF comprehensively, along with an emphasis on specific programmes, which was dependant on the interviewee. Insights were provided by DF staff as well as by allied institutions such as the Consultative Group to Assist the Poor (CGAP), the Centre for Sexualities, AIDS & Gender (CSA&G) at the University of Pretoria and the BMGF.

Survey: An e-survey was deployed amongst 745 programme participants, 132 valid responses from 40 countries were received, as shown in Figure 1 below. The survey supported triangulation and facilitated engagement with a broader spectrum of stakeholders, promoting a more comprehensive representation of stakeholder voices in the evaluation findings.

The findings section presents curated results from the survey and not all survey questions were included. All survey data related to participant perception on programme performance can be consulted in Annex 7.

The majority of the survey responses were received from DF African countries such as Nigeria, Gambia and Zambia. The country with most responses was Bangladesh, where a large cohort of Central Bank officials was trained by the CDFP programme.

Figure 1 - Country of e-survey responses.



Among the respondents, 59% identified as women, 36% as men, and 5% preferred not to answer, as illustrated in Figure 2, below. This distribution does not reflect the distribution of the participant universe, as per the databases provided. The larger proportion of women is somewhat influenced by the GEC programme, in which more than 70% of alumni are women.

Figure 2 - Gender distribution of e-survey responses

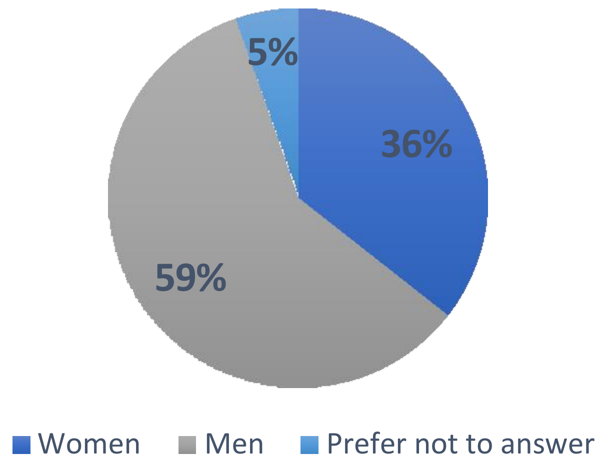
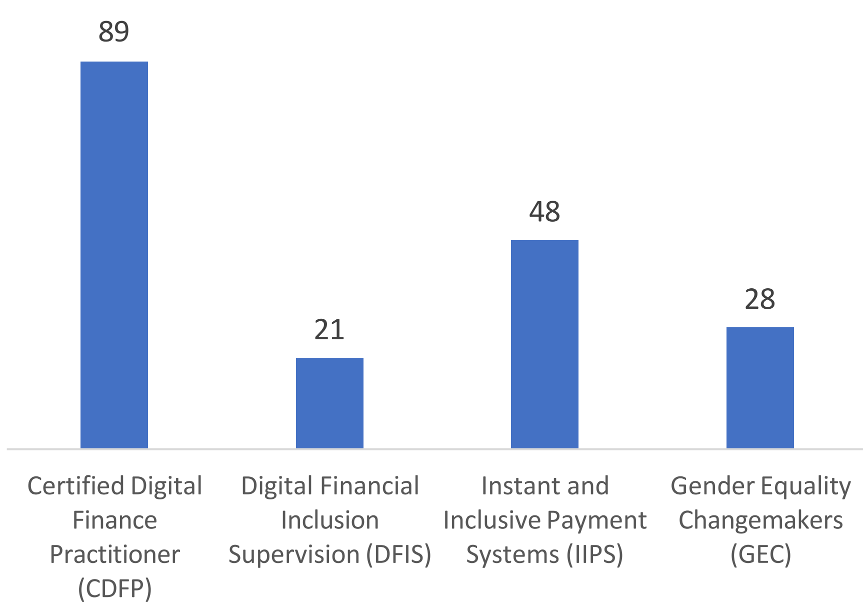


Figure 3 - Programme distribution according to e-survey responses.



As show in Figure 3, above, the CDFP received the highest number of responses, followed by IIPS, GEC, and DFIS. It's crucial to note that the response count does not directly correlate with the number of unique respondents, as the same alumni might have participated in more than one course.

Sampling

For the interviews, the criteria for the sample selection were as follow:

1. **Sampling per Program:** Ensuring representation from each program.
2. **Elimination of Single-Alumni Countries:** Excluding countries with only one alumnus to diversify perspectives.
3. **Exclusion of Developed Countries:** Given the distinct context and impact of digital finance in more developed financial environments, alumni from developed countries were omitted.
4. **Random Sampling:** Employing a random selection process to enhance inclusivity and objectivity.

The survey did not require a sampling process as it was distributed to the entire participant database of the CDFP, DFIS, IIPS, and GEC courses as provided by DF. Survey results are not statistically representative of alumni populations but rather seek to identify trends.

Overall, since responses relied on alumni availability and interest, it is important to note that the resulting sample is not statistically representative.

Additionally, this document presents a list of DF participants and their contributions to expected impact, focusing on the type of contribution, the significance of that contribution and how it relates to DF. This is presented in Annex 1. These alumni were identified in DF reports and communication pieces or were referred by other alumni. It should be noted that this was created to respond to a DF request to identify as many alumni contributions as possible and does not inform the findings of the evaluation. Furthermore, additional research is required to triangulate DF influence on these contributions. **The use of the information contained in this list is strictly for DF internal purposes, any public use of this information must be previously authorised by the corresponding alumnus.**

2.2 Limitations

The following challenges were encountered while conducting this evaluation:

- Overall, there was a very tight timeline for data collection and analysis. As a mitigation measure the evaluation team did its best to adhere to the agreed timeline and prioritised efficient data collection methods.

- The DFIS logic model was updated during the process, which halted the review of this programme for four weeks. Finally, the evaluation team was instructed to use the latter version of the logic model, and data collection for DFIS was closed a few weeks after.
- The evaluation was bound to online data collection. This allowed for a wider spectrum of reached stakeholders, during a longer period of time. However, it also required additional resources for follow up as responsiveness and engagement is lower than for in-person tools.
- Alumni engagement in data collection was challenging for different reasons due to lack or responses or delayed responses from participants and by unannounced absences to the interviews. Stakeholders' engagement required extensive follow-up, due to lack of or delays in responses, which hindered efficiency to the data collection processes.
- Data collection logistics were also challenged by inconsistencies in the databases provided by DF. For instance, two sets of differing alumni lists were provided for the same programme (e.g. DFIS, one list contained 80 alumni whilst the other one 64 alumni); also, some lists did not have contact information (e.g. GEC CoPs master list) or were incomplete.
- Some of the participants could not be reached by email because their email accounts were not working.
- Connectivity challenges at times interrupted the interviews and at times halted them altogether, this resulted in some of parts of the discussions being lost and in one case an incomplete interview.
- Assessing the significance of alumni contributions to expected outcomes requires that those contributions take effect, in other words, the change produced by those contributions requires some time to happen. Given the relative youth of some of the programmes that change is not evident.

It should be noted that as a result of the mitigation measures taken by the evaluation team, and the extensive support of Digital Frontiers, solutions were found, and the evaluative process remained balanced and relevant. These limitations did not affect the results of the evaluation.

3. FINDINGS

This section contains the evaluation findings regarding DF's progress towards the achievement of the intended intermediate and long-term outcomes of the GEC, DFIS, IIPS and CDFP programmes. Each of the four programmes is presented separately and the sub-sections under each programme present each of the intermediate and long-term outcomes individually.

The evaluation team assessed the evidence to examine if each of the programmes has contributed to the expected outcomes. Following the programmes' logic models, DF contribution is expected to be through the students, and as one of the many factors that produce changes. As such, the analyses are centred on the relationship between alumni programme participation and contribution.

3.1. CDFP

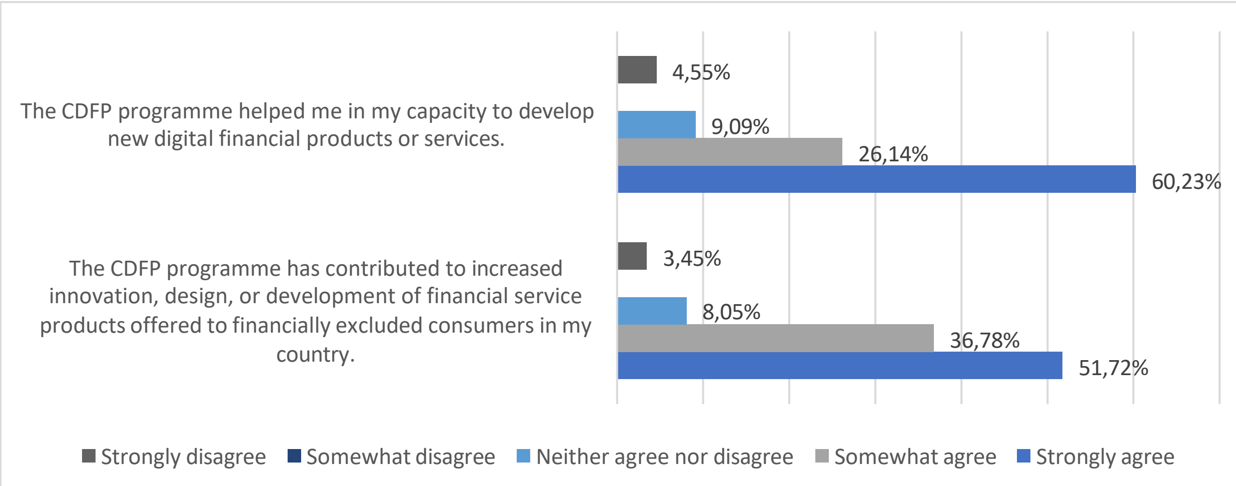
3.1.1. Intermediate Outcomes

IMO1. Increased innovation, design and development of financial service products are adapted, designed, and offered to financially excluded/underserved customers.

Evidence shows that **the CDFP programme contributes to the advancement of innovation, design and development of digital financial service products that foster financial inclusion.** Whilst some digital financial service products are specifically designed to encourage financial inclusion, most of them leverage on market opportunities and, are not necessarily tailored for serving the poor. They nonetheless strengthen inclusion via increased adoption of digital services by excluded groups. The CDFP influence was mostly recognised in **enhanced knowledge to drive innovation** and **greater confidence and skills to engage in collaboration**, both within organisations and across sectors. Some alumni also pointed out that the programme contributed to the inclusion of gender considerations in product design, development and delivery.

CDFP influence was recognised in a wide array for digital financial service products such as mobile money accounts, insurance and microinsurance, credit, remittances and pensions. Survey data is consistent with interview evidence: 89% of survey respondents agree that the CDFP programme has contributed to increased innovation, design, or development of financial service products offered to financially exclude consumers in their countries; and 86% agree or strongly agree that the CDFP programme has helped them in their capacity to develop new digital financial products or services. It should be noted, however that 5% of survey participants strongly disagreed about the CDFP being influential in capacity development conducive to innovation, design and development as shown in Figure 4 below. Survey data also shows that at least 76% of programme respondents (alumni, DFA or CoP members) have been involved in the development or improvement of inclusive digital finance products or services.

Figure 4 Increased innovation, design and development of financial service products adapted, designed, and offered to financially excluded or underserved customers.



Knowledge was also identified as a pillar for improved confidence, another key result from CDFP programme participation. **Alumni recognised that confidence enables professionals to engage in effective collaboration, both within their organisations as well as with players from different sectors**, like regulators, service providers, FinTech's and financial institutions. Confidence allows entrepreneurs, technical advisors, regulators, project managers and other digital finance professionals to hold complex technical discussions, provide insights and promote a deeper understating on the different issues surrounding product development, including financial inclusion and gender considerations. An interviewee described that, while working as an IT Product Manager for Consolidated Bank Ghana, he encountered the challenge of onboarding remote customers. He explained how knowledge acquired from CDFP (the product development module in particular) helped him and his team come up with an Application Programming Interface (API) based solution, building the bank's own middleware that allowed them to comply with "Know your costumer" (KYC) regulation. This required the use of biometric verification so that new customers did not have to come to the bank. He mentioned that effective collaboration was also key to this product, since it was dependent on the service provider supplying the technology needed for delivery. Furthermore, he believes that the service provider leveraged on the experience with Consolidated Bank Ghana to develop its own solution, which allowed other industry players to utilise their APIs for similar purposes, and thus permitting more underserved customers to access financial services.

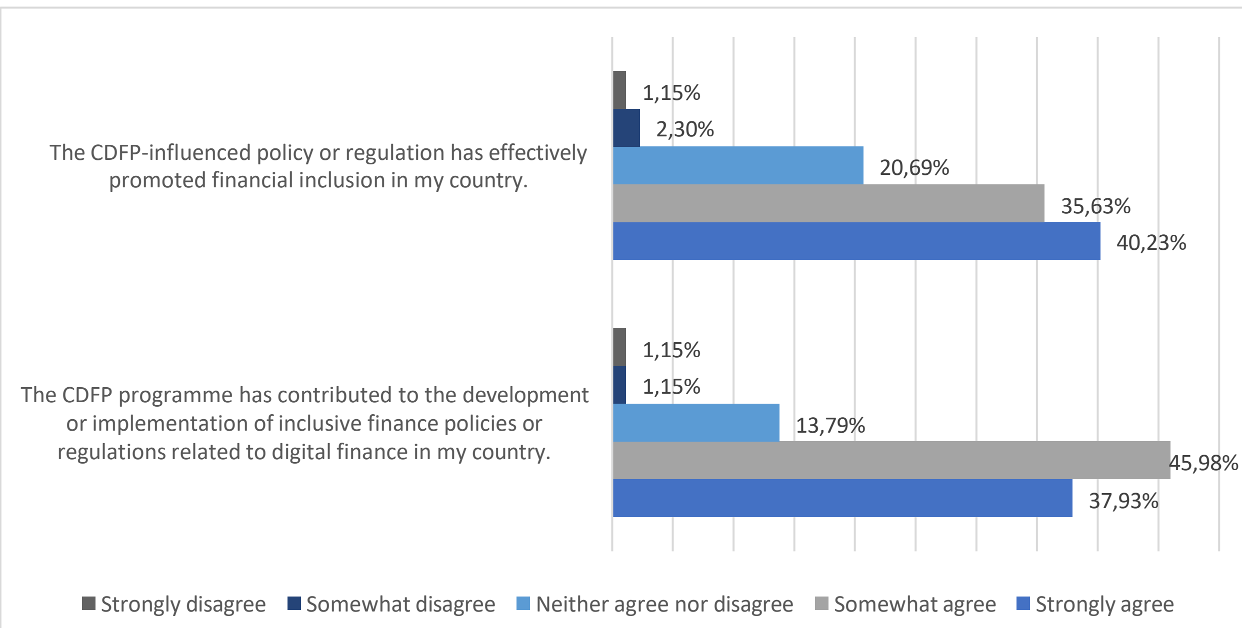
Some of the CDFP resources highlighted by various alumni as effective means for promoting knowledge gains are the use of relevant case studies from different countries and the assignments at the end of each of the modules. A few alumni also pointed out increased knowledge in gender issues as relevant knowledge for designing and developing products specifically for women.

IM02. Increased drafting and improvements of enabling inclusive finance policies and regulations in line with international best practices.

Data suggests that **the CDFP programme contributes to increased drafting and improvement of enabling inclusive finance policies and regulations that foster financial inclusion**. Some of the alumni mentioned their engagement in policy development and explained that CDFP contribution was centred in the provision of relevant knowledge to inform these processes, as well as increased capacities for collaboration and advocacy. Most of them stressed on the importance of policy in ensuring consumer protection and as enablers of digital financial service products like mobile money accounts, payments, credit, and insurance.

Survey results show that 84% of respondents agree that the CDFP programme has contributed to the development or implementation of inclusive finance policies or regulations in their countries. Further, 76% agree that CDFP-influenced policy or regulation has effectively promoted financial inclusion in their countries. Still, it should be noted that 21% could not confirm nor refute this statement as illustrated in Figure 5 below. In terms of actively collaborating with policy development, 50% of survey respondents indicated to have been involved or participated in policy or regulation development.

Figure 5 Increased drafting and improvements of enabling inclusive finance policies and regulations.



Much alumni regard knowledge as the main contribution coming from CDFP course participation to policy and regulation drafting and development, highlighting exposure to international best practices and guidelines as the most important sources of knowledge for policy development. Amongst the many topics and issues that influence and are influenced by regulation, respondents highlighted interoperability, digital identity, taxation, fintech, blockchain technology and artificial intelligence as key drivers for the advancement of digital finance.

Evidence also shows that **the CDFP programme contributed to increased skills and knowledge to engage in effective collaboration for policy development**. An alumnus explained how CDFP participants collaborated in drafting the National Financial Inclusion & Development Strategy of Ghana, launched in 2019, which aims to increase financial inclusion to 85% by the end of 2023. Members of two DFI-promoted groups, the Financial Inclusion Forum and the Digital Finance Practitioners of Ghana were part of the working group assisted by the World Bank, that drafted this policy, which is aligned to international best practices. This policy has resulted in an increase in mobile money account holders, mobile microinsurance, and mobile lending, and other digital banking services. In Bangladesh, more than 100 staff of the Bangladesh Bank have participated in the CDFP programme, many of which have contributed to the formulation of digital banking policy guidelines and the financial inclusion policy, which is aligned to the SDGs.

Some alumni also point to **enhanced advocacy skills as an important result stemming from CDFP course participation.** Advocacy skills development is grounded in expanded knowledge and increased confidence. Survey results show that 64% of the CDFP respondents have advocated for changes in policy or regulation related to digital finances. Some alumni mention that CoPs and DFAs have been implicated in advocacy efforts, influencing decision-making by reaching out to policy makers and sensitising them. Two alumni from Ghana commented on how the local DFA facilitated discussions on electronic money taxation, convening policy makers as well as representatives from the private sector, like service providers, banks, microfinance organisations and FinTech's. These discussions focused on the implications of the Electronic Transfer Levy Act of 2022, including the possible negative consequences for vulnerable populations. These discussions further informed policy makers, who eventually introduced changes, reducing or eliminating some of the taxes, making them less punitive. DFA members also reached out to other civil society and private sector organisations to advocate for tax reduction. Another CDFP alumnus explained how recent advocacy efforts have been directed towards the improvement of infrastructure to ensure service reliability: "…*now as a group we are able now to be advocating for what customers are looking forward to... this has helped the service providers and everyone to make sure that they get good vendors who are able to provide a stable system and also a system that is more scalable so that we should be able to provide more services as time goes*".[2]

IM03. Business models, operations & promotional activities are adapted to suit financially excluded/underserved consumers.

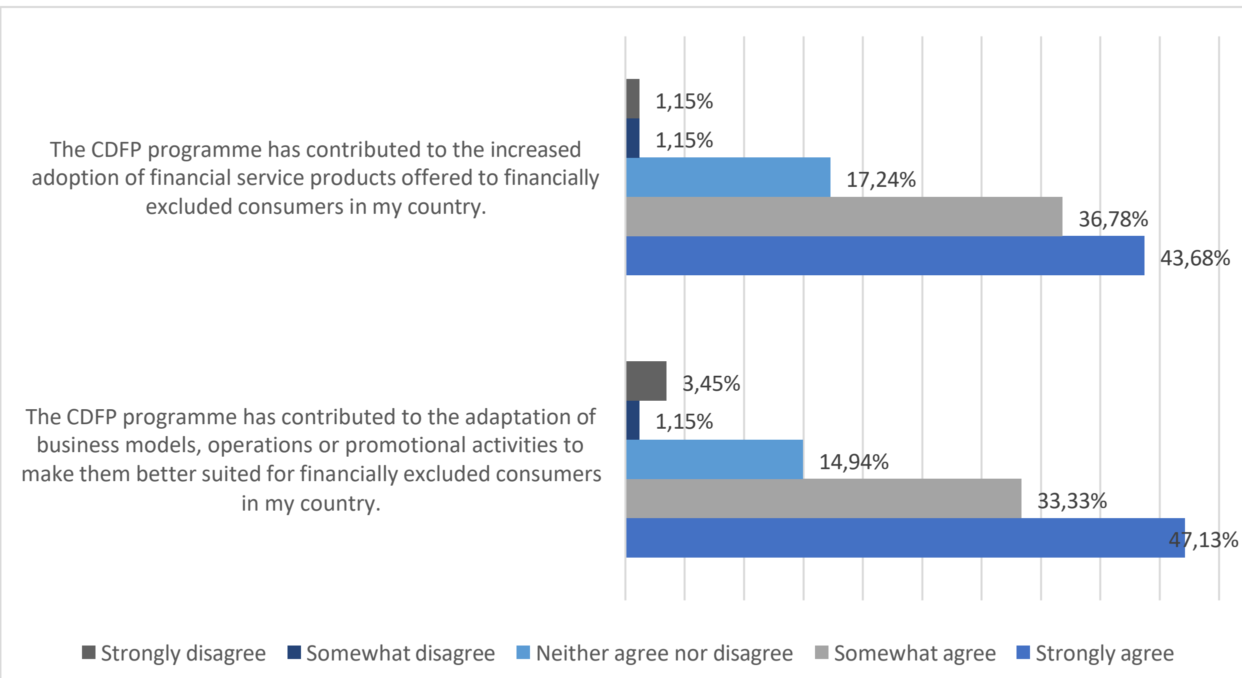
Evidence indicates that **the CDFP programme contributes to the development or adaptation of business models, operations and promotional activities that suit financially underserved or excluded consumers.** CDFP influences business model adaptation through the knowledge it provides, bringing a better understanding of the context, challenges and needs of the underserved. **Alumni stressed the importance of service products that meet specific needs of the poor.** The programme also improves alumni confidence to engage in meaningful collaboration with industry players in the implementation of financial service products. Additionally,

[2] CDFP Alumnus. Malawi.

influence was also identified in the enhancement of advocacy skills, particularly amongst members of the Digital Finance Associations (DFA) and CoPs, to push the digital finance agenda forward. Alumni pointed to reduced transaction costs, rapid access to credit, savings and remote access to financial services as key benefits of digital innovation.

Survey results show that 80% of respondents agree that the CDFP programme has contributed to the adaptation of business models, operations or promotional activities to make them better suited for financially excluded consumers in their countries, and that it has also contributed to the increased adoption of financial service products offered to these market segments. It should be noted, however, that 15% of respondents could not confirm nor refute CDFP influence in business model adaptation and 17% could not confirm nor refute influence in increased adoption, as shown in Figure 6, below.

Figure 6 Increased business model adaptation to suit the financially excluded or underserved.



Evidence suggests that knowledge is the most prominent contribution by the CDFP programme in adapting business models, operations and promotional activities to suit financially underserved or excluded consumers. Alumni identified course contents such digitizing agriculture, digital humanitarian payments, digital MSME, and digital money transfers, as especially relevant to foster financial inclusion as they provide information to better assess needs and ideate consistent solutions. The consideration of gender issues into digital financial services (the “Gender-blind spots in Digital Financial Services” module was mentioned) was highlighted by some alumni as influential in adapting digital service products to suit women or designing products specifically for women.

As with the previous outcomes, **increased confidence and skills for collaboration were also highlighted as key CDFP course participation results.** As mentioned, collaboration is key as the implementation of digital financial service projects requires cooperation amongst different industry players. In Guinea, a CDFP alumnus working as a Project Analyst for UNCDF mentioned how CDFP helped her to effectively facilitate the consolidation of partnerships between FinTech's, financial institutions and telecommunication companies like Orange Guinee, which ultimately resulted in increased access to financial services for rural populations. She explained how CDFP increased her knowledge and confidence to hold discussions, and how, by understanding key issues, she played an active role in the discussions. In Ghana, an alumnus described how he was involved in the introduction of overdraft facilities using electronic wallets services while working for Consolidated Bank Ghana. He engaged in close collaboration with Vodafone to launch the service product and make it accessible for costumers.

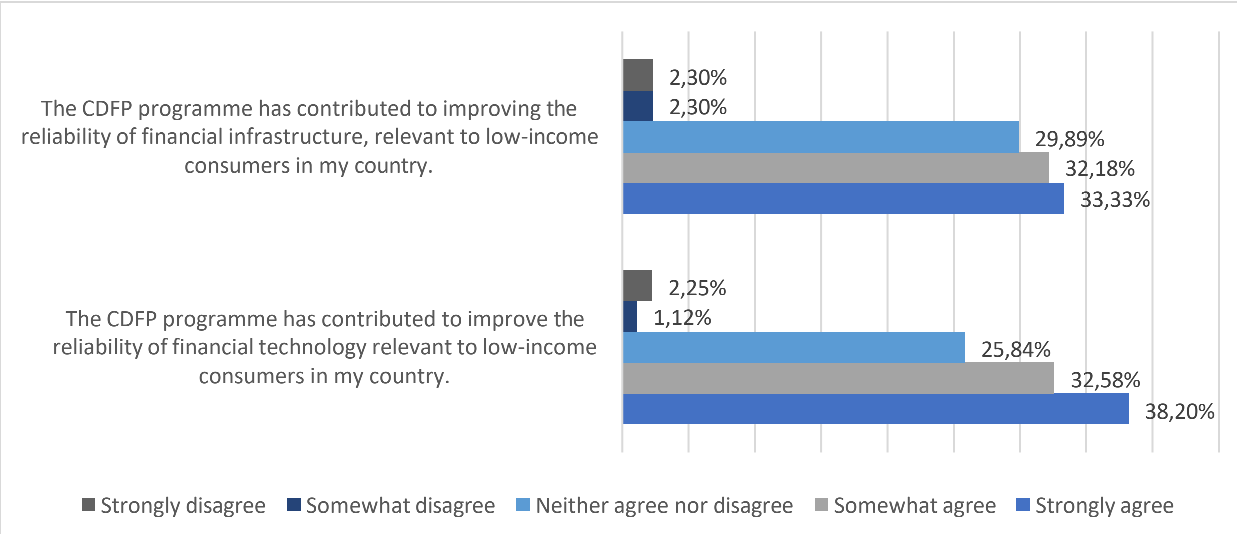
Interviewees explained that digital financial services benefit poor segments of the population through reduced transaction costs when using digital baking, increased resilience to face external shocks through microinsurance and overdraft facilities, ease of access and closure when receiving social cash transfers, payments or remittances, and increased access to rural communities and agribusiness in remote areas. They also indicated that raised awareness and improved trust are key in fostering financial inclusion and some have engaged in promotional activities with these objectives in mind.

3.1.2. Long term Outcomes

LTO1. Improved reliability of financial technology and infrastructure, relevant to low-income consumers.

Evidence to support CDFP influence on the improvement of the reliability of financial technology and infrastructure is limited. Interviewed alumni could not really identify a relation between programme participation and improved technology and infrastructure, more than 68% of survey respondents, however, did agree to some extent that CDFP contributes to the reliability of technology or infrastructure. It should be noted, however, that a large portion of survey respondents could not confirm nor refute CDFP influence on improved reliability (26% for technology and 30% for infrastructure). As shown in Figure 7, below, survey data suggests that the connection between programme participation and technological reliability is somewhat stronger than the link with infrastructure reliability. These results are consistent with the notion that, being long term outcomes, influence from CDFP is harder to identify as a significant number of additional variables (political, technological, financial, environmental, etc) influence the progress and reliability of infrastructure and technology.

Figure 7 Improved reliability of financial technology and infrastructure.

