Deployment of a Comprehensive End-2-End Trusted and Secured Enrollment - Verification - Election Solution
Why Electoral Voting is going Electronic?
Benefits of Electronic Voting

- Electronic Voting is “FIT” - Fair, Innovative and Trustable
- Every Vote Count is based on “FACT” – Factual, Accurate, Clean and Transparent
- Full Automation without Human Manipulations – Avoid Cheating and Human Errors
- Fast Vote Counts Consolidation - Speedy Result Confirmation
- Election Processes - Secured and Auditable
- Secrecy of Votes – Personal and Sensitive Data are Well Encrypted and Protected
- Vote Data Matching with Physical Printed Records – ZERO Dispute
- Fast and Wide Deployment with Minimal Resources – Operations and Cost Effective
- User Friendly & Simplicity to Vote – Voters Satisfaction
- Highly Accessible - Voter Engagement and Turnover Enhancement
- Less Carbon Footprints – Reusable Devices & Environmental Friendly
Traditional vs. Electronic

Traditional Voting
- Huge Workforce & Resources Allocation
- Human Interactions and Manipulations
- Manual Counting & Data Consolidation
- Time Consuming & Low Efficiency
- High Risks of Human Errors
- Not Environmental Friendly
- Data Accuracy Doubts and Disputes

Electronic Voting
- Minimized Workforce & Resources
- No Human Manipulations
- Fully Automatic Vote Counts & Statistics
- Fast and Highly Efficient
- Lowest Risks of Human Errors
- Environmental Friendly
- Data Accuracy, Security and Traceability
- Fair, Innovative & Credible
- Data Encryption & Protection
- Satisfied Voters Experience
- Operations and Cost Effective
What needs to be done to transform Traditional Voting into Electronic?
Electronic Voter Registration

Voter Registration and Biometric Data Enrollment

- Personal Info
- Photo
- Fingerprint
- Signature
Electronic Voter ID Card Issuance

- Overlay
- Printing
- Security Reinforcement
- Hot Lamination
- Punching
- Chip Encryption
- Quality Operations

Card Personalization

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Voter ID Verification

Are you who you say you are?

- Contact or Contactless Card Reading
- Optional: ePassport MRZ or Barcode Reading
- Encrypted Data Transfer (Local or OTA)
- Personal Data Verification
- Photo Verification
- Fingerprint Verification
Electronic Voting

Step I
Voter Identity Verification & Mark on Ballot Paper

Step II
EVM login (optional 2nd level Identity Verification inside Polling Unit)

Step III
- View Candidates List in EVM
- View Candidate Details in EVM

Step IV
Ballot Confirmation & Casting into Ballot Box
- Window View
- No Touch
- No Tamper

Data Encrypted and Managed
Who can provide End-to-End Comprehensive Electronic Voting Solution and Services?
EmperorTech’s Trusted End-2-End Solution

Application & Approval

Voter Registration

Data Management

Personalization

Issuance / Dispensing

Verification & Voting

One Voter… One ID… One Vote
Biometric Data Enrollment

Mobile Enrollment
- Mobile Enrollment Kit
- Secured Tablet
- Optional External Power Supply
- Solar Power

Stationary Enrollment
- Fixed Enrollment
- Enrollment Service Station
- Enrollment Kiosk

• Mobile, Fixed and Self-service Data Collection Methodologies for Secure ID Documents
• Biometric Data Collection Configurations: ID Document Reading, Portrait, Fingerprint, Signature, etc
• Highly Customization for different User Experiences
ID Card Production and Issuance

Laser - UV - Inkjet - Thermal

Centralized - De-centralized
Identity Verification

1. Handheld Verifier

Product Description

- Contactless Card Reading
- Fingerprint Verification
- MRZ Reading (Optional)
- 1D / 2D Barcode Reading
- Vocal Assistance

2. Emperor ID Tablet

Product Description

- Contact/Contactless Card Reading
- MRZ and Barcode Reading
- Fingerprint Verification
- 8” Touch Screen
- Vocal Assistance
- 4G, 3G, Wi-Fi, Bluetooth and GPS
- Encrypted Data Transfer
Vote Count Optical Scanner

VCOS Machine

Product Description

- Secured Features and Voter Experience are Highly Customized per Electoral Committee Requirements
- Votes are scanned optically thus Vote Data are recorded both electronically and on paper simultaneously
- Paper Ballots can be scanned on precinct-based optical scan system in the polling place (Precinct Count)
- Paper Ballots can also be collected in a ballot box to be scanned at a central location (Central Count)
- Vote Data Matching electronically with Physical Paper Ballots Collected
Electronic Voting Machine

Electronic Voting with Matching & Verifiable Printed Paper Record - Electronic & Paper Combined Voting with User Friendly, Convenient and Secured Voting Procedures

Product Description

- Biometric Duel Access Control
- Touch Screen
- User Friendly and Convenient Interface
- Easy & Clear Candidate Information Display
- Simple Voting Operations
- Automatic Vote Receipt Printing
- Automatic Vote Count Management
- Secured Ballot Paper Storage
- Tamper Proof
Electronic Voting Machine (RFID Ballot)

- Infrared Body Sensor
- Speaker
- 21.5" Infrared Touch screen
- USB2.0 * 2, Mini USB *1
- RFID reader & Thermal Printer

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Electronic Voting Machine (RFID Ballot)

Excellent Voter Experience
- 21.5” LED-Backlit Display Screen
- Capacitive Touch Screen
- Privacy Protection
- Vocal Assistance

