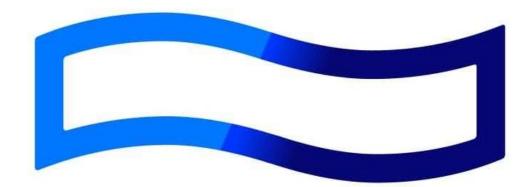


member of MASAWARA group of companies



# PayStream



## **Digital Banking Opportunity**





### **Payments**





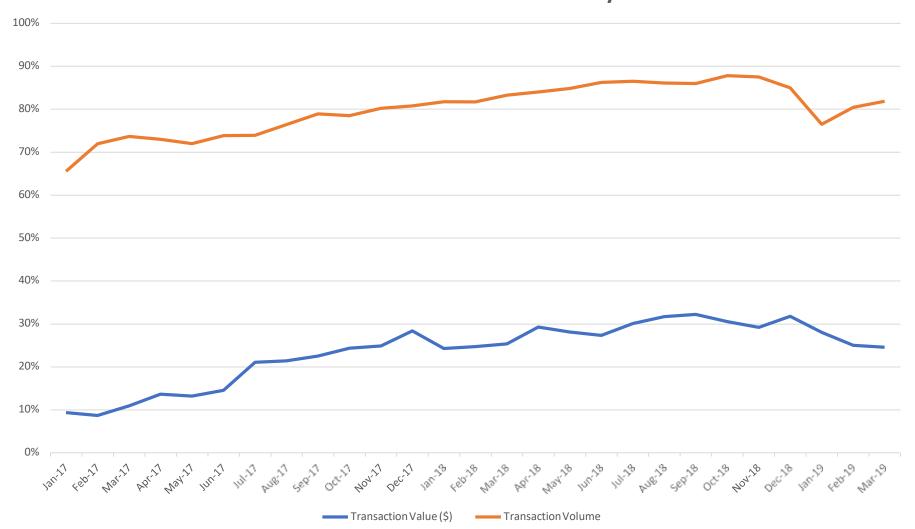
### Investments



### **Payments Market Opportunity**

## **Domestic Mobile Banking Transactions**

Mobile Transactions as a % of Total Payments



### lateral insight

### **March 2019**

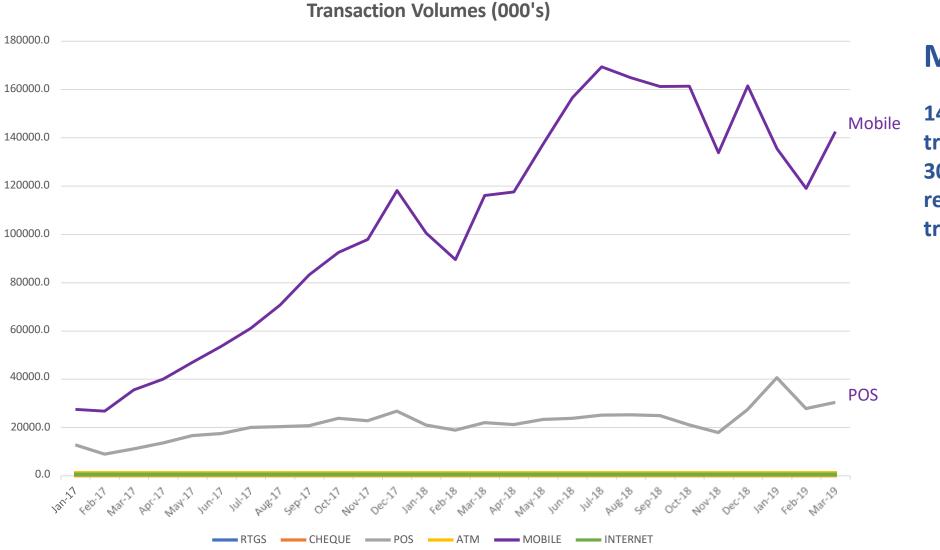
Mobile transactions represented 82% of all transactions processed in Zimbabwe and represented 25% of the total dollar value transacted via formal channels.

