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The New World
Being Mobile

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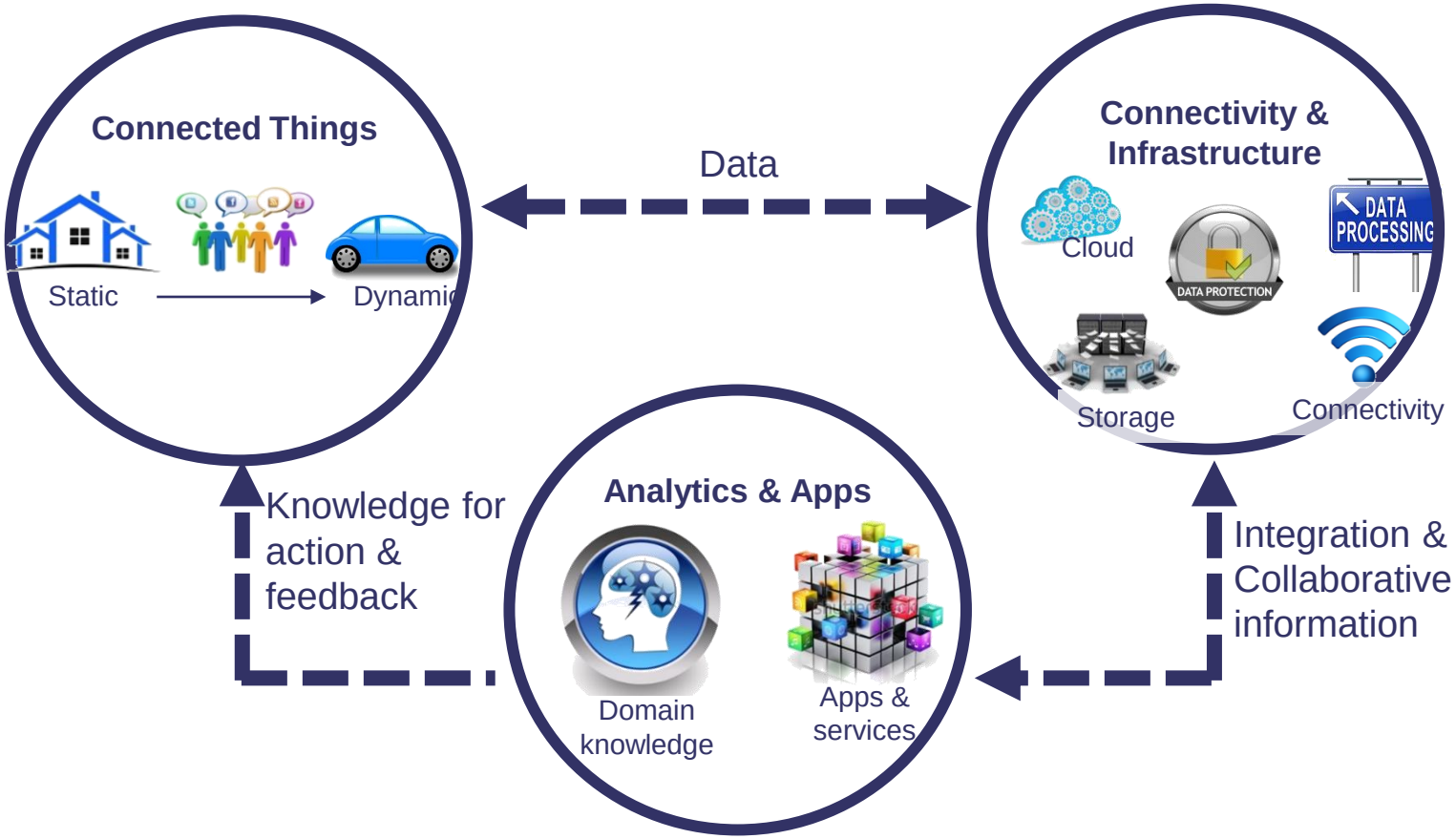
Being Mobile: Collecting Data to Creating Knowledge

Intelligent interactivity between human and things to exchange information & knowledge for new value creation.



Being mobile : Mobility Landscape

Mobile computing has been growing at a staggering rate across all age groups, income groups, industries, geographies and cultures and is widely expected to continue its exponential growth rate over the next five years.

Current mobile landscape

- Mobile cellular subscriptions surpassed **5B** in 2010 (Gartner)
- **83%** of MY population owns cellphones; **35%** of these are smartphones (Frost & Sullivan)
- More than **410M** smartphone devices have been sold globally so far (Forrester)
- Nearly **18M** tablets were sold in 2010 (IDC)

Expected growth

- Approximately **470M** smartphones will be sold globally in 2011 (IDC)
- Approximately **980M** smartphones will be sold globally in 2016 (IMS)
- By 2015, global mobile data traffic volume will be approximately **25 times** 2010 volume (FCC)
- Tablets will reach **one-third** of MYS adults by 2015 (Forrester)
- Tablet unit sales to total around **54.8M** in 2011 and top **208M** in 2014 (Gartner)

Mobility and mobility services are not only gaining ground among consumers but also among enterprises

Mobile applications deliver tremendous benefits

Business to Enterprise

- Increase worker productivity
- Improve claims processing
- Increase revenue through sales engagements
- Extend existing applications to mobile workers and customers
- Increase employee responsiveness and decision making speed
- Resolve internal issues faster
- Reduce cost by utilizing personal owned instead of corporate owned devices

Business to Consumer

- Improve customer satisfaction
- Deeper customer engagement and loyalty
- Drive increased sales through personalized offers
- Customer service
- Competitive differentiator
- Improve brand perception
- Deeper insight into customer buying behavior for up sell and cross sell
- Improve in store experience with mobile concierge services

