



Stablecoin as Infrastructure

How fintechs are using
programmable dollars to rewrite
the rules of global finance

 **privy** a stripe company

Privy powers secure, scalable wallet infrastructure that makes it easy for modern fintech applications to build on stablecoin rails. Our modular and flexible stack provides enterprise-grade security, compliance-ready key control, and consumer-grade UX designed to convert.

Learn more at privy.io or reach out directly to sales@privy.io to schedule a conversation.

Contents

Introduction	5
01 What are stablecoins?	6
02 Designing your stablecoin stack	12
03 Navigating a still evolving landscape	17
04 Beyond payments: what's next for stablecoins?	21



\$

₹

Bar chart icon

₹

Introduction

Circle's IPO marking the biggest crypto listing since Coinbase's 2021 debut. A landmark partnership between Shopify, Coinbase, and Stripe bringing stablecoin payments to merchants worldwide. And the US Senate's recent passing of the GENIUS Act, offering a clear regulatory framework for stablecoin issuance in the United States.

It is no surprise that the summer of 2025 is being dubbed *Stablecoin Summer*, a term that echoes DeFi Summer in 2020, when decentralized finance protocols saw a surge of popularity and adoption and captured the world's attention.

But where DeFi Summer was defined by hype cycles and short-term incentives, stablecoin adoption today is quieter, and more foundational. The products being built now aren't speculative. They're payments apps, neobanks, marketplaces, and treasury tools operating in production around the world.

Still, the question remains: how much of today's momentum represents a step change in global finance, and how much is just noise?

At Privy, we've spent the past three years building infrastructure that makes programmable money movement not just possible, but secure and simple to use. Today, our embedded wallets power more than 75 million accounts and sit inside over a thousand products, from fintech apps to global marketplaces.

This primer gives you the essential pieces to understand stablecoins, and whether it has a role to play in better serving your users. It also walks through how to design and scale with stablecoins in your product, so you can make the infrastructure decisions that future-proof your business.

Let's dive in.

01

What are stablecoins?

Stablecoins are digital currencies commonly pegged 1:1 to fiat currencies like the US dollar. Unlike other cryptocurrencies that are more volatile in nature, stablecoins offers the reliability of traditional money with the speed and programmability of blockchain networks.

To maintain its stable value, the most widely used examples today, such as USDC or USDT, are issued by regulated entities and backed by 1:1 by dollar reserves. They are designed to be redeemable at any time for the exact amount they represent.

This section provides you with an overview of how stablecoin rails work, and what real-world applications they are currently powering.

Why stablecoin payments matter

At its core, stablecoin payments let any individual or business convert dollars into a digital asset that can be sent globally, settled near-instantly, and integrated directly into software flows.

Traditional money movement systems like SWIFT, ACH or card networks rely on a patchwork of banks, processors, and clearinghouses. Each layer adds delays, fees, and potential points of failure along the way.

Stablecoins cut through that by settling directly on a blockchain: an open, global ledger where value can move 24/7, near-instantly, and without needing permission from any middlemen. What this unlocks:

- Fast settlement
- Low transaction costs
- Public state ensures end-to-end transparency and auditability
- Native programmability (e.g. conditional payments, splits, or time-based triggers)

How stablecoin payments work

Moving money on stablecoin rails is simple in theory, but the stack underneath is quietly powerful. Each stablecoin transaction follows three phases: entry, transit, and egress.

In the following illustration, we assume a user is transferring US dollars from the US to a recipient in Mexico.

1. Entry: Converting fiat to stablecoins

This is where value enters the system. A user or business converts US dollars into stablecoins by sending a wire transfer or making a bank or card payment to a regulated issuer like Circle. Once received, an equivalent amount of USDC is issued onchain and deposited into a wallet. This transforms what previously were traditional dollars into programmable digital assets.

