

Building the fundamentals of a welfare-enhancing digitalised economy

“Digital Transformation is a driving force for innovative, inclusive and sustainable growth. Innovations and digitalization are stimulating job creation and contributing to addressing poverty, reducing inequality, facilitating the delivery of goods and services, and contributing to the achievement of Agenda 2063 and the Sustainable Development Goals.”

– African Union Africa Digital Transformation Strategy 2023-2030

Transforming society for good. Cenfri’s strategy focuses on building the fundamentals of welfare-enhancing digitalised economies that contribute to sustainable economic growth and inclusion for all. We target 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.

Easier said than done. Even though the potential value of digital transformation is uncontested, these positive outcomes are not guaranteed or even the default. Indeed, digitalisation or digital transformation *per se* has marginal impact; the crux is the way it is leveraged and implemented. Much is still to be explored and understood: how does digital transformation create welfare-enhancing societal outcomes? Where does the impact break down and why? What are the risks of negative impacts and how to manage societies’ transition where such impacts are inevitable? The key is to reconfigure entire systems around the strengths of digital and not to merely digitalise elements or links originally configured for non-digital or semi-digital processes in a largely analogue system.

Understanding what it takes to get to optimal, inclusive and sustainable outcomes requires policy, regulation and business models to be calibrated to the domestic context and policy priorities. It requires a welfare-enhancing digitalised economy to take root at the **real-economy or sector level**.

Box 1. What do we mean by the digitalised economy?

The **digital economy** encompasses providers directly active in the ICT sector, such as hardware and software providers, digital developers, as well as those providers that produce and sell purely digital products or services, such as platforms or start-ups. The digital economy is therefore “that part of economic output derived solely or primarily from digital technologies with a business model based on digital goods or services” (Bukht & Heeks, 2017).

The **digitalised economy** refers to the application of digitalised activity and technology to economic activity: the use of digital products and services to enhance the efficiency and productivity of traditional economic activities, leading to enhanced competitiveness¹. This manifestation of digital transformation becomes apparent across the core economic sectors (manufacturing, agriculture and the service sector) as well as within cross-cutting sectors that play a critical supporting role in the development and productivity of the other sectors, such as financial services or education².

Systems approach. Welfare-enhancing digital transformation requires a dynamic and interrelated ecosystem of enterprises, consumers, support functions, tech and data system providers, regulation, supervision, and “foundational” infrastructure such as identity, electricity, payment systems, physical infrastructure and ICT and data infrastructure. It also requires inclusive digital financial services as backbone for economic participation. Achieving a digitalised economy ecosystem falls beyond the mandate and capacity of individual institutions or even individual countries and requires coordination and regional collaboration.

The diagram below illustrates how welfare-enhancing digital transformation comes about across the system. At the bottom level are the foundational building blocks for a welfare-enhancing digitalised economy – the infrastructure, policy and regulatory environment, market conditions and target market characteristics needed for the ecosystem to “land” in sector-level, real-economy digitalisation in the middle layer. We see the foundational building blocks coming together in two key transmission mechanisms or enablers for real economy digitalisation: inclusive digital financial services and digital innovation of systems and processes. Transformation towards a digitalised economy is only meaningful if it generates the ultimate welfare-enhancing societal benefits that we strive for (top layer). Hence, digital transformation requires considered design of building-block- and sector-level interventions and collaboration of stakeholders across the ecosystem to ensure that the real economy outcomes are welfare-enhancing:

¹ UNCTAD (2019) adapted from (Bukht and Heeks, 2017) and (Malecki and Moriset, 2007)

² Bukht and Heeks (2017)

