



# 2019 ANNUAL LEARNING EVENT

DRIVING ACTIVE USE IN A DIGITAL WORLD

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Insights Summary

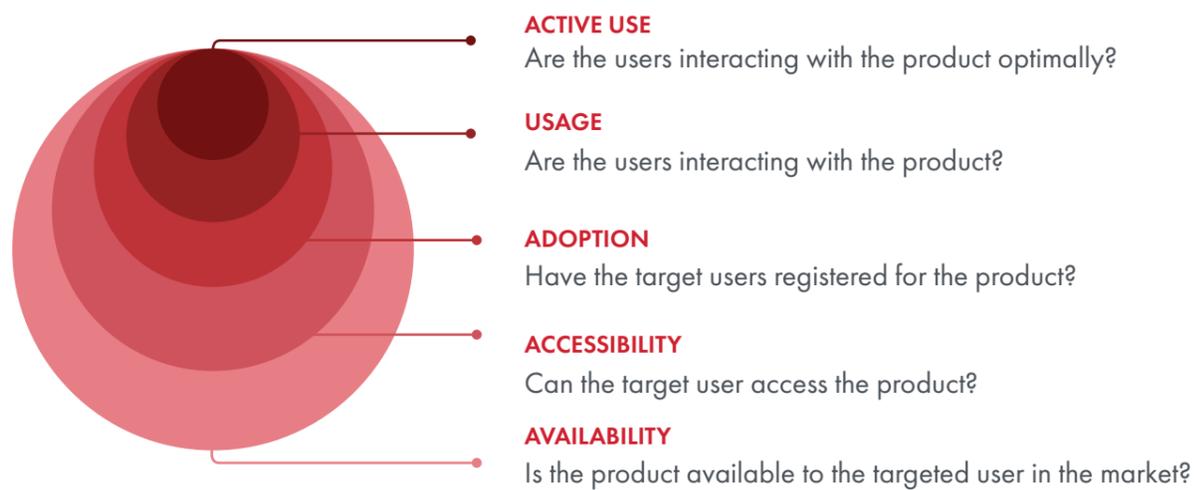


# DRIVING ACTIVE USE IN A DIGITAL WORLD

## What is your definition of active use in your scope of work?

The definition of active use has been adopted across different sectors with the financial sector leading in providing an easy default of "1 activity within 90 days". However with the evolution of digital technology in agriculture and specifically considering the different cycles for farmers of different commodities challenges this basic default definition. Furthermore considering introduction of super platforms that combine multiple service and product offerings.

When asked, the 320 participants of the ALE 2019, majority (41%) retorted that there remain too many variables to consider to determine an ideal active use number.



### The definitions for "Active Users" vary across institutions:

**MPESA:**  
Activity within a 30day period (2018 annual report)

**WEFARM:**  
Farmers who actively contribute their knowledge every month.

**FSDK:** Users who have taken a loan in 90 days prior to their being interviewed (2018 Mshwari Brief)

**GSMA**  
Activity within a 30 day period (2017 state of the industry report: mobile money)

**Global Findex survey:**  
account owners who have made a depositor withdraw - in digital form or otherwise - in the past 12 months (2017 report)

This year's event was crucial for 3 main reasons:

Bringing together all the partners allow us to 1) learn from each other and 2) map the courses to identify opportunities and 3) tackle challenges to scale and reach more small holder farmers.

## ABOUT MERCY CORPS AFA

Mercy Corps AFA is a US\$25 million, 6-year initiative supported by the Mastercard Foundation, expected to benefit 1 million smallholder farmers across Kenya, Tanzania, and Zambia. It aims to close the financial inclusion gap for smallholders with greater access to affordable, accessible, and demand driven financial products and services through digital solutions. Currently AFA is working side by side with more than 50 Private Sector and Development partners in 5 main sectors of

-  **Products and Services for SHFs**
-  **Farmer Capabilities Tools**
-  **Technology Start Up Acceleration**
-  **Alternative Data and Credit Scoring**

*The financial gap is enormous across developing countries and stands at about 450 Billion dollars, that exists not because of lack of finances but more so lack of opportunities. AFA exists to act as a market facilitator to understand who are the actors who make up the ecosystem to address this gap and drive innovative partners.*

