

