



**2024**

**Year in review**



We're so grateful for a busy 2024 and the opportunity to work on a range of interesting projects with numerous funders and partners. One of the enduring strategic objectives at Cenfri is "evidence-driven impact" and while we're excited about the growth of our (quantitative) data-for-decisions work, it has been good to have commissioned numerous qualitative research studies and had extensive in-person meetings with stakeholders to better understand their perspectives.

This publication includes a snapshot of some of our flagship projects and reflections on lessons learnt, as well outstanding challenges that we would like to continue to work on with our partners.

We took some risks this year; they paid off and so we're looking forward to new adventures next year!

*Donbell Chamberlain*

**Managing Director**

# 7 Lessons

from our work this year

## 1 Context-appropriate open finance in Africa

An estimated 25% of Africans have smartphones, and yet most global guidance related to API-enabled data sharing assumes smartphone usage.

## 2 Promoting good outcomes for financial services consumers

There's a big gap between appreciating the need for positive consumer outcomes (for financial services consumers) and the ability of financial service providers and regulators to measure good outcomes.

## 3 Building inclusive payment systems

The many legacy systems and adverse incentives are inhibiting the delivery of cheaper, faster, convenient and transparent payment systems in Africa. Although the global payments community is working to find solutions (with 50 ongoing payment development projects on the continent), the transferability of lessons is limited.

## 4 Data-for-decision-making

Getting the initial seat at the table and building trust is time consuming, but there is very little access to data without it.

## 5 Regulating for innovation

Despite misgivings about the appropriateness of regulatory sandboxes within relatively small developing countries and/or by under-capacitated regulators, sometimes sandboxes present a useful structure and mandate around which different departments within the regulator can organise.

## 6 Understanding MSMEs

The integration of MSMEs within value chains and social networks significantly impacts their resilience and ability to access knowledge and financial support. This is particularly true for women-owned MSMEs.

## 7 Innovations in integrity

As more African countries face grey-listing risks, the need for stronger data-driven risk assessments and risk-based-supervision approaches becomes urgent. But, in many financial institutions there appears to be limited use of data and data skills to better understand risks posed by low-income and rural customers.

# Our travels

for project work in 2024

1. **Burundi** - Bujumbura
2. **DRC** – Kinshasa
3. **Egypt** - Cairo
4. **Eswatini** - Ezulwini
5. **Ethiopia** – Addis Ababa
6. **Germany** - Frankfurt
7. **Ghana** - Accra
8. **Italy** - Turin
9. **Jordan** - Amman
10. **Kenya** - Nairobi
11. **Morocco** - Rabat
12. **Netherlands**, Amsterdam
13. **Nigeria** – Abuja & Lagos
14. **Rwanda** - Kigali
15. **South Africa** – Cape Town, Pretoria & Johannesburg
16. **Switzerland** - Basel
17. **Tanzania** – Dar es Salaam, Zanzibar
18. **Uganda** - Kampala
19. **Zambia** – Livingstone, Lusaka

