



Landscaping the agritech ecosystem for smallholder farmers in Latin America and the Caribbean

TREND #3

Digital procurement tools are mainly offered as Software-as-a-Service (SaaS) solutions

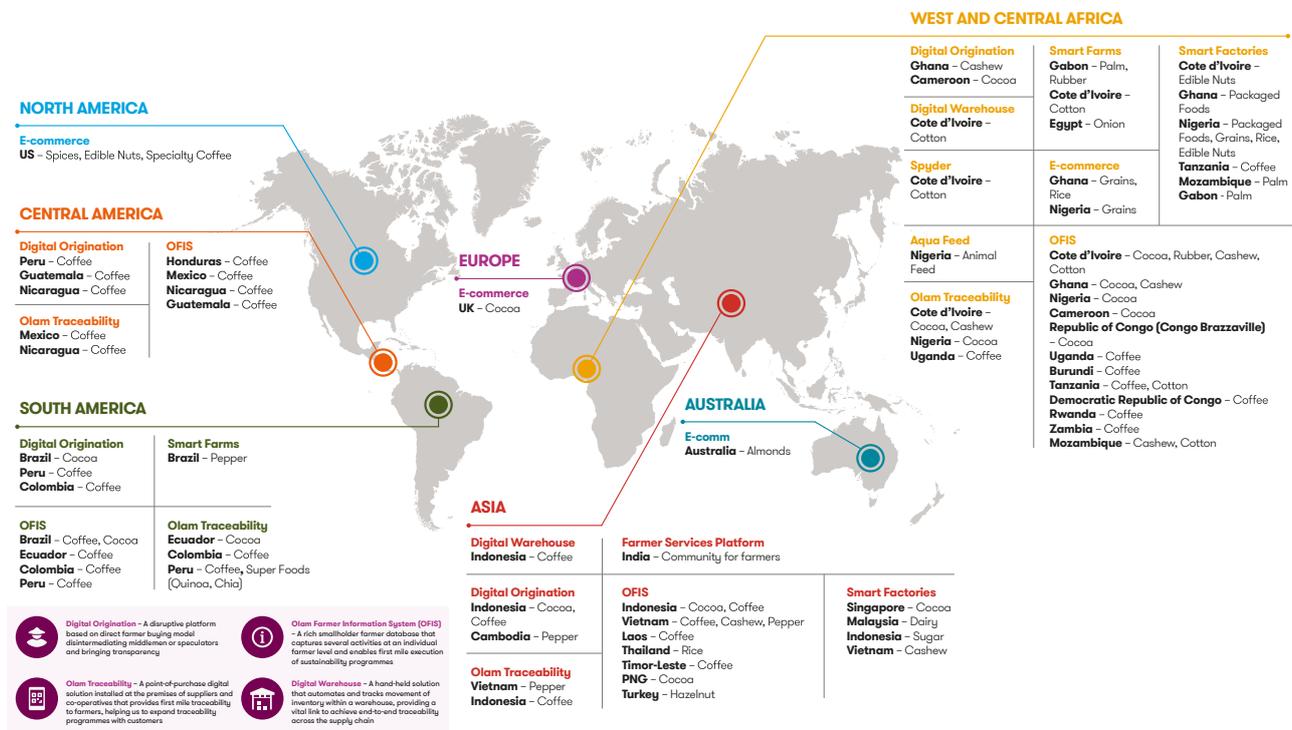
Given the complexity and cost of building tools that integrate digital payment capabilities, generate digital transaction records and enable crop traceability, the majority of digital procurement tools tracked by the GSMA are being provided as SaaS solutions by companies that specialise in the provision of such services. Agritech companies, such as SourceTrace, Cropin, Farmforce, Agritask and TaroWorks (a wholly owned subsidiary of Grameen Foundation), have scaled by building solutions that can be applied across different geographies and in various languages for a variety of value chains and different types of organisations and user requirements. Although many of these agritech companies got their start in Europe and Asia, they have since expanded their presence to Latin America. Outside of Farmforce and TaroWorks, however, these agritech companies have focused

their attention on large-scale farmers rather than smallholders. In most cases, digital procurement solutions are offered through a business-to-business-to-consumer (B2B2C) model.

In some cases, agribusinesses and commodity traders have developed their own digital procurement solutions in-house to maintain control of their own assets and fully customise the solution to their needs. Olam International, for example, built a series of last-mile digital procurement tools to better capture farmer information, manage payments to farmers and implement traceability and sustainability initiatives. These include Olam’s Digital Origination, Olam Traceability, Olam Farmer Information System (OFIS) and Digital Warehouse tools, which are deployed worldwide.³⁰

Figure 5

Olam’s global footprint of digital procurement tools



Source: Olam

30 Olam (May 2019), *Olam Insights*, Volume I.

4 Agritech landscape and trends in digital disruption in Latin America

Digital interventions can have a substantial impact on the health and incomes of smallholder farmers by closing knowledge gaps, improving access to finance, providing access to formal markets and opening access to assets that would otherwise be out of reach.

To better assess the opportunity for digital tools to support smallholder farmers in Latin America and the Caribbean, it is important to first map out the landscape of digital tools already available in the region to understand how these tools are funded and scaled, and to identify the leading trends underpinning these interventions.

In the first half of 2020, the GSMA AgriTech team conducted 40 interviews with regional stakeholders and identified roughly 131 digital tools currently in use or being deployed for the benefit of smallholder farmers in Latin America and the Caribbean.

This section begins by highlighting some of the high-level trends across a variety of use cases. We then look more closely at each of the five digital agriculture use cases identified by the GSMA AgriTech team. Each use case section presents a regional map of the agritech landscape, reviews different business models and identifies major trends. The section concludes by highlighting some of the main challenges agritech companies have faced when deploying digital agriculture solutions in the region.

TREND #1

Latin America's digital agriculture tools have not reached the same scale as in Asia and Africa.

The AgriTech team identified very few digital agriculture tools with active user figures above 25,000.⁸² Most of the tools profiled in this study have between 1,000 and 5,000 active users with only a few agritechs targeting smallholders, such as Colombia's Control Ganadero (77,000 farmers) Comproagro (26,000 farmers) and Mexico's Smattcom (25,000 farmers) breaking the 10,000 user mark. In Asia and Africa, by contrast, some

services have scaled into the millions of users, although it should be noted that these regions have addressable markets four to six times larger than the Latin American market. Most tools in Latin America continue to be managed by cooperatives or NGOs with limited user numbers, and there have been fewer impact investors helping to scale commercial digital agriculture solutions in Latin America than in Asia and Africa.

⁸² This refers to active user figures in the target markets of Central America and the Andean region. Apps prevalent in Argentina and Brazil, such as Booster Agro, are nearing 100,000 active users. Some of the global solutions analysed in this study, such as Farmforce, ECOM's Integrity, Olam's OFIS, SourceTrace and Cropin, manage hundreds of thousands of users worldwide.

4.3 Digital procurement



Widespread connectivity, smart device ownership and the prevalence of export crops, such as coffee, cocoa and fresh produce, are key enablers for the development of digital procurement tools in Latin America. Digital procurement refers to the roll-out of digital technologies in the agricultural last mile¹⁰⁰ that enable a range of digital systems and processes to transition from paper to digital (see Appendix).

4.3.1 Mapping digital procurement initiatives in Latin America aimed at smallholder farmers

Digital procurement tools are widely adopted in Latin America both by large-scale global exporters, such as ECOM and Olam, as well as smaller cooperatives that manage as few as 250 members, such as Argentina's COOPSOL. The main drivers for adopting digital procurement tools are to improve on-farm practices through the digitisation of farmer records, and to manage certification and traceability requirements needed to export specific crops, such as cocoa, coffee, honey and fresh produce, to North American and European markets.

Some agribusinesses have opted to use digital procurement tools available from global software providers, such as SourceTrace, Agritask, Farmforce and Cropin, customising these solutions to local circumstances as appropriate. Some global players, like Olam, have opted to build their own tools internally and deploy them across their footprint as part of broader sustainability initiatives. Still others have hired local software developers to build simpler, less expensive tools suited to the specific needs of cooperative members in the last mile. ECOM, which

operates in several Latin American countries, has pursued a hybrid model in Colombia. It leverages ECOM's proprietary Integrity platform, which is deployed globally to digitise data collection from its more than 8,800 coffee farmers in the country. However, to collect the additional metrics required for certification by the Colombian government, such as number and frequency of on-farm audits, and number of farmers trained in the use of potable water, ECOM Colombia developed a tool locally that can integrate with the Integrity solution.

The bulk of digital procurement tools deployed in Latin America are either digital records tools or digital records with traceability (see Appendix). There are a few digital records with payment tools in the region, but these are largely concentrated in countries such as Colombia and Mexico. Although companies expressed a strong interest in digitising payments due to the added security and time savings they would offer, they noted that their smallholder farmer partners were not generally open to these efforts. This was particularly true in Central American countries.

100 In agricultural value chains, the "last mile" refers to the web of relationships and transactions between farmers, crop buyers and input suppliers. Such solutions create a digital record of the interactions between farmers and agribusinesses or cooperatives.