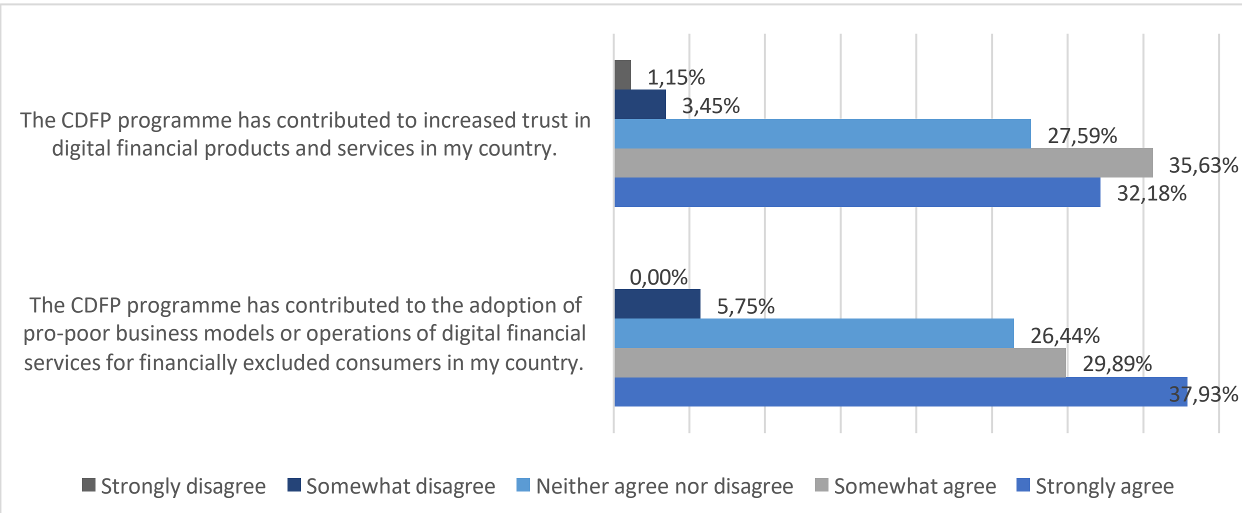


Alumni recognise the importance of advocacy and collaboration efforts in this direction as infrastructure and technological development require close cooperation between industry players. An alumnus from Malawi pointed out that CoPs and DFA are increasingly discussing matters related to security which should gradually evolve into policy recommendations for more reliable infrastructure and technology. They also stress the importance of developing human capital in the technology, communications, regulation and financial sectors, increasing the number of professionals that can foster market and policy dynamics conducive to infrastructure and technological development. Data also shows that the growth of digital markets presents opportunities for infrastructure and technological development as it provides economic incentives for investment, enabling economies of scale through cross-sectoral service delivery.

LT02. Improved pro-poor business models and operations of digital financial services for financially excluded/underserved consumers.

Data indicates that the **CDFP programme contributes to the advancement of pro-poor business models and operations of digital financial services for financially excluded or underserved consumers.** Still, around 30% of all respondents could not identify a clear effect of the CDFP programme on the establishment of pro-poor business models and around 5% indicated that there is possibly no influence. Many of the digital financial services identified as being inclusive are not necessarily designed to specifically serve the poor but rather wider segments of the population. There are innovations, however, that enable these product services to drive inclusion, such as reduced transaction costs, improved security and reduced access restrictions. Alumni mentioned that CDFP influence in pro-poor business model ideation, development and implementation comes mostly from increased knowledge, which enables a deeper understanding and analysis of the contexts, needs and incentives of financially excluded populations. Also highlighted was improved confidence, conducive to more engagement in collaboration and advocacy more effectively. Digital banking and especially money wallets were identified as the most effective financial services in promoting financial inclusion. Alumni stressed the importance of trust and literacy in furthering the adoption of financial services. Survey results indicate that 68% of CDFP respondents agree that the CDFP programme has contributed to the adoption of pro-poor business models in their countries and that it has contributed to increasing trust in digital financial services as illustrated in Figure 8 below.

Figure 8 Improved pro-poor business models and operations of digital financial services for financially excluded/underserved consumers.



Almost all of the consulted alumni agree that **a fundamental driver for the expansion of financial inclusion in their countries is the constant growth of digital markets**, which facilitate the identification of opportunities for innovation and foster an increasingly enabling environment for the introduction of digital financial services. Market growth also influences the cost of using financial services which also have a deep effect in the rate of adoption of digital financial services. The growth of the mobile phone markets was also underscored, as some alumni indicated that market penetration of mobile phones is on the rise and with it the possibility of including more segments of the population in digital finance. Data show that after taking the CDFP programme, alumni are better able to assess needs and gaps, identify new market opportunities, define adequate pricing schemes, and determine the viability of possible solutions to address them.

Evidence also suggests that **regulation plays a determinant role in facilitating or challenging the adoption of financial services**. In the case of Ghana, for example, the imposition of levies for digital transactions slowed down the adoption of digital financial service products significantly and the Government revenue from these taxes was only 10% from what was projected 8 months into their introduction[3]. As explained before, advocacy is particularly relevant to influence

[3] CDFP alumnus. Ghana.

regulation and CDFP influenced skill development assists alumni in increasing the effectiveness of their advocacy efforts.

An important challenge to financial inclusion is distrust in the financial system and in technology. This was remarked by some interviewees who mentioned that fear of being robbed is a disincentive for adoption. Some alumni have collaborated in promotional and educational campaigns to raise awareness about the benefits of digital finances and build trust amongst users. Trust in the financial system can also be fostered by promoting financial literacy, as indicated by the interviewees. Additionally, alumni remarked that adoption is also deeply influenced by the user's ability to manipulate the technology, which in turn is directly dependant on his or her ability to read and write. Low literacy levels in African countries are seen by alumni as another important challenge against financial inclusion.

3.2. DFIS

The following sections present findings related to DFIS outcomes that are no longer part of programme's TOC, which was updated during the course of the evaluation. The evaluation team and DF agreed to conduct the review on the previous version of the LM given the length of the process of developing the new one.

The updated DFIS programme TOC has the following intermediate and long-term outcomes:

Intermediate outcomes

IMO1. Enhanced capacity to effectively supervise digital financial services.

IMO2.Enhanced capacity to design policy, regulatory or supervisory actions to address innovations in the financial sector.

Long-term outcome

ILO1: Strengthened supervisory framework that promotes an inclusive, stable, and responsible digital financial system.

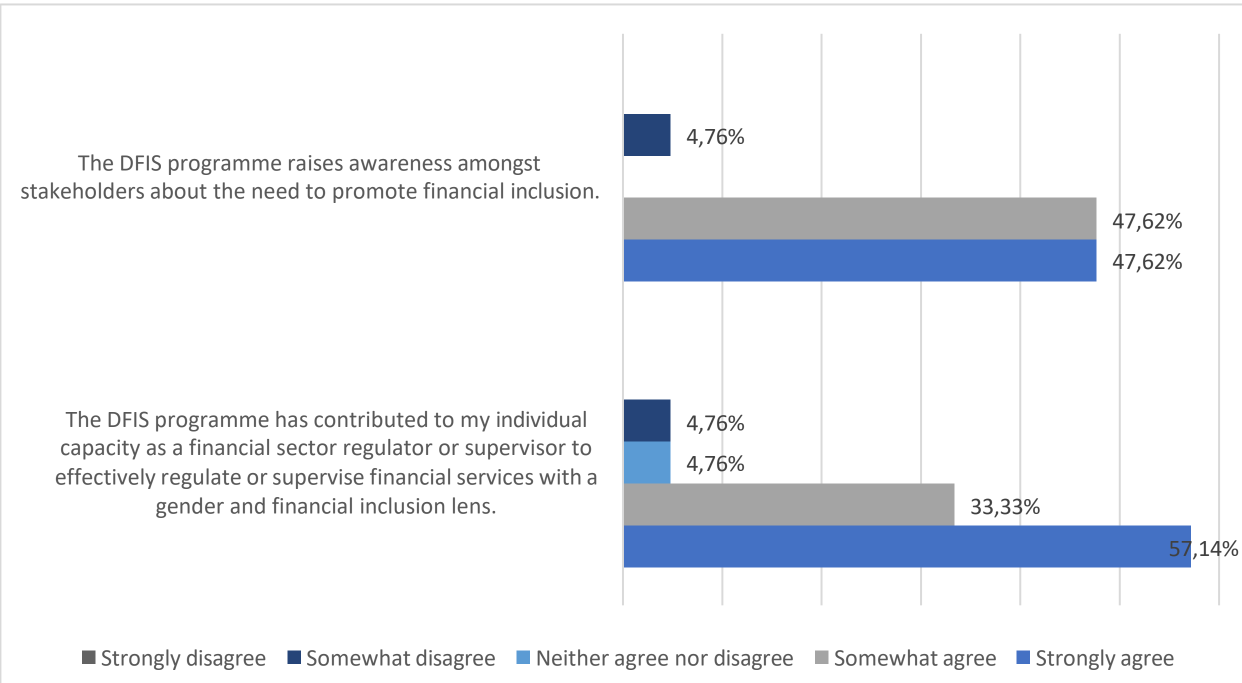
Even though some of the analyses that follow may fall out of scope of the current DFIS TOC, especially those for IMO3: Enhanced regulatory harmonisation among different jurisdictions and bodies, findings are still relevant with respect to most of the current outcomes.

3.2.1. Intermediate Outcomes

IMO1. Enhanced capacity of financial sector regulators and supervisors to effectively regulate and supervise financial services with a gender and financial inclusion lens.

There is evidence that the DFIS programme contributes to increasing the individual capacities of participating regulators and supervisors from the financial, insurance, and pensions sectors. This was further confirmed by survey results, showing that 90% of participants agree that the programme contributes to enhanced capacities, as seen in Figure 9 below. Furthermore, survey data also show that 95% agree that the DFIS programme raises awareness amongst stakeholders about the need to promote financial inclusion. Alumni declared that the DFIS course has helped them to gain a better understanding of fundamental concepts that are relevant for the present and future of the regulatory space. A few alumni recognised that the course introduced them to topics they hadn't encountered before and that the DFIS programme provided them with a solid foundation on key concepts.

Figure 9 - Enhanced capacity to effectively regulate and supervise financial services with a gender and financial inclusion lens.



Moreover, since innovation and developments tend to change faster than regulations, **the DFIS programme helped regulators to "catch up" or stay updated with a range of issues**. Alumni also highlighted that the programme showed them **the importance of being flexible and creating enabling environments to embrace innovation.** For example, by expanding regulations to include new players such as FinTech's. Some of the more common topics mentioned were open banking, e-money and Central Bank Digital Currency (CBDC), fintech regulation and consumer protection. Overall, the DFIS programme has facilitated their role because they can now analyse their tasks from various perspectives and incorporate some of the ideas they have learned into their work.

Some alumni mentioned that as a result of the courses, they now feel more confident to initiate or participate in discussions or in new projects because they feel their contribution is now more meaningful. At least two interviewees commented that the programme also provided them with knowledge that will come in handy for the future. An alumnus from Tunisia explained that the course introduced them to the supervision of digital financial networks, which do not exist in his country yet. Still, they are sure they will use this knowledge in the future, when establishing legal mechanisms and new procedures to implement a new system for supervising digital financial inclusion in the insurance sector.

A few alumni pointed out how **the DFIS courses provided a clear overview of what financial inclusion means and how it can be done.** They mentioned that they are more aware of the needs of marginalized groups, including the youth, people working in the informal sector (unbanked), rural communities, and women. For example, they mentioned that a structural factor affecting digital financial inclusion is the low connectivity and limited coverage of networks in rural and remote areas. Others mentioned that they now understand how regulation and supervision can move forward the financial inclusion agenda and identify some actions to take. As such, the DFIS courses have contributed to expanding the financial inclusion lens they use for their work. An enabling factor is the fact that DFIS focus on financial inclusion matches the reality of most of the countries. Also, that the use of technology and digital solutions to foster financial inclusion has been part to some extent of the political agenda and the global direction of economies and markets.

Evidence suggests that **gender considerations are more challenging to include in regulatory and supervision work.** Survey results show that 85% of participants agree to some extent that the DFIS programme promotes the use of a gender lens when developing regulation or public policy. In Malawi, for example, peer discussions and collaboration during the programme contributed to the drafting process of a guideline on gender inclusive finance (to be published soon). It is important to note, however, that less than half of the interviewees mentioned gender considerations as a takeaway from the course. One of the main factors is that most of the existing regulations and supervision guidelines under which alumni operate do not address these issues and, as such, appropriation and application of such knowledge in their supervision functions are more difficult. Some of the structural barriers to integrating a gender lens relate to the lack of reliable disaggregated data for regulation development and supervision functions, cultural practices and beliefs that prevent women from accessing the financial sector, and limited capacities of the central banks and governments to address such issues.

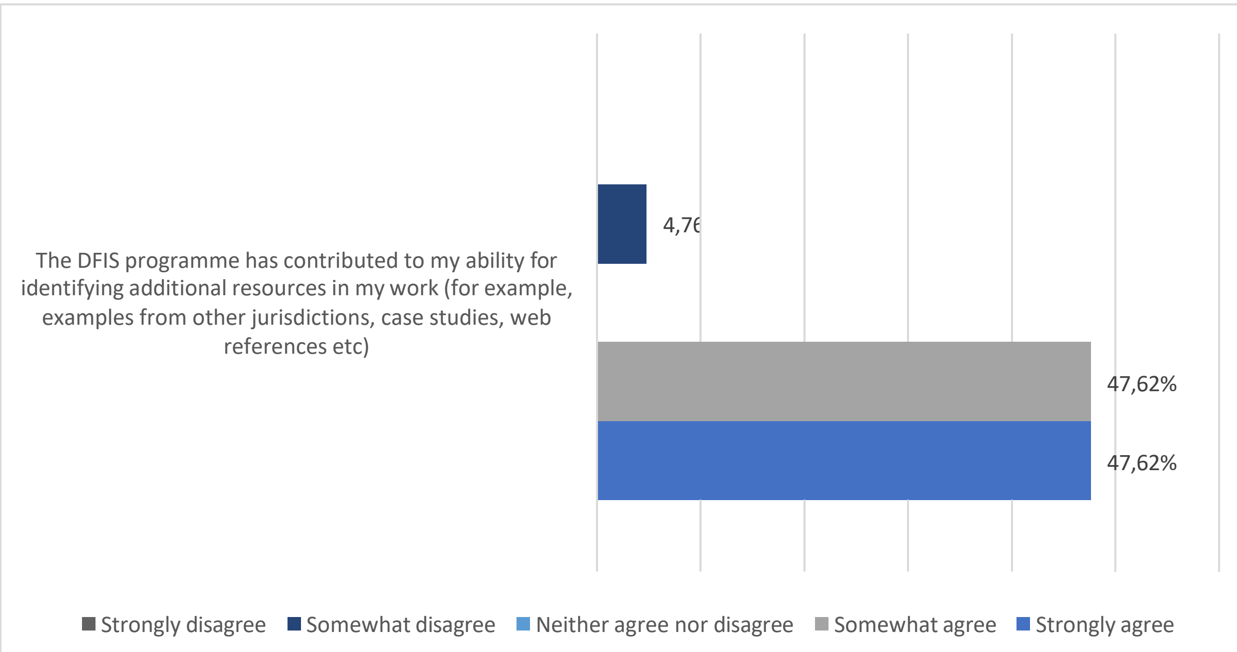
The DFIS courses also allowed students to better identify and understand which factors can influence their work as regulators and supervisors. A key factor is weak data quality and accuracy and limited quality assurance during monitoring and reporting, which form the basis for supervision.

IMO2. Enhanced organisational resource awareness and utilisation.

Evidence suggests that the DFIS course contributes to regulators and supervisors' awareness and use of resources within their organisations, especially for identifying and accessing evidence, and applying new methodologies in their work. From the survey, 95% of

DFIS participants agree that the DFIS programme has contributed to their ability to identify additional resources in their work, such as examples from other jurisdictions, case studies, and references, as seen in Figure 10 below.

Figure 10 - Enhanced organisational resource awareness and utilisation.



Resource awareness has increased, as alumni reported a clearer understanding of the type of evidence they need to look for, relevance of the source, and knowing where to look for it. The most cited source of evidence and resources among DFIS alumni is CGAP. Several alumni reported that they now consult its material on a regular basis, have incorporated some of their tools into their work practices, for example when analysing reports. Alumni from two different countries have explained that their institutions now have a direct relationship with CGAP and have consulted with them on specific topics.

The DFIS programme also assisted various alumni in assessing and managing risks. The programme provided conceptual resources to identify and understand different types of risks, such as those associated to money laundering and data privacy, and the importance and need to address them through regulation. The programme has also provided tools to assess the potential effects of regulations and develop more solid and effective guidelines. For example, alumni from Ethiopia, Trinidad and Tobago, and Zambia expressed they are now using the Regulatory Impact Assessment tool to review drafts and regulations. One of them even mentioned that before the DFIS programme, they had to do a lot of "guesswork" about the effects of policy and regulations. Alumni from Brazil and Malawi mentioned that the course brought the use of regulatory sandboxes to their attention, as a measure to understand effects and consequences of regulation in a controlled environment. Overall, being aware of the need for risk management is also related to the efficient use of organisational resources.

Evidence also points to other relevant tools that DFIS alumni have accessed and used from the programme. Some interviews revealed that **alumni are now more aware of the importance of the data and evidence for supervision and how to properly use it.** For example, one alumnus mentioned better understanding of the data and feeling more confident in developing proper indicators for monitoring. Another person mentioned increased understanding regarding the importance of data analysis and having clear baselines during the process of formulating policy or regulation. Additionally, a participant highlighted the survey methods learned during the course as a key takeaway. Other alumni have applied tools for assessing supervised entities in areas such as consumer protection and disclosure compliance, aiming to improve data accuracy and quality. Others appreciated the new methodologies and tools learned, although they haven't been able to use them in their supervisory or regulator functions. A reason that explains it is that their organisations already have relevant and useful tools, and there is no need to change them. Identifying and using a mix of these resources has contributed to the development of regulations.

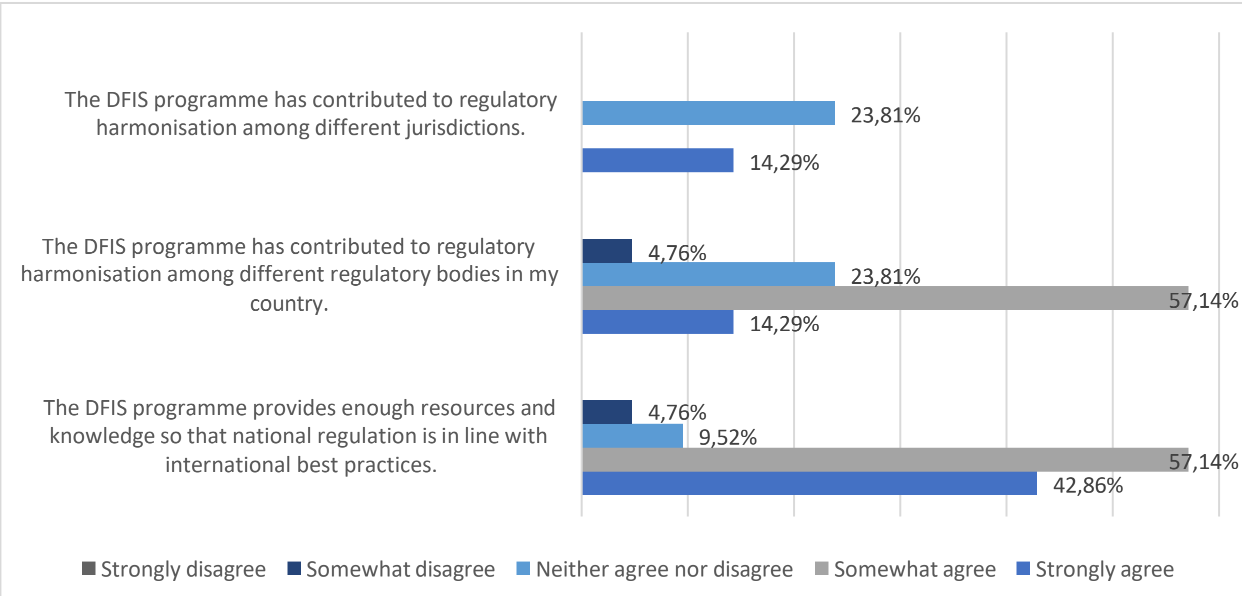
Not all interviewees were able to contribute to changes in this area. Some of them pointed out that they were not in a decision-making position to influence the use of organisational resources, while others cited the lengthy bureaucratic processes and requirements to propose and implement new approaches. A couple of interviewees also commented that there were limited opportunities to scale change beyond their desk. According to them, since only a few people have taken the DFIS course within the organisation, there is not enough critical mass to produce a change in the use of resources.

IMO3. Enhanced regulatory harmonisation among different jurisdictions and regulatory bodies.

Evidence suggests that the DFIS programme contributes to regulatory harmonisation through the promotion of best practices and international standards and collaboration and exchange in the course and the CoPs. Despite these efforts, this does not yet seem to translate into the alignment of supervisory practices and regulations across different countries. Some of the issues preventing further coordination and harmonisation include limited opportunities to collaborate, limited capacities (time and resources) or limited autonomy for decision-making to promote such harmonisation. Although there are some efforts at the regional level mentioned by alumni, they recognised it cannot be linked or related to DFIS.

The DFIS programme promotes a more coherent and consistent regulatory environment both at the national and international level. First, throughout its content, it presents international standards, best practices and lessons learned from different countries. Also, through interaction with professional colleagues from other regions and countries during class discussions. Group projects, when possible, also allow for such exchanges. Multiple alumni agree that this **exposure to best practices has been very beneficial**. It serves as guidance on how processes and systems could be, or how to adapt them to their own country. For example, alumni from Trinidad and Tobago, Albania and Zambia admitted that they have used some knowledge and best practices from the DFIS courses as a “checklist” to structure and include multiple angles into their projects. This was further confirmed by survey results, 90% of participants agreeing that the DFIS programme provides enough resources and knowledge so that national regulation is in line with international best practices, as seen in Figure 11 below.

Figure 11 Enhanced harmonisation of regulatory frameworks.



Moreover, the DFIS programme features the Communities of Practice (CoPs) as an additional resource aiming to promote collaboration and networking, even after the course is finished. However, evidence suggests that **CoPs involvement varies greatly among students and is rather moderated.** Several interviewees mentioned that they were not members of the CoPs, nor did they keep in touch with their fellow students once the programme was over. Likewise, only 10% of survey participants have been highly involved in their local CoP. One of the most common challenges expressed is the limitation of opportunities to meaningfully engage with others during the courses, which also affects engagement to the CoP. Also mentioned, was the limited time in regulators and supervisors' agendas, and lack of incentives to participate. One explained that CoPs participation usually comes from self-motivation or personal interest.

Still, **collaboration among students through either class interaction or CoPs involvement has occurred to some extent**. According to survey results, 20% of participants have been highly involved and another 25% have been moderately involved in collaboration or coordination with other supervisors or regulators because they participated in the DFIS programme, the alumni CoPs or the DFAs. They also commented that some of the **tangible results from this collaboration include knowledge sharing and coordination**; one participant even mentioned that collaboration has influenced their work in behavioural scoring in which risk is assessed for individual customers based on their financial history and other relevant information. Likewise, as highlighted by a couple of interviewees, when multiple colleagues from the same organisation take the DFIS course, it facilitates collaboration among them as a result of a shared understanding and knowledge of specific issues. Others commented that hearing other perspectives and experiences allowed for reflection and inspiration on how to act when facing a similar situation and what aspects to be mindful of.

Overall, participants recognised the advantages and benefits of collaborating with other regulatory bodies (cross-sectoral coordination) and exchanging and reaching international agreements aligned to best practices and international standards. A common challenge to effective supervision and regulation is that sometimes policies from different regulating bodies can overlap or even contradict each other. As such, regulated entities and products might face differing requirements. As such, regulatory harmonisation should contribute to greater coordination, and more effective and efficient regulation and supervision. However, they also mentioned that introducing changes to these standards and translating them into national regulation is a lengthy process. Moreover, several interviewees also mentioned that such decisions are beyond the scope of their roles, or are taken at higher hierarchical levels, and so they aren't in a position to contribute to regulatory harmonisation. Although a couple of alumni brought up some efforts for regional harmonisation, for example in Sub-Saharan Africa and the ASEAN, they also recognised that these initiatives have been there for years and cannot be traced back to the DFIS programme.

3.2.2. Long term Outcomes

LTO1. Increased development of regulatory & supervisory frameworks that foster financially inclusive products and services.

Evidence suggests that the DFIS programme contributes to the development of regulatory and supervisory frameworks that foster inclusive financial products and services for example for FinTech's and digital insurance. These alumni recognised that the DFIS programme has been one of several resources they have used to provide input and contribute to these policy developments.

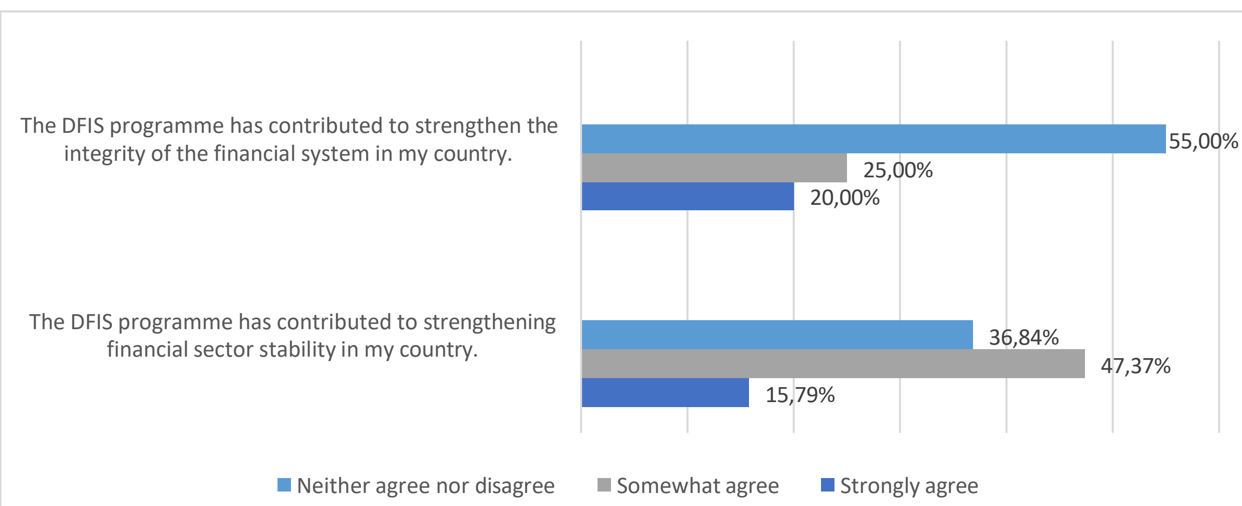
Digital finance and solutions usually move at a faster pace than regulation. As a result, regulatory frameworks might be stifling new products and services aiming at expanding the financial markets and including new segments of the population. It is therefore quite important that new or revised regulation keeps us to the furthest extent possible, fostering an enabling environment that fosters innovation while mitigating risks for the market and consumers. A few DFIS alumni have been involved in refining frameworks to allow and regulate digital products and services. In Zambia, for example, a DFIS alumnus has been participating in the process of revising all the regulations, standards and guidelines related to insurance supervision, after the Insurance Act in 2021. This revision should facilitate the adaptation of a growing number of insurance products that now have a digital component. Another DFIS participant is leading a team creating a baseline of fintech products and services in Malawi, which is a key input for the policy direction on fintech regulation. A third participant contributed to the development of the e-money issuer regulation in Trinidad and Tobago, which resulted in the registration of three money issuers to start operating in that market, thus expanding digital financial services like digital wallets. Another DFIS alumnus in Bangladesh contributed to the development of the guidelines to establish digital banks. Despite the diversity of alumni, all of them agreed that it is not easy to single out what exactly was taken or implemented from the DFIS courses; but having this solid background has contributed to their capacities and ability to influence regulatory frameworks.