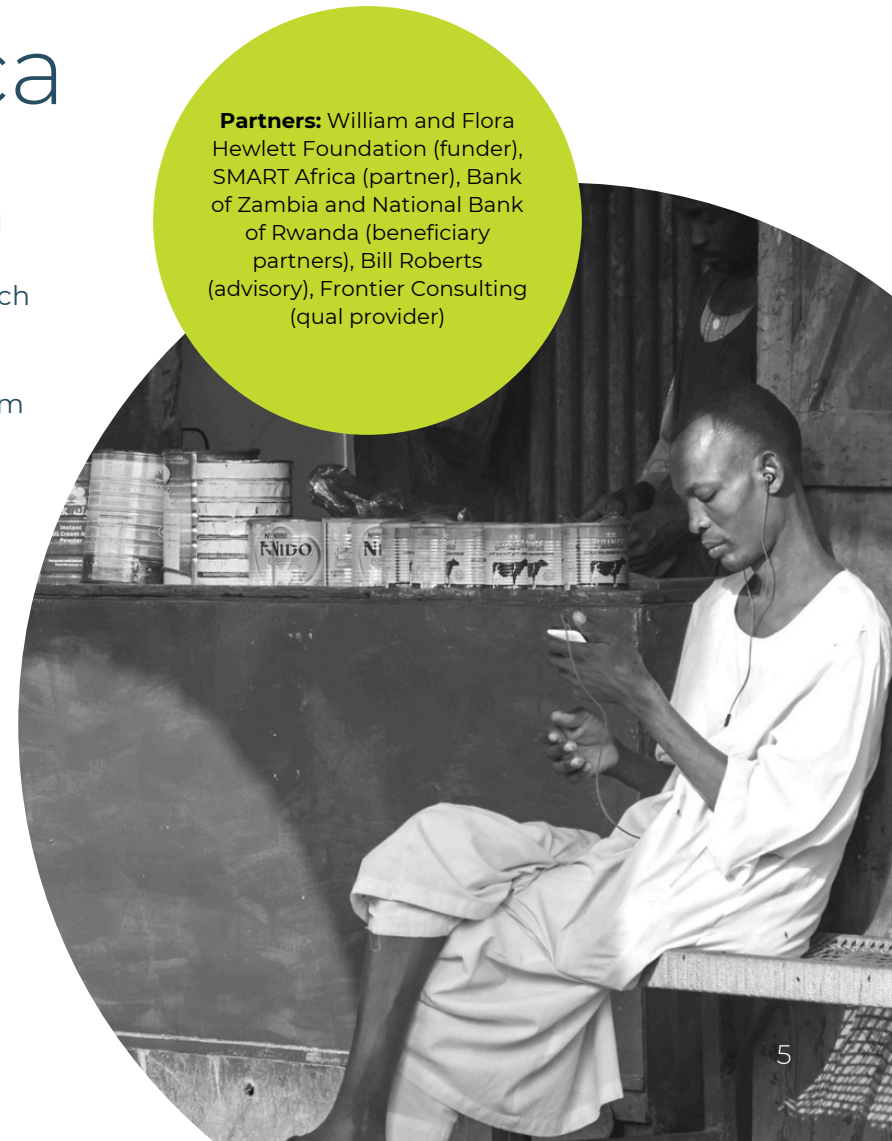


# Context-appropriate **open finance** in Africa

In 2024 we completed open finance diagnostic assessments in Zambia and Rwanda. This culminated with in-country workshops to discuss the recommendations and move towards an implementation action plan in each country with our partners – the Bank of Zambia and the National Bank of Rwanda. Together with our partner, SMART Africa, we also conducted introductory online training workshops for regulators and policymakers from across more than 20 African countries.

**A key lesson** from our work this year is that existing global API standards and most global guidance related to API-enabled data sharing (a core foundation for open finance) assume that consumers have smartphones, which they can use to securely provide consent/ permission for the sharing of their data. This completely ignores the reality that only about 25% of African consumers are estimated to have smartphones.

**Partners:** William and Flora Hewlett Foundation (funder), SMART Africa (partner), Bank of Zambia and National Bank of Rwanda (beneficiary partners), Bill Roberts (advisory), Frontier Consulting (qual provider)



**Unsolved challenge:** More work is required to support tailored design and an inclusive transition towards open data sharing across Africa's financial sectors. We see three channels to inform this:



At the **national level**, tailored, context-specific approaches can only be designed based on locally gathered evidence – e.g. national diagnostics or similar assessments.



At the **regional level**, consideration on harmonised approaches and consistent standards to both limit the cost and complexity for providers operating across multiple markets and to build the foundation for cross-border data sharing.



**Globally**, evidence from African countries realities finds its way into global discussions and that any global standards (formalised or de facto) and guidance actively reflects those realities.

**Outcomes observed to date:** The National Bank of Rwanda has formally adopted the open finance implementation plan for the next 6 years (2024-2030) and the Bank of Zambia has already considered supporting amendments to pending financial sector bills.

## Key publications:



Article



Article



Report

**Highlight:** Attending, together with our partner regulatory authorities, a global workshop on open finance hosted by the BIS. Hearing those partners share how they are building on the evidence we helped prepare.