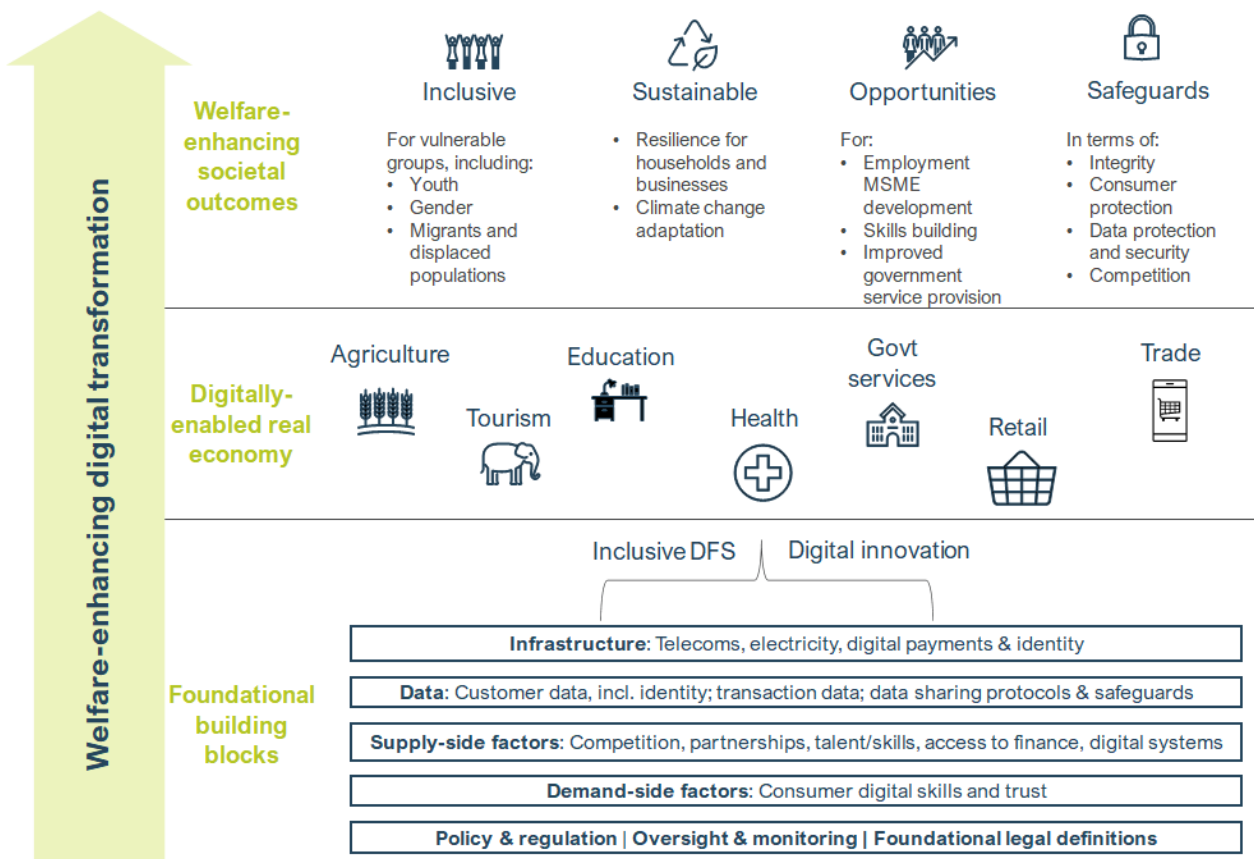


Figure 1. Welfare-enhancing digital transformation

Cenfri's focus

Understanding the linkages. Across our portfolio, we often explore and map the drivers of welfare-enhancing digital transformation to effect change – be it at the real economy sector level or by engaging in the foundational building blocks of digital infrastructure, digital innovation or inclusive digital financial services. This is simultaneously a learning agenda: we populate the canvas for what welfare-enhancing digital transformation entails as we learn. Our work consists of specific and detailed interventions across various parts of this canvas and our ambition is to learn further as we navigate our digital transformation strategy.

We have developed several thematic competencies, frameworks and tools to engage on these topics. Our work roughly categorises into two categories: **inclusive digital financial services (DFS)** (or, indeed, an inclusive digital financial sector at large) and **digital transformation (DT)**, each with a number of linked sub-themes as illustrated in the diagram below. Note that these are not mutually exclusive categories – DFS dynamically plays into DT and the other way around, and both in turn manifest at the real economy sector level.

