

# Stablecoin Integration Opportunities for Google

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\* This is not an officially commissioned report by Google, and was developed using only publicly available information.



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### **The Stablecoin and Payments Landscape**



#### **Understanding Stablecoins**

**Definition**: Stablecoins are cryptocurrencies pegged to stable assets like fiat currency or commodities to reduce volatility.

**Types**: Fiat-collateralized (e.g., USDC), crypto-collateralized, and algorithmic stablecoins.





#### **General Stablecoin Advantages**

- 24/7/365 operation times
- Near instantaneous transactions and settlement times
- Eliminated intermediaries leading to 0.1%-0.15% fees compared to 1%-3% for

legacy systems

• Price stability



## **Using Stablecoins**

- 1. Obtain through a centralized exchange
- 2. Store in a compatible wallet
- 3. Send/receive funds







FAO

>

SINANCE Buy Crypto Markets Trade - Futures	✓ Earn Square ✓ More	re Y	Q	🛓 Deposit	Θ	Ξ	ŝ.	Ξ	(;)	۲
Buy & Sell Recurring Buy Deposit Fiat Wi	Price Spend Fee Receive	1 USDC ≈ 0.91456823 EUR 120 EUR ≈ 131.20945607 USDC 2.4 EUR ≈ 2.62418912 USDC 128.58526694 USDC			<b>i</b> 0	rders	82 F	AQ		
	<b>128.585</b>	526694 USDC								
	Price	1 USDC ≈ 0.91456823 EUR								
	Fee	2.40 EUR								
	Pay With	📼 Google Pay (VISA/Mastercard)								

I have read and agree to Bifinity's Terms of Use and Privacy Policy and I authorize Bifinity to debit my chosen payment method for the amount above on 2024-08-29.

#### Confirm

The fiat/crypto exchange service is powered by Bifinity UAB.



## **Using Stablecoins**

- 1. Obtain through a centralized exchange
- 2. Store in a compatible wallet
- 3. Send/receive funds

9:41	10:02		.ıl ≎ ■,
Overview Spot Funding	)verview Sp	oot Funding	Margin Future
Total Value (BTC) 👁	Total Value (BTC <b>*****</b>	C) 📎	
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	s ARS		*****
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			-



## **Using Stablecoins**

- 1. Obtain through a centralized exchange
- 2. Store in a compatible wallet
- 3. Send/receive funds

Funding Wallet (BTC) 🔘 Ó 50 **1.23421421** ≈ \$23,435.12 Amount Spent Amount Received > 0 BTC 0 BTC ≈ \$23.435.12 ≈ \$23,435,12 Use Binance App scan to pay Pay **Recent Payme** Starbuck Coffee 2019-09-12 12:00: Starbuck Coffee 2019-09-12 12:00:



#### **Accessibility and Fees**

- Obtaining via centralized exchanges simple but slow (KYC/deposit)
- Withdrawal fees
- Currency exposure for non-USD buyers is important









#### Jurisdictions with implemented regulation

#### How easy or hard is it for these groups to use stablecoin?

Country	Issuer Outlook	User Outlook	Corporate Outlook
EU	Mixed (getting easier)	Easier	Mixed (getting easier)
Japan	Harder (licensed banks)	Easier	Harder
Singapore	Strict (clear regulation	Easier	Moderate (getting easier)



#### Jurisdictions working towards regulation

#### How easy or hard is it for these groups to use stablecoin?

Country	Issuer Outlook	User Outlook	Corporate Outlook	
United States	Harder (for now)	Mixed (heading towards easier)	Mixed (heading towards easier)	
Australia	Easier (in progress)	Easier	Easier	
United Kingdom	Easier (proposed regs)	Easier	Easier	
Nigeria	Harder (uncertainty)	Mixed	Harder (for now)	



#### **Current Landscape - Domestic Payment Rails**

- FedWire: Real-time gross settlement, high fees (\$15-\$35), limited hours
- CHIPS: Net settlement, lower fees, end-of-day delays
- ACH: Low cost, delayed (1–3 days), ideal for recurring payments
- RTP/FedNow: 24/7 instant payments, but limited adoption and capped value





#### **Current Landscape - Retail Transactions**

- Card Networks (Visa, Mastercard): Fast authorization, slow settlement
- MDRs: 1–3% fee burden on merchants, passed to consumers
- Third-Party Services (PayPal, Stripe): Easy UX, high fees, delayed access to funds
- Google Pay: Competes here, but relies on the same intermediaries





#### **Current Landscape - Cross-Border Transactions**

Stablecoins are best positioned to disrupt international rails due to these inefficiencies:

- SWIFT Network: 2–5 days, multiple correspondent banks, \$25+ fees per transfer
- Currency Conversion: Hidden markups, poor transparency
- Remittance Services: High fees (up to 20%), long delays
- Google's Use Case: Payouts to global YouTube creators,

app developers, vendors









### **Stablecoin Use Cases for Google**



#### **Google's Payment Flows**

- Advertisers
  - Search Ads, Youtube Ads

- Consumers
  - YouTube Premium, YouTube TV, and

Google Play purchases

- Enterprise Customers
  - Google Cloud, Google Workspace

- Outgoing Payments
  - Youtube creators, App developers, ad

publishers, suppliers/vendors



#### **Merchant Payouts**



Partner with stablecoin issuers/exchanges

Create user-friendly interfaces for managing payments

Provide educational resources



#### **Cross Border B2B via Traditional Rails**





### **Cross Border B2B via Stablecoins**

- 24/7/365 = payments can be processed over weekends and bank holidays
- 90-95% cost reduction on translation fees
- Worldpay case study: cut processing times by 50% with T+0 settlements



## stripe

Solution 1: Existing partners like Stripe's "Pay with Crypto" at 1.5% fee

	Credit card	<b>血</b> Bank account	Debit card
4:20 Buy Bitcoin		\$150.0 Buy © ETH 0	0
<b>B</b> +	n wallet	0×41685158D395532a	5419572b9811DF56EF58337F
\$15	<b>O</b> <sup>3</sup> ay with	<b>V/SA</b> 8291	
0.0052568 B Payment Method	тс	Powered by <b>stripe</b>	Buy now
Continue			

**Buy cryptocurrency** 



#### **Solution 2: Specialized B2B Stablecoin providers**





#### **Treasury Management**







Improve operational efficiency

## Simplify reconciliation

Programmable smart contracts

Optimize cash flow with real time liquidity



### **Digital Wallets**

- Enhance Google Wallet's competitive edge
- Pay with USDC via Google Pay for lower merchant fees (potential for lower consumer prices)
- Crypto processing fees significantly lower than traditional credit card fees







## **Addressing Implementation Challenges**



#### **Blockchain's Key Characteristics**





#### The Blockchain Trilemma

Difficult to achieve all three simultaneously...

Trade-offs are necessary





### **Key Implementation Challenges**





Privacy

Refunds (Transaction Finality)





Scalability

Interoperability



### **Operational & User Concerns Solutions**

<u>Privacy</u>

#### How can we protect sensitive data?

#### Zero-Knowledge Proofs

- Cryptographic validation
- Maintains transaction privacy
- Prevents de-anonymization
- Regulatory compliant
- zkSync: EOY launch





#### **Operational & User Concerns Solutions**

Refunds (Transaction Finality)

How will refunds be processed?

**Smart Contract Dispute Resolution for Stablecoin Transactions** 





### **Technical Considerations' Solutions**

#### <u>Scalability</u>

#### How can we process high transaction volumes?

Payment System	Transactions Per Second	Finalization Time	Refund Mechanism	Fee Structure
Visa	24,000	1-3 days	120-day chargeback window	Fixed percentage fee
Ethereum	15-30	Minutes	No built-in mechanism	Variable gas fees (up to \$50 per transaction)
Solana	2,000-4,500	12.8 seconds	No built-in mechanism	~\$0.00025 per transaction



### **Technical Considerations' Solutions**

<u>Scalability</u>

#### How can we process high transaction volumes?

Layer 2	(Off-chain)
<b>Scaling</b>	<b>Solutions</b>

- Off-chain batch processing
- Two possible options
- Multiple current users for ZK
- processing 2k-20k TPS
- Significantly reduces gas fees by 10-100x

	Feature	Optimistic Rollups	ZK Rollups
	Validation Model	Transactions presumed valid, only challenged if alerted of fraud	Transactions are mathematically proven valid upfront
	Implementation Difficulty	Easy	Difficult
	Dispute Period 7 day challenge period		Near immediate
Main Advantage Quic		Quick scaling/implementation	More privacy and security



### **Technical Considerations' Solutions**

Interoperability

What if someone wants to use a different network?

**Interoperability Solutions** 

1. Accept the dominating USDC networks

- Ethereum: 60%
- Solana: 16%
- 2. Implement cross-chain solution for cases at a higher price (CCIP)
  - Chainlink, LayerZero







## Conclusion



#### Conclusion

- Evolving stablecoin environment offers many potential use cases for Google
  - Low cost and high speed transactions
  - Enhance functionality of Google Pay/Wallet
  - Streamlined payouts
- Landscape is still evolving so there are challenges
  - Regulatory uncertainty
  - Scalability and interoperability concerns

Stablecoin will play a role in the next stage of financial innovation, and Google should proactively explore stablecoin applications to shape their future payment systems.



## **Thank You!**