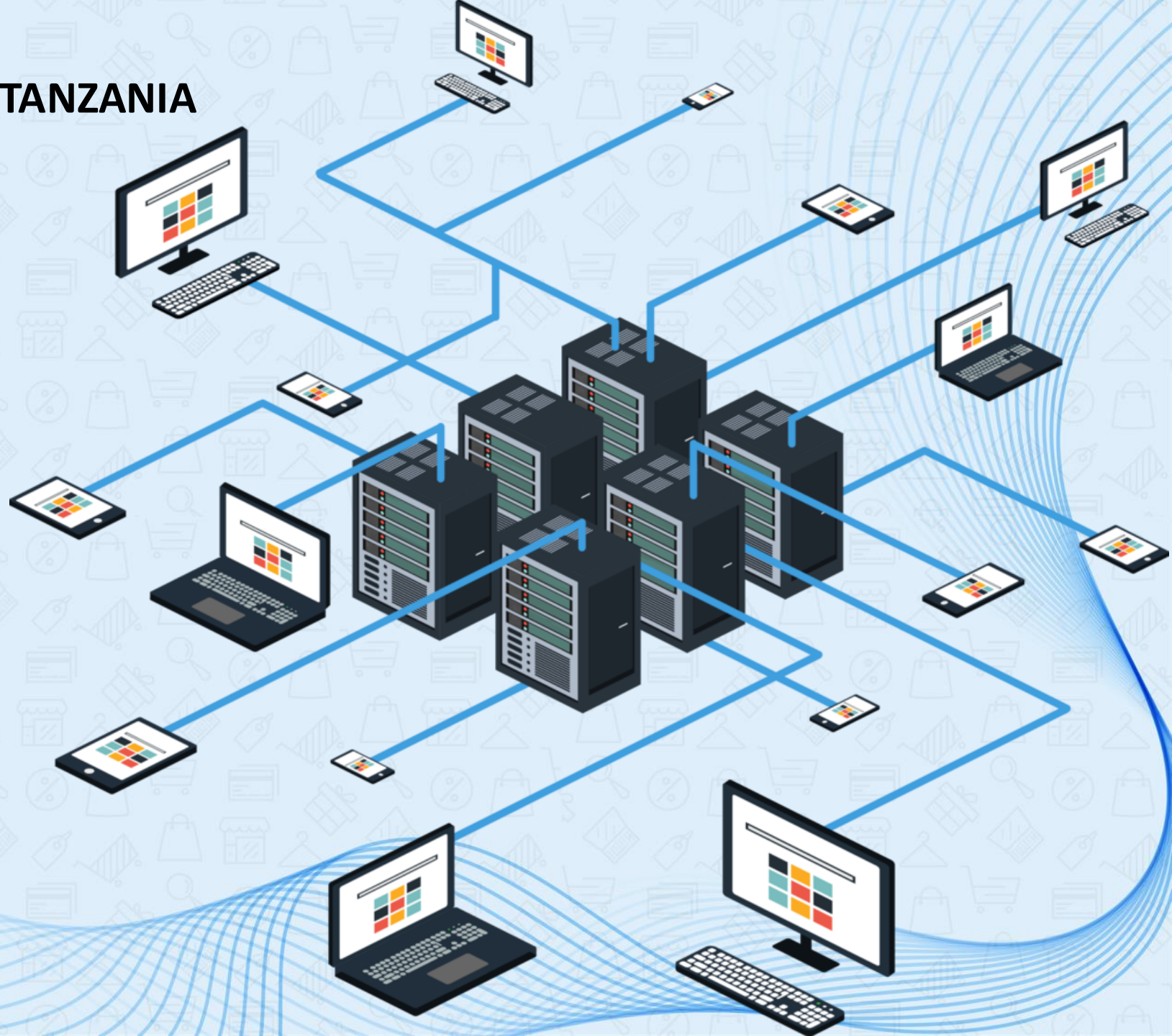




UNITED REPUBLIC OF TANZANIA

Jamii X-Change

*Secure Data Exchange
Platform*



Data Exchange in Tanzania -

Registration and Identification of Persons Act, 2012

and its accompanying regulations provides for Data Sharing Agreement that governs integration of systems and clear delineation of responsibilities between National Identification Authority (NIDA) and Stakeholders