# Promoting **good outcomes** for **financial services consumers**

We undertook a range of consumer outcomes projects in 2024, including updating the global consumer experience in digital finance. We developed a framework to consider the level of customer centricity, collaboration and commitment in the responsible digital finance ecosystem for CGAP.

We also did a global policy review on the treatment of vulnerability in financial consumer protection for Consumers International, developed digital financial services (DFS) consumer protection guidelines for the Central Bank of Jordan and assessed the implementation of financial consumer protection in SADC (developing a dashboard tool for tracking member-state progress).

**Partners:** Consumers International, SADC Secretariat, Central Bank of Jordan, GIZ Jordan, CGAP



**We've learnt that:** There's a big difference between buying into the need for positive consumer outcomes at a conceptual level and measuring and implementing them in practice. It's a change management journey that requires all stakeholders to be on board, and that doesn't need to wait for regulation.

**Countries:** Burkina Faso, Jordan; the 15 SADC member states; 13 countries across the globe for the vulnerability policy review.

### Key publications:



Article



Report

### Unsolved challenges:

- The ability to track consistently outcomes of financial consumer protection for consumers themselves.
- Addressing risks and pain points for lower-income and vulnerable consumers without protecting them out of the market via the unintended costs and compliance burden of regulation.

**Highlights:** Participating in a workshop with policymakers in Kenya on the implications of the Financial Consumer Protection Outcomes Index that we developed a couple of years ago and discussing progress on financial consumer protection with SADC member states at the SADC Financial Inclusion Forum.



# Building **inclusive** payment systems

In 2024, we supported central banks, regional economic communities, and development partners on their journey to building inclusive payment systems that can facilitate low-cost, sustainable, transparent, and instant digital domestic and cross-border payment transactions. We created strategies to align regulatory frameworks and payments architecture with sustainable business models and engaged both the public and private sectors around creating fit-for-purpose payment solutions. We researched the payments landscape across Africa and coupled with primary consumer research, contributed to the understanding of existing barriers and opportunities.

**What we've learnt:** Africa's race to create domestic and regional payment solutions is heating up and there are over 50 ongoing payment development projects on the continent. Payment systems underpin all other DFS and are therefore crucial to get right as they guide the rails of economic development.

However, there are many legacy systems and adverse incentives that prevent payment systems from achieving the intended outcomes of cheaper, faster, convenient and more transparent payment systems. The global payments community is working to find solutions, but the transferability of lessons is limited given the unique contexts of each country and region.

**Countries:** Togo, Kenya, Uganda, Tanzania, Democratic Republic of Congo, Rwanda, Burundi, South Sudan, South Africa, Lesotho, Malawi, Mozambique. As well as Africa-wide landscaping study.



**Unresolved challenge:** There is a dire need for more structured collaboration and co-creation of inclusive payment systems between public and private sector. Payment service providers know best what works in payments (and not just in terms of technology). However, the public sector needs to set the right parameters from a regulatory and oversight position to ensure that payments pricing isn't extortionate, and consumers are adequately protected from fraud and other risks.

**Outcome observed to date:** A heightened focus on inclusive instant payment systems (IIPS) by regulators and supervisors.

**Partners:** MCC, AfricaNenda, GIZ, TradeMark Africa, FinMark Trust, BankservAfrica, EAC Secretariat, IDEA Consulting, INFITX, Africa Cybersecurity Resource Centre, Circle Pay, Frontier Consulting, Behave Consulting



*Cenfri 2024: Year in review*

**Highlight:** Waking up to the sounds of a hippo splashing in an old crater lake in Naivasha in Kenya after an intense week of stakeholder interviews. East Africa is wonderful!

**Key publications:**



**The untold realities of women cross-border traders**  
 14 MARCH 2024  
 Christine Hwangwani, Amanda Bazzi, Nourhelle Zaidi and Akinyemi Itangbi

Article



**State of inclusive instant payment systems in Africa**  
 21 NOVEMBER 2024  
 Juliana Bazzi, Mia Thoms, Gary Condon, Vera Hwangwani, Immanuel Fomaha, Christine Hwangwani, Saaha Linniche, Rasmus Mufundisi and Sophie Gaters

Report



# Expanding our **data-for-decision- making** portfolio

Earlier this year we celebrated a three-year extension of the Rwanda Economy Digitalisation (RED) Programme – our flagship data-for-decision-making initiative. Under the extension, the programme's data analytics workstream continues to focus on exploring the Education, Tourism, Retail, Agriculture, Finance, Transport and ICT sectors but has expanded its analysis to consider Climate and Labour issues. We were excited to extend our data-for-agricultural-policymaking work beyond Rwanda, kicking off a project in Tanzania with the Ministry of Agriculture and the UNCDF. Funding from the Hewlett Foundation has provided leeway to scope additional opportunities to deepen our data-for-decisions work in Africa.