**EcoCash** 

9.3 million accounts90% of adult population



### **Domestic Transactions**



### March 2019

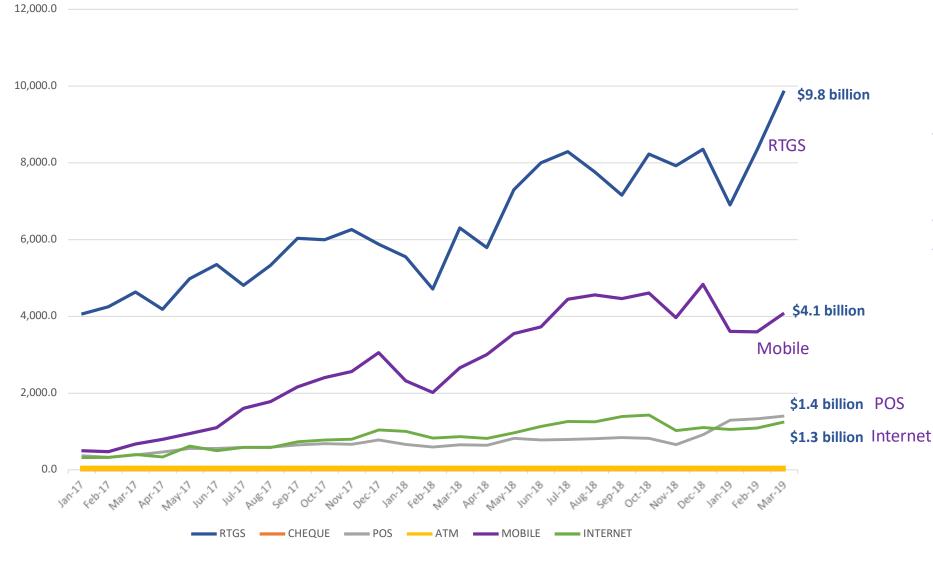
143 million Mobiletransactions together with30 million POS transactionsrepresented 99.3% of alltransactions processed

insight



### **Domestic Transactions**

Transaction Values (\$ millions)



### March 2019

143 million Mobile transactions together with 30 million POS transactions represented 99.3% of all transactions processed in transmitting \$5.5 billion.

ateral

insight



### **Payments Growth Rates**

## lateral insight

### **Transaction Values (\$ millions)**

	Q1 2017	Q1 2018	Q1 2019	17 to 18	18 to 19
RTGS	12,929.1	16,555.1	25,121.5	28%	52%
CHEQUE	21.9	13.9	10.8	-37%	-22%
POS	1,088.2	1,911.7	4,024.1	76%	111%
ATM	187.6	47.7	52.4	-75%	10%
MOBILE	1,639.5	6,991.0	11,284.0	326%	61%
INTERNET	1,042.7	2,701.9	3,400.4	159%	26%
<b>Fransaction Vo</b>	lumes (000)				
CHEQUE	85.5	68.9	44.0	-19%	-36%
POS	32832.3	61847.0	98842.6	88%	60%
АТМ	3049.3	1010.2	708.3	-67%	-30%
MOBILE	89974.3	306298.2	397160.0	240%	30%
INTERNET	642.1	1476.1	1318.0	130%	-11%





### **Remittances Market Opportunity**



## **Distribution of Zimbabweans Globally**



om

Country/Region	Zimbabwean Immigrants	Annual Remittances (USD)
South Africa	2,120,000	757,000,000
United Kingdom	400,000	327,584,668
Botswana	200,000	42,133,000
Rest of Africa	200,000	110,344,500
United States	50,000	121,655,450
Australia	20,000	26,379,233
Rest of World	50,000	40,948,084
Totals	3,040,000	1,426,044,935

### **Remittance Flows from South Africa**

late	eral
ins	ight

Origin country	is many of contral mmig ramits of y wound ge	
Zimbabwe	59%	788.7
Mozambique	15%	187.2
Lesotho	12%	206.7
Swaziland	4%	46.1
DRC	3%	14.8
Malawi	2%	14.6
Zambia	2%	14.7
Botswana	2%	21.5
Mauritius	1%	9.8
Namibia	1%	6.2
Angola	0.3%	2.9
Tanzania	0.2%	1.2
Total	3 255 406 migrants	1 314.2