Artisan Industrial Design
- Robust and Tamper Proof Casing
- Light Weight for Mobility and Logistics Convenience
- Adjustable Angles for Voting Convenience

Trusted and Secured Features
- Embedded RFID Reader and Thermal Printer
- Simultaneous RFID Encoding and Ballot Printing
- 3 Way Vote Data Matching and Management Mechanism
### Our Different Electronic Voting Solutions

#### Trusted and Highly Customized Solution

<table>
<thead>
<tr>
<th></th>
<th>VCOS</th>
<th>EVM</th>
<th>EVM with RFID Ballot</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Type</strong></td>
<td>Standalone</td>
<td>Mobile (Rechargeable battery)</td>
<td>Mobile (Rechargeable battery)</td>
</tr>
<tr>
<td><strong>Ballot Format</strong></td>
<td>Paper Ballot</td>
<td>Printed Paper Ballot</td>
<td>Printed Paper Ballot with RFID Encoding</td>
</tr>
<tr>
<td><strong>Ballot Recognition</strong></td>
<td>Scan</td>
<td>Vote via System + Paper ballot Printed</td>
<td>Vote via System + RFID Encoding + Paper Ballot Printed</td>
</tr>
<tr>
<td><strong>Tally Efficiency</strong></td>
<td>Simultaneous</td>
<td>Simultaneous</td>
<td>Simultaneous</td>
</tr>
<tr>
<td><strong>Voter Ability Level</strong></td>
<td>Low Literacy and Machine Operation Proficiency</td>
<td>Basic Literacy and Machine Operation Proficiency</td>
<td>Basic Literacy and Machine Operation Proficiency</td>
</tr>
<tr>
<td><strong>Legislation Requirements</strong></td>
<td>No impact to legislation</td>
<td>Possible Election or New Laws and Regulations Approval Needed</td>
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</tr>
</tbody>
</table>

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Total End-2-End Solution & Services from A to Z

- Vote Data Encryption and Management (Local Storage & Secured Transmission)
- Vote Statistics and Data Consolidation Management
- Remote Voting Machine Monitoring System (VMMS)
- Other Value Added Services:
  - Consultancy Services (Standards, Regulations, Procedures, Approvals, Certifications, etc)
  - Polling Center Design, Renovation, Ballot and Accessories Production
  - Administration, Logistics and Training Services
900,000,000+
ID Cards Produced

100,000,000+
ePassport Produced

30,000,000+
Public Transportation Data & Transactions are being managed per Day

300,000+
Registration Devices are in Operations

Worldwide Successes & References

30+
Very Satisfied BIG ACCOUNTS Worldwide

1,000+
Perso Devices are in Operations

200+
Transportation Token Sorting Machines are in Operations

50+
Security Related Patents Registered

1000+
Kiosks are in Operations
China ePassport Perso System

Issuing
150,000
ePassports every day

ePassport
China Citizen ePassport
China Diplomatic ePassport

Location
Covers all 31 Provinces of China
3 Overseas Perso Centers

Equipment
Issuing 900,000,000 China National eID Cards

- **Sample**
- **Equipment**

- **Time**
  From Y2005

- **China National eID**

- **Equipment Steps:**
  - LaserJet
  - Pre-Position
  - Flat Stamping
  - Perso/QC
  - Sorting
Kazakhstan eID Card Perso System

Customer
Ministry of Interior of Kazakhstan

Time
Y2014

Sample
Color photo based on polycarbonate substrate

Equipment
High-speed Issuance
State Bank of India—Banking Card Dispenser

Self-service
Banking Card Issuance / Dispensing

Customer
State Bank of India

Scope
250+ branches in India

Equipment

- Instant Issuance Kiosk
- Account Opening Kiosk
Smart Transportation (Fare Payment)

- 20,000+ payment terminals installed in 100+ cities
- To support 30 million+ transaction data every day with high integrity and security
Automatic Fare Clearance

Shenzhen Metro
Automatic Clearing Center

Beijing Metro
Ticketing Center Equipment Provider

80% Market Share
In China
Nigeria Voter’s Card

Issued
70,000,000 Voters’ Cards

Customer
Nigeria Independent National Electoral Commission (INEC)

Time
From 2012

Sample

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Nigeria Voter Verification System

Serving
70,000,000+ Voters
180,000 Polling Units

Customer
Nigeria Independent National Electoral Commission (INEC)

Time
From 2014

Equipment
"I commend President Jonathan for his leadership throughout the electoral process and his statesmanship in upholding the democratic process. I also applaud the INEC for having organized and carried out the elections in a professional manner under challenging circumstances."

——— The Secretary-General of UN, Ban Ki-moon

Letter from The chairman of INEC

The chairman of INEC, Professor Attahiru M. Jega, OFR addressed a letter to praise Emperor Technology for the excellent coordination and project implementation which set a strong technical foundation for promised credible elections.

“..."I am very impressed by the decision of INEC to use technology in this election. The Permanent Voter Cards are very high-tech. They are more high tech than my voter card from the state of Virginia in the US. My voter card does not have biometric. It does not have my fingerprint. The high-tech gives the process more integrity”

——— The US Ambassador to Nigeria, James Entwistle

"Nigeria's Independent National Electoral Commission (INEC) and its Chairman, Attahiru Jega, deserve special recognition for what independent international observers have deemed a largely peaceful and orderly vote. I commend INEC for its extensive efforts to increase the credibility and transparency of the electoral process."

——— The US President, Barack Obama
Thank You

Emperor Tech