### Some insights from the data in Rwanda:

- Rwanda's Vision 2050 reveals a bold vision for the future of the country and ambitious plans to transform its economy but the agrarian nature of the economy proved advantageous during the pandemic. The fact that most Rwandans live in rural areas (+/- 80%) and engage in subsistence farming added to the country's Covid-19 resilience since people could move away from the cities to their families in villages where there was food and work.
- Uneducated parents in Rwanda place a high priority on the foundational education of their children. Analysis of education data revealed an exponential uptake in pre-primary education – gross enrolment for pre-primary education increased from 24% in 2018 to 53% in 2022.

**Travelling beyond Rwanda:** Some lessons from our efforts to extend the data-for-decisions practice:

- Seat reservations: From our engagements in Ethiopia, Egypt and Ghana, it is clear that getting a seat at the table, as the initial hurdle, will require significant engagement over time, to build a relationship and gain trust.
- Get a local guide: Our engagements to date highlighted that it is easier to get a project around data-for-decisions going if you have a local relationship holder that are bought in. In engaging outside of Rwanda, we are following more than one approach. Thus far, it is proving more successful to have a funder that is onboard first, and then to engage other stakeholders.
- The weather can change: It has become clear, in Tanzania and in Ethiopia, that things can change as the conversation progresses. It is therefore necessary to maintain the flexibility to adapt to the changing needs of local parties in order to continue building the relationships required for longer term work.

**A priority for the remainder of the RED Programme:** With an eye on the sustainability of our work, we are constantly challenged to find the best ways to build the skills of local data scientists and to deepen the orientation towards problem-solving and innovation.

**Partners:** Mastercard Foundation, UNCDF, Hewlett Foundation, Government of Rwanda (MiniICT, MinAg, MinEduc, MiniCom, Rwanda Development Board, Rwanda Conference Board, Rwanda Utilities Regulatory Authority, National Bank of Rwanda, MIFOTRA), Irembo, 71point4, Data Horizons.

Programme page:



### Outcomes/impact observed to date:

- The most significant impact has been a shift in the attitude toward using data to inform policy decisions in Rwanda. Through the work of the programme and advocacy by the Minister of ICT and Innovation (our partner in Rwanda), we have seen a much stronger demand for the analytics that the RED programme generates.
- Our scenarios work on the future of food security and employment directly informed 3 of the 5 priorities of Rwanda's 2nd National Strategy for Transformation, the country's apex policy document.

### Highlight from this work in 2024:

- Education retreat – we facilitated a daylong session for MinEduc and its agencies on the insights from the education analysis to inform the new Sector Strategic Plan of the Education sector.
- The Cenfri Rwanda team has moved into new office premises and it was good to celebrate this with an office-warming.

# Regulating for innovation

Over the course of 2024, we conducted technical assistance and capacity building with 6 financial regulators across 5 countries in Africa and the Middle East. The intention is to create a more enabling environment for innovators as well as to implement organisational changes so that organisations themselves become more innovative. We also published the 2nd version of our Regulating for Innovation Toolkit, which sets out the available tools, approaches, options and decisions for financial regulators who aim to support and enable innovation within their markets.

**What we've learnt:** To date, we have been cautious about the appropriateness of regulatory sandboxes within relatively small developing countries and/or by under-capacitated regulators. While this caution remains, an interesting lesson over the last year has been a less obvious benefit from implementing sandboxes – it can create a joint structure and mandate around which different departments within the organisation can convene and organise.