#### Source: The South Africa – SADC Remittance Channel, 2012 (Note R1 = USD 0.11782)



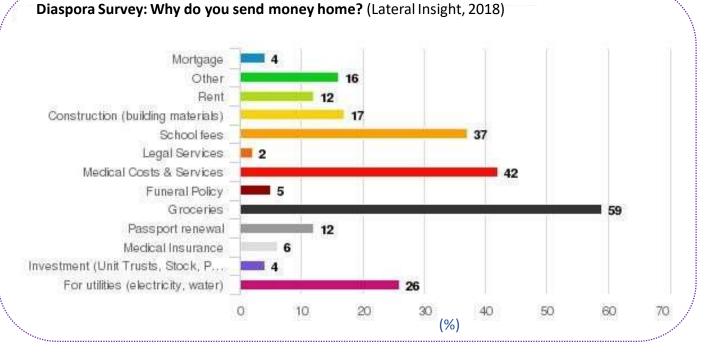
## Why Zimbabweans Remit Money Home

lateral insight

minin

**Remitting Activities of Zimbabweans in Northern England** (Magunha et al., 2009)

Items remitted during 2007	Percentage of sample who said they remitte <i>this item in 200</i>
Cash for general household	
support	55.5
Cash for food	60.2
Cash for school fees	52.6
Cash for household bills	41.2
Cash for clothes	39.5
Cash for fuel	27.8
Cash for medicines	41.9
Cash for funeral costs	40.2
Cash for purchase of	
household items	18.9
Cash for building project	20.9
Food purchased through	
remittance exchange agencies	19.9
Fuel purchased through	
remittance exchange agencies	15.0
Medicines purchased through	10.1
remittance exchange agencies	
Food items themselves	13.4
Actual medicines	16.7
Actual household items	11.5
Actual clothing items	28.2
Actual vehicles	8.8

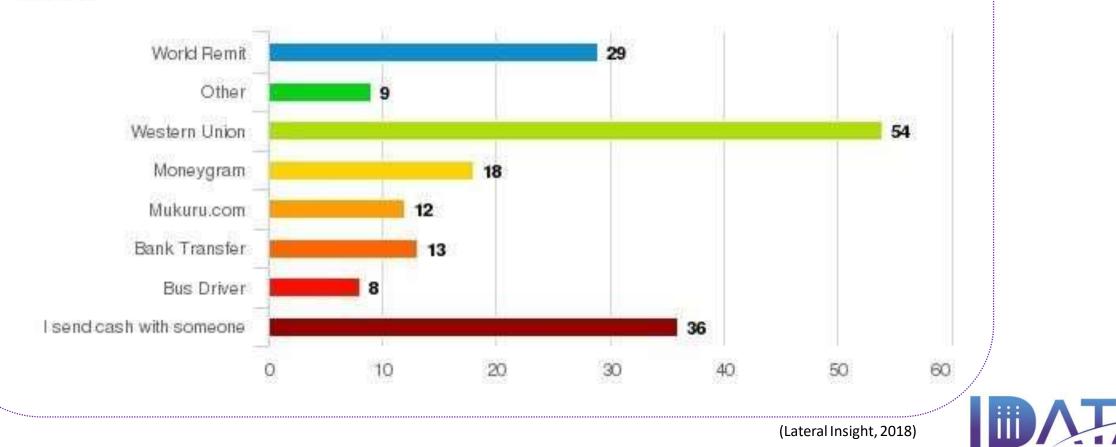


#### Use of Remittances (Maphosa, 2007)

Remittance use	Number of remittance-receiving households	Frequency
Food	79	98.8%
School fees	63	78.8%
Medical expenses	52	65.0%
Livestock	47	58.8%
Building and consumer goods	25	53.8%
Agricultural inputs	43	31.2%
Business	8	10.0%
Other	31	38.8%

## **How Zimbabweans Remit Money Home**

Please select all the methods you have used to send money home?



lateral insight

mining.com

## **Cost of Remitting Money to Zimbabwe**



Remit	ting from:	Remitting USD 200	<b>Remitting USD 500</b>
	South Africa	15.82%	9.02%
	United Kingdom	7.08%	5.02%
	<b>United States</b>	5.42%	3.52%
	Australia	7.77%	5.00%

#### Source:

https://remittanceprices.worldbank.org//sites/default/files/rpw\_annex\_q3\_2018.pdf

https://remittanceprices.worldbank.org//sites/default/files/rpw\_report\_sept\_2018.pdf



### **Our Team & Relevant Experience**

#### Nhena Nyagura

BSc Information Systems (Major - Software Engineering)

Standard Chartered Bank ATM Network & Core Banking Admin Renaissance Merchant Bank Non Exec Director Chair IT Steering Committee (RFHL)

Mateen Ashraf MSc, Network & E-Business

#### TCS

Assurance & Cybersecurity Digital Consulting Sr. Developer AML Dev Ops Scrum Consultant Oxford Blockchain Strategy

#### Kudzai Nyagura

MSc Information Systems (2020)

