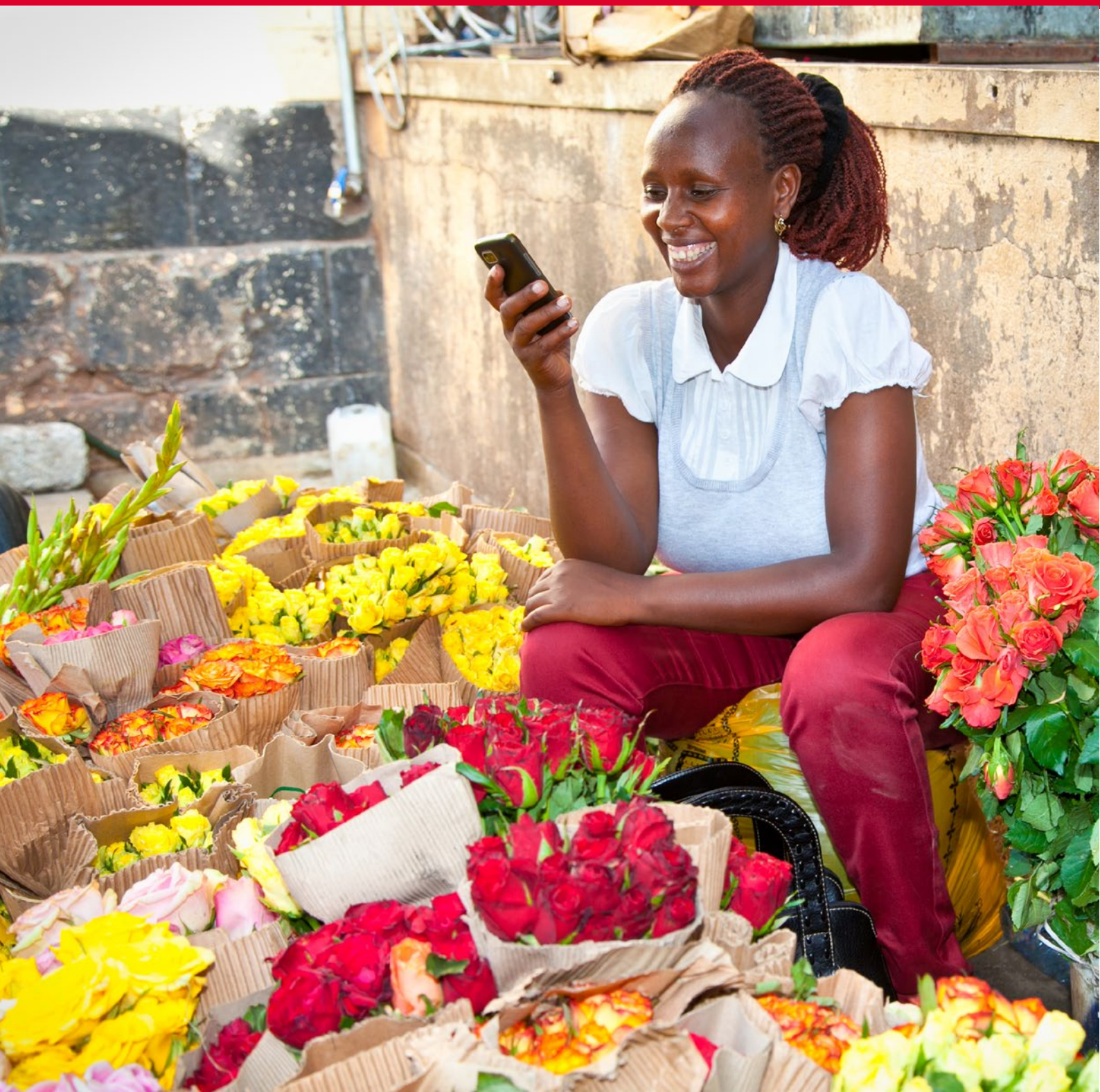


# Advancing Digital Financial Literacy: Insights from two pilot projects in Africa





The GSMA is a global organisation unifying the mobile ecosystem to discover, develop and deliver innovation foundational to positive business environments and societal change. Our vision is to unlock the full power of connectivity so that people, industry, and society thrive.

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## GSMA Mobile Money

The GSMA's Mobile Money programme works to accelerate the development of the mobile money ecosystem for the underserved.

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Visa is a world leader in digital payments, facilitating transactions between consumers, merchants, financial institutions, and government entities across more than 200 countries and territories. The "Digital Finance for All" (DFA) initiative, a Visa-funded partnership between Visa and the GSMA Mobile for Development Foundation, is committed to advancing sustainable growth. The DFA programme aims to enable individuals and small and micro businesses (SMBs) in low and middle-income countries (LMICs) with digital financial services and financial education to bolster financial inclusion.

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## Acronyms and abbreviations

<b>API</b>	Application programming interface	<b>MFI</b>	Microfinance institution
<b>BTC</b>	Bitcoin	<b>MMP</b>	Mobile money provider
<b>CRM</b>	Customer relationship management	<b>MNO</b>	Mobile network operator
<b>DFL</b>	Digital financial literacy	<b>NGO</b>	Nongovernmental organisation
<b>DFS</b>	Digital financial services	<b>NMSE</b>	Nano, micro and small enterprise
<b>HCD</b>	Human-centred design	<b>P2P</b>	Peer-to-peer
<b>IVR</b>	Interactive voice response	<b>SACCO</b>	Savings and Credit Co-operative Society
<b>KPI</b>	Key performance indicator	<b>SMS</b>	Short message service
<b>LMIC</b>	Low- and middle-income country	<b>UX</b>	User experience
<b>LMS</b>	Learning management system	<b>VSLA</b>	Village Savings and Loan Association
<b>MEL</b>	Monitoring, evaluation and learning	<b>WAEMU</b>	West Africa Economic and Monetary Union



# Executive summary



# The proliferation of mobile money and other digital financial services (DFS) over the past decade has contributed to the financial inclusion of millions across Africa.

According to the World Bank Global Findex database, 55% of those over 15 in Sub-Saharan Africa had an account at the end of 2021, compared with 23% a decade earlier.<sup>1</sup> Mobile money services powered by mobile money providers (MMPs) have driven much of this growth. Recently, rapid growth of other, non-mobile network operator (MNO) players has spurred innovation in the DFS space, improving the user experience (UX) and boosting merchant payments. However, the adoption of adjacent mobile money services, such as credit, savings and insurance, remains mixed and slower compared to more basic use cases like peer-to-peer (P2P) transactions and merchant payments.

One of the main obstacles to greater financial inclusion and the adoption of these new services is low digital and financial literacy (DFL). According to the Standard & Poor's Global Financial Literacy Survey, only one-third of the world's population is considered financially literate.<sup>2</sup> Among West African Economic and Monetary Union (WAEMU) countries, "more than half of unbanked adults express[ed] insecurity about using an account independently while about half of mobile money account owners report needing help with their account."<sup>3</sup> By improving financial literacy, marginalised and low-income individuals can become self-sufficient, engaged participants in the formal financial sector with greater potential for financial stability.

DFL programmes can play an instrumental role in financial inclusion by arming users with the knowledge and tools to use the financial services available to them for their benefit. Targeted DFL programmes can also help bridge the persistent digital and financial services divide between men and women, and between urban and rural areas in low- and middle-income countries (LMICs). DFL programmes can build trust in the financial services ecosystem by giving users the skills they need to avoid falling prey to fraudulent activity. For DFS providers, DFL programmes offer the opportunity to expand into new customer segments, deepen relationships with existing customers and build loyalty.

In 2024, the GSMA Mobile for Development (M4D) Foundation entered a partnership with Visa to improve the DFL of the unbanked and underserved in LMICs, advance financial inclusion and promote the digitalisation of the nano-merchant ecosystem. Now, the organisations have partnered with two MMPs in Sub-Saharan Africa – Senegal's Mixx by Yas (formerly Free Money) and Kenya's Safaricom – to pilot DFL initiatives that aim to improve the DFL of users in both countries. Both MMPs are planning to launch their DFL pilots in mid-2025.

Based on lessons from the initial stages of these two pilot initiatives, this study offers a practical guide for DFS providers in LMICs interested in introducing a DFL programme of their own. When designing and launching a DFL programme, the GSMA recommends that DFS providers consider their activities in four key areas: platform/channel, content, promotion and partnerships, and monitoring, evaluation and learning (MEL).

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1 World Bank Findex. (2021). *The Global Findex Database 2021*. The World Bank defines an account as "The percentage of respondents who report having an account (by themselves or together with someone else) at a bank or another type of financial institution or report personally using a mobile money service in the past year."

2 Standard and Poor's Global Financial Literacy Survey measures financial literacy "using questions assessing basic knowledge of four fundamental concepts in financial decision-making: knowledge of interest rates, interest compounding, inflation, and risk diversification." Standard and Poor's. (2014). *Financial Literacy Around the World: Insights from the Standard & Poor's Rating Services Global Financial Literacy Survey*.

3 Klapper, L. and Bouri, M. (2023). "Maintaining momentum of financial inclusion through digital adoption in the West African Economic and Monetary Union (WAEMU)". World Bank. WAEMU countries include Benin, Burkina Faso, Côte d'Ivoire, Guinea-Bissau, Mali, Niger, Senegal and Togo.

# Key lessons

Although the DFL pilots had not been launched at the time of drafting this report, the partners have already learned several key lessons from their design and preparatory work.



## Lesson 1

**Buy-in from the senior executive team is critical to the ultimate success of a DFL programme.**

DFL programmes will be more successful if they are supported by the executive team and given the appropriate prioritisation index to execute it in a timely manner.



## Lesson 2

**Clearly delineated milestones and responsibilities at the inception of the project lead to timely programme implementation.**

DFL programmes involve resources from various divisions. Ensuring that everyone understands their responsibilities, timelines and expected outputs will ensure a smoother product launch. Technology integration can be particularly challenging, so assigning an appropriate prioritisation index and resources are key.



## Lesson 3

**A product manager will keep the programme running smoothly.**

It is important to assign a product manager who will keep product development moving forward and is accountable to the executive team on the timely delivery of the DFL programme.



## Lesson 4

**Data security, privacy and sovereignty issues are key considerations in the early stages of programme development.**

When developing a DFL programme, it is important to understand the data security and privacy implications of integrating different systems.



## Lesson 5

**DFS providers and partners can take measures to reduce barriers to entry.**

Potential strategies include offering the DFL content free of charge and making it available on a zero-rated basis.



## Lesson 6

**Anticipating legal requirements in advance ensures the programme makes steady progress within the planned timeline.**

Given the complexity of DFL programmes, involving legal teams early to address issues like regulatory compliance, data privacy, contractual obligations and intellectual property rights can save time and keep the programme on track.

# Recommendations

Given the lessons learned to date by the stakeholders participating in the two pilots, and the overarching goals of the GSMA-Visa partnership to improve DFL and advance financial inclusion, the GSMA has developed a set of recommendations for the pilot participants as well as other DFS providers seeking to launch and scale DFL solutions.



## **Recommendation 1**

**Develop a multi-channel strategy to reach new users.**

Despite the many advantages of a mobile app for disseminating DFL content, limited smartphone ownership among the target audience can limit the reach and impact of DFL initiatives. DFS providers can leverage alternative channels like SMS and IVR to expand their reach, while also exploring offline delivery mechanisms like in-person training to increase the number of touch points with target users and improve the efficacy of DFL initiatives.