What is clear is that where this has worked, it's not because of the sandbox itself (several regulatory authorities are already re-launching or re-designing their sandboxes after the self-acknowledged failures of the first iteration), but rather the direction and mandate provided by the organisational leadership. The sandbox initiative has provided a single point of convening for the lead implementing department.

**Partners:** GIZ, FSD Africa, FSD Uganda, Central Bank of Jordan, Capital Markets Authority of Jordan, National Insurance Commission of Nigeria (NAICOM), Central Bank of Ethiopia, Central Bank of Iraq, Bank of Uganda, Sandbox Consulting (Nick Cook), Nigel Bowman, Eden d' Oliveira

Key publication:



Toolkit



**Highlight:** A new-to-us facilitation tool that we piloted in workshops with a few central banks was to ask participants to draw their impression of their central bank in crayon. This was an entertaining icebreaker but also a fascinating insight into how they perceived their own organisations.

**Unresolved challenge:** One of the themes that emerged in recent work with regulators is the need to modify recruitment approaches. It is widely accepted that regulators need to ensure that their skills evolve in line with market evolution on topics like data governance, data analytics, increased automation, etc. Many regulators approach this by trying to build skills through training of existing staff and while this is an important component, purely following this approach won't allow the organisations to catch up to the market.

Greater emphasis on recruiting these new types of skills at both senior and junior levels is important. However, with low staff turnover, many regulatory authorities focus almost entirely on graduate recruitment and traditional indicators, particularly GPA or equivalent. To remain relevant and keep pace with industry innovation, financial regulators not only need to adjust the type of candidates they recruit for but also the practical recruitment and assessment process.

**Outcomes:**

- The Central Bank of Jordan (CBJ) published and publicly launched their fintech vision last year after a workshop we facilitated with the Bank's leadership. Further, in 2024, the CBJ opened their regulatory sandbox (JoRegBox) for applications and has successfully admitted multiple applicants. Public-private dialogues between CBJ and industry are held regularly.
- The Government of Rwanda launched a five-year fintech strategy (to which Cenfri contributed).

# Improving access to remittances via innovations in financial integrity

Access to remittances could be improved by innovating know-your-customer (KYC) and customer-due-diligence (CDD) processes however remittance service providers (RSPs) and financial regulators are not always alive to the innovation opportunities. It can depend on the extent to which they have progressed in implementing the risk-based approach. Based on lessons from the [Remittance Access Initiative](#), Cenfri and IFAD developed the IFAD Remittance Innovation Toolkit. We've been sharing lessons from the toolkit with a range of RSPs and regulators across several countries in Africa.

## Key publication:



Toolkit



Unlocking growth: 3 key opportunities for remittance service providers

24 SEPTEMBER 2024  
Linda Burgen

Article

### What we've learnt:

In many financial institutions there appears to be limited use of data and data skills in risk assessments to better understand risks posed by low income and rural customers. The use of relevant data in risk assessments is key to enhancing remittance access.

Grey-listing is an escalating threat for African countries, with an increasing number being placed under scrutiny by the Financial Action Task Force (FATF) for not meeting international standards on anti-money laundering (AML) and counter-financing of terrorism (CFT)[1]. This restricts or makes it more costly for RSPs and countries to access global financial systems, making it harder for remittances to flow seamlessly. As more African countries face grey-listing risks, the need for stronger data-driven risk assessments and risk-based-supervision approaches becomes urgent. The toolkit innovations are positioned to help RSPs and regulators mitigate grey-listing threat.

### Outstanding challenge:

The increased demand for support to align risk-assessment frameworks, regulations, policies and procedure to the risk-based approach and inclusive integrity to enhance remittance access remains unmet. This is especially true for those facing grey-listing risk or those currently grey-listed. The limited use of data and data skills in risk assessments to better understand risks posed by low income and rural customers compounds this challenge and impedes progress towards the FATF-mandated risk-based approach.

### Highlight:

High-level institutional buy-in significantly accelerates implementation and enhances remittances access to low income and rural customers. For example, in Gambia, the Managing Director of one of institutions to which we provided capacitation support participated in most of the capacity sessions and insisted that the key departments be represented at the highest level. Cenfri also assisted with developing a report to the board of directors to update on the new risk-assessment model and updates. This represents the highest level of buy-in and goes a long way to guarantees sustainability.