#### IBM

Managing Consultant – Mobile Strategy & Design Managing Consultant – Strategy & Analytics Lead Business – Digital Channels Security Nationwide Building Society (NBS) Snr Business Analyst – NBS Internet Banking

#### **Mudiwa Mvere**

**BSc Computer Networks** 

President Computer Society of Zimbabwe IFIP Security and Privacy Technical Committee member



#### World's Largest Building Society

GBP 209 Billion Assets Under management



insight

#### This team delivered the mobile & internet banking and origination platforms

Our Approach (Go to Lean Canvas)





## The Solution (Stellar Blockchain Financial Network)



#### **Native Use Cases**

#### **Features**

Remittances Agency Banking Mobile Money Micropayments Services for Unbanked Insurance Loyalty

Real-time settlement (2-5 seconds) Regulatory compliance AML, OFAC, KYC International reach with single integration Automatic currency exchange Cryptographic secure transactions

TEM

### lateral insight

97% of the world's biggest banks are IBM customers.

90% of global credit card transactions are processed on IBM platforms.

Deloitte.

Deloitte Consulting has developed transaction platform solutions for som of its banking clients.

**Ultra Low Cost Transaction Costs** 

### **100 stroops per operation**

1 XML = USD 0.10 100 stroops = 0.00001 XML USD 0.01 = 1,000,000 operations 600,000 Transactions





### The Solution (Banking App Framework)



#### **Multi Currency** Wallets **Multi Network Multi Jurisdiction Multi Channel** Stellar 5 NPS, MTA, FX USD (₿ BLOCKCARD Ť. bitcoin eMoney, FX 4000 0000 0000 0000 GBP DEBI G Stelar EE CARDHOLDER VISA ethereum Crypto PayStream Download on the ZAR ZIM SWITCH App Store Crypto ZWD GET IT ON Google Play



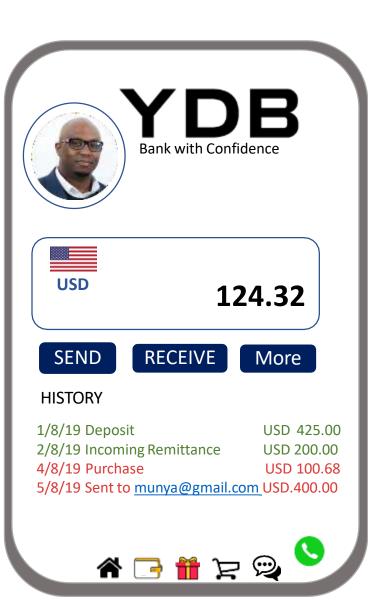
## The Solution (Your Digital Bank App)

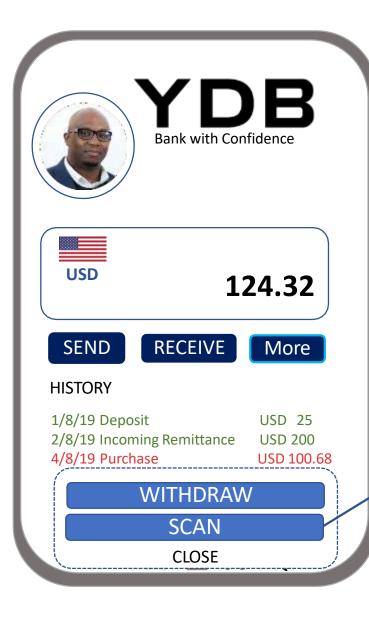
	THE STATE OF	
	USD 124.32 USD 13.72 USD 13.72	Offshore Wallets Swiss / Malta Crypto Currency Licensing
<b>Zimnat</b> Domestic Wallets RBZ NPS, MFI, FX & FCA Licensing	USD NOSTRO 124.32 ZWL 14,236.45 ZAR NOSTRO 145.44	
		Customer's other bank accounts
	* 🕞 👬 🎘 😋 💙	

lateral insight

mining.com

### The Solution (Your Digital Bank App)





### **Wallet Features**

Transactions: Deposit, Withdraw, Send Authentication (Including MFA) Document Upload (KYC) Generate and Scan QR Code Multi Currency Pin/Touch ID (Including fingerprint Scan) Crypto enabled Notification cards Transaction history

