



Tizel Global

Mainstreaming Technologies in Nigeria Election Management

A Cybersecurity & Digital Resilience Blueprint for Modern Elections

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Tecom
Concepts Limited

Secure Elections. Stronger Democracy.



Happiness Obioha
Tizel and Tecom Managing Director

Awards

1. Most Influential Figures in Nigeria Digital Economy 2026
2. ATAEX Cybersecurity Personality of the Year 2025
3. Outstanding Woman in Technology 2025
4. 50MVP Personalities In Nigeria Digital Economy 2025
5. United Nation Ambassador for Peace 2025
6. Telecom & Digital Personality In Nigeria Economy 2025
7. Best Cybersecurity Woman of Year In Nigeria 2024
8. Chief Data Ambassador For Nigeria 2024 and many more

Educational Background

- BSc in Business Administration - Lagos State University
- Doctorate in Artificial Intelligent - Omniversity Imperial College, USA
- Professor of Practice Cybersecurity - Omniversity Imperial College, USA



Professional Qualifications

- Certified ISO27001 Lead Auditor
- ISO31000 – Business Risk Manager (PECB)
- Certified Data Protection Officer (CDPO – NDPR, EU GDPR & U.S.A GDPR) PECB
- ISO42001 Certified AI Management System Lead Implementer (PECB)
- PMP – Project Management Professional
- Certified Chartered Consultant, e.t.c.

Specialist Competences

- ISM, IT and Cyber Security
- IT Governance, Risk and Compliance (GRC)
- NDPR, EU Data Protection Regulation (EU GDPR) & U.S.A GDPR
- Strategic Risk Management, Analysis & Assessment
- IT Audit / IT Security Audit
- Business Continuity Management (BCM)
- Network Infrastructure & Connectivity



Building a Secure, Trusted & Resilient Digital Election Ecosystem

Nigeria is moving toward the mainstream adoption of emerging digital technologies in election management ahead of the **2027 General Elections**.

This transition is driven by the need to address electoral irregularities, improve operational efficiency, strengthen election security, and rebuild public confidence in electoral outcomes.



2027
GENERAL ELECTIONS



Why Now? THE URGENCY

Growing concerns over electoral irregularities, declining voter confidence, and the need for credible, transparent and efficient elections make this the right time to scale digital solutions with strong cybersecurity at the core.



The 2027 elections must be more secure, more transparent, and more credible.



What's Changing? DIGITAL TRANSFORMATION

Nigeria is mainstreaming emerging technologies in election management, including:

- ✓ Biometric authentication
- ✓ Electronic poll books
- ✓ Digital result transmission
- ✓ AI & data analytics
- ✓ Cloud infrastructure
- ✓ Real-time monitoring & reporting



What Must Be Protected? THE KEY ASSETS

- ✓ Voter data & personal information
- ✓ Election systems & applications
- ✓ Devices & endpoints
- ✓ Networks & communications
- ✓ Infrastructure (cloud & physical)
- ✓ People & processes



Cybersecurity is not just about technology — it's about the entire election ecosystem.



What This Presentation Delivers FOCUS AREAS

This presentation examines how cybersecurity can support Nigeria's transition to technology-enabled elections through:

- ✓ Solutions for a secure election ecosystem
- ✓ Best practices and proven technologies
- ✓ Infrastructure and operational readiness
- ✓ Governance, policy and compliance
- ✓ Building trust and voter confidence

The Path to Election Resilience



Technology
Smarter tools.
Greater efficiency.

+



Security
Stronger protection.
Lower risk.

+



Infrastructure
Reliable systems.
Always on.

+



People
Skilled teams.
Greater accountability.

