



# **The Interoperable Payment & Settlement Systems for Enhanced Integrity and Trust of Financial Transactions in Ghana**

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# About Ghana



## WHO WE ARE

- A West African Country
- Known for exporting Gold, Cocoa etc
- **Population:** 27.41 million (2015 World Bank)
- **Capital:** Accra
- **Number of Regions:** 10
- **Currency:** Ghana Cedi
- **GDP:** \$ 37.54 billion ( WB, 2015)



# About GhIPSS



**Wholly owned subsidiary of the Bank of Ghana**

**Incorporated in 2007 with a mandate to implement and manage interoperable payment system infrastructures for banks and non bank financial institutions in Ghana**

## **Currently manages**

- National Biometric Smart Card system- e-zwich
  - Cheque Codeline Clearing (CCC) System
- Ghana Automated Clearing House (GACH) System
- National Switching and Processing System- gh-link



# GhIPSS Mandate,

## **Mandate**

Implement and Manage Interoperable Payment Systems  
Infrastructure for banks and non bank financial institutions in Ghana.

## **Vision**

Migrate Ghana to an Electronic Payment Society

## **Mission**

To partner the financial services industry in promoting,  
developing and managing efficient and secure payment systems.



## Performance Over the Years

<b>TOTAL</b>	<b>e-zwich 2008 - 2016</b>	<b>CLEARING HOUSE 2010 - 2016</b>	<b>Gh-link 2012 - 2016</b>	<b>TOTAL</b>
<b>VALUE (Gh¢)</b>	4,285,586,003.24	685,841,183,442.39	1,004,094,502.48	692,130,883,948.11
<b>VOLUME</b>	11,486,071	66,756,457	5,873,918	84,116,446



# Interoperability and Financial Identity

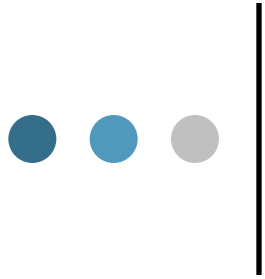


# Understanding Interoperability

- **Interoperability in simple terms is the ability for different systems to connect with one another.**

- **Interoperability increases transaction volumes and create new business opportunities**