Personal Data Protection Act 2022

Under the Personal Data Protection Commission mark out principles for protection of personal data so as to establish minimum requirements for the collection and processing of personal data and administration of consent of the data subject

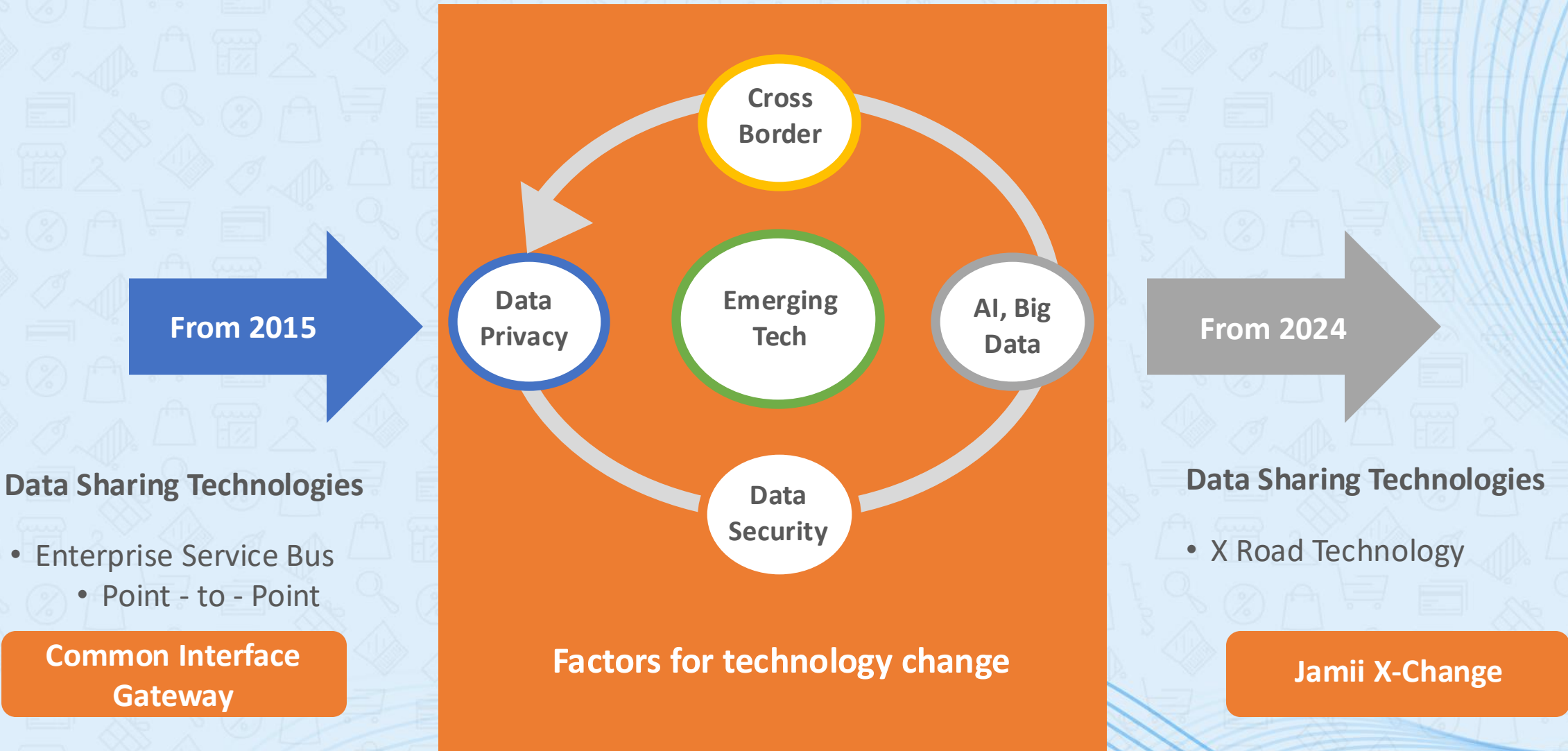
Sectoral Regulations and Circulars

Delimits minimum data sets to be collected from Data Controllers appropriate for intended purpose

Governed by the Law



Data Exchange Technology Evolution in Tanzania



Traditional data exchange

NIDA started using **Common Interface Gateway (CIG)** in 2018 as a mechanism for sharing personal identification information with eligible interested stakeholders for generation of eKYC and authentication alongside the process of services provision.

Key features

- Central hub - Centralizes management and governance of users and services
- Enhanced Security - Combines VPN and Server Certification
- Consent oriented - Authorization of Data before access
- Controlled access to information

Challenges

- Single point of failure
- High involvement management
- Limits scalability
- High security risk
- Limited inclusiveness

Rational for Change to Jamii Exchange



Category	Distributed Technology Strength
Security	End-to-end encryption between nodes - Mutual
Interoperability	Designed for cross-border and multi-domain integration supporting multiple standards (SOAP, REST, etc.)
Scalability	Scales horizontally by design
Sustainability	Open-source and community-driven
Maintenance	Distributed updates and independent
Fault Tolerance	High fault tolerance
Data Governance	Strong in sovereignty and compliance
Cost Efficiency	Minimal for large scale organizations, government or inter agency integrations

Jamii Exchange - Key Features

Data privacy

End-to-end encryption and strong authentication mechanisms of both central and security server

Accountability

- Digitally signed messages
- Logging through security server

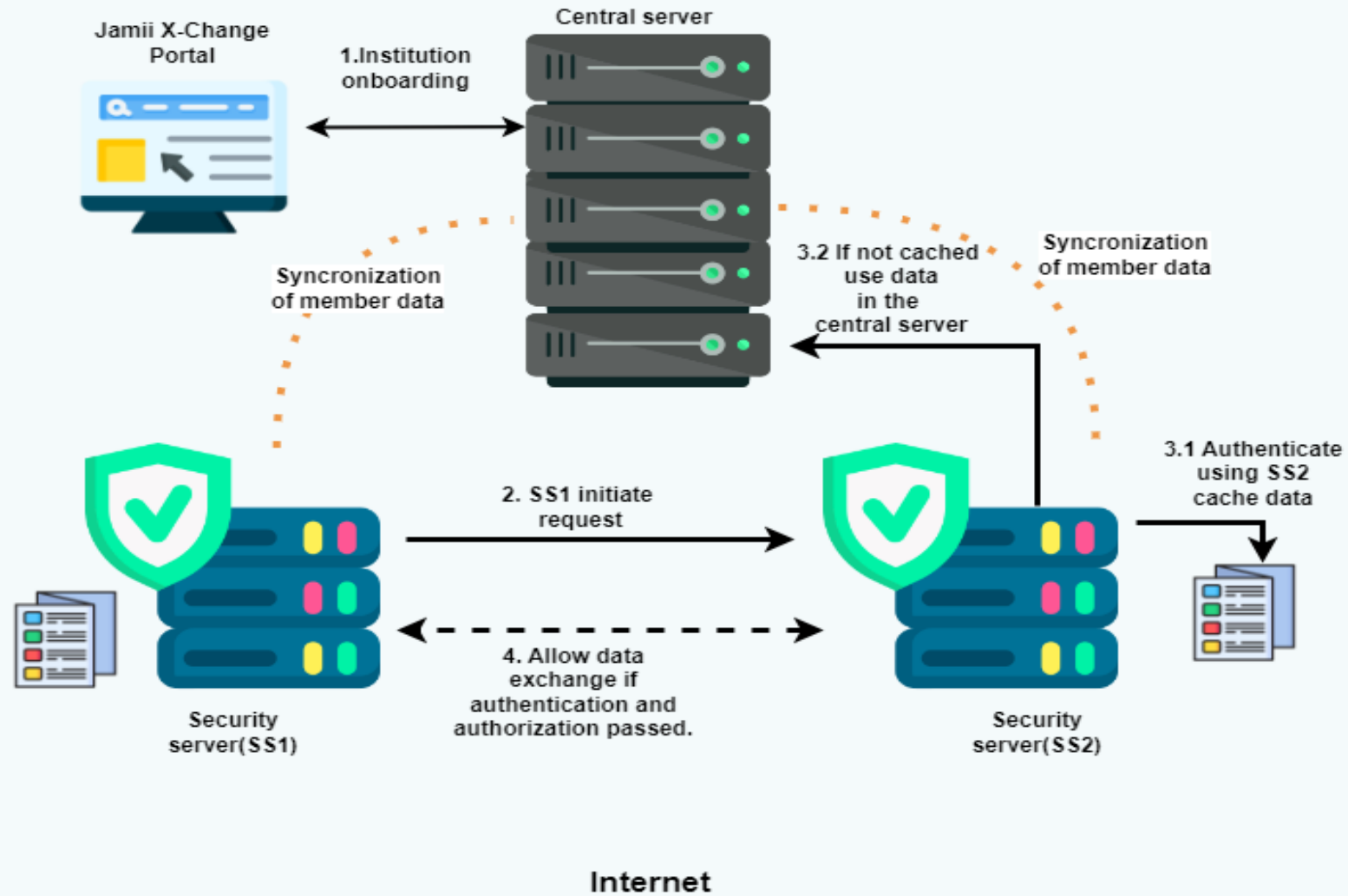
Oversight mechanisms

- Maintains trusted Membership registry
- Consent Management
- Compliance with Personal Data Protection Act

How it works

- ❖ Institutions on board themselves through the Jamii X-Change portal.