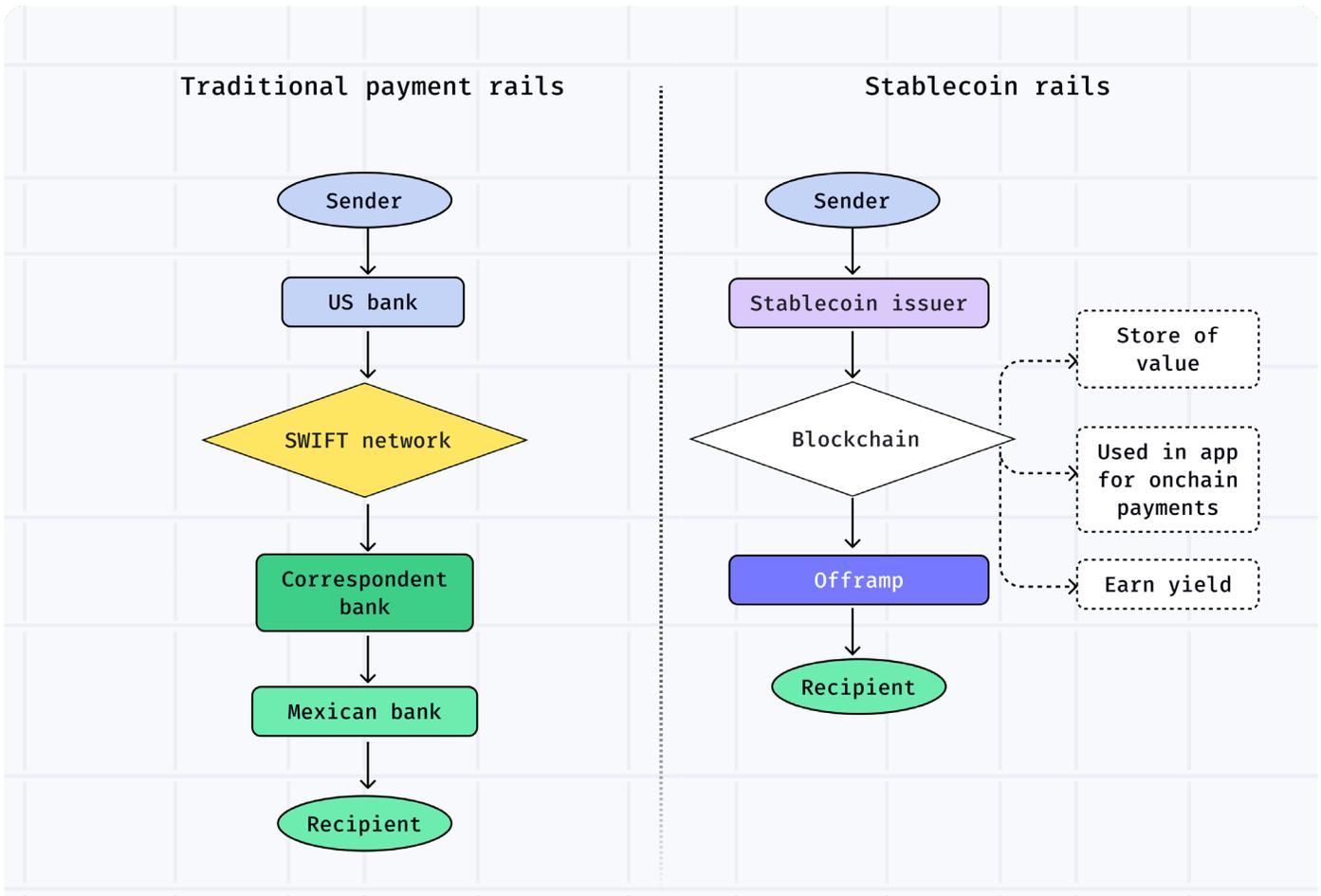
2. Transit: Sending value onchain

Once stablecoin tokens are issued, they can be transferred between wallets on the underlying blockchain network. This is the programmable “rail” that replaces existing payment systems like SWIFT or ACH. It is also where blockchain’s core advantages are most apparent through low latency, minimal cost, and native composability.

3. Egress: Converting stablecoins back to local currency

On the receiving end, USDC can be held as a dollar-denominated store of value, spent directly onchain (where accepted), or converted back into local currency (in this case Mexican peso) via an offramp like a local fintech, exchange, or banking partner.

This end-to-end flow is often referred to in the industry as the **stablecoin sandwich**: fiat enters on one side, stablecoins moves value in the middle, and fiat exits on the other. It’s a simple mental model for how programmable money moves under the hood to power real-world applications.



An illustration of how stablecoin rails work versus traditional payment rails

How fintechs are using stablecoins today

Stablecoins are already running in production inside hundreds of fintech products. Here are four broad use cases where it's driving real-world impact:

1. Cross-border payments

As demonstrated in the earlier illustration, stablecoins make sending money across borders faster and cheaper. Traditional remittances can cost anywhere from 1-4% in foreign exchange fees and sometimes even take days to arrive. On stablecoin rails, that same

flow can be settled in minutes at a fraction of the cost, sometimes down to as low as single-digit basis points.

Products like Felix are already powering a meaningful share of the US-Mexico remittance corridor using stablecoins behind the scenes.

2. Dollar access in unstable economies

In certain markets where local currencies are volatile or banks unreliable, stablecoins give users global access to dollars.

For example, an Argentine contractor working for a US-based company may prefer to be paid in USDC instead of pesos, especially as annual



inflation tops 400%. The employer fulfills payroll in dollars, while the contractor holds a stable, digital store of value and offramps to local fiat as needed.

Platforms like Dolar make this experience seamless, and let users receive stablecoins via local bank account and routing numbers.

3. Financial services beyond borders

Stablecoins also open access to yield and credit markets that aren't tied to any single geography. Traditional banks on the other hand are inherently local, and hence can only offer customers financial services tied to interest rates dictated by central banks.

Because stablecoin assets live onchain, users can tap into global financial services. This includes earning a more competitive yield, accessing additional lending markets, or using their balances for programmable payments,

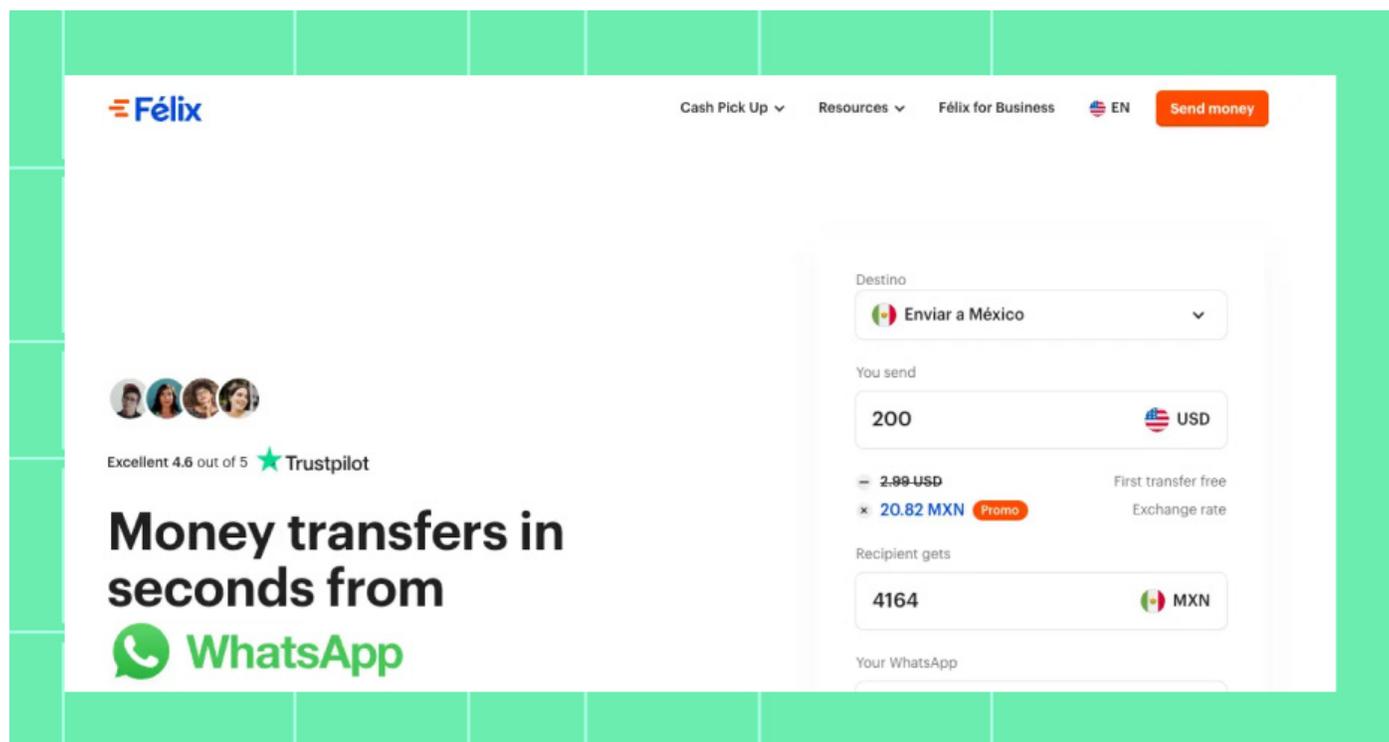
without relying on local banks or institutions. This results in higher APRs due to greater capital efficiency and elimination of intermediaries.