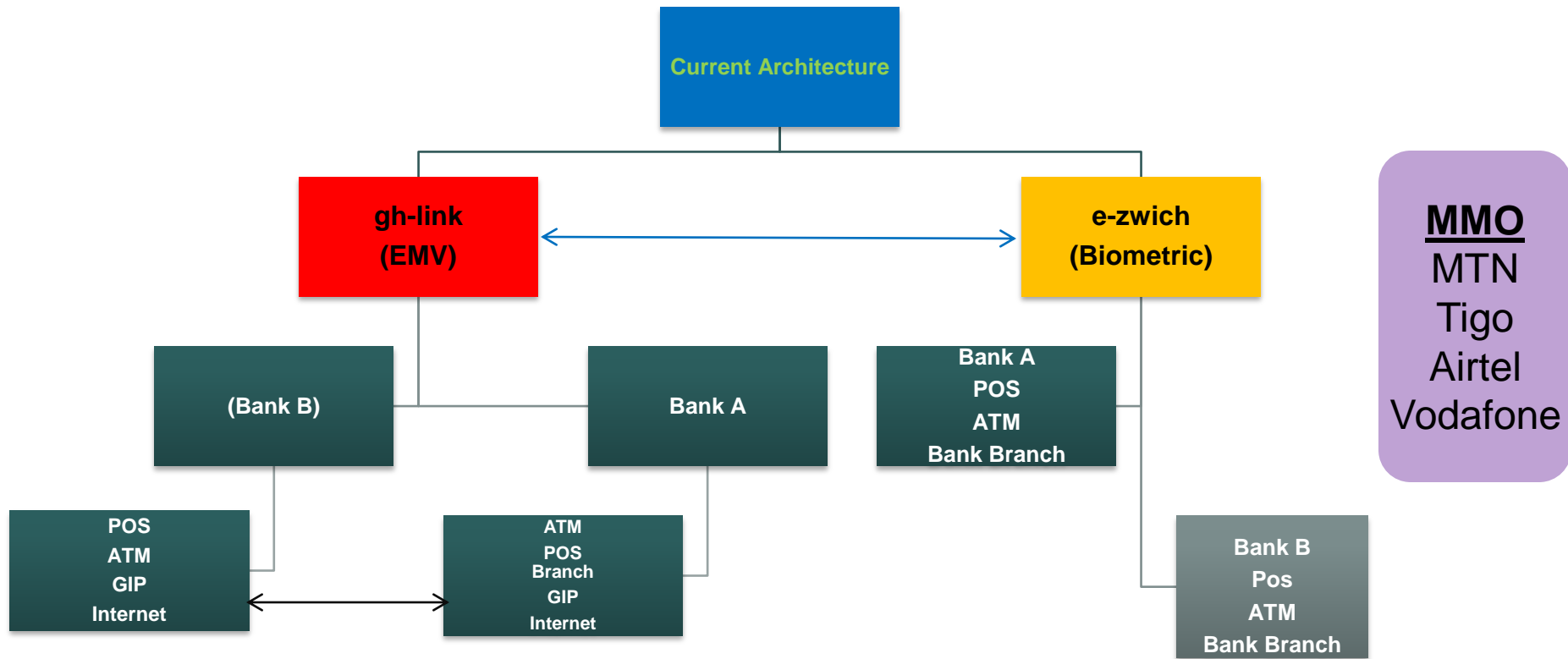
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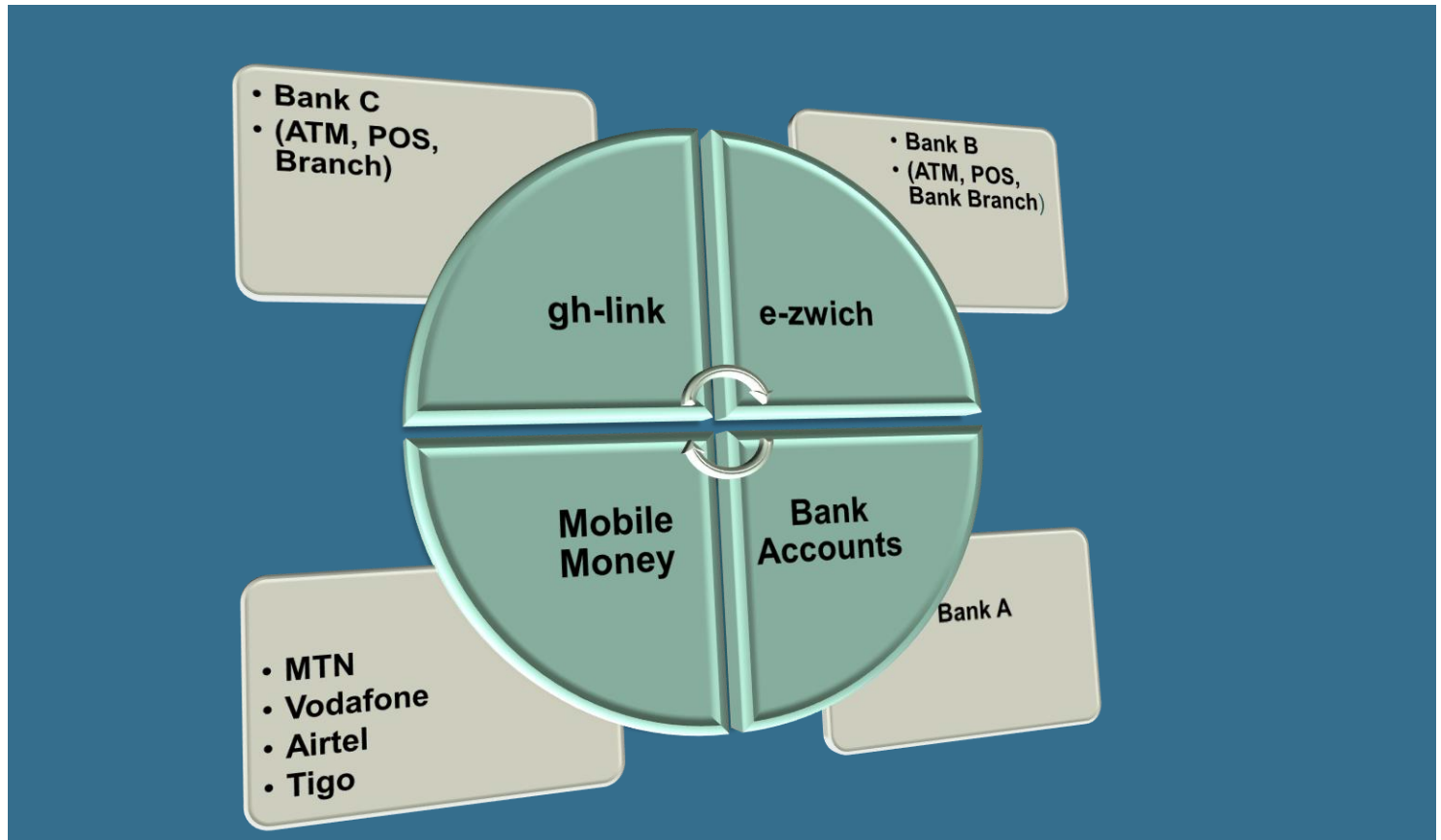
GhIPSS has created an Interoperable  
platforms for banks and non-bank  
financial Institutions in Ghana