### Outcome to date:

Capacitation support for regulators and financial institutions to implement toolkit innovations (including risk assessment) has significantly enhanced remittance access opportunities for low-income and rural customers. For example, over 30 RSPs and 6 regulatory bodies (across 3 countries) have already been capacitated to implement toolkit learnings and best practices in their work. They have requested additional support.



**Partners:** IFAD's Financing Facility for Remittances, European Union (+ Luxembourg, Sweden, Spain), John Symington





# Understanding different **MSMEs** and their needs

In 2024, we deepened our understanding of MSME segmentation to empower financial service providers, development partners and government agencies to better tailor their offerings to the specific needs and risks of different MSME segments. A key focus has been examining gender dynamics to gain a more nuanced understanding of female-owned MSMEs and their unique challenges.

**What we've learnt:** MSMEs do not operate in a vacuum, their integration within value chains and social networks significantly impacts their resilience and ability to access knowledge and financial support. This is particularly true for women-owned MSMEs, where connections to female mentors and participation in social and business networks are crucial for establishing their businesses, securing suppliers and clients, facilitating cross-border transport and accessing financing. For instance, our study on female cross-border traders shows that they create WhatsApp groups with other women to communicate with each other to support, coordinate, and assist one another with running their businesses.



**Partners:** UNDP, CGAP, Finance in Motion, IFC, Microinsurance Network and Finmark Trust

**Unsolved challenge:** Shifting financial service providers away from one-size-fits-all product design for MSMEs remains a key challenge. Providers need to be encouraged to base their strategies on real data and a nuanced understanding of the unique realities faced by different segments. This will become even more important as climate risks increase and adversely affect MSMEs through flood risks, heat waves, droughts and other challenges.

We are collaborating with our partners to address data gaps and identify commercial opportunities, particularly through our ongoing segmentation project with CGAP. This project aims to further explore the realities and challenges of women-owned nano and micro enterprises and the distinct segments within this target group.

**Highlight:** The insurance for MSME's training conducted in Turin as part of a broader ILO Impact Insurance Academy programme. This provided a wonderful opportunity to have stimulating discussions with insurance and development practitioners and to share our knowledge on MSMEs with them.



**Countries:** South Africa, Lesotho, Malawi, Mozambique, Uganda, Kenya, India, Thailand, Malaysia, Jordan

# Digitalising economies and welfare-enhancing outcomes

Last year we shared how, through our work, Cenfri is targeting welfare-enhancing societal change that builds economies that are:

- **Inclusive:** Customer-centric and inclusive for all parts of society, including the vulnerable and marginalised (such as women, youth, rural communities and forcibly displaced people)
- **Sustainable:** Supporting resilience for households, businesses and governments against shocks, and helping societies adapt to the impact of climate change
- **Opportunity creating:** Building economic participation and advancement opportunities for individuals and small businesses through inclusive and competitive markets
- **With safeguards:** Providing fair outcomes for consumers, ensuring the integrity of the system and data protection for consumers and businesses alike

These are bold targets. Cenfri's entry point to sustainable development has typically been via a focus on the financial sector – particularly in working to ensure it is inclusive, it meets peoples' needs, and it is appropriately regulated. We have extended our focus and have been exploring how digital transformation and the real economy contribute to poverty alleviation and sustainable economic development.

In what has been dubbed the 'year of elections', we spent some time delving into some of the unenviably complex trade-offs facing policymakers. We want to better understand how governments are charting pathways to prosperity while managing trade-offs across opportunity (jobs), sustainability and security of provision (for example food and energy) in a digitalising, climate-constrained and geopolitically fragmenting world.

Scenarios work for Rwanda and South Africa respectively, also provided the opportunity to consider:

- Challenges linked to **food security** and the **future of employment** and the ways in which these priority policy issues are likely to impact Rwanda's Vision 2050 in the context of a climate-constrained and fragmenting global economy. (Our data-for-policy decisions work under the Rwanda Economy Digitalisation Programme afforded good insight into the current realities in the market.)
- The tough decisions and trade-offs required to leverage the potential of **digital public infrastructure** (DPI) to enable an inclusive, secure and people-centred digital government in South Africa. (This research has been enhanced by input from citizens sharing their experiences of navigating various SA government services.)