+

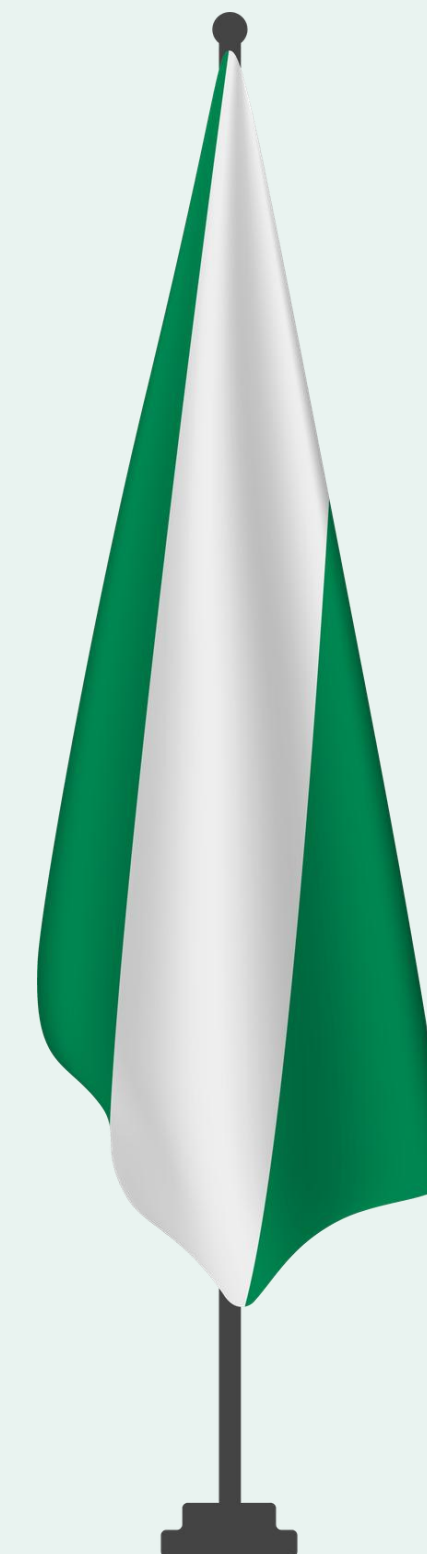


Process
Transparent workflows.
Better outcomes.

=



Election Resilience



CURRENT & EMERGING TECHNOLOGIES

Powering Modern Election Management



BVAS / Biometric Authentication

Fingerprint, facial, ID verification



Electronic Poll Books (E-Poll Books)

Real-time voter lookup & verification



e-Transmission & Results Management

Digital collation and tracking



AI & Data Analytics

Anomaly detection, voter trend analysis



Cloud & Virtual Infrastructure

Scalable, flexible, resilient



THE BIG PICTURE

Technology + Trust + Resilience

Modern election management is not just about devices, it's about secure systems, protected data and uninterrupted connectivity — from the voter to the results.



Technology

Modern & Reliable
Systems



Security

Protecting People,
Data & Process



Resilience

Continuity
& Uptime



NEXT-GENERATION BVAS

Security by Design

Beyond authentication — a fully secured ecosystem.



Multi-factor Authentication

Biometric + ID + Liveness detection



Encrypted Data & Secure OS

Tamper-proof hardware & software



Real-time Device Monitoring

Detects jailbreak, tampering, unusual activity



Secure Data Transmission

End-to-end encryption & VPN

WHAT THE U.S. 2024 ELECTION TEACHES US

Proven Technology. Stronger Safeguards.



Electronic Poll Books

41 states/territories used e-poll books (EAC 2024).



Risk-Limiting Audits

Verified results with independent checks.



Cybersecurity Mandates

MFA, network segmentation, EDR, SIEM.



Public Trust & Transparency

Continuous monitoring and audit trails.

Securing the Election Ecosystem

Layered security. End-to-end protection.



Identity & Access Management

MFA, role-based access



Endpoint Security

EDR, anti-malware, device control.