## **Recommendation 2**

**Offer incentives to drive usage of DFS products.**

DFS providers should seek to link DFL content with the adoption and use of their products, as this will make it easier to justify investment in DFL programmes. One way to do this is to offer incentives for engaging with DFL content. For example, users who have completed DFL modules and received certifications could receive lower interest rates, longer loan maturity periods and larger loan sizes.



## **Recommendation 3**

**Improve content localisation.**

Given the diversity of languages, cultures and religions in Sub-Saharan Africa, localisation of DFL content is critical for expanding the reach of DFL programmes. Content that is delivered in a user's own dialect, that addresses their own experiences and concerns and provides actionable advice, is more likely to encourage engagement and have a long-term impact.



## **Recommendation 4**

**Develop strategies to reach different target segments.**

To expand the reach and improve the efficacy of DFL programmes, DFS providers should develop content that addresses the specific experiences and needs of different population segments, including women, youth, smallholder farmers and nano-merchants, among others.



## **Recommendation 5**

**Prioritise human-centred design (HCD) in product development.**

Engaging with DFS users at every stage of DFL product development and subsequent iterations will ensure that the content is aligned to user needs and increase the chances of service adoption and engagement.



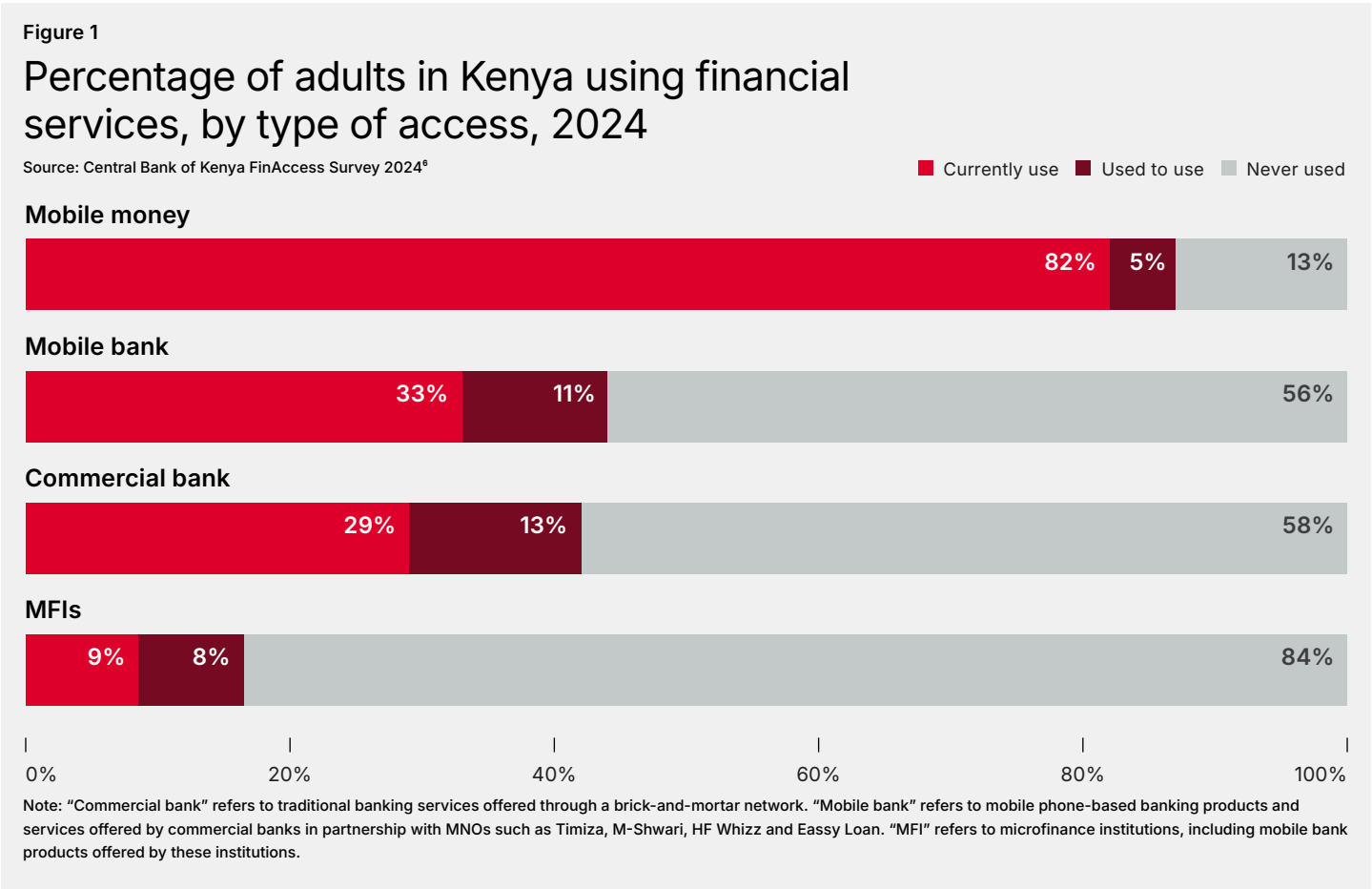
# Introduction



The proliferation of digital financial services (DFS) and mobile money services over the past decade has contributed to the financial inclusion of millions across Africa. According to the World Bank Global Findex database, 55% of those over 15 in Sub-Saharan Africa had an account at the end of 2021, compared with 23% a decade earlier.<sup>4</sup> Mobile money services powered by mobile money providers (MMPs) are driving much of this increase. The GSMA estimates there were 283 million 30-day active mobile money accounts in Sub-Saharan Africa at year-end 2024, accounting for 55% of active mobile money accounts globally.<sup>5</sup>

Recently, the rapid growth of some non-mobile network operator (MNO) players in the DFS space has spurred innovation, improving the user experience (UX) and boosting merchant payments. However, the adoption of adjacent mobile money services, such as credit, savings and insurance, remains mixed and slower compared

to more basic use cases like peer-to-peer (P2P) transactions and merchant payments. Even in Kenya, which enjoys one of the highest financial inclusion rates in Africa, access to non-mobile money financial services lags mobile money access by nearly 50 percentage points (see **Figure 1**).

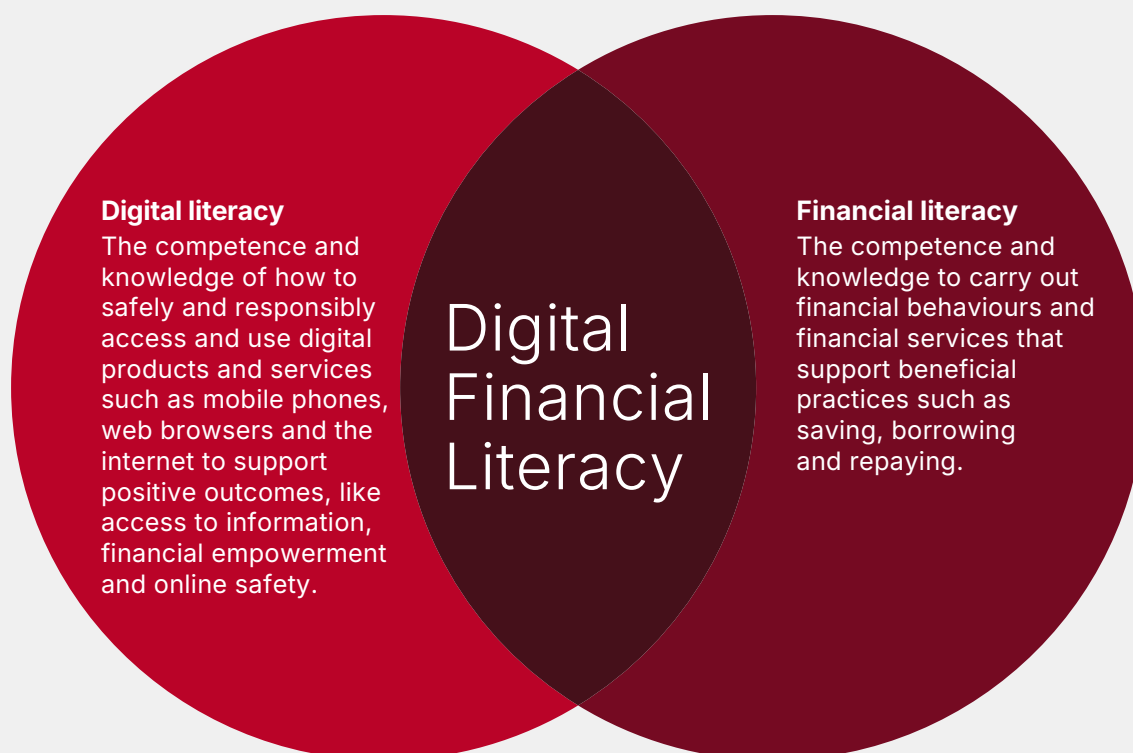


4 World Bank Findex. (2021). *The Global Findex Database 2021*.  
5 GSMA. (2025). *The State of the Industry Report on Mobile Money 2025*.  
6 Central Bank of Kenya. (2024). *2024 FinAccess Household Survey*.

Figure 2

## Defining digital financial literacy

Source: Futurelearn; GSMA<sup>7</sup>



One of the main obstacles to greater financial inclusion is low digital and financial literacy (DFL) (see **Figure 2**). A 2022 review of 76 studies covering a sample size of more than 160,000 individuals found that financial education had, on average, a positive impact on financial knowledge and "downstream financial behaviours", including savings and borrowing.<sup>8</sup>

According to Standard & Poor's Global Financial Literacy Survey, only one-third of the world's population is considered financially literate, with women typically lagging men in overall literacy rates.<sup>9</sup> Among West African Economic and Monetary Union (WAEMU) countries, "more than half of unbanked adults express[ed] insecurity about using an account independently while about half of mobile money account owners report needing help with their account."<sup>10</sup>

Not only does low digital and financial literacy impede the adoption of new services, but it can also lead to a higher incidence of fraud as bad actors take advantage of it to defraud users and sow mistrust in the system. According to the Organisation for Economic Co-operation and Development (OECD), financial literacy is a core life skill of the 21st century that contributes to individual empowerment and the economic well-being of society.<sup>11</sup>

The digital delivery of financial education is growing in parallel with the digitalisation of societies and economies. Individuals increasingly use digital technology in their lives and expect higher levels of personalisation and easier access to content. Financial literacy is not just a mobile industry concern, but also a financial sector challenge that affects card payments, banking and microfinance, among other areas.

A multi-stakeholder approach is needed to mitigate the challenge. By improving financial literacy, marginalised and low-income individuals can become self-sufficient participants in the formal financial sector and have greater potential to achieve financial stability. Key steps in attaining financial literacy include learning how to create a budget, track spending, differentiate between personal and business expenses, manage and pay off debt and plan for retirement.

Although governments and financial institutions have been engaged in financial literacy efforts for some time, this has mostly been through in-person workshops, radio spots or the distribution of pamphlets, which can be costly and not always aligned with the needs and interests of the target audience. DFL offers the potential to reach a much wider audience given the near-ubiquity of mobile devices, while also allowing content to be personalised and interactive to meet the needs of users.

7 GSMA. (2023). *The digital financial literacy toolkit: Addressing the gap in low- and middle-income countries*.

8 Kaiser, T. et al. (2022). "Financial education affects financial knowledge and downstream behaviors". *Journal of Financial Economics*, Vol. 145, Issue 2.

9 Standard and Poor's. (2014). *Financial Literacy Around the World: Insights from the Standard & Poor's Rating Services Global Financial Literacy Survey*.