#### **Questions that we are keen to continue exploring:**

- To what degree are idealistic digital economic visions achievable given domestic skills and infrastructure constraints?
- How can emerging markets leverage and manage global technology platforms, which are not fully under the governance of any national jurisdiction?
- How do we update our thinking on market structure and competition (particularly around data and connectivity infrastructure) in this globalised digital economy?
- What options do emerging markets have regarding energy security and energy intensive industrialisation?
- How are emerging markets going to cope with penalties where they have not been able to adapt quickly to pending climate requirements on exports?

We don't have all the answers yet and are eager to discuss these issues with others who are grappling with similar questions. Let's connect.

# Incorporating the **needs** and perspectives of **stakeholders**

To deliver work that contributes to positive impact, it is important to understand the specific context and realities of potential beneficiaries. We often supplement our desktop research, data analysis and key informant interviews with considered qualitative research. Some of the qual we have commissioned recently explored the following questions:

- What are the perceptions of open finance/ data sharing, and what are kind of benefits and risks they would foresee? (Financial consumers in Zambia and Rwanda)
- What are the dynamics of informal cross-border trade by women? (Women trading between South Africa and Lesotho, Mozambique, and Malawi)
- How important do parents and teachers perceive pre-primary education to be in ensuring primary school success? (Parents and teachers in select districts within Rwanda: Nyagatare, Burera, Gisagara, Karongi and Kigali)
- What the main risks and pain points people experience in digital finance and what is the lived experience of digital finance? (Individuals and MSME representatives in Jordan)
- What are the use cases, desired features, unmet needs, and perceptions of end users regarding instant digital payments? (Algeria, Ethiopia, Guinea, Mauritius, and Uganda)
- What are the perceptions regarding the provision, cost and potential alternative pricing of public transport in Kigali? (Commuters in Kigali)
- What are the dynamics related to borrowing behaviour, as well as the barriers and enablers to growth and resilience for very small businesses? (Women-owned nano and micro enterprises in Kenya, Uganda and India)
- What are the common experiences for vulnerable user groups accessing select government services in South Africa? What are the priorities in digitising those user journeys? (12 focus group discussions in 3 provinces of South Africa)



Thank you to our qualitative research providers: Behave Consulting, Corporate Research Consultancy, Frontier Consulting, Mindset, EDI Global and Grant Thornton.

# New joiners in 2024

The Cenfri team is growing. We asked “relative” newcomers about their experiences at Cenfri to date and these are some of their reflections:

“What I appreciate about Cenfri is the flexible working environment. I can work from home or at the office. I have found actually that I’m very productive when I work from home – the commute time is saved and well utilised.”

Angelos Munezero,  
Policy Lead Rwanda Economy  
Digitalisation Programme

“I want to say that what I enjoy most about Cenfri is Cynthia’s food... but definitely the culture of having lunch together and how much Cenfri focuses on creating a fun working environment.”

Curen Fortuin,  
Project Office Administrator

“It is a joy to be surrounded by a group of people who believe so wholeheartedly in the work they do. Their passion is infectious, and one cannot but help be swept along with it.”

Joshua Hill,  
Comms & Design Generalist





"I was surprised by how professional and dedicated everyone at Cenfri is. In addition, they are all welcoming and always available to provide guidance whenever needed."

Belle Fille,  
Senior Data Scientist

We are also pleased to have welcomed interns and short-term contract employees to our office in South Africa as well as 10 data fellows and 2 academic interns to our office in Rwanda.

"What I enjoy most about Cenfri is getting to work with the most incredible, optimistic, and friendly colleagues who've risen to the occasion of changing the world, while having fun doing it."

Kgotso Mofulatsi,  
Research Analyst

"I've learnt that Cenfri's culture is learning culture. One has to be comfortable (and is always encouraged) to share his/her views on a topic."

Rememberance Chimeri,  
MEL Specialist



# Partners

Thanks to our partners and clients for ongoing support, we couldn't have done this without you! We are pleased to have worked with the following funding organisations in 2024:

