2SCALE

Digital Innovation Directory

How can agribusinesses digitise their operations to work efficiently with low-income farmers and consumers at scale?

Sharing

2SCALE

What is this publication about?

The *Directory for Digital Innovation* aims to capture all you need to know in one place. It is not an exhaustive how-to-guide for digitising your own agribusiness operations. Instead, it should provide just enough to get you started.

We begin this publication with an overview of all different areas of the value chain that can be digitised: from farmer payments, team operations, to mass marketing and low-income consumers. For each area we present the opportunity, where possible supported with evidence taken from pilots implemented in a 2SCALE agribusiness partnership. All case studies for these pilots can be found in a second publication, which we keep updating as new digital innovation pilots are being implemented. Would you like your company to be mentioned in the Directory, or work with 2SCALE on digital innovation in general? Then please send us a message and we'll explore a collaboration.

When recommending digital solutions in this publication, we differentiate between proven turnkey solutions that can be implemented in the short-term, and new solutions that can transform value chains in the long-term. Many of the former solutions can be implemented with no or little support. For the latter group of solutions you can reach out to the 2SCALE Digital Innovation Specialists. Also, if a suggested solution or service provider is not operational in your country, ask us how we can help explore and facilitate replication of the idea.

(!)

Digital solutions are not a silver bullet

While digital solutions hold a lot of potential to replace or strengthen existing business activities, you should be aware of their limitations, particularly because of the novelty of many of these solutions.

Introducing digital solutions takes time, especially when they serve large groups of farmers. It is important that you select solutions that are optimised for all players, regardless of their age or gender. This should keep you from adding to the so called *'digital divide'*.

Other barriers for adopting digital solutions can be more specific to your market. Some solutions June rely on, amongst other things, the availability of and stability of an internet connection, smartphone penetration, the uptake of mobile banking, and the digital proficiency of your intended users.

Who is this publication for?

The *Directory for Digital Innovation* aims to introduce readers to digital innovations that could help transform operations in agribusiness partnerships. Initially, this was a publication intended for 2SCALE country teams, their partnership facilitators and business champions they work with. However, we believe, this publication can also be helpful for other organisations implementing food security programs, or businesses working directly with low-income producers and consumers.

This publication holds information that makes it a worthy read to those that are completely new to digital innovations as well as to those with some experience in digitisation.

We recommend 2SCALE staff and other interested development practitioners to print this document and bring it to meetings in which you wish to explore digital solutions together with agribusinesses.

Why digital innovation?

The digitalisation of African agriculture is happening at an accelerating speed, with many new digital services becoming available every year. In 2020, around 400 companies are offering digital services for agribusinesses in 43 Sub Saharan African countries, with majority being launched in the last three years

Digital solutions provide agribusinesses opportunities for organising supply chains, contributing directly to cost savings, improved efficiency, transparency, and mass marketing, to mention just a few.

The COVID-19 crisis has urged agribusiness to digitise their activities at a much faster pace. When farmers can no longer receive face-to-face training, for example, digital alternatives such as video training bootcamps and whatsapp groups can be consulted. As many of these digital solutions prove their value in response to the crisis, it is very likely they will grow and remain important beyond the pandemic.

Adoption rate 25%

The COVID-19 crisis has pushed nearly a quarter of agribusinesses in Africa to adopt digital solutions to sustain business.
TNS Survey June 2020

Technical support 45%

Almost half of the agribusinesses are in need of technical support to develop or adopt online platforms in response to COVID-19.
GAIN Survey June 2020

More about digital innovation?
The Digitisation of African agriculture (CTA)
Digital Technologies in Agriculture and Rural Areas (FAO)

How to select digital innovations?

Selecting the right digital innovation can be tough. This directory helps you in your search. But before you actually start searching, take time to answer the questions posed in the below four steps. It will help you make the right choices.

Understand the problem you want to solve

What is the real problem that needs to be solved?