Still, the number of DFIS alumni involved in such processes is limited. One of the main reasons is that regulatory and supervisory framework development are influenced by many other factors beyond the influence of the DFIS programme. Several participants stated that they have not had the opportunity to influence the development of such frameworks because it is outside of their role or organisation. They have limited autonomy and authority over what they can do.

LTO2. Enhanced financial sector stability with a focus on gender and financial inclusion.

Evidence suggests that the DFIS programme contributes to the financial sector stability of the countries where alumni are working. Several interviewees agree that DFIS contribution is not direct or explicit, but it still provides guidance on what is expected and what needs to be done to improve financial stability. Overall, DFIS participants indicate that if they are to apply what they have learned, they will be clearer in communicating what is expected from the various entities, strengthening the financial sector. Programme influence is further confirmed by survey results: around 60% of participants agree that the DFIS programme has contributed to strengthening financial sector stability in my country, as illustrated in Figure 12 below.

Figure 12 DF contribution to Financial Sector Stability



Moreover, the **DFIS programme gives a greater understanding on how to identify and mitigate risks affecting stability**. A few alumni have managed to use this knowledge in discussions and projects aiming to protect different stakeholders from the financial sector. For example, an alumnus commented that they apply DFIS knowledge to establish how to best incorporate new players such as FinTech's and ensure that they are securely using digital payment platforms. Likewise, another participant commented that they were involved in the drafting of market conduct directives, aiming to increase consumer protection in Malawi. A few others explained the importance of data availability and accuracy for effective supervision, and the need for data quality assurance. All of these measures aim to foster trust in the financial sector, which is a key factor for the stability of the financial sector.

Another aspect discussed by the DFIS alumni is **the challenge of striking a balance between financial stability and financial inclusion.** Regulations and policies are cautious about the implications of innovation and reduced access barriers in terms of increased risk for the system, the investors and the consumers. To address this issue, some participants are now implementing Regulatory Impact Analysis (RIA) or are also moving towards risk-based supervision frameworks. Interestingly enough, gender considerations were barely mentioned when discussing financial stability. Alumni recognised that as individuals it is not easy to scale up their knowledge and influence as much, especially with so many variables affecting financial sector stability.

3.3. IIPS

3.3.1. Intermediate Outcomes

IM01. Increased use of inclusive and sustainable digital payment systems by financially excluded/underserved consumers.

Evidence suggests that the IIPS programme contributes to the development and use of inclusive and sustainable products related to instant payment systems, mainly through technical capacity development and increased knowledge. Most of the alumni agreed that the IIPS course and its different specialisation tracks gave them a better understanding of the different components and principles of an instant payment system, which in turn facilitated their professional roles. **Several alumni have been involved or contributed to the development of specific products and systems for which the IIPS training has been relevant.** A few others, although not working directly in payment system development, are still using this knowledge in their job activities related to a broader spectrum of digital finance, for instance as consultants. **Overall, 73% of IIPS survey participants agree that the IIPS programme has contributed to increasing the adoption and use of digital payment systems in their countries.**

Several alumni commented on the structure of the IIPS programme, and how it provides a clear overview of what an inclusive payment system is, the payment processes and its features. Likewise, the programme gives clarity about the different stakeholders involved, provides a variety of models and deepens on the requirements and regulatory conditions for payment systems. Additional course topics such as payment settlements, interoperability, affordability and inclusiveness were highlighted as relevant. Moreover, IIPS contributes to keeping alumni updated about the rapidly evolving digital financial innovations. A few mentioned that it facilitated their professional transition into the payments sector, while others mentioned that it assisted them in their roles by giving them technical abilities and confidence about what needs to be addressed and how to proceed. As expressed by an alumnus: "*it was much simpler after the programme to go through the documents and understand the system and what the bank was required to do*".

"CLIQ is an open system, so anyone can transfer from mobile wallets to bank accounts or vice versa. So, this helps to increase the usage of digital payments because of the system's interoperability and its model without fees. That's something I think helped customers to increase its use."

IIPS Alumnus, Jordan

A majority of alumni agree that they are **still using some of the concepts learned during the IIPS programme.** Almost half of the survey respondents confirmed they have been involved in the development or improvement of inclusive digital payment products and services. Such progresses have been made in projects related to mobile money, peer-to-peer payment services, fintech ecosystems, and mobile wallets. Contributions from alumni varied depending on their role and country, but some of them have been leading the design, development and implementation of new payment systems and payment getaways. For example, an interviewee from Jordan reported that he and other IIPS alumni were leading the development, testing and support of a new payment system named CliQ. During this process, they used knowledge learned from the course on issues like interoperability and fee modelling. Another alumnus from Ethiopia informed that they have been leading a project developing a payment suit with multiple use cases. This digital system, based on the Smart Vista platform is still in the testing phase. A third participant in Uganda supported the development of the government's electronic payment gateway and is currently working on its second phase, aimed at establishing a universal payment system (UPS). All of them agree that valuable insights and ideas were picked from the IIPS courses.

Several alumni recognised that the **adoption and adaptation of new digital payment systems may foster inclusion at two different levels. First, it allows new players into the payment sector beyond banks and traditional actors**. So, small financial providers or nontraditional payment service providers can offer a new range of services and products. Ensuring interoperability of systems contributes to the integration of such players. **Second, by reaching excluded and underserved groups that were not part of the financial system before.** Various interviewees mentioned that these systems target people who live in rural areas, informal workers, and small businesses, and are designed to cater to their needs. For example, in the case of Uganda, the launch of the electronic payment getaway during the COVID-19 pandemic period allowed people who couldn't reach ATMs and banks to still pay for government services. Moreover, the gateway was supported by the Unstructured Supplementary Service Data technology (USSD), which permitted the completion of payments from feature phones and with a reduced number of steps. A similar application of the USSD was implemented in Nigeria.

IM02. Increased policy development and regulation related to IIP systems.

Evidence suggests that the IIPS programme contributes to policy and regulation development of payment systems through capacity building of payment professionals. A few IIPS alumni have confirmed they have provided inputs and feedback for drafts given their role as industry experts or consultants. They recognised that IIPS knowledge is one of the resources that has provided them with a deep understanding and strong technical skills to meaningfully engage in this process. Still, according to survey results, although 66% of participants agree that the IIPS programme has contributed to policy development related to payment systems in their countries, only 20% of participants have been directly involved in these processes. This limited contribution is mostly due to a lack of interaction and opportunities with regulators and supervisors.

> *"The National Payment System Act was seeking to harmonize our ecosystem for payments because previously we had some fragmentation. The banks were being regulated by the Central Bank, while the fintechs were regulated partly by Uganda Communications Commission, and partly by NITA. But this [Act] is to harmonize and then create some joint regulation of the financial sector."*
>
> *IIPS Alumnus, Uganda.*

Overall, alumni who have participated in policy development have done so at different levels. Some of them reviewed and provided **inputs to national strategies and guidelines** such as the Ghana Digital Financial Service policy, which is a roadmap to grow adoption of digital financial services, including payment services, and others contributed to the National Bank of Ethiopia Digital Strategies. In Uganda, an IIPS alumnus has been involved in multiple policy developments related to payment systems. They provided technical guidance and revised the drafts of the National Payment System Act of 2020, as well as its guidelines for licensing payment service providers, payment instrument providers and payment system owners. They have also been involved in ICT policy processes, in which they carried out a regulatory impact assessment. Other alumni have been involved in **regulations of specific processes**. For example, an alumnus from Ethiopia provided technical comments on the payment system operator and the payment instrument operator regulating drafts; while a member from Zambia was part of the team drafting and reviewing e-Money rules that guide participation on the platform. An additional participant confirmed being part of the working group on fintech under the Payment Systems vision 2025 (PSV2025) for the Central Bank of Nigeria. An IIPS alumnus who is an international consultant provided technical assistance to the Central Bank of Uzbekistan on drafting their regulatory framework regarding payment services. As explained by participants: the IIPS course taught them how to structurally analyse the key points that regulators need to keep in mind when dealing with inclusive payment systems.

Moreover, many IIPS alumni, including those who have not yet participated in policy development, mention that they **are able to analyse and discuss the relevance and practicality of existing regulations**. Most of them commented on **the role of regulatory frameworks in fostering an enabling environment that allows new players and promotes the innovation of products and services**. Especially in economies where banks and traditional players have a lot of influence, as has been the case in several African countries. IIPS alumni mentioned how regulation could tailor specific requirements to “outsiders” characteristics, allowing them to participate in payment systems. The regulators also play a central role in bringing together a variety of stakeholders working with them as partners, operating on equal terms to foster interoperability and inclusion. A couple of participants mentioned that there are challenges in levelling the field for all partners. For example, a couple of alumni in Ethiopia mentioned that licensing regulation might be implicitly biased towards state-owned companies. In Ghana, to allow for the development of non-traditional ideas, the government introduced a regulatory sandbox open to the payment sector.

Another key issue highlighted by IIPS alumni is the governance of the infrastructure of payment systems. Overall, there is no conclusive data on how payment systems’ governance should be set up, but some agree it should be a mix of both the private sector and central banks to ensure a financial inclusion perspective. Other policy concerns related to payment systems mentioned by IIPS participants include customer protection, supervision and data quality assurance. In Uganda, there seems to be a challenge to the National Payment System law regarding disruptive technologies: as reported by an IIPS participant, there are now applications for licensing of payment services built on blockchain, but the impact of such technology to the payment landscape wasn’t considered before, which has forced regulators, including an IIPS alumnus, to study and assess its implications.

IM03.Enhanced collaboration among IIP system stakeholders to innovate, develop and implement effective regulation, operation, and technology solutions.

Evidence suggests that the IIPS programme contributes to the enhanced collaboration among IIP stakeholders through the exchange of knowledge, ideas, and good practices during course, CoPs and DFA participation. Still, these **interactions rarely translate into concrete collaboration actions or synergies for cooperation in general.** Some of the issues preventing further coordination include the limited availability and interest of different stakeholders, and reduced interaction with regulators.

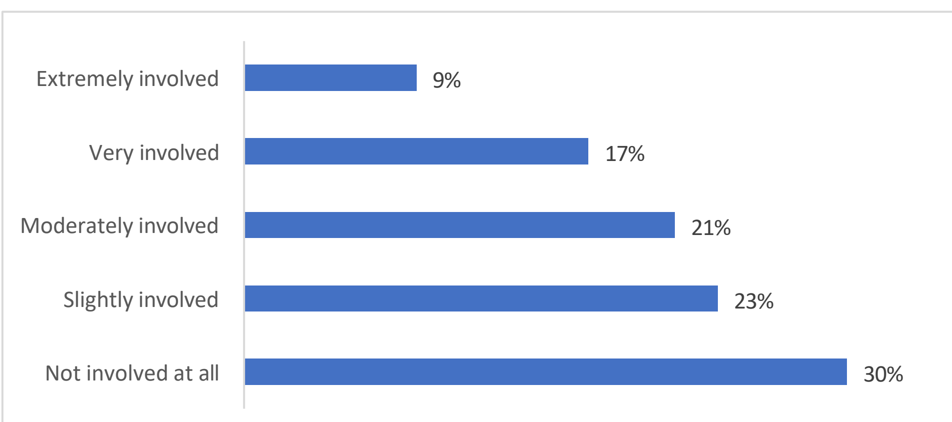
Several interviewees agreed that **the IIPS programme provided a space for interesting exchanges and discussions with colleagues from other countries**. Through class calls and group projects, students were able to interact, jointly analyse case studies and change perspectives about good practices and solutions to common problems. Some also mentioned that **these encounters sparked conversations about different scenarios and alternative use cases, such exposure allowed for capacity development**. A couple of participants mentioned that the Indian experience on UPSs has inspired and guided developments in other countries. Yet, such interactions rarely continue after the end of the programme.

A few exceptions were noted, specifically among colleagues from the same institution who took the IIPS courses. In Jordan, colleagues from JoPaCC have taken the IIPS courses at some point, collaboration has led to improved results in the development of CliQ because it is founded in shared knowledge and understanding of key issues. A similar case was reported in the case of Ethiopia's National Switch, where various IIPS colleagues were able to have more informed discussions. As such, signing up to the course as institutional groups has facilitated collaboration among coworkers.

Overall, **participants recognised the need for more collaboration and cooperation** among payment stakeholders to improve interoperability, efficiency and innovation. As shown in Figure 13 below, only 26% of IIPS survey respondents have been highly involved in collaboration and coordination as a result of the IIPS programme, the CoPs or the DFA. From those who have collaborated, work is centred around interoperability, like the case of alumni in Rwanda and Zambia. In Nigeria, the IIPS programme contributed to improve collaboration with regards to USSD, a unified USSD regime, and participation at the ReguVators Forum.

According to a few participants, **one of the hindering factors for further collaboration is the limited interaction in the online platform, preventing them from forming strong relationships that could continue after the programme is over.** Once they are finished, some participants don't see value in continuing their relations with international peers. Others commented that even when relationships have been established, competing priorities and lack of time do not allow them to undertake meaningful interactions. Also, an alumnus highlighted that regulators rarely interact with industry players, further hindering collaboration. However, these issues vary from one country to another.

Figure 13 IIPS participant involvement in collaboration and coordination.



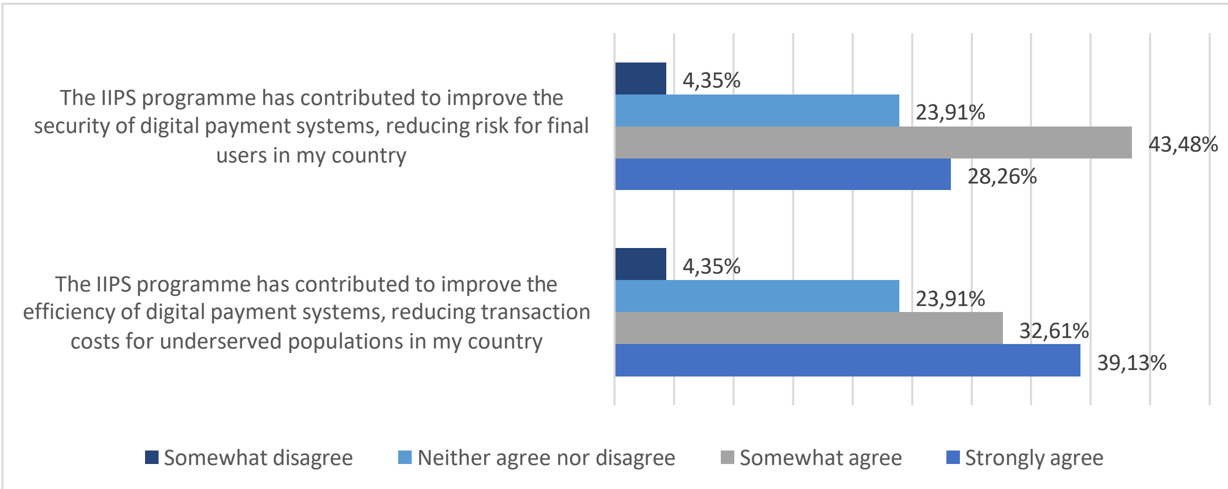
3.3.2. Long term Outcomes

LT01. Improved efficiency and security of digital payment systems to reduce transaction costs and risks for financially excluded/underserved consumers.

Evidence suggests that the IIPS programme contributes to the efficiency and security of digital payment systems by enhancing the capacities of IIPS alumni to incorporate interoperability or efficiency features in new and existing services and products; also, to influence regulation conducive to reduced transaction costs. The various alumni that have participated in these advancements recognised that the IIPS programme was one of the sources for their contributions.

According to the survey results, 72% of IIPS participants agree to some extent **that the programme has contributed to improving the efficiency of digital payment systems, reducing transaction costs** for underserved populations in their country, see Figure 14 below. This was further confirmed by interviews that highlighted that IIPS paid special attention to the links between inclusion, affordability and interoperability. Alumni agreed that this knowledge provided them with insights and ideas to foster interoperability, thereby reducing costs of operation, and benefiting both payment system providers and consumers. For example, Jordan's CliQ is run in the same ISO as its precursor JoMoPay, in order to ensure interoperability among them. Moreover, at the moment CliQ does not charge any fees, but the project team is now analysing the different fee models, some learned through the IIPS programme, in order to establish a transaction fee that is aligned with the needs of underserved costumers. Likewise, in the case of Ghana, an alumnus pointed out that from the understanding they acquired through the programme, they were able to figure out an indirect way to integrate RexPay to card schemes and significantly reduce the overhead cost. The updated version of this product is being developed and will soon be relaunched with a much lower cost than what was initially proposed. Additionally, Uganda is now moving towards a national switch system, which only charges a small fee compared to the real time gross settlement system (RTGS). As a result, charges for payment transactions will be reduced. IIPS participants highlighted that the use of digital solutions had expanded access to the financial sector for historically excluded groups. An alumnus explained that these products do not only aim to reduce nominal fees, but also addresses hidden costs of transactions such as time and opportunity, which is especially relevant in the rural areas.

Figure 14 DF contribution to improved efficiency and security of payment system.



Nonetheless, there are certain challenges to the efficiency and costs of payment systems. One major issue is the regulatory frameworks, which impose requirements and taxes on the use of digital payment services. In countries where the governance of payment systems does not include the views of FinTech's, and small service providers competitive costs are harder to achieve. Tanzania and Ghana provide evidence of advocacy efforts promoted by the DFAs to revisit tax regulations and which have resulted in reduced levies, fostering adoption of digital financial services. Another challenge preventing further efficiency is the gap in technical knowledge and capacities to adapt to the systems, which forces reliance on external experts that increase cost.

Regarding the security of digital payment systems, 71% of IIPS survey respondents agree that the programme has contributed to improving the security of digital payment systems, mitigating risks for final users in their countries. Data show that contributions in this sense are mostly done through awareness efforts that promote further understanding of potential risks like fraud and cybercrime, as well as the corresponding regulatory frameworks to mitigate them. Efforts are also directed towards the promotion of international standards such as ISO 20022, that ensure certain levels of security. An alumnus from Malawi explained that course content was useful in his role as a member of a task force analysing standards compliance for industry players to ensure effective and efficient fund transfer services. This was further confirmed by another IIPS participant, who indicated that there are needs for further regulation, as cyber-scams are on the rise in this country.

A few participants mentioned that **IIPS content was more focused on security from a regulatory and compliancy perspective, and not enough on technological solutions to address such issues**. The only reference made in this regard is the set-up of irrevocable payments to increase security in the CliQ example previously illustrated. Various participants agree that while they are now more aware of the risks, they are still struggling to establish what are the appropriate measures to deal with some of them. Moreover, they agree that such measures should not be limited to their organisations, but rather implemented in a market-wide approach to increase consumer trust. An additional factor hindering the security of digital payments is the low financial literacy levels among excluded groups, which makes them especially vulnerable to crimes. As a result, trust and adoption of such services among this bracket of the population is still hard and an ongoing challenge.

LT02. Increased payment innovation leading to the development of new payment use cases in the digital economy.

Evidence suggests that the IIPS programme contributes to payment innovations in the digital economy. Alumni mention that the solid foundations provided by the programme as well as increased skills and exposure to other experiences have been the main divers for these contributions. This was further confirmed by survey results: although 70% of participants agree to some extent that the IIPS programme has contributed to innovations in payment systems, not all of them have been directly involved. Only around 43% confirmed that they have been part of initiatives or innovations aiming to improve digital payment systems.

Some IIPS alumni reported they have participated in projects and developments that are promoting innovation in their countries. Some initiatives are related to bulk payments, others have to do with request to pay initiatives. Because innovation is context-dependent, what may be a consolidated product like UPS in India may be disruptive in another country. As such, innovations cannot always be compared or categorised. Still, after analysing the data, some trends emerged: evidence shows that payment systems in at least 3 different countries including Tanzania, Uganda and Jordan, have introduced in the last year a feature of QR code payment. Interviewees agree that QR code might open up the space for future use cases. Another trend that is occurring in various countries is related to the efforts to closely collaborate with national citizen identification and registration initiatives. For example, alumni from Ethiopia and Uganda discussed the integration of KYC standards to establish synergies with the **national ID systems**. This is a significant step as part of the population in these countries does not have valid identification, and thus cannot fulfil standard requirements to access the financial market. These initiatives aimed at adapting standards to the needs of the excluded people have a great potential for inclusion in the digital economy.

Nonetheless, alumni also mentioned the relevance of **expanding the approach from only access considerations to extended use concerns**, not only focusing on the number of unique users registered in the payment systems, but also on the number of transactions and uses. Moreover, regulatory frameworks are another key factor driving innovation. Overall, some of the IIPS alumni recognised that innovations are constantly happening both in terms of product development and regulation, many of which cannot be linked to the IIPS programme.

Additional challenges for the advancement of digital payment systems were identified by the programme participants. Slow developing infrastructure (or lack of it) hinder development. Also, as mentioned small financial institutions don’t have the technical requirements or technological capacity to achieve compatibility. Furthermore, because small service providers do not own the technology, the cost of adapting for integration is prohibitively expensive, and interoperability is unattainable. Other interviewees signalled issues surrounding network availability and connectivity, which prevent payment systems from operating properly. Finally, lack of trust amongst final users can hinder the adoption of such products. Since there is limited awareness and literacy on how to access and use these technologies, there is an increased risk of fraud and as a result consumers are cautious.

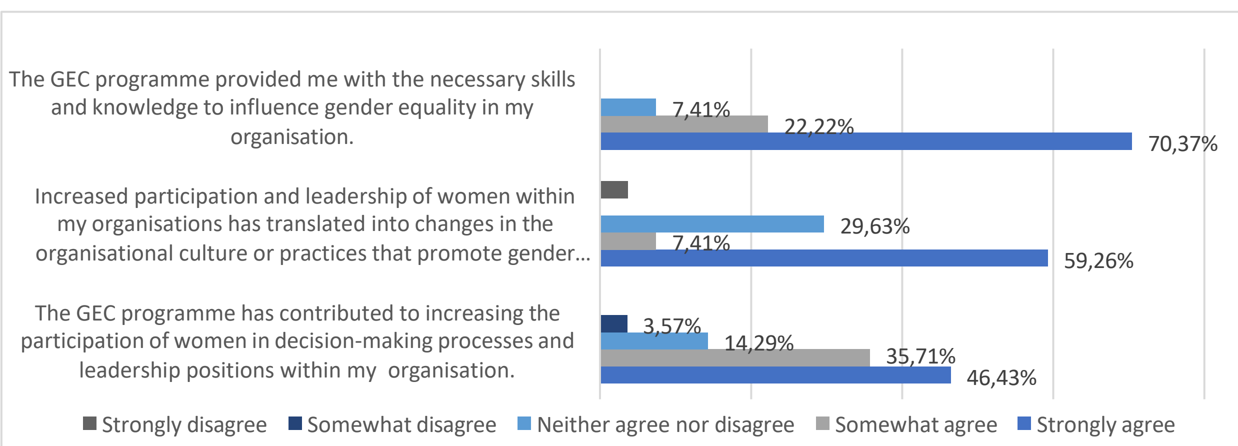
3.4. GEC

3.4.1. Intermediate Outcomes

IM01. Increased participation of women in decision-making processes and leadership positions within participants' organisations.

Evidence shows that **the GEC programme contributes to the promotion and participation of women in organisational contexts**, including increased access to decision-making instances and leadership positions. GEC programmes influence in promoting women's participation is based in its effectiveness in promoting alumni capacity via increased awareness, knowledge and confidence. **Many of the consulted alumni consider themselves gender champions in their organisations or active participants in Gender Equality (GE) initiatives**. Specifically, 68% of the GEC survey respondents indicated that they had been involved in GE initiatives in their organisations. Alumni have been able to raise awareness in the workplace, disseminate knowledge, influence policy, better negotiate and drive change. Survey results are consistent with this view. Figure 15 below shows that amongst the GEC respondents there is agreement that the programme is effective in furthering women's participation (82%), and that the programme provides skills and knowledge to influence GE in the organisation (93%).

Figure 15 GEC Increased participation.



> *"I am in different (organisational) fora where I need to contribute in terms of looking at the perspectives of men and women, how they contribute to the environment, to decision-making, economic empowerment at different levels, I see that I'm able to now look at it better because of the knowledge that I acquired."*
>
> *GEC Alumnus, Uganda.*

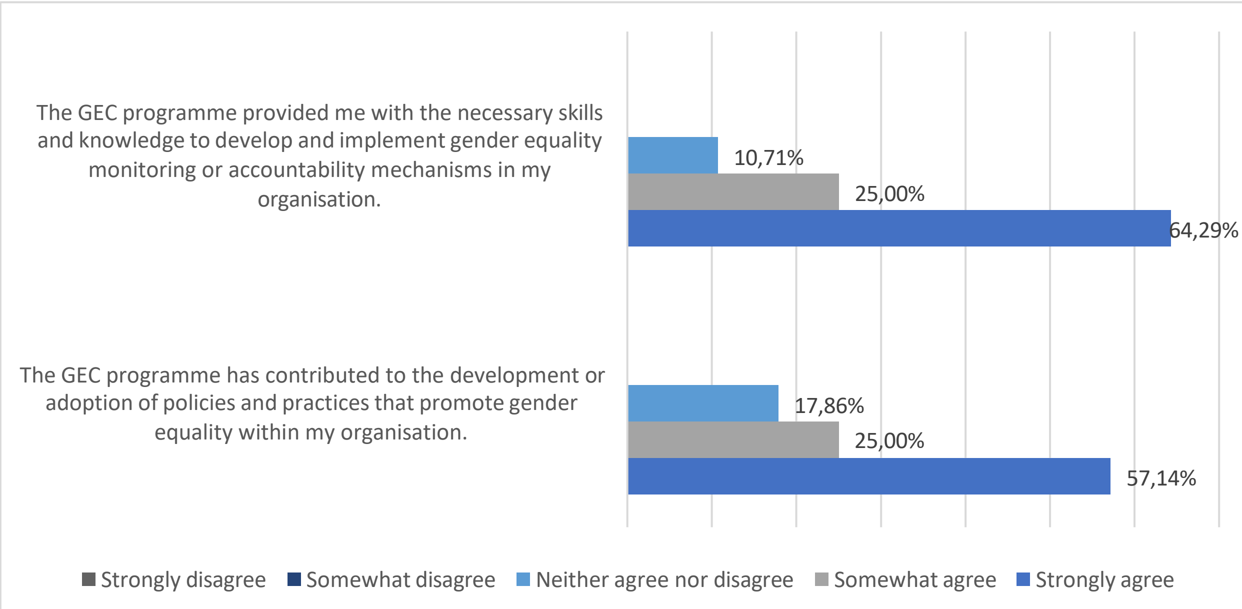
Several results emanating from course or CoP participation were highlighted by the alumni as important for increasing women's participation in decision-making. **The GEC programme is appreciated for its effectiveness in raising awareness** on issues such as unconscious bias, women's own biases, and structural factors that drive inequality. "Eye-opener" was a term commonly used to describe the course. **An increase in negotiation skills and confidence grounded on knowledge and deeper understanding were also mentioned as key results** conducive to drive change, providing tools to manage change and resistance. This is linked to a greater influence of women in decision-making, resulting in new or updated HR policies that seek to balance house and work duties such as childcare and nursing facilities, flexible working schedules and extended parental leaves.