10 Klapper, L. and Bourl, M. (2023). "Maintaining momentum of financial inclusion through digital adoption in the West African Economic and Monetary Union (WAEMU)". World Bank.

11 OECD. (2021). *OECD/INFE 2023 International Survey of Adult Financial Literacy*.

Understanding the benefits of digital delivery, a handful of partnerships between non-governmental organisations (NGOs), banks, governments and technology companies have formed in recent years to offer DFL solutions in Africa. The need for such initiatives will only increase as the variety and sophistication of financial services increase and as bad actors find new and innovative ways to commit fraud. For example, high inflation rates and pressure on several African currencies have raised interest in stablecoin<sup>12</sup> and other cryptocurrencies, especially in Nigeria and Kenya, which are among the 20 largest markets for stablecoin globally. DFL programmes will need to evolve beyond their current focus on savings, credit, budgeting and business skills to incorporate the benefits and risks of crypto and blockchain.

Digital financial literacy programmes can play an instrumental role in driving financial inclusion by arming users with knowledge and tools to use available financial services for their benefit. Targeted DFL programmes can also help bridge the digital and financial services divide that persists between men and women, as well as urban and rural areas in low- and middle-income countries (LMICs). DFL programmes can also restore trust in the financial services ecosystem by giving users the skills they need to avoid falling prey to scams. For DFS providers, DFL programmes offer the opportunity to expand into new customer segments, deepen relationships with existing customers by adding new services, lower the risk of extending services like loans to under-represented groups and build customer loyalty by protecting users from fraud and scams.

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<sup>12</sup> According to Investopedia, “stablecoins are cryptocurrencies whose value is pegged, or tied, to that of another currency, commodity or financial instrument. Stablecoins aim to provide an alternative to the high volatility of the most popular cryptocurrencies, including Bitcoin (BTC), which has made crypto investments less suitable for everyday transactions.” Hayes, A. (2024). “Stablecoins: Definition, How they Work and Types”. Investopedia.



# 01

## The Visa and GSMA DFL partnership



The GSMA and Visa launched a partnership to improve the DFL of the unbanked and underserved in LMICs, advance financial inclusion and promote the digitalisation of the nano-merchant ecosystem. The partnership leverages the assets, tools and resources of both organisations to develop customer-facing content that addresses the DFL gaps faced by individuals and nano, micro and small enterprises (NMSEs). Visa, for its part, has developed a comprehensive set of financial education resources as part of its Practical Money Skills toolkit.<sup>13</sup> Meanwhile, the GSMA has developed a Digital Financial Literacy toolkit to support industry stakeholders in developing a DFL programme in LMICs.<sup>14</sup>

It is within this context that Visa and the GSMA entered a partnership with two MMPs in Sub-Saharan Africa to improve the DFL of mobile money users. In 2024, Safaricom and Mixx by Yas signed on to deploy DFL pilots in Kenya and Senegal, respectively. The DFL pilots will use Visa's financial education resources to offer DFL content and training to mobile users in both countries. The pilots are expected to launch in mid-2025 and conclude before the end of the year. Although the pilots are being conducted in partnership with MMPs, the insights and findings outlined in this report are also relevant to other DFS providers interested in introducing DFL programmes.

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## Report objectives and target audience

This report draws on insights gathered from the two pilot partnerships to provide DFS providers in LMICs with practical guidance on designing and implementing a DFL initiative. Since the pilot projects had not been launched at the time of publication, this report focuses on the steps leading up to the pilot launch, highlighting key considerations, best practices and potential challenges that MMPs and other DFS providers may encounter during the design and initial implementation phases.

The report is aimed primarily at DFS providers seeking to introduce a DFL product in LMICs. However, the lessons included in this report can also benefit other ecosystem stakeholders, including banks, microfinance institutions (MFIs) and fintechs that might be interested in offering DFL products, as well as the NGOs, governments and donors backing these initiatives in LMICs.

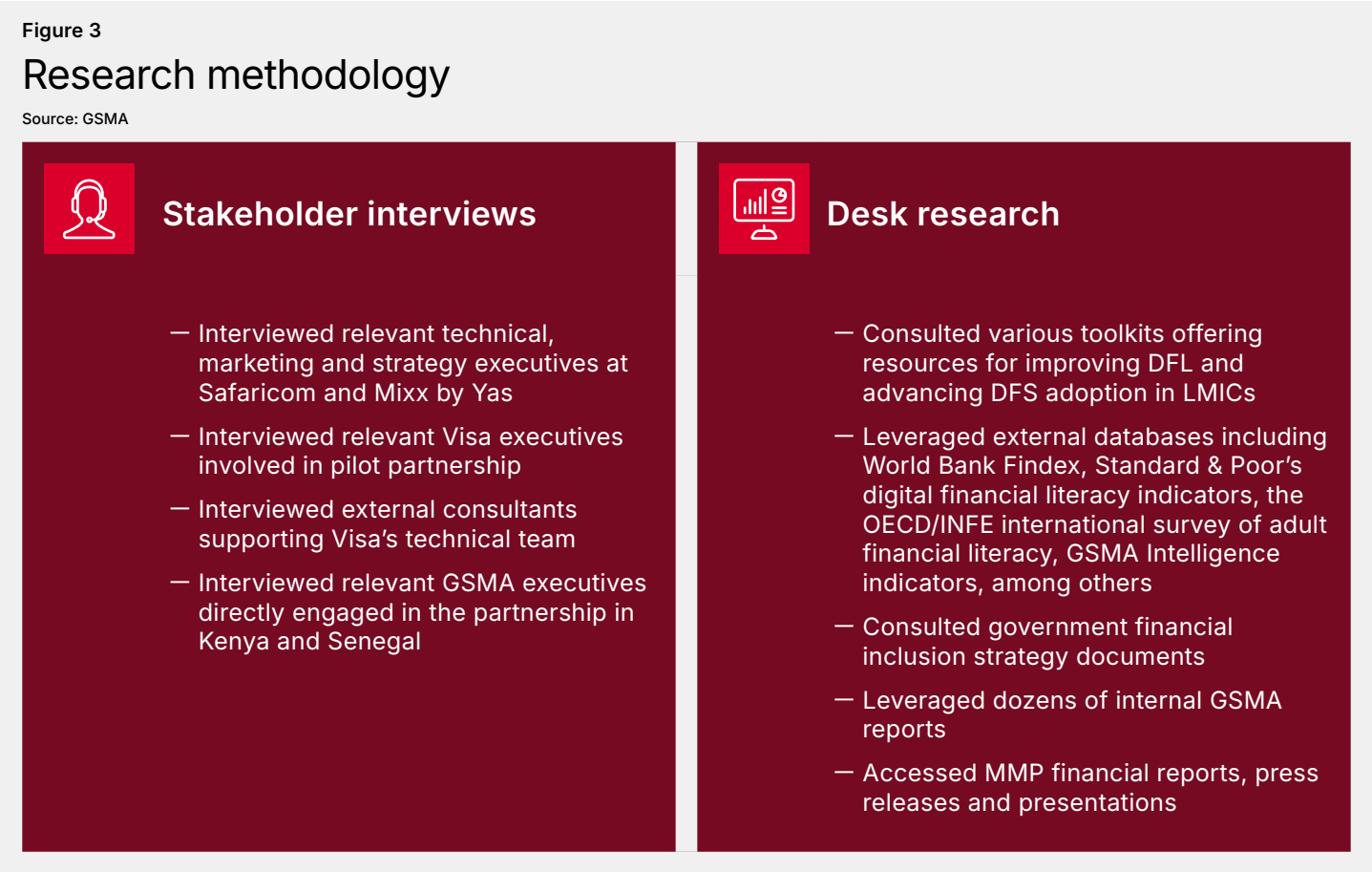
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<sup>13</sup> See Visa's [Practical Money Skills website](#): "Financial Education for Everyone".

<sup>14</sup> GSMA. (2023). *The digital financial literacy toolkit: Addressing the gap in low- and middle-income countries*.

# Methodology

The GSMA Mobile Money team relied on a combination of stakeholder interviews and desk research (see **Figure 3**) for this study. Stakeholder interviews were conducted between December 2024 and January 2025.



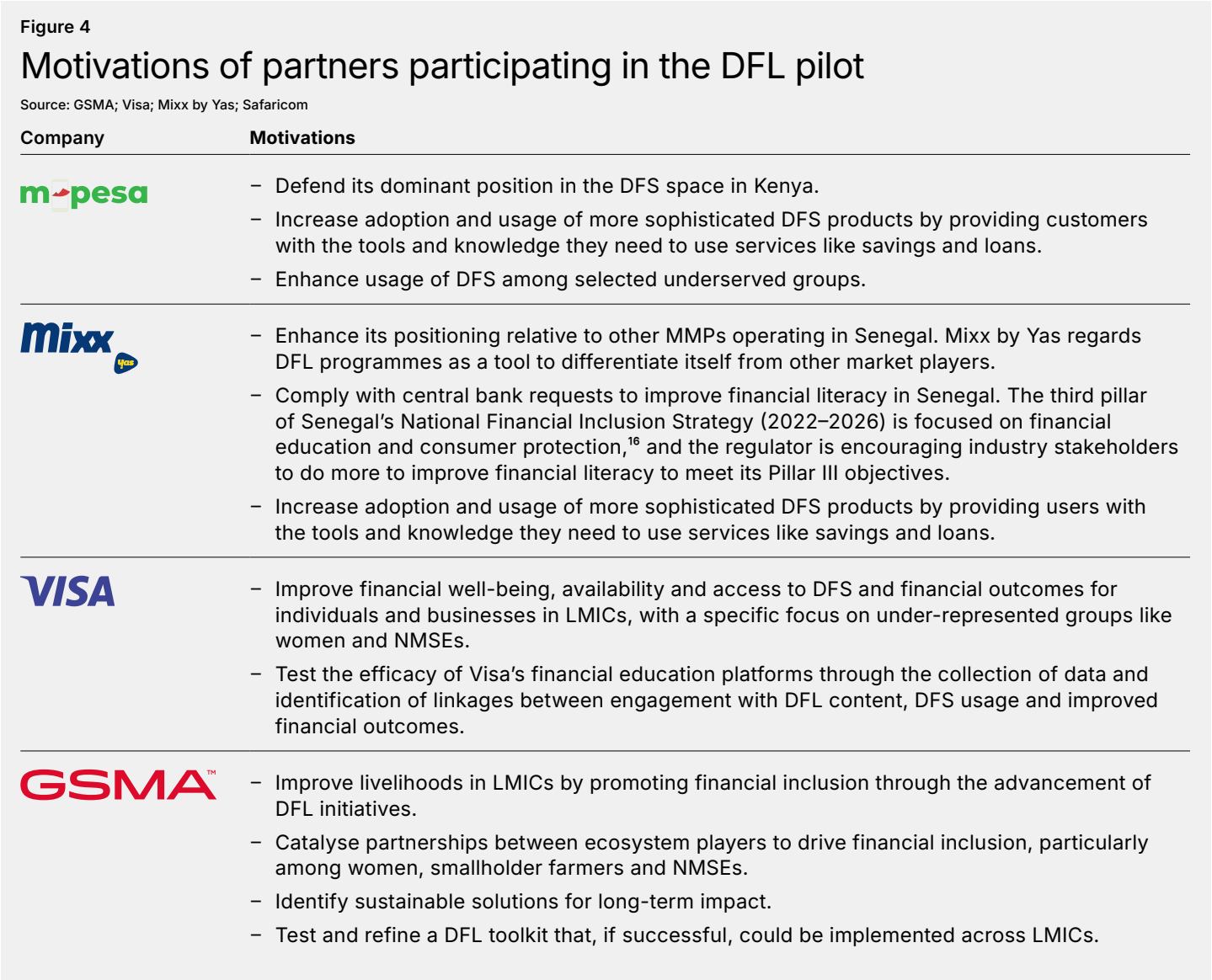
# 02

## Overview of the DFL pilot projects





The two MMPs participating in the DFL pilot projects are Safaricom in Kenya and Mixx by Yas in Senegal (formerly Free Money).<sup>15</sup> While both MMPs were driven to participate by a desire to improve DFL in their respective countries for the benefit of their customers, there were other considerations unique to their circumstances and market positioning (see **Figure 4**). For the GSMA and Visa, the pilot projects are an opportunity to test the efficacy of their DFL toolkits and content and, ultimately, improve financial inclusion across LMICs.