**Christabell Makokha,**  
Zambia Country Director - AFA

*Advancement in digital technology has significantly improved access to financial services for farmers. However, fundamental systemic changes in agriculture sector will require massive integration of ongoing ongoing initiatives. This would then help sort challenges such as access and effective use of inputs, adoption of farming technologies for intensive farming and positive changes in food security in sub-Saharan Africa.*

Post Event Evaluation Comments



# AFA YEAR 4 HIGHLIGHTS

Reached **1.4 MILLION** farmers in 4 years and growing

Closing the gender gap as up to **42%** women inclusion

Understanding the youth farmers that is growing - some partners reaching **70%** youth

Piloting and growing digital input loans **200,000**

digital loans offered through partners such as Safaricom through DigiFarm, World Food Program, Tula e.t.c.

Growing rates of repayments from **40%** and loans diversifying progressively.

## Developing digital markets for smallholder focusing on four primary legs

- › Access to information to allow better decision making
- › Access to inputs that are affordable and quality
- › Access to financial services i.e. beyond loans, also savings and insurance
- › Access to market

Rural Connected Hubs mapped out to brings multiple players into a digital platform and play off efficiencies and learnings from smart partnerships and offerings

### Case Studies Completed:

- DigiFarm**
- + 1 million farmers have registered on to DigiFarm
  - + Active Use benched at 10% of hte loan product
  - + Farm to Market Alliance (Getting services to farmers in an integrated coordinated way)

## Understanding farmer capabilities

18 engagements that are geared towards making farmers better farmers based on various combinations.

**SunCulture** - a focus on post harvest loss and irrigation benefits that can change lives for farmers

Common Data standards and regulatory constraints remain biggest roadblock to achieve practical data interoperability and data sharing, critical to generate new insights into farming data, for research, policy or operational value chain purposes

Khalid Bomba  
CEO - Ethiopian Agricultural Transformation Agency

## EVENT SUMMARY

It featured dedicated experts on financial inclusion from banks, mobile network operators, agribusinesses, tech innovators, governments, and development partners in Kenya and across Africa. Through plenaries, workshops, and an innovations marketplace, the event brought together thought leaders and industry players to brainstorm collaborative solutions to increase financial inclusion and improve smallholder farmers' productivity and livelihoods.

<b>300</b> Attendees	<b>200</b> Organizations
<b>14</b> Market place presenters	<b>6</b> Sessions
<b>6</b> Keynote speakers	<b>6</b> Presenters
<b>2</b> Plenary sessions	<b>1</b> Day

# OPENING PLENARY

## DRIVING SCALE AND ACTIVE USE

Moderator - Leesa Shrader

### Presenters



**Khalid Bomba**  
CEO  
Ethiopian Agricultural Transformation Agency



**Charles Murito**  
Manager  
Google Kenya

The opening plenary set the stage to discuss how the ecosystem can leverage digital data and technology (AI, machine learning, blockchain, etc) to drive active use. From the relevant keynote speakers, we would take a deep dive to explore various roadmaps in industry, government and development sector. Furthermore, exploring the concept of precision farming and questions of accessibility and impact. Lastly is keeping the conversation going around how traditional and new actors in the sector protect client privacy, data security, and ownership/control of their own data.



We should all be aiming to solve 3 challenges to make systemic transformation in African Agricultural Markets:

1. Infrastructure bottleneck
2. Smart devices (without constraints to memory, data & battery!)
3. Content that gives farmers a reason to be online.

Charles Murito,  
Manager - Google Kenya

## Key Takeaways

1

Collaboration between government and private sector is necessary to achieve scalability.

This will enable government to focus on developing systems that have a wide reach, targeting farmers while creating an enabling environment for the private sector to realize the economies of scale required for long term economic sustainability.

### Case Study: ATA Input Voucher System

#### Description of Product

Providing access to quality inputs is crucial to supporting farmers increase productivity. Ethiopia is procured and provided to farmers

through the centralized process between regional governments and the federal government. Local cooperatives would then be used as distribution points to the farmers.

**Innovation:** Given the delays in cooperatives transferring payments from farmers to regional governments, ATA introduced financial institutions into the distribution channel. Farmers would pay the financial institutions who then provide them with an e-voucher to redeem for fertilizer. This creates a financial balance across the entire ecosystem. This has served 6 million farmers over the last 4 years. This platform has allowed for provision of credit (3 million farmers), trainings for financial literacy (resulted in 98% repayment among farmers taking out credit), increased savings (200 million USD).