4. Treasury and liquidity management

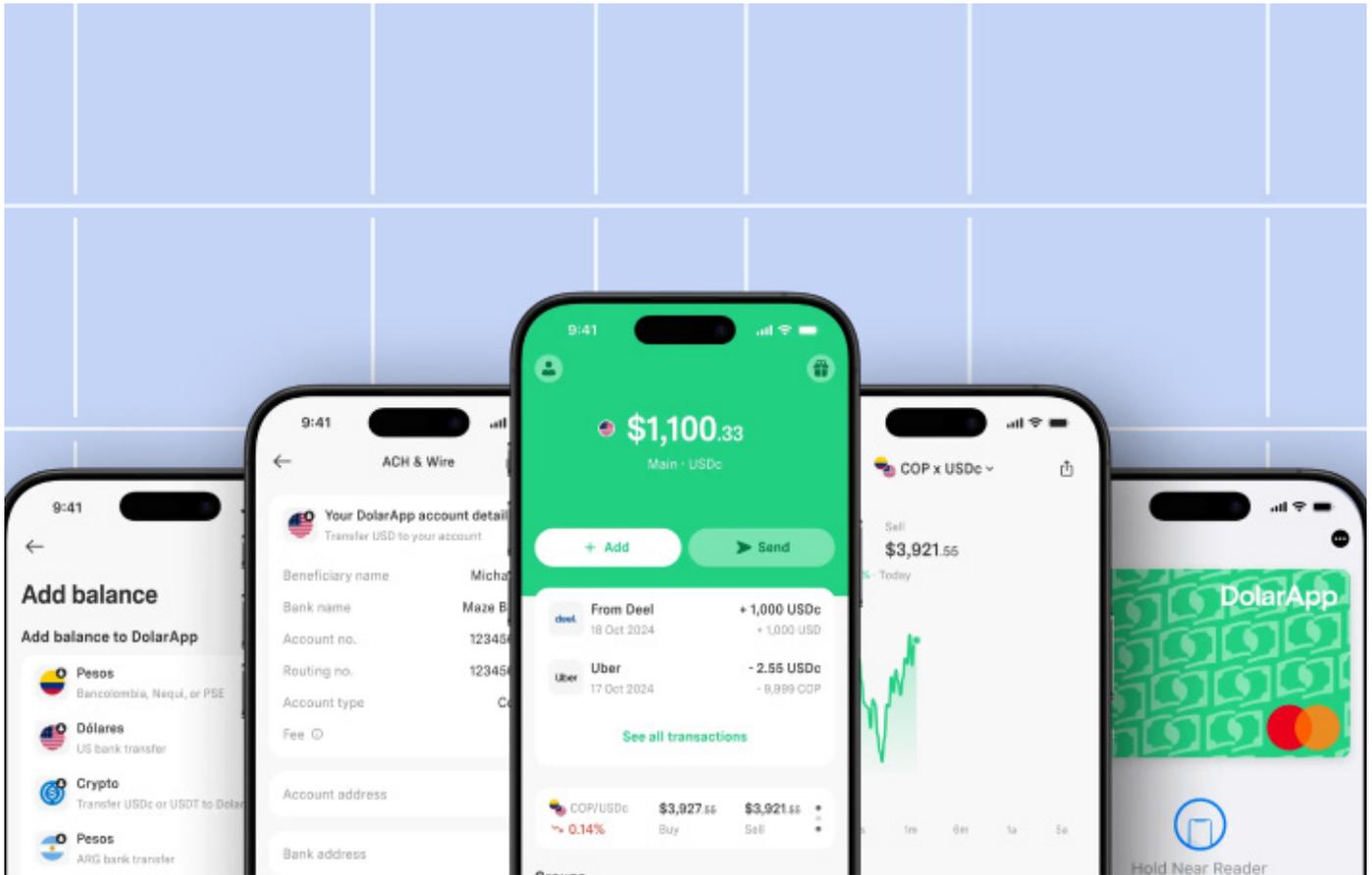
Lastly, for payment-intensive businesses and multinationals, stablecoins offer a more efficient way to manage global liquidity.

Instead of idle reserves lying across dozens of local bank accounts, companies can hold working capital in stablecoins and move it instantly where it is needed. This improves overall responsiveness, reduces capital lock-up, and streamlines global operations.

Broadridge, which powers the infrastructure behind many of the world's financial markets, now uses stablecoins to transfer value between market intermediaries more efficiently than traditional fiat rails.