15 In November 2024, AXIAN Telecom announced a rebranding of the Free brand. AXIAN Telecom. (26 November 2024). "AXIAN Telecom launches unified pan-African brands for its mobile network operators and fintech operations".

16 Alliance for Financial Inclusion (AFI). (7 April 2022). "Senegal's 2022–2026 National Financial Inclusion Strategy".

Kenya has established itself as a regional leader in financial inclusion, driven by the phenomenal success of mobile money in the country. Approximately 85% of adults in Kenya are now financially included, an increase from 75% in 2016.<sup>17</sup> While Senegal's financial inclusion levels are significantly lower than Kenya's – 56% according to the latest Global Findex data<sup>18</sup> – the country's National Financial Inclusion Strategy (NFIS) aims to achieve 65% financial inclusion among adults and 90% financial inclusion among MSMEs by the end of 2026.<sup>19</sup> Safaricom Kenya has long been a market leader in Kenya, with a more than 90% share of mobile money users in the country (see **Figure 5**). Mixx by Yas, by contrast, is a challenger in Senegal competing against other MNO-backed MMPs like Orange Money, as well as MMP Wave Senegal, the country's largest provider of mobile money services.

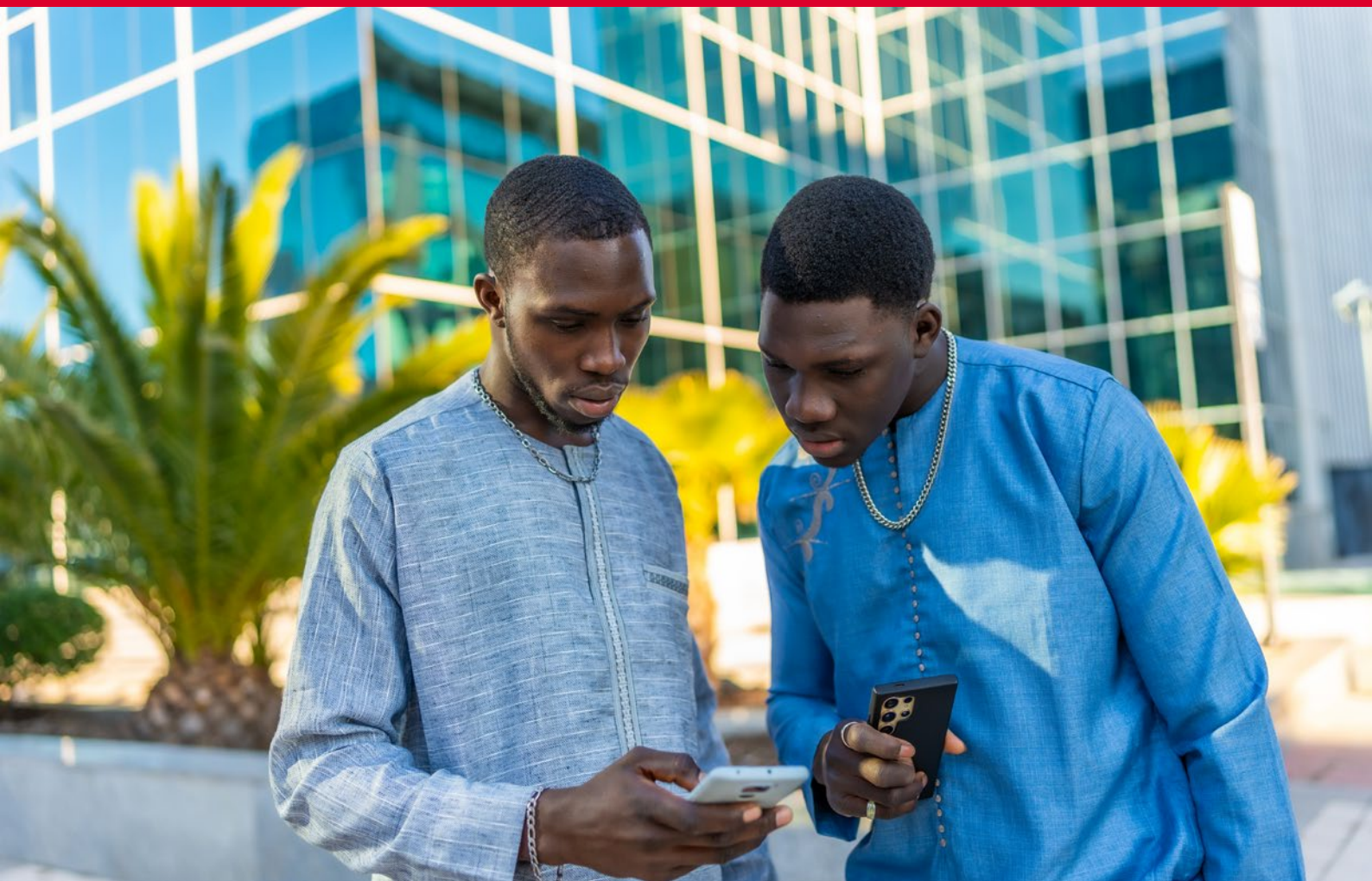
**Figure 5**  
**Key mobile money statistics, Mixx by Yas and Safaricom Kenya**  
Sources: Mixx by Yas; Safaricom; GSMA



17 Central Bank of Kenya. (2024). *2024 FinAccess Household Survey*.  
18 Klapper, L. and Bourji, M. (2023). *Maintaining momentum of financial inclusion through digital adoption in the West African Economic and Monetary Union (WAEMU)*. World Bank.  
19 United Nations Secretary-General's Special Advocate for Financial Health (UNSGSA). (5 July 2022). "Fintech, Financial Health and MSMEs Drive Senegal's Financial Inclusion Agenda".

**03**

# **Practical guide for DFS providers implementing DFL initiatives in LMICs**



As DFS providers introduce more sophisticated products, the need for DFL programmes will only increase. Some providers may rely on DFL content provided by governments, multilateral agencies like the United Nations Capital Development Fund (UNCDF) or NGOs. However, DFS providers are expected to take a more proactive approach to ensure that the dissemination of DFL content is aligned with their strategy and not subject to the changing priorities of governments and central banks nor to the three-year funding cycle typical of donor-funded initiatives.

DFS providers seeking to add a DFL product to their offering can do so through their foundation/community engagement arm or their business arm. Mixx by Yas opted to develop its DFL programme through its community engagement arm so that it would not be under pressure to meet the short term (6–12 month) revenue goals often attached to initiatives through the business arm. This approach could make it easier for providers to align their DFL programme with high-level impact objectives and ensure that the activities align with the central bank's objectives.

Safaricom Kenya, by contrast, opted to develop the DFL programme through its business arm. Since the business arm is already responsible for achieving several key performance indicators (KPIs) for DFL, the MMP can monitor and evaluate them more closely. It can also make it easier to link DFL programmes to relevant DFS offerings and ensure that the objectives closely align with the commercial strategy.

Regardless of whether a DFL programme is launched through the foundation/community engagement arm or the business/commercial arm, it will require the full commitment of the DFS provider's executive team to meet the desired objectives. Because DFL initiatives are not directly linked to revenue generation and can incur development and maintenance costs, it is very easy for these initiatives to be deprioritised in favour of revenue-generating activities or initiatives that may be more strategic and larger in scope.

Because the successful launch of a DFL programme requires the participation of various departments, including legal, regulatory, marketing and technical (see **Figure 6**), having a product manager to oversee the programme and be accountable for its overall targets is optimal. Ideally, the product manager will have experience conducting similar impact projects and, at the very least, be highly motivated to implement the DFL initiative and able to effectively communicate the value of the programme to colleagues.<sup>20</sup> The product manager should report to the DFL programme sponsor, a member of the executive team with close oversight who can provide strategic guidance and support throughout the product life cycle.<sup>21</sup>

Before designing and launching a DFL programme, DFS providers need to consider issues that will arise in four key areas, as outlined in **Figure 7**.

20 Oulai, R. (17 January 2024). "Digitisation of agricultural value chains: Lessons learnt across Africa and South Asia". *GSMA Mobile for Development Blog*.

21 Ibid.



Figure 6

## Role of different departments in the launch of a DFL programme

Sources: MMPs; Visa; GSMA



Figure 7

## Framework for designing and launching a DFL programme

Source: GSMA



# 3.1

## Platform/channel strategy

When introducing DFL content to their mobile money customers, DFS providers have several choices for how to deliver it. MMPs and other DFS providers have long relied on offline channels like pamphlets, radio spots, TV infomercials or in-person training. More recently, they have started using digital channels to provide DFL content, including interactive voice response (IVR),<sup>22</sup>

SMS, WhatsApp, web content, social media and mobile apps. Although the Visa team considered several channels for making its content available to DFS partners and their users, they decided to prioritise app-based delivery given its many advantages relative to other channels (see **Figure 8**).

Figure 8

### Factors behind Visa's selection of a mobile app for the delivery of DFL content

Source: Visa



#### Advantages

##### Future-proofing

Although smartphone usage is not yet ubiquitous in emerging markets, there is a recognition that smartphones are the future. In that sense, it is preferable to build for the future than the present.

##### Better tracking

Visa and its DFS provider partners are keen to track usage of the various content modules so that they can fine-tune the solution over time.

##### Compatible with rich-media formats

Visa already has a substantial library of financial literacy content that it has been developing and fine-tuning for decades. That content incorporated animations and videos that are more easily adaptable to a mobile app than to SMS or IVR.

##### More personalisation and interactivity

Visa is seeking to offer coursework on various topics for different types of users. The use of a mobile app allows users to access the content most relevant to them.

##### Easier to scale

Following a plug-and-play API model is easier to integrate and scale than a bespoke API integration, provided management assigns sufficient priority and resources to the task.



#### Disadvantages

##### Limited reach

The share of mobile money users who have a smartphone and downloaded an app is relatively low, particularly among disadvantaged groups like women, smallholder farmers and NMSEs.

##### May incur data usage fees

While DFL is often offered with no fee for the content itself, users may incur data usage fees, dissuading use unless zero rated.

##### Requires a minimum level of digital literacy

Even if they have a smartphone, many mobile money users may be unable to use all the functionalities available to them. Many still require help from family and friends to download an app or to use mobile money services.

