

Opportunities in digitising agricultural value chains

Our learnings so far – GSMA mAgri Webinar,
Tuesday 10th October 2017



What does GSMA mAgri do?

Who is GSMA M4D?

GSMA Mobile for Development (M4D) works with the mobile industry to identify opportunities and deliver innovations with socio-economic impact. It is a donor-funded, not-for-profit organisation.

What is mAgri's mission?

The mission of M4D's mobile agriculture programme (mAgri) is to advance the productivity and profitability of smallholder farmers through scalable and commercial mobile services.

What have we achieved?

Since 2009, the mAgri programme has supported 12 projects which have reached over 10 million smallholder farmers across Asia and Africa with mobile information services.

What are our plans for the coming months?

- **Convene** the industry to share experiences and learnings on mobile agriculture.
- **Identify** best practices for service design, business models, go-to-market.
- **Engage** in markets to support service providers in developing countries. We are currently engaged in three markets (Pakistan, Sri Lanka, Madagascar).



What we will cover in this webinar

Part 1 - The opportunity to digitise the agricultural last mile

- Who are the clients for last mile digitisation initiatives?
- What kind of solutions do agribusinesses and farmers demand?
- How much cash is available for digitisation in formal value chains?
- What is the opportunity to digitise cash payments to farmers?

Part 2 - Implementation models

- Who are the providers of last mile digital tools?
- What partnership models between solution providers have emerged?
- What tools are agribusinesses adopting?

Part 3 - Lessons learnt and roadmap

- What are the key lessons in digitising payments?
- How do you identify enterprise clients for holistic last mile solutions?
- What are the key steps for a successful go-to-market strategy?



Part 1- We will answer these questions on the opportunity to digitise the agricultural last mile

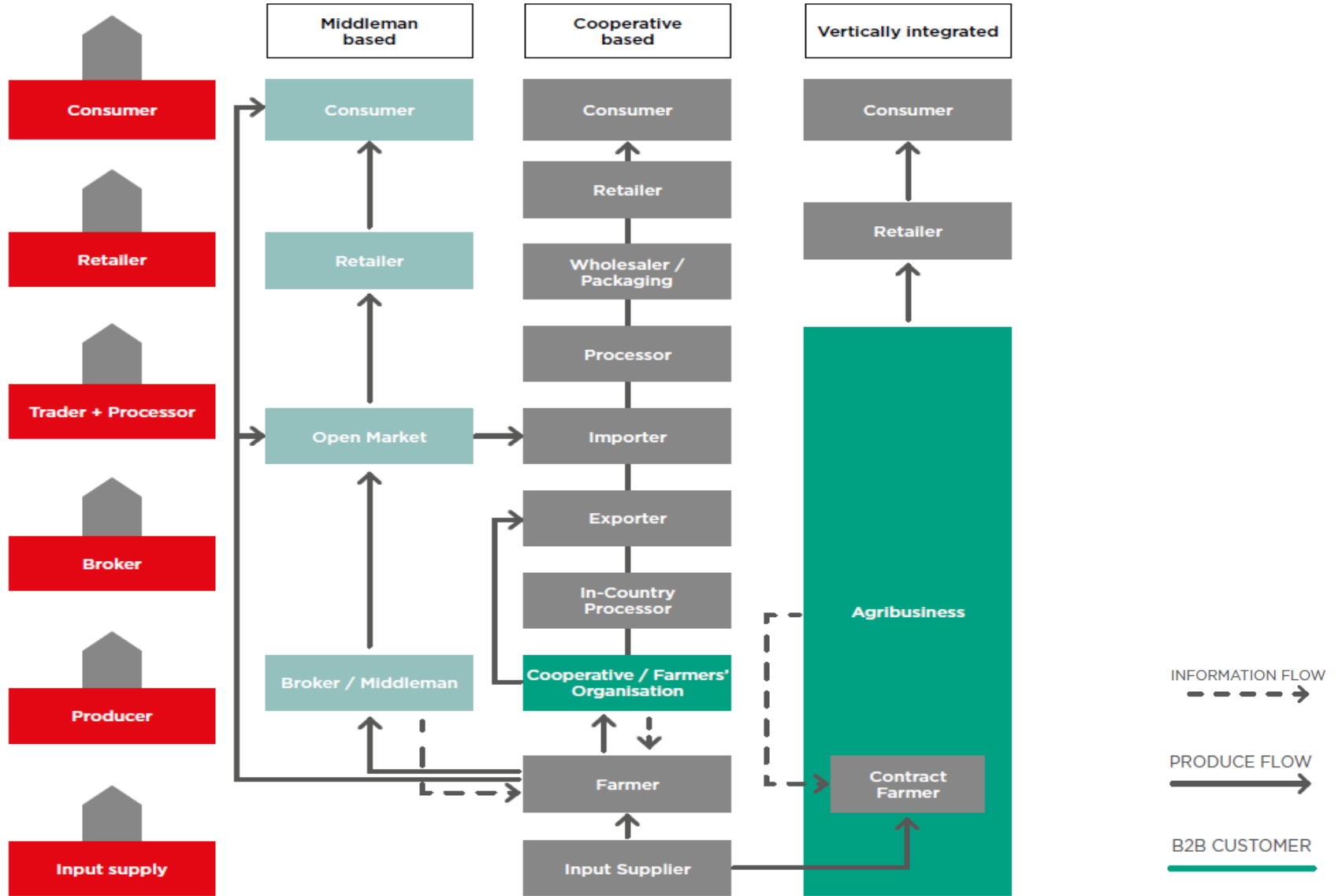
- Who are the clients for last mile digitisation solutions?
- What kind of solutions do agribusinesses and farmers demand?
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Who are the clients for last mile digitisation solutions?







Potential for digitisation

Generic structure of agricultural value chains





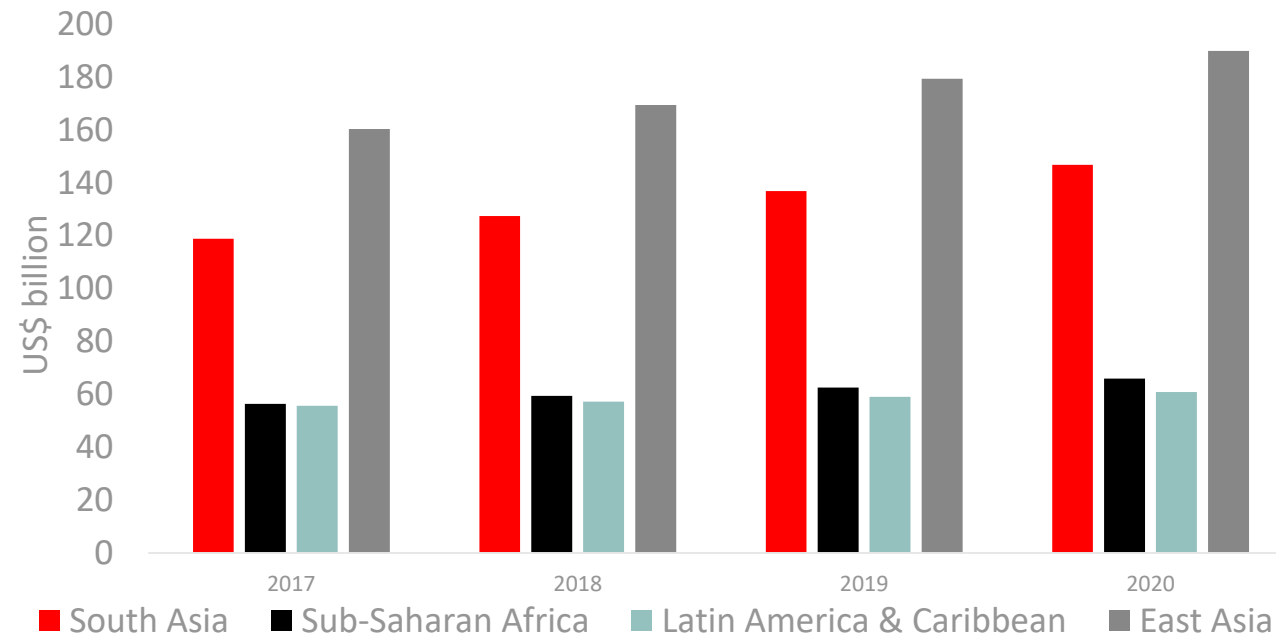
What kind of solutions do agribusinesses and farmers demand?