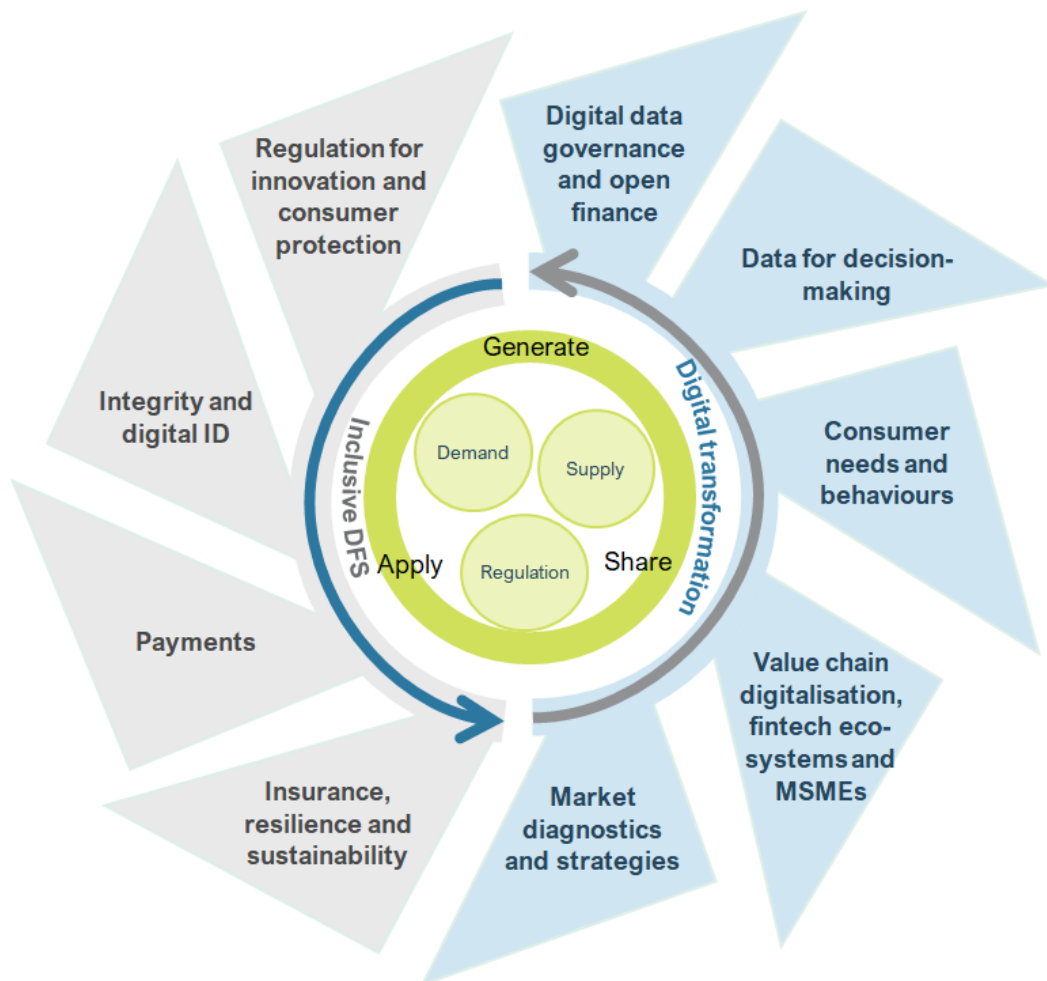


Figure 2. Cenfri's thematic portfolio

The diagram depicts how our various thematic areas fan out across the two categories to set in motion a flywheel or propellor for change. According to the systems view, setting this flywheel in motion requires an interplay of demand, supply and regulatory or enabling environment forces, so we cover all of these in our work.

Under **digital transformation**, our portfolio includes data and digital governance (including open finance and fintech policy), data-for-decision-making (where we empower government and private sector stakeholders to leverage large record-level and foundational datasets to inform and transform policymaking and strategy), digitalised economy diagnostics to inform digital transformation strategies and value chain digitalisation.