2

Bundled productivity tools have been a gateway to enhancing farmer capabilities.

Access to content, and targeted messaging are key to increasing farmer's active use and adoption of digital technology.

3

Technology is a scale enabling feature and is merely a means to an end.

Technology serves 2 main purposes,

- 1) to improve decision making process for farmer or policy makers and
- 2) use technology to deliver more effective services. To enhance

4

Access, content and education are core pillars to ensure a rapid shift to digital and smart farming.

Infrastructure development is essential for digital technology integration among SHFs. It is important to provide all farmers with smartphones so that they can have relevant information at the palm of their hands. Only 50% of people have access to smartphones. Our objective should be to deliver devices to the other 50% by lowering the cost of devices.



# SESSIONS

## SESSION 1

# DATA ANALYTICS AND MACHINE LEARNING

### Moderator

Emmanuel Makau

### Presenters



**Dean Caire**  
Credit Scoring Consultant  
Independent



**Rafe Mazer**  
Regulation Consultant  
FSD-Kenya



**Sean Krepp**  
Senior Project Manager  
Google



**Primoz Kovacic**  
Co-Founder & Director  
Spatial Collective



**David Nyamai**  
Head of Big Data & Business  
Analytics  
Safaricom PLC



**Eric Chavez**  
Research Fellow  
Centre For Environmental Policy  
Imperial College London

Data analytics, artificial intelligence and machine learning have become important topics to discuss in this space. Advanced analytical technologies are being harnessed to deliver tailored products, and financial services to a wide range of customers. However, appropriate solutions tailored for smallholder farmers have yet to concretely emerge. The goal of this session was to explore the potential ways to build products and services that utilize data analytics, big data and AI/ML initiatives to drive active use for smallholder farmers. The session identified new emerging players; urged stakeholders to understand and utilize big data plays in their work with smallholders. Use of data for credit scoring, climate variability and customer profiling guided the conversation around use cases for data analytics and machine learning.



“We need a data hub to create a competitive market place. Jerome has financial data but he can’t leverage it because it is trapped in data silos. If data silos are broken in digital finance, information sharing could bring greater value of finance to consumers.”

Rafe Mazer,  
Regulation Consultant - FSD-Kenya



## Key Takeaways

1

Agricultural data is highly relevant for predicting credit scores, however, obtaining this data is a challenge.

Developing credit scorecards with reasonable predictive power requires a lot of data. Data is created each time a farmer interacts with a digital platform. There is need to continue to provide services to encourage human interaction by smallholder farmers in order to create more robust data sets for credit scoring. AI is needed to find hidden irregularities in large data sets. Farm Wave for example uses a large dataset and local datasets are added through crowdsourcing images .

2

If data silos are broken in digital finance, information sharing could bring greater value to consumers.

People need to know that data is their right and they can control it. Data is largely available but people can't leverage that data because it is trapped in silos. Partnerships are essential but data collaboration in the past has been a challenge. Establishing rules that can drive open source technology and compliance will go a long way.

3

Consumer led data protection is crucial.

Consumer protection regarding data in this sphere remains to be a pertinent issue. The challenge circles around market players running faster than regulators in some cases. However there are countries that are leading with regulation that is consumer centric that could e.g. the Mexican Fintech Law and India Digital Locker.



## SESSION 2

# CAPABILITY AND SMART FARMING

### Moderator

Lucy Kioko

### Presenters



**Emmanuel Bakirdjian**  
Country Director  
Precision AG



**Jamilia ABASS**  
CEO  
WeFarm



**Peninah Wanja**  
MD & Founder  
Digi Cow



**Mirafe Gebriel Marcos**  
Senior Director  
Agricultural Transformation  
Agency



**Christy Vanbeek**  
Managing Director  
Soilcares

Farmer capability and smart farming are centered on driving improved productivity and income levels for smallholder farmers. The session explored ways of driving active use of small holder farmers centric smart farming and farmer capability building tools, products, services and methods.

The session considered one case study;

**AFA farmer capabilities case study:** providing farmers with information, awareness and capability needed to access and maximise use of digital financial services that in turn drive increases in productivity and income.