BUSINESS CHALLENGES	Farmers do not follow best practices, and lack skills and access to agri-related information, educational resources etc.	Cash payments are risky and costly for agribusinesses and for farmers. A cash economy also prevents farmers from accessing credit savings and insurance	Farmers do not possess formal and/or economic identities that capture transactional history, geolocation, farm size etc.	Agribusinesses need full and real-time visibility for traceability and certification of goods when sourcing from smallholders	Agribusinesses rely on manual systems which do not capture the data required for efficient equipment, farm and warehouse management	Agribusinesses rely on manual data management systems and lack real-time visibility into their business data
						
DIGITAL SOLUTIONS	1. Information services: Agricultural extension, education, certification standards, skills development	2. Mobile money: Transfers, payments and digital financial services	3. Digital profiles: Mobile for authentication and verification and as a tool to create economic identities/ digital profile	4. Track and trace systems, farm management systems	5. IoT applications for agriculture: Equipment logistics, crop, soil and weather monitoring, smart warehousing	6. Agribusiness analytics: Predictive analytics, precision agriculture



How much cash is available for digitisation in formal value chains?

Value of transactions via formal channels available for digitisation

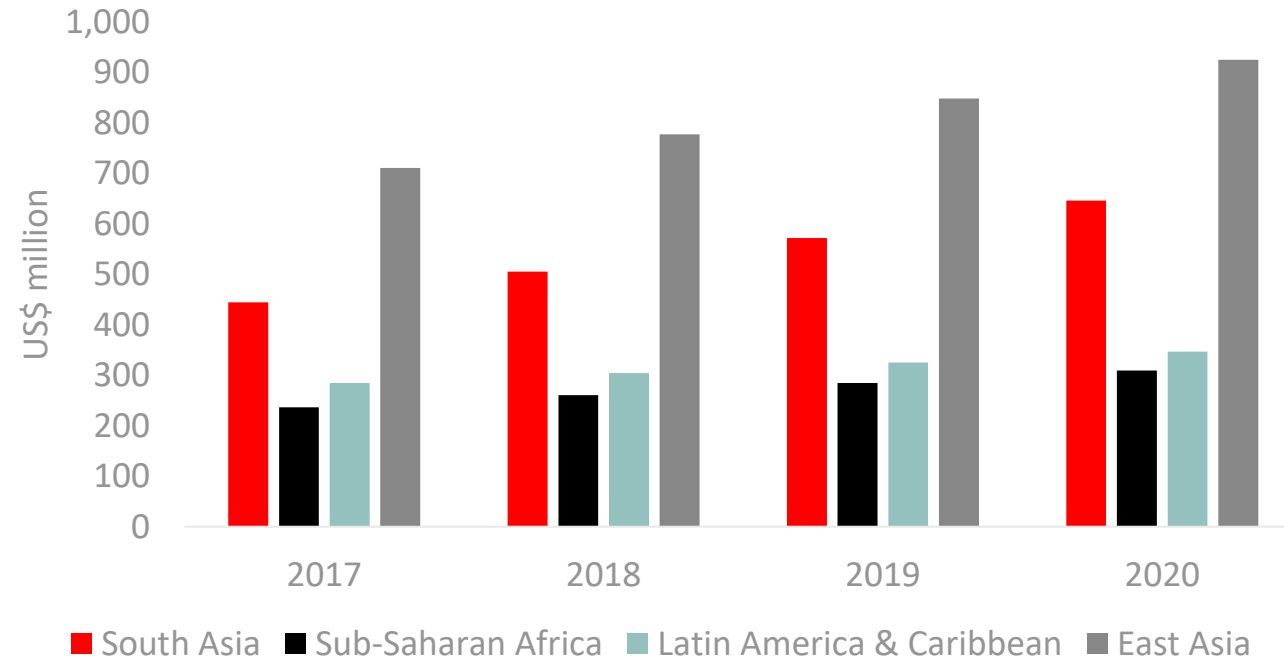


Source: GSMAi and GSMA mAgri



What is the opportunity to digitise cash payments to farmers?