Network Security

Firewalls, ID/IPS, segmentation



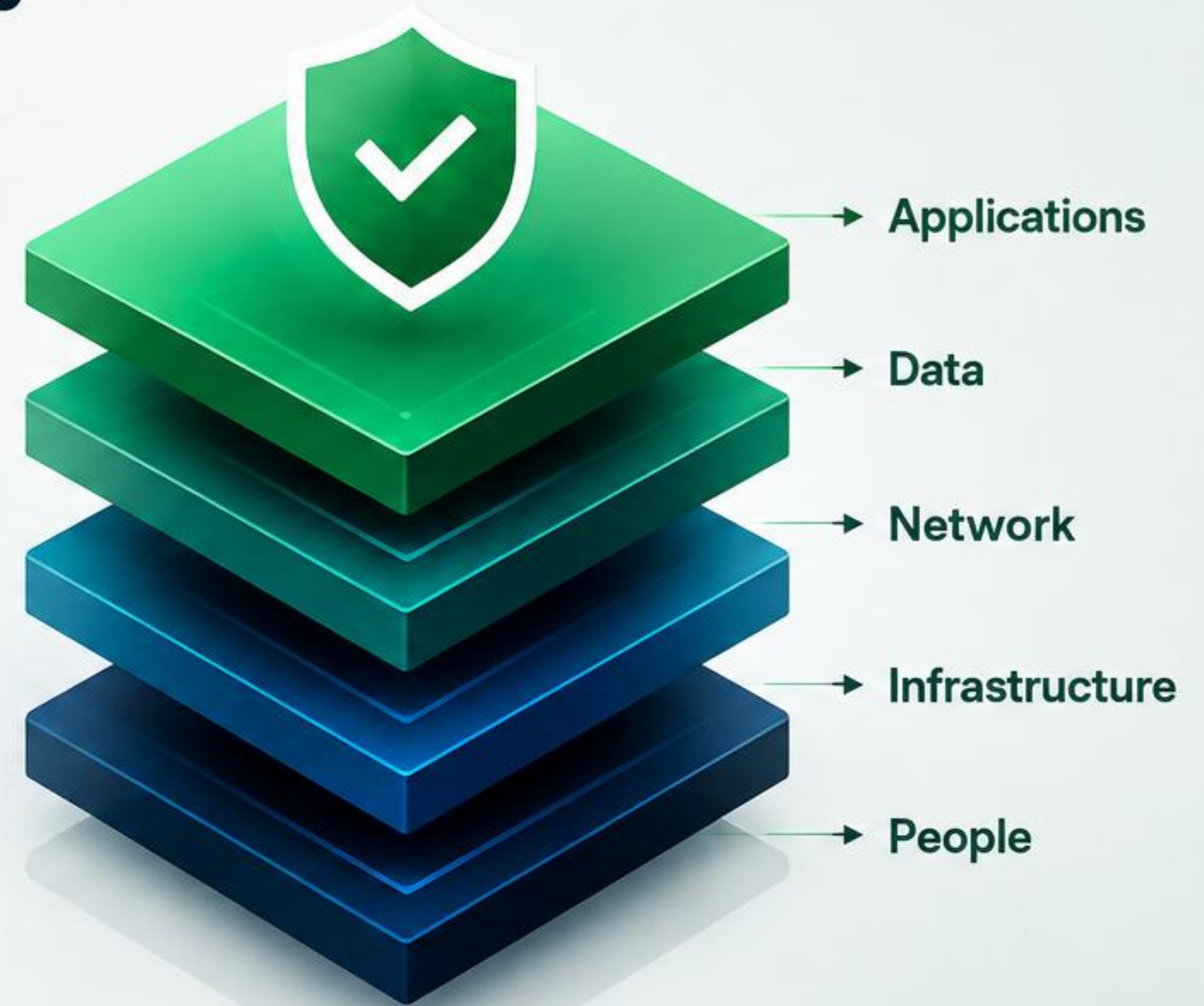
Data Security

Encryption, DLP, data integrity



Security Operations Centre (SOC)

24/7 monitoring & incident response



THE ELECTION SECURITY OPERATIONS CENTER (SOC)

Real-Time Visibility. Faster Response.



24/7 Monitoring

Threats, anomalies, system health



Threat Intelligence

Proactive protection



Incident Response

Containment & recovery



Audit & Reporting

Full traceability & compliance



CONNECTIVITY & CONTINUITY

Keeping the Election Online

Reliable connectivity. No interruption.



Multi-Network Connectivity

Fibre, 5G/6G satellite backup



Redundant Infrastructure

Multiple ISP & power options



Real-time Network Monitoring

Detect & resolve issues early



Offline Capabilities

Local data caching & sync



Data Integrity. Always.



Tier III/IV Data Centre

High availability & physical security



Data Encryption

At rest & in transit



Backup & Disaster Recovery

RPO/RTO defined & tested



Scalable Cloud Infrastructure

Flexible, secure, cost-efficient



SECURE ELECTIONS, STRONGER DEMOCRACIES.

People + Process + Technology



Trained Personnel

Skilled & vetted staff



Technology Solutions

Integrated & secure



Standard Operating Procedures

Clear & tested workflows



Regulatory Oversight

Independent monitoring
& compliance

KEY CHALLENGES & TECHNOLOGY RESPONSES

From Risks to Resilience.

CHALLENGES

-  Cyberattacks & data breaches
-  Device tampering & fake identities
-  Network outages & poor connectivity
-  Insider threats & human error
-  Data manipulation & misinformation

SOLUTIONS

-  Advanced threat detection & SOC
-  Biometric + liveness + encryption
-  Redundant networks & offline mode
-  Access controls & user monitoring
-  AI analytics & audit trails



WHERE TIZEL CYBERSECURITY FITS

Your Trusted Partner in Election Cybersecurity.

We secure the technology, the data and the process.

OUR KEY CAPABILITIES



Cybersecurity Strategy & Advisory

End-to-end election security planning and risk advisory.



SOC Monitoring & Threat Detection

24/7 monitoring and rapid incident response.



Network & Data Security

Protecting electoral systems, data and communications.



Cloud & Infrastructure Security

Secure, scalable and resilient cloud environments.



Training & Capacity Building

Empowering election officials and stakeholders.



RECOMMENDED ROADMAP FOR NIGERIA

A Phased Approach to a Secure Election



Assess & Plan

Audit current systems, identify gaps, define requirements.



Build & Deploy

Implement secure infrastructure and security controls.