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But also with some unique challenges

How do you quickly:

- Engage with **anyone**, customers, partners or employees, no matter who owns the device
- Extend to **anything**, from instrumented machines to a broad spectrum of smart devices
- Execute business **anywhere**, with ubiquitous, trusted and secure transactions

Top Mobile Adoption Concerns:

1. Security/privacy (53%)
2. Cost of developing for multiple mobile platforms (52%)
3. Integrating cloud services to mobile devices (51%)

200 Million

employees BYOD

(bring your own devices)

Source: 2014 IBM Tech Trends Report
https://www.ibm.com/developerworks/mydeveloperworks/blogs/techtrends/entry/home?lang=en

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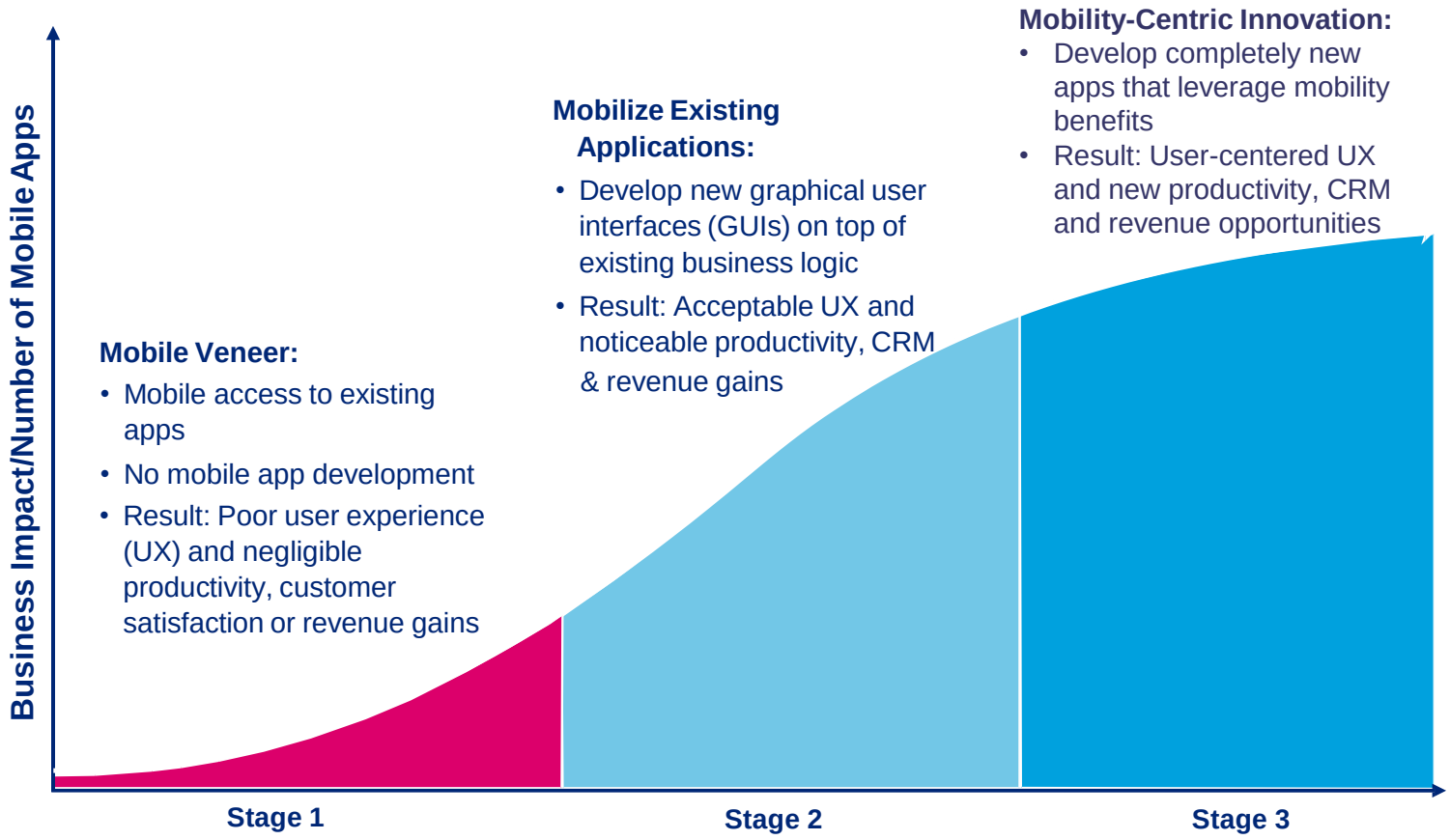
Adoption of mobility trends

At a high level, entities go through three stages of adoption for mobility.

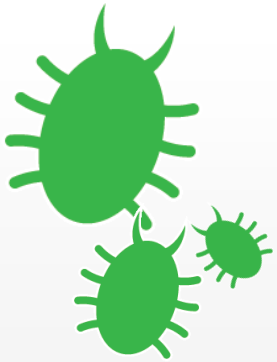


Though mobility offers wide range of products and services, it has its own set of security vulnerabilities due to the changing threat landscape

As mobile grows, so do security threats

In 2014 the number of cell phones **(7.3 billion)** will exceed the number of people on the planet (7 billion).[1]

Mobile downloads will increase to **108 billion** by 2017.[2]

