

Implementing Instant Payments in Ghana

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Evolution of our Payment Systems

2008

e-zwich Biometric Smart Card Banking and Payment System with offline, realtime Technology



2010

Automated
Clearing House
(ACH) Direct
Credit and Direct
Debit platform



2015

GhIPSS Instant Pay (**GIP)** Instant Interbank Transfer Service



2020

Ghana Universal QR Code Payment Service (GhQR)





Cheque Codeline Clearing with cheque truncation

2009



gh-link Acquiring network and domestic card scheme

2012



Mobile Money Interoperability (MMI) Service

2018

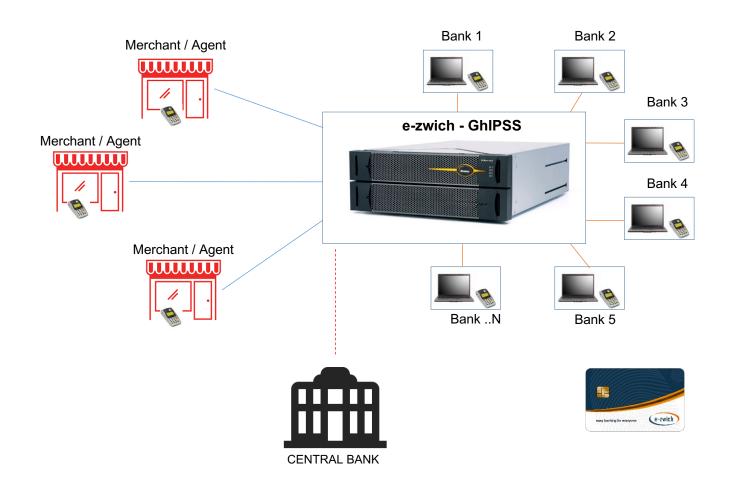


GhanaPay Bankwide Mobile Money Service

2022



e-zwich – Real time Online & Offline Card platform





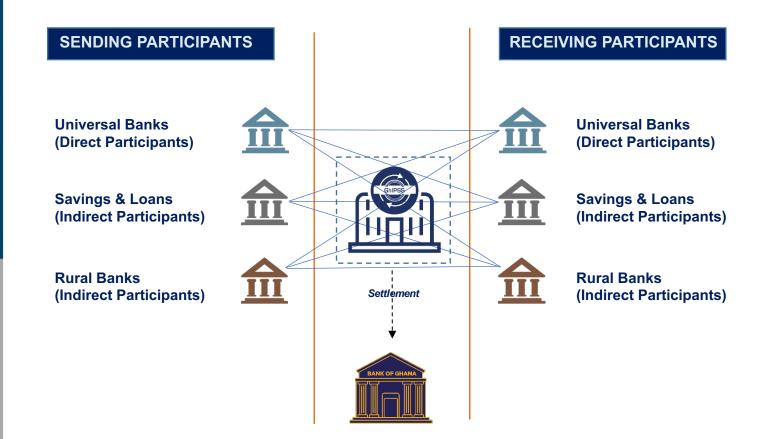
- e-zwich is a proprietary banking and retail payment system.
- Uses chip card with biometric verification instead of PIN
- The platform enables online and offline processing of smart card transactions and ensures settlement of transactions taking place on POS Terminals and e-zwich enabled ATMs
- Interoperability exists at bank branch level where cardholders can make a deposit, withdraw cash, do a transfer to another card etc.

170 Institutions

- 23 Banks3 S& Ls
- 144 RCBS



GIP - Instant Account - to - Account Platform





- Instant interbank transfer service
- Account name validation feature
- Instant access to Funds by Beneficiary
- Deferred settlement for participating **Universal Banks**
- Indirect participants are sponsored by direct participants for settlement purposes

178

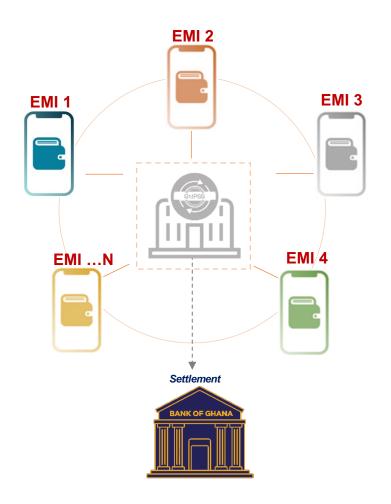
Financial Institutions • 8 S& Ls

23 Banks

147 RCBS



MMI – Mobile Money Interoperability Platform



MMI

Mobile Money Interoperability

- Instant transfers across Electronic Money Issuers (EMI)
- Mobile wallet name validation feature
- Instant access to Funds by Beneficiary
- Indirect participants in settlement Sponsored by universal banks

