

Today

Infrastructure

App Services

API's Security

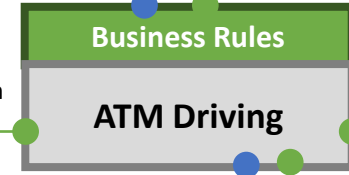
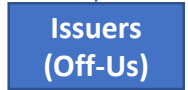
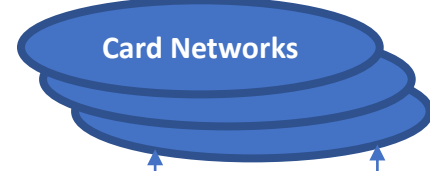
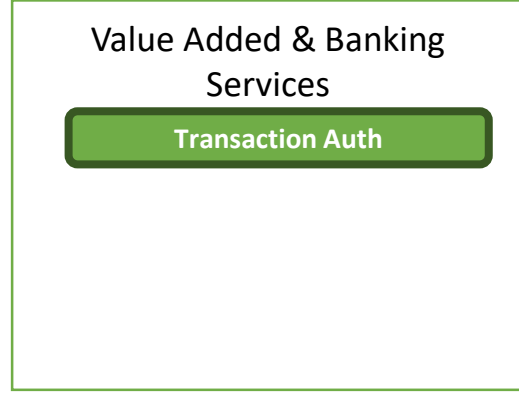
API Management

Infrastructure Mgmt

Security

Core Platform Svcs

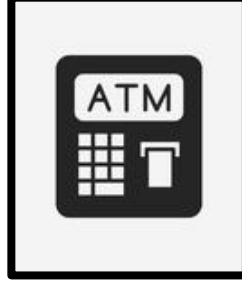
Infrastructure Management (Hardware, OS, Kernel)



- On-Us Tx Auth

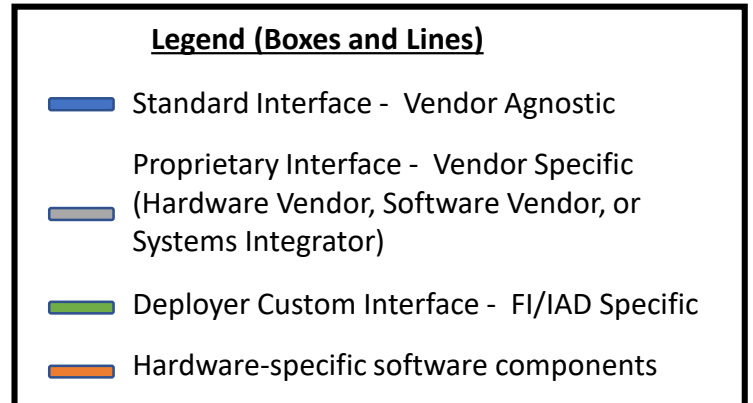
- Off-Us Tx Auth

- Legacy Protocols
- Transaction Routing
- Remote Key Exchange
- Totals
- Etc.



Traditional ATMs

ATM End Point & Consumer Owned Devices



Future

Infrastructure

Infrastructure Management (Hardware, OS, Kernel)

- API Management
- Infrastructure Mgmt
- Core Platform Svcs
- API's Security
- Security

Value Added & Banking Services

- Transaction Auth
- Cash Transaction As A Service
- Check Transaction As A Service
- More Services...

Machine Learning & Big Data Analysis

- Fraud Detection
- Data Collect & Process
- App Analytics
- Consumer Analysis
- Transaction Analytics
- More Services...

Monitoring & Management

- Infrastructure AppSvc Monitoring
- Device Monitoring / Control
- Fleet Mgmt & Inventory
- Alerts Management
- Cash & Media Mgmt
- Journal & Reporting
- More Services...

Card Networks

Issuers (Off-U's)

Network Gateway

• Open Banking API e.g. PSD2

App Services

Testing & Certification Services

Appliance Server

- Security
- Appliance Update
- Journal Collection
- Feed to Monitoring & Mgmt
- Etc.

App Store & Web Svcs

App Server

- App Enumeration
- Preferences
- Etc.

Business Rules

ATM Driving

- Legacy Protocols
- Transaction Routing
- Remote Key Exchange
- Totals
- Etc.

ATM End Point & Consumer Owned Devices

Next-Gen ATM

- Accts
- Cash
- Payment
- Transfer
- Operator Services
- Etc.

Javascript API

- Realtime App Loading
- App Enumeration
- Etc.

- Monitoring & Management
- Balancing & Reconciliation
- Device Reporting
- Appliance Management
- Etc.

- Cached Apps & Services Loading
- App Enumeration
- Etc.

Next-Gen ATM

- Accts
- Cash
- Payment
- Transfer
- Operator Services
- Etc.

Javascript API

Business Rules

Traditional ATMs

ATM Appliance

- Device Support
- OS Kernel
- Device Firmware
- Device Hardware
- Monitoring & Mgmt Agents

Consumer Operated Device

- Accts
- Cash
- Pmt
- Xfer

ATM Appliance

- Device Support
- OS Kernel
- Device Firmware
- Device Hardware
- Monitoring & Mgmt Agents

Legend (Boxes and Lines)

- Standard Interface - Vendor Agnostic
- Proprietary Interface - Vendor Specific (Hardware Vendor, Software Vendor, or Systems Integrator)
- Deployer Custom Interface - FI/IAD Specific
- Hardware-specific software components