Potential direct revenue opportunity for B2P payments in agriculture



Source: GSMAi and GSMA mAgri











Part 2 - We will answer these questions on implementation models for last mile digitisation

- Who are the providers of last mile digital tools?
- What partnership models between solution providers have emerged?
- What tools are agribusinesses adopting?



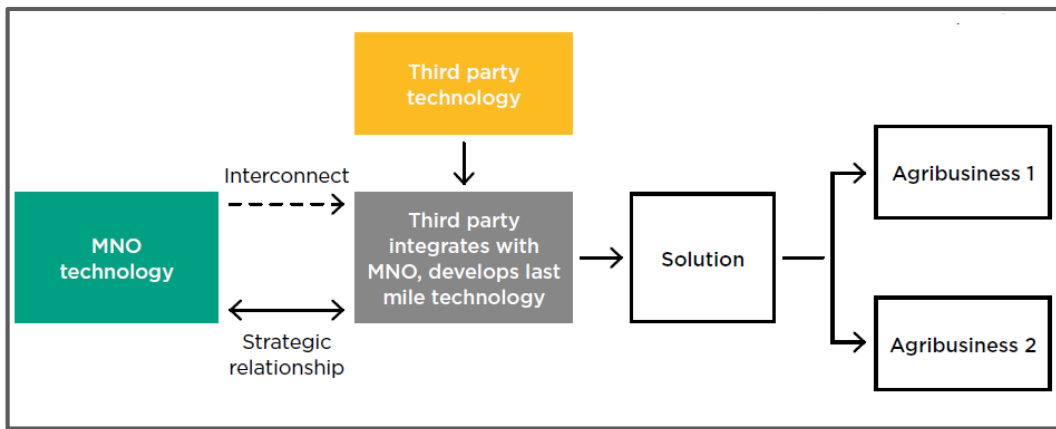
Who are the providers of last mile digital tools?

DIGITAL SOLUTIONS	1. Information services: Agricultural extension, education, certification standards, skills development	2. Mobile money: Transfers, payments and digital financial services	3. Digital profiles: Mobile for authentication and verification and as a tool to create economic identities/ digital profile	4. Track and trace systems, farm management systems	5. IoT applications for agriculture: Equipment logistics, crop, soil and weather monitoring, smart warehousing	6. Agribusiness analytics: Predictive analytics, precision agriculture
						
EXAMPLES	MNO enterprise messaging platform	MNO mobile money service (B2P payments, transfers and other digital financial services)	MNO authentication and verification tools	MNO track and trace system e.g. Vodafone's Connected Farmer Alliance		
	Enterprise messaging platform via VAS provider e.g. Esoko, Echo Mobile	Digital B2P payments via aggregator interconnected with MNOs	Agriculture-related block chain solution e.g. Banqu, AgriLedger	Farm management system e.g. FarmForce, SourceTrace, Agrivi	Agricultural IoT solution e.g. Arable, Nano Ganesh, Kukua	Precision agriculture and predictive analytics tools e.g. aWhere, Agrible, Gamaya
		Digital payments via non-MNO mobile money provider (e.g. SmartMoney)				
				 MNO-led	 Non MNO-led	