Felix Pago uses USDC to facilitate cross-border transactions for remittances to Latin America



Dolar is a neobank that allows users to hold their balances in USD-denominated stablecoin

Summary of stablecoin use cases

Stablecoin adoption continues to accelerate across a range of real-world use cases. While the primary motivations may differ, teams are turning to stablecoins as a faster, programmable alternative to traditional financial systems. The table outlines some of the most common use cases, and why stablecoin rails are particularly well-suited to power them.

Stablecoin use case	Why it works
Cross-border payments	Low fees, instant settlement, and no dependency on card networks or correspondent banks
Dollar access in unstable economies	Dollar stability, flexible spend timing, and user stickiness for the platform providing the wallet
Global financial services	Programmability, global liquidity, and optionality on how capital is deployed
Treasury and liquidity management	Faster fund flows, lower capital costs, and better responsiveness to market needs



Looking ahead

As of mid-2025, the total market capitalization of stablecoins is around \$250 billion, with daily transaction volume in the tens of billions. Analysts expect that figure to surpass \$400 billion by year's end driven by continued adoption across remittances, payroll, commerce, and global finance.

If any of these applications resonate with your product, the next section walks through how to design a stablecoin stack that's secure, scalable, and built for the long haul.

CASE STUDY

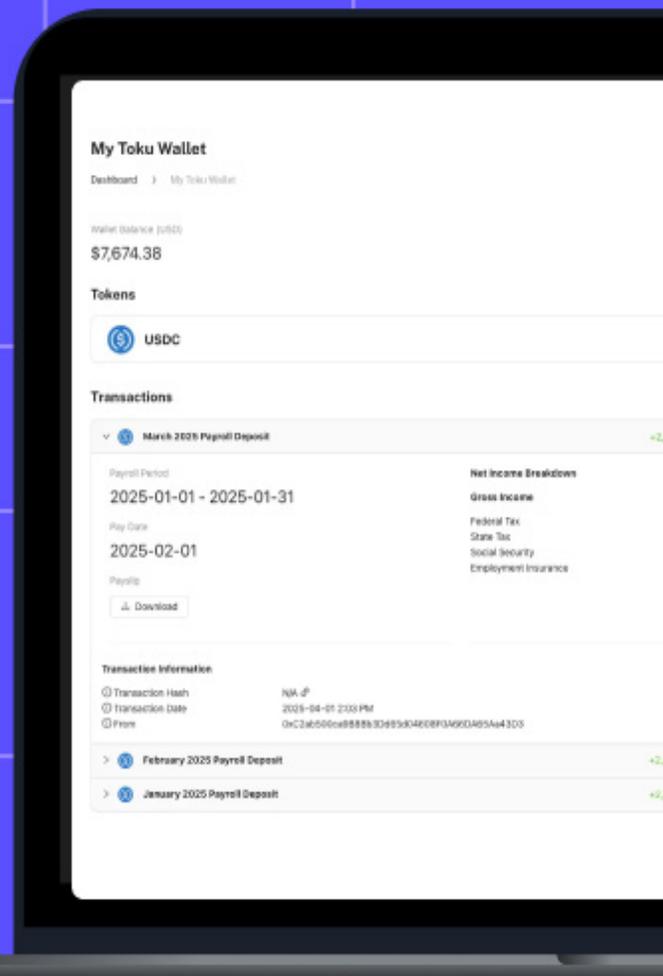
How Toku pays a global workforce across 150+ countries on stablecoin rails

Challenge

Cross-border payroll is slow, expensive, and often inaccessible for workers without traditional bank accounts. Many lose up to 5% in foreign exchange and transfer fees, with payments delayed by days or weeks.

Solution

Toku uses stablecoins (USDC) to deliver faster, cheaper payroll to a global workforce. Payments are sent instantly via email, skipping bank delays and high FX fees. Workers receive funds instantly using just their email. With Privy embedded wallets, there is no need for a separate setup or crypto know-how.



02

Designing your stablecoin stack

With stablecoins, we are seeing a fundamental shift in how value moves on the internet. Over the past few months, not a day has gone by where Privy has not spoken with a fintech, neobank, or remittance platform about their stablecoin strategy.

Some are just beginning to explore global payments or dollar-backed accounts. Others are scaling stablecoin flows across markets. Across all of them, the same questions come up: How do we get started? How do we build something reliable? And how do we avoid being locked in?

There's no one-size-fits-all architecture, but there are clear patterns.

This section outlines the core building blocks of a stablecoin-enabled product. Whether you're spinning up a new flow or layering stablecoins into an existing experience, these are the components to understand, evaluate, and own.

Back to basics

Sticking with our example of letting US-based customers send dollar-denominated value to recipients in Mexico, the core mechanics are as previously described:

- Convert fiat to stablecoins
- Send stablecoins onchain
- Offramp to local currency

However, under the hood, implementation matters. From issuers to the underlying wallet infrastructure to offramps, each component of the flow introduces tradeoffs around latency, liquidity, compliance, and cost. Building the right stack means choosing the right set of tools and sequencing them properly.

This is where orchestration platforms like Bridge come in. They provide developers with a way to abstract and manage:

- Funding and minting via issuers (entry)
- Wallet and transaction logic (transit)
- Offramp and payout mechanics (egress)

Effectively, they help to coordinate the moving pieces across fiat and crypto infrastructure, and offer a developer-friendly way to route payments, monitor balances, and scale operations without stitching multiple different integrations yourself.

The components of a stablecoin stack

A stablecoin-powered payment flow requires just a few components. Building the right stack that balances speed, cost, and flexibility however, requires thoughtful and intentional choices from the start.

Here's how we think about the core building blocks across dozens of live deployments.

1. Wallet infrastructure

The wallet is the heart of your stablecoin system. It is how users receive, send, and hold assets. This is also the part of the stack that Privy is hyper-focused on.

Wallets can also be thought of as a programmable crypto bank account. Two models dominate:

- **User-specific wallets:** One wallet per user. Easier to track balances, reduce co-mingling risk, and unlock services like yield or credit.
- **Omnibus wallets:** Pooled funds across users. These are familiar to fiat-native neobanks, but harder to scale and more complex to manage.