“The 8020 Farmers Hotline, a tool developed by Ethiopian ATA to disseminate agriculture advisory information, has today ~4 million registered farmers extension agents and has accommodated >35 million calls ”

Mirafe Marccos,  
Senior Director - ATA



## Key Takeaways

1

Structured farm data organized quick actionable insights increases the value of the data and active use to farmers.

### **Case Study:** Digi Cow

Digi cow is a simple record keeping application that targets smallholder dairy farmers, enabling the farmer to increase profits through data driven decision making. Usage rate of the app is 60%.

**Innovation:** Digi Cow allows farmers to monitor and analyse key performance indicators of individual animals, particularly productivity using simple data from their farms

2

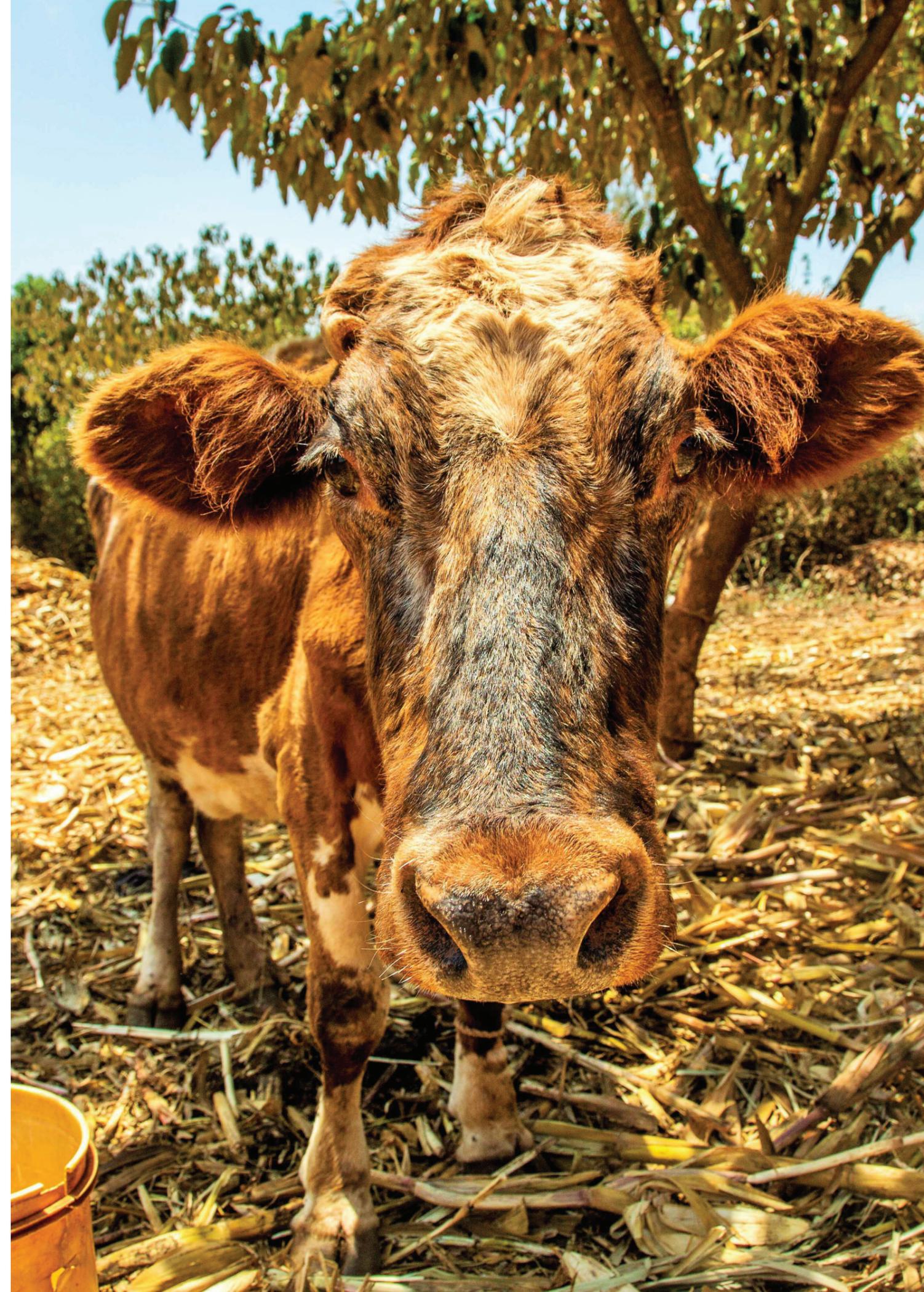
Peer to peer knowledge sharing works.