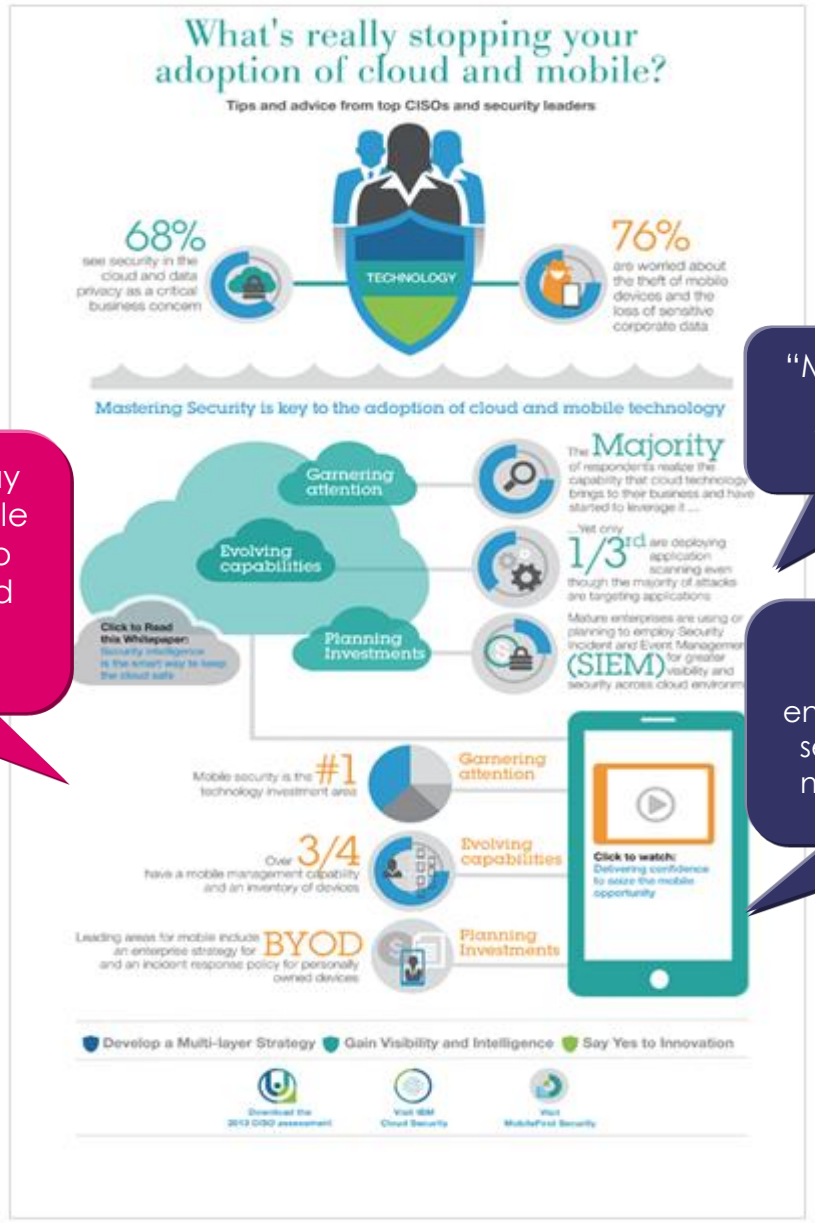


Mobile malware is growing. Malicious code is infecting more than **11.6 million** mobile devices at any given time.[3]

Mobile devices and the apps we rely on are under attack. **90%** of the top mobile apps have been hacked.[4]

Business must adapt and redefine security for mobile

2015 SANS Security Assessment Findings



"76% of responders say that the loss of a mobile device with access to corporate data could result in a significant security event."

"Mobile security is the #1 technology investment area."

"Although many are planning to develop an enterprise strategy for mobile security (39%), a significant number have not done so yet (29%)."

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Weak security can have significant financial impact on your brand

Most security breaches go undetected for eight months

*The Gartner 2015 Global Study on the Economic Impact of IT Risk Study.