Box 2. Cenfri's digital transformation portfolio overview

Data for development

- **Data for decision-making.** We seek to accelerate the welfare-enhancing digitalisation of the economy by leveraging data insights to improve policymaking and catalyse innovation. We work with governments to unlock the power of hitherto untapped datasets to inform policy decisions. Our flagship RED programme has been extended for a further 3 years.

Example: [Rwanda Economy Digitalisation \(RED\) Programme](#)

Digital strategy and governance

- **Diagnostics and welfare-enhancing digital transformation strategies.** We aim to leverage the best available tools and evidence to understand ways to build a welfare-enhancing digitalised economy for consumers (including vulnerable groups such as women, youth and displaced populations), digital workers and MSMEs. We use sector-level diagnostic evidence to inform practical donor, regulatory and market player strategies that contribute to positive welfare outcomes for these groups and at the sector level.
- **Digital and data governance.** Digitalised sectors work best where the underlying fundamental law, definitions and rights are clear and well established. A simple process becomes complicated when the underlying fundamental rights and concepts are not clear or are unreliable or unenforceable. Moreover, in emerging markets, local regulation is often influenced by standards determined in other jurisdictions and outside the regulators' immediate sphere of influence. We use the diagnostic evidence to work with emerging market regulators, policymakers and supervisors on policy and regulatory architecture and instruments to deliver on their broadening institutional mandates. We help them to design strategies and instruments to implement a proportionate approach and to adapt to a changing market landscape within the means and resources at their disposal.

Example:
[Unlocking the digital economy in Senegal](#)
[Youth Skills digital diagnostic in Africa](#)

Example:
[The New Nexus: digital governance, digital financial services and the SDGs](#)
[Open Finance in Africa: Designing context-appropriate approaches](#)
[Rwanda Fintech Policy 2022-2027](#)

Digitalised real-economy development

- **MSME and value chain development.** Our focus on MSMEs originated out of our resilience theme, where we identified small business resilience as key to business success. This has evolved to a broader focus on MSME and value chain digitalisation and MSME finance to support real economy outcomes.
- **Tech ecosystems and digital platforms.** We have built up a database of Africa's digital platforms and a portfolio of projects exploring the dynamics of digital platforms and gig work in Africa.

Example: [Digitalising farm to table supply chains in Asia](#)

[The untold realities of women cross-border traders](#)

Example:
[Africa Digital Platforms database](#)
[Platforms for employment](#)
[The Africa Fintech Hub](#)

On **inclusive digital financial services**, our work includes payments architecture design and digitalisation; insurance, risk management and resilience; financial integrity

and risk-based regulatory approaches; regulation for innovation and adaptation; consumer protection; as well as MSME finance and resilience strategies.

Box 3. Cenfri's financial services portfolio

Inclusive and welfare-enhancing financial services

- **Resilience.** Inclusive insurance has been a core focus since Cenfri's founding. We have since broadened the theme to Resilience, noting that insurance is not the only risk-coping mechanism that matters for households and small businesses and that, through innovation, insurance can go beyond risk transfer to support risk management. We have built a portfolio of projects on [MSME inclusion](#) beyond insurance.

Example:
[The role of insurance for development](#)

[Holistic risk solutions for MSME resilience in Egypt](#)
- **Payments, remittances and CBDC.** Building inclusive payments and remittance markets has been one of Cenfri's central themes from the start. More recently, we've also been doing pioneering work on the topic of Central Bank Digital Currencies (CBDC) in the emerging market context and on the future of instant payment system architecture on the African continent.

Example:
[AfricaNenda State of Inclusive and Instant Payment Systems in Africa 2023](#)

[Central bank digital currency \(CBDC\) and financial inclusion](#)
- **Financial integrity and digital identity.** Financial integrity matters deeply for the outcomes we want to see. An inability to verify identity forms one of the biggest barriers to financial inclusion. Thus, we are actively working to promote risk-based and inclusive financial integrity. The topic of digital identity as an enabler of financial inclusion links closely to our integrity as well as payments and remittances themes. Digital identity for individuals and small businesses is a critical infrastructure to enable participation in a digitalised economy.