Smallholder farmers have plenty of innovative ideas and knowledge. Leveraging on this to build technology that allows fluidity of this information to support farmers could increase active use and consequently increase food supply and production.

### **Case Study:** WeFarm

Wefarm is a peer-to-peer, digital network connecting small-scale farmers from all over the world. WeFarm allows farmers without internet access to connect to other farmers. Currently has 1.4M users across East Africa.

**Innovation:** Smallholder farmers can ask and answer questions related to farming via SMS text or online if internet connectivity is available. A farmer sends a text message with their question then Wefarm uses machine learning and the power of the crowd to source the best answers drawn from the platform's network of farmers.



## SESSION 3

# CHANNEL STRATEGIES & HUMAN TOUCH

### Moderator

Sieka Gatabaki & Betty Muriithi

### Presenters



**Micheal Tweed**  
Consultant  
Dalberg



**Annabel Schiff**  
Senior Partnership  
Manager  
Caribou Digital



**Eli Pollak**  
CEO  
Apollo Agriculture

Digital technology in the financial sector has led to an increase in access to and quality of financial services. Inclusive startups are finding innovative ways of engaging consumers by striking the balance between digital technologies and human interaction. Finding the right combination of “tech and touch” at the right moments during a customer’s journey is a key factor in determining whether a startup succeeds or fails. This session explored the question of when, how and why human touch is critical to technology adoption by small holder farmers. With reports suggesting adding human touch to digital sales consistently outperform their peers, achieving five times more revenue and eight times more operating profit, this tech and touch see-saw becomes a more crucial game to serve



There are few better ways to know your customers than spending time with them.

Michael Tweed,  
Consultant - Dalberg Global  
Development Advisors



## Key Takeaways

1

### Know your customer.

There are few better ways to know your customers than spending time with them. Focus on building meaningful relationships with your customers by building trust in the product, effective communication and investing in your field team. This could be through group collateralization that has proven successful particularly in the case of digital credit repayment. More importantly exploring the triggers behind limited comfort and familiarity with these technologies, limited awareness and understanding of financial products, and little trust in financial service providers to better design interventions to address these.

2

### End to end value chain digitization through data collection.

Balancing tech and touch to optimally enhance adoption and active use. This may mean establishing which context requires tech enales, establishes or replaces touch altogether and this balance can be adjusted across the independent customer journey steps. Three main factors to consider will be product familiarity, technology and labor costs, tech savviness to determine what tech-touch strategy to adopt at those respective points.



#### Customer acquisition & Onboarding

Learning about and deciding to adapt a product



#### Approval and Analytics

Sharing information and receiving a speedy decision



#### Ongoing payments/ Collections

Getting reminders to ensure timely payments and making actual transactions



#### Claims management

Filing claims and collecting payouts (for select insurtech companies )



#### Customer engagement

Filing claims and collecting payouts (for select insurtech companies )



## SESSION 4

# ADVANCING DIGITAL FINANCIAL SERVICES FOR SMALLHOLDERS

### Moderator

Christabell Makokha and Paul Kweheria

### Presenters



**Rose Goslinga**  
Director, Co-Founder  
Pula Advisors



**Chali Mwefenyi**  
Head  
Commercial & Agriculture  
Banking Zambia National  
Commercial Bank PLC



**Michael Mbaka**  
Senior Innovation Specialist  
Financial Sector Deepening  
Kenya



**Rob Madziva**  
Founder & Executive Director  
Digital Mobile Africa



**Ruchit Garg**  
Founder & CEO  
Harvesting (Uganda,  
Nigeria, Kenya, Myanmar,  
Bangladesh)

This session explored innovative ways in which various service providers were meeting the \$450 billion financing gap in agriculture, using innovative products and tools such as alternative data for credit scoring, conditional savings, layaway, bundled products, and alternative channels like saving groups. The goal of the session was to speak to the broad ecosystem actors (banks, telcos, agcos, agfintechs) on the business case for digital financial services targeting smallholder farmers.