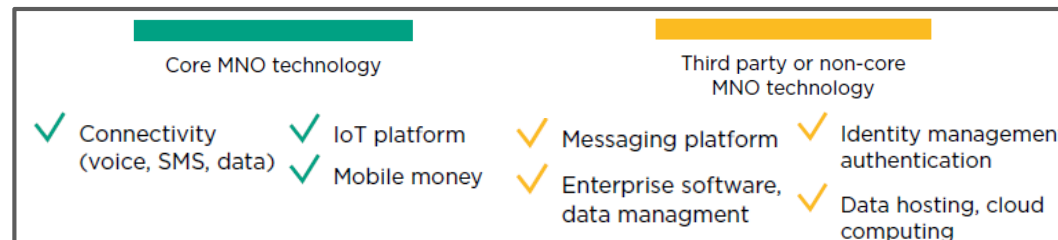
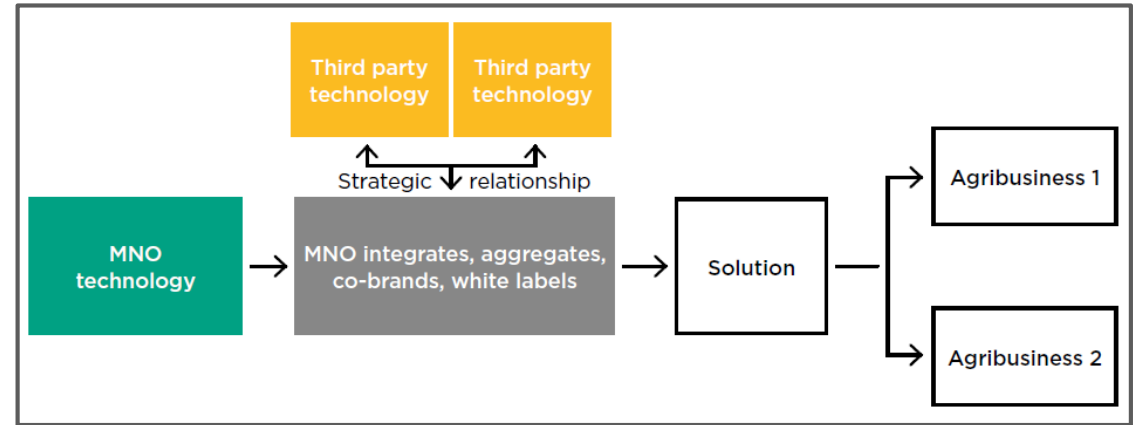


What partnership models between solution providers have emerged?

Third-party led



MNO-led





What tools are agribusinesses adopting?



				
Cooperatives	✓	✓		
Local Commercial Agribusinesses	✓	✓	✓	
Multinational Commercial Agribusinesses	✓	✓	✓	✓

Holistic enterprise solution



**Please send us your questions we will
answer some of them at the end..**



Case study: UTL targets cooperatives with mobile money bulk payments

MNO-led model

Bulk payment solution

Client: Coffee cooperatives, small independent agribusinesses

Users: Coop members and agribusiness owners, farmers and salaried workers

Features:

- Uses MNO's intelligent mobile money platform for preferential pricing
- MNO driving farmer enrolment and BTL





Case study: Yo Uganda offers last mile solution beyond payments

Third party-led model (aggregator)

Last mile solution with bulk payments as core functionality

Client: Commercial coffee buyers

Users: Agribusiness field staff and farmers

Features:

- Potential for expansion to track and trace system for coffee buyers
- Uses MNO's intelligent mobile money platform for preferential pricing





Case study: Connected Farmer strengthens agribusiness' interaction with smallholders

MNO-led model

Last mile solution including digital payments, bulk messaging and farm management system

Client: Agribusinesses in cash value chains (nuts, dairy, fruits, coffee, tea)

Users: Agribusiness field staff and farmers

Features:

- Uses M-PESA for payments
- Leverages MNO dedicated enterprise team
- Potential to customise platform for client need