Example:
[AFI Inclusive Integrity Toolkit](#)

[A roadmap for implementing biometric identity systems in Sub-Saharan Africa](#)

[Remittance Access Initiative in partnership with IFAD](#)
- **Regulating for innovation, adaptation and consumer protection.** Balancing the regulatory mandate for market development with that of stability and consumer protection is at the heart of creating a facilitative environment for welfare-enhancing and inclusive financial services. We focus on practical advice, technical assistance and capacity building for regulators and supervisors to assist their adaptation to a changing environment. We have worked with a range of regulators in Africa and have provided extensive support to the regulator in Jordan.

Example:
[Regulating for innovation in Africa: cross-country synthesis note](#)

[Digital finance: the consumer experience, 2023](#)

[Consumer protection in digital finance: policy brief](#)
- **Consumer insights and financial inclusion measurement.** The adage goes "you manage what you measure" and we believe that that holds particularly true for financial inclusion. To be able to effectively protect and include consumers, you need to understand their financial needs and their direct perspectives on the

Example: [Financial needs toolkit](#)

value added by financial services. We deploy a range of tools to understand consumer (individual and MSME) needs and behaviour, including behavioural science and big data.

- **Financial inclusion diagnostics and change strategies.** Our financial inclusion diagnostics and our range of insurance and remittances diagnostic studies have been a linchpin of Cenfri's work. It's where we formed our deep understanding of the way that the financial sector develops and shapes outcomes throughout the economy.

Example:

[MAP country diagnostics and global insights series](#)

[A2ii toolkit on country diagnostic studies](#)

- **Fintech ecosystem diagnostics and regulatory strategy.** Fintechs can be a powerful engine of inclusion but can also give rise to risks. We do diagnostic assessments of the enabling ecosystem for fintech development, from which we develop context-appropriate roadmaps for responsible facilitation of fintech development.

Example: [Rwanda fintech strategy](#)

Sustainable outcomes

- **Climate change adaptation and urban resilience.** How to respond to climate change and natural disasters by building more sustainable, insurable cities and infrastructure is a front-of-mind market and policy question.

Example: [Climate risk data and modelling for Africa](#)

Our evolving toolset

Empowering change agents. Whatever the specific thematic area, our focus is on empowering decision-makers – market players, policymakers, regulators and development partners with an operating mandate at the country level – with evidence and capacity development, so that they can act as change agents in line with their domestic policy context and objectives.

Generate, share, apply. As indicated in Figure 2, we equip and empower these change agents by:

- **generating** or unlocking data, evidence and insights that matter for front-of-mind policy or market problems and equipping change agents to do so on an on-going basis;
- **sharing:** leveraging available means of inserting the evidence into decision-making processes – including convening stakeholders, developing roadmaps or strategies and generating buy-in for implementation.
- **applying:** accompanying and assisting the implementation journey through technical assistance, coordination and capacity-development to see the learnings and recommendations applied in practice.

The specific tools we leverage in this generate, share and apply cycle include diagnostic studies, behavioural science and qualitative market research tools, survey design, data analytics, sentiment analysis, data engineering, stakeholder facilitation, innovation lab engagements, technical assistance, generation of learning journeys,

cross-stakeholder roadmaps or institution-specific strategies, and policy and regulatory design and drafting.

Such a change process does not happen overnight; it requires “patience to pursue impact”. Persevering in this quest not only has benefits at the local level, but at the regional and global level as well. Armed with the relevant evidence and appropriate capacity, national change agents can coordinate and align at the regional level and can leverage regional and global forums to negotiate favourable guidance, standards and cooperation outcomes in line with their domestic policy priorities that can, in turn, influence domestic application.

The change process also applies to us internally. With the rise of AI, we are continuously taking stock of the future of research and how we adjust our processes to remain relevant and impactful. We are also working to sharpen our tools for ensuring data integrity and accuracy in our data analysis work.

Partnering for impact

Sustainable systems-level change requires alignment and collaboration across multiple partners and stakeholders over a long period of time. As an integral part of our systems approach, we work with **partners that share our vision** and are willing to accompany the journey to impact. Over the next five years we will continue to leverage and extend our partnerships for change.

Recent partners include:



For more information email doubell@cenfri.org.