Why do you see this as an opportunity for digitisation?

What have you learned about how others solved this problem with digital solutions? Did it work and was it easy for them?

Set requirements for the digital solution

Who in the agrivalue chain will use the digital solution, what devices do they use and what is their digital literacy level?

How much money would you want to spend on this solution and what (financial) benefits do you expect to get in return on this investment?

Explore and compare multiple solutions

Can you find reviews of others that used the same digital service and/or worked with the same solution provider?

Can you have a call with the service provider and ask clarifying and critical questions?

Have you compared multiple solutions or providers?

Start small before you adopt at full scale

Who in your team or farmer group can test and evaluate this solution at small scale?

Can you get a free demo or trial period from the service provider?

What do you need to learn before you adopt this solution across your organisation?

What to use digital innovation for?

This directory features seven digital innovation domains across three parts of the value chain. An additional eighth domain focuses on adapting to the new reality posed to us by COVID-19.

Organising supply from farmers

01.
Help farmers access inputs and improve productivity

02.
Pay farmers and improve their financial resilience

Aggregating and processing by mSMEs

03.
Aggregate, transport and track my produce

04.
Raise capital to sustain and grow my business

Selling products to low-income consumers

05.
Develop new products and packaging solutions

06.
Distribute products in low-income communities

07.
Drive marketing and behavior change

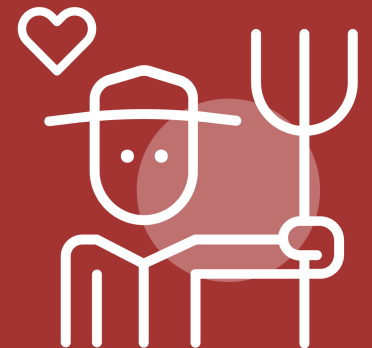## Adapting to COVID-19
08. Manage distributed teams online

Organising supply from farmers

How can we use digital innovation to..

01. Help farmers access inputs and improve productivity

02. Pay farmers and improve their financial resilience

01.   Help farmers access inputs and improve productivity

Opportunity

Climate smart agriculture becomes more relevant for smallholder farmers every year, with the rapidly changing climate conditions across their lands. With digital services, farmers are able to plan their farming better in advance, based on the changing weather conditions. They can also be alerted when a pest or disease might come their way. Fintech providers can use the same data to provide personalised crop insurance and input credit. In addition, farmers can get access to better and more affordable inputs through market linkages.

Stakeholders benefits

Farmers
Access to appropriate and affordable inputs, timely advice on crop management and prevent crop diseases.

Food processors
Can manage sourcing of required quantity and good quality produce.

Farmer groups
Can advise their farmers better on climate mitigation activities and enjoy bulk benefits of input purchases.

Financial institutes
Track farmer data to support credit decisions and introduction of weather/disease based insurance.

Example

Ignitia has developed a weather forecasting service that combines proprietary algorithms adapted to predicting convectional rains in Africa's tropical environment. This results in forecasts that are 84% reliable allowing farmers to know when to plant, fertilize, harvest, etc. Forecast messages for a 48 hour period are sent daily to farmer subscribers through an SMS service. 2SCALE has already implemented one pilot in 2019 in Nigeria with Ignitia and is running two more pilots in Mali (Rice partnership) and Ghana (Sorghum partnership).

"In the tropics, 96% of farmers rely on rain as the source of water for their fields. Compounding that pretty much every stage of farming relies on rain, having a highly accurate weather forecast is a gamechanger for the 500 million farmers across the tropics"

Chief Operations Officer, Ignitia

Help farmers access inputs and improve productivity

Solutions to explore		Software providers	Create your solution
Farmer training and advisory services	Training videos, farmer call center and messaging like SMS and WhatsApp chatbots.	Garbal (BF)* FarmerLine Esoko Access Agriculture Landbot* Whatsapp Learn.Ink	Facebook farmer groups WhatsApp training videos Google Sites
Input use advise and pest or disease alert SMS services	Give farmers accurate spraying schedules, early warning messages, soil testing nutrient advice, pest identification and disease diagnosis, input financing.	Ujuzi Kilimo (KE)* Control-D (NG) MyAgro360 (GH) RiceAdvice (IC) Google Lense PlantVillage NuLast Milru	
Last mile input distribution	Farmers get access to inputs along with best agricultural advice in remote areas where infrastructure is poor.	DigiFarm (KE)* Agriwallet (KE)*	
Hyperlocal weather forecasting SMS or IVR services	Predict weather patterns down to a hyperlocal range, based on high-resolution and various physics and initialisation methods.	Ignitia (NG, MA, GH)* Weather Impact (SSAfrica) IShamba (KE)	Publicly available weather forecasts through radio, TV, Whatsapp groups Facebook groups, or websites.
Equipment sharing	Affordable leasing of machinery for mechanisation of crop production activities.	HelloTractor(NG, KE)* Trotrotractor (GH)	WhatsApp farmer groups Facebook farmer groups

*Solution piloted in 2SCALE

02. Pay farmers and improve their financial resilience

Opportunity

Digital financial tools such as mobile money enable farmers to receive payments faster and conveniently from produce offtakers. Such tools have also been used by financial service providers to deliver credit and insurance services to smallholder farmers. Digital solutions have indeed increased efficiency, transparency and security for all actors in agricultural value chains.

Stakeholders benefits

Farmers
Access to payments becomes more efficient, transparent and secure.

Food processors and other off-takers
Reach farmers in a more efficient, transparent and secure way.

Farmer groups
Arrange group sales, loans and insurance more effectively.

Financial institutes
Easier to build credit profiles of farmers for loans and insurance.

Example

Currently YUP (BF) mobile money is being trialled in combination with Yelen (BF) insurance services. Producers have a mobile money account, save on their account and make agricultural input payments through a network of organized input distributors in their villages. This solution is innovative because of the increased speed of payment and delivery by input providers, because payments can be made remotely via YUP. In combination with Yelen, farmers will even get digital access to insurance services. Dôni-Dôni mobile money (Mali) and Agri-Wallet (KE) function in similar ways as YUP.
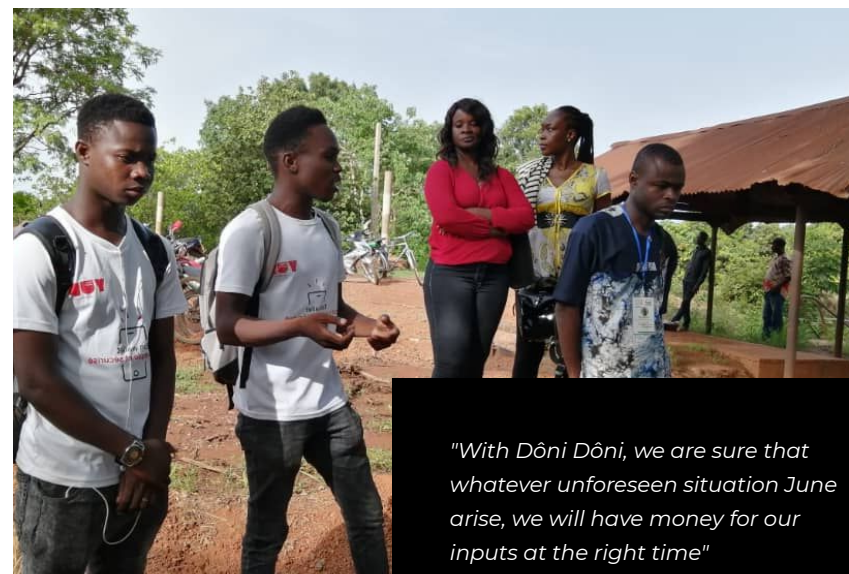
"With Dôni Dôni, we are sure that whatever unforeseen situation June arise, we will have money for our inputs at the right time"

Customer (farmer)

02.   Pay farmers and improve their financial resilience

Solutions to explore		Software providers	Create your solution
Digital payment of farmers and input finance	Settlement of payments through mobile money wallets. Earmarking loans for brands/dealers	Agriwallet (KE)*** Doni Doni (MA)*** Kitovu (NG)*** DigiFarm (KE)*** YUP (BF)***	MTN, M-Pesa, Orange, other Mobile Money providers
Crop insurance, based on weather & disease data	Using new technologies in satellite imagery and weather forecasting to simplify and automate claim management, and thus creating low-cost crop insurance for smallholder farms.	Yelen Assurance (BF)*** Agriwallet (KE)*** Oko Finance (Mali) Worldcover (GH) ACRE (KE) Pula (KE)	
Credit for farmers	Low-interest loans for smallholders, incl. crowdlending platforms	YUP (BF)*** Agriwallet (KE)*** ThriveAgric (NG) Crop2Cash (NG) Shalem (KE) Rabobank Foundation (KE) Ifarm360 DigiFarm (KE)***	

*Solution piloted in 2SCALE

PROCESSING

Aggregating and processing by mSMEs

How can we use digital innovation to..

03. Aggregate, transport and track my produce

04. Raise capital to sustain and grow my business

Opportunity

Agribusinesses manage relationships with many different actors like farmers, sourcing agents and transporters. They also organize extension and input supply services as well as produce aggregation, local sourcing, processing and marketing. Digital technology can be used to decrease the cost and risk of procurement transactions and enables informed decision making using real-time data. Their use replaces inefficient paper-based operations with robust digital systems that promote transparency, save cost and support data driven decision making. This unlocks opportunities like financial inclusion and efficient traceability.

Stakeholders benefits

Farmers
Enhance transparency and access quality inputs and credit.

Food processors
Give control on sourcing and quality. Enable predictions. Save cost from efficient operations and better staff management.

Farmer groups
Give control on sourcing and quality. Enhance relationship management.

Financial institutes
Data for profiling agribusinesses (Digital Identities) minimize risks.

Example

CropIn in Côte d'Ivoire and DigiFarm in Kenya have cloud based, mobile traceability solutions for crop and dairy value-chains, respectively ensuring transparency among actors. 2SCALE is supporting the adoption of CropIn's traceability system to digitize farmer database and advisory services in the rice partnership in Côte d'Ivoire. DigiFarm, a secure cloud-based web and mobile enabled solution developed by Safaricom in Kenya is being trialled to maintain digital records of farmers and manage the collection and receipting of milk by transporters.

" CropIn provides a meaningful approach to bridge the information gap in the Agri value chain through a cutting-edge integrated solution that supports sustainable development in agribusiness"

Carlos Castillo, Agribusiness Director Eco BCG

Aggregate, transport and track my produce

Solutions to explore		Software providers	Create your solution
Procurement and Supply chain management	Manage large number of transactions and smallholder farmers databases.	Cropin (CI)*** Farmforce (NG)*** SourceTrace (BF)*** Kitovu (NG)*** DigiFarm (KE)***	Smart spreadsheets in Excel / Google Sheets.
Digital identities and Warehouse Receipting	Verify farmer identities and collect farmer & farm data. Farmers are able to use stored produce as collateral for credit from financial institutions.	Cropin (CI)*** Farmforce (NG)*** SourceTrace (BF)*** Kitovu (NG)*** DigiFarm (KE)***	Smart spreadsheets in Excel / Google Sheets.
Traceability of procured produce	Tracking of produce from farm gate through to aggregation centres, warehouses, processing etc.	Cropin (CI)*** Farmforce (NG)*** SourceTrace (BF)*** Kitovu (NG)*** DigiFarm (KE)***	Smart spreadsheets in Excel / Google Sheets.
Digital payments of farmers	Settlement of payments through mobile money wallets.	Agri-wallet (KE)*** Doni Doni (MA)*** Kitovu (NG***) DigiFarm (KE)*** YUP (BF)***	

*Solution piloted in 2SCALE

04.   Raise capital to sustain and grow my business

Opportunity

Limited access to capital by farmers and agribusinesses working in agricultural value chains greatly affects the growth of the sector. Digital solutions can help in making agribusinesses more attractive to investors. First of all, agribusinesses can carry out digital Monitoring and Evaluation in order to improve their accounting and profile towards investors. Second, agribusinesses can develop a social media strategy to improve their visibility and credibility towards investors. Third, agribusinesses can apply for grants on crowdfunding platforms. Fourth, agribusinesses can search for investors and funders online, by making use of investor/funding databases.

Stakeholders benefits

Farmers
Allow use of quality inputs and investment in new technologies.

Food processors and other off-takers
Fast settlement of farmers dues, increase capacity to offtake.

Farmer groups
Enhance expansion and formalization of operations.

Financial institutes
Access to capital for on-lending.

Example

The 2SCALE Crowdfunding platform was launched in September 2020 to alleviate short-term liquidity problems that food producing SMEs face as a result of the COVID-19 crisis. When successful in raising a pre-set amount over a certain period of time, the crowdfunders might also be eligible for an additional matching grant from the 2SCALE program and its partners. There are a number of other crowdfunding initiatives for farmers such as Thrive Agric (NG) and iFarm360 (KE). Apart from digital initiatives, many offline activities remain for raising capital.

"With new instruments like the crowdfunding platform, SMEs and producer organizations can get access to new ways of cash flow. They are able to continue to produce and supply quality food products to local, national, and regional markets, including Base of the Pyramid consumers."

Henk van Duijn - Program Director 2SCALE

2 SCALE CROWDFUNDING

Start your initiative now

Are you ready to start your crowdfunding campaign? Create an initiative now and invite your network to support your business.

Raise capital to sustain and grow my business

Solutions to explore		Software providers	Create your solution
Digital Monitoring & Evaluation	Carry out digital Monitoring and Evaluation in order to improve accounting by agribusinesses towards investors.	Cropin (CI)* Farmforce (NG)* SourceTrace (BF)* Kitovu (NG)* DigiFarm (KE)*	Google Drive Suite (Google Docs, Slides, Sheets, Keep, Forms, Meet, Gmail, Calendar)
Social media strategy	Agribusinesses can develop a social media strategy to improve their visibility and credibility towards investors.	Social marketing agencies*	Facebook, Whatsapp, Instagram, Linkedin, own website
Crowdfunding	Raising capital from family, friends and any other individuals interested in helping the business overcome cash flow issues.	2SCALE Crowdfunding* ThriveAgric (NG) Crop2Cash (NG) Farmcrowdy (NG) Growsel (NG) iFarm360 (KE)	Lend-a-hand, GoFundMe
Scouting funding options	Agribusinesses can search for investors and funders online, by making use of investor/funding databases.		Global Innovation Exchange, AgTech funds database

*Solution piloted in 2SCALE

Selling products to low-income consumers

How can we use digital innovation to..

05. Develop new products and packaging solutions

06. Distribute products in low-income communities

07. Drive marketing and behavior change

STORE

05. Develop new products and packaging solutions

Opportunity

Base of the Pyramid (BoP) consumers purchase decisions are influenced by their awareness about products, but also their aspirations. Whether they will buy your product will very much depend on whether your problem meets their desires. When developing a new product as an agribusiness, you need to put your consumer at the center of your design process. Digital solutions can help you to collect consumer insights and validate your early ideas.

Stakeholders benefits

Consumers
Gain access to (and co-create) improved products that truly add value to their lives.

Food processors and other off-takers
Increase their chances of successfully introducing a proposition that is uptaken by consumers.

Farmer groups
Have more assurance about where to invest and focus their means of production.

Financial institutes
Ensuring business case validity and improve ROI.

Example

In Nigeria, 2SCALE worked with partner Viamo to conduct market research through IVR (Interactive Voice Response). A survey, that combined both quantitative (multiple choice) and qualitative (open ended) data, was aimed at collecting information on the use of cassava products. The target population of the survey were cassava users in Oyo, Osun, Ondo and Ekiti. An important question in the survey was the request to participants if they would be willing to join in another session, whereby we co-developed the concept ideas which we defined based on the outcomes of this survey with them. A large portion of the 310 cassava users was willing to do this and joined in a Whatsapp group. Within the Whatsapp group we share ideas and collect qualitative insights and feedback on our ideas and product propositions without additional costs of an external research agency.

"The insights and the amount of feedback we received was impressive, even without incentives."

**Adeshina Salaudeen
(2SCALE Partnership Facilitator)**

Solutions to explore

Software providers

Create your solution

Consumer insights collection

Execute surveys and get quantitative data about population sizes generic segmentations and basic preferences. Or dive deeper into the 'why' of consumers with online qualitative methods such as open or closed discussion platforms, in-context research (diaries, spies, etc.), creative exercises and digital FGD sessions.

Viamo*****
CMNTY
Digsite
Dscout
Versus Africa

Whatsapp FGDs, ODK surveys, Google Forms

Prototyping and validation

Build a digital (mostly visual) prototype as a model of your (potential) product or service, share it through digital channels with consumers or other stakeholders, and test it for feedback.

Viamo*****
CMNTY
Digsite
Dscout
Versus Africa
Invision
Balsamiq

Whatsapp FGDs, ODK surveys, Google Forms

Product and packaging design

Organize design sessions online, share ideas and collaborate on the refinement together with your development team and other stakeholders.

Mindmeister

Miro, Slack, Mural

*Solution piloted in 2SCALE

06. Distribute products in low-income communities

Opportunity

Tracking your distribution, storage and sales is crucial for your coordination, efficiency and overall business management. Helping a business to avoid making unnecessary costs and help steering operations is a necessary gap to fill in last mile distribution. Last mile delivery software is often implemented in supply chain and logistics departments at businesses that manage delivery orders on a daily basis. Last mile delivery software is implemented alongside other supply chain and logistics software such as supply chain planning software.

Stakeholders benefits

Farmers
Increase the tracking of field level interaction (harvest collection, delivery of inputs) and predict sales (and thus production targets) better.

Food processors and other off-takers
Allow them to increase efficiency by digitally tracking sales, inventory and client database.

Farmer groups
Increase the tracking of field level interaction (harvest collection, delivery of inputs)

Financial institutes
Digitizing credit procedures in the field can lower costs and manageability of repayment, increase the accuracy of sales and repayment predictions and optimize tailored products for value chain actors.

Example

In rural Ethiopia, 2SCALE partner Bopinc, has worked with Fieldbuzz to increase efficiency of a micro-distribution model whilst it was scaling up towards 2500 agents. With multiple supplying product partners and around 35 different sales areas, scattered across 3 different regions in Ethiopia, the costs of coordination and accurate forecasting were at risk of becoming very high. These costs need to be lowered as much as possible to create a viable micro-distribution business case.