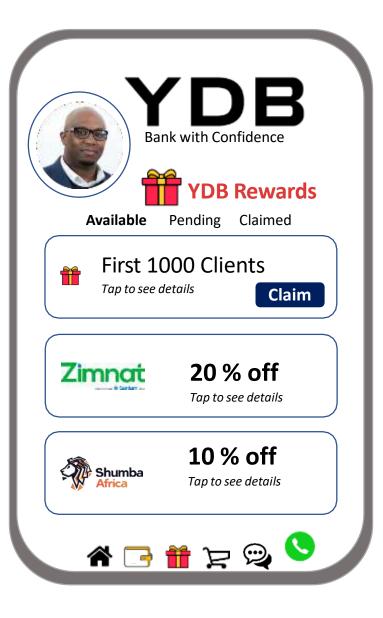




ateral

insight

### The Solution (Your Digital Bank App)



### **Rewards**

Run campaigns that enable you to reward users for completing actions that are important to the business.

#### Features

- Create and manage campaigns
- Configure reward parameters such as amount, limits, currency type
- Reward users for specific actions downloading & registering



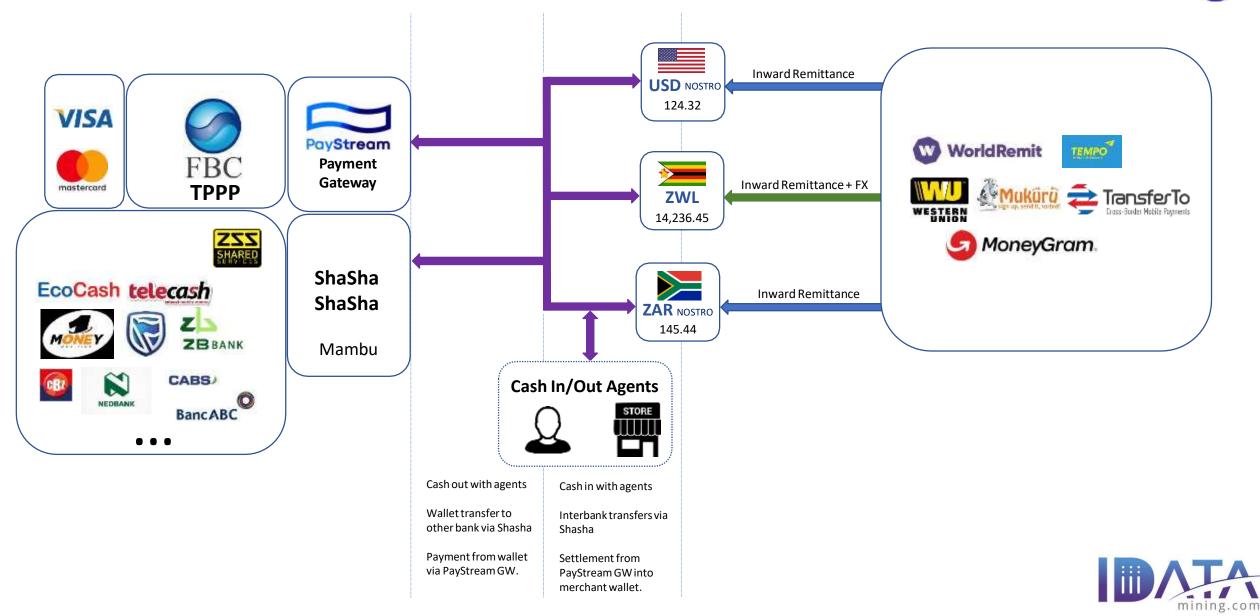


#### ateral **The Solution (Your Digital Bank App)** insight In App Marketplace In App Chat In App Support R DR Bank with Confidence Bank with Confidence Bank with Confidence Zimnat Talk to Us Send **Dave Poptatl** 1/8/2019 Zimnat YDB Support Zimnat Congratulations my dear friend. 3<sup>rd</sup> Party Funeral Centre Aunty Nozi 31/7/2019 \$5.00 monthly \$3.00 monthly 1 sultana close, uitzicht, cape town 7550 Zimnat Zimnat Varayidzo 31/7/2019 Zimnat Medical (From) Home (From) W Thank you \$7.00 monthly \$13.00 monthly Production @ Sanlam The Willing Company 30/7/2019 Willing Nyasha: I will liaise with Joan and revert shortly Vic Falls 4 Nights Shumba Nyarie Gandanhamo 30/7/2019 CRESTA \$350 2 PAX 1<u>9</u> 💬 Thank yu Sir <u>a 📑 🌐 🔁</u> 🗟 🖀 📑 🎁 🄁 🛱