Additionally, interviews revealed that **increased recruitment of women and more access to professional development opportunities seem to be the most common initiatives to increase female participation**, this results in increased female quotas in the workplace, although mostly in low and middle hierarchical positions. It is important to note that some women have gained access to jobs that are traditionally male dominated.

IM02. Increased development and adoption of policies and practices that promote gender equality within organisations.

Evidence indicates that **the GEC programme influences the development of policies or practices that promote GE in the alumni's organisations. GEC influence is recognised in capacities developed through course and CoPs participation, conducive to greater and more effective advocacy and improved change management skills.** Results related to increased GE policies and practices include changes in recruitment, capacity development and wellbeing HR policies, data management practices, project management practices and the development of formal and informal GE monitoring mechanisms. GEC outcomes include increased capacity to advocate for GE, a deeper understanding of GE issues, increased skills to conduct GE-related assessments, increased knowledge of change management, and, in some cases, the use of capstone projects to advance GE. Survey results show that there is agreement amongst GEC participants on recognising that the programme has contributed to the development or adoption of policies and practices that promote gender equality in their organisations (82%), and that it provided the necessary skills and knowledge to develop monitoring or accountability GE mechanisms (89%), as shown in Figure 16 below. It should be noted that a couple of interviewees in this evaluation did not identify any clear connections between course participation and increased GE policies or practices in their organisations.

Figure 16 Increased organisational GE policies and practices.



Increased and strengthened advocacy for GE is a prominent outcome emanating from GEC programme participation and closely related to influencing policy and practice. Most of the interviewees indicated that they are active in advocating for GE and some stressed that capacity development in the form of improved knowledge, skills and confidence is key for these efforts to result in changes in policy or practice. Seventy-three percent of all surveyed programme participants reported advocating for GE in their organisations for changes related to increased female recruitment and promotion, gender sensitive procurement, the creation of more enabling environments for women, and the development and implementation of an organisational gender policy.

Data also show that change management with the active engagement of the organisations' directives is quite important to model practices or influence policy development. Some alumni stressed that the advancement of GE in organisations requires a step-by-step approach supported by the senior leadership in order to mitigate resistance. Capstone projects, although not frequently mentioned, were also appreciated by some alumni as effective in driving change.

Alumni remarked that **GE policies are particularly effective in increasing the participation of women in the workplace**, mainly through gender sensible recruiting, but also by improving work-life balance conditions. The programme has also influenced changes in practices in project design and implementation, strengthening the incorporation of GE criteria.

> *"…it's called Gulu Uganda Country Dairy Farm…most of the top management are now girls whom they have trained but also retained to employ…they now trust them to lead the process of training other people and manage the firm all the way up to even artificial insemination and other skills that are provided."*
>
> *GEC Alumni. Uganda.*

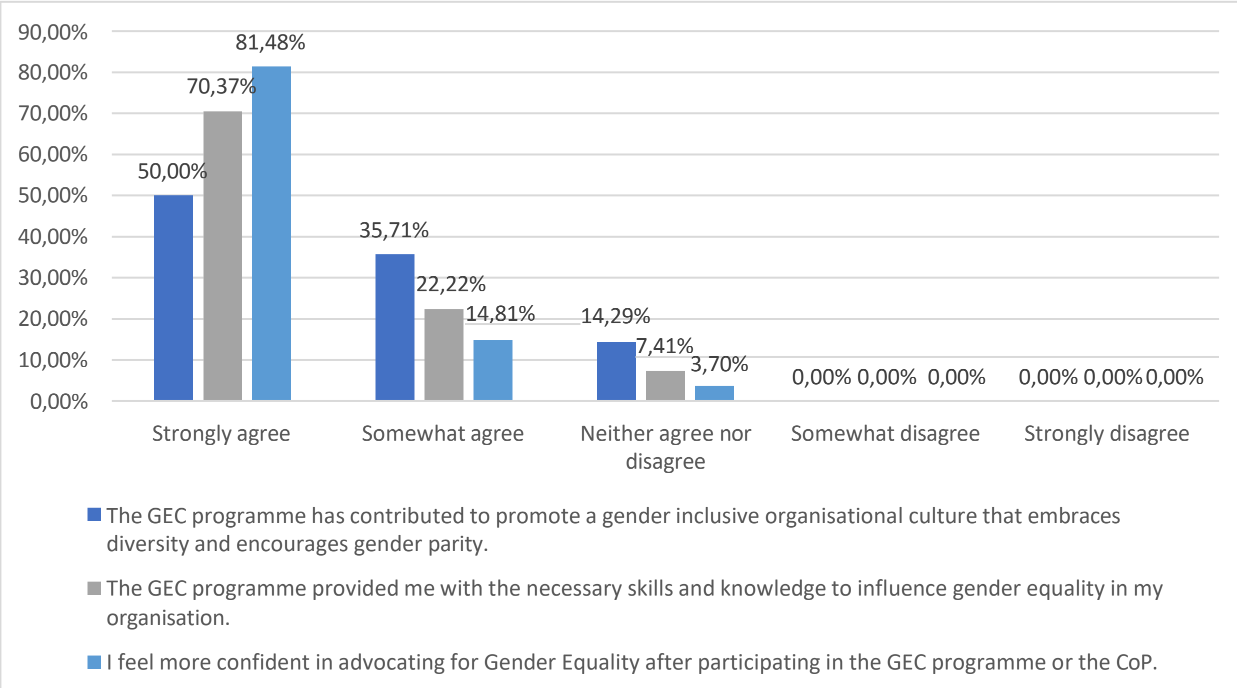
Some alumni also indicated that **organisational policies or practices are influential in the dissemination of knowledge related to GE.** Training related to GE and the facilitation of spaces for discussion and consultation are examples of this. These efforts bring a deeper understanding on GE issues, preventing oversimplification and providing opportunities to further shape practices, ideate solutions to concrete GE challenges and create formal and informal GE monitoring mechanisms. Male participation in these knowledge sharing activities was highlighted by some alumni.

3.4.2. Long term Outcomes

LTO1. Improved gender inclusive organisational culture that embraces diversity and encourages gender parity.

Evidence suggests that the **GEC programme contributes to fostering an improved gender inclusive organisational culture that encourages gender parity in the alumni's organisations**. Nonetheless, evidence also indicates that organisational engagement in other expressions of diversity is limited; **so not much progress has been identified in the inclusion of people with different gender identities or individuals from the LGBT+ population**. Participants highlighted changes towards inclusive practices and policies, improved capacities to analyse gender dynamics, advocacy, open dialogue, collaboration and increased female participation as the main drivers of changes towards a more inclusive culture towards women. Survey results are consistent with interview findings: 86% of participants agree that the GEC programme has contributed to the promotion of a gender inclusive organisational culture that embraces diversity and encourages gender parity; 93% agree that the GEC programme provided them with the necessary skills and knowledge to influence GE in their organisations; and 96% feel more confident in advocating for Gender Equality after participating in the GEC programme or the CoP, as seen in Figure 17 below.

Figure 17 Inclusive organisational culture.



According to consulted alumni, **GEC influence in organisational culture changes is most evident in the incorporation of GE considerations into organisational practices and policies** either oriented to **building internal capacity in GE** (training, spaces for dialogue and consultation, professional development), **mainstreaming gender in operations**, (gender sensible procurement and budgeting, recruitment) and **service delivery** (communication, and project design and management). Additionally, open dialogue was recognised as a key influence in culture, raising awareness, deepening understanding, facilitating advocacy and enabling collaboration and providing opportunities for identifying challenges and issues, and ideating adequate solutions. Alumni also stressed that increased skills to understand, analyse and assess gender issues is effective in promoting change as it enables evidence-informed, promotes the establishment of formal or informal gender equality monitoring mechanisms.

Data suggests that **women's self-awareness is highly influential in promoting women's inclusion** and that a change in attitudes is an ongoing and high-priority task in many countries. Alumni indicated that improved self-awareness, increased knowledge on GE trends and issues, exposure to positive female role models and increased understanding of legal frameworks that promote women's rights are effective drivers to influence attitudes.

The **engagement of the organisation's leadership in GE efforts was also identified as an important enabler** for women's participation given its capability for effectively introducing gender inclusive policies and shaping practices, especially in human resources. It is worth noting that DF targeted organisation's higher management for enrolment in the GEC programme, albeit with limited success.

Cultural norms deeply rooted in cultural tradition pose the most significant challenge against advancing GE in organisations, as shown by the evidence. These norms define gender roles and stereotypes (e.g. "women should be in the kitchen") that are difficult to change; women may be considered unskilled or less able, or outsiders in male dominated sectors. Some interviewees indicated that in many instances women perpetuate these exclusionary norms. Also associated to culturally conditioned obstacles against increased participation is the uneven distribution of household responsibilities, which poses important and uneven burdens for women challenging them in balancing house and work duties, this is exacerbated by the lack of adequate organisational policies that provide flexibility to attend to child-bearing responsibilities. The impossibility of balancing house and work duties results in many women abandoning their jobs. Finally, cultural tradition was recognised as the main obstacle against the promotion of individuals from LGBT+ communities and persons with different gender identities, even influencing legal frameworks as in the case of Uganda.

3.5. Cross-cutting findings

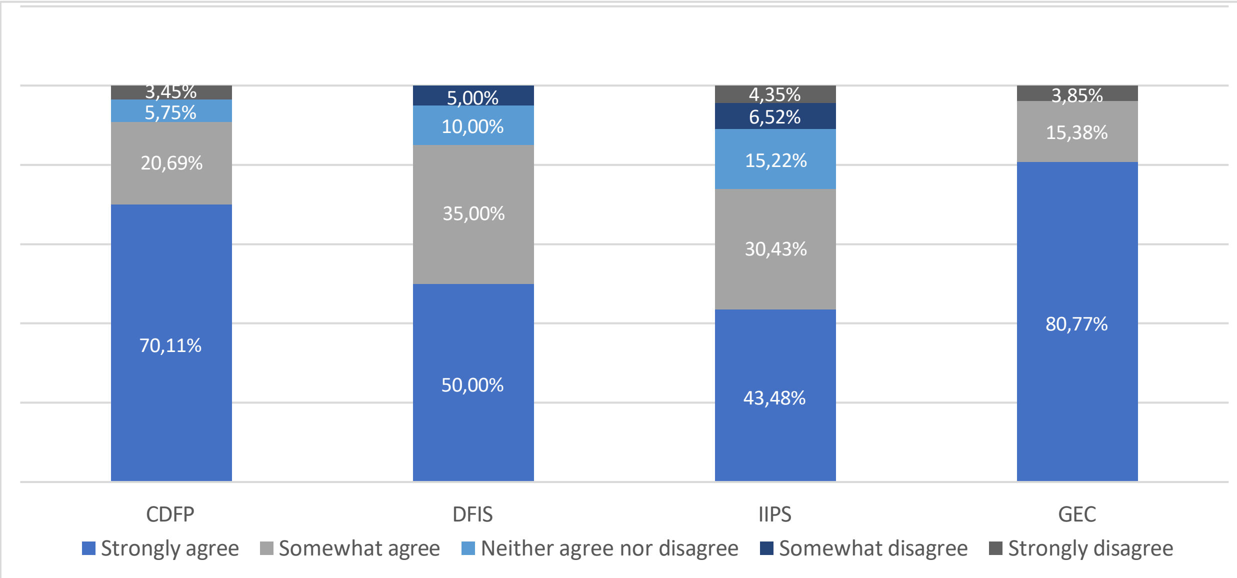
3.5.1. Professional development

DFI aims to provide opportunities for continuous professional development and cooperation for students and alumni, as part of its comprehensive approach to capacity building. This means upskilling does not only happen during the online classes but also through other forms of engagement such as the communities of practice, webinars and the knowledge bank.

As thoroughly discussed before, participants benefit from the programmes by improving their skill sets on issues related to digital finance. Most of the participants highlighted that these programmes complemented their existing knowledge or filled specific gaps through training. A few participants mentioned that they came from different backgrounds and the DFI courses provided them with a solid foundation to continue learning. Overall, alumni agree that these trainings facilitated task completion and gave them more confidence in their jobs. Some commented that they have recommended the programmes to their colleagues to foster collaboration and organisational development.

> "*It is a 100% useful what I learned from this course. It has made my role simpler, and I recommended to all my colleagues to attend it.*"
>
> DFI Alumnus, Ethiopia

Figure 18 DF contribution to Professional Development



Overall, several interviewees from the four programmes agreed that their participation in professional development activities helped them advance professionally. For some, it was one of multiple contributing factors to expanding their roles and responsibilities in their current jobs. A few alumni explained that having a technical certification is an advantage in the digital financial sector, especially in Africa. Evidence supporting DF programme influence in career mobility is very limited because most of the interviewees have not changed positions since taking the course or not necessarily work in areas directly related to course contents. This is further confirmed by survey results. As shown in Figure 18 above, at least 86%[4] of students in all programmes agree that the DFI programme has contributed to their professional development. The programmes with the highest results are CDFP and GEC.

3.5.2. CoPs, DFA's and the League

There is substantial evidence to assert that CoPs and DFA's are relevant and effective in prompting alumni and other participants into actively contributing to the advancement of digital financial and gender inclusion though increased awareness, discussion, ideation, collaboration, networking and advocacy. DF's approach of including CoPs creation or sign up for alumni as an immediate result in all programmes seems well suited and effective in furthering course participation results and promoting the achievement of intended outcomes.

Many alumni from all programmes indicated being active in CoPs and DFAs and highlighted that they are effective resources to influence change at industry, government and organisational

[4] This figure refers to the average between the four programmes, taking into consideration the categories "Strongly agree" and "Somewhat agree".

levels. Alumni highlighted exposure to different experiences, the diversity of participants, in-depth discussion about specific themes, access to subject matter experts and industry players, networking for professional development, and peer support as the most relevant take aways. Many alumni also emphasised the importance of using instant messaging (WhatsApp) to keep CoPs active, not only by allowing easy communication, but also as a platform for sharing content. Collaboration and discussion also seem to predominantly happen within CoPs and DFA's rather than across them, but this does not hinder exposure to relevant international experiences. Evidence to support influence of the CoPs or Leagues advancing career paths, for example through the access to jobs or consultancy opportunities, is scarce.

Still, relevance of CoPs does not appear to be even among all programmes. CDFP CoPs and DFAs are highly regarded by programme alumni for their effectiveness in facilitating meaningful cross-sectoral collaboration that leads to increased influence on public and private players related to digital financial industry as well as to more innovation. Survey results show that 42% of CDFP respondents who live in countries where there is a CoP or DFA are highly involved in their activities, 46% are moderately or slightly involved and 3% are not involved at all. Some alumni remark that the presence of policy makers and other public sector players is key in raising the effectiveness of advocacy efforts but that this sometimes poses challenges related to conflict of interest. In Ghana for instance, the DFA is proactive in holding meetings with representatives from the Central Bank, the Ministry of Finance, and fintech associations who are not necessarily members but who nonetheless participate (and are influenced by) the discussions held in these meetings, an example of which was the revision of the mobile money tax policy. Data also show that CDFP CoPs and DFAs are important means of staying up to date on digital financial issues, especially through the availability of resources which have also assisted in research for papers and publications made by participants. Many CDFP interviewees were keen on the fact that the transition from CoPs to formally registered DFAs is a strategic priority in terms of positioning themselves as key national players of the digital financial industry, increasing their probabilities of influencing regulation and engaging with industry players.

Data suggests that IIPS alumni engagement in CoPs or DFAs is less than that of CDFP alumni: 34% of IIPS survey respondents indicated to be highly involved in CoPs or DFAs, 23% to be moderately involved and 13% not to be involved at all. Low IIPS engagement is partly explained by the fact that the programme does not have CoPs of its own, alumni do not participate while taking the course but are invited to join after completion. The DFIS CoPs appear to be the least active of all. According to survey results, less than 10% of DFIS respondents are highly involved in their country's CoPs, while 62% are moderately or slightly involved, and 14% are not involved at all. It should be noted, however, that active CoPs members are moderately (35%) or highly (20%) active in collaboration, although not always through the CoPs. Many of the DFIS interviewees say they do not actively participate in the CoPs, though some say they would like to. Alumni indicate that the main reasons for not participating in a CoP are lack of CoP activity, unresponsive members to queries via WhatsApp, a lack of time, or being unaware of the CoPs existence. Interviewees suggest opening regional chapters to DFIS CoPs as well as specific thematic working groups (e.g. consumer protection) as possible strategies to increase activity and engagement. It is important to also note that DFIS CoPs are not facilitated by DFI after course completion, which could also explain low DFIS CoPs activity.

> *"I'm able to refer some of the challenging questions to my other colleagues from different organisations that I know are equally experts at this and then they that they share.*
>
> *GEC Alumnus, Uganda.*

In the GEC programme, alumni remarked how CoP members are active in promoting GE in their organisations. Survey results indicate that at least 53% of GEC respondents are highly involved in CoPs while 43% are moderately or slightly involved; 4% are not involved at all. Alumni stated that CoPs are a good space to bring specific GE challenges and brainstorm tailored solutions, as well as discuss capstone projects. An alumnus from South Africa noted that GEC CoPs are also effective in developing facilitation skills that strengthen awareness and training efforts, which is especially relevant considering that many organisations do not have budgets to bring in GE experts and that they play an important role in increasing the number of gender champions. Some interviewees also share the opinion that CoPs could engage more GEC stakeholders, especially from civil society, to expand the number of gender champions, strengthen CoPs research on GE and increase the opportunities for meaningful collaboration.

Evidence suggests that engagement in the Leagues is less than in CoPs and DFAs. Especially in the League of Gender Equality Changemakers, many GEC programme alumni explained how they occasionally access the League platform on LinkedIn but are not really active in it. Some CDFP alumni, on the other hand, highlight the effectiveness of the League of Digital Financial Professionals in promoting new learning from the experiences of others around the world given the diversity of its members. Alumni indicate that use is mainly limited to accessing relevant knowledge for their industries and their professional development, and also to information related to events and webinars of their interest.

While the majority of interviewees appear satisfied with the CoPs and DFAs, indicating that they are motivated to participate, some indicated that they are not active members and have mixed views about the benefits of participation. Some suggest that CoPs could improve their performance in terms of event planning and the implementation of collaborative initiatives and recommendations, particularly those aimed at advocating for policy development. Some alumni also mentioned a lack of follow-through from government officials on recommendations resulting from discussions.

Data show that increased engagement in the CoPs is challenged by lack of time to participate, meetings often compete with other priorities and alumni find it challenging to attend, this challenge seems more acute for physical meetings. Another challenge is the continuity and frequency of CoP meetings, some alumni noted that CoP activity slows down after programme completion, in the case of GEC, LGBT+ issues were mentioned as a factor challenging CoPs engagement due to cultural and sometimes legal factors. Alumni recommend fostering more physical meetings and international gatherings as an effective means to further consolidate engagement and boost collaboration, some participants mentioned being willing to share some of the costs.

Given their potential to influence change, CoPs and especially DFA's are increasingly being monitored by DF to further understand their dynamics and assess their impact. As mentioned in the previous section, these instances provide opportunities for continued data collection for outcome assessment. Furthermore, CoPs and DFAs provide learning opportunities to DF to further understand what works and what doesn't in terms of collaboration, supplying evidence that can be used to further refine collaboration fostering strategies.

4. MONITORING, EVALUATION AND LEARNING

This section is focused on M&E considerations related to DF's capacity to implement suitable mechanisms and approaches to assess the contribution of its programmes to its intended outcomes whilst considering current M&E capacity. During the evaluation, a few opportunities for improvement were identified, many of them related to data collection activities.

- The fundamentally qualitative approach that DF has used thus far to provide evidence of outcome achievement, whilst effective, still **requires complementary data** to provide sufficient information to comprehensively assess progress and understand how DF contributed to social and economic development.
- The recent M&E development of **logic models (LM) and performance measurement frameworks (PMF)** for programmes is a step in the right direction, PMF intermediate and long-term indicators should provide relevant data for assessing not only contributions to change but also promote a better understanding on how these contributions are achieved.
- **LMs and PMFs can encourage learning** amongst DF stakeholders by enabling increased, relevant, precise, and comprehensive data on outcome achievement.
- LM outcome statements could be further refined to make explicit that **DF outcomes are centred in alumni contributions** to those outcomes.
- To optimise DF's M&E capacity to monitor programme PMFs, **DF must revisit its current participant tracking approach**. Given that alumni contributions are central to the programmes TOCs, they are the main data source for many of the indicators, or they should be. This means that alumni tracking is determinant on the effectiveness of data collection, and in turn, the PMFs. This evaluation identified opportunities to strengthen the effectiveness of alumni tracking which are also consistent with current M&E capacity: alumni data, database management, data collection mechanisms and incentives.
    - **Alumni data:** DF should ensure the capture of alumni personal contact information at the time of registry. Some students provide only professional emails and once they change organisations, they are harder to reach, if not impossible, which reduces the

number of alumni eligible to track. Some of the alumni mentioned in previous case studies, for example, were not reachable for the purposes of this evaluation.

- **Data base management:** Data collection for this evaluation revealed an important challenge to the efficiency of the monitoring activity. Despite using a robust data management system (Tableau), key information seems to not be centralized. During the undertaking of this evaluations the alumni databases provided by DF were not entirely consistent and the CoP database lacked contact information, which had to be retrieved through the use of course data bases. Furthermore, data bases came mainly from the PMs of the different programmes, which slowed down the process of accessing information; these **databases could be consolidated, centralized and managed by the M&E unit** to ensure rapid and effective access to alumni information for M&E purposes.
- **Data collection mechanisms:** Data collection relevant to assessing outcome achievement poses important challenges because alumni response to interviews or survey request is uncertain. Whilst email should not be overlooked, **CoPs and DFAs provide the most accessible opportunity to ensure timely and relevant data**. CoPs ensure continuity because some alumni are still involved with DF, increasing the likelihood and reliability of obtaining data. Furthermore, CoPs facilitate effective and efficient data collection by bringing together participants in meetings and gatherings, that appear to be good opportunities for data collection. It should be noted that the CoPs guidebook includes a recommendation that CoPs conduct yearly impact assessments; evidence suggests that progress is being made in this area by developing data collection templates. The possibility of collecting data through the Leagues should also be explored.
- **Incentives:** DF could also explore using incentives to strengthen data collection via events like conferences, gatherings and discussions, free of charge for participants, which could prove fruitful opportunities for data collection.
- **Awareness:** Awareness efforts related to post-course data collection engagement could be reinforced during the courses, CoPs and DFA participation. DF could also institutionalise an annual participant survey and pilot its effectiveness.
- **Professional development** could also be better assessed through improved tracking.

5. CONCLUSIONS

The conclusions presented below are derived from the main evaluation findings. They highlight the most significant insights about the CDFP, DFIS, IIPS and GEC programmes with regards to the evaluation criteria and evaluation matrix.

Overall, there is evidence that indicates that DF is contributing to the achievement of most of the intended outcomes of the programmes under review. Still, this progress is uneven across programmes, sectors and countries. DF's programmatic portfolio influences the advancement of digital financial and gender inclusion though participant contributions in their industry, legislation, and organisations. DF courses influence behavioural changes that in turn translate into these contributions. Behavioural changes are firmly rooted in capacity development and awareness, supported by the appropriation of relevant and up to date knowledge. Relevant knowledge is the cornerstone of the programmes' theories of change, the starting point of the change processes and causal relations between programme results, and DF is effective in delivering relevant knowledge. Results in terms of capacity development are most evident in increased confidence, as well as expanded collaboration, negotiation, advocacy and technical skills.

For the **CDFP programme** there is evidence that it has contributed to all its intermediate outcomes: increased innovation, design and development of digital financial service products that foster financial inclusion; increased drafting and improvements of enabling inclusive finance policies and regulations that foster financial inclusion; and increased adaptation of business models, operations and promotional activities that suit financially underserved or excluded consumers. With respect to its long-term outcomes, there is evidence of contribution to improved pro-poor business models and operations of digital financial services for financially excluded or underserved consumers. There is limited evidence to support programme contribution to improved reliability of financial technology and infrastructure, relevant to low-income consumers.

The **DFIS programme** has contributed to all of its intended intermediate outcomes with differing levels of influence: there is evidence of contribution enhancing the individual capacities of participating regulators and supervisors from the financial, insurance, and pensions sectors. Evidence also shows that the programme has contributed to some extent to regulators and supervisors' awareness and use of resources within their organisations and that it has contributed to a limited extent to regulatory harmonisation through the promotion of best practices and international standards. With respect to its long-term outcomes evidence suggests that the programme contributed to the development of regulatory and supervisory frameworks of inclusive financial products and services in some cases. Data also show that the programme has contributed to the financial sector stability of the countries where alumni are working.

The **IIPS programme** has made contributions to all of its intended outcomes, also with varying levels of influence. Evidence suggests that the IIPS programme contributed to the development and use of inclusive and sustainable products related to instant payments and also to some extent to policy development and regulation of payment systems. Data also concluded that the IIPS programme has contributed to enhanced collaboration among IIPS stakeholders. With respect to its long-term outcomes, evidence suggests that the IIPS programme has contributed to the increased innovation, efficiency and security of digital payment systems.

The **GEC programme** has contributed to all of its intended outcomes: increased participation of women in decision-making processes and leadership positions; increased policies or practices that promote GE in organisations; and improved gender inclusive organisational culture although with no identifiable contributions to foster the inclusion of people with different gender identities or individuals from the LGBT+ population.

Overall, people are happy with the courses. They have recommended them to other colleagues, some have asked for new versions and others actively engage in learning activities in specific issues. Many of the consulted alumni are of the opinion that expanding the alumni base would be a significant contribution for the advancement of digital financial inclusion and gender equality in their countries.

The CoPs as well as the DFAs are effective in providing access to new knowledge resources, enabling interaction with peers and industry players, promoting advocacy efforts and exposing participants to experiences from other countries. Many of the CDFP and GEC CoPs as well as the DFAs are healthy, active and expanding, with an engaged and motivated membership base. This is does not seem to be the case of the DFIS CoPs, in which there is less engagement and action, possibly related to the fact that there was no DFIS CoPs activity in 2023 as the programme ended in 2022.

However, there are underlying structural factors that deeply affect DF's mission. Low literacy, financial literacy and digital literacy, all hamper increased adoption and hinder citizen trust in the digital financial system. Infrastructure poses important obstacles to connectivity and innovation and increases investment costs. Policy and regulation, and institutional support can both swiften or slow down innovation, adoption and financial inclusion. Culture poses important obstacle to the advancement of GE. Whilst the programme portfolio addresses most of these issues, transformation to favour financial and gender inclusion implies that a multiplicity of social, cultural, political, economic factors and stakeholders come into play. Online programmes and its results can only do so much in such complex scenarios, and thus scalability of DFI programmes needs to be done with realistic expectations.