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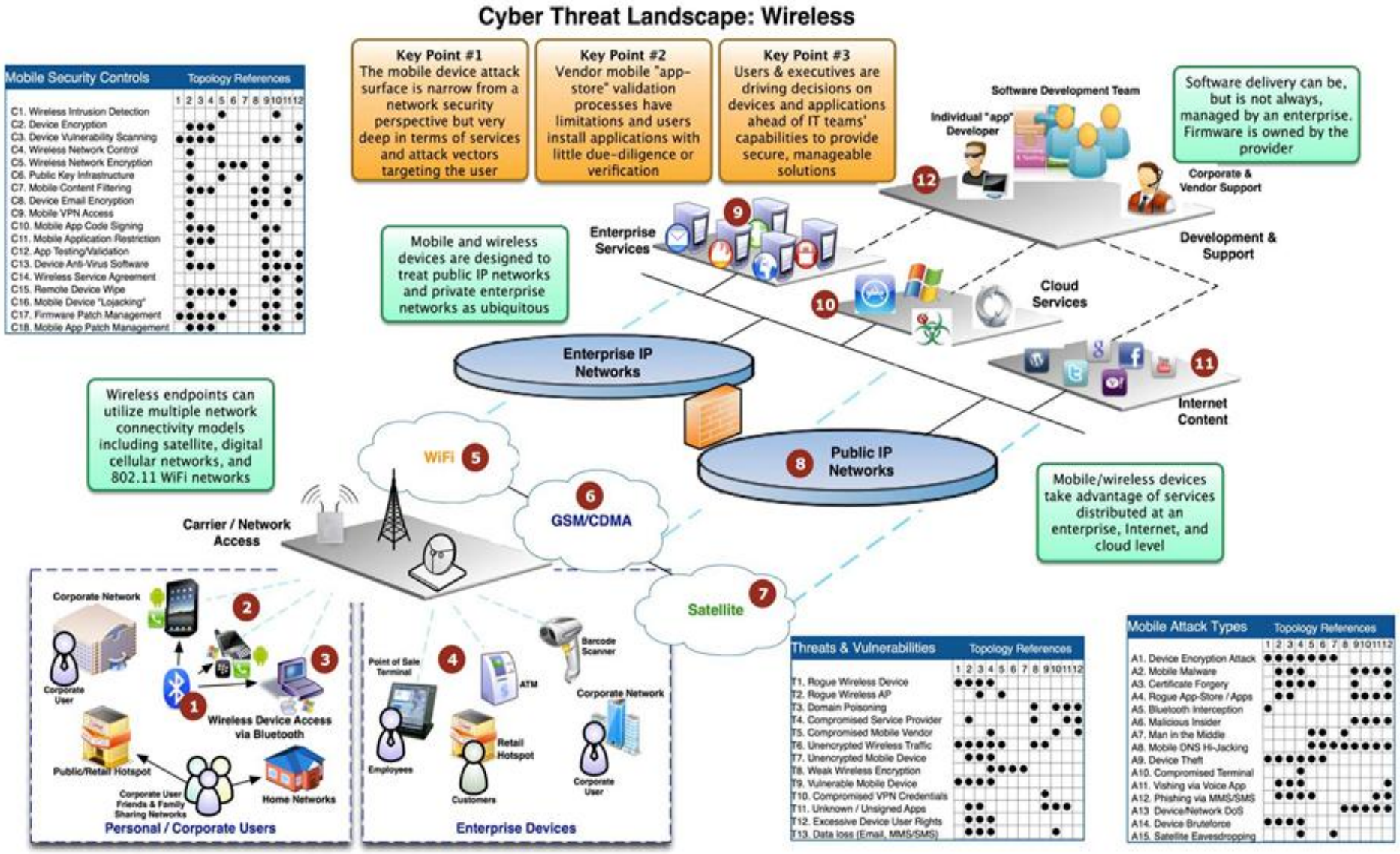
Threat overlay in Mobile eco-systems



How is New Mobility Eco-system Approach Different?

Bridging the gap between platform and app providers

Platforms

- Networks
- Devices
- OS's

Vodafone, at&t, android, orange, verizon, JUNIPER NETWORKS, SAMSUNG, MOTOROLA, cisco

