DFS Customer Security Framework

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Country Landscape

- High cell-phone penetration
  - Mobile density stands at 85%; more than 187 million cell phone connections
- High internet usage
  - More than 106 million mobile 3G/4G/LTE users
- 60% population under the age of 45 years
- Adopted National Financial Inclusion Strategy in 2015
- National Payment System Strategy in Nov 2019

- **Branchless Banking (BB)**
  - 11 licensed providers
  - 74.6 million BB accounts
  - 534,000 BB Agents
  - USSD is the most used channel for DFS
- **Conventional Banking (Internet/Mobile Apps)**
  - 27 Bank Apps
  - 12 million users
- **Electronic Money Institutions (EMIs)**
  - 8 licensed EMIs
  - 2 of them in Live operations

*National Database & Registration Authority

State Bank's Regulatory Regime for DFS Security

Enterprise Technology Governance Framework

Governs the use of technology in Banks as an enterprise

Card Security Framework

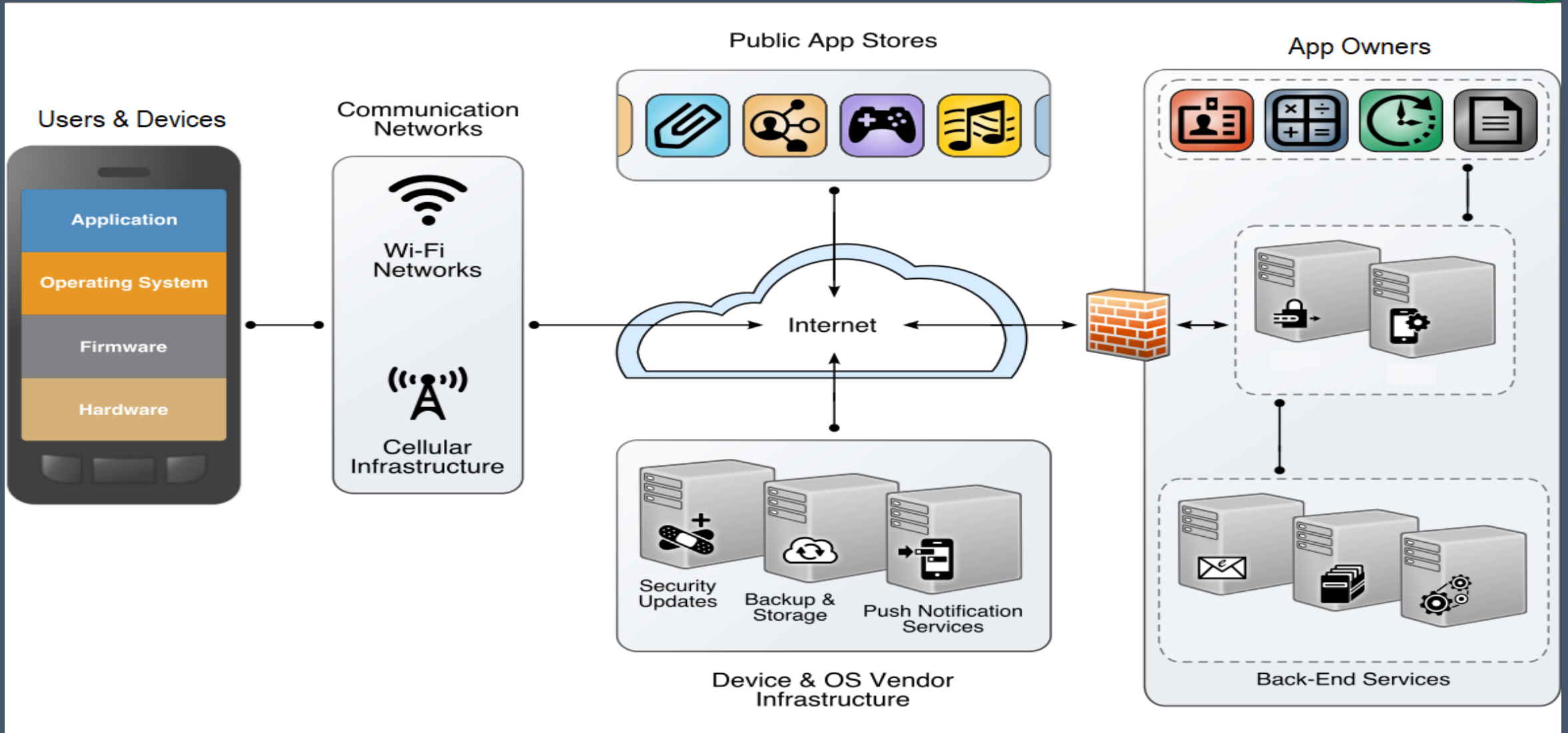Internet Banking Security Regulations

App Security Framework

Instructions on Security of Customer Facing Channels/Interfaces
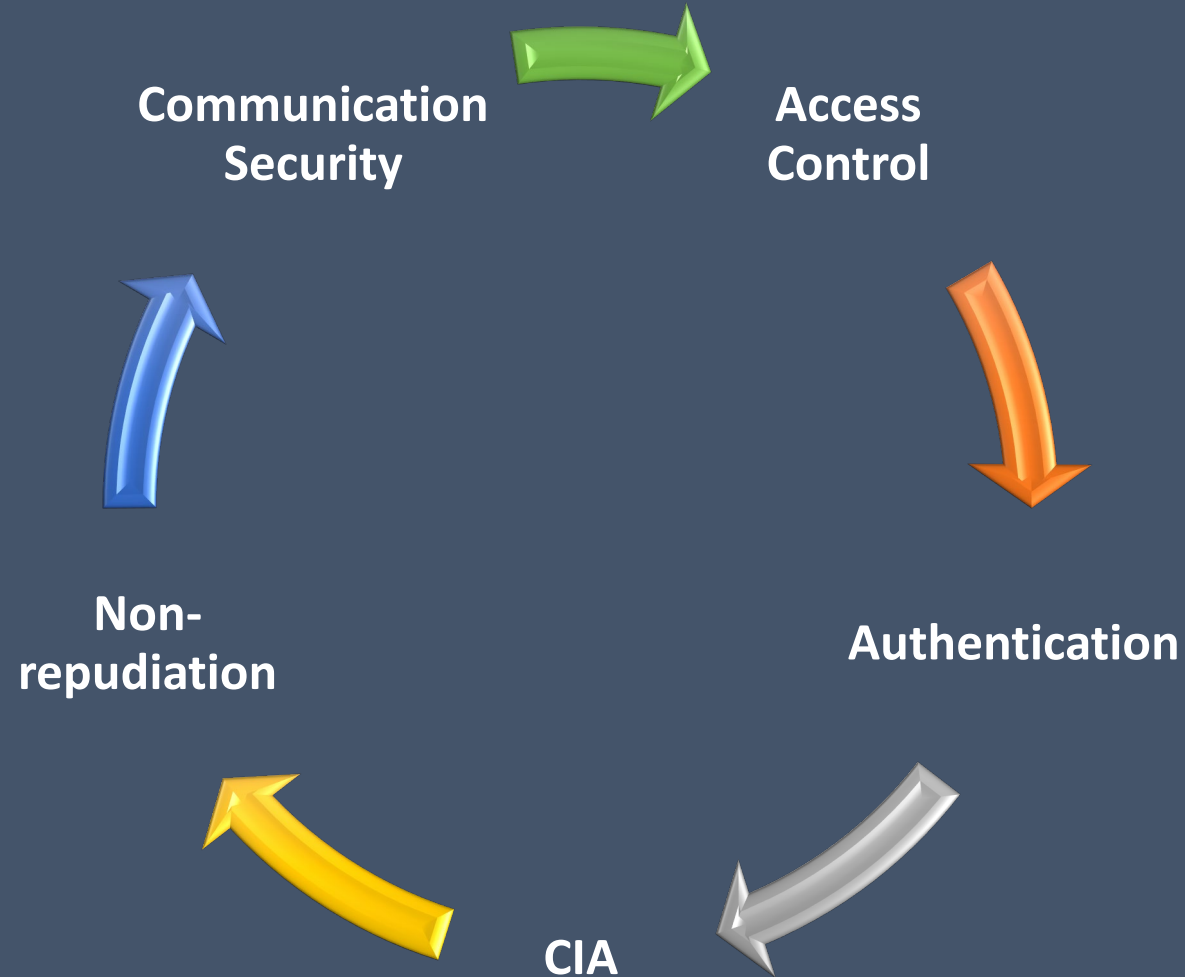
App Security Framework

- Proliferation of cheaper (*and vulnerable*) smartphones and availability of broadband mobile internet (~48%)
  - 27 banks offering apps (*more than 11 million users*)
  - Apps developed by 3rd parties
  - Security an after-thought
- Framework addresses known app vulnerabilities including:
  - Weak authorization controls, Man-in-the-middle, inter-process communication, app permissions
- Based on Open Web Application Security Project (OWASP), National Institute of Standards & Technology (NIST) and ITU X.805 standard for application security
  - Broad-based consultations with banks, PSO/PSPs, EMIs, World Bank, ITU, CGAP etc.
- Recognized by ITU as regulatory best practices

Payment App Stakeholders

Security Dimensions

Communication Security

Access Control

Non-repudiation

Authentication

CIA

Thank you