

PesaTech analysis 5:

Emerging fintech models for inclusive MSME finance

Tanzania's fintech ecosystem is changing how micro, small and medium-sized enterprises (MSMEs) access finance. Across the PesaTech portfolio, fintechs serving agriculture, healthcare, transport and enterprise management are using operational and transaction data to address one of the greatest barriers to MSME lending: limited information about business performance.

Digital payments, inventory purchases, transport bookings, and agricultural transactions create verifiable records of cash flow and commercial activity. These records allow lenders to assess businesses that may lack collateral, formal accounts or conventional credit histories.

Two models show how this data can be converted into finance.

Vertically integrated embedded finance

PesaTech fintechs broadly represent a **vertically integrated embedded-finance** model. They offer MSMEs a useful digital service, collect data through its use, analyze that data to assess creditworthiness and provide financing from their own balance sheets.

Because the service and financing are integrated, the provider can make credit available at the point of need. A platform that records inventory purchases or agricultural transactions, for example, can use that information to estimate repayment capacity, set a credit limit and offer working capital directly to the business.

This approach creates a simple customer experience and allows credit decisions to improve as more data is generated. However, it also requires the fintech to combine several demanding capabilities: developing a compelling digital product, building credit-risk models, raising lending capital, and managing repayments and portfolio risk.

It can also limit scale, as the cost and complexity of managing all these functions may constrain margins and make it more difficult to serve last-mile markets. However, in contexts where a developed partner ecosystem does not yet exist, this may be the only viable option for entrepreneurs.

A partnership model

An alternative is a partnership model in which these functions are distributed among specialized providers.

The digital infrastructure providers (DCPs) supported by PesaTech are a critical part of this model. Platforms such as Hashtech generate or organise operational data by helping businesses manage transactions and other core activities. An analytics partner may then turn that data into financial indicators or credit scores. Finally, a bank, microfinance institution or other capital provider uses those insights to underwrite and fund MSME credit.

This model allows each participant to focus on its comparative advantage:

- Digital infrastructure providers create useful services and generate trusted data.
- Analytics firms translate that data into actionable risk assessments.
- Financial institutions provide capital and manage regulated financial products.

No single company must therefore build the entire financing system. The model's success, however, depends on interoperability, clear commercial incentives and agreed rules for customer consent, data security, credit decisions and risk sharing. Many digital infrastructure providers also find it difficult to sustain a business model without a higher-margin offering such as credit. Analytics firms, meanwhile, require sufficient data to build viable models and willing buyers, such as banks. Across the region, including in Tanzania, financial institutions with large balance sheets have been cautious about engaging with these partners, limiting the scale of this model.

Digital public infrastructure for scale

Digital public infrastructure (DPI) could make both models more efficient and easier to scale. Currently, providers often repeat the same customer verification processes and build separate connections to fragmented data sources (walled gardens). These costs can make small loans commercially unattractive.

DPI can provide a shared foundation for trusted data exchange. With appropriate consent and safeguards, identity and know-your-customer information could be connected with public records such as business registration and land ownership. In agriculture, this foundation could also incorporate farm-plot information, hydrology, soil maps and weather indices.

Fintech platforms and analytics firms could combine their proprietary data with this shared foundation to improve credit scoring and reduce the cost of assessing smaller or previously invisible businesses. DPI would not replace private innovation; it would provide interoperable systems, standards and safeguards on which that innovation can build.

This is the relevance of FinWise Tanzania's work on Data for Digital Agriculture Transformation (D4DAT) and **FinWise Ethiopia's work on Open AgriNet, which are both agricultural DPIs that can unlock finance for rural economies.** By connecting foundational and agricultural data with digital infrastructure, analytics and finance providers, D4DAT can help create a more cost-effective pathway from data to responsible finance.

Together, these models point towards an ecosystem in which fintechs, infrastructure providers and financial institutions play complementary roles—extending formal finance to MSMEs that conventional lending models have struggled to reach.