Business strategy and planning

Process & transaction integrity

Full lifecycle solutions

Open cross-platform development

End-to-end security and management

Integration with backend systems, enterprise data and cloud

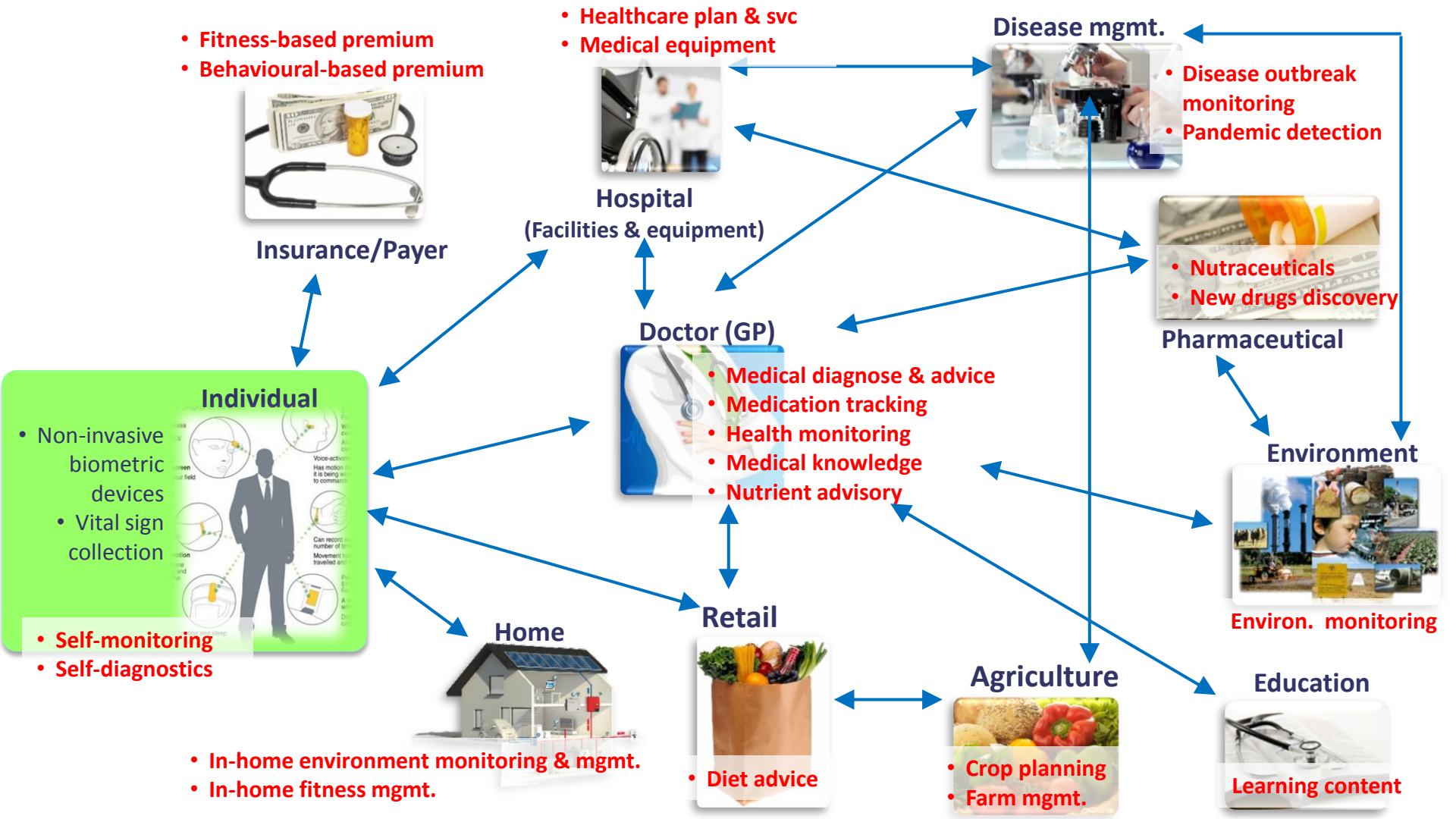
Open ▪ Governed ▪ Integral

Mobile Enterprise

Apps

- Smarter Commerce
- Social Business
- BI & Analytics
- Etc.

Internet of Things for Internet of Services
Choice, Engagement, and Experience



Challenges with Implementing Enterprise Mobility Eco-System

How do I accommodate all the different mobile platforms?

- Highly fragmented set of …
  - Platforms and devices
  - Languages, APIs, and tools
- Native programming models not portable across platforms

How do I design and develop a high-quality User Experience?

- High quality user experience is a requirement
- Quality influenced as much by design as it is by function

I need to develop different apps for different departments – quickly.

- Higher frequency of releases and updates
- Added pressure on teams to deliver on time and with quality

I need to connect my apps to existing systems

- Existing services typically need to be adapted for mobile
- Enterprise wireless networks are running out of bandwidth for employee devices

THALES Strategy Addresses Challenges

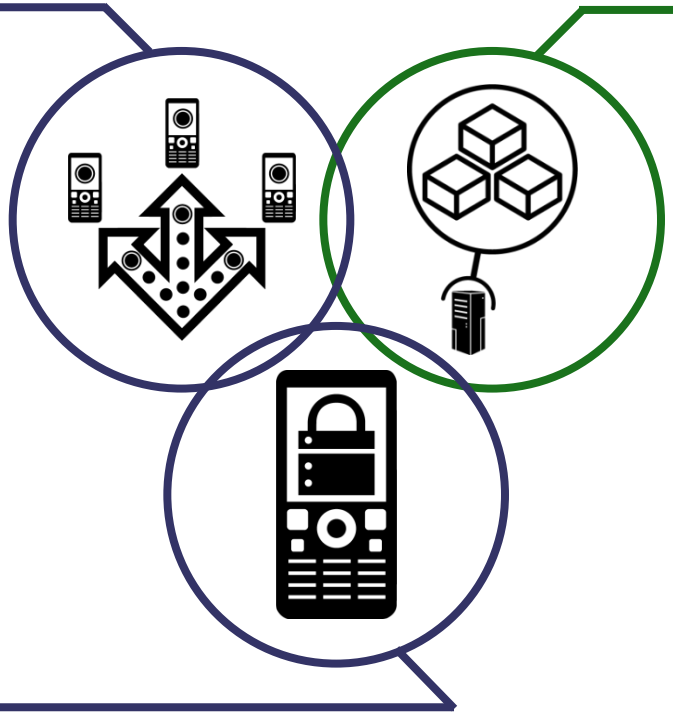
Extend & Transform

Extend *existing business capabilities to mobile devices*

Transform *the business by creating new opportunities*

Key Capabilities

- Analytics incorporating context and location from mobile devices
- Commerce and collaboration as key components of mobile-enabled solutions
- Strategy, planning, implementation



Build & Connect

Build *mobile applications*

Connect *to, and* ***run*** *backend systems in support of mobile*

Key Capabilities

- Mobile web, hybrid and native app development
- Enterprise data, service, and application integration at scale
- Enterprise wireless networking

Manage & Secure

Manage *mobile devices, services and applications*

Secure *my mobile business*

Key Capabilities

- Mobile lifecycle management
- Device analytics and control
- Secure network communications & management

Open, cost-effective, cross-platform app development

Delivering for multiple mobile platforms

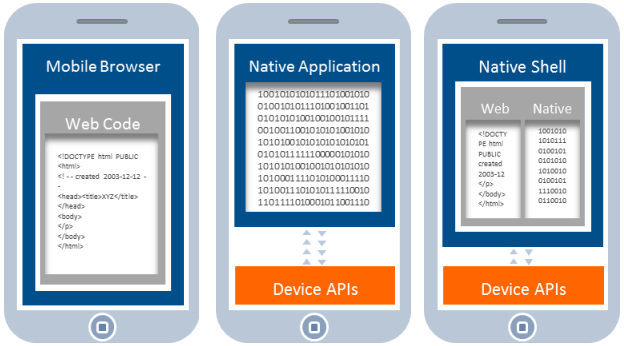
- Enterprise back-end connectivity
- Third-party integration
- Strong authentication framework
- Encrypted offline availability
- Data collection for analytics
- Packaged runtime skins

App development using native and/or familiar web technologies:

- HTML5
- CSS3
- JavaScript

App delivery in variety of forms:

- Mobile Web app
- Hybrid app
- Native



Compatible with prominent HTML5 libraries and tools:

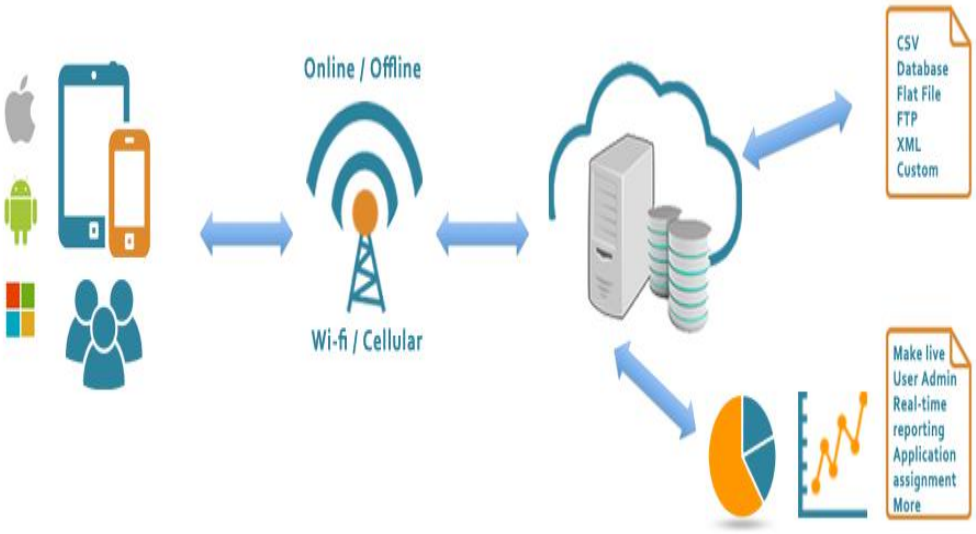
Mobile strategies also extend across channels

	Multichannel Sites and Applications	Mobile Applications (native and hybrid)
Why?	Provide a consistent integrated web experience across multiple channels (desktop browser, smartphones, tablets, etc.)	Provide an experience that takes full advantage of the device and its ecosystem
Needed Capabilities	▪ Aggregate multiple applications ▪ Content management ▪ Personalized for roles	▪ Dedicated, task focused app ▪ Integrates with device capabilities ▪ App store presence

Where are you starting today?

Rapid, simple & flexible connectivity for mobile apps
Cloud integration

Simple and flexible integration for all connectivity projects, allowing you to rapidly integrate SaaS and back-end systems with mobile apps



Client Challenge

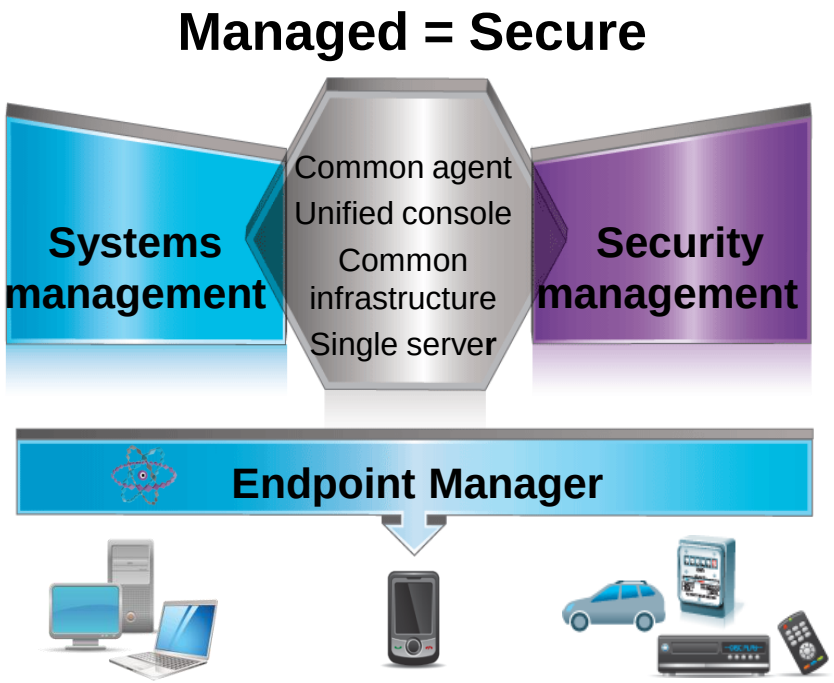
Simplified and cost effective mobile integration to back-end systems and cloud

Key Capabilities

- Native connectors and template integration processes (TIP's) to connect mobile apps to backend & cloud systems, reducing project costs up to 80%
- Bidirectional connectivity and business logic to increase data quality and streamline business processes
- Centralized monitoring
- Simple and flexible, user-friendly, wizard-based, "configuration, not coding" architecture provides best-practices and repeatable mobile integration

Device Lifecycle, Data Protection
Endpoint Manager for Mobile Devices

A highly-scalable, unified solution that delivers device management and security across device types and operating systems for superior visibility and control.



Client Challenge

Managing and securing enterprise and BYOD mobile devices without additional resources.

Key Capabilities

- A unified systems and security management framework for all enterprise devices
- Near-instant deployment of new features and reports to customer's environments
- Platform to extend integrations with Service Desk, CMDB, SIEM, and other information-gathering systems to mobile devices
- Advanced mobile device management capabilities for iOS, Android and Windows Mobile
- Security threat detection and automated remediation

Smart Mobility Reference Architecture

Strategy development

- Business Analysis (Opportunity ID, Business Case
- Mobile Enablement / Strategy Roadmap
- Mobile Solution Architecture
- End-to-end Network Design
- Mobility Readiness Assessment
- Industry Regulatory/Compliance/ Security Analysis

Application Development (design, implementation and testing)

- Creative/UX/UI Design
- Cross-Platform Dev Sybase SUP, HTML5, Adobe
- Native Development Objective C (iOS), Java
- Enterprise Systems Integration
  - ERP, Web/Ecommerce and Legacy Systems
  - Reporting/BI/DW Enablement
- Mobile middleware
  - Integration
  - Data Management
- Mobile Analytics Feedback
- Cloud and social media

