Mobile Strategy

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Mobile Strategy Presentation Outline

Security

Competition

Strategy

Application
Mobile Threats

- There are numerous attack vectors
- The targets are high-value

### Attack Vectors
- SMS
- Email
- Web browser
- 3rd party apps*
- “Jail-Broken” phones
- Operating system vulnerabilities
- Physical Access

### Targets
- Message forwarding
- Credential acquisition
- Recording or listening to conversations
- Malware propagation
- User tracking (GPS)
- Data collection

*10.9B mobile apps downloaded in 2011, 76.9B projected by 2014 (IDC)
Mobile Controls

• There are a litany of controls that organizations can employ:
  – Force encryption of data at rest
  – Force secure connectivity on unsecured public networks
  – Confirm unauthorized mobile devices do not have access to corporate LAN
  – Confirm mobile user spending is in-line with mobile security policy
  – Implement over-the-air decommissioning of lost or stolen devices
  – Set the device to auto-lock
  – Set limit for unauthorized login attempts
  – Handheld devices should be enterprise property
  – Before an employee departs, obtain device and remove corporate data
  – Classify data according to sensitivity of data being carried

• But there will still be residual risk...

Source: Verizon Mobile Devices and Organizational Security Risk
Adversary Capabilities

- You cannot stop the sophisticated adversary
  - Extremely skilled
  - Heavily funded
  - Highly determined

- Your goal is to find the balance between the potential economic impact of a breach and the cost of controls (EEI, 2009)
Competitive Security Positioning

• Sophisticated adversary with a targeted attack
  – Establish initial beachhead
  – Direct extensive resources to control key assets
  – Defenses track activity for intelligence gathering
  – At pre-determined level of progression, adversary is denied

• Adversary re-directs activities toward peer organization
  – Learned lesson from previous activity and adapts approach
  – Multiplied resources toward new target

• By performing incrementally better than peers, organizations can realize outsized gains (“outrunning the bear” strategy)
Competitive IT Positioning

• Our job is to position our businesses to be more competitive – create competitive advantage. This is done by differentiating.

• Google CIO (Ben Fried):
  • Make technology accessible and open
  • Empower users to do more
  • Facilitate corporate culture of innovation
  • Focus on things that are noticeable
  • Non-standardization

• Avoid competitive convergence...
Strategic Process

• **Strategy is about creating competitive advantage by leveraging resources to exploit opportunities**

• There are three basic steps to strategic development (Rumelt, 2011):
  – Diagnosis
  – Approach
  – Actions

• **Example**: US Cold War Strategy
  – Diagnosis: USSR heavily motivated to compete militarily but cannot invest dollar for dollar with the US
  – Approach: Invest in offensive capabilities for which defensive counter-measures offer no complementary offensive capabilities
  – Actions:
    • Modify investment process
    • Promote offensive capabilities
Characteristics of Good Strategy

• Good strategy:
  – Is about what not to do (Porter, 1996)
    • The problem should be simpler and less complex when a good strategy is applied
    • Financial/Operational/etc targets are not strategy, they are goals
  – Views situations from unique perspectives (Levitt, 1960)
    • Industry: Holcim (Zack, 2003)
    • Mobile: Consumers and Creators of data
  – Leverages an organizations’ strengths (Wernerfelt, 1984)
    • Industry: Honda Engines
    • Mobile: User Experience
  – “fits” in such a way that activities are complementary
    • Industry: identical aircraft, low-overhead operations, no-frills service supports “low cost airline” strategy
    • Mobile: logging, risk, data loss prevention, monitoring “fit” with data-driven decisions
Business Strategy: 3 Horizons of Growth

HORIZON ONE

Core Revenue

- Demand-side benefits of scale
- Service delivery
- Standardization
- Process improvement

HORIZON TWO

Emerging Growth

- Growth through acquisition
- Service integration
- Virtualization
- M&A playbook

HORIZON THREE

Embryonic Opportunities

- Value chain expansion
- Platform development
- Software development
- Usability