Probably more important than machine learning is publishing your data - freely - and availing documentation and support for users.

Jasper Grosskuth,  
Managing Director - Dalberg Research



## Key Takeaways

1

Bundling digital insurance with products farmer's actually want could drive adoption and active use.

Rather than build end to end facilities, partnerships to consolidate products that work in tandem to address farmer needs can accelerate adoption, active use.

**Case Study:** *Agri Wallet*

is a digital wallet, a mobile financial tool for smallholders giving them access to savings, loans and pre-finance of crops/produce.

**Innovation:** Agri-wallet helps farmers to save and in turn enables them to access short term loans without the conventional stack of paperwork. This kind of credit ecosystem is comparable to a voucher system, combined with a savings element. Currently 35% of the farmers who use the wallet, save. Farmers who have insufficient money to invest can use Agri-wallet to borrow up to a third of the expected crop yield in blockchain tokens. That means that the loan can only be spent on agricultural products. After harvesting, the loan is automatically repaid through the cooperative payments.

2

A behavioral and human centered design approach is key to driving adoption and active use of digital financial services by SHFs.

To better design digital financial services for smallholder farmers, there is need to understand their needs, experiences and the product features that they value most.



## SESSION 5

# SUPER-PLATFORMS DIGITAL SCENARIOS

### Moderator

Leesa Shrader, Sieka Gatabaki and Betty Muriithi

### Presenters



**Annabel Schiff**  
Senior Partnership Manager  
Caribou Digital



**De Hoogh**  
Managing Director  
Agriwallet (Kenya)



**Vince Mountaga Diop**  
CEO  
Belcash Ethiopia



**Sebastian De Escorisza**  
Country Coordinator  
FTMA

Super-platforms are pushing the boundaries of financial inclusion around the world, creating millions of new jobs and stimulating trade, especially in rural markets. These “platforms of platforms” are typically thought of as connecting customers and merchants, but as new Mercy Corps research in Africa shows, they are also connecting farmers to markets – potentially increasing farmers’ incomes by 50 percent or more. This session provided participants with a set of 3 hypothetical scenarios of super-platforms emerging and transforming the digital landscape for smallholder farmers in Africa.

35% of DigiFarm farmers have smartphones for example. We need to explore how users make adjustments across these platforms to enable them to survive and thrive on platformized markets is key. Trust for example is a key aspect to address as more farmers come online

Annabel Schiff,  
Senior Partnership Manager - Caribou Digital

## Key Takeaways

1

Digitization that includes segmentation can improve financial inclusion

Digital innovations in value chain finance for smallholder farmers present an opportunity to address many of the pain points that farmers in the value chain face, such as insufficient funds to invest in high-quality seeds or fertilizer.

2

Bundling of products can drive active use as well as cut costs.

Bundling across the same routes by all the partners has proven to reduce resource expenses generally as partners leverage efficiencies. Crucial to setting this up is having a consortium or platform manager who will ensure a high level view of consistency and execution through communication and coordination across all partners.

3

Connectivity hubs are essential in improving the accessibility to markets and information for the farmers.

The connectivity hubs could act as “one stop shopping” areas for farmers improving accessibility and connectivity between buyers and sellers



## SESSION 6

# ACTIVE USE AND IMPACT

### Moderator

Collins Marita and Andrew Karyl

### Presenters



**Jasper Grosskuth**  
Managing Director  
Dalberg Research



**Victor Ikawa Hod**  
Research & Consumer  
Insights  
Safaricom



**Ram Tamara**  
Vice President  
Nathan Associates



**Niamh Barry**  
Senior M&M Manager  
Caribou

Why does evidence matter? Evidence based decision making is the big word in the developing world.