Security

- Mobile application security
- Mobile security policy and governance
- Mobile security strategy and architecture
- Mobile device and operations security

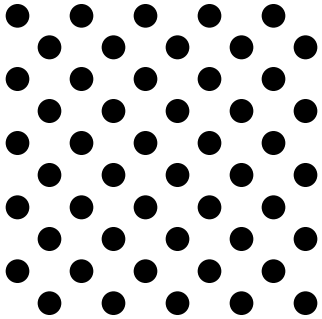
Deployment, Distribution, Management, Operations

- Mobile Device Management
- Enterprise App Store
- Product development and Enablement
- ICT Governance
- Operational / Organization Readiness
- Support Readiness

- Business Strategy
- App Concept to Development
- Mobility Infrastructure
- Enterprise Integration Strategy
- Security, Privacy & Compliance

Security Intelligence & Big Data / Analytics

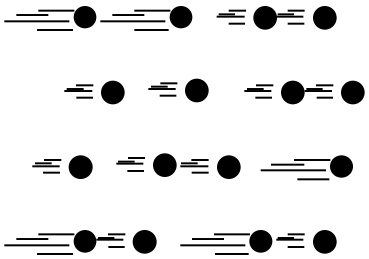
Volume



Data at Rest

Terabytes to exabytes of existing data to process

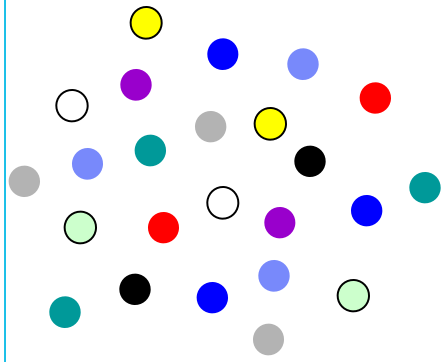
Velocity



Data in Motion

Streaming data, milliseconds to seconds to respond

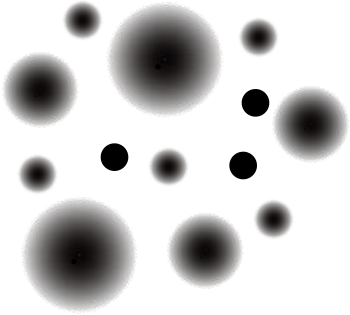
Variety



Data in Many Forms

Structured, unstructured, text, multimedia

Veracity*



Data in Doubt

Uncertainty due to data inconsistency & incompleteness, ambiguities, latency, deception, model approximations

* Truthfulness, accuracy or precision, correctness

Integrated Approach

Security Intelligence Platform

Threat Intelligence SIEM

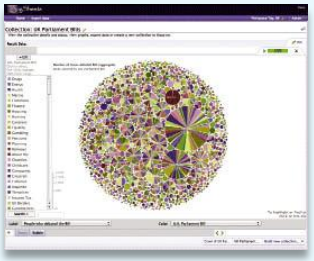
- Data collection and enrichment
- Event correlation
- Real-time analytics
- Offense prioritization

Advanced Threat Detection

Data ingest

Insights

Big Data Platform



Threat Insights

- Hadoop-based
- Enterprise-grade
- Any data / volume
- Data mining
- Ad hoc analytics

Custom Analytics

Traditional data sources

Non-traditional

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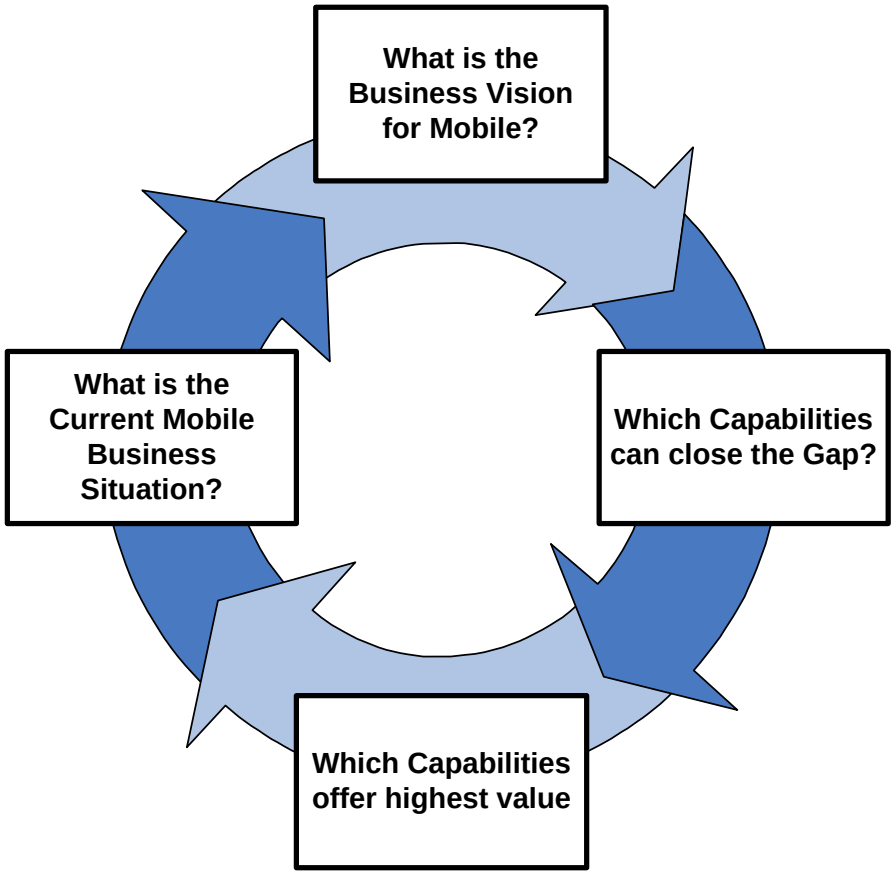
A successful mobile strategy considers …