Mobile Strategy

• Mobile is a “point” strategy – a subset of business, IT and security strategies

• Each organization should have a unique strategy
  – A great strategy for one organization may be terrible for another
  – Don’t succumb to competitive convergence
### Information Touch Points

<table>
<thead>
<tr>
<th>Security Capabilities</th>
<th>Stakeholders</th>
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<tr>
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<td>M&amp;A</td>
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**Table Legend:**
- **X** indicates touch points.
Mobile Strategy - Diagnosis

- **External Environment:**
  - 102 million tablets will ship in 2012
  - 630 million smartphones in 2012
  - 4G networks will be 10x faster than 3G
  - 52% of 18-27 year olds consider technology when selecting an employer
  - 54% of 18-22 year olds expect to access their own tech in the workplace

- **Internal Environment (S/W):**
  - (1) infrastructure,
  - (2) hardware refresh cycle,
  - (3) spending levels,
  - (4) information sensitivity,
  - (5) new acquisitions,
  - (6) compliance requirements,
  - (7) risk profile

- **Threats:** (see slide 3)

- **Opportunities:**
  - (1) reduce costs,
  - (2) reduce energy consumption,
  - (3) attract new talent,
  - (4) strengthen brand,
  - (5) support complementary initiatives,
  - (6) happy users,
  - (7) improve security,
  - (8) productivity, etc.

Source: Mobile: Gartner. Millennial Users: Accenture
Mobile Strategy - Approach

• The guiding approach will provide overarching direction for all stakeholders to base their decisions

• Business Approach
  – “Low Cost Airline” – Southwest Airlines

• General Security Approaches
  – Opportunistic – “minimal security footprint”
  – Relative Value – “perform equal or incrementally better than rivals”
  – Absolute Value – “do what creates the most value”
  – Compliance – “good compliance means good security”
  – Risk to Zero – “accept as little risk as possible”
Mobile Strategy - Actions

- Strategic actions support execution and delivery of the strategy
- Examples of actions include:
  - Accelerate VDI implementation
  - Sandbox mobile devices
  - Segment network to support BYOD
  - Develop mobile risk scenarios to characterize exposure
  - Define data classification requirements
  - Develop social network and mobile training program
Mobile Strategy - Example

Technology Actions
- Standardization
- Process improvement
- Virtualization
- M&A playbook
- Software development
- Usability

Mobile Strategy

Approach
- “Manage data and applications – not devices”

Security Actions
- White-listing (profile)
- Mobile sandboxing
- Mature DLP services
- Enclave environments
- Mktplace app testing
- User experience

Challenges
- Data classification
- Device selection
- Risk acceptance
- Compliance
- Technology maturity
- User training

Benefits
- Leverages biz strategy
- Quick wins
- Strategic alignment
- Scalability
- Full BYOD support
- Risk reduction
Complementary Drivers

- Complementary drivers provide a good platform for a mobile strategy
  - Unified Collaboration/Communication – Accenture, Cognizant
  - Mobile Field Services – ADP
  - Disaster Recovery/Emergency Response – Interstate Transport
  - Enterprise/Web 2.0 – Booz Allen Hamilton, Cognizant, Juniper Networks
  - Virtualized Desktop Infrastructure - SaveMart
  - Mobile Application Development – Google, Wells Fargo
  - Electronic Records Management – Univ. of Chicago, Goodwin Procter
  - Wireless Infrastructure/Security – USD, GWU, Halifax Health Systems
  - Social Media Employee Collaboration – J&J
  - Mobile Claims Management – Reliance General Insurance
  - Intellectual Property Workflow Automation – Thomson Reuters

Source: Network World, Top 100 IT Projects
Next Steps

• View your organization and capabilities from the perspective of competitive positioning
  – Differentiate
  – Create competitive advantage

• Build your strategy based on diagnosis, approach and actions

• Use characteristics of good strategy:
  – Focused
  – Unique perspective
  – Utilize strengths
  – Complementary

• Doing this right will make users happy and improve security
Mobile Strategy

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