Across conversations with fintechs and payments providers, we are seeing a clear shift toward user-specific wallets for a few reasons: better ledgering, clearer control, and greater long-term flexibility.

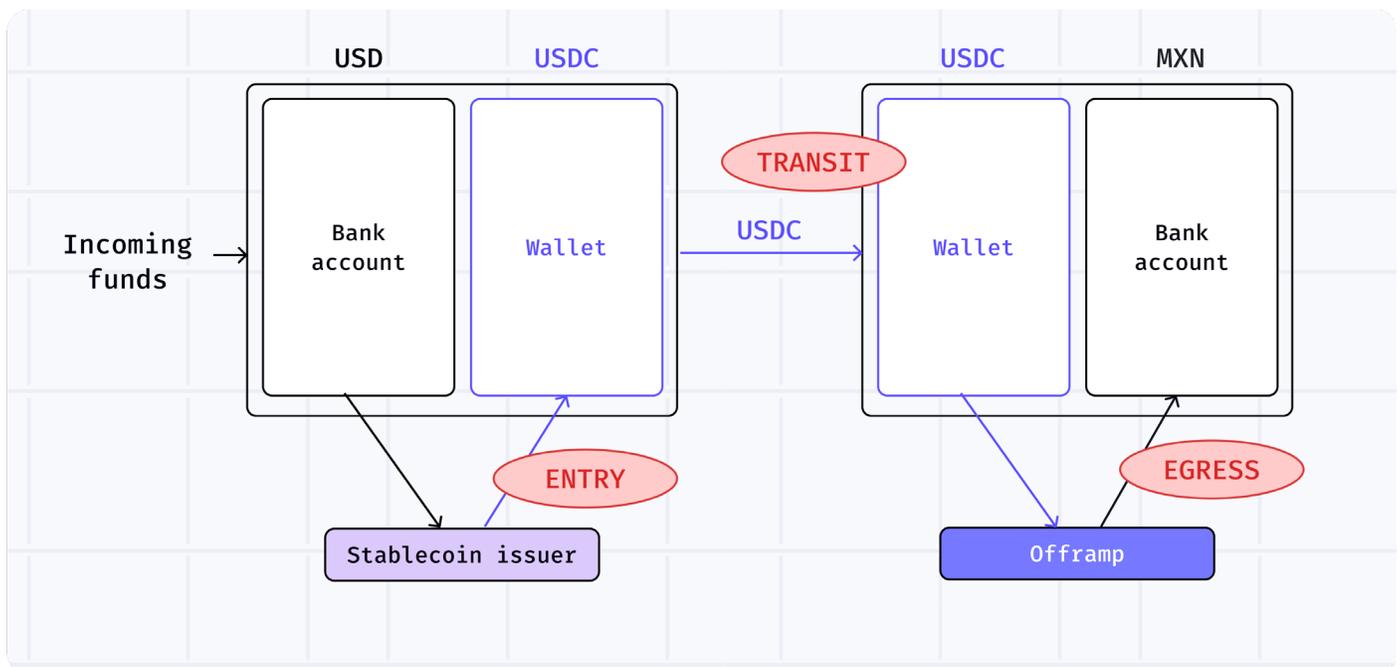
When selecting a wallet infrastructure partner, focus on three key criteria:

- **Security — how are private keys secured?**

Private keys control access to wallet assets. If they're compromised, so are user funds.

At Privy, we use a combination of hardware-protected TEEs and key sharding, as well as a fine-grained policy engine to ensure that only the intended party can access each wallet.

- **Performance — can the system scale with you?**



An illustration of how entry, transit, and egress occurs when paying with stablecoin

Your infra should keep up with your growth. Look at user volume, transaction throughput, and latency.

Privy powers over 75 million accounts and billions of dollars of volume with sub-100ms transaction latency.

- **Custody — who controls the wallet and under what rules?**

Custody defines who holds and can act on assets: your users, or your platform. The right model depends on product design and regulatory context.

Privy supports both self-custodial and platform-managed wallets. You can integrate wallets with any auth system or provision them directly via API.

Owning your wallet matters.

The wallet is the control center of any stablecoin system. Self-custodial or custodial, owning its setup is how you maintain control over your product, your users, and your roadmap.

Here's why it matters:

- **It is your account system:** Controlling the wallet means controlling the assets. Relying on third-party wallets disintermediates your relationship with your users.
- **It is your payments rail:** Owning the wallet lets you decide which chains, tokens, and on/offramp providers to support. This future-proofs your system as the ecosystem evolves.
- **It is your foundation for growth:** Wallets unlock the ability to layer on new services, such as yield, credit, or rewards, without having to re-architect your stack.

Owning the wallet means owning the app experience you wish to deliver to your users.

Lastly, stablecoin designs are likely to evolve. Presently, they are mostly backed by treasuries (i.e. fiat reserves). However, regulatory policies could eventually allow for alternative implementations, such as tokenized deposits or collateralized deposits of other onchain assets.



Modular infrastructure is key so you can experiment quickly today while still making sure your stack stays future-proofed for tomorrow.

2. Payment rails: onramp → blockchain → offramp

If wallets are the “what,” rails are the “how.” As explained previously, you need infrastructure to:

- Onramp (entry): Convert fiat to stablecoins
- Move (transit): Send over a supported chain
- Offramp (egress): Convert back to local currency, or let users spend directly

On/offramps

One can think of stablecoin flows like foreign exchange (FX) facilitators. A remittance app for example might convert USD → USDC → MXN in a single user tap.

With stablecoin rails offering a global value proposition, most products will stitch together a few regional partners to handle compliance, liquidity, and settlement cover their priority geographies.

Some common partners by region include the following:

- **US/Europe:** Bridge, HiFi
- **LatAm:** Caliza, Conduit Pay
- **Africa:** Juicy, Yellow Card

Here are a few things to consider when evaluating on/offramp providers:

- **Geographic coverage and licensing:** Does this provider have liquidity and the ability to operate in the region of interest?
- **Supported payment methods:** Does this provider support the payment methods for on or offramping needed for your intended

product flow?