It is positive that DF has invested resources in strengthening their M&E systems, especially the development of LMs and corresponding PMFs. These developments will better enable the organisation to understand how and to what extent it contributes to its intended intermediary and long-term outcomes as well as its impact. Special attention should be given to alumni tracking mechanisms to provide the necessary data for this. It is important that DF's monitoring and evaluation mechanisms consider that the achievement of outcomes associated with increased digital financial inclusion, increased digital financial innovation, improved enabling environments for digital finance and gender inclusion take time and that the programmes are relatively new, so change may be noticed only later. DF should also ensure that its stakeholders have a clear and widespread understanding of the assumptions underlying its Theory of Change.

6. RECOMMENDATIONS

The following recommendations are based on the findings and conclusions of the evaluation and aim to improve DF overall effectiveness in delivering change.

At the strategic level:

- Diversify DF partnerships and synergies with other players of development. For example, to find synergies for placing alumni in the industry, increase the number of scholarships or identify new opportunities of additional funding. This would also contribute to sustainability of the programmes.

At the programme level:

- Continue fostering soft skills key for achieving expected changes such as advocacy, negotiation and management skills, especially in IIPS and DFIS, perhaps draw lessons learned from GEC and CDFP.
- Further mainstream gender considerations in all four programmes, for example by expanding discussion of the gender lens both in classes and CoPs.
- Capstone projects and action plans should be further supported to ensure high-level engagement in implementation.

At the CoP level:

- Invest more resources in strengthening CoPs to foster collaboration and cooperation.
- Explore the possibility of unifying the DFIS and CDFP CoPs and include IIPS students in CoPs during course participation. This could result in efficiency gains in CoPs management, increased alumni engagement and increased effectiveness towards outcome achievement. Pilots could be run at country level for this purpose.
- Implement the CoPs impact assessment approach as designed in the CoP facilitator manual.
- Promote organisational engagement with regards to participation in CoPs activity as formal knowledge exchange spaces (i.e. conference, discussions, etc), thus facilitating attendance and knowledge dissemination within organisations.

With regards to M&E:

- Continue setting up appropriate mechanisms to track changes and alumni contributions to real life issues. In order to understand the pathway towards the achievement of goals, there needs to be more close monitoring of the change pathway, as detailed in section 3.5.1.

- Improve the clarity of reporting (accountability, lessons learned, results), explicitly indicating the programme contributions to outcome achievement and impact.

Additional alumni recommendations compiled by the evaluation team can be consulted in Annex 6.

ANNEX 1: LIST OF IDENTIFIED DF ALUMNI AND THEIR CONTRIBUTIONS TO FINANCIAL OR GENDER INCLUSION

The data presented in this annex show contributions from 43 different alumni to DF's expected outcomes and **use is strictly intended for internal use, any public use of the information, names and organisations included here must be approved by the corresponding alumni.**

The following stories have been collected from multiple sources and using different methodologies, additional research is recommended to further assess DF attribution to these results.

Name	Abubakar Shehu
Position	Senior Manager
Organisation	MTN Group Limited
Country	Nigeria
What? (Contribution)	Abubakar Shehu is a senior manager at the Sales and Distribution Department, which is responsible for mobile money operations, including building the agent network. He led the building and operation of the mobile money agent network for MTN for the Eastern Region of Nigeria while he was the Head of Sales for the East Region.
How DFI contributed?	The DFI has enriched his understanding of digital finance and how to adapt to the emerging changes in digital finance. Professionally, the Mobile Money Operations course was timely for him as most of the materials modules were directly applied to the agent network built in Nigeria, adding knowledge and insight to make valuable contributions.
So what? (Significance)	The Agent Banking Model empowers banks to utilise agents such as retail establishments and post offices as intermediaries to offer banking services to customers residing in remote regions. Through his work within the MTN Group, Abubakar Shehu grew the agent network to 15,000 agents.

Name	Charity Chikumbi
Position	Senior Staff Member Zambian
Organisation	Financial Sector Deepening Limited - FSD Zambia
Country	Zambia
What? (Contribution)	On a governmental level, she has contributed to the Biometric Solution project in Zambia for smallholder farmers. She is also doing a blog on gender and mobile money booths in the country. Charity contributes regularly to DFI's Community. She wrote the article: *The unheard cry of a female mobile money*

	agent in Zambia and host the Webinar: *Financial education bridging the literacy gap and empowering financial inclusion*.
How DFI contributed?	Charity is a sponsored CDFP as part of the FSD Africa and FSD Zambia scholarship programme supporting applicants for the CDFP program. Charity's particular areas of interest within DFS are using technology for problem-solving and regulation. Having gained skills in digital ID, blockchain, and cryptocurrencies, as well as digital financial services in agriculture and gender, she is using this knowledge to help her in the biometric solution project in Zambia and share knowledge within the CoPs.
So what? (Significance)	Zambia has a slightly larger number of females (51% of the population), and more people live in rural areas (57%) than in urban settlements (43%). In rural areas, most people, especially women, need formal documents, such as national IDs, and in those remote areas, a formal bank branch has yet to reach them. Then, through the biometric project, women can access digital finance services on their cell phones.

Name	Ethel Chiwara Mupambwa
Position	Founder & CEO
Organisation	MoneyMart Finance (MMF) Founding Trustee - Digital Finance Practitioners Association of Zimbabwe (DFPAZ)
Country	Zimbabwe
What? (Contribution)	Ethel played a crucial role in championing financial inclusion, ensuring that both women and men were actively part of the agenda through her role as a Founding Trustee. Within Money Mart Finance, she spearheaded the release of various marketing materials highlighting the expansion of branches throughout Zimbabwe. Money Mart Finance stands out as a key player in advancing sustained, inclusive, and sustainable economic growth, along with promoting full and productive employment and decent work for all. Notably, the company makes significant contributions to achieving Sustainable Development Goals (SDGs) 1, 3, 5, 7, and 8. Since its inception in 2014 with a humble start of only three employees, Money Mart Finance has experienced remarkable growth. Presently, the company boasts a workforce of over 144 employees spread across 27 branches throughout Zimbabwe. Ethel's dedication extends to providing microloan funding to empower Small and Medium-sized Enterprises (SMEs), further solidifying Money Mart Finance's commitment to fostering economic development at the grassroots level.
How DFI contributed?	She is a digital financial practitioner and according to her, the certification drives the agenda of financial inclusion through her organisation, making the service available to a broader audience of underserved people. She is now qualified and doing quite a lot to spread access to fintech solutions on the ground.

So what? (Significance)	Through the microloan to SMEs, she greatly helped Zimbabwe to close to fighting unemployment because most Zimbabweans are in the informal sector. They're self-employed and will need quite a lot of assistance in funding their businesses.

Name	Faith Kobusingye
Position	Network International and formerly I&M Bank
Organisation	Regional Managing Director - East Africa
Country	Rwanda
What? (Contribution)	Faith developed a crypto currency blockchain payment product. She engaged and worked with the regulator around their fear of blockchain implications. In 2020, she reported that *"it's been one of the highlights for the bank during this quarantine window*." She provided input to the Rwanda National Digital Payment System design. Since 2019, it has been awaiting a letter of no objection as they are still trying to garner buy-in from various stakeholders and sponsors. Also, while with I&M Bank collaborated with MTN and Master Card to provide a virtual card solution.
How DFI contributed?	Faith credits her work to providing a virtual card solution with MTN and Master Card while working for I&M Bank to DFI and the connections she made. Those connections enabled conversations with these players: *"[...] With MTN being a telecom company, they wanted to expand their use cases on the wallets. I could pull in with Master Card a blessing to provide a [virtual] solution, and that was because it was easier to start the conversation. After all, the MTN person overseeing that development was a DFI alumni. We were on par in terms of what we needed and how to go forward and implement it. So, the collaboration became seamless and easier because we have the same background. We all come from the same place*."
So what? (Significance)	The term "digital financial services" (DFS) covers the whole set of financial products and services, such as a payment card that connects to a digital device (e.g., POS terminal) and regular bank accounts. Then, the virtual card solution has increased the speed and seamless movement of money between Rwandans.

Name	Farouq Kakuru
Position	Uganda DFA and DFCU Bank
Organisation	Senior Manager E-banking
Country	Uganda
What? (Contribution)	Farouq lobbied regulators and MPs on the tax on mobile digital transactions. He contributed to a paper to the Ugandan parliament on the National Payment System and to amend interbank charges. He discussed his collaboration with

	other banks, including Stanbic, KCB, and Equity Bank, working towards contactless Visa Cards.
How DFI contributed?	In addition to practitioners engaging in collaborations on behalf of their employer, several Ugandan practitioners reported engagements with their country-based association, DFA, one of the stronger associations to have emerged from DFI.
So what? (Significance)	As part of DFA in Uganda, Farouq collaborated with multiple banks to amend an interbank card charge. The amendment of an interbank card charge is low enough to increase financial inclusion but high sufficient for banks to earn revenue.

Name	Gabriel Kamuge
Position	Banking Professional/ Senior Project Advisor
Organisation	DGRV Uganda and DFA Uganda
Country	Uganda
What? (Contribution)	He has contributed to many policies that are now active through the Digital Finance Committee of the Uganda Bankers Association. Input into regulations supporting the development of recent delivery channels in Uganda, including Agency banking, Mobile Banking, E-banking assurance. He was also on the committee that helped develop Sharia-compliant channels for Islamic banking. Because there is no clean database of all the actors and cooperatives in the regulatory regime in Uganda, Gabriel, with the Central Bank and regulatory cooperatives, is currently developing guidelines for a digitized regulatory platform/structure called Uganda Microfinance Regulatory Authority (UMRA).
How DFI contributed?	Gabriel Kamuge noted that policies in Uganda have typically been a "*copy-paste" from developed countries, which has not matched the institutional readiness and available resources.* He expressed that *"through DFI, he and his colleagues have gained a greater understanding of the grassroots issues, which has enabled them to better inform policy that is appropriate for their context: "[the] contribution of the German Cooperative and Raiffeisen Confederation (DGRV) would be its support to the regulators of cooperatives on all the regulatory issues that are relevant to the cooperative sector. We have [improved] a lot through understanding what we have now. A strength is that we understand the grassroots issues and know what is appropriate to develop regulatory guidelines and inform policy on what is most appropriate for the different population segme*nts."
So what? (Significance)	Among all Gabriel's contributions to digital finance inclusion, one of the most important is the Uganda Microfinance Regulatory Authority (UMRA). The UMRA enhances financial inclusion and consumer protection by monitoring the market to ensure adherence to the consumer protection principles; restore investor and consumer confidence by promoting legitimacy and building the

	confidence of members, customers, and investors in the Microfinance business; and protect depositor's savings by promoting transparency and accountability by applying both prudential and non-prudential standards to safeguard members' deposits; and limit predatory lending and unethical practices by promoting stability and integrity of the sector through ensuring stability and security of Tier 4 Microfinance Institutions.

Name	Gertrude Kadumbo
Position	Project Manager
Organisation	National Switch
Country	Malawi
What? (Contribution)	She was involved in many initiatives, such as drafting the Permits Act, specifically the interoperability directive, financial literacy policy for Malawi, consumer protection policy, and Reserve Bank guidelines on various DFS areas. She also engaged with and advised agent banking from a digital platform point of view on making business-to-person payments and improving the digital payments base.
How DFI contributed?	The DFI courses provide a space to explore innovation and innovative thinking. Gertrude believes the courses encourage more intensive thinking on topics and, consequently, innovative thinking.
So what? (Significance)	Through Gertrude's initiatives, she collaborated to increase innovation, design, and development of financial service products offered to financially excluded/underserved consumers. She also increased drafting and improvements of enabling inclusive finance policies and regulations in line with international best practices.

Name	Joao Gaspar
Position	Fintech Promoter and Entrepreneur
Organisation	Paytek Founder and CEO and formerly consultant to FSD
Country	Mozambique
What? (Contribution)	Paytek has been participating in the Central Bank Sandbox for almost two years. At the Sandbox, he contributed by testing products and showing how they can implement a new service provider, deal with consumer protection, anti-money laundering (AML), and quality assurance and control (QAC). While consulting to FSD, he commented on draft laws that the Central Bank issued for basic bank accounts, including the payment service provider law. He also developed a basic framework for internal privacy for mobile money operators in Mozambique.

How DFI contributed?	Joao Gaspar's company (Paytek, Mozambique) collaborated with four other companies at the Sandbox at the Central Bank of Mozambique. Paytek made an agreement with two of the companies on the Sandbox to develop a new system for a third-party company. Joao positively noted that instead of the companies competing with one another, they engaged and agreed to split the development process; they came together to produce a solution for the end customer. He believed that was partly because those companies also had employees who had done DFI courses; thus, they had a shared understanding and goal for DFS in Mozambique.
So what? (Significance)	Paytek is part of the FSD and the Bank of Mozambique to launch the sandbox incubator project for FinTech's. The incubator is in Maputo and is designed to create conditions of interaction between the regulator (Central Bank) and fintech service providers as well as opportunities for development, testing, and demonstration of products. PAYTEK is a new Mozambican fintech that operates as a payment services aggregator provider. It provides payment integration services, application interfaces, and access channels for companies and individuals to perform all kinds of digital financial services. Its e-wallet will allow users to continue to use their bank accounts and mobile wallets to carry out payment of services but in a more intuitive, comprehensive, and conscious way. It is designing new systems for low-value payments such as transport, public service taxes, and show entrance fees. The firm says that by streamlining the digital finance process, it can promote among fellow Mozambicans a sustained habit of making electronic payments, instead of using physical money.

Name	Keenly Chagona
Position	Operations Officer
Organisation	Centenary Bank Malawi
Country	Malawi
What? (Contribution)	Keenly mainly contributed to two projects: A mobile money service provider and an Instant funds transfer project. In the first one, he was a key project member. In the second one, he was involved from the word go, putting up the processes.
How DFI contributed?	Before the IIPS course, he didn't understand what the regulators were doing. But having attended this IIPS course, he could have a better understanding of the enabling environment, the players, and the requirements when at regulatory perspective, "*you look at other players, you look at the customer, you look at the infrastructure and also further enabling services that may need to be there for the service*".
So what? (Significance)	In the Mobile Money Service Provider project, the objective was to ensure to build structures and tested the platform. However, it was mainly driven by the legislators through the Bankers Association of Malawi, pushing every bank to

	integrate with the menus through the national switch. Before the Instant Funds Transfer project, the banks used to settle through RTGS (Real-Time Gross Settlement) for instant funds, whereby you push funds in the morning, and it might take some hours before they reach the other bank, an inter-bank funds transfer. The project made the payment transfer more efficient through rapid payment liquidity.

Name	Kevin Rudahinduka
Position	Transformation Programme Director
Organisation	Bank of Kigali (BK) (Formerly) Chief Executive Officer at Eden Care Medical (Currently)
Country	Rwanda
What? (Contribution)	Kevin contributes to overseeing strategic projects undertaken by the Bank, including its digital finance strategy and the development of new systems. He also contributes to implementing the BK Quick product, which enables BK customers to instantly borrow from their Bank and acquire the loan amount from their mobile phones. It is repayable in a period ranging from one to three months.
How DFI contributed?	Rudahinduka was among the first Rwandans to take the CIDM course in 2016 when he worked at another bank. DFI influenced his work through expanded knowledge and access to peers for consultation, including assessments and due diligence reviews. DFI also raises awareness of the issues, especially from other jurisdictions, to "*understand what is happening worldwide*." He still uses some of the materials provided during the course, highlighting his contributions to implementing the product BK Quick.
So what? (Significance)	Bank of Kigali (BK) has been reworking its systems and operations to fulfil its digital transformation strategy. BK Quick has been successful in increasing the number of customers with access to these financial services. The main features and benefits are: 1) Less than 5 minutes processing period; 2) Current Loan rate is down to 4%; 3) No additional security is required; 4) Payment period up to a maximum of 3 months; 5) Credit scoring techniques applied; 6) It is based on regular monthly income channel led through BK, i.e., salary, rental, pension, business; 7) Loans are of shorter duration; 8) Customer can use the money for whatever purpose they wish.

Name	Lumbani Gondwe
Position	Country Operations & Partnership Manager
Organisation	Flutterwave
Country	Malawi
What? (Contribution)	He contributed to the 31st volume of the Malawi Financial Magazine, The Malawi Banker. He shared an article on regulatory sandboxes, as a tool in regulatory technology (RegTech) that is increasingly becoming vital globally

	for regulators in driving, promoting and accelerating innovation and efficiency in the financial services sector.
How DFI contributed?	Through the CDFP journey, he contributed to DFS-related matters with the proper knowledge acquired, such as articles in mainstream media, bankers' magazines, professional newsletters, and various media channels.
So what? (Significance)	With his action to promote the Sandbox Regulatory tool, Lumbani is helping to increase innovation and the design and development of financial service products offered to financially excluded/underserved consumers.

Name	Maxime Lokossi
Position	SME and Digital Finance Consultant
Organisation	Freelancer
Country	Benin
What? (Contribution)	Maxime has contributed to extend access to DFI's webinars and other continued professional development activities, which were initially only offered in English. Maxime initiated a conversation with DFI, and formed a partnership where now the monthly community newsletter is available in French, most of the blog posts and League of Digital Finance Professionals being bilingual platforms and dedicated French webinars. He also has a leadership role in the *Association des Professionals de la Finance Digitale* (APFD).
How DFI contributed?	He became a Certified Digital Finance Practitioner (CDFP), which has strengthened his skills in digital finance and allowed him to participate in several consulting assignments aimed at creating a more inclusive financial ecosystem in Benin. The training has allowed him to intervene on issues related to the digitalization of agricultural value chains, e-commerce, and the adaptation of the DFS regulatory framework or the marketing of dedicated digital finance solutions.
So what? (Significance)	With this experience, Maxime has now become an advocate of the CDFP training and motivates others to gain their CDFP certification for them to help foster a healthy digital finance ecosystem in their markets. DFI trainings aim to empower participants to feel confident and comfortable in discussions with key players such as central banks, other FinTech's, development finance institutions, and policymakers who meet regularly in crucibles of exchange. Maxime confirms that his native Benin aims to become the platform for digital services in West Africa and to this end is deploying huge infrastructures such as setting up a fibre optic network, a biometric civil status register, a national electronic payment platform, and e-services projects.

Name	Ophelia Ama Oni
Position	Independent Director

Organisation	Fidelity Bank of Ghana (Formerly) BRAC Ghana Savings and Loans Ltd (Now)
Country	Ghana
What? (Contribution)	When Ophelia was working for Fidelity Bank of Ghana, she was Head of Strategy and Business Development for the Inclusive Banking where she put forward the financial inclusion agenda, and was responsible for product development, financial literacy, sales, and marketing for Inclusive Banking. She is a founding member of the Financial Inclusion Forum Africa (with over 800 members) and was selected as one of the top 25 Most Influential Fintech Leaders in Ghana in 2019
How DFI contributed?	She is a Certified Digital Finance Practitioner. Among the courses she pursued, the emphasis was on the certificate on digital money: it presents all aspects of the digital payments and digital financial services ecosystem. She really enjoyed the digital identity course because it is one, she could easily relate to. At the time, Ghana didn't have a national system that was working well. She also enjoyed artificial intelligence in the finance because, at the time, she was working in the finance industry. For the practical section, she attended all her community of practice meetings, so she didn't miss any CoPs meetings. She ended up becoming the CoP facilitator for Ghana.
So what? (Significance)	When Ophelia completed the CDFP programme, she was working at Fidelity Bank of Ghana. Her contribution to customer acquisition targeted the unbanked. She also contributed to the creation of a marketing campaign for top-of-mind awareness to facilitate financial literacy for groups and associations.

Name	Pamela Bella Nyamutoka
Position	Country Director/ Africa Regional Director
Organisation	International Institute of Rural Reconstruction
Country	Uganda
What? (Contribution)	She applied the gender action plan to measure the impact in their organisation and dig deeper into women's access to the financial sector. She implemented some family-sensitivities policies within the organisation to allow women with small children to grow in their roles. In her institution, the International Institute of Rural Reconstruction IIRR, she is implementing a women-led commercialization programme in an area that faces rampant women marginalization.
How DFI contributed?	The Gender Equality Changemaker course gave her a whole new perspective. She began to deeply evaluate the field's best programs and procurement systems. She realized a very low percentage of female field staff and female-owned businesses as part of its service providers. She doesn't think she would have thought of this if I had not done the DFI courses.

So what? (Significance)	Her collaborations within and outside her organisation helped to increase the development and adoption of policies and practices that promote gender equality.

Name	Ruth Ogena
Position	Psychosocial Support Worker
Organisation	Facilitation for Peace and Development (FAPAD)
Country	Uganda
What? (Contribution)	She mainstreamed gender into programme implementation for her organisation. Even though the Ugandan anti-homosexuality restrictions affected the course: now all staff must undergo GEC training, life-balance and child-friendly policies and equal pay policies are in play, and other gender streamlining initiatives. Also, as part of her role, she is strengthening “Vulnerable Households”, a three-year project with the aim of increasing food security, income security, and disaster resilience.
How DFI contributed?	She believes the GEC programme has influenced the development or implementation of organisational policies or practices to increase gender equality. The executive director thought that everybody should take the course.
So what? (Significance)	As a result of the gender mainstreaming programme in her organisation, an equal pay policy was implemented. Now, the women in the organisation enjoy a more favourable work-life balance. She and some of her peers (her programme manager) advocated for gender equity within the organisation. She is working to see if all programs implemented by FAPAD have gender and disability included. She is also working to mitigate gender-based sexual violence in Northern Uganda.

Name	Helen Mbabazi
Position	Gender Specialist
Organisation	AVSI Foundation
Country	Uganda
What? (Contribution)	In her Capstone Project, she analysed where most women and men were in management positions in her institution. She gave a copy to her supervisors that was later included in the organisation's first gender policy.
How DFI contributed?	Helen affirmed that DFI has increased her knowledge, which has contributed to her increased participation and leadership in her organisation. The knowledge acquired through the course contributed to increasing her confidence. She also feels she has gained negotiation skills and trained colleagues and beneficiaries in gender issues.

	"*I am contributing in terms of looking at the perspectives of men and women, how they contribute to the environment, to decision making, economic empowerment at different levels. I can now look at it better because of the knowledge acquired*."
So what? (Significance)	Even though Helen's capstone project was not the only factor contributing to her organisation's first gender policy, her contribution helped to increase the development and adoption of policies and practices that promote gender equality and participation of women in decision-making processes and leadership positions within her organisation.

Name	Nebiat Tekle
Position	Director Agent and Virtual Banking
Organisation	Bank of Abyssinia
Country	Ethiopia
What? (Contribution)	As a gender champion in his organisation and working with more than 75% of women's staff, he has checked their organisational gender gaps. His capstone Project was focused on how to increase the number of women in leadership positions. He has started to do weekly knowledge-sharing sessions and mentorship. Also, he has been encouraging his coworkers, women and men, to take the GEC course such as the Human Resources responsible.
How DFI contributed?	According to Nebiat Tekle, the GEC programme was an "eye-opener" and has effectively promoted women's and gender equality in decision-making and leadership positions in his organisation. He has gained knowledge to provide mentorship to women and help them advance in their careers through skill development.
So what? (Significance)	Ethiopia is still a society where feminism is seen as a threat against institutions such as family and marriage. This cultural background directly affects women's positions within Ethiopian organisations. For example, banking is a male-dominated business, especially in managerial positions. Although many women are in the sector, they are underrepresented in leadership positions. In this regard, the GEC course was proven effective in promoting women's and gender equality in decision-making and leadership positions in his organisation.

Name	Joweri Namulondo
Position	Social Worker
Organisation	Youth Coalition for Sexual and Reproductive - NGO
Country	Uganda
What? (Contribution)	Her main contribution is regarding the use of gender-inclusive language. They have adopted project frameworks within her organisation with inclusive and gender-responsive language.

How DFI contributed?	Joweri states that the GEC course has improved her thinking and advocacy skills. She felt more confident and critical in identifying systems of oppression or biases and standing up for herself or fellow women. So, in cases where women are being pressured to abandon their jobs and take care of their families, she feels more prepared to help those women within and outside her organisation.
So what? (Significance)	The Joweri organisation is not working in the financial sector but in sexual and reproductive health. Thus, her work has contributed to advocating for women's health and sexual rights in her country.

Name	Bright Masiyazi
Position	Manager Operations – Know Your Consumer and Compliance
Organisation	EcoCash Holdings Zimbabwe Limited
Country	Zimbabwe
What? (Contribution)	Bright was part of the pioneering team that launched EcoCash in 2011, a fintech arm business under EcoCash Holdings Zimbabwe Limited. EcoCash has around 8 million customers, of which 50% are active. The company offers a fully-fledged mobile financial services solution which include peer to peer transfers, bill payments, international remittances, domestic remittances, and merchant payments. It integrates solutions with banks and was also incorporated into the national switch.
How DFI contributed?	The course in digital finance helped him realize the funding gap for small and medium enterprises (SMEs) existing in the market which was estimated at about an 11 trillion dollars funding gap for SMEs globally helping him identify a market opportunity in Zimbabwe. In 2022, he registered, alongside a team of three colleagues, a microfinance business that focuses on productive sector funding for SMEs.
So what? (Significance)	DFI has helped enhance his product knowledge in the fintech space which is very helpful and critical in ensuring positive contribution to his organisation because EcoCash Holdings offers solutions such as Fintech, Insurtech, Healthtech, and Edutech. The company has a uniquely integrated digital transactions ecosystem, including mobile money, digital banking, payment services, and international remittances. They can also access funeral, auto, health, and education through mobile devices. The penetration of mobile phones is 90% in Zimbabwe, which could mean an increase in financial inclusion in the country and access to education and health services. He is also driving the MFI business to become a digitally driven business through aggregating knowledge from different courses done during his certification programme.

Name	William Díaz Alvarado
Position	Country Representative
Organisation	Flow Global (Now) GIZ - Sustainable Economic Development Program, MozambiqueGIZ - Sustainable Economic Development Program, Mozambique (Senior Advisor - Previously)
Country	Peru / Mozambique
What? (Contribution)	When working in Mozambique, he consulted for GIZ on strategies for the development of financial systems, including digital. A major challenge for the private sector is Small and Medium Enterprises' access to financial systems. So, he contributed to providing ideas to the GIZ regional group from Africa. After, he started to work from Flow Global, in Peru. Flow Global is a platform that allows funding for small businesses based on predictive analyses and data analytics. They provide apps and web-based systems to assist small businesses in enhancing efficiency and profitability. One example of small businesses is entrepreneurs, like local store owners. Flow Global was started in Uganda, and 93% of its client base is active. As a country manager in Peru, he is helping expand and bring technology to Latin America.
How DFI contributed?	CDFP influenced his career development because it expanded his capacities in digital finance. The CDFP course provided increased understanding and skills to provide technical assistance to the regulator's teams, primarily when he was working in Mozambique as senior advisor to GIZ for the Sustainable Economic Development Programme and now, from his current role within Flow Global. According to him, it is essential to consider that CDFP knowledge must be tailored to real contexts, and he was able to do this in Mozambique and Peru.
So what? (Significance)	During his time in Mozambique, he played a key role in crafting, putting into action, and overseeing programme interventions that aimed to broaden access to financial services for Micro, Small, and Medium Enterprises (MSMEs) as well as the low-income communities in both urban and rural settings. His responsibilities included the thoughtful design and effective execution of initiatives that facilitated access to a spectrum of financial services, ranging from savings and payments to credit and insurance. Upon transitioning to Peru and delving into his work there, he realized that trust issues were among the biggest issues of implementing digital finance services. To deal with it and improve the reliability of financial technology and infrastructure, Flow Global is setting up a system in Latin America that lends to the agents and agents to the final users. They consider gender issues, especially working with female agents, as "it is proven that women foster more trust." They also maintain competitive interest rates; otherwise, the business model will not work. Interest rates are not the main driver of the business model but rather the ease of use and speed of the loans.

