



# Responsible Digital Finance Ecosystem (RDFFE)

## A Conceptual Framework

### EXECUTIVE SUMMARY

September 2024 • Eric Duflos, Juan Carlos Izaguirre, Sai Krishna Kumaraswamy,  
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# Executive Summary

**T**HE RAPID DIGITIZATION RESHAPING THE financial services landscape presents both opportunities and challenges. While rapid digitization has broadened access to and reduced the costs of financial services, it has also led to fragmentation in the provision of financial services, complicating financial consumer protection (FCP) efforts. Technologies such as automation and extensive data sharing have heightened consumer risks, including fraud, data misuse, and inadequate recourse mechanisms. Additionally, a lack of consumer trust in financial services and limited digital literacy among some users are becoming significant barriers to safe access and usage (Duflos and Izaguirre 2022). Regulators and supervisors are also facing challenges in adapting their consumer protection frameworks to fast-evolving technologies, such as artificial intelligence and crypto assets.

Despite advancements in global frameworks like the G20/OECD High-Level Principles on Financial Consumer Protection and their implementation in emerging markets and developing economies (EMDEs), there are increasing types of risks, and the rate at which digital finance risks grow often surpasses the rate at which digital financial services (DFS) are adopted. FCP efforts tend to be siloed and primarily carried out by a financial sector authority. Therefore, these efforts do not sufficiently keep up with the dynamic DFS landscape, which involves many new and non-traditional market actors that may not fall entirely under the purview of the financial sector authority. Moreover, FCP measures in DFS tend to be reactive, often arising only after consumer harm has occurred, rather than being proactive and pre-emptive.

It is time to enhance FCP in the digital age to ensure consumers continue to derive value and positive results from DFS and the sector can realize its immense financial inclusion potential. The basic legal and regulatory building blocks that many jurisdictions have been fine-tuning over the years continue to form the foundation of any FCP framework. At the same time, the growing number of market actors interacting in the provision of DFS, coupled with the fast-growing and evolving nature of DFS consumer risks are clear signs that we need to further strengthen the existing FCP framework by making it more holistic and proactive.

To achieve this, CGAP envisions a “Responsible Digital Finance Ecosystem” (RDFE), where key stakeholders collaborate to proactively identify, prevent, and mitigate DFS consumer risks, not only to safeguard consumers from potential harm, but to also ensure that DFS offerings enrich consumers’ lives.

Solutions to address consumer risks require the involvement and buy-in from many stakeholders. Actors with key roles in an RDFE include financial and non-financial sector authorities such as data protection, competition, or telecom regulators, along with a broad range of digital finance providers, consumer advocates, and market facilitators. Through deliberate individual and collective action from these actors, the digital finance ecosystem can become more responsible, rebuild consumer trust, and deliver on its promised benefits for both consumers and financial service providers.

Achieving the vision for an RDFE requires building on and strengthening—not replacing—current FCP

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country frameworks, including their regulation and supervision. In many cases, this will help improve the effectiveness of existing authorities and market actors. It may also involve incorporating new tools. In most cases, these improvements are already in progress, thanks to various stakeholders taking different actions to move toward more responsible DFS. The aspiration for an RDFE is to cohesively weave these individual efforts into a concerted movement, ensuring that all key actors are intentionally and methodically advancing toward a predefined vision.

This paper offers a conceptual framework for achieving the vision of an RDFE and draws on real-life examples and case studies. It outlines the four key components of an RDFE—Customer centricity, Collaboration, Capability, and Commitment, referred to as “the four Cs”—that help build on and strengthen current FCP frameworks, and which should be developed by all ecosystem actors to enable customers to use digital finance safely and in a manner that leads to positive outcomes.

- **Customer centricity:** Effectively placing customers at the center of actors’ actions.
- **Collaboration:** Working together effectively to create, plan, fund, implement, and monitor solutions.
- **Capability:** Effectively addressing consumer risks via enhanced competencies, tools, and resources.
- **Commitment:** Individually and collectively dedicating internal resources to champion an RDFE.

While the RDFE was envisioned primarily for DFS, it can inspire the strengthening of the FCP framework of traditional non-digital finance services.

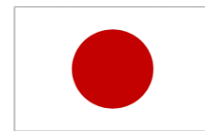
CGAP recognizes that the implementation of this conceptual framework must be tailored to each country’s local context to complement existing FCP policy, regulatory, supervisory, and industry initiatives. Implementation calls for strong commitment from the relevant financial sector authority and a collaborative effort involving other national stakeholders and global actors who can provide support. It is important for leaders championing reforms to understand and act on the incentives needed to encourage this additional effort.

Despite the challenges, it will be crucial to set up a measurement framework that includes a baseline assessment with gender-disaggregated data, as well as follow-up surveys and progress monitoring tools. Through this measurement framework, DFS ecosystem actors will see how implementing an RDFE vision is leading to better consumer risk management and positive customer outcomes.

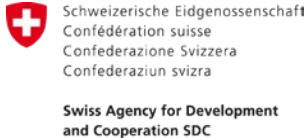
## References

Duflos, Eric, and Juan Carlos Izaguirre. 2022. “Reading Findex with A Consumer Protection Lens.” Washington, D.C.: CGAP. <https://www.cgap.org/blog/reading-findex-with-consumerprotection-lens>.

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