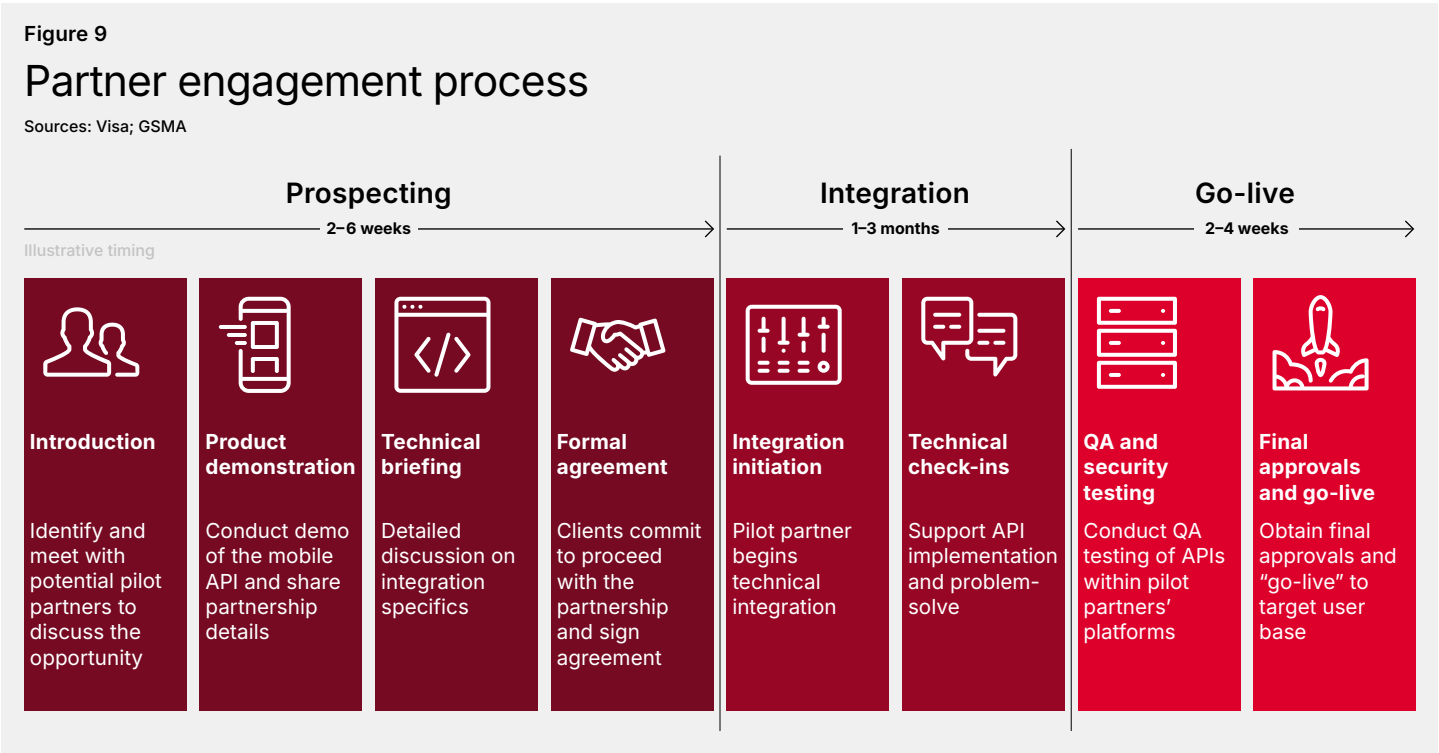
##### No offline capabilities

Although a mobile app can be compatible with offline usage, the app-based delivery of DFL content by Visa and its DFS provider partners does not support offline usage.

<sup>22</sup> Interactive voice response, or IVR, is an automated telephone system technology that enables callers to receive or provide information, or make requests using voice or menu inputs, without speaking to a live agent. Source: IBM. "What is Interactive Voice Response (IVR)?"

DFL pilot partner Safaricom Kenya opted for a bespoke integration of Visa's financial education resources whereby it delivers content through its own mobile money app or super app.<sup>23</sup> Although this approach offers a more seamless experience for the user with single sign-on and gives MMPs control over the customer journey, it is longer and more complex compared to plug-and-play API integration, which is what Mixx by Yas opted for. The plug-and-play approach is faster to integrate and less resource-intensive but offers fewer opportunities for customisation compared with the bespoke approach. The technical process and anticipated timelines followed by Visa and its partners are outlined in **Figure 9**. For DFS providers interested in implementing a DFL programme, additional steps are required for sourcing content and technical development.

DFS providers have several avenues available when launching a DFL programme. They can develop the platform from scratch, plug-and-play into an existing platform using APIs or adopt a hybrid model whereby a third-party platform is integrated in their own network environment (e.g. a super app). Each of these options has trade-offs in terms of timing, cost and level of customisation (see **Figure 10**).



**Figure 10**

### Advantages and disadvantages of each implementation strategy

Sources: Visa; GSMA

	Time to market	Customisation	Volume and variety of content	Scalability
Plug-and-play API integration	■ ■ ■ ■ ■	■	■ ■ ■ ■ ■	■ ■ ■
Customised API integration (into own mobile app)	■ ■ ■	■ ■ ■	■ ■ ■	■
Develop DFL solution from scratch	■	■ ■ ■ ■ ■	■ ■	■ ■ ■ ■ ■

23 Safaricom Kenya. (23 June 2021). "Safaricom Launches M-PESA Super App With Offline Mode and Mini Apps".

# 3.2

## Content

To be effective, DFL content must be accessible, timely, relevant, engaging and actionable<sup>24</sup> (see **Figure 11**). DFS providers must also ensure that the content complies with local regulations as some governments, particularly in Africa, require content to be approved by the central bank prior to dissemination or linked to specific products and services.

DFS providers and partners interested in developing a DFL programme would benefit from conducting UX research to better understand the financial lives of their users; the constraints they face in terms of access to knowledge; their awareness of DFS and the fraud risks they face; their access to and use of digital technology; their level of digital skills; and their financial decision-making.<sup>25</sup> To the extent possible, UX research should collect these insights for each population segment targeted by the DFL programme (e.g. women, smallholder farmers, NMSEs). UX research findings should inform topic selection, languages and localisation, format and stylisation of DFL content.



24 Based on GSMA research and interviews with providers of educational content.  
25 GSMA. (2023). *The digital financial literacy toolkit: Addressing the gap in low- and middle-income countries*.



## Topic selection

### Key considerations:

- Should the content be **general** to appeal to a broad audience, or **targeted** to address the needs of specific groups? Safaricom and Mixx by Yas opted to start with general content that they will market to all population segments with some targeted content for smallholder farmers and NMSEs, for example. Starting with general content gives MMPs the opportunity to learn about customer interests based on their level of engagement with the content and to fine-tune it over time. After the initial pilot is complete, both MMPs plan to offer more targeted content for additional subsegments. This strategy has the benefit of reaching a wider audience in the initial phases at a lower cost, but it risks being less actionable as the content may not be targeted enough for the users' needs.
- Should DFS providers aim for **breadth** and cover a wide variety of topics, or should they aim for **depth** and address topics in greater detail? Having a variety of topics ensures that users can find something that is relevant to them while a narrower topic selection may limit some users. However, research conducted with providers of DFL content has suggested that having too many content modules can be overwhelming for some users and that offering a limited number of topics (not to exceed 8–10) may be preferable. The Visa DFL programme offers eight distinct topic areas, each with roughly six learning modules, enabling users to gain some knowledge of each topic. One way to introduce additional topics over time is to rotate topics based on relevance and changing consumer interest.

## Languages and localisation

### Key considerations:

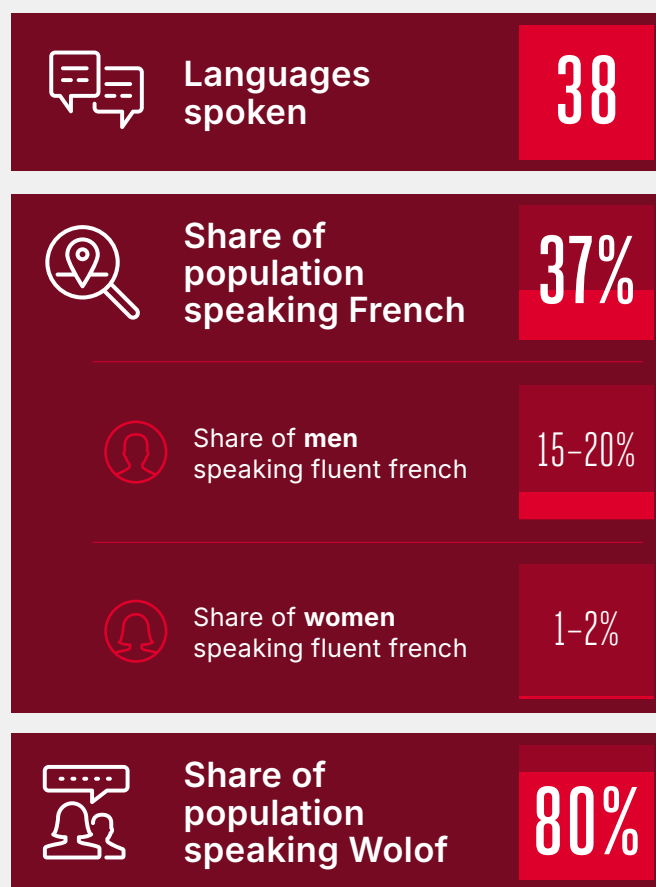
- The African continent is one of the most linguistically diverse areas of the world. More than 50 languages are spoken in each country, on average, and in Nigeria more than 500 languages are spoken.<sup>26</sup> DFS providers developing a DFL programme must decide whether to present their content in a **single language** or a **variety of languages**. In Senegal, for example, Visa and Mixx by Yas will offer their DFL content in French, which is spoken by around 37% of the population but is the first language for less than 1%. For this reason, Mixx by Yas would like to introduce a Wolof version of the content in a second phase of development given that Wolof is spoken by around 80% of the population and, more importantly, spoken by more women (see **Figure 12**) – one of the main targets of the DFL programme.

- The choice of language for DFL content is not the only consideration for DFS providers – local **intonation and phrasing** is also critical. The English spoken in Kenya, for example, may be distinct from the English spoken in other parts of Africa, and the DFL content may need to be modified so that users not only understand it, but also relate to it. The localisation of intonation and phrasing may be feasible for DFS providers building their content from scratch, but those adapting existing content may incur additional costs.
- DFS providers introducing DFL content may need to consider the extent to which they can localise the content, that is, using **local names, locations, places of business, traditions and holidays** when developing storylines. Compliance with Islamic legal principles is becoming increasingly important for DFS providers offering services in countries with sizeable Muslim populations. Including DFL content that is consistent with Islamic law is critical in certain Sub-Saharan African countries. While localisation makes it more likely that audiences will relate to the content, it can also add to the cost of content creation – a consideration for DFS providers unsure whether the DFL programme will generate return on investment.

Figure 12

### Snapshot of languages spoken in Senegal

Source: Do People Speak<sup>27</sup>



<sup>26</sup> Clear Global. (n.d.). "Language data for Nigeria".

<sup>27</sup> Do People Speak. (6 November 2022). "Do People Speak French in Senegal?"

## Format and stylisation

Key considerations:

- DFS providers interested in launching a DFL programme must decide on the format of the content delivered to their users. This can range from **voice messaging to simple text**, to **longer text format** and **rich multimedia**. The delivery platform will often dictate the format of the content. Text messaging, for example, will require a short text format, whereas a mobile app will enable rich multimedia. Multimedia content can also take several forms, from videos with actors or celebrities to animated videos and shorts. Important considerations for DFS providers include the file size associated with the content and the data allowance required to access it. Visa's DFL content, for example, includes animated videos with on-screen graphics and key messages (see **Figure 13**).
- **Content length** is another important consideration for DFS providers. Research conducted by the GSMA suggests that the most effective content can be delivered in a few minutes or less to ensure that users remain engaged and completion rates are high.
- DFS providers should also consider the **style** of the DFL content provided. Visa, for example, has pursued a modular approach in which topics are presented to users in several related modules that build on the previous one and lead to certifications and awards upon completion. This helps users develop a mastery of a particular subject. Content can also be presented through interactive games or calculators, in a dramatised format or as a soap opera, which can be useful for different kinds of audiences.