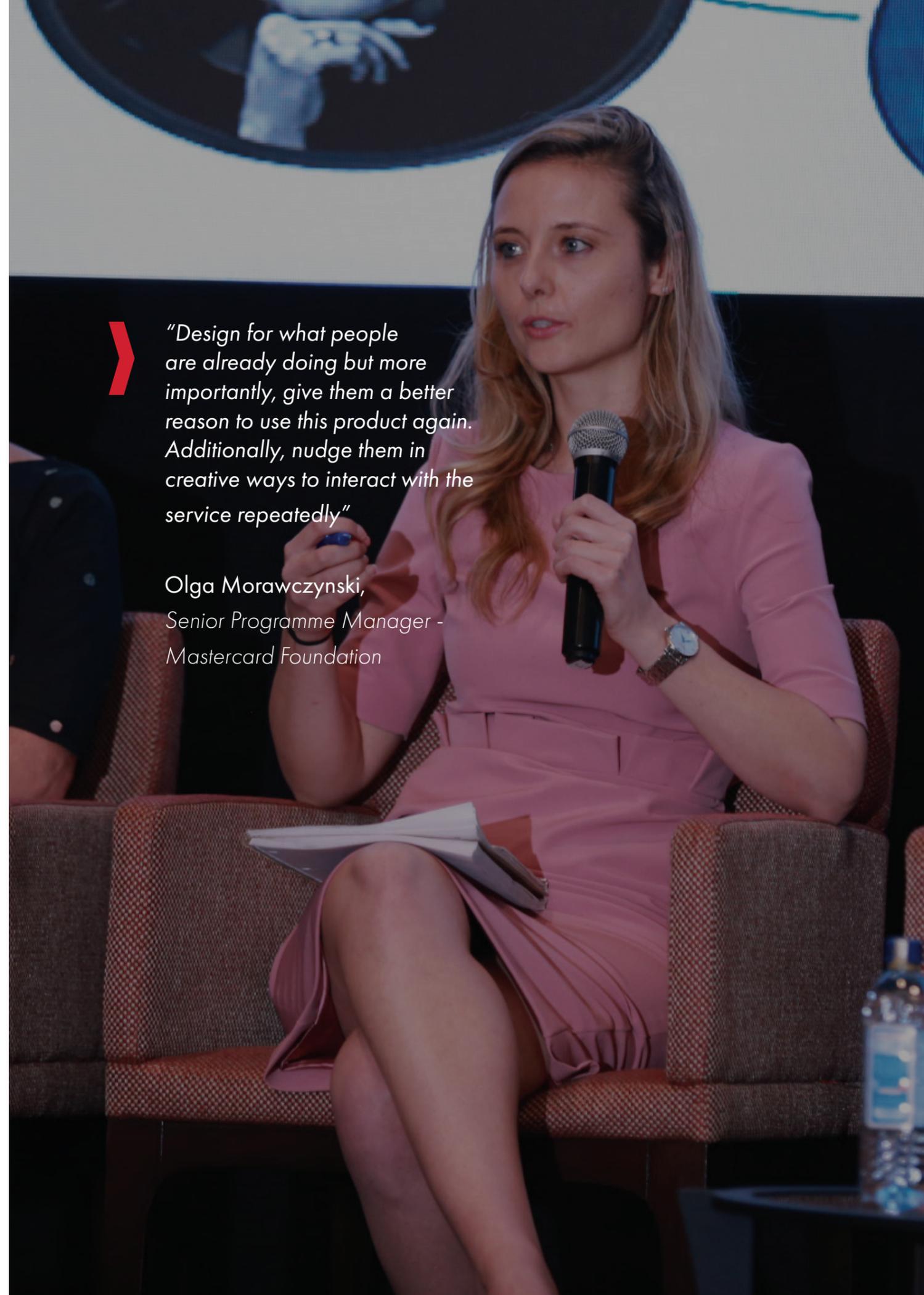
This session sought to establish

- 1) what tools are available to assist in decision making at pilot, launch and scaling,
- 2) How can learning partners evaluate products for different market segments considering how different segments are structured and
- 3) How do we ensure that we are contributing to the existing body of evidence, and we are checking impact of products on consumers



“Design for what people are already doing but more importantly, give them a better reason to use this product again. Additionally, nudge them in creative ways to interact with the service repeatedly”

Olga Morawczynski,  
Senior Programme Manager -  
Mastercard Foundation



## Key Takeaways

1

Context matters.

The evidence you require depends on what you want to know, why you want to know it and when you want to know it. There is need to use multiple sources when using previous research to make decisions.

2

Digital Finance is not one thing.