"Introducing Fieldbuzz into our operations would help us spur towards a break-even distribution model faster"

Shani Shenbetta
CEO of Kidame Mart, Ethiopia

field((•))buzz

06. Distribute products in low-income communities

Solutions to explore		Software providers	Create your solution
Digitize and track orders & deliveries	Allowing rural shops and other sales points to digitize and track orders and deliveries helps improve coordination. This ensures your logistics and stock keeping can be organized at optimal efficiency, lowering costs and help ensure better pricing and business case.	Fieldbuzz (ET) Upya Taroworks	Google Drive Suite (Google Docs, Slides, Sheets, Keep, Forms, Meet, Gmail, Calendar)
Manage digital payments	Making use of digital payments increases manageability and steerability and therefore also reduces cash-flow issues and costs of repayment.	Fieldbuzz (ET) Upya	Facebook, M-Pesa and Mowali
Stock management	Allowing shops and other sales points to digitize and track orders and deliveries helps them improve stock management and make sure they increase sales and customer retention. Of course this helps ensure optimal sales for other value chain actors at the same time.	Fieldbuzz (ET) Upya Taroworks	Google Drive Suite (Google Docs, Slides, Sheets, Keep, Forms, Meet, Gmail, Calendar)

*Solution piloted in 2SCALE

07. Drive marketing and behavior change

Opportunity

Base of the Pyramid (BoP) consumers prefer to experience and test a product, before considering to buy it. Unfortunately, this is not always possible. Now that BoP consumers are getting more and more connected, social media and digital innovation such as chatbots and digital vouchers or rewards are becoming an interesting way to reach out to them. 2SCALE is exploring these in order to promote and share information about products of agribusinesses, as well as to change food consumption behavior towards more nutritious food consumption.

Example

In Burkina Faso, 2SCALE is conducting a digital survey through a chatbot platform (Landbot) in order to promote and get feedback from consumers on a dehydrated attieke. Consumers receive a WhatsApp message on their phone and answer a few survey questions by easy text responses (yes/no; A/B/C/D) This is also a way to share healthy recipes with them, using the agribusiness product.

Stakeholders benefits

Farmers
Their produce is being sold more, which increases their offtake.

Food processors and other off-takers
Can promote their product and get feedbacks from consumers digitally.

Farmer groups
Drive marketing efforts more effectively as a farmer collective.

Financial institutes
The credit worthiness of farmers increases with their increased sales.

"The Landbot survey will allow us to collect important feedback, but also know more about the food consumption behavior of our consumers "

Mady Zoungrana, BoP specialist

Landbot.io

07.   Drive marketing and behavior change

| Solutions to explore		Software providers	Create your solution
Chatbots for consumer interaction	Collect contact or use existing one to launch a online survey about a product in order to promote/get feedback and share recipes.	Landbot* Viamo* Echomobile	Whatsapp
Social media channels	Many consumers are now using social media like Facebook or Whatsapp to buy products. A good way to communicate on new products, launch special offers or discounts and fidelize your consumers.	E1M (KE)*	Whatsapp, Facebook, Instagram, Linkedin, Viber, Telegram
E-commerce platforms	Virtual online shopping sites that allow consumers to buy products and services online.	Jumia (CI) Copia (KE) Shoprite (NG)	Google sites, Facebook groups
Behavioral change campaign tools	In order to realise behavior change, digital vouchers, (non-)monetary rewards and loyalty schemes can be used to drive consumer engagement and retention.	E1M (KE)*	

*Solution piloted in 2SCALE

Adapting to COVID-19

How can we use digital innovation to..

Manage distributed teams online
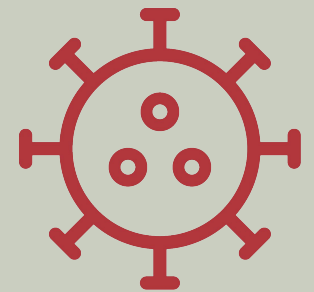
Opportunity

Before the Covid-19 crisis, working remotely was already a growing practice in many working environments across the world. However, it wasn't until recently that companies were forced to accelerate adopting to working beyond their office walls. Managing a remote team brings with it unique hurdles for many team leaders across all economic sectors as remote work quickly becoming accepted in the mainstream workforce.

For agribusinesses with operations in rural areas and in light of restrictions due to C-19, more team members find themselves outside the office and working at home or remotely. This is where remote working structures and tools come to the aid.