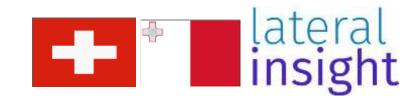
## **The Solution (Domestic Transaction Flows)**

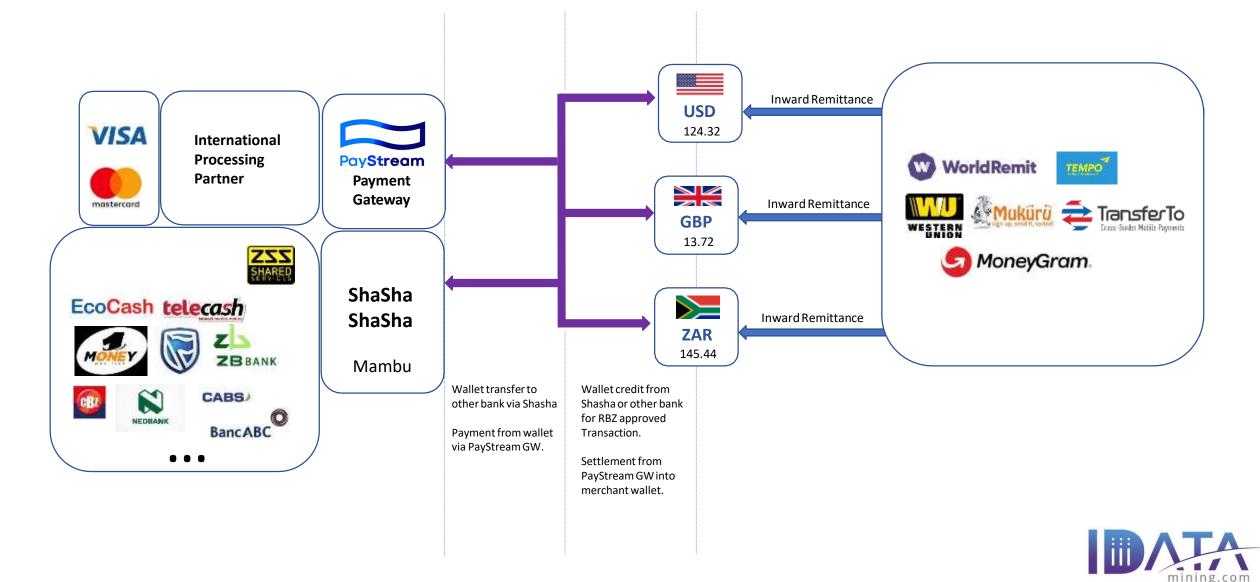






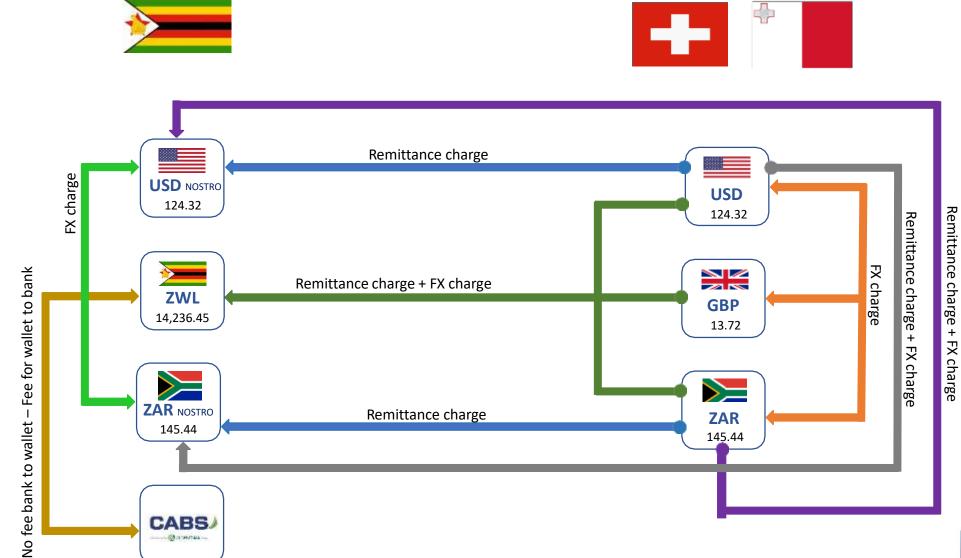
## **The Solution (Offshore Transaction Flows)**