Monitor & Optimize

Track in real time, detect anomalies, strengthen continuously.



Scale & Innovate

Expand capabilities, leverage emerging technologies, stay ahead of evolving threats.



Ensure & Sustain

Build long-term resilience with training, governance and continuous support.



A secure election today builds a stronger Nigeria tomorrow.



DIGITAL INNOVATION SOLUTIONS

From IT Securities to Network Insfrastructures

Cybersecurity Services

- ❑ VAPT – Vulnerabilities, Assessment & Penetration Testing
- ❑ Cybersecurity Posture Assessment
- ❑ Trainings
- ❑ NDPR & GDPR
- ❑ Software Valuation

Trainings & Certifications

- ❑ ISO Trainings & Certifications
- ❑ ISO 27001, ISO 31000, ISO 25001 Cerifications
- ❑ Cloud & Network Security
- ❑ CompTia Security +
- ❑ Executive Management Trainings, e.t.c

IT Security Solutions

- ❑ SIEM/SOC
- ❑ DLP – Data Loss Prevention
- ❑ MDM – Mobile Device Management
- ❑ DAM – Data Activity Monitoring
- ❑ WAF – Web Application Filtering
- ❑ API – Application Programming Interface.
- ❑ PAM – Privileged Access Management
- ❑ Advance Antivirus
- ❑ NAC – Network Access Control, e.t.c

Tizel ERP & Customizations

- ❑ Human Resources Modules
- ❑ Procurement Module
- ❑ Accounting Modules
- ❑ Income Assurance Module
- ❑ Operational Module, e.t.c.

Data Center Solution

- ❑ Data Center Design & Engineering
- ❑ Structured Cabling & Fiber Infrastructure
- ❑ Power Infrastructure
- ❑ Data Center Implementation
- ❑ Precision Cooling
- ❑ Modular & Edge Data Centers

Network Infrastructure

- ❑ Firewalls
- ❑ Servers
- ❑ Enterprise Backup & Disaster Recovery
- ❑ Cloud Services
- ❑ Datacenter Management Services
- ❑ Hardware Supplies

Tizel has been recognized as Digital Transformation Company of the Year 2025
A testament to our dedication to innovation and impact

Partner With Us If You Want:

- ✦ Uncompromised cybersecurity assurance
- ✦ Infrastructure that scales with growth
- ✦ Compliance ready systems
- ✦ Business continuity and resilience

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DIGITAL INFRASTRUCTURE NETWORKING & ICT SOLUTIONS

From Enterprise Networking to Smart Connectivity Solutions

Enterprise Networking

- ❑ Enterprise Wi-Fi Solutions
- ❑ LAN & WAN Infrastructure
- ❑ Structured Cabling
- ❑ Fiber Optic Solutions
- ❑ Switching & Routing
- ❑ Wireless Point-to-Point Links
- ❑ Network Design & Deployment
- ❑ Network Optimization

Fiber & GPON Solutions

- ❑ Mini FTTO Solutions
- ❑ GPON OLT Systems
- ❑ ONU/ONT Devices
- ❑ XGS-PON Solutions
- ❑ Optical Splitters
- ❑ Fiber Accessories
- ❑ Optical Distribution Frames
- ❑ Passive Network Equipment

Wireless Broadband

- ❑ Ubiquiti Solutions
- ❑ Cambium Networks
- ❑ MikroTik Solutions
- ❑ Huawei Wireless
- ❑ Point-to-Point Radio
- ❑ Point-to-Multipoint Radio
- ❑ Outdoor Wi-Fi
- ❑ High Capacity Backhaul

Data Centre & Enterprise

- ❑ Enterprise Servers
- ❑ Network Storage
- ❑ Rack Cabinets
- ❑ UPS Systems
- ❑ Cooling Solutions
- ❑ Network Monitoring
- ❑ Infrastructure Management
- ❑ Disaster Recovery

Security Solutions

- ❑ CCTV Surveillance
- ❑ Access Control
- ❑ Video Management Systems
- ❑ Network Security
- ❑ Firewall Solutions
- ❑ Endpoint Security
- ❑ Secure Remote Access
- ❑ Cybersecurity Consultation

Cloud & Business Solutions

- ❑ Cloud Networking
- ❑ Managed IT Services
- ❑ VoIP Solutions
- ❑ IP PBX Systems
- ❑ Enterprise Collaboration
- ❑ Network Maintenance
- ❑ Technical Support
- ❑ Professional Services



OUR PARTNERS



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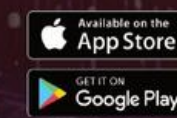
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Together, We Can Build a
Safer, Smarter
Election System.

Thank You

Questions & Discussion



www.tizel.ng

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