

EPISODE 3

Embedding finance in e-commerce

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E-commerce platforms can do far more than connect micro and small enterprises (MSEs) to suppliers and customers. By embedding financial services directly into the transaction experience, digital platforms can become the primary financial gateway for MSEs to access the capital they need to grow, withstand shocks, and participate more fully in the digital economy.

Over the past two years, Accion and the Mastercard Center for Inclusive Growth have been working with fintech lenders, digital marketplaces, and financial service providers across Brazil, Colombia, Ethiopia, India, Indonesia, and the Philippines to design, test, and scale embedded credit and other financial solutions for MSEs.

When credit is available at the right moment, within the platform where an MSE is already operating, it becomes a natural extension of the commercial experience.

Despite this potential, and despite broader industry efforts to unlock access to responsible credit for MSEs, the credit gap in emerging markets remains significant.

How can e-commerce platforms replicate and improve upon the informal credit infrastructure that MSEs already depend on in general trade, and what does it take to make embedded finance work at scale?

We have identified five requirements for effective implementation that address both supply and demand for credit

- 1 Replicating informal credit in digital transaction flows**
MSEs in general trade access credit through trust-based supplier relationships. Embedded finance must reconstitute that same flexibility digitally.
- 2 Delivering credit offers contextually, at the right moment within the platform experience**
Relevant offers surfaced at checkout, bundled with promotions, or triggered by a purchase signal, make credit a seamless part of the transaction rather than a separate financial decision.
- 3 Using alternative data to assess creditworthiness and drive inclusion**
Platform-generated behavioral and transactional data can be leveraged for credit decisions, reaching MSE borrowers that conventional approaches struggle to serve effectively.
- 4 Segmenting credit products to match MSE profiles**
No single credit product serves all MSEs equally. Effective embedded finance requires differentiated strategies calibrated to business type, supply chain vertical, transaction behavior, and risk profile.
- 5 Designing commercially sustainable partnership models**
Embedded finance requires coordinated partnerships among platforms, lenders, and distributors that can survive long enough to deliver impact at scale.

1 Replicating informal credit within the digital transaction flow

Liquidity is central to how small businesses operate. In traditional supply chains, many MSEs informally procure inventory on delayed payment terms built on trust and long-standing supplier relationships. These flexible arrangements align with sales cycles, allowing retailers to stock and sell goods without immediate cash outlay. That flexibility is real, but it is also narrow. Because suppliers extend these terms from their own working capital, which they must first direct toward running and growing their own businesses, they can only offer credit to a small pool of retailers they already know well, and the amounts rarely match what a growing business needs. Informal credit can also tie retailers to a limited set of brands, and because it leaves no formal record, it does little to help small businesses build the credit history they need to access financial services in the future.

E-commerce platforms, by contrast, typically require immediate payment, leading MSEs accustomed to 15- or 30-day terms to limit their order volumes, the range of products they can stock, and their ability to take advantage of bulk pricing or promotional offers. In this way, digital platforms can unintentionally restrict the very participation they enable.

Replicating informal credit effectively means designing credit around the MSE's cash-flow realities, enabling deferred payment at purchase, and integrating repayment seamlessly into transaction flows. When done right, digital platforms can offer more financial flexibility than traditional trade networks.

For example, Accion's partner in Indonesia, [Titipku](#), embeds credit for small merchants selling online through a B2C marketplace. The offering helps MSEs purchase inventory when they need it without requiring immediate payment upfront. It is integrated within the platform's digital payment acceptance infrastructure so businesses can procure stock, sell it, and repay directly using sales revenue.

Accion and Titipku used digital sales and payment acceptance data to adjust each merchant's credit line to their real capacity to repay on 30-day payment terms. In an early pilot, nearly 100 percent of outstanding balances have been repaid successfully, giving Titipku the confidence to keep extending credit for merchants' next round of inventory purchases.

2 Delivering credit offers contextually, at the right moment within the platform experience

What distinguishes embedded finance from conventional digital lending is not the product, but how and when it is delivered. Traditional digital lending requires MSEs to identify a need, find a lender, apply, and wait for approval. Each step adds friction and discourages businesses with limited time, and those hesitant about formal finance, from continuing.

Embedded finance removes much of this friction by offering relevant, often pre-qualified financing directly within the platforms MSEs already use. In practice, this means offering a financing option at checkout when an order exceeds a typical transaction value, bundling a deferred payment offer with a bulk purchase promotion, or triggering a credit offer when platform data signals that an MSE is expanding its product range or due to restock. The offer is relevant because it is calibrated to the transaction, timely because it arrives at the moment of commercial intent, and frictionless because the MSE never leaves the platform to act on it. This is what drives uptake where standalone digital lending has consistently failed. It also compounds over time: each offer accepted, declined, or ignored refines the next, improving relevance and risk management without requiring additional data inputs from the borrower.

[Verqor](#), an Accion partner, illustrates the model. Verqor is an agri-fintech platform whose core product is direct input lending to small and medium-sized farmers in Mexico, a segment where only about seven percent have access to formal bank financing despite accounting for roughly 40 percent of the country's agricultural output. Verqor serves as an "agro wallet" connecting farmers across the agricultural value chain, input retailers, produce buyers, and non-bank lenders, and uses that visibility to underwrite the farmer loans directly. Additionally, this "in-flow" knowledge will enable them, in the future, to expand loan products for retailers and offtakers as well.

By sitting across every node of the value chain, from retailer to farmer to offtaker, Verqor captures transaction data at each point of contact and resurfaces credit exactly when it's needed, in effect acting as a persistent, embedded relationship manager the value chain's smallest players couldn't otherwise access.

3 Using alternative data to assess creditworthiness and drive inclusion

Access to credit in formal financial markets has historically depended on credit history, collateral, and documentation that most MSEs in emerging markets cannot provide. This exclusion is not a reflection of creditworthiness but of data. MSEs that have reliably purchased inventory and cycled stock for years remain invisible to conventional models because their activity was never captured in a usable form.

E-commerce platforms change this. Every interaction generates data, including the purchase frequency and volume, the consistency of order patterns, and the speed of repayment on prior transactions. Taken together, these signals can offer a more current and operationally relevant picture of an MSE's financial health than a credit bureau report in a market where bureau coverage is thin. Implemented well, alternative data reduces the cost and risk of lending while extending access to borrowers who would otherwise be excluded, making it at once a commercial and a financial inclusion instrument.

Across our engagements, Accion uses alternative data to strengthen credit risk models. Inputs such as transaction history, digital payment acceptance and sales, payments to suppliers, and data on delivery fulfillment have helped build credit scores for small businesses, many of whom are first-time borrowers typically excluded from formal financial services.

Models leveraging this data have improved predictability and increased eligibility for credit up to 4x, while maintaining strong portfolio health. Seventy-four percent of embedded credit users surveyed reported being better able to withstand supply chain shocks, and frequent users were 42 percent more likely to report improved procurement and inventory management.

4 Segmenting credit products to match MSE profiles

MSEs are not a homogeneous group. A kirana store in India restocking fast-moving consumer goods daily has fundamentally different credit needs from a fresh produce trader in Brazil managing weekly supply cycles, or a small manufacturer in Indonesia purchasing raw materials monthly. A product calibrated to one profile will be poorly suited to the others, either over-extending credit or underserving the actual need.

Segmentation moves from a single generalized credit offering to a portfolio of differentiated products. Effective segmentation goes beyond demographic drawing on platform data to identify behavioral clusters: MSEs that are growing and increasing their order value, those that are stable but constrained by credit limits, and those whose repayment consistency warrants a higher credit line. It is also an inclusion lever. A single credit product built around an average risk profile will exclude MSEs at the margins, including first-time borrowers and microenterprises below standard volume, whereas a segmented approach can bring these groups into the addressable market without disproportionately increasing portfolio risk.

As part of Accion's work with [Credix](#), a Brazilian B2B embedded finance platform, more than 170,000 merchant buyers were segmented using machine learning clustering on intrinsic business traits and payment behavior data. The resulting segments, ranging from core growth enterprises to micro merchants, now anchor a portfolio of experiments targeting dormant buyer activation, recurrence, and approvals.

5 Designing commercially sustainable partnership models

Embedded finance for MSEs is inherently collaborative. No single player holds all the capabilities required to deliver it. Platforms contribute data, customer engagement, and digital transaction environments. Fintechs and financial institutions provide underwriting expertise, capital, and regulatory infrastructure. Supply chain actors bring operational reach and market knowledge. Together, they create credit systems that are more contextual and scalable than any institution could build on its own.

Sustainability, however, is not guaranteed. MSE lending is characterized by small ticket sizes, high transaction costs relative to loan value, and the need for sustained engagement. It requires attention to three areas: reducing the cost of credit assessment through automation so that cost-per-decision does not erode margin; building a revenue model that reflects each partner's contribution, including the platform's role in reducing customer acquisition cost and improving credit; and structuring the partnership to allow iteration, as early implementations rarely achieve optimal unit economics from the outset.

The strongest partnerships also extend beyond credit and can ensure, for example, that MSE-focused marketplaces are able to achieve robust operating margins to ensure their long-term sustainability. [Agrim](#), an Accion partner, lets retailers procure inventory while accessing financing at the point of purchase, with capital provided through off-balance-sheet lending partners and underwriting strengthened by the platform's transaction data. [AquaExchange](#), another Accion partner, provides IoT-based farm monitoring solutions and farm health data for shrimp farmers. It pairs this with affordable financing and insurance that covers disease-related crop losses, a risk traditional insurance never covered before, made possible because the farm health data improves underwriting, illustrating how multi-actor partnerships are built on genuine contributions from both the platform and the balance sheet partner.

Our experience offers meaningful evidence that embedded finance can expand MSE access to credit, though constraints remain. The models we tested were shaped by the specific partners, industries, and regulatory environments in which they operate, and the transferability of any single model requires careful assessment. What does transfer is the underlying framework:

1. Reconstituting the flexibility of informal credit within digital transaction flows.
2. Delivering offers at the moment and place of commercial intent.
3. Building credit assessment on the data platforms already generate.
4. Segmenting to serve a diverse market, and structuring partnerships that sustain themselves commercially.
5. Establishing mutually beneficial partnerships for scale.

Taken together, these five requirements define what it means to implement embedded finance responsibly and effectively for MSEs.

The potential returns are significant. MSEs that access credit through embedded finance do not simply make larger purchases. They build financial resilience to manage shocks, expand their product range, and grow within the digital economy. Embedded finance is not only a credit product — it is an infrastructure for inclusion.