Name	Hussam Hammad
Position	Project Manager
Organisation	Jordan Payment & Clearing company (JoPACC)
Country	Jordan
What? (Contribution)	JoPACC launched CliQ in 2020, Jordan's newest Instant Payment System. The system enables sending and receiving money between bank accounts across all participating banks in Jordan instantly and to and from any mobile wallet. CliQ, a fully interoperable payment system that adopts the ISO 20022 messaging standard, leverages cutting-edge international principles of financial market infrastructure. His contribution to CliQ started by developing and testing the system from a technical and business perspective. JoPACC began a certification process with each bank to ensure they could transfer and build the system under the same infrastructure compliant with ISO 20022. So, we test the bank or check the readiness from the bank side. He also helped to develop a QR code payment under EMVCo® standard. The EMV QR Code Specifications standardise the data format of QR codes for payments to simplify and broaden the acceptance of QR code payments globally. EMV QR Code Specifications address the QR Code itself and the way the data is coded into the QR code. Before the CliQ, Jordan had the JoMoPay, which was exclusively for mobile wallets, not for bank accounts. It's designed for customers who could not open a bank account as the Central Bank of Jordan required. JoMoPay was updated to the same ISO as CliQ, so now there are two payment systems under one infrastructure to increase the interoperability between both systems.
How DFI contributed?	Participating in the IIPS course was a unique, critical step in his career path. The IIPS course has built his capacity and helped him understand the value of the payment system, the scheme of governance, and how to implement the fees model. He started with JoPACC as a business development officer, helping them to launch the CliQ, and then he was transferred to be a project management officer. When he participated in the IIPS course, it was his cornerstone to contribute to launching this payment system.
So what? (Significance)	A system like CliQ helps increase financial inclusion and interoperability between customers in Jordan. It is an open system, so anyone can transfer from a mobile wallet to a bank account or vice versa. It helps increase the usage of digital payment systems because the interoperability systems are without fees. After three years, the CliQ has brought benefits to the users. For example, it is interoperable between all banks and mobile service providers. It is instant, so customers can confirm the credit, and it is available 24/7. It is free of charge and has multiple user identifiers (email, mobile number, etc).

Name	Oscar Mmari
Position	Managing Digital Product

Organisation	BancABC
Country	Tanzânia
What? (Contribution)	He manages a virtual card in partnership with M-Pesa, an African mobile money service. Thanks to the virtual card offered by Vodacom, customers can seamlessly make online payments and transfer funds to various institutions and banks. Now, someone with an account from a mobile money service provider can easily send money to individuals with bank accounts.
How DFI contributed?	The insights gained from the programme have proven useful in comprehending consumer behaviour and crafting a product that is both suitable and affordable for them. The programme places emphasis on developing inclusive products characterized by both quality and affordability.
So what? (Significance)	Prior to the introduction of the virtual card, customers could send money from banks to various mobile wallets, but the process relied on individual arrangements made by the institutions or companies offering the service. With the interoperability, if a new company enters the scene, it is required to integrate with the Central Bank, once integrated, it gains seamless connectivity with all other financial service providers without incurring additional integration costs.

Name	Tsedale G/Egziabher
Position	Project Manager (Former) Director, Business Analysis and Digital Transformation Department (Current)
Organisation	Ethiopia National Switch
Country	Ethiopia
What? (Contribution)	Ethiopia is pursuing a digital transformation strategy with a focus on implementing the Instant Payment System (IPS). Tsedale is leading the charge in managing the IPS project. In the initial phase, the team aims to introduce person-to-person (P2P) transactions, utilising unique aliases linked to individuals' accounts. Collaboration with the national ID project has been established to facilitate these aliases, leveraging unique numbers for payments in the absence of an existing payment system in Ethiopia. As the project manager for instant payments, she envisions implementing a comprehensive system covering person-to-person, person-to-business, and person-to-government transactions. The current payment infrastructure relies on the SmartVista platform. As of now, approximately 85% of the components have been deployed in the environment, marking the transition to the system integration testing phase.
How DFI contributed?	The programme set a comprehensive standard for the entire Instant Payment System (IPS). As a result, the platform is built upon this standard and is currently in the process of development and deployment. The programme played a role in enhancing her understanding of the project, and the IPS is already operational, adhering to the ISO 20022 standard. Tsedale notes that she has been promoted to the Director of Business Analysis and Digital Transformation Department because of her golden success in pioneering these IPS projects.

So what? (Significance)	This IPS is replacing the former payment system, which required individuals to possess a bank account and a card to use ATMs. However, with this new platform, you can simply utilise your mobile number along with an alias to make payments to anyone. This streamlined approach makes the process easy and extends its reach to the unbanked society, thereby promoting financial inclusion. It is important to note that since this report has been concluded, EthSwitch S.C. has been finalising the SIT and UAT and enabling the instant payment system - P2P product with three pioneer banks.

SURVEY AND ANONYMUS ANSWERS

Position	Senior Engineer
Organisation	Previous: Bank of Kigali (Rwanda) Now: EFT Corporation Limited (Zimbabwe)
Country	Rwanda
What? (Contribution)	When this student was working at the Bank of Kigali (BK), the bank introduced a unit called the "Digital Factory," which is responsible for developing new digital financial products and taking them to the market. He was a lead implementer of the Electronic Funds Technology and Payments. He was responsible for designing, implementing, and providing end-to-end support for this cost-effective payment system. He designed and implemented a solid, cost-effective card-less systems architecture to accommodate Kiosk-related and value-added services using the same existing electronic equipment infrastructure. In his current role in EFT Corporation, he leads a team to support the acquisition systems, such as the switch that supports the ATMs and point of sales (POS) machines.
How DFI contributed?	This student is one of the first DFI students to complete his Certified Digital Finance Practitioner journey, and as such he has completed many DFI courses. He stated: *"The digital finance thing has only just started, so I wanted to really understand it. I am working more on the technical side of things, like the switch, where we don't always learn about broader things. So, I got to see what is happening outside Africa, like in China for example. I was also keen to study online, where you can get lots of peer-to-peer knowledge. On a personal basis I have learnt a lot. Workwise we are trying to apply it in the Digital Factory and then we also want to change the*

	programming system of the bank, which is in its early stages. So, we now have the knowledge to do this – the DFI courses will be instrumental and should help. There are quite a lot who have done the CIDM through the bank, but my courses I did them all on a personal note".
So what? (Significance)	As part of the Digital Factory, he designed and implemented cost-effective payment and a solid, cost-effective card-less systems architecture to accommodate Kiosk-related and value-added services using the same existing electronic equipment infrastructure. As a result, he ensured cutting-edge revenue, service improvement, and cost-minimization outcomes in his work within BK. He also helped reduce support and maintenance costs formerly accrued through hiring consultants.

Position	Head technical Specialist
Organisation	Central Bank
Country	Nigeria
What? (Contribution)	He provided inputs during the drafting of the Policy for Payment Systems for Bank, serving as an internal consultant. He contributed to the Payments Bill, which aims to repeal the current Bill and incorporate aspects of cryptocurrency and digital regulations regarding data privacy issues. Moreover, in response to COVID, the Central Bank of Nigeria recently launched a loan platform to enable households to access facilities using digital platforms and their ID-enabled credentials, even when they do not have any form of identification. He was internally consulted to share perspectives on the issues and main points, and he developed the customer journey map. He also provided inputs on an Anti-Corruption Commission report on country-specific interventions on illicit funds transfer to be presented to the president of Nigeria.
How DFI contributed?	He highlighted the importance of the Association of Digital Finance Practitioners (ADFP) Nigeria. He pointed out they are building the ADFP reputation as leaders alongside the regulators of the digital financial sector and setting the standard of competences to deliver digital finance services in Nigeria. He stated, "*Our first concentration is to register our presence with all financial sector regulators, such that we become the go-to forum for sourcing competencies. Then, we will become critical partners in the financial system in Nigeria, in the sense that if you're constructing a country-wide body or workgroup for anything around digital finance, we will naturally be required to be members of that, our voice would have to be heard*".
So what? (Significance)	In Nigeria, lack of resources or steady income are the main reasons for not having a bank account or using Digital Finance Services (DFS). Other main reasons include the cost of financial services, the lack of required documentation (such as identification), and the lack of trust in financial service providers. In this sense, the initiative of the Central Bank to launch a loan with an ID-enabled facilitated the loan's access to the underserved Nigerian population.

	The Independent Anti-Corruption Practices Commission is the leading agency for investigating criminal and illicit fund transfers, criminal activities, money laundering, and corruption in government transactions. The anti-corruption commission report had to present progress regarding how the Central Bank of Nigeria is working on meeting international standards and expectations by implementing anti-money laundering standards and reducing corruption. The main goal is to reduce the lack of trust in financial services providers, advancing the use of DFS by the Nigerian population.

Position	Examiner
Organisation	Central Bank Zambia
Country	Zambia
What? (Contribution)	He was part of a team in the Bank of Zambia that reviewed and contributed to the draft regulation that would control access to information developed by the mobile network operator's regulator, Zambia Information, Communication and Technology Authority (ZICTA). Moreover, he was part of a project team that intended to issue a framework on cyber-security that also extended to digital service providers. He reviewed mobile money guidelines to equate the requirements of an agent of a bank *versus* an agent of a mobile money operator. He further noted that due to learnings gained through DFI, they reviewed a mobile operators' guideline with a new lens. As cofounder and chairperson of the Association for Digital Finance Practitioners (ADFP) in Zambia he also: - Consulted to the Consumer Protection Comission (CPC) in regulating incoming players in the financial industry in regulating incoming players in the financial industry - Lobbied for the removal of unnecessary fees for the Mobile Network Operators (MNOs)
How DFI contributed?	"*I certainly feel that it has improved. We have a banking guideline for mobile operators, and this guideline was initially omitted to equate or level the playing field in terms of what the requirements are for an agent of a bank compared to an agent of a mobile money operator. Hence, where an agent of a mobile money operator had more discretion in terms of limits for transacting and more headroom in terms of the balance that the wallet could hold, our guidelines were a bit more conservative regarding how much the agent should be able to do. It rendered most of the bank-lead agents quite uncompetitive. So, because of exposure and learnings in the course, the banking guidelines got to be reviewed because it started now considering what's happening on the ground*."
So what? (Significance)	In Zambia, the regulation that controls access to information developed by mobile network operators covers to what extent a mobile money user information can be used by any platform connected to the mobile money operator. It ensures users' information security and improves Zambians' confidence levels in DFS.

Position	Country Manager
Organisation	Real Pay
Country	Uganda
What? (Contribution)	He conducted regional market analysis highlighting potential partners and possible new areas for alternative delivery channel product fit. He fostered relationships with senior executives at the Central Bank of Uganda, and Uganda communications commission resulting in the legal registration of a company subsidiary in Uganda. Led and supervised merchant integrations with ABSA Bank Uganda and mobile money integration with MTN Uganda. Continuously engages and supports business development teams at Microfinance Institutions, Insurance, and MNO potential partners on Real pay product value addition.
How DFI contributed?	He affirmed that the DFI course was massive and positive in terms of skills and knowledge: *"The course upgraded my skills to a very technical level. In terms of networks, it was also fantastic. I have grown my DFS network and got to know a number of people in different organisations. But the main impact is on my knowledge and skills. The knowledge has allowed me to express myself more confidently and teach others what I have learned".*
So what? (Significance)	In this role, he drives the digital transformation agenda in existing and new markets, enhancing the economic well-being of society and expanding the digital economy. Lead engagements with Microfinance partners for provision of debit collection solutions through mobile and card digital channels for over 40,000 monthly microloan transactions.

Position	Senior Economic Inclusion Advisor
Organisation	Financial Sector Deepening Kenya - FSD Kenya
Country	Kenya
What? (Contribution)	She changed the maternity leave policies in her organisation (from 03 to 06 months for women and from 02 weeks to one month for men). The other two contributions are the new health finance project, which she is coordinating; and the peer-to-peer learning forums. She was able to scope out the support that she thinks her company needs from external gender equality specialists.
How DFI contributed?	She joined the Gender Changemakers programme because she needed to have a different understanding of gender in the 2022-2026 strategy of her company. After the course, she felt well-prepared to give input on an intervention regarding gender equality, especially through the communication skills that she had gained. One of the examples she highlighted is the change in maternity leave policies in her organisation.
So what? (Significance)	As a result of her work, she helped to increase the development and adoption of GE policies and practices that promoted gender equality within her

	organisation. As a long-term goal, it also may help to improve gender inclusive organisational culture that embraces diversity and encourages gender parity.

Position	Acting Chief Operating Officer
Organisation	NicoLive Insurance Company Ltd.
Country	Malawi
What? (Contribution)	He helped develop a low-cost funeral insurance product on Unstructured Supplementary Service Data (USSD). It includes payment of settlements and arrangement of insurance conditions. USSD is a communication protocol used by GSM cellular telephones to communicate with the service provider's computers. The company decided on a USSD platform because it is more affordable for the population than an internet-based mobile app and because most phones can use USSD.
How DFI contributed?	The CDFP provided knowledge mostly in product management and was "key" in planning, developing, and launching the product.
So what? (Significance)	The product was launched in September 2022 by Nico Life. Results have met expectations in terms of market penetration. Despite being an insurance service and not a digital product per se, also fosters digital financial inclusion as it is a service that the masses can very easily use, low-end customers, enabling them to buy, make claims, or change their insurance using a phone.

Position	Programme Manager Digital Payments
Organisation	FSD Kenya
Country	Kenya
What? (Contribution)	She has engaged in numerous collaborations, especially in the public sector, including: 1) The Kenya Bank Association and Interbank on developing a National Interbank Switch; 2) National Treasury on a digital finance strategy; 3) The Ministry of Information, Communications and The Digital Economy (ICT) on a digital economy strategy.
How DFI contributed?	As a result of her participation in the DFI courses, she highlighted the following key contributions: 1) The course formalized and solidified her knowledge. For example, the Digital ID course: *"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." 2) She also remained in the same position, but she was given more responsibility as a result of her new DFI knowledge. 3) She feels that her knowledge has contributed to her organisation's effectiveness, along with three other colleagues who have completed DFI courses.
So what? (Significance)	Her work is providing technical advice to drive implementation, convening stakeholders, identifying new collaboration areas, promoting evidence to develop use cases and show impact, and working with partners to develop capacity. Her financial market infrastructure work developing open, affordable and efficient market infrastructure that delivers services and supporting functions that are critical to the effective functioning of the financial sector in Kenya.

Position	Department Head
Organisation	Bangladesh Bank
Country	Bangladesh
What? (Contribution)	He produced a paper on banking customer service quality, making policy recommendations and guidelines for the Bank of Bangladesh. He also influenced policies by CDFP contributions: design of the digital banking policy guidelines; and financial inclusion policy aligned to Sustainable Development Goals. He contributed to the segment of AI related to the reliability of the technology employed by the bank.
How DFI contributed?	He desired to work in the digital finance field and got that motivation after taking CDFP.
So what? (Significance)	Through his actions within Bangladesh Bank, he has impacted three areas: Increased policy, concerning to the policy recommendations and guidelines that he made. The second is improved reliability of financial technology and infrastructure, with his contributions to AI related to the reality of technology employed by the bank. The third is increased innovation, with the consideration from the supervision department to introduce RedTech Technology solutions coming from CDFP alumni ideas.

Position	Payments Analyst - Payments and Financial Market Infrastructure Department
Organisation	Central Bank of Trinidad and Tobago
Country	Trinidad and Tobago
What? (Contribution)	She collaborated with research and contributed to developing the E-Money (e-money order) Issue Regulation, part of Trinidad and Tobago's larger payment bill, regulation, and licensing process.

How DFI contributed?	She works as an examiner in the bank, and her job has stayed the same since the course. Still, her knowledge about developing legislation for payment systems and regulations expanded due to relevant course elements, like consumer protection and the regulatory impact assessment. She applied this knowledge in assessing the effectiveness of legislation and regulations when they become law. She feels more confident and knowledgeable about making useful contributions.
So what? (Significance)	When ready, the E-Money Issue Regulation will be a legal certainty to regulate the industry and can be applied appropriately or adopted in the market. The E-Money order, which has registered three money issuers to start operating in the market, is a financial "avenue" to promote financial inclusion since it now has digital wallets in the market and the expansion of digital financial services.

Position	Currently a student (University of Calgary - Postgraduate Degree, Business Intelligence & Analytics) Previously and IT products Manager at Consolidated Bank Ghana
Organisation	Bank of Ghana
Country	Ghana
What? (Contribution)	He was involved in financial solutions in partnership with Vodafone Ghana. One was the overdraft facilities using electronic wallets: *"If you need quick funding and you don't have the means on your wallet, you are allowed to overdraw from your wallet immediately."* Another solution he was taking part in is the Application Programming Interface (API). The solution allows the bank to verify the identity of potential customers remotely and help onboard them without necessarily having to bring them to our banking halls.
How DFI contributed?	The Community of Practices (CoPs) from DFI made meaningful contributions towards the development of electronic wallets. The DFI also contributes with knowledge to help design a solution to identify customers remotely and meet regulatory requirements without inconveniencing new customers.
So what? (Significance)	The use of electronic wallets allows loan facilities to be more attractive than local money lenders. Also, the interest rate is highly competitive. In turn, using API to identify potential customers helps the financial inclusion of those living far from agency banking, such as the rural population. It permits the reduction of bottlenecks to financial inclusion.

Position	Founder and CEO
Organisation	Tablu Tech
Country	Mozambique
What? (Contribution)	He is a founding member of the Association of FinTech's of Mozambique, where he is Vice-President of Studies, Projects, and Regulation. Within his fintech company, of which he is the founder and CEO, he developed at least two different products: ROSCAS and MoDI. ROSCAS is a digital book-

	keeping platform for loans and savings groups that empowers cashless transactions and monetization of all the savings made through the platform. MoDI is a platform that allows for document sharing between financial and non-financial institutions allowing for more flexibility on Know Your Costumer (KYC) process on both onboarding and account update.
How DFI contributed?	He received deep knowledge from the DFI, which helped him identify good partners for his products, such as his investment partner. These were only possible with an understanding of what is helpful in the digital financial landscape. He also noted that the learnings from other countries encouraged him to consider how their practices can be adapted in his own country: "*It can be an innovation hub. We are focusing on innovation; we tend to look at places where we can find pieces of knowledge to help us enable that innovation, and the fact that we are around the DFI means that you can leverage off experiences for many countries*".
So what? (Significance)	Mozambique is no exception—whilst literacy rates there are low, and the ICT infrastructure and regulatory framework are underdeveloped, traditional banking is still not serving people's needs. The financial inclusion rate is at 42% (Work Bank Findex 2017) and there is a clear need for financial services to be available for poorer, more rural and marginalised populations. He is helping to change the Mozambique scenario of DFS with his company. Tablu Tech, a company that specialises in developing digital solutions for the financial and telecommunications sectors and is responsible for developing ROSCAS, the largest bookkeeping platform for savings groups in Mozambique with more than 100,000 members, as well as other Know Your Customer (KYC) and open banking innovative solutions. He led the KYC implementation process in SIM card registration as manager of the Provisioning and Subscriber Administration department at Vodacom Mozambique. He also managed the Business Development, and Products & Services teams of Vodafone M-Pesa Mozambique.

Position	Principal Examiner, Market Conduct Supervision
Organisation	Reserve Bank of Malawi
Country	Malawi
What? (Contribution)	She actively participated in developing a financial consumer protection law encompassing digital financial services and FinTech's from the Reserve Bank of Malawi. This financial consumer protection law comes from two directives: Fair Treatment of Financial Consumers and internal redress mechanisms. Once it is enacted, it will be called the Consumer Protection Act.
How DFI contributed?	The contribution of the DFIS course is, according to her, the use of the gender lens to draft a new policy of the Consumer Protection Act and to influence the supervisory culture, broadening the focus for traditional financial services to incorporate fintech.
So what? (Significance)	Once the Consumer Protection Act is enacted, the Reserve Bank of Malawi will issue secondary legislation in the form of rules or standards for market

	conduct, called directives. Those directives go through the gazetting process, which is quicker than the enacting of law. The Consumer Protection Act's primary purpose is to increase the development of regulatory & supervisory frameworks that foster financially inclusive products and services.

Position	Project Analyst
Organisation	UNCDF
Country	Senegal / Guinea
What? (Contribution)	She contributed to the establishment of partnerships between FinTech's, banks, and telecom companies (Orange Guinee), which opened access to services for rural populations in Guinea. She also worked with Wave (a local company) in Senegal, helping them assess the market and identify new services that could be provided, such as the use of QR codes for financial transactions.
How DFI contributed?	She declares that the influence of the CDFP course was indirect, increasing confidence and improving her knowledge to hold discussions about partnerships between stakeholders from the financial field, such as banks, FinTech's, telecom companies, and governments. She understands better the issues surrounding the implementation of digital services in collaboration with different stakeholders, and she can take a more active role in discussions in order to provide better digital finance services.
So what? (Significance)	The partnerships between FinTech's, banks, and telecom companies in Guinea allowed many rural people to start using banking services. In the Senegal case, WAVE has been innovative, for example, by introducing QR code technology that facilitates transactions, which is especially relevant for users with low digital or technology literacy levels.

Position	International consultant to central banks
Organisation	Accounting and payment services
Country	Albania
What? (Contribution)	She worked providing technical assistance to the Central Bank of Uzbekistan in drafting their regulatory framework regarding payment services. The bank already had a law on payment services and payment systems in place, but they didn't have the regulatory framework related to that in place. She helped them design their oversight policy on payment systems and some supervisory and regulatory requirements for payment services, such as e-money. She drafted the guideline note for other Alliance for Financial Inclusion members on data for collecting data for fintech and digital financial services from a supervisory perspective.
How DFI contributed?	As a consultant, she needs to be kept updated constantly. In this regard, the course was helpful because she learned from other countries' experiences

	and how they dealt with similar situations in designing and implementing Instant and Inclusive Payment Systems. Since there were many other central bankers in the course, it was also helpful to see their points of view.
So what? (Significance)	The laws, as they are currently designed in many central banks in developing countries, are that the participants in the payment systems are only banks. So, there is no room for other participants. Then, working on developing appropriate regulatory frameworks allows the payment systems to be more open and inclusive and provides the opportunity for other players in the market to be direct participants in them so that they can interoperate as well as their customers.

Position	Supply Chain Professional
Organisation	AirTelTigo
Country	Ghana
What? (Contribution)	In his organisation, he collaborated in promoting new practices in recruitment, mindful of selecting qualified candidates (recruitment based on skill, not gender), and deliberately increasing the quota of women.
How DFI contributed?	The alumnus stated that the main contributions from the course to his actions within his organisation and his career development were: 1- have contributed to expanded knowledge and awareness in recruiting so that it is not biased against women; 2- able to engage in in-depth conversations with the Mobile Finance Unit of the company he works for in making decisions; 3- He is also consulted on several projects to give his insights and opinions.
So what? (Significance)	The alumnus helped to increase the development and adoption of GE policies and practices that promoted gender equality within her organisation. As a result of the gender-sensible recruitment practice, the company has a more vibrant team, not dominated by male roles.

Position	Financial Consultant
Organisation	Freelancer
Country	Italy
What? (Contribution)	Short-term consultant for central banks (in other countries) to draft the oversight regulation for payment systems and payment instruments. Guideline note on Fintech and Digital Financial Systems Ecosystem.
How DFI contributed?	Improving capabilities to draft regulations and policy documents.
So what? (Significance)	The course IIPS improves capabilities to draft regulations and policy documents.

Position	Teacher and researcher

Organisation	Wutivi University
Country	Mozambique
What? (Contribution)	The alumni, spurred by its gender action plan, played a pivotal role in bringing the issue of sexual harassment to the forefront of discussion, with a specific emphasis on raising awareness and the imperative to engage stakeholders in dialogue regarding the repercussions of this practice within universities. Presently, the alumni stand as a standard-bearer for addressing sexual harassment, extending an invitation to the entire academic community to engage in discussions and collectively take action against this pervasive issue.
How DFI contributed?	Participating in alumni discussions allows us to share more about the Mozambican reality in relation to gender equality issues.
So what? (Significance)	Advocate the need to improve gender policy and discuss the need to include women in decision-making.

Position	Head of Human Resources Officer
Organisation	Musoni System Ltd
Country	Kenya
What? (Contribution)	At Musoni, they have successfully tackled gender disparities that were largely rooted in deeply ingrained stereotypes and structural barriers. They have acknowledged and embraced the presence of LGBT+ individuals in the workplace, striving to create a more inclusive environment. Additionally, the alumnus spearheads an initiative for the Promotion of Women in Leadership. Their contributions have encompassed the following: 1) Securing funds for coaching and mentorship programs designed for women. 2) Actively encouraging women to pursue leadership positions. 3) Addressing issues related to gender pay equity. 4) Advocating for flexible working hours and work-from-home programs to facilitate better work/life integration.
How DFI contributed?	The GEC course has empowered the alumnus to raise awareness about gender and LGBT+ issues within their organisation.
So what? (Significance)	Thanks to the initiative for the promotion of women in leadership, there have been several positive changes at Musoni: 1) Introduced Flexible Working Arrangements. 2) Established a policy permitting employees to work remotely and beyond traditional working hours. 3) Conducted training sessions to empower employees to manage their responsibilities, ensuring productivity remains unaffected. 4) These changes have significantly improved work/life integration in the workplace.

Position	Independent Consultant
Organisation	Policy Advisor
Country	United Kingdom
What? (Contribution)	Closing of gender wage gaps in a client's organisation. For every $1 that a man makes, a woman with the same role and level of responsibility makes $0,60 cents. Married men are paid more than single women despite holding the same roles in the organisation and are perceived as "having more responsibilities" compared to single, child-free women. The alumnus conducted a comprehensive gender audit of all organisational, divisional, and sectional rules, regulations, and policies to identify other gender gaps and imbalances that may have been missed out while rolling out anonymized surveys, focus group discussions, and interviews.
How DFI contributed?	The course deepened the alumni's understanding of gender inequalities, and this newfound awareness has positively influenced her work.
So what? (Significance)	Championed efforts to address a significant gender wage gap, rectify the imbalance in the executive team's gender representation, and mitigate the disproportionate division of labour among employees based on their gender.

Position	CEO
Organisation	Self employed
Country	Uganda
What? (Contribution)	The GEC course inspired her to pursue training for a consultancy she conducts for female leaders, known as "The Female Future Programme", for the Federation of Uganda Employers.
How DFI contributed?	As part of the consultancy, she actively participated in strategic sessions focused on enhancing the impact of women in society and the community. This collaboration involved working closely with the British Council and the Federation of Uganda Employers.
So what? (Significance)	Her efforts have led to an increase in the number of females occupying leadership and influential positions within the Federation of Uganda Employers.