Electronic • 3 Telco led Money

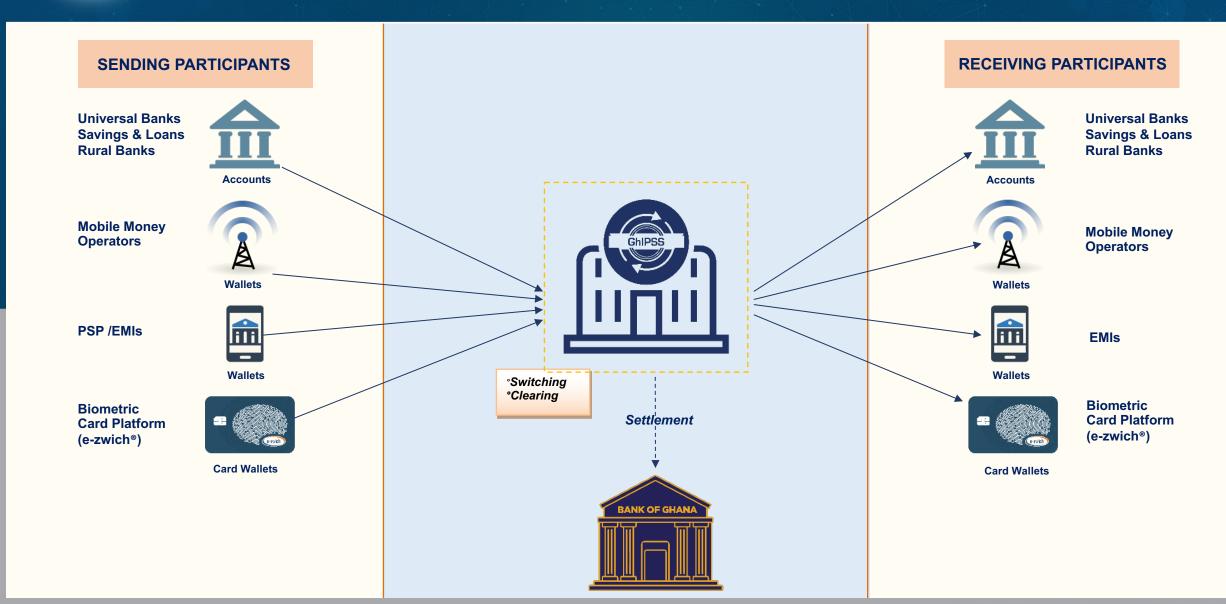
• 2 Bank led

Issuers

1 Fintech led

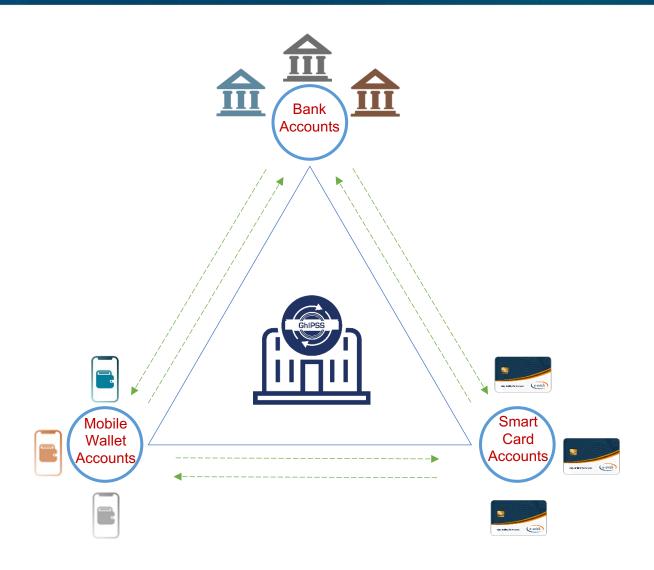


Instant Payment Ecosystem





FIT - Cross Domain Interoperability



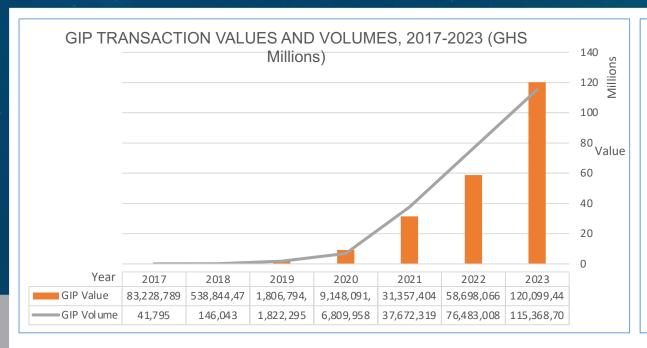
FINANCIAL INCLUSION TRIANGLE

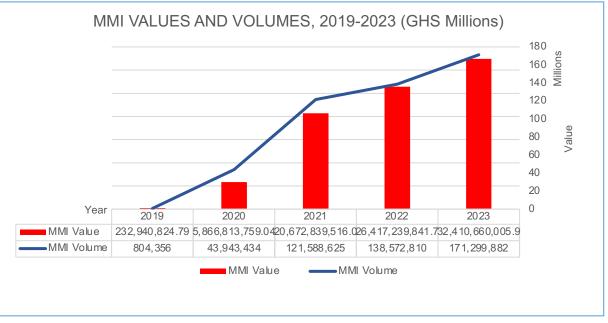


- Integration of 3 independently interoperable platforms i.e. e-zwich biometric smartcard banking and Retail system, Instant interbank transfer system (GIP) and Instant inter EMI transfer system(MMI)
- Seamless funds transfers across all 3 domains
- Interaction between the formal and the informal sector
- Delivered on instant payment rails