- **Rates:** Are they offering the above at competitive rates, at the very least when compared to fiat alternatives?

Transit (Chain Choice)

Last but not least, you have to consider which blockchain to send and hold stablecoins on. Choose a chain with broad wallet and offramp support, and assess it on the following factors:

- Security
- Latency
- Cost per transaction

Both your wallet infrastructure and your on/offramp must support your target chain natively.

3. Card issuance

Stablecoins are not universally accepted at checkout yet, although this is gradually changing. In the meantime, there are a number of card providers such as Kulipa and Rain that issue Visa/Mastercard cards that let users spend directly from their stablecoin balance.

When selecting a card issuing partner, consider:

- **Geographic coverage:** Where can they ship, and to whom?
- **Asset compatibility:** Do they support your stablecoin and blockchain of choice?
- **Interchange:** Can you share in card revenue and add another high-margin revenue source to your business?

Final thoughts

Stablecoins unlock real value for businesses. However, building on them means having to be highly cognizant of infrastructure decisions, regulation, and cost.

Further, there remains a “singleness of money” problem, where users expect a dollar to feel like a dollar, whether it’s in a bank, a wallet, or onchain. But that’s not the case yet.

Bridging that mental gap requires abstraction — not just on the backend, but in the user interface itself. That’s where deeply modular wallet infra matters. Privy lets you integrate different types of stablecoin flows and redemption logic under a unified surface, so your users don’t have to worry about what’s happening under the hood.

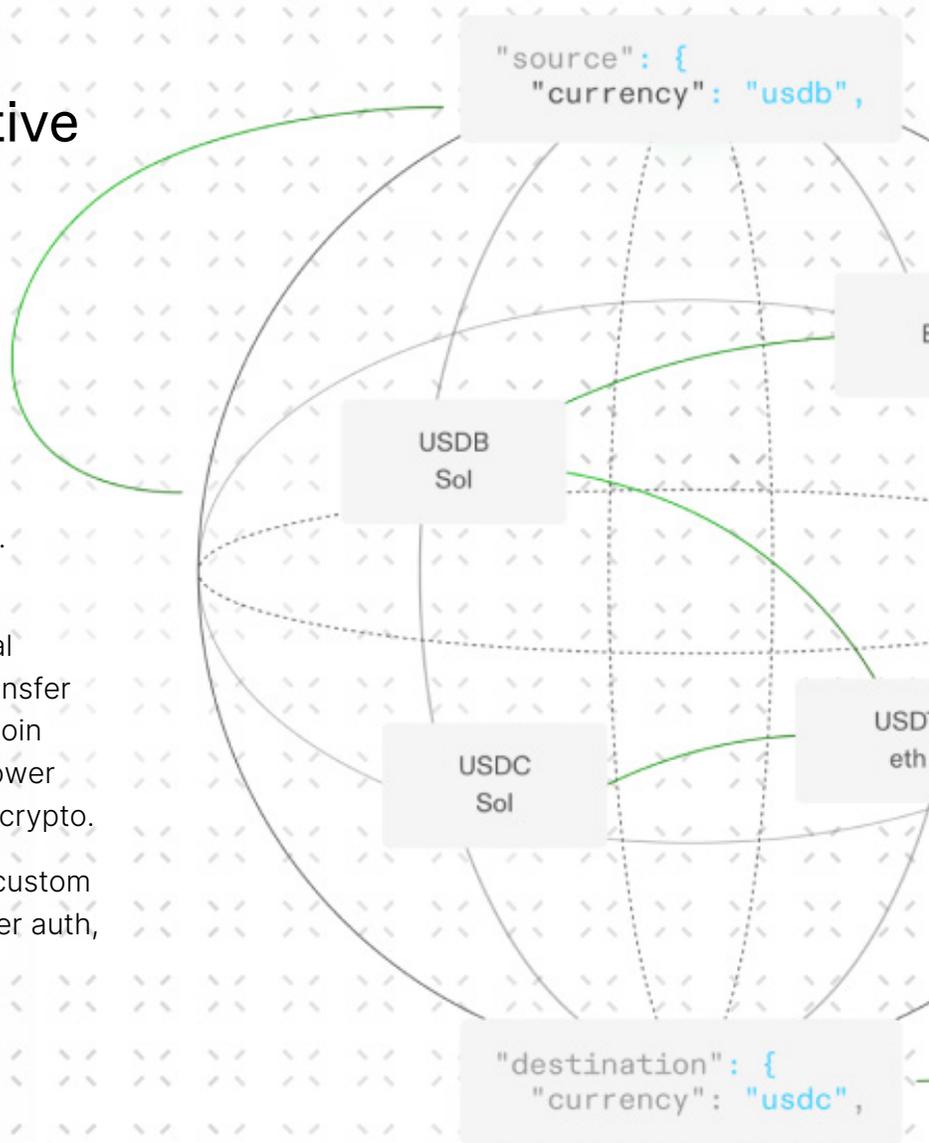
IN PRODUCTION

How Privy powers native onramp and offramp flows with Bridge

Privy offers native support for Bridge, letting you integrate fiat onramps and offramps directly into your app. From bank linking and KYC to ACH, SEPA, or wire transfers, the entire flow is smooth, programmable, and built right into our API.

Apps like **Karsa**, a digital wallet for saving in dollar-denominated stablecoins via local payment methods, and **Pana**, a money transfer app enabling instant cross-border stablecoin transfers, already use Privy + Bridge to power seamless money movement in and out of crypto.

Prefer another provider? Privy supports custom integrations too, giving you full control over auth, wallets, and compliance from end to end.



03

Navigating a still evolving landscape

Stablecoin infrastructure is advancing fast but unevenly. While orchestration and wallet providers have helped mature some of the core primitives, much of the broader stack remains in flux, especially at the edges.