Stakeholders benefits

Farmers
More interaction with field staff.

Food processors
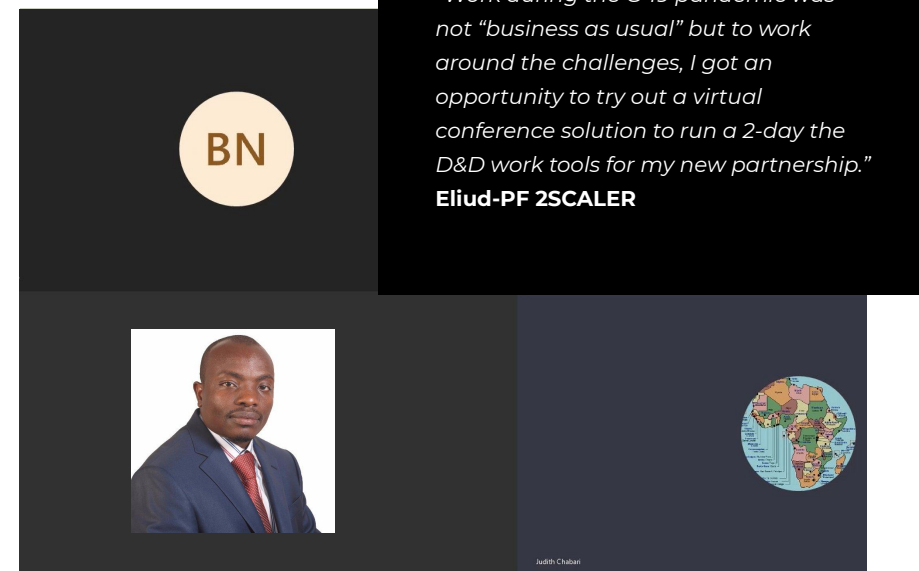Faster growth rate fueled by staff productivity management.

Farmer groups
Better management of operations.

Financial institutes
Digital data to help in profiling.

Example

With restrictions on C-19 leading to closure of offices and limited interactions, Virtual interactions became a norm, however, scheduling calls or video meetings was difficult due to the different time availability, poor connectivity and lack of equipment. Meru Dairy Union in Kenya was a new 2SCALE partnership in 2020 when all activities that required traveling and meeting were banned by the Government. With support from 2SCALE, they were able to plan a 2-day Design & Diagnostics workshop on Microsoft Teams. Remote team management tools are able to support agribusinesses to manage distributed teams overcoming challenges in staying in touch and working remotely.

"Work during the C-19 pandemic was not "business as usual" but to work around the challenges, I got an opportunity to try out a virtual conference solution to run a 2-day the D&D work tools for my new partnership."
Eliud-PF 2SCALER

Manage distributed teams online

Solutions to explore		Software providers	Create your solution
Business Operations Management	Cloud based ERP systems that allow automation of processes and remote access.	Cropin (CI)* Farmforce (NG)* SourceTrace (BF)* Kitovu (NG)* DigiFarm (KE)*	Power BI, Google Drive Suite (Google Docs, Slides, Sheets, Keep, Forms, Meet, Gmail, Calendar).
Productivity & route management	Time-tracking applications that run on mobile devices like phones or tablets.	Cropin (CI)* Farmforce (NG)* SourceTrace (BF)* Kitovu (NG)* DigiFarm (KE)*	Google Drive Suite (Google Docs, Slides, Sheets, Keep, Forms, Meet, Gmail, Calendar)
Team communications	Remote communication and working tools with capabilities to work in remote off-grid areas as well as working from home.	Slack Microsoft Teams Miro	Google Drive Suite (Google Docs, Slides, Sheets, Keep, Forms, Meet, Gmail, Calendar), Whatsapp groups, Facebook messenger, SMS, phone calls.

*Solution piloted in 2SCALE