Instant Pay – Some Statistics





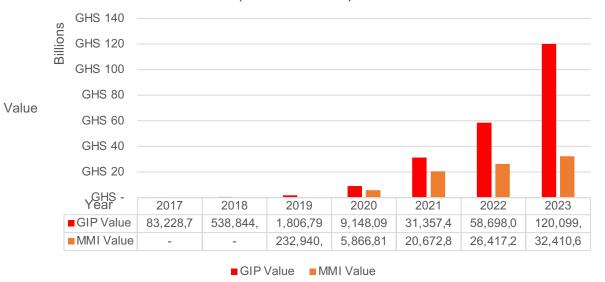
- GIP growth fueled by Fintech disbursements / payments
- E-levy tax applies at a higher threshold for payments from bank accounts

- E-levy tax introduced in 2021 and implemented in 2022 impacted growth rate
- Also average transaction amounts are lower

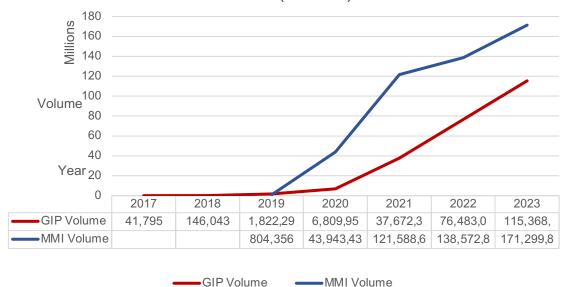


Instant Pay- Some Statistics

TRANSACTIONS VALUES GIP AND MMI, 2017-2023 (GHS Billions)



TRANSACTION VOLUMES GIP AND MMI, 2017-2023 (Millions)



 GIP transaction values from bank accounts much higher than wallet accounts GIP transaction volumes have a strong positive correlation with inception of MMI



UNIVERSAL QR CODE

Merchant Presented

Merchant Presented

Terminal ID: 000234546

Unique ID for USSD Payments

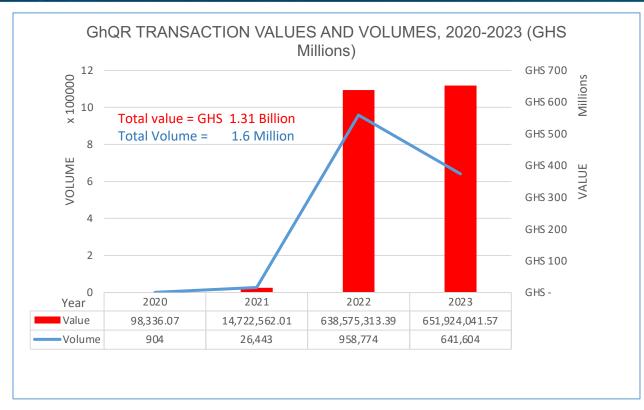
Static / Dynamic

Runs on Real time rails

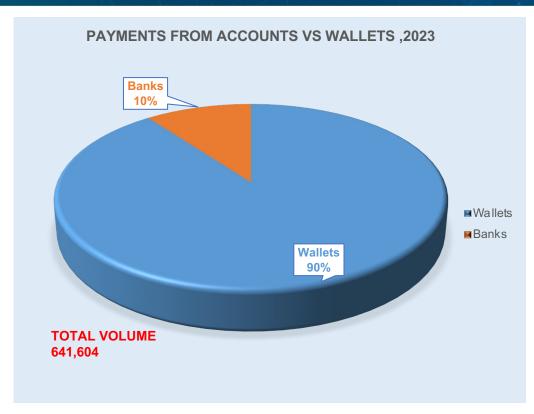
Accepts payment from
Different Funding sources e.g.
Bank Account, Card Account,
Wallet Account



Instant Pay- Some Statistics



• GhQR growth negatively impacted by e-levy tax since the incidence is on the customer (Payer) and also additional charge to the customer by some EMIs.



 90% of QR Code payments in 2023 were initiated from wallet accounts



Instant Pay- Inclusivess

GHANA'S INCLUSIVE INTEROPERABLE PAYMENTS ECOSYSTEM

'No one left behind'

Ensures participation by all licensed and approved financial institutions

Fosters participation from all customer segments



Implementing Instant Pay-Lessons Learned

01

GOVERNANCE

 Strong and tight policies and processes for compliance to technical and operational standards. 02



CAPACITY MANAGEMENT

 Redundancy planning, High Availability & Load Balancing 03



TECHNOLOGY SOLUTION (SCOPING)

 Solution Design must be universal (encompassing of all stakeholders) 04



BUSINESS / GROWTH

- Instant Payment Business is driven by PSPs
- The need to continue developing new solutions for multiple use cases
- Inclusiveness



thank

QUESTIONS?