# Current System Architecture

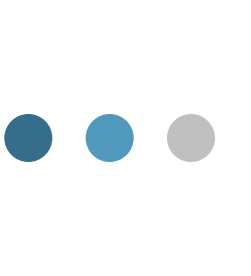


# Future System Architecture





# **Achieving Financial Identity (FI) with Interoperability. The Case of e-zwich**



**e-zwich** is an interoperable biometric smart card payment system which links all financial institutions in Ghana.

## Key Features

- ❑ Biometric Authentication
- ❑ Online & Offline Loading & Settlement
- ❑ 10-Digit Signature Code for Online/Offline Loading
- ❑ Multiple Audit Trails
- ❑ Transparent & Automatic Recovery
- ❑ 12 Map Biometric Search Station

# Use Cases of e-zwich



Authentication  
of payroll



Audit Payroll



Uniquely  
identify  
customers

Platform is Currently used by  
**Government & Non  
Governmental Institutions:**

**NSS, GSOP, LEAP, Cocoa Buying  
Companies, SLTF**

**Cards are issued by Commercial,  
Rural & Community Banks,  
Savings & Loans  
Companies**

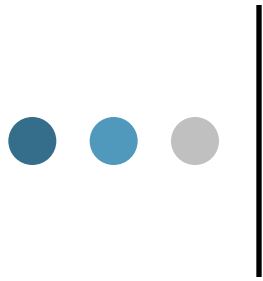


# Benefits of e-zwich

- It is faster, Secure and Convenient.
- Gives the cardholder access to a wide range of retail and banking services at any POS terminal anywhere in Ghana.
- The cardholder can also earn interest on money held in the savings wallet on their card.



# **Benefit of Interoperable Platforms**



Increase in the Number of Financial Institutions on the Platform



Increase in 3<sup>rd</sup> Party Companies



Increased in the number Of bankable citizens



Increased the amount of Money in the banking System



Growth in the number of Fintech Companies





# Benefits



Reduced end to end transaction cost.



Payments are made more securely, leading to a reduction in fraud.



Reduce fraud activities.



Lower Operational & Maintenance Cost



Improved Financial Ecosystem



Thank you