Figure 13

### Screen shots of Visa DFL content

Source: Visa



# 3.3

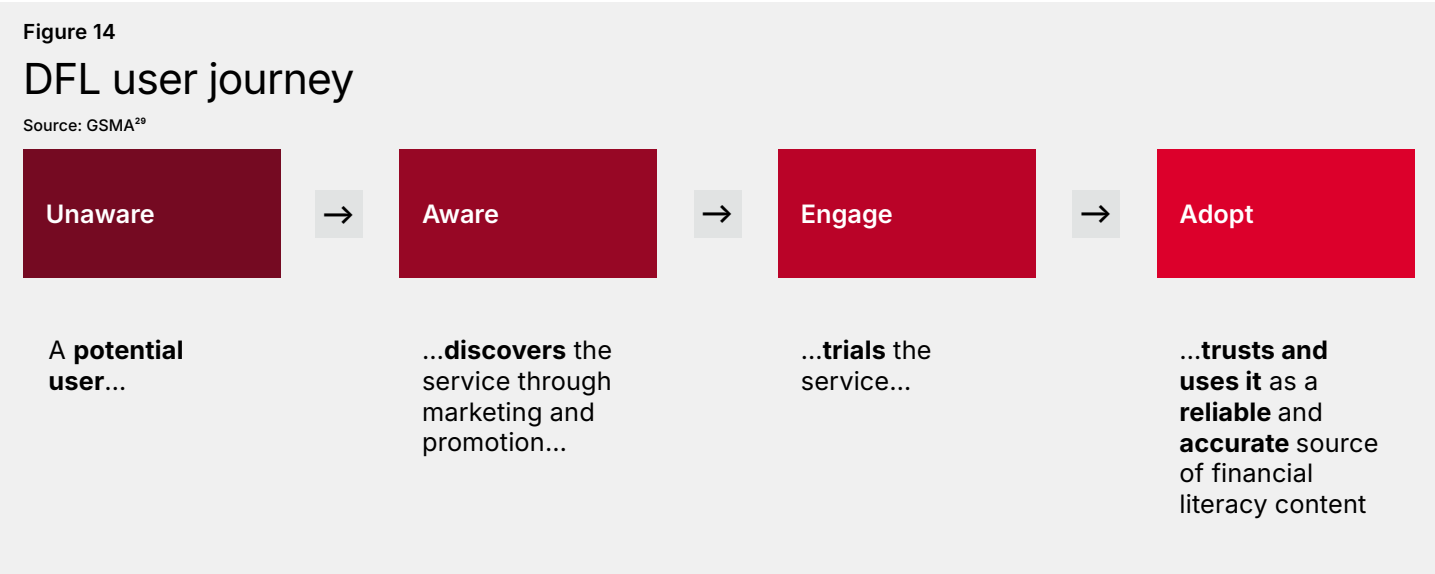
## Promotion and partnerships

Prior to the official launch of a DFL programme, DFS providers should consider conducting either beta testing with a few select users or champions, or a soft launch that will enable them to test features and functionalities, identify potential bugs, collect initial user feedback and make necessary changes prior to the official release.<sup>28</sup> Safaricom in Kenya is planning to do beta testing with selected users prior to the official launch of its DFL programme in mid-2025 to test the offering and solicit initial feedback.

The goal of any promotional activity for a DFL programme is to move users along the user journey (see **Figure 14**), transforming potential customers into engaged, repeat customers.

Any qualitative and UX research conducted during the initial phases of product development can inform the promotional phase of the launch. For example, the types of promotional activities conducted, the channels used and the desired frequency of the outreach. To the extent possible, DFS providers should leverage existing assets and partnerships for promotional activities to avoid creating new costs for the organisation.

GSMA research suggests that a combination of online and offline promotional activities is most impactful when targeting consumers at the bottom of the pyramid, or those with traditionally low digital and financial literacy. Examples of promotional tools that DFS providers can use when launching a DFL programme are outlined in **Figure 15**.

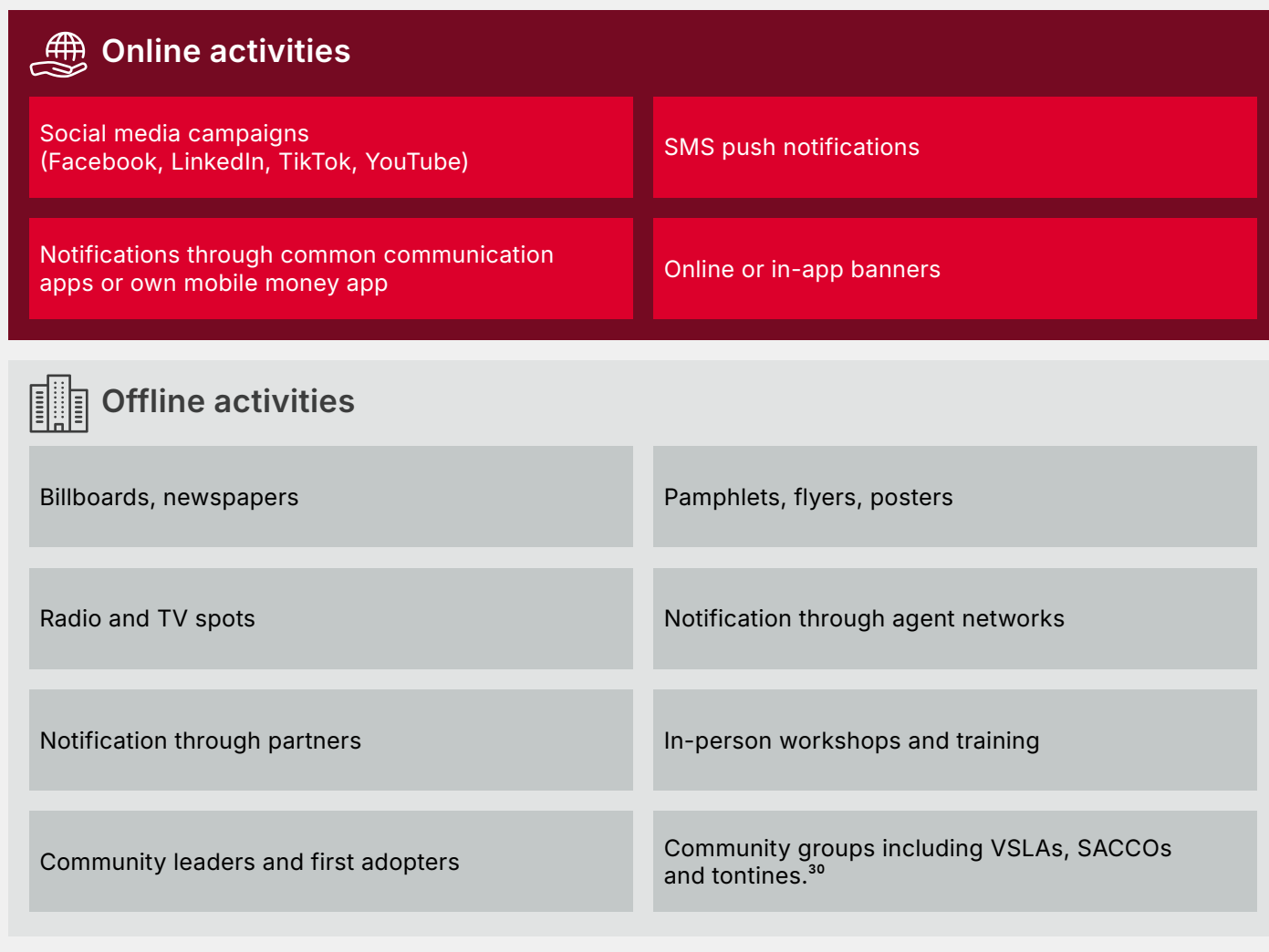


28 GSMA. (2016). *Agricultural Value-added Services (Agri VAS) Toolkit 2.0: How to design, develop and market next generation VAS for the rural market*.  
29 Adapted from GSMA. (2016). *Agricultural Value-added Services (Agri VAS) Toolkit 2.0: How to design, develop and market next generation VAS for the rural market*.

Figure 15

## Examples of online and offline promotional activities

Source: GSMA



Safaricom and Mixx by Yas are planning a full-throated promotion of the DFL content on their mobile apps. Both MMPs will send SMS messages to their customers with links to the DFL modules. Safaricom is also planning to use banners on its mobile money app to direct users to the DFL content.

Because one of the motivations for introducing DFL content is to drive usage of new DFS products, DFS providers can also promote it in combination with specific DFS offerings. Safaricom and Mixx by Yas are also considering a variety of incentives to promote usage. This includes everything from offering lower interest rates or access to higher loan amounts to those completing relevant coursework, to the development of a loyalty programme that assigns points for each training module completed that can be traded in for airtime, mobile data allowances or other benefits.

As DFS providers move beyond the initial promotion stage to more targeted promotion among specific groups (e.g. women or smallholder farmers), the GSMA recommends seeking partnerships with groups that have already earned the trust of the target segments. Examples include local women's and savings groups (e.g. VSLAs, SACCOS and tontines), agricultural cooperatives or farmer groups and merchant groups or associations. Mixx by Yas is considering teaming with enterprise customers that work directly with the target audiences, for example, agribusinesses and financial institutions. Promotional activity through these partners can reinforce the messaging already delivered through offline and online promotional channels.

<sup>30</sup> "A Village Savings and Loan Association (VSLA) is a group of people who meet regularly to save together and take small loans from those savings." Source: VSL Associates. (n.d.) "The VSLA Methodology". A Savings and Credit Co-Operative Society (SACCOS) is a "member-based financial institution owned and controlled by its members, who are also the customers using its services. SACCOS provide financial services, such as savings and credit, to members who share a common interest, such as living in the same geographic area, or labour union, working for the same employer, belonging to the same church or a social fraternity, or living in the same community." Source: digipay.guru. (18 April 2023). "What is SACCOS?" A tontine "is a savings system where people contribute money into a shared pool and take turns receiving the money back." Tontines are common in Senegal, Mali, Cameroon and Nigeria, although in Nigeria they are often referred as Ajo, Esusu or Adaji. Source: CNN. (2018). "Bringing an ancient African savings system into the digital age".