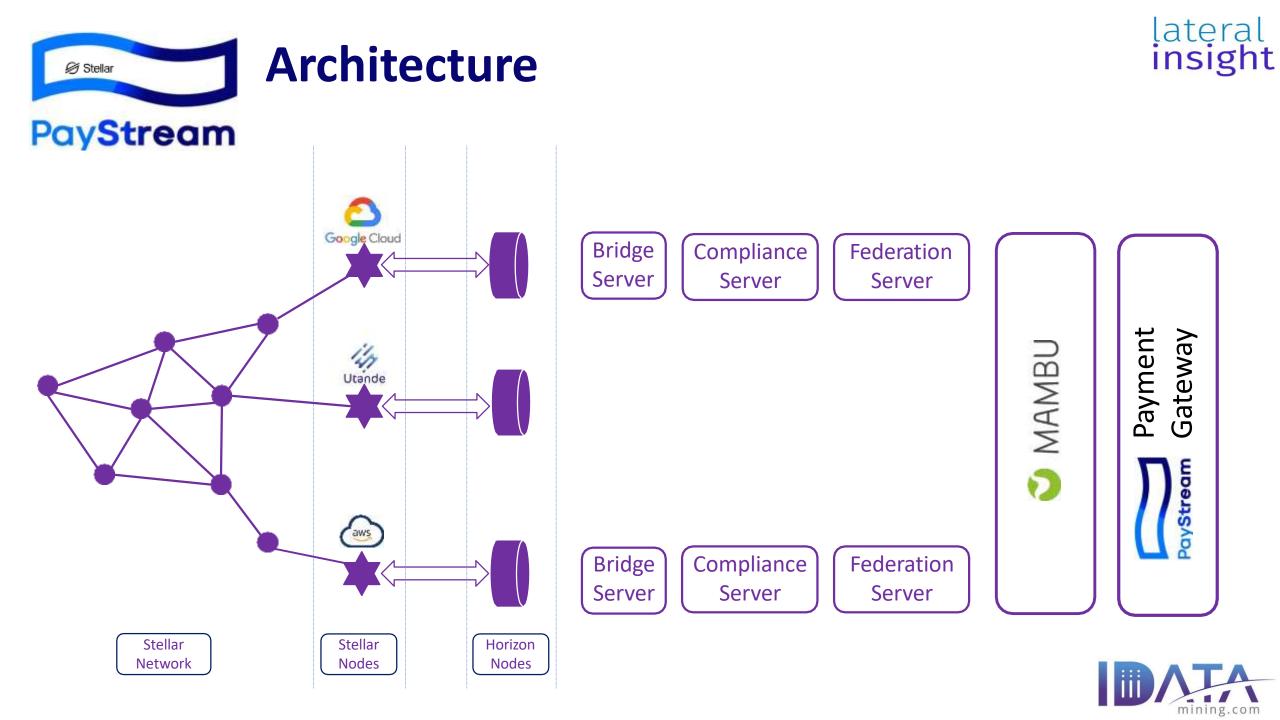




### **The Solution (Transaction Logic)**



iii) ATA mining.com





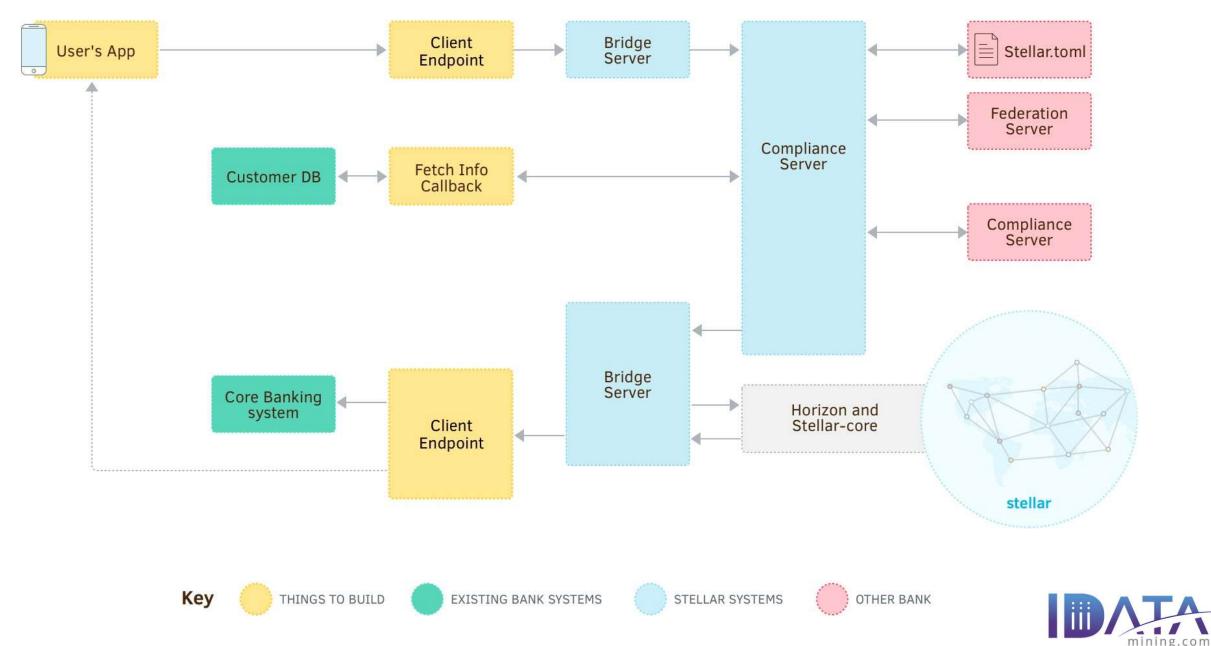


	Build Wallet	lssue Asset	Integrate With Assets		Connect to Institutions	Build Order Book	Setup User Addresses	
Anchor (Token Issuer)		1		2		3		
Money Transfer		1			2		3	
Wallet	1		2				3	

### YOUR INFRASTRUCTURE Sending Transaction

OUTSIDE INFRASTRUCTURE



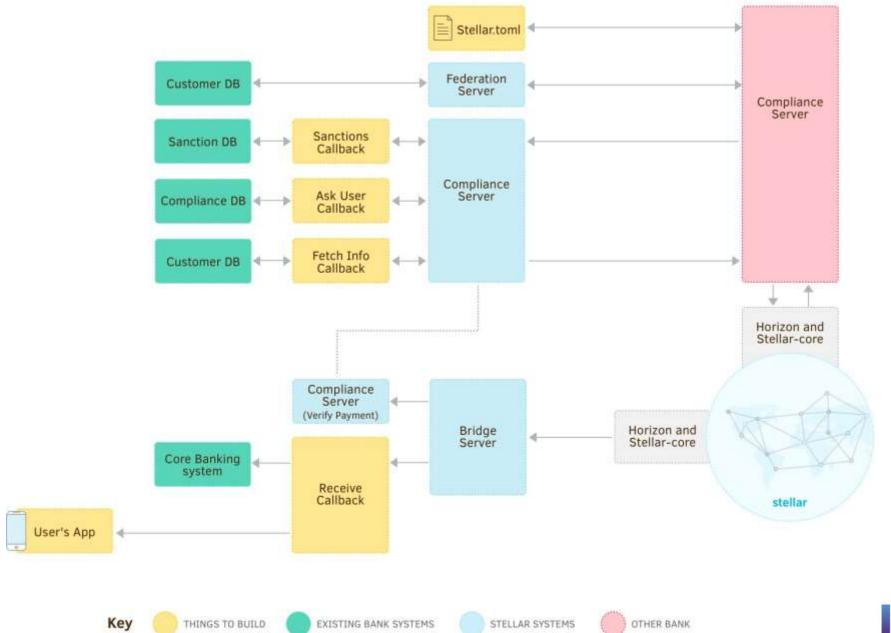


YOUR INFRASTRUCTURE

### **Receiving a Transaction**

OUTSIDE INFRASTRUCTURE







# Dashboard



Admin dashboard helps admins, managers and support team members to manage users and transactions.

General (Admin user)

- ✓ Deposit, Withdraw, Transfer
- ✓ Authentication (including MFA)
- Permissions and Controls
- ✓ Multi currency configuration
- ✓ Custom fee configuration
- ✓ User Management
- Account Management
- ✓ Transaction Management
- ✓ Custom search / filters
- Analytics and alerts

### **Developer / Security**

- ✓ Access control (IP address control)
- ✓ API tokens (temp or permanent)
- ✓ Request logs
- ✓ Web hooks
- ✓ API Documentation
- ✓ Status dashboard
- ✓ PSD2 conformant
- ✓ GDPR conformant

### **Global Settings**

- ✓ KYC framework
- Configurable allow countries  $\checkmark$
- Configurable allow transaction types 1
- ✓ Configurable require T&Cs
- Configurable require privacy policy  $\checkmark$
- Setup defaults (accounts, currencies, user groups, user status)
- Activate and configure Extensions