Digital finance includes a variety of products that are diverse. When testing the impact of a digital finance product, researchers need to disentangle each product from the broader category in order to get a deeper understanding what changes each of these products catalyze in the lives of low-income users.



## CLOSING PLENARY

# DRIVING SCALE AND ACTIVE USE

### Moderator

Christabell Makokha and Paul Kweheria

### Presenters



**Sean Krepp**  
Senior Project  
Manager  
Google



**Shreya Argawal**  
Head of Programme  
Strategy  
Digital Green



**Olga Morawezynski**  
Senior Programme  
Manager  
Mastercard Foundation



**Rita Okuthe**  
Chief Enterprise  
Officer  
Safaricom



**Hillary Miller**  
Founder & CEO  
Tulaa



**John Mundy**  
Tanzania County Director  
AFA

The digital landscape is changing, with extensions of existing products being crafted within and across different value chains. To sustain the rate of innovation, to propel growing initiatives up to scale and beyond, to maintain active use rates that keep rising, what can we do? This session sought to explore what leading companies leading different innovations have done, have experienced and have learned in the process. Simply put, what is the present and future for digital solutions to drive rural agricultural livelihoods?

How do you drive behaviour change and adopt use of product? You need to spend time with customers e.g focus groups, be open to change and try things. win fast or fail fast as innovation disrupts processes

Rita Okuthe,  
Chief Enterprise Officer -  
Safaricom



## Key Takeaways

1

Human Centered Design is crucial to drive adoption and more so active use

Technology should be used as an amplifier but get the human side right. Immersion with the end customer to understand and envision the entire experience from end to end can allow you to build and adapt product and services to match needs. HCD can further help break down heuristics that we often rely on that are unfounded and are not transferable to different contexts. Take for example Okoa Jahazi which has repayment rates of upwards to 90%. It demystifies the idea that bottom of the pyramid cannot be trusted.

2

Increase in productivity does not necessarily translate into increase in income.

Diversifying into market access solutions is key to ensure end to end linkages that address a wholistic approach to impact. Take Loop offered by Digital that aggregates selling to market has cut cost by 45% and saved 4-5 hours time for farmers.

3

Institutionalizing the approach within existing systems to deal with willingness to pay

This requires creating strategic partnerships that can collectively define value to the farmer. When the farmer's perspective and financial mindset is well understood and more strategically leveraged, farmers willingness to pay would be elevated significantly.



# CONCLUSIONS AND NEXT STEPS

› The challenge of re-defining active use is an ongoing conversation.

As digital products and services continue to serve the smallholder farmer, independently and in bundles with other components, players in the space are invited to challenge the default band-aid. AFA looks to further drive this conversation with the lead product DigiFarm that is set to be a super platform that provides multiple services and products from information services to inputs to access to markets.

› Data silos need to be broken with well established partnerships that are driven by consumer centric rules and protection laws.

As create partnerships are being formed to capitalize on each organizations' niche, manage costs, leverage strengths, and offer a customized package of services, the conversation around data sharing is crucial to support insight generation to feed back into driving active use.

› The tech-touch balancing act should continue to be evaluated and suited across the customer and provider journey.

It has been concluded, the needs touch however AFA is working to evaluate the product and customer contexts that match whatever respective human touch elements that are required. Partnerships with organizations that keep pushing these alternatives will be the focus over the next period to establish how active use can be influenced.

## Marketplace

Twelve innovative companies exhibited their Ag-tech services and products at the 2019 ALE marketplace.



Pula



Sunculture



Soilcares



Waterwatch of Oregon



Sunculture



Farmcrowdy



MTN Zambia



Fundacion Capital



FarmForce



Lima Links Zambia



Digital Green



Mediae Company



Hillary Miller-Wise,  
CEO and founder,  
Tulaa



Sean Pavo Krupp  
Senior Eng. Cloud/HR  
Talent Solutions at Google



Shreya Agarwal  
Head of Program Strategy  
Digital Green

Without democratization and data transparency smallholders won't be able to access or leverage their own data to improve their productivity and access better financial services.

RALF Learning Lab

We have evolved to understand the pain points for farmers to adopt new practices are much more complex based on country, context and each community context. And we need to adapt to that reality with how we offer products and services.

John Mundy,  
Tanzania Country Director - AFA