Case study: Olam develops in-house last mile digital tool OFIS

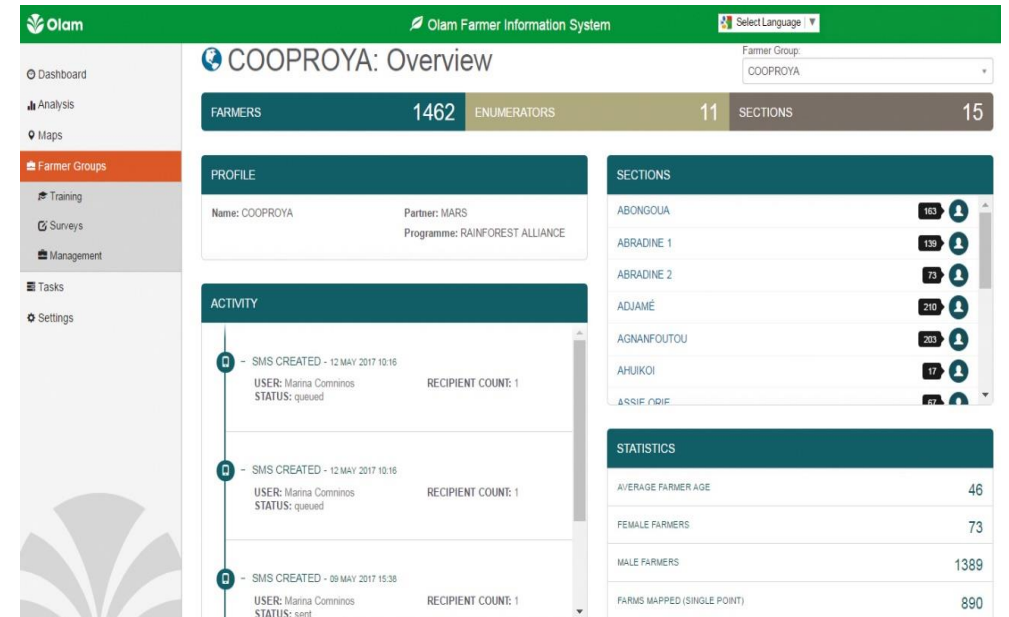
Third party –led (agribusiness owned)
Digital platform for farm management and sustainability programmes

Client: Olam International subsidiaries (cocoa, coffee, rubber and cashew nuts value chains)

Users: Olam’s field agents, coop members

Features:

- Supports traceability and certification compliance
- Potential to integrate digital payments via API with MNO or third party



Category	Count
FARMERS	1462
ENUMERATORS	11
SECTIONS	15

Section	Count
ABONGOUA	163
ABRADINE 1	139
ABRADINE 2	73
ADJAMÉ	210
AGNANFOUTOU	203
AHUJKOI	17
ASSIÉ, ODIF	67

Statistic	Value
AVERAGE FARMER AGE	46
FEMALE FARMERS	73
MALE FARMERS	1389
FARMS MAPPED (SINGLE POINT)	890



Part 3 - We will answer these questions on lessons learnt and the roadmap for digitisation

- What are the key lessons in digitising payments?
- How do you identify enterprise clients for holistic last mile solutions?
- What are the key steps for a successful go-to-market strategy?



What are the key lessons in digitising payments?

Foundational elements

- Service providers must prioritise and select value chains that are suited for digital payments
- MNO strategic engagement is required to ensure liquidity and efficient sales channels

Cost mitigation

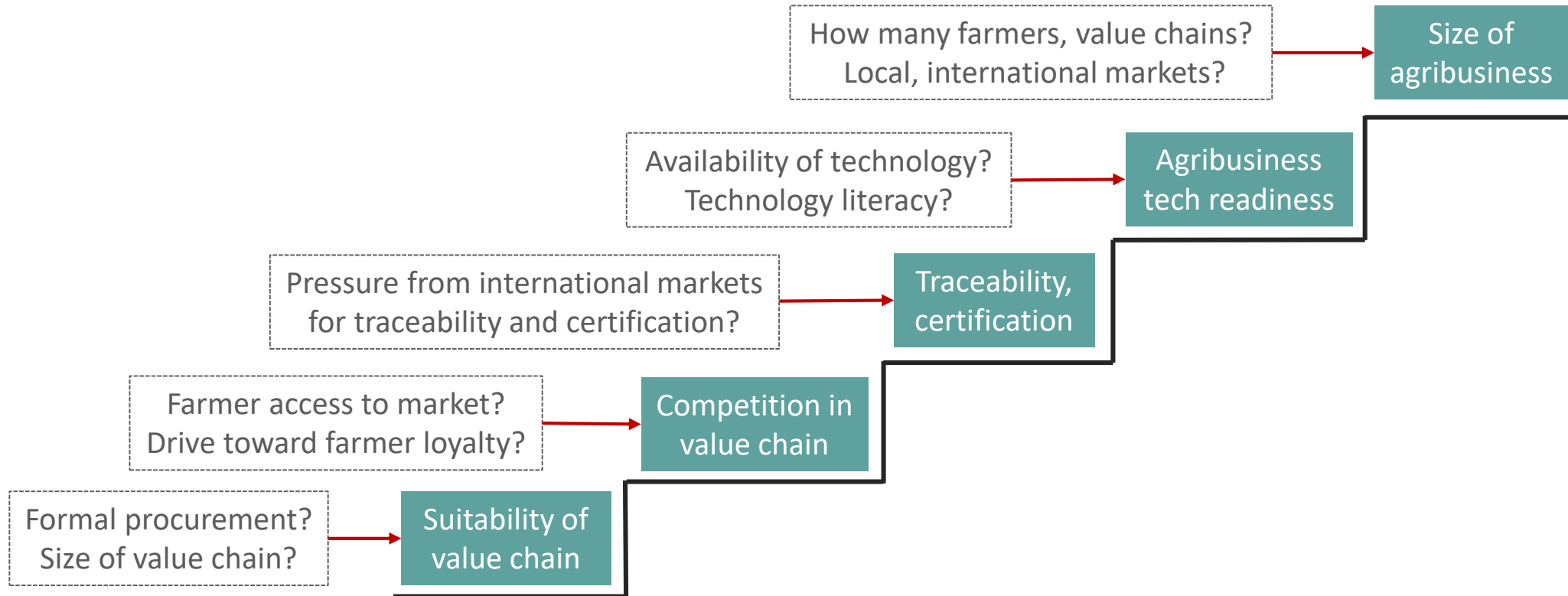
- MNOs are prepared to offer preferential pricing to stimulate adoption
- Agribusinesses are prepared to take on the cost of mobile money

Service ecosystem

- Farmers recognise value of mobile money for cash management
- Farmers appreciate the value of mobile money for P2B payments (utilities, school, health fees)

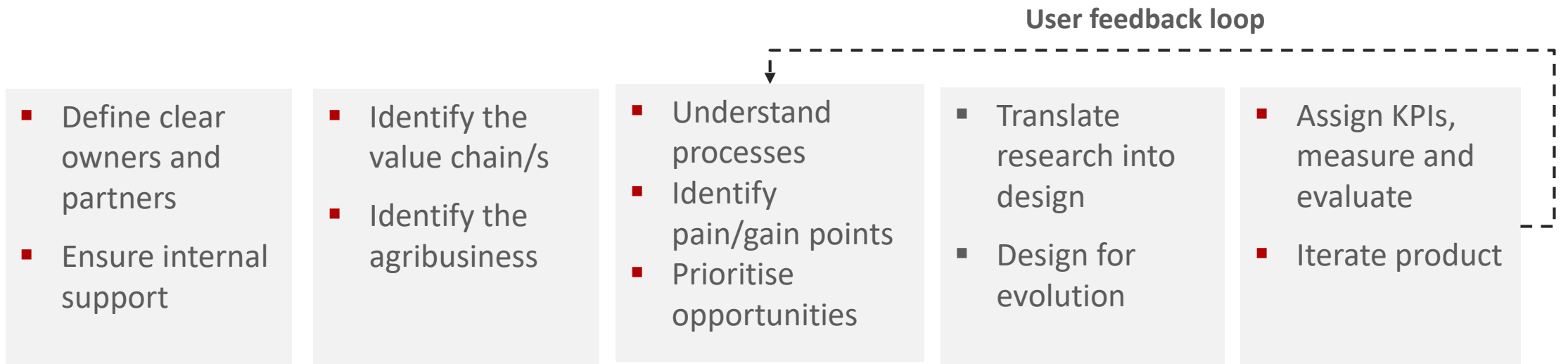


How do you identify enterprise clients for holistic last mile solutions?





What are the key steps for a successful go-to-market strategy?





Want to learn more? Explore our resources

- [Market size and opportunity in digitising payments in agricultural value chains](#)
- [Opportunities in agricultural value chain digitisation: Learnings from Uganda](#)
- Forthcoming publications:
 - Market-level reports on Côte d'Ivoire and Ghana
 - Agricultural value chain digitisation toolkit
- Subscribe to our [newsletter](#)



Questions?



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