Position	Senior Research and Policy Manager
Organisation	Technology for Social Change and Development
Country	Nigeria
What? (Contribution)	He has played a role in designing gender-based interventions within his organisation, such as creating spaces for breastfeeding and implementing maternity leave policies.

How DFI contributed?	The course deepened the alumnus' understanding of gender inequalities, and this newfound awareness has positively influenced her work.
So what? (Significance)	Consequently, he expanded maternity leave, introduced flexible work arrangements, and established safe spaces for nursing mothers.

ANNEX 2: EVALUATION MATRICES

Certificate in Digital Finance Practitioner Programme – Evaluation Matrix

Programme Expected Outcome	Question	Sub-Questions[5]	Indicators	Data Collection Method	Information Source
Intermediate outcomes					
IMO1. Increased innovation, design and development of financial service products offered to financially excluded/underserved consumers.	• How has the programme contributed to an increase in innovation of digital financial service products offered to financially excluded or underserved populations in target countries? • What new or updated financial service products have included contributions from the programme in their development.	• What benefits have these digital financial innovations brought to the financially excluded or underserved? Do they contribute to make digital financial services more available, accessible or affordable? • What are the facilitating factors for these innovations to come about? What are the challenges? • How has CDFP contributed to tailor digital financial service products to meet the needs of financially excluded or underserved consumers? • What capacities, resources or skills acquired or enhanced through CDFP have been especially helpful for innovation? • Has CDFP promoted cross collaboration across sectors been beneficial to innovation and development in any way? How? What have been the challenges for this effective and sustainable cross collaboration? What are the enablers?	• New or updated financial service products that have included contributions from the programme in their development. • Perception of course alumni on programme influence on local innovation in financial service products.	• Interviews • FGD • Survey	• CDFP course participants

[5] Not all questions and sub questions were asked to all individuals, but rather questionnaires were tailored to each respondent. The questions were to guide data collection and analysis for the evaluation team.

IMO2. Increased drafting and improvements of enabling inclusive finance policies and regulations in line with international best practices.	• How has the programme contributed to an increase in drafting and improvement of inclusive finance policy and regulation? • What new or updated financial inclusion policies or regulations have included contributions from the programme in their development.	• What new financial policies or regulations have been developed or updated by CDFP alumni? How did the programme contribute to this? • Have these been in line with international best practices? • Have these policies or regulations been introduced in their corresponding markets? • What are the facilitating factors for these policies and regulations to be implemented and enforced? What are the challenges?	• New or updated financial inclusion policies or regulations that have included contributions from the programme in their development. • Perception of course alumni on programme influence on financial inclusion policy or regulation development.	• Interviews • FGD • Survey • Doc Review	• CDFP course participants • Policy Documents
IMO3. Business models, operations & promotional activities are adapted to suit financially excluded/underserved consumers.	• How has the programme contributed to develop or implement business models, operations or promotional activities adapted to the financially excluded or underserved? • What inclusive business models, operations or promotional activities that have been implemented have included contributions from the programme in their development.	• Is there evidence that these business models, operations or promotional activities have benefitted the financially excluded or underserved? How? • What are the challenges in adapting business models, so they are more inclusive? What are the challenges?	• Implemented business models, operations or promotional activities have included contributions from the programme in their development. • Perception of course alumni on the benefits of business models, operations or promotional activities for financially excluded or underserved consumers.	• Interviews • FGD • Survey	• CDFP course participants.
Long-term outcomes					
LTO1. Improved reliability of financial technology and infrastructure, relevant to	• How has the programme contributed to improve the reliability of financial technology or infrastructure relevant to low-income consumers?	• What sort of improved technologies or infrastructures have been influenced by the programme? • What effects (in terms of quality, accessibility, diversity or usage) have new regulations and policies had on target populations in terms of financial inclusion and financial health?	• Perception of course alumni on programme influence on the reliability of financial technology or infrastructure.	• Interviews • FGD • Survey	• CDFP course participants.

low-income consumers.		• What are the key factors in sustaining the improvement and maintenance for this digital financial technology and infrastructure? • What are the specific gaps or challenges in the existing policies and regulations that still need to be addressed through further advocacy and policy development?			
LTO2. Improved pro-poor business models and operations of digital financial services for financially excluded/underserved consumers.	• How has the programme contributed to improve pro-poor business models and operations of digital financial services for financially excluded or underserved consumer?	• What benefits have the pro-poor business models and operations of digital financial services brought for financially excluded or underserved consumers? Is there evidence of increased trust, adoption, and use of financial services? What evidence? • What are the key factors in sustaining the availability and usage of theses financial service products beyond the CDFP programme? • What specific financial needs and challenges of the target population still need to be addressed through further innovation and development of financial products? • Has CDFP facilitated collaboration (for example through the CoPs) contributed to the advancement of pro-poor business models and operations? How? What kind of collaboration? Cross sectoral? • How have financial service providers responded to the changing needs of financially excluded or underserved consumers? • How has the CDFP programme contributed to the career development of course participants? Is there any role played by the CoPs in this?	• Perception of course alumni on programme influence on the improvement pro-poor business models and operations	• Interviews • FGD • Survey	• CDFP course participants.

Digital Financial Inclusion Supervision – Evaluation Matrix

Programme Expected Outcome	Questions	Sub questions	Indicators	Data Collection Method	Information Source
Intermediate outcomes					
IMO1. Enhanced individual capacity of financial sector regulators and supervisors to effectively regulate and supervise financial services with a gender and financial inclusion lens.	• How has the DFIS programme contributed to enhancing the individual capacity of financial sector regulators and supervisors to effectively regulate and supervise financial services with a gender and financial inclusion lens? • How has the DFIS programme contributed to improving supervision and regulation with a gender and financial inclusion lens in the countries in which the alumni work?	• What capacities, resources or skills have been acquired or enhanced through DFIS participation? • Has this capacity building led to changes in regulatory practices and outcomes in DF target countries? How? • What are the key challenges and success factors in implementing a gender and financial inclusion lens during supervision?	• Level of capacity to effectively supervise or regulate as reported by exit surveys. • Perception of DFIS alumni on changes in the regulatory and supervision roles	• Interviews • FGD • Survey	• DFIS students and alumni
IMO2. Enhanced organisational resource awareness and utilisation	• How has the DFIS programme contributed to enhancing organisational resource awareness? • How has the DFIS programme contributed to enhancing organisational resource utilisation?	• What organisational resources have been identified and used by DFIS alumni? • How have these resources influenced decision-making processes and outcomes? • What are the challenges and the enablers for organisational resource awareness and utilisation?	• Type of organisational resources identified and used.	• Interviews • FGD • Survey	• DFIS students and alumni
IMO3. Enhanced regulatory harmonisation among different jurisdictions and	• How has the DIFS programme contributed to regulatory harmonisation among different jurisdictions and regulatory bodies? • What new or updated changes have been introduced	• What specific measures have been introduced addressing regulatory harmonisation? • In which sectors or domains within the financial industry is harmonisation priority?	• New or updated measures to regulatory harmonisation • Level of involvement of DFIS alumni in measures related to regulatory harmonisation. • Perception of DFIS alumni on regulatory harmonisation	• Interviews • FGD • Survey • Doc Review	• DFIS students and alumni • Policy docs

regulatory bodies.	addressing regulatory harmonisation because of DFIS alumni? To what effect?	• In what ways has collaboration among DFIS alumni contributed to regulatory harmonisation? • What specific mechanisms have been put in place to promote such regulatory harmonisation? • What are the enabling factors for effective regulatory harmonisation? What are the challenges?			
LTO1. Appropriate regulatory frameworks which enable inclusive financial products and services	• How has the DFIS programme contributed to the development or implementation of appropriate regulatory frameworks which enable inclusive financial products and services? What specific frameworks?	• What specific regulatory frameworks have been made appropriate to enable inclusive financial products and services? How has this happened? • What have been the facilitating factors in this endeavour? What have been the challenges? • Are there any benefits that these new regulations have already brought to the financially excluded population? Which benefits?	• Perception of DFIS alumni on programme influence on the development or implementation of appropriate regulatory frameworks. • Identified benefits for financially excluded populations.	• Interviews • FGD • Survey • Desk review	• DFIS students and alumni • DFIS related documents.
LTO2. Strengthened financial sector stability and integrity that takes into account gender and financial inclusion.	• How has the DFIS programme contributed to strengthening financial sector stability and integrity in target countries? • How has the DFIS programme contributed to considering issues of gender and financial inclusion in the financial sector in target countries?	• What specific DF influenced new regulations regulation or supervision practices to strengthen financial sector stability and integrity have been introduced? • Has DF been effective in promoting the adoption of gender and financial inclusion regulations and supervisory practices in the financial sector? How? • What are the enablers and challenges for financial sector stability and integrity?	• Perception of DFIS alumni on programme influence on financial sector stability and integrity	• Interviews • FGD • Survey	• DFIS students and alumni

[1]

Instant and Inclusive Payment Systems – Evaluation Matrix

Programme Expected Outcome	Questions[1]	Sub questions	Indicators	Data Collection Method	Information Source
Intermediate outcomes					
IMO1.Increased use of inclusive and sustainable digital payment systems by financially excluded/underserved consumers.	• How has the IIPS programme contributed to an increased use of inclusive and sustainable digital payment systems by underserved consumers? • What new or updated inclusive and sustainable digital payment systems have included contributions from the programme in their development?	• How has the use of inclusive and sustainable digital payment systems been increased and improved? • How do the improved inclusive and sustainable digital payment systems meet the needs of financially excluded and underserved consumers? • What are the key challenges and success factors in implementing inclusive and sustainable payment systems?	• New or updated inclusive and sustainable digital payment systems. • Perception of IIPS alumni on how the new digital payment systems have reached excluded and underserved consumers	• Interviews • FGD • Survey	• IIPS students and alumni
IM02. Increased policy development and regulation related to IIPS systems.	• How has the programme contributed to policy development and regulation related to IIP systems? • What new or updated regulation have included contributions from the programme in their development?	• How has policy development and regulation related to IIP systems changed? To what effect? • What are the key policy and regulatory challenges and opportunities in promoting inclusive, affordable, and sustainable payment systems? • What efforts in terms of advocacy have led to changes in policy development and regulation related to IIP systems?	• New or updated regulation related to IIP systems. • Advocacy efforts by payment professionals for IIP systems • Perception of IIPS alumni on challenges and opportunities	• Interviews • FGD • Survey • Doc Review	• IIPS students and alumni • Policy docs
IM03. Enhanced collaboration among IIPS system stakeholders to innovate, develop and implement effective regulation, operation,	• How has the course contributed to enhanced collaboration among IIP system stakeholders? • Has this collaboration led to innovations in terms of IIPS regulation, operations	• What specific mechanisms have been put in place to promote collaboration? • What enables effective and sustainable collaboration? What challenges it?	• Perceived extent of collaboration • Perceived effectiveness of collaboration among IIPS stakeholders. • Perceived sustainability of collaboration among IIPS stakeholders.	• Interviews • FGD • Survey	• IIPS students and alumni

and technology solutions	or technology solutions? How so?	• What are the best practices and lessons learned in stakeholder collaboration for payment system development? • What are the concrete results of stakeholder collaboration in terms of regulation, operation or technology?	• Collaboration mechanisms • New or updated regulation, operations or technology solutions		
LT01. Improved efficiency and security of digital payment systems, reducing transaction costs and risks for underserved populations.	• How has the programme contributed to the improved efficiency and security of digital payment systems, reducing transaction costs and risks for underserved populations?	• How has the efficiency or security of digital payment systems improved? Have these improvements been effective in reducing transaction costs and risks for underserved populations? • What are the key technical and operational challenges in achieving efficiency and security in payment systems? • What are the best practices and strategies to reduce transaction costs and mitigate risks in payment systems for financially excluded/underserved populations?	• Perception of course alumni on programme influence on the efficiency and security of digital payment systems. • Improvements in digital payment systems that lead to improved security or efficiency	• Interviews • FGD • Survey	• IIPS students and alumni
LT02. Increased payment innovation leading to the development of new payment use cases in the digital economy	• How has the programme contributed to innovations in payment systems? • Are there new payment use cases in the digital economy that have been influenced by IIPS? How?	• What challenges are there to innovation in payment systems? What are the facilitating factors? • What are the key opportunities and challenges in promoting financial inclusion and innovation in the digital economy? • What have been the main benefits that payment system innovation has brought to the financially excluded or underserved?	• Alumni perception on programme influence on payment systems innovation? • Innovations in payment systems influenced by IIPS?	• Interviews • FGD • Survey • Doc Review	• IIPS students and alumni

Gender Equality Changemakers – Evaluation Matrix

Programme Expected Outcome	Question	Sub-Questions	Indicators	Data Collection Method	Information Source
Intermediate outcomes					
IMO1. Increased participation of women in decision-making processes and leadership positions within participants' organisations.	• How has the GEC programme influenced any changes in the participation of women in decision-making processes within the participants' organisations? • How has the GEC programme influenced any changes in women assuming leadership positions within participant's organisations?	• Do course participants have the necessary skills and knowledge to influence gender equality-related changes in their organisations? • What are the changes in policies and practices the enable or promote access for women to leadership positions and meaningful participation in decision making? Are there other enabling factors? What are the hindering factors? • What are the enabling factors for women to actively participate in decision-making and leadership? What are the obstacles?	• Participant's perception of women's participation in decision-making. • Percentage of participating organisations in the evaluation that have an increased number of women in leadership positions.	• Interviews • FGD • Survey	• GEC course participants.
IMO2. Increased development and adoption of policies and practices that promote gender equality within organisations.	• How has the GEC programme influenced the development or adoption of organisational gender equality policies or practices in participant's organisations?	• What specific policies and practices have been developed and adopted to promote gender equality within target organisations? How have they been implemented? To what effect? • What challenges have been faced in developing and adopting these policies and practices, and how have they been addressed within target organisations? • Have any gender equality monitoring or accountability mechanisms been put in place? To what effect? • Do course participants feel confident to advocate for gender equality changes in their organisations? What are the enablers to be effective gender champions? What are the challenges? • Have programme participants advocated or participated in initiatives aimed at promoting gender equality? How? In what	• Percentage of participating organisations that have an increased adoption of policies or practices that promote gender equality. • Percentage of consulted participants that have advocated or participated in gender equality promotion in their organisations.	• Interviews • FGD • Survey	• GEC course participants.

		sort of spaces? Are they still advocating for these? • To what extent have GEC capstone projects contributed to changes in gender practices or policies? Are they an effective means to promote changes in gender issues? How? • What capacities, resources or skills acquired or enhanced through GEC have been especially helpful for the promotion of gender equality?			
Long-term outcomes					
LTO1. Improved gender inclusive organisational culture that embraces diversity and encourages gender parity.	• How has the GEC programme contributed to the improvement of a gender inclusive organisational culture in the participant's organisations?	• Is there collaboration and networking amongst different organisations or individuals working to promote gender equality? How does this collaboration take place? • What are the enabling factors for effective and sustainable collaboration in Gender issues? What are the challenges? • To what extent has the profession of Gender Equality Changemakers been created and sustained in participating organisations? What challenges have been faced in creating and sustaining this profession, and how have they been addressed? • Has increased participation and leadership of women in decision-making processes and positions within organisations translated into changes in organisational culture and practices that promote gender equality? Which ones? • Have the policies and practices that promote gender equality within organisations evolved and been institutionalized? How? • Are there any visible effects, either within or outside the organisation, derived from organisational changes to promote gender equality?	• Participant's perception of changes in gender inclusive organisational culture.	• Interviews • FGD • Survey	• GEC course participants. • CoPs participants

ANNEX 3: CONSULTED DOCUMENTS

Basic Documents

1. Digital Frontiers Institute Vision, Mission & Values Document.
2. DFI ME Strategy 2017 Document.
3. Digital Frontiers. 2022. CoPs impact stories: Jacinta Kamama Maiyo, Abigail Komu, Lumbani Gondwe and Modow Sall.
4. Digital Frontiers. 2021. Digital Frontiers. Guidebook on Communities of Practice for COP Facilitators.
5. Digital Frontiers. 2020. MMRE Report.
6. Digital Frontiers. CoPs meeting reports: Abuja and Accra.
7. Digital Frontiers. CoPs meeting reports: Bangladesh, Benin, Cameroon and Ethiopia.
8. Digital Frontiers. CoPs meeting reports: Ghana, Kenya, Mozambique, Nigeria and Pakistan.
9. Digital Frontiers Institute. Monitoring and Measurement Results Report 2020.
10. Digital Frontiers Institute Case Studies: Bank of Bangladesh.
11. Digital Frontiers Institute Case Studies: Bank of Kigali.
12. Digital Frontiers Institute Case Studies: Accion Case.
13. Digital Frontiers Institute Case Studies: MTN group.
14. Digital Frontiers Institute Case Studies: Uganda country.
15. Digital Frontiers Institute Case Studies: Zambia country.

Course Documents

1. Course exit surveys.
2. DFIS Feedback Survey 2021.
3. Digital Frontiers. 2021. CDFP Project Completion Report.
4. IIPS and DFIS course curriculum.

Other Documents

1. African Development Bank Women's Financial Inclusion.
2. Digital intelligence Index.
3. Global Center for Gender Equality at Stanford University. 2021. Brief for Gender Intentional Training Design.
4. G20-2020 Financial Inclusion Action Plan.
5. GFPI Advancing Women's Financial Inclusion.

Online Resources

1. A Comparative Analysis of Financial Inclusion: A Study of Nigeria and the UK, Medium. https://www.academia.edu/381362/A_Comparative_Analysis_of_Financial_Inclusion_A_Study_of_Nigeria_and_the_UK
2. A Comparative Analysis of Recent Efforts on Financial Inclusion and the Policy Recommendations of Financial Inclusion in India and Nigeria. https://www.namibian-studies.com/index.php/JNS/article/view/2634
3. An enabling Regulatory Framework is Critical for Financial Inclusion. https://www.cgap.org/topics/collections/regulation-inclusive-digital-finance
4. Digital Frontiers. 2023. DFIS Web Page. https://dfis.digitalfrontiersinstitute.org/
5. Digital Frontiers. 2023. IIPS Web Page. Digital Frontiers. 2021. DFIS Web Page. https://iipscertification.org/
6. Izaguirre, Juan Carlos et al. 2023. How do Industry Associations Promote Responsible Digital Finance? CGAP. https://www.cgap.org/blog/how-do-industry-associations-promote-responsible-digital-finance
7. Digital Financial Inclusion. https://www.cgap.org/research/publication/digital-financial-inclusion
8. Determinants of Financial Inclusion: A Comparative Study of Kenya and Ethiopia. https://www.tandfonline.com/doi/pdf/10.1080/15228916.2022.2078938
9. GPFI's report on 'Advancing Women's Digital Financial Inclusion' (pp. 13-16). https://www.gpfi.org/publications/advancing-women-s-digital-financial-inclusion
10. How do Industry Associations Promote Responsible Digital Finance. https://www.cgap.org/blog/how-do-industry-associations-promote-responsible-digital-finance
11. Optimizing interoperability: Lessons from Instant payment systems across 12 Jurisdictions. https://bfaglobal.com/wp-content/uploads/2022/10/BFA_Report-Optimizing-interoperability_0910.pdf
12. UNCDF. 2021. Virtual capacity-building isn't going anywhere. Here's how to make it more effective. https://policyaccelerator.uncdf.org/whats-new/virtual-capacity-building-isnt-going-anywhere
13. This is My Journey Videos on YouTube. https://www.youtube.com/playlist?list=PL-7PR_2d_7bZrWc_YX9YLzUtZa4D9Ags3
14. Risk-based supervision is key to financial inclusion in 2020 & beyond. https://www.cgap.org/blog/risk-based-supervision-is-key-to-financial-inclusion-in-2020-beyond

ANNEX 4: LIST OF DF STAKEHOLDERS CONSULTED

Digital Frontiers	
Gavin Krugel	Co-Founder and Executive Director
Kholeka Zama	Chief Financial Officer and Executive Director
Sarah Corley	Divisional Director and CEO of the Alliance of Digital Finance Associations
Tariro Nyimo	Deputy Divisional Director, Digital Frontiers Institute
Tendai Gumbi	Head: Monitoring, Evaluation and Business Intelligence
Xavier Martin	Divisional Director, Digital Frontiers Institute
Bill and Melinda Gates Foundation	
Lilian Tan	Senior Programme Officer, Women's Economic Empowerment & Financial Inclusion
Ariadne Plaitakis	Senior Programme Officer Regulation
CGAP/Toronto Centre	
Juan Carlos Izaguirre	Senior Financial Sector Specialist
Centre for Sexualities, AIDS & Gender (CSA&G) at the University of Pretoria	
Pierre W. Brouard	Director
Christi Kruger	Senior Research Manager
Vuyisa Mamanzi	Project Manager

ANNEX 6: ALUMNI RECOMMENDATIONS

The majority of DFI alumni are highly satisfied with their experience and recognise Digital Frontiers' efforts in delivering high-quality training with updated and relevant content, to advance digital financial inclusion. Still, some recommendations were made[6]. Multiple recommendations have been aggregated and synthesized per topics[7]:

Strategic level:

- Expand coverage and diversity of target students to increase alumni base, reaching people at high levels with greater influence (executives).
- Increase the critical mass of alumni in different countries, so DFI could contribute more to expected changes.
- DF could establish memorandums of understanding with various government institutions and authorities to deliver education to those target groups, to further its outcomes of financial inclusion.
- Increase communication and visibility of DFI, not only in Africa but the whole Global South.
- Increase linkages and partnerships with other stakeholders of the civil society who could complement DFI's work.
- Increase scholarships available to reach more people.
- Increase tailoring of the programmes to regional contexts, including course language and more diversity of instructors.

Programme design/ management.

- The courses are completely online, and it would be very beneficial to at least have a part them in-person to allow for further engagement and knowledge exchange.
- Extend the time frame of the courses to be able to cover more material at a comfortable pace.
- Increase collaboration and peer learning during the course and as a basis for further online interactions.
- Regular engagement and follow-up post-training, through a platform to share experiences and discuss real-life application of concepts learned.
- Expand to another type of interaction such as annual conferences for all DFI alumni, to mix a wide range of stakeholders and foster an environment of cooperation for productive discussions and networking.

[6] A large number of suggestions were made, but due to the limited space, this evaluation only presents the most relevant ones in relation to the scope its scope evaluation, i.e. those that could boost effectiveness and advance intermediate and long-term outcomes.

[7]This section present ideas that came up from more than one source. Since these came from alumni from all programmes, they are mostly cross-cutting issues.

- To consider establishing a 2-3 months or six months on-hands training in the digital financial sector, as a requirement to completing the programmes. Those who have experience on the field, could be credited.
- Get involved and visit key organisations through student exchange programmes or technical/academic visits.
- Include industry talks in the course to foster knowledge exchange.

CoPs

- Strength CoPs performance by setting up monitoring of results of members as well as goals for the CoP facilitators.
- CoPs could have a more active role in supporting project development and implementation of its members. For example, advise on implementation of Capstone projects and Action Plans.
- Use CoPs as a mean to prevent attrition of students.
- To have more informal CoP meetings to foster trust and exchange knowledge among participants.
- To promote more in-person events, to strength relationship and the sense of “community”.
- Creating CoP/DFA regional chapters with other countries, to foster further coordination and harmonisation with other jurisdictions.
- Bring together different fora such as the League of professionals, the CoPs and fellow alumni from other courses, in order to interact, and share lessons from each CoP terms of achievements and challenges.

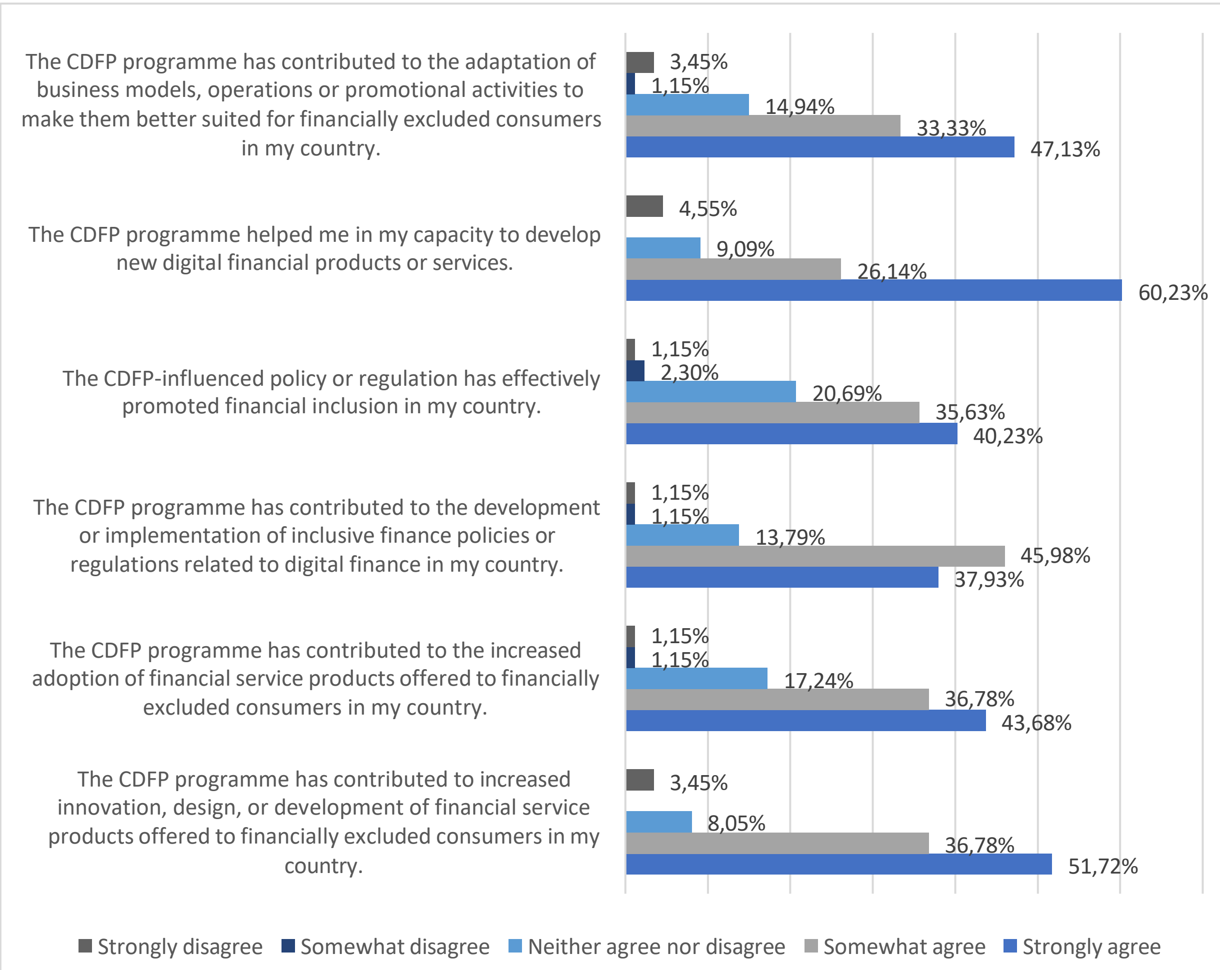
Program-specific feedback:

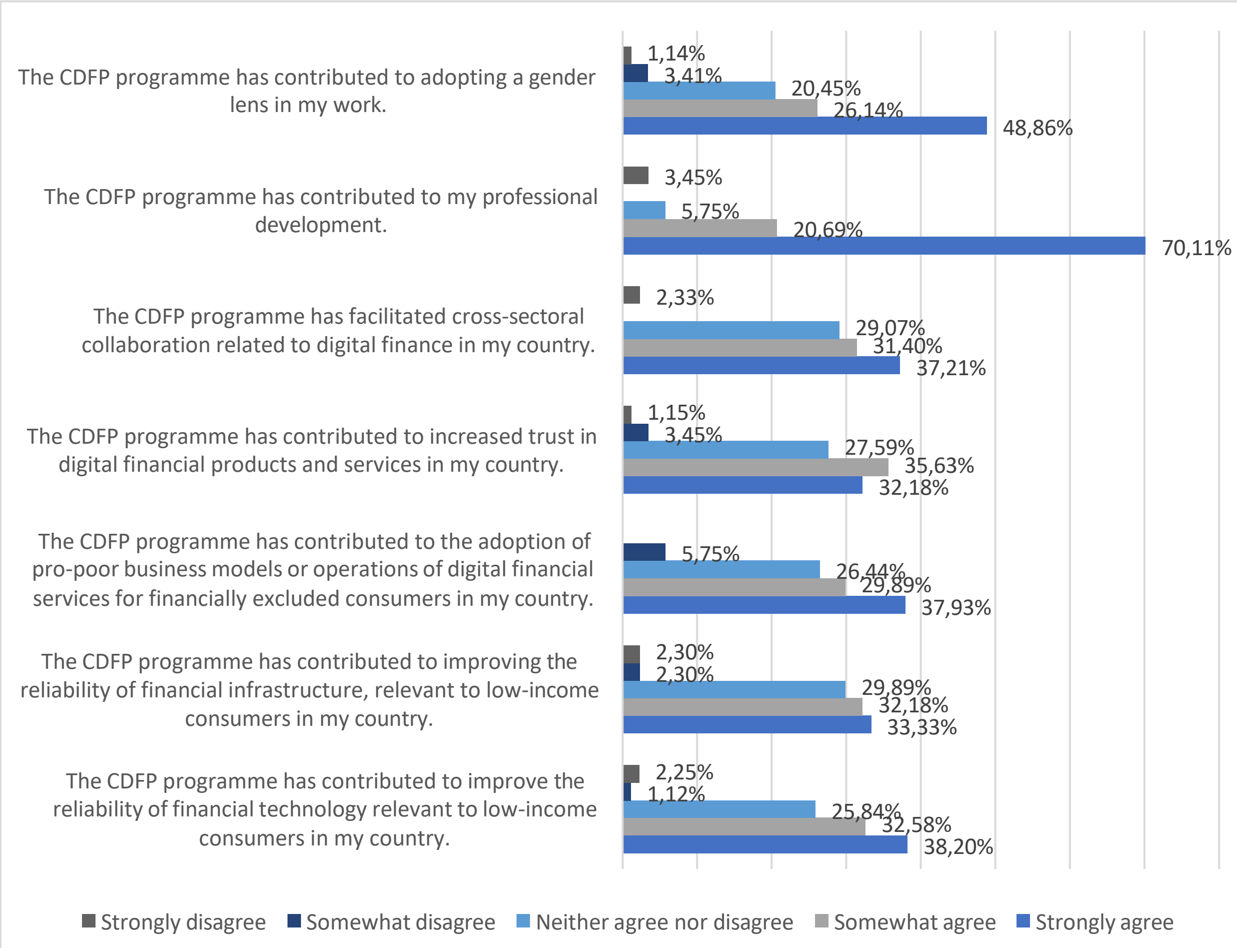
- For CDFP, include more public sector officials from the Ministries of Finance especially in the CoPs.
- Similarly, for DFIS, to foster collaboration between regulators and industry players.
- For IIPS, expand content in a new specialisation course related to the infrastructure of the payment platforms, and technological solutions to address common problems to the platform, such as security risks.
- For IIPS, consider expanding the programme and turning it into a certification for payment professionals.
- For GEC, allow students to keep the trainers and facilitator tools, to keep raising awareness and using learned concepts in other contexts.
- For GEC, expand coverage to more civil society organisations, with content tailored to this segment.
- For GEC, target HR personnel as they are in a better position to drive change.
- For GEC, provide more networking opportunities and mentorship for women in leadership positions, and learning from more role models.

ANNEX 7 SURVEY RESULTS

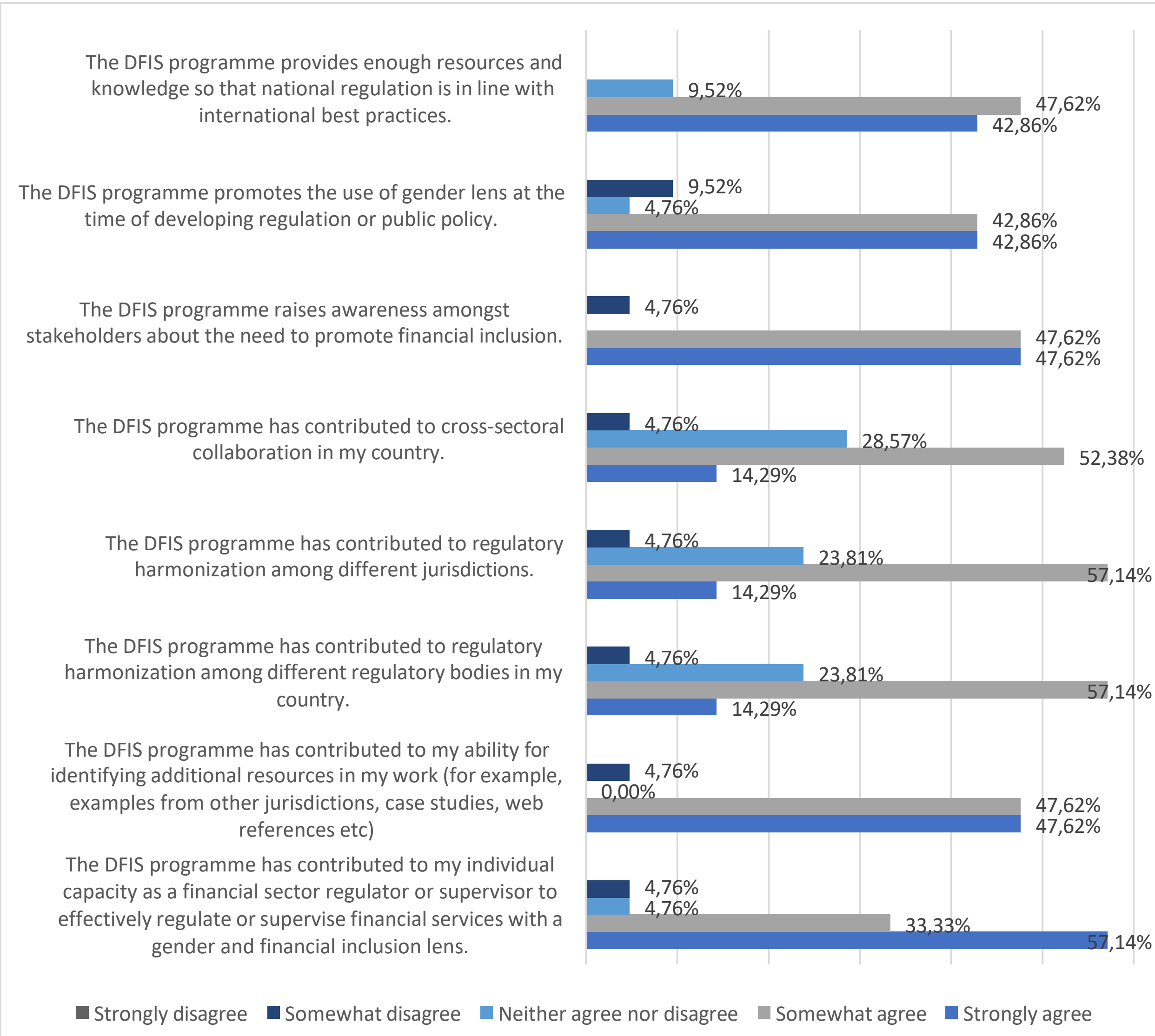
This annex presents the survey data relative to alumni perception on programme performance in terms of outcome achievement.

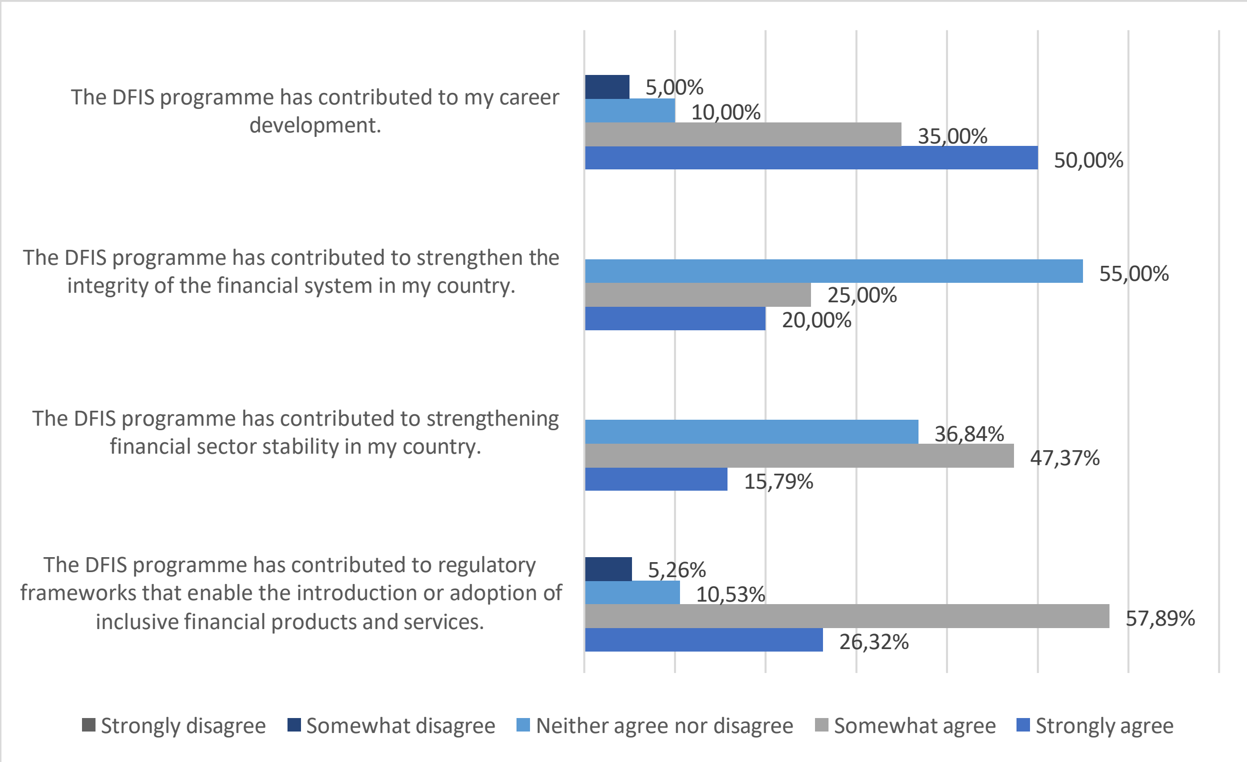
CDFP



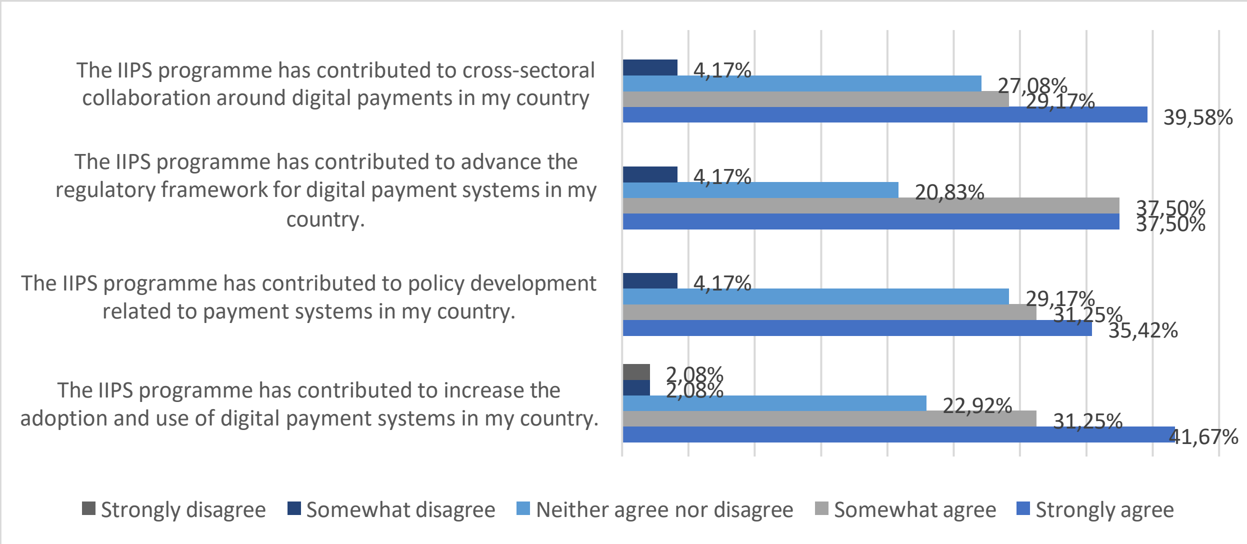

The CDFP programme has contributed to adopting a gender lens in my work.
1,14%
3,41%
20,45%
26,14%
48,86%
The CDFP programme has contributed to my professional development.
3,45%
5,75%
20,69%
70,11%
The CDFP programme has facilitated cross-sectoral collaboration related to digital finance in my country.
2,33%
29,07%
31,40%
37,21%
The CDFP programme has contributed to increased trust in digital financial products and services in my country.
1,15%
3,45%
27,59%
35,63%
32,18%
The CDFP programme has contributed to the adoption of pro-poor business models or operations of digital financial services for financially excluded consumers in my country.
5,75%
26,44%
29,89%
37,93%
The CDFP programme has contributed to improving the reliability of financial infrastructure, relevant to low-income consumers in my country.
2,30%
2,30%
29,89%
32,18%
33,33%
The CDFP programme has contributed to improve the reliability of financial technology relevant to low-income consumers in my country.
2,25%
1,12%
25,84%
32,58%
38,20%
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree

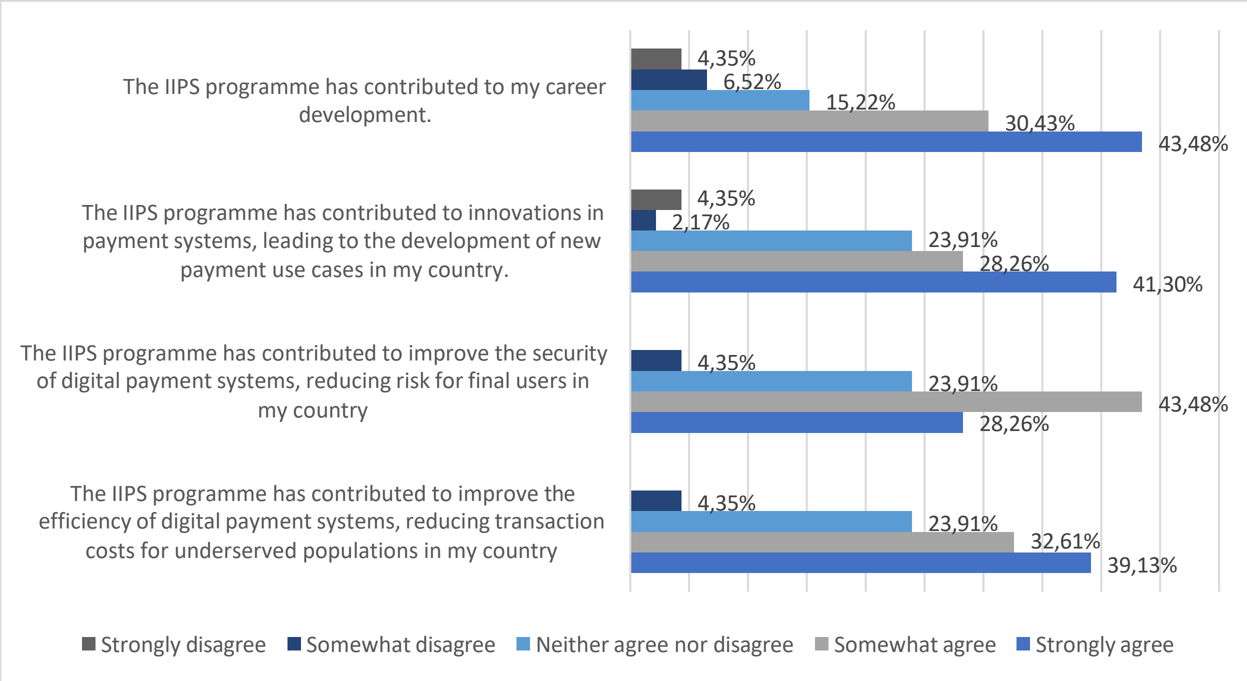
DFIS


The DFIS programme provides enough resources and knowledge so that national regulation is in line with international best practices.
9,52%
47,62%
42,86%
The DFIS programme promotes the use of gender lens at the time of developing regulation or public policy.
9,52%
4,76%
42,86%
42,86%
The DFIS programme raises awareness amongst stakeholders about the need to promote financial inclusion.
4,76%
47,62%
47,62%
The DFIS programme has contributed to cross-sectoral collaboration in my country.
4,76%
28,57%
52,38%
14,29%
The DFIS programme has contributed to regulatory harmonization among different jurisdictions.
4,76%
23,81%
57,14%
14,29%
The DFIS programme has contributed to regulatory harmonization among different regulatory bodies in my country.
4,76%
23,81%
57,14%
14,29%
The DFIS programme has contributed to my ability for identifying additional resources in my work (for example, examples from other jurisdictions, case studies, web references etc)
4,76%
0,00%
47,62%
47,62%
The DFIS programme has contributed to my individual capacity as a financial sector regulator or supervisor to effectively regulate or supervise financial services with a gender and financial inclusion lens.
4,76%
4,76%
33,33%
57,14%
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree

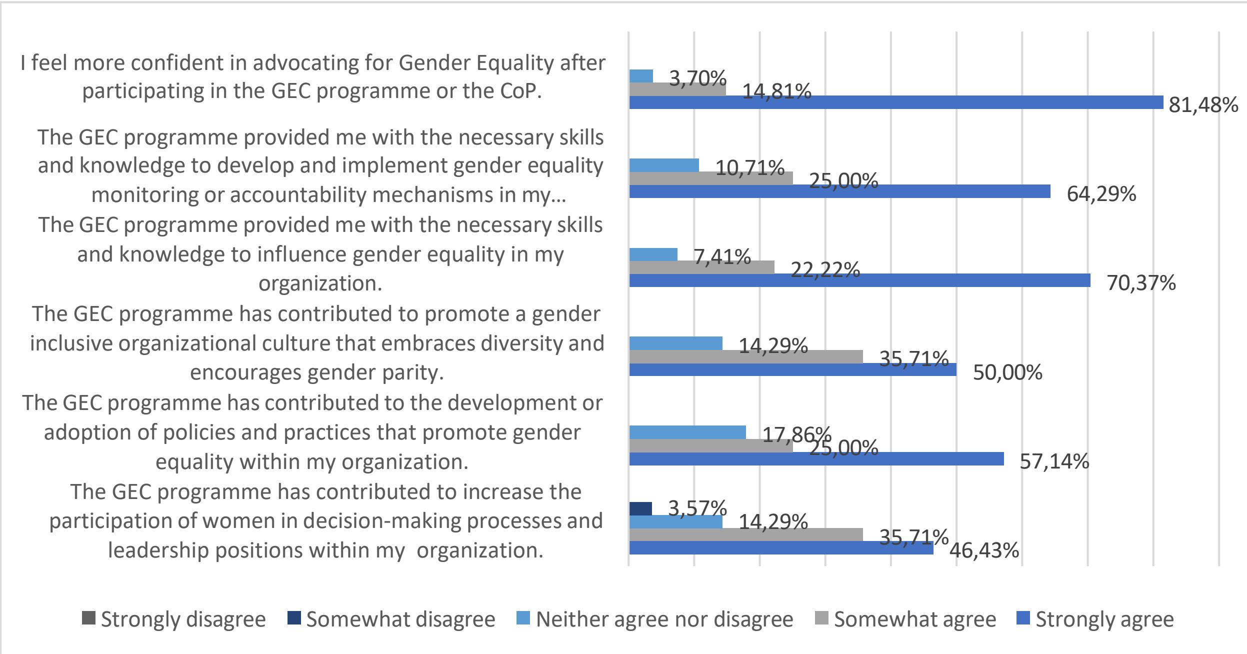

The DFIS programme has contributed to my career development.
5,00%
10,00%
35,00%
50,00%
The DFIS programme has contributed to strengthen the integrity of the financial system in my country.
55,00%
25,00%
20,00%
The DFIS programme has contributed to strengthening financial sector stability in my country.
36,84%
47,37%
15,79%
The DFIS programme has contributed to regulatory frameworks that enable the introduction or adoption of inclusive financial products and services.
5,26%
10,53%
57,89%
26,32%
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree

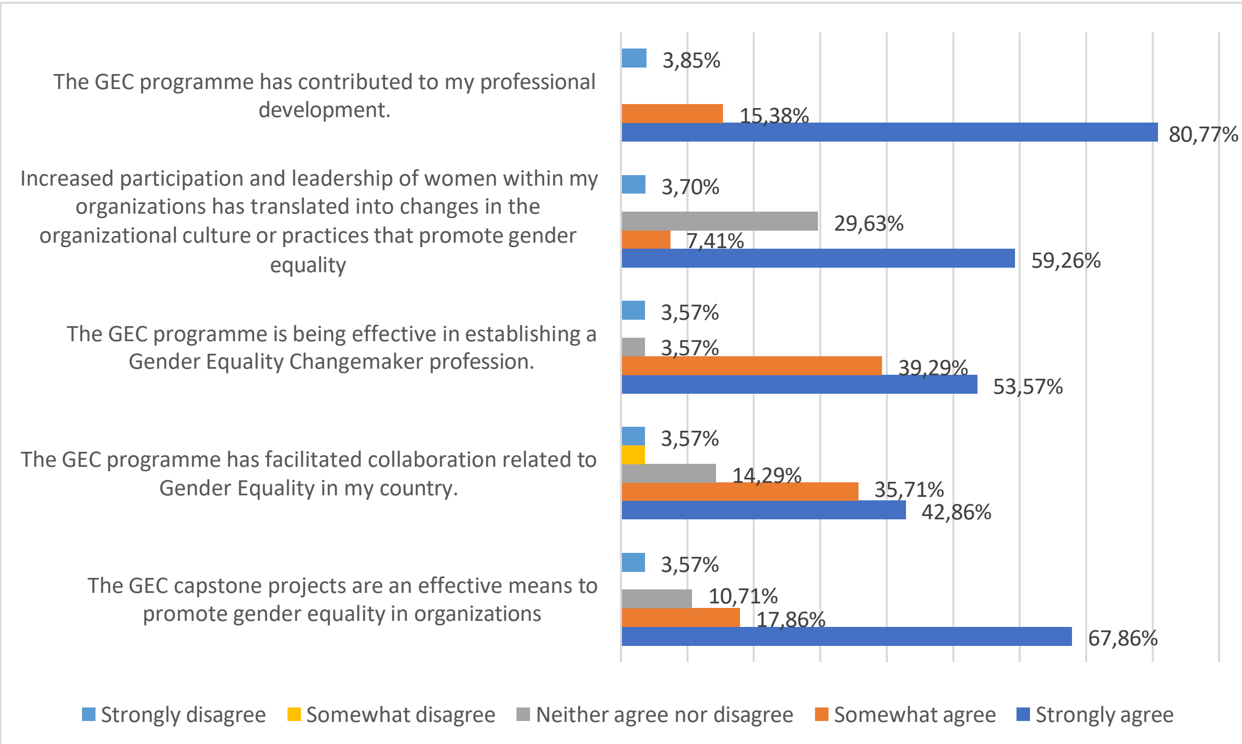
IIPS


The IIPS programme has contributed to cross-sectoral collaboration around digital payments in my country
4,17%
27,08%
29,17%
39,58%
The IIPS programme has contributed to advance the regulatory framework for digital payment systems in my country.
4,17%
20,83%
37,50%
37,50%
The IIPS programme has contributed to policy development related to payment systems in my country.
4,17%
29,17%
31,25%
35,42%
The IIPS programme has contributed to increase the adoption and use of digital payment systems in my country.
2,08%
2,08%
22,92%
31,25%
41,67%
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree


The IIPS programme has contributed to my career development.
4,35%
6,52%
15,22%
30,43%
43,48%
The IIPS programme has contributed to innovations in payment systems, leading to the development of new payment use cases in my country.
4,35%
2,17%
23,91%
28,26%
41,30%
The IIPS programme has contributed to improve the security of digital payment systems, reducing risk for final users in my country
4,35%
23,91%
43,48%
28,26%
The IIPS programme has contributed to improve the efficiency of digital payment systems, reducing transaction costs for underserved populations in my country
4,35%
23,91%
32,61%
39,13%
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree

GEC


I feel more confident in advocating for Gender Equality after participating in the GEC programme or the CoP.
3,70%
14,81%
81,48%
The GEC programme provided me with the necessary skills and knowledge to develop and implement gender equality monitoring or accountability mechanisms in my...
10,71%
25,00%
64,29%
The GEC programme provided me with the necessary skills and knowledge to influence gender equality in my organization.
7,41%
22,22%
70,37%
The GEC programme has contributed to promote a gender inclusive organizational culture that embraces diversity and encourages gender parity.
14,29%
35,71%
50,00%
The GEC programme has contributed to the development or adoption of policies and practices that promote gender equality within my organization.
17,86%
25,00%
57,14%
The GEC programme has contributed to increase the participation of women in decision-making processes and leadership positions within my organization.
3,57%
14,29%
35,71%
46,43%
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree



The GEC programme has contributed to my professional development.
Increased participation and leadership of women within my organizations has translated into changes in the organizational culture or practices that promote gender equality
The GEC programme is being effective in establishing a Gender Equality Changemaker profession.
The GEC programme has facilitated collaboration related to Gender Equality in my country.
The GEC capstone projects are an effective means to promote gender equality in organizations
3,85%
15,38%
80,77%
3,70%
29,63%
7,41%
59,26%
3,57%
3,57%
39,29%
53,57%
3,57%
14,29%
35,71%
42,86%
3,57%
10,71%
17,86%
67,86%
Strongly disagree
Somewhat disagree
Neither agree nor disagree
Somewhat agree
Strongly agree

Baastel

30 Years Promoting Sustainable Development

North American Office

Le Groupe-conseil Baastel ltée

92, rue Montcalm

Gatineau (Québec)

Canada, J8X2L7

European Office

Le Groupe-conseil Baastel srl

Boulevard Adolphe Max 55

B-1000 Brussels

Belgium

Representation France

Olivier Beucher & Gaetan Quesne

T : +33 7 82 92 44 98

Representation Jamaica

Curline Beckford

P: +1 876 298 6545