DIGITAL TECHNOLOGY

Settlement Design and Payout Failure on Multi-Currency Creator Platforms: Evidence from African Cross-Border Transactions

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Abstract

For creators operating across borders, a successful customer payment does not guarantee timely access to earnings. The critical challenge is ensuring that funds move reliably from payment acceptance through currency conversion and settlement to a usable domestic account or wallet. This article examines settlement and payout failures on multi-currency creator platforms, distinguishes payment acceptance, settlement, and payout, and identifies foreign exchange friction, fragmented payment infrastructure, regulatory and verification requirements, reconciliation problems, and operational dependencies as key sources of failure. The article examines the Mainstack experience as an African creator-commerce case to show how multi-currency processing, local payout mechanisms, and transaction visibility can address some of these challenges. The article proposes a settlement architecture built around interoperable payment layers, intelligent currency routing, real-time monitoring, automated reconciliation, exception management, and recovery mechanisms. It argues that settlement reliability must be treated as a core component of digital commerce infrastructure, not merely a back-office function. For African creators and platforms operating across fragmented markets, more reliable settlement can reduce payment friction, improve income predictability, and support sustained participation in the global digital economy.

Keywords: creator economy; cross-border payments; settlement; payout systems; multi-currency payments; digital commerce; Africa; payment interoperability

1 Introduction

Digital platforms have expanded creators', freelancers', and other independent digital businesses' ability to reach customers beyond their domestic markets. Creators can now market and sell content, digital products, online services, and virtual events internationally without a physical presence in each customer's country. This development has created new opportunities for African creators to earn income from global demand, while increasing their dependence on payment systems that connect international customers with domestic financial infrastructure (Goldman Sachs, 2023; UNCTAD, 2022; Peres et al., 2024). However, the ability to generate international revenue does not necessarily guarantee timely or predictable access to it. Recent evidence illustrates the distinction between domestic payment capacity and reliable cross-border receipt. In Nigeria, a 2026 ODI report found that 84% of surveyed firms experienced system glitches and 80% reported regular delays in payments from other African countries, indicating that domestic digital-payment development does not automatically eliminate cross-border friction (Agarwal et al., 2026). A separate IMF account describes a Ghana-to-Nigeria payment that took two weeks to arrive and cost almost $40 to send $100 (Wellisz, 2022). Although these findings concern firms and a single payment rather than creator payouts specifically, they illustrate the broader infrastructure constraints within which African

creator platforms operate. It also notes that Nigeria's large domestic digital-payment capacity has not automatically produced frictionless cross-border trade.

For creators operating across borders, the payment process extends beyond the moment a customer completes a transaction. Funds may need to pass through payment processors, currency-conversion arrangements, settlement institutions, compliance checks, and domestic payout channels before they become available for use. Each stage introduces potential costs, delays, or operational complications. These challenges are particularly relevant in African markets, where differences in financial infrastructure, currency arrangements, regulatory requirements, and access to international banking networks can complicate cross-border transfers. Initiatives such as the Pan-African Payment and Settlement System (PAPSS) reflect broader efforts to improve regional payment connectivity. Still, interoperability and cross-border fund delivery across different financial systems remain key considerations for cross-border commerce (African Development Bank (AfDB), 2024).

The growth of the creator economy, digital financial services, financial inclusion, and cross-border payment infrastructure has attracted increasing attention in both academic research and industry discussions (Mou and Faruk, 2024; Dallocchio et al., 2024; Radford, 2026). However, these discussions do not always distinguish between a platform accepting payment and the recipient actually receiving accessible funds. This distinction matters because a transaction may appear successful at the point of purchase. At the same time, the creator continues to face delays, conversion costs, unresolved transaction records, or difficulty receiving the money locally. The problem is beyond settlement alone; it may stem from payment authorization, inaccurate beneficiary information, compliance requirements, or the receiving institution. The central concern, therefore, is how platforms manage these dependencies across the full payment-to-payout process.

This article examines settlement and payout reliability on multi-currency creator platforms, focusing on the processes that connect international customer payments to usable funds in African creators' domestic accounts or wallets. It uses the concept of the settlement gap to describe the interval between a payment being recorded as successful and the creator receiving accessible funds. The article first identifies the process's main stages and potential failure points, then examines the Mainstack experience as a case of African creator-commerce infrastructure. It concludes by proposing design principles for more reliable settlement systems. Because the available case evidence does not provide transaction-level measurements of payout performance, the analysis distinguishes documented operational challenges from proposed design responses and outcomes that would require further empirical testing.

2 Multi-currency settlement and payout failure

2.1 The transaction-to-payout lifecycle

A multi-currency creator payment is best understood as an end-to-end transaction lifecycle rather than a single payment event. Depending on the payment arrangement, the process may involve customer authorization, payment processing and clearing, currency conversion, settlement between participating institutions, transaction reconciliation, and final payout to the creator's domestic account or wallet. These stages are related but distinct. Renzetti et al. (2022) identify exchange-rate determination, exchange-rate application, and the settlement model as separate elements of the transaction process. Cross-border payments in Sub-Saharan Africa also operate through different

channels, including bank transfers, mobile money, digital wallets, and regional payment systems, with varying arrangements for connectivity and settlement (Ricci et al., 2025).

Distinguishing these stages matters because payment confirmation does not necessarily mean funds have reached the creator. A platform may record a transaction as successful while the money remains subject to processing, conversion, verification, or transfer through another institution. The creator's practical outcome depends not only on whether the customer's payment was accepted, but also on whether the remaining stages are completed and the proceeds become accessible. In this article, the settlement gap refers to the interval between the platform recording a successful customer payment and the creator receiving usable funds through the intended payout channel. A delayed payout is one in which funds arrive later than expected. A failed or rejected payout is one in which the transfer does not complete as intended and may require correction, resubmission, or another recovery process.

Several connected factors can widen the settlement gap. Foreign exchange is one. When a customer pays in one currency, and a creator receives another, the transaction may depend on exchange-rate determination, conversion timing, available currency pairs, and the institutions handling the conversion. The exchange rate applied and the fees charged can affect the final amount received, while the availability of particular currency routes can influence how the payment is processed. As a result, a transaction's cost and predictability depend on more than the headline fee charged at check-out.

Infrastructure fragmentation and regulatory requirements create a second set of challenges. International payments may cross institutions and payment networks that operate under different technical standards, processing schedules, verification procedures, and regulatory obligations. Domestic payout channels may also differ in their operating hours, coverage, and ability to receive funds from international providers. Regional initiatives and improvements in payment interoperability can reduce some of these barriers, but their effectiveness depends on how well participating systems connect in practice (AfDB, 2024; Ricci et al., 2025). A platform must therefore account for differences among payment routes and receiving markets rather than assume that a single processing arrangement will work uniformly across countries.

A third source of friction is reconciling transactions and handling exceptions. Payment initiation, conversion, settlement, and payout may generate records across several systems, and those records may not update simultaneously or use identical identifiers and status descriptions. Incomplete beneficiary details, inconsistent transaction references, or delayed status updates can make it difficult to establish where a payment has stalled and what action is required. Research on payment data and transaction monitoring highlights the importance of accurate, structured information for tracking payments and identifying irregularities (Josyula, 2024; Cooper et al., 2025). These factors are not evidence that every late or failed payout originates in settlement design. Some problems arise before funds enter the settlement process, while others depend on external institutions or recipient information. A creator platform's design challenge is to make these dependencies visible, identify where a transaction has stopped progressing, and provide a clear path to resolution. This provides the basis for examining how creator-commerce platforms manage cross-border payments and which design choices may improve payout reliability.

3 Evidence from African creator commerce: the Mainstack experience

Mainstack emerged from a common challenge in cross-border creator commerce: receiving payments from international customers did not always mean timely access to usable local funds. Its co-founder,

Ayobami Oyaleke, described experiencing payment delays of three to four weeks and high transaction fees while working with US companies from Nigeria (Miller, 2023). In January 2022, the company launched a pre-beta product combining online storefronts with payment functionality. According to Miller (2023), it attracted approximately 3,000 users and processed $100,000 in transaction volume within one month. These early figures suggest demand for simpler cross-border commerce infrastructure, although they do not, on their own, establish the prevalence of payout failure across African creators.

Mainstack subsequently expanded its offering to include digital products, ticketing, analytics, and international payment capabilities. Its role in the 2025 Moonshot conference further illustrates the demands placed on platforms serving international customers: the event attracted about 6,000 attendees from 39 countries, and its organizers reported processing payments across more than 21 countries (Miller, 2023; Condia, 2026). These capabilities illustrate how multi-currency support and transaction visibility can help platforms manage geographically dispersed commerce. However, the available evidence does not establish their direct effect on settlement times or payout failure rates.

The case supports this study's central argument: cross-border commerce requires more than successful payment acceptance. Connecting international transactions to suitable payout channels and clear transaction records can reduce friction in currency conversion, reconciliation, and local disbursement. For platforms serving African creators, the broader design challenge is to coordinate these stages so that internationally collected payments become accessible, predictable domestic income.

4 Designing more resilient settlement systems

The preceding analysis has suggested that improving creator payouts requires more than adding another payment method. The required settlement architecture must remain reliable when currencies, payment rails, institutions, regulatory requirements, and transaction conditions differ. A resilient cross-border payment ecosystem enables the continuous, reliable movement of value across jurisdictions, supporting trade and financial inclusion. At the same time, persistent inefficiencies can undermine systemic stability, increase fragmentation, and constrain long-term economic growth (Lammer et al., 2026). Resilience is not defined by how quickly a transaction is processed, but by whether value continues to move reliably when disruptions occur and whether the system can recover without compromising the transaction itself. Malaika et al. (2025) emphasize that vulnerabilities can arise across connectivity infrastructure, payment systems, intermediaries, payment solutions, and user access, making resilience an ecosystem property rather than a feature of a single payment interface.

A resilient architecture should therefore be multi-layered, separating customer-facing payment initiation from routing, foreign-exchange execution, settlement, reconciliation, and payout. This allows operators to upgrade or replace individual components without redesigning the entire transaction chain. Reslow et al. (2024) identify technical infrastructure, customer-facing functions, and financial functions such as foreign-exchange provision as distinct responsibilities within cross-border payment arrangements. Their analysis also shows how routing hubs and standardized gateways can connect domestic instant-payment systems while incorporating functions such as FX quotation and payment processing. For African markets, this modularity matters because payment infrastructures remain unevenly interconnected. This aligns with Ricci et al. (2025), who identified

interoperability, governance, data management, scalability, and currency-of-settlement arrangements as central design issues for regional payment systems.

The second requirement is intelligent routing and currency conversion, ensuring each transaction follows the most efficient path for its destination, currency, and settlement conditions rather than being processed through a single standard route. Routing decisions can consider the destination currency, available payment rail, liquidity position, settlement window, transaction cost, and applicable compliance requirements. In cross-currency systems, this also means determining where conversion should occur and which available liquidity source provides the most reliable route. Reslow et al. (2024) show that different cross-border payment models allocate FX provision and settlement responsibilities differently, while their analysis of cross-currency settlement highlights the importance of 24/7 availability and payment-versus-payment mechanisms in reducing settlement risk. The objective goes beyond choosing the cheapest route for every transaction; it is to direct payments through channels that balance cost, liquidity availability, processing speed, and settlement reliability.

A third layer is continuous transaction and settlement monitoring, as real-time processing enhances resilience only when institutions can quickly detect emerging issues, track transactions throughout the settlement cycle, and respond before disruptions escalate into failures. Monitoring systems should track transactions across their lifecycle, including authorization, routing, FX conversion, settlement status, reconciliation, and payout. Desai et al. (2024) demonstrate the potential of machine-learning methods to detect anomalous transactions in real time within high-value payment systems, particularly when operational outages or other abnormal events might otherwise go undetected. Complementing this, Shanmugam (2025) shows that real-time reconciliation can identify missing, duplicated, or failed transactions earlier than conventional batch-based processes by continuously comparing transaction events with authorization, clearing, and settlement records. For creator platforms, the practical implication is that monitoring should identify whether a payment succeeded, where the transaction currently sits, and what prevents it from progressing.

Monitoring should be paired with automated reconciliation and exception management. Structured payment data lets systems match transaction identifiers, amounts, counterparties, currencies, and settlement records without requiring manual review of every discrepancy. Josyula (2024) argues that ISO 20022 can improve payment-data richness and interoperability, although its benefits depend on effective implementation, data migration, and regulatory alignment. A resilient payment platform requires more than shared messaging standards; it needs a unified transaction record and automated exception management to identify and resolve issues such as unmatched payments, incorrect beneficiary details, failed currency conversions, and settlement delays before they disrupt the payment lifecycle.

Lastly, resilience depends on effective failure detection and recovery mechanisms, recognizing that outages, connectivity issues, liquidity shortages, and disruptions across interconnected institutions are inevitable and must be managed rather than simply prevented. Griffiths and Joyce (2024) observe that, in retail payment systems, third-party dependencies drive many operational incidents and that failures can propagate through interconnected payment infrastructures. A resilient creator-payment architecture must handle network interruptions with automated retries, state retention, and duplicate prevention to ensure temporary delays do not become permanently unresolved payouts. Rather than optimizing speed, cost, or compliance in isolation, platforms servicing African creators must adopt an adaptive settlement system that seamlessly balances these competing operational

priorities. This means true platform success depends on how consistently platforms convert international receipts into reliable local income for creators.

5 Implications for African digital commerce

Reliable settlement empowers creators to participate in global markets by removing friction from receiving, converting, and accessing international funds through local channels. Because knowing when earnings will arrive is as critical as how fast they move, predictability can support business planning and cash-flow management. Clear timelines, transaction visibility, and dependable exception handling give creators the financial stability to manage cash flow and reinvest in growth. Ultimately, this level of payout reliability transforms digital platform access into true, sustainable economic participation.

At the infrastructure level, the issue points to a broader requirement for African digital commerce: payment systems must become more interoperable across currencies, institutions, and national markets. Ricci et al. (2025) identify interoperability, stronger digital infrastructure, and cross-border cooperation as key to creating a more efficient, secure payment environment in Sub-Saharan Africa. Evidence from Copestake et al. (2025) similarly shows that interoperability can increase digital payment usage where payment networks are fragmented, although their empirical analysis is based on India rather than Africa. To operate effectively across fragmented African markets, platform settlement architecture must natively support diverse currencies, payment rails, compliance rules, and domestic mechanisms while maintaining a unified transaction record.

The broader implication is that reliable settlement is more than a back-office function of creator platforms. It is part of the infrastructure through which African businesses participate in the global digital economy. As payment networks become more interoperable, the value of digital commerce increasingly depends on whether revenue generated across borders can be transferred, converted, reconciled, and delivered locally with reasonable predictability. Strengthening this settlement layer can therefore help turn global digital demand into more usable economic value within African markets.

6 Conclusion

Reliable cross-border creator commerce depends not just on accepting payments, but on ensuring funds are converted, settled, reconciled, and delivered through accessible local payout channels. When these processes fail, creators face avoidable delays, costs, and uncertainty that limit the practical value of participating in global digital markets.

The Mainstack experience shows why settlement must be a core part of creator-commerce infrastructure, not a back-end function. Addressing payout failure requires coordinated systems for interoperability, intelligent routing, reconciliation, monitoring, and recovery, designed around the realities of African financial markets. The priority shows payment success must be measured by creators receiving usable funds reliably and on time.

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