- ❖ Once on boarded, their data is synchronized to central servers, and they are provided with configurations for their security servers.
- ❖ List of trusted members is maintained between Security Servers.
- ❖ Security Server initiates a request to another Security Server.
- ❖ Receiving Security Server authenticates the requester.
- ❖ Requested message is sent to the requesting Security Server.
- ❖ Both Security Servers independently log the entire transaction.

How it works



... How it works

Why several instances?

- i. Scalability and performance
- ii. Customized policies

SLA adherence

When onboarding, members are required to agree to SLAs on the services provided in the ecosystem to be approved.

Consent within the ecosystem

Services published in the X-change define access rights

Implementation status

- i. Jamii X-Change is Operational
- ii. Zan X-Change (*Exchange Federation*) in Testing environment
- iii. Revenue X-Change is under Implementation

Exchange Federation



Tanzania Mainland

For Tanzania Mainland only
Operated Institutions



Data Tracing and National Statistics Dashboard

- Single source for personal data and cross boarder data tracing
- National Statistics Dashboard



Zanzibar

For Zanzibar only Operated
Institutions



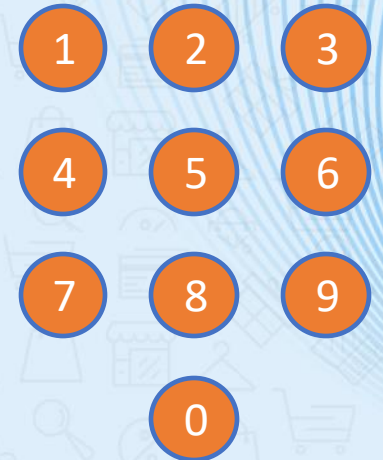
Union Matters

For Union Matter Services



Key Factors for Success

- **Jamii Namba** a unique identification number to all people in Tanzania including newborns, visitors, refugees and citizens
- **One's only principle** through eKYC, data remains with custodian, only few data can move for intended purpose
- Event based architecture, from **birth to death**
- Strong **Political will** and **Stakeholders** involvement
- Digital Economy Strategy launched by H.E **Dr. Samia Suluhu Hassan** the president of United Republic of Tanzania



Thank You

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