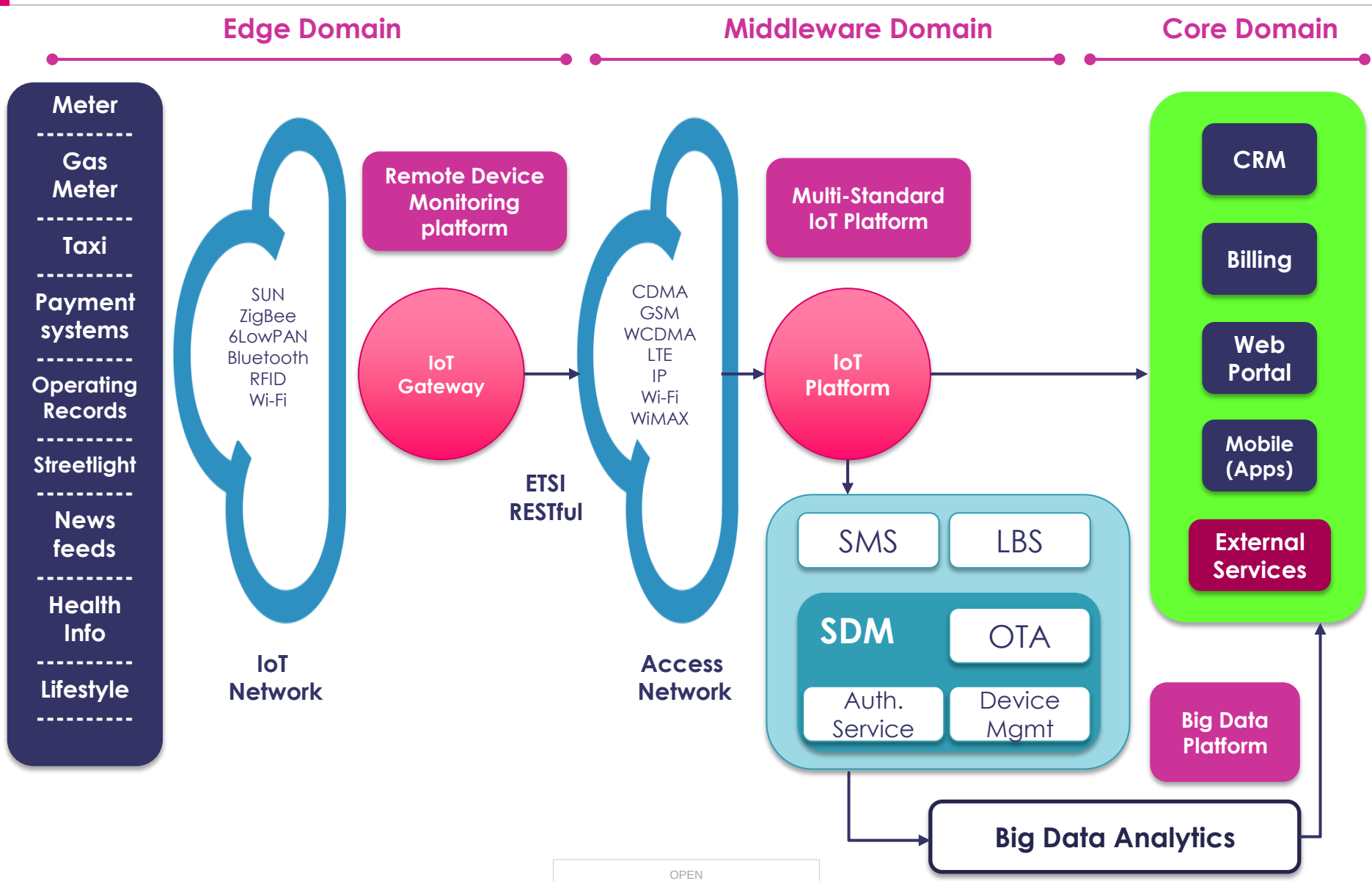
And provides …

- Strategic direction for mobile capabilities that considers audience needs, business priority, and IT readiness
- Strategic direction on device support
- Strategic direction on build approach based on technical experience and time to market priorities
- Strategic direction on options for operation of the mobile solution

Success of the strategy depends upon a core team of client and THALES resources that collaboratively builds the security strategy

Your business goals and audience goals are aligned to your IT capabilities to create a practical roadmap for mobilization

Value Creation – IoT Mobility Business Model



THALES Mobile security services

Thales can assist you in creating a secure delivery framework for your mobility initiatives from inception to ongoing operation. We can help you set the proper risk balance between control, efficiency and user experience. Our security and privacy specific services include:

THALES secure mobility eco-systems

- Security architecture, strategy & roadmap
- Security risk assessment
- Secure Infrastructure eco-systems
- MDM & operational security
- Mobile application security testing
- SDL, SAMM for mobile applications
- BYOD Security policy review
- Security training & Crisis Management
- Incident investigation response & Forensics

We also leverage the resources of the Thales E-Security mobility Solutions that conduct original research and develop substantive points of view to help executives make sense of and profit from emerging opportunities on the edge of business and technology.

Three ways to get started with Thales Mobile Security

1. Learn more about Thales Security Consulting and NFC Security Assessment : Visit our booth
2. Find all the answers to your Mobile Security Questions in one place. Contact our Consultant
3. Stay connected – read the latest blogs and visit us at: www.thales-security.com

Thank You

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