main issue

Digital solutions such as mobile money, e-commerce, weather alerts and index-based insurance have transformed the way smallholder farmers run their businesses. While the pace of rollouts has increased exponentially over the last decade, many tend to disappear just as quickly. This workshop aimed to give SSNUP stakeholders an overview of the different types of digital solutions for smallholder farmers and raise awareness of the risks, constraints, and opportunities these solutions can entail.

key takeaways

1. Digital solutions differ in terms of provided services, target customers and business models

   The Technical Centre for Agricultural and Rural Cooperation divides digital solutions into five broad categories according to their types of provided service. They differ in target customers and business models, which impacts their scalability and commercial viability in various ways.

   Business models

   **Linear**
   - Production ➔ Distribution ➔ Marketing ➔ Consumer
   - Advisory & information services
   - Financial access
   - Supply chain management
   - Macro agricultural intelligence

   **Platform-based**
   - Providers ➔ Consumers ➔ Providers / Owner platform
   - Market linkages
   - (Main) Customers

   Sources: CTA, The Digitalisation of African Agriculture; Platform revolution: How networked markets are transforming the economy and how to make them work for you

SPEAKERS

William Saab
——
Expert in smallholder farming service delivery models
In 2021, William Saab co-authored the report Agricultural “platforms” in a digital era: Defining the landscape, which documents and analyses the emergence of platforms in smallholder agricultural markets for the first time.

Manfred Borer
——
Chief Executive Director of Koltiva
In 2013, Manfred Borer co-founded Koltiva, a global tech company providing digital and financial services to farmers and fishers from seed to table.

Worlali Senyo
——
Head of Corporate Services of Farmerline
Farmerline is a fast-growing tech company based in Ghana that provides digital tools, logistics, field agents, farm resources and agribusiness partnerships to African farmers.
Digital service providers face multiple challenges in offering their services to smallholder farmers

- **Client base difficult to reach:** Smallholder farmers have a low level of digital literacy, face difficulties accessing smartphones, stable phone networks and internet connections. They also have limited financial resources, are very price sensitive, and unlikely to pay for digital services in the short term.

- **Highly competitive and dynamic digital market:** With many experiments, successes, and failures. Barriers to entry are often relatively low, while the costs of reaching scale and viability are high, as tech startups often face difficulties retaining customers and generating sustainable revenue streams. Although long-term investments are crucial, investors often have more short-term objectives.

- **Structural challenges in agricultural value chains:** In other sectors, new digital platforms made functioning markets work better. In contrast, smallholder markets are often dysfunctional with weak market fundamentals, which hampers the commercial viability of digital solutions.

- **Regulatory uncertainty:** Regulations are, in many cases, still catching up to technological advancements in areas such as data ownership and privacy. This lack of clarity and potential future compliance requirements creates both opportunities and challenges for innovation and upscaling digital solutions.

Client-centric, holistic business models with diverse revenue streams most likely to thrive

- **Client-centric approach:** Digital services must meet the smallholders’ tangible, specific, daily needs. Good models that solve real problems can quickly get customers to pay, ensuring a win-win situation for service providers and customers. Digital services should be in the clients’ language and easy to use.

- **Holistic solutions:** Smallholder farmers often require multiple, interrelated services. One-stop shops that meet various needs at once can have a more significant impact on their lives, even though they may come at the expense of specialisation.

- **Digital solutions will not replace human interactions:** Face-to-face interactions generate more trust among poor and low-educated people than virtual interactions. Digital services must be physically supported (in person - the blended “phygital” approach).

- **Leverage umbrella organisations to reach individual clients:** Building on communal structures, i.e., farming cooperatives or producer organisations, can be more effective than acquiring farmers as individual customers.

- **Diversify revenue sources:** As the targeted farmers have limited capacity to pay, many digital solution providers charge other value chain actors doing business with the farmers, relying on B2B, B2D or B2G revenue streams.\(^1\)

Outlook: The market for digital agricultural solutions will continue to grow

Smallholder farmers still represent an underserved customer base while the penetration of smartphones is rapidly increasing, and more and more people are getting connected. At the same time, the number of agri-SMEs is rising, and markets and regulations are becoming increasingly mature. Digital solutions are thus increasingly well suited to improve the functioning of smallholder agricultural markets. In this context, governments and impact investors play an essential role in creating enabling regulatory environment, bringing in long-term investments and technical assistance support.

1 B stands for business, D for development actor, and G for government.

TO GO FURTHER

- **GSMA (2020).** Digital Agriculture Maps
- **ISF Advisors & RAF Learning Lab (2021).** Agricultural “platforms” in a digital era: Defining the landscape
- **CTA & Dalberg (2019).** The digitalisation of African agriculture report 2018-2019
- **GSMA (2020).** The GSMA AgriTech Toolkit for the digitisation of agricultural value chains.
- **CTA & Dalberg (2019).** The digitalisation of African agriculture report 2018-2019
- **Mercy Corps et al. (2021).** Digital marketplace playbook
- **GSMA (2020).** Agricultural insurance for smallholder farmers; Digital innovations for scale

DIGITALISATION PROJECTS CO-FUNDED BY SSNUP

Learn more about SSNUP digitalisation projects here: SSNUP

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SSNUP is a 10-year programme that aims to strengthen the safety nets of 10 million smallholder households in Africa, Latin America, and Asia through technical assistance promoting investment in agricultural value chains. Within the framework of the programme, regular workshops are organized to facilitate the exchange of experiences of different stakeholders on projects’ issues, challenges, solutions, and lessons learned, or on specific topics related to existing or potential projects.

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