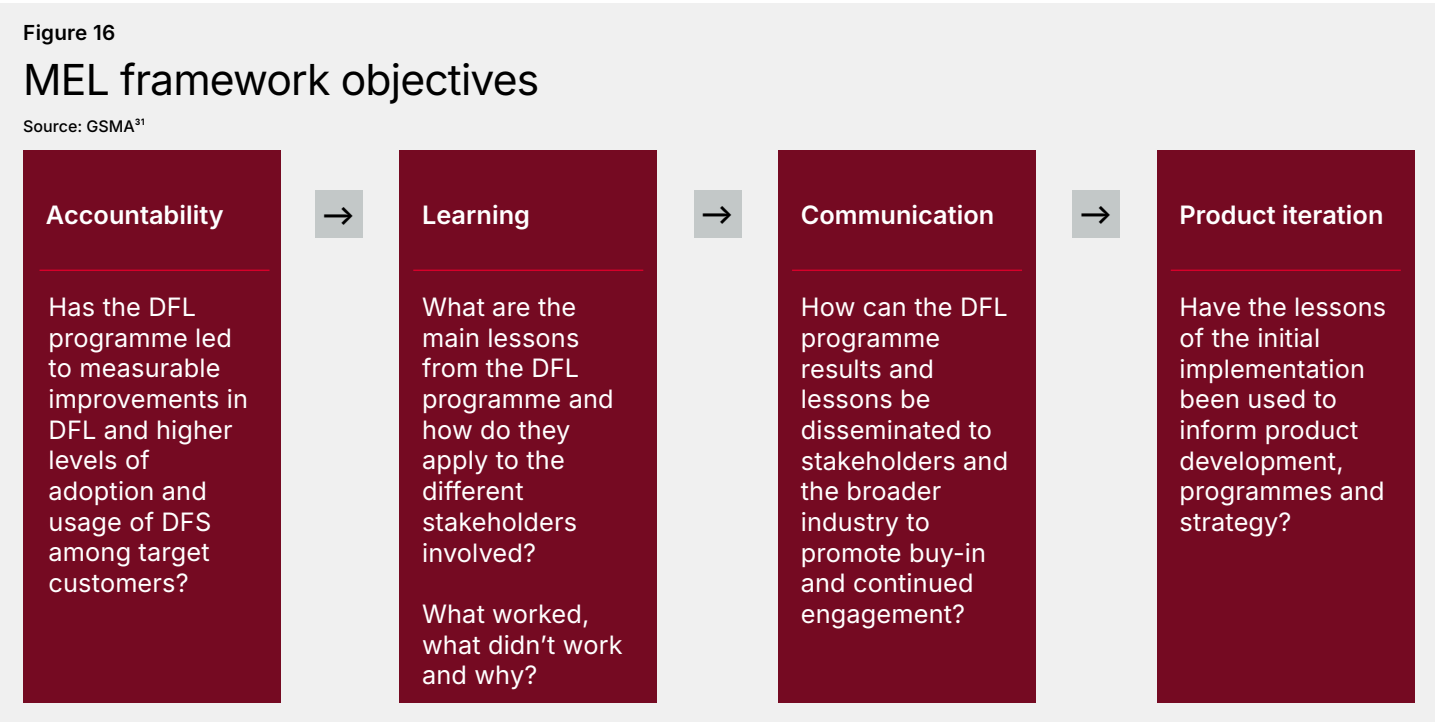


# 3.4

## Monitoring, evaluation and learning

Monitoring, evaluation and learning (MEL) is critical for assessing the efficacy and impact of any DFL initiative. The most effective MEL frameworks promote accountability, learning and communication while also collecting data and insights that can help improve the programme over time (see **Figure 16**).

Impact measurement would typically involve a baseline survey to develop an initial understanding of the level of DFL, skills and digitalisation among the target audiences, their level of financial services usage and the perceived benefits and risks of these services. With a midline survey, a DFS provider can assess progress and any changes since the baseline, including the development of financial literacy and skills, user perceptions of their digital safety and security and income and livelihood changes as a result of accessing and using DFS. A final set of surveys will provide an assessment of the extent to which a DFL programme was successful in achieving outcomes, improving access to and use of DFS and improving financial resilience and livelihoods.

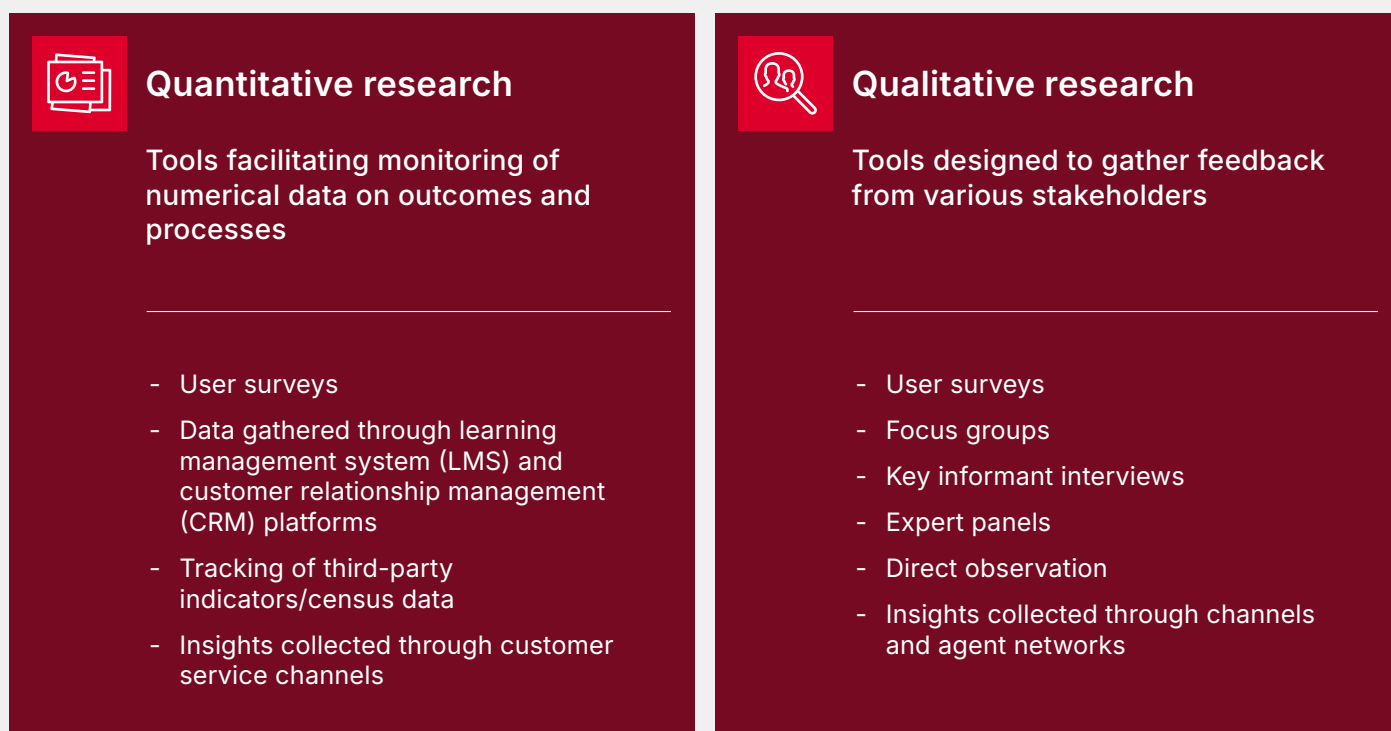


31 GSMA. (15 January 2024). "How to combine monitoring, evaluation and learning data in commercial product development".

Figure 17

## Qualitative and quantitative tools to measure the progress of a DFL programme

Source: GSMA<sup>32</sup>



The MEL framework supports improvements to a DFL programme by ensuring the initiative meets user needs and requirements. It also helps identify opportunities to expand the programme to new population segments or areas. Insights are gathered through multiple data sources, both qualitative and quantitative (see **Figure 17**).

Qualitative and quantitative tools for capturing data and insights from DFL programme users should be intuitive and simple to use, without requiring too much effort and time from users. This will ensure that the data and insights captured are accurate and collected in large enough quantities to be representative of the target audience. To the extent possible, DFS providers should leverage existing systems and platforms, including customer relationship management (CRM) and learning management systems (LMS) to collect data and insights. For example, Visa has implemented an LMS for its DFL pilots with Safaricom and Mixx by Yas with dashboards that track dozens of easy-to-monitor and analyse KPIs. Safaricom and Mixx by Yas are also keen to introduce a mechanism by which users can ask questions and provide feedback directly through the mobile app, providing another way to collect insights from users and enhance the programme over time.

32 GSMA. (2020). *A Monitoring, Evaluation and Learning (MEL) Framework for Humanitarian Innovation Programmes*.

The tools used to monitor the efficacy and impact of the DFL programme should be aligned with KPIs established at the outset of the programme. These may include impact, commercial and performance KPIs (for examples, see **Figure 18**).

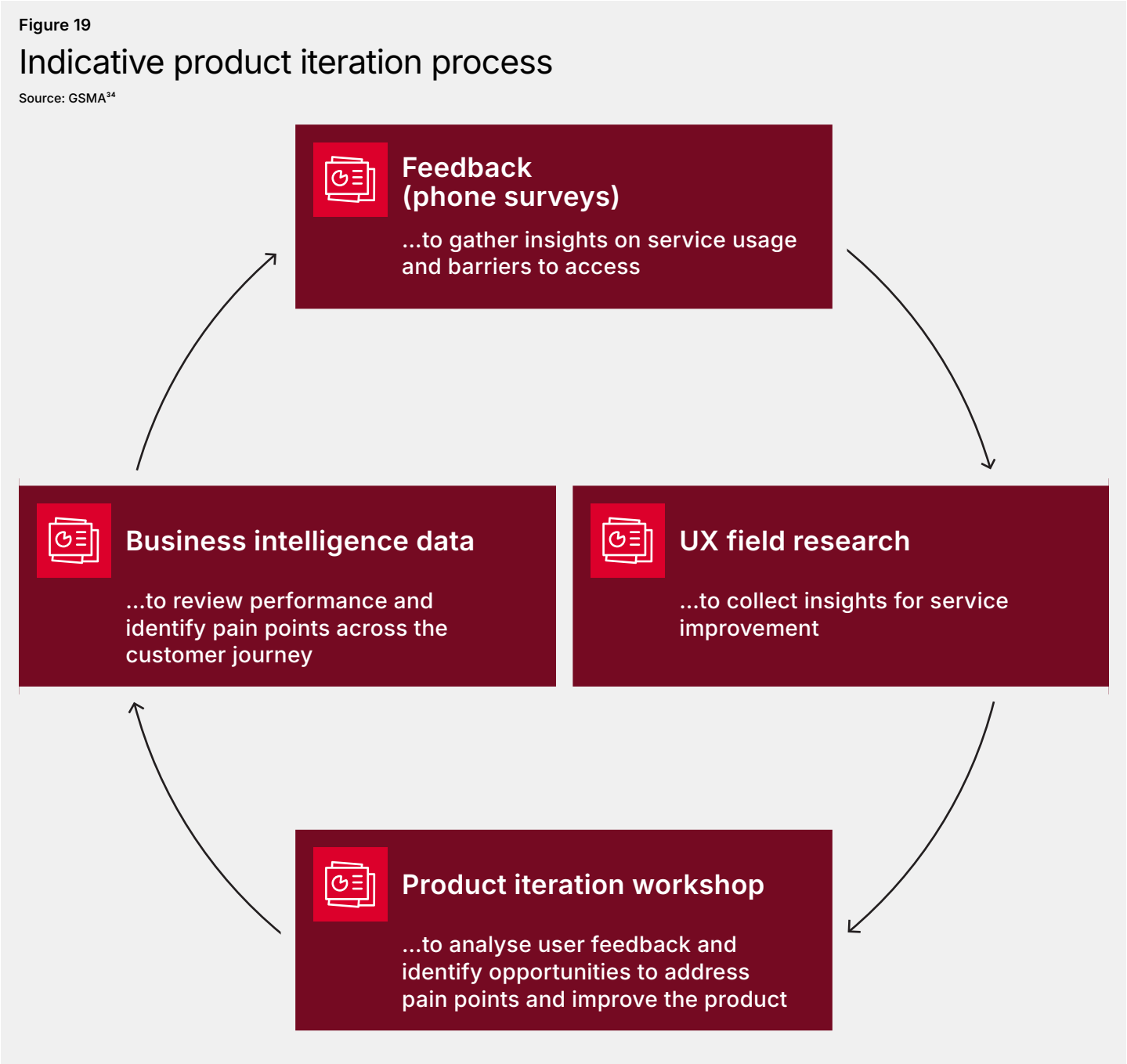
Figure 18  
Examples of KPIs in DFL programmes

Source: GSMA

 <b>Impact KPIs</b>	
Change in DFL levels among target segments	Number of users who engaged with DFL content and have successfully accessed new DFS products
Number of users who engaged with DFL content and have no repayment defaults over the past year	Number of users trialling new mobile money use cases like savings and credit
Number of users who engaged with DFL content and have savings equal to or more than three months of expenses	Number of users reporting improved confidence in mobile money-adjacent services
 <b>Commercial KPIs</b>	
Rate of adoption of various DFS products among those that have completed DFL modules	Number of merchants that report accepting payments through digital credentials over time
Number of digital loan approvals over time	Number of users who have continued to use a DFS product three months after adoption
Number of digital loan applications over time following completion of relevant DFL modules	Assessment of user perception of safety when engaging with DFS platforms <sup>33</sup>
 <b>Performance KPIs</b>	
Number of users accessing each module	Number of users completing all modules within a specific thematic area
Number of users failing to complete each module	Number of repeat customers
User satisfaction with delivery platform	User satisfaction with content modules

33 World Economic Forum. (2024). *Making a Difference: How to Measure Digital Safety Effectively to Reduce Risks Online*.

Over time, KPIs can be adjusted to apply lessons from the programme and capture the impact of any product changes implemented. A framework for how an MEL programme can feed into product iteration and enhancement is presented in **Figure 19**. How often this process is conducted depends on the perceived trade-offs between the cost of collecting the data and insights and the benefits associated with the product enhancements.



34 GSMA. (15 January 2024). "How to combine monitoring, evaluation and learning data in commercial product development".



# 04

## Key lessons from the pilot projects



Launching a DFL programme requires a multi-disciplinary approach with many steps and activities. However, it enables DFS providers to create lasting impact for both their users and their business operations. During this process, challenges and delays may occur due to unforeseen issues in product development. These issues can arise from project scope complexities, new technologies or an incomplete understanding of the requirements. This makes proactive planning and risk management essential.

Although the DFL pilots in Kenya and Senegal were still underway when this study was published, the partners have learned some important lessons that will inform future product iterations. These lessons, outlined below, will not only improve the DFL offerings in the two countries, but also provide critical insights for other DFS providers and partners seeking to launch similar products in their markets.



#### **Lesson 1**

**Buy-in from the senior executive team is critical to the ultimate success of a DFL programme.**

As DFL programmes do not have a direct and immediate link to revenue generation, they can often be de-prioritised and pushed back in favour of revenue-generating activities. DFL programmes will be more successful if they have the buy-in of the executive team and are appropriately prioritised within the organisation. Safaricom's leadership, for example, is aware of the many benefits of DFL, not only for mobile money users but also for increasing usage and the revenue from mobile money services. For that reason, they have been keen to participate in a DFL programme and played a key role in moving it forward. Mixx by Yas executives were interested in teaming with Visa and the GSMA as the DFL pilot enabled it to make DFL content available to its customers more quickly (see Section 3).



#### **Lesson 2**

**Clearly delineated milestones and responsibilities at the inception of the project lead to timely programme implementation.**

DFL programmes often involve resources from different divisions, ranging from legal and regulatory to commercial and technical (see Figure 6). Ensuring that everyone is involved from the beginning and understands their responsibilities, timelines, outputs and milestones will ensure a smoother launch. Technology integration can be particularly challenging, so assigning it appropriate priority and resources are key.



#### **Lesson 3**

**A product manager will keep the DFL programme running smoothly.**

Given the cross-functional nature of DFL programmes, it is important to assign a product manager that can keep product development moving forward and be accountable to the executive team on the timely delivery of the programme (see Section 4). This person will need sufficient technical experience to communicate effectively with technical, commercial, marketing and legal teams. They will also need to manage discussions with external partners, including NGOs, content creators, financial institutions and others.



#### Lesson 4

**Data security, privacy and sovereignty issues are key considerations in the early stages of programme development.**

When working with partners to implement a DFL programme, it is important to understand the data security and privacy implications of integrating multiple systems. Some DFS providers may be reluctant to share documentation on their technology platforms with third parties given the sensitivity and competitive nature of this information. There may also be local sovereignty issues around data and testing, particularly with certain under-represented groups. For Safaricom, all testing had to take place within Kenya's borders, making it difficult for Safaricom and international partners like Visa to test the DFL content in the Safaricom super app. All these issues should be considered early on so that strategies can be developed to address them (see Figure 9).



#### Lesson 6

**Anticipating legal requirements in advance ensures the programme makes steady progress within the planned timeline.**

Given the complexity of DFL programmes, involving legal teams to address various issues can be a time-consuming process that should be anticipated to avoid delays. Legal considerations often include regulatory compliance, data privacy, contractual obligations and intellectual property rights, all of which require meticulous scrutiny and approval (see Figure 6). This is especially pertinent when integrating systems with external partners or navigating local data sovereignty laws. By anticipating these legal requirements early in the process and allocating adequate time to deal with them, DFS providers can ensure their DFL initiatives proceed smoothly and on time.



#### Lesson 5

**DFS providers and partners can take measures to reduce barriers to entry.**

Both partner MMPs and Visa recognised the importance of minimising barriers to entry for potential users of DFL content. From a technology standpoint, this meant integrating DFL resources in the MMPs' mobile apps, which users were already familiar with, rather than directing them to a third-party app that would require a new sign-on process. This also meant providing the DFL resources free of charge. Visa made a strategic decision to not charge MMPs for access to its financial education toolkit, while MMPs opted not to charge users either for the content or the data usage required to access it, offering it on a zero-rated basis instead.

# 05

## Recommendations for DFL pilot partners





Although the DFL pilot projects are still underway, the partners are actively discussing ways to scale up and enhance the effectiveness of DFL content after the launch. The following recommendations can facilitate these strategies. Although they are directed at the MMPs participating in the pilot projects, they are also relevant to other DFS providers seeking to introduce DFL content for users in their own markets.



#### **Recommendation 1**

##### **Develop a multi-channel strategy to reach new users**

Despite the advantages of using a mobile app for DFL content (see Section 4.1), one of the key drawbacks is that it limits access to those who have a smartphone, have downloaded the MMP super app and are actively using it. In the case of Safaricom and Mixx by Yas, this means that most of their mobile money users will not have access to the DFL content in the short term. Although the GSMA expects the number of smartphone users will continue to grow and that more users will become familiar with mobile apps, there are other, complementary delivery channels that DFS providers can employ to drive adoption and usage. For example, Visa is considering adapting its content into bite-sized pieces that could be delivered through SMS-based text messages. IVR is a channel used by many NGOs and financial institutions to deliver DFL content across Africa and is familiar to marginalised groups like smallholder farmers and women.

Adapting existing content or developing new content that can be delivered through alternative channels like SMS and IVR enables DFS providers to deliver DFL content to feature phone users until smartphone usage becomes more widespread. As smartphone adoption increases, DFS providers may find that some users still prefer these alternative delivery methods. Consequently, a multi-channel strategy becomes an important consideration for long-term success. Given the added technical complexity of integrating a multi-channel strategy, DFS providers will need to ensure that requisite resources from the technical team are allocated to the project.

For maximum efficacy, digital delivery should be coupled with offline delivery, integrating the DFS provider's extensive network of mobile money agents that interact daily with mobile money users, as well as partners such as agribusinesses and financial services companies that may work directly with the targeted users. Some NGOs and financial institutions interviewed in 2024 by the GSMA Mobile Money team, for example, distribute financial literacy comic strips or pamphlets to mobile money users through mobile money agents. Others use videos and animations created for mobile devices and play them at community meetings to reach users who may not have a device capable of displaying video.



#### **Recommendation 2**

##### **Offer incentives to drive usage of DFS products**

The long-term success of DFL programmes will depend on the ability of DFS providers to drive adoption and usage of their products. Establishing direct connections between DFL content and DFS products will be critical. The current pilot projects, for example, will allow users to receive certifications for completing course modules. Mixx by Yas is considering incorporating certification in the credit-scoring algorithm it uses to approve loans. Completing a course on credit, for example, could result in lower interest rates, loans with longer maturity dates or eligibility for larger loan amounts. Safaricom aims to make the training modules interactive, allowing users to contact customer service for questions or sign up for products.



**Recommendation 3**  
**Improve content localisation**

Content localisation is essential for expanding the reach of DFL content. Africa is an extremely diverse continent with numerous cultures and religions, hundreds of languages and dialects and varying income levels and interests. DFL content that is suitable for one country (e.g. addressing a specific type of fraud) may not be relevant in another. Balancing localisation with scalability can be challenging, but one approach is to develop generalised content and translate it later into local languages and dialects, incorporating local phrasing and slang, referencing local places, people and culture and using common names. Mixx by Yas, for example, anticipates that a future phase of the DFL programme will feature content in Wolof, which is spoken by more people in Senegal than French, potentially reaching a larger proportion of the target audience.



**Recommendation 4**  
**Develop strategies to reach different target segments**

In the upcoming pilots, much of the content is generalised and promoted to the entire mobile money user base, without significant segmentation. In subsequent phases, both Safaricom and Mixx by Yas intend to refine the content and develop strategies to reach specific segments, including youth, women, smallholder farmers and NMSEs. To reach these segments effectively, MMPs and Visa may need to develop new content tailored to these groups. Interviews conducted in 2024 with NGOs implementing DFL programmes throughout Africa revealed that women tend to prefer receiving messaging from other women as opposed to men. One way to modify the content could be to use characters and voices that reflect the target audience, as well as address issues and challenges relevant to their lives.



**Recommendation 5**  
**Prioritise human-centered design in DFL product development**

Human-centred design (HCD), also known as user-centred design, involves designing products and services around user needs and preferences. This includes identifying the most appropriate technology for delivery and implementing an effective marketing strategy to reach different users.<sup>35</sup> HCD engages users throughout the product development process, from the initial identification of opportunities and concept generation, to the advanced stages of product realisation, execution and scaling.<sup>36</sup> For DFS providers introducing DFL programmes, it is important to engage target audiences at all stages of the process. Prior to launch, users can assist in identifying the most useful topics, the most effective formats and the optimal distribution channels. They can also provide valuable feedback on incentives and rewards for completing DFL modules. As the programme progresses, it is crucial to build in feedback mechanisms to ensure that user insights are communicated to DFS providers for iteration and improvement.

<sup>35</sup> GSMA. (2020). *Digital Agriculture Maps*.  
<sup>36</sup> Ibid.

# 06 Conclusion



In the evolving digital landscape of financial services, DFL is vital. Equipping individuals and businesses with financial knowledge empowers them to make informed decisions and become financially stable and independent. As DFS become increasingly prevalent, it is crucial that users understand these services. DFL aims to increase access for all, promoting broader financial inclusion.

DFS providers should consider implementing robust financial education programmes in their markets. By integrating DFL initiatives in their service offerings, these providers have the opportunity to play a pivotal role in advancing financial inclusion and enhancing their relationships with users. Investing in DFL could yield both immediate and long-term benefits, ultimately contributing to economic empowerment and development. There is no better time to make this investment, as collaboration can ensure widespread and accessible financial literacy for all.



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