Building on stablecoin rails also means grappling with real-world complexity. This includes fragmented liquidity, evolving regulatory environments, and inconsistent compliance requirements across regions. Teams must carefully design around these limitations, balancing user experience with operational feasibility.

That said, the opportunity remains massive. What began as a simple cross-border settlement rail is quickly becoming a programmable financial layer and one that enables yield, credit, and composable money movement across apps and services.

In this section, we explore areas where innovation and clarity are still needed, and how to future-proof your product as the ecosystem matures.

The offramp bottleneck

One of the biggest constraints in stablecoin-powered products today is access to reliable, liquid offramps, especially across emerging market corridors. While the first step in stablecoin money movement is to onramp value from fiat to crypto; the ability to convert that value back into local fiat on the other side is just as critical for real-world utility.

Offramp availability varies widely by region, and is shaped by local regulation, banking partner risk appetite, and liquidity on crypto rails. Many countries lack compliant, scalable offramp infrastructure, which makes it difficult to guarantee that funds can move all the way through to a recipient's bank account.

Until more merchants accept stablecoins as a form of payment, the need for reliable offramping solutions remains. At Privy, we're seeing a surge in direct card issuance atop stablecoin wallets. This bypasses traditional offramps and enables users to spend directly from their balance. Card issuers like Rain and Kulipa for example allow users to link wallets to Visa or Mastercard rails, making stablecoins as spendable as cash, even in regions where fiat offramps are limited.

Compliance isn't plug-and-play

A stablecoin-powered payment flow requires While building on stablecoin rails skips some of the friction of traditional financial systems, compliance still remains one of the biggest operational lifts in practice.

While moving money onchain via stablecoins is technically permissionless, users and endpoints still exist in regulated fiat jurisdictions. This means having to adhere to Know-Your-Customer (KYC), Know-Your-Business (KYB), and Anti-Money Laundering (AML) programs. These requirements vary significantly depending on geography, business model, and licensing structure.

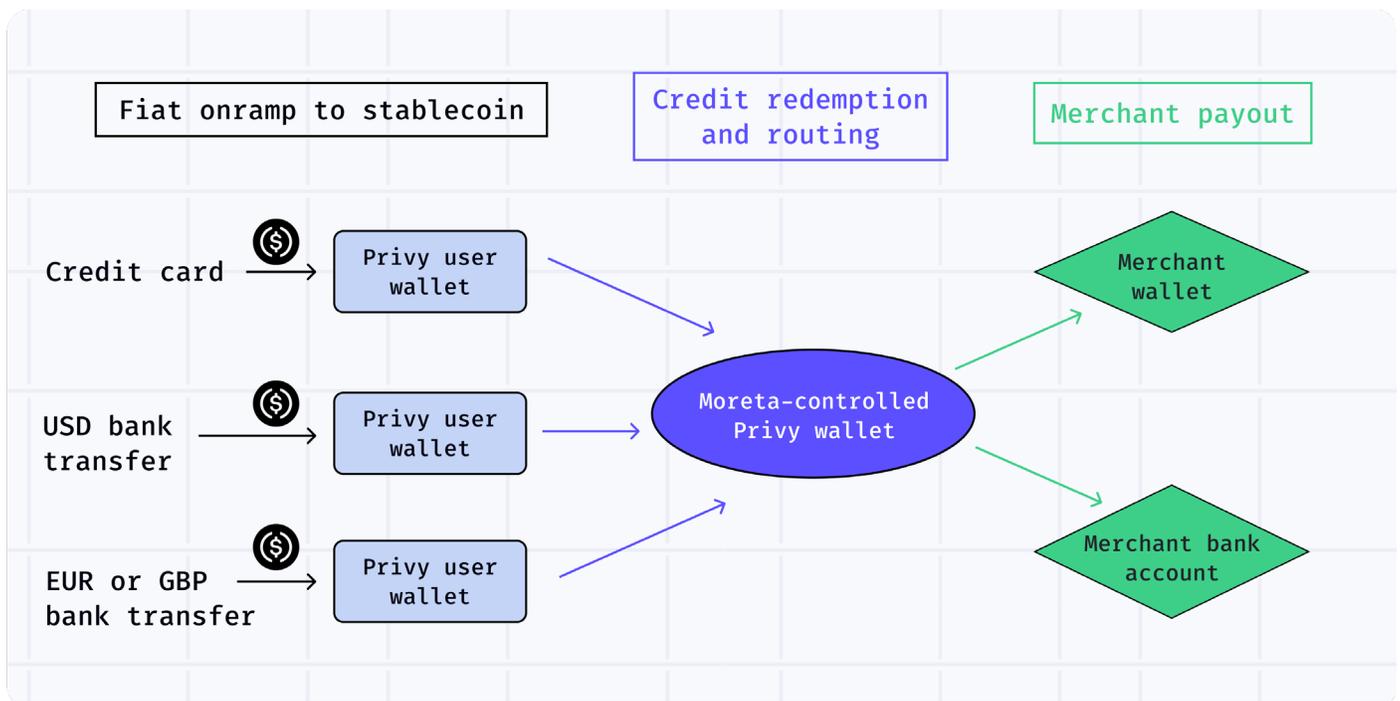
In practice, this means builders often need to stitch together compliance policies that bridge both onchain and offchain worlds. This introduces not just legal costs, but also product, operational, and UX tradeoffs. Teams must determine where responsibility for compliance lives: with the protocol, the app, the wallet provider, or all three.

We saw this in action with Moreta, a payments product built on Solana that lets users pay local merchants abroad via QR codes. Moreta partnered with Coinflow to handle the fiat onramp, making it easy and cost-effective for users to fund their accounts. Coinflow credits the user's Privy-powered wallet 1:1 with USD-denominated credits, which are later redeemed in the background and settled in USDC.

This structure offered both UX and compliance advantages. By avoiding direct onramping or custody of USDC by end users, Moreta was able to stay within the bounds of their compliance model, while still enabling fast, stablecoin-powered payments. It's a clear example of how thoughtful product architecture and partnerships across the stack can help teams navigate regulatory complexity without compromising usability.

As with offramping, there is no one-size-fits-all solution. Some startups integrate with compliance-as-a-service providers; others build





How Moreta integrated stablecoin payments with Privy and Coinflow

in-house. But the most successful products design compliance as a core feature, not an afterthought, so they can scale across borders while staying aligned with evolving regulation.

Regulation: from uncertainty to catalyst

Stablecoin regulation is increasingly commonplace today. Around the world, policymakers are beginning to define stablecoins not just as crypto assets, but as a new class of financial instrument that needs to be actively supervised and integrated.

In the U.S., the recent passing of the GENIUS Act (Guaranteed Electronic National Infrastructure for Uniform Stablecoins) by the US Senate marks a major milestone. It offers long-awaited regulatory clarity around stablecoin issuance and reserve requirements for US-based projects and financial institutions.

Meanwhile, in the EU, the MiCA (Markets in Crypto Assets) framework lays out specific provisions for stablecoin issuers as a way of regulating digital assets.

That said, regulation remains uneven. Many countries still operate under patchwork guidance, forcing teams to navigate outdated laws or face geographic limitations. This fragmentation creates friction, especially for consumer products that aim to scale globally or integrate with local banking infrastructure.

Clear regulatory frameworks don't just reduce risk. They also unlock entirely new classes of products, from onchain savings accounts to yield-bearing instruments. As infrastructure improves, stablecoin adoption will increasingly hinge not just on what's technically possible, but on what is legally viable.



Jul 2025



Aug 2025



Jan 2026



Jul 2026



Effective date
Nov 2026

GENIUS Act enacted, rulemaking clock starts.

Start of 60-day public comment period on innovative strategies on BSA/AML.

Treasury to submit report to Congress on innovative BSA/AML proposals.

Regulations to be finalized. Issuers can submit applications to become permitted payment stablecoin issuers (PPSI).

Payment stablecoins may be issued only by PPSIs pursuant to the Act.

GENIUS Act Implementation Timeline

CASE STUDY

How Kulipa powers stablecoin-backed card payments with a dedicated wallet flow

Challenge

Offramping stablecoin balances into real-world spending is often fragmented, requiring multiple integrations and custody layers. Card programs typically involve high upfront complexity, long timelines, and compliance overhead.

Solution

Kulipa makes it easy for wallets to launch stablecoin-backed debit cards. Users move funds from their main wallet to a Privy embedded wallet as spendable balance, while Kulipa handles payment authorization and settlement. This setup will be going live with Mass, a mobile DeFi app.



04

Beyond payments: what's next for stablecoins

The most exciting part about continued development in stablecoin infrastructure isn't moving money. It's about its programmability and building on it.

As adoption grows, stablecoins become more than just a fast settlement layer. Instead, it lays the foundation for more composable and interoperable financial systems. The more wallets can be actively used as payment applications, and the more onchain credits can flow into real-world purchases, the less critical offramping becomes.

This section covers how this shift opens the door to a growing economy built on stablecoin rails, and highlights how financial applications will not only operate faster but do so in a way that is more connected.

From settlement to software

Stablecoins' first promise was fast, low-cost settlement, especially across borders. Its true potential however lies well beyond that.

Once we think about stablecoins as programmable money, we look to it not just to settle transactions, but also to enable more complex financial workflows. This makes stablecoins a natural fit for everything from one-to-many payouts (like payroll and marketplaces) to cross-border treasury operations.

In the latter, companies can automate internal transfers, streamline multi-currency operations and maintain tighter control over liquidity. This is especially valuable for global teams managing capital across subsidiaries, where traditional systems introduce unnecessary delays, FX risk, and reconciliation overhead.

We're starting to see stablecoins power not just how money moves, but how financial products function more broadly. This includes wallets that automatically route payments across borders, or smart contracts that trigger payouts or actions, such as portfolio rebalancing, based on predefined rules.

One of the most exciting trends we're seeing in recent Privy conversations is how stablecoin rails have unlocked the ability to provide new, yield-driven product experiences.

Yield as the product

In traditional finance, yield often feels inaccessible, and is tied to complex products, hidden behind institutions, or limited to accredited investors. But in crypto, yield is native. Stablecoin infrastructure allows yield to

be surfaced directly in the products people use every day, making it not just a financial reward, but a core part of the user experience. Whether it's earned through lending protocols, tokenized treasuries, or staking mechanisms, yield in crypto is global, always on, and fully onchain.

What makes this even more powerful is how programmable it is. With embedded wallets and smart contracts, developers can direct yield to specific users, automate payouts, or build entirely new flows — from savings accounts that earn passively to marketplaces that share yield with their communities.

At Privy, we're seeing more and more builders bake stablecoin-based yield directly into their apps. It's no longer a nice-to-have, it's becoming the expectation.

For a deeper dive on how yield works under the hood and how developers are implementing it today, check out our dedicated [Yield Primer](#).

Programming the next layer of finance

Stablecoins started as a faster way to move money. But today, it's becoming the foundation for how financial products themselves are built. As teams move beyond just payments, they're designing flows where money can be split, scheduled, or shared — automatically, securely, and without needing to involve a traditional bank in the loop.

This shift reflects a broader reality: stablecoins aren't just held, they are used. Unlike traditional capital, which often sits idle, stablecoins are liquid and designed for motion. Value is not something that just exists, but something that actively participates in the product experience.



Build with Privy

At Privy, we see a shift towards programmable money every day.

Builders are using stablecoins not just to settle value, but to encode financial logic directly into their products.

Privy's wallet infrastructure is deeply modular, session-aware, and programmable, and is designed to support this shift. With embedded wallets, session signers, and flexible permissioning, Privy helps bring money movement, compliance, and a seamless user experience together in a single flow.

We're excited to power the next generation of applications built on stablecoin rails. **If you're building in this space, [get in touch](#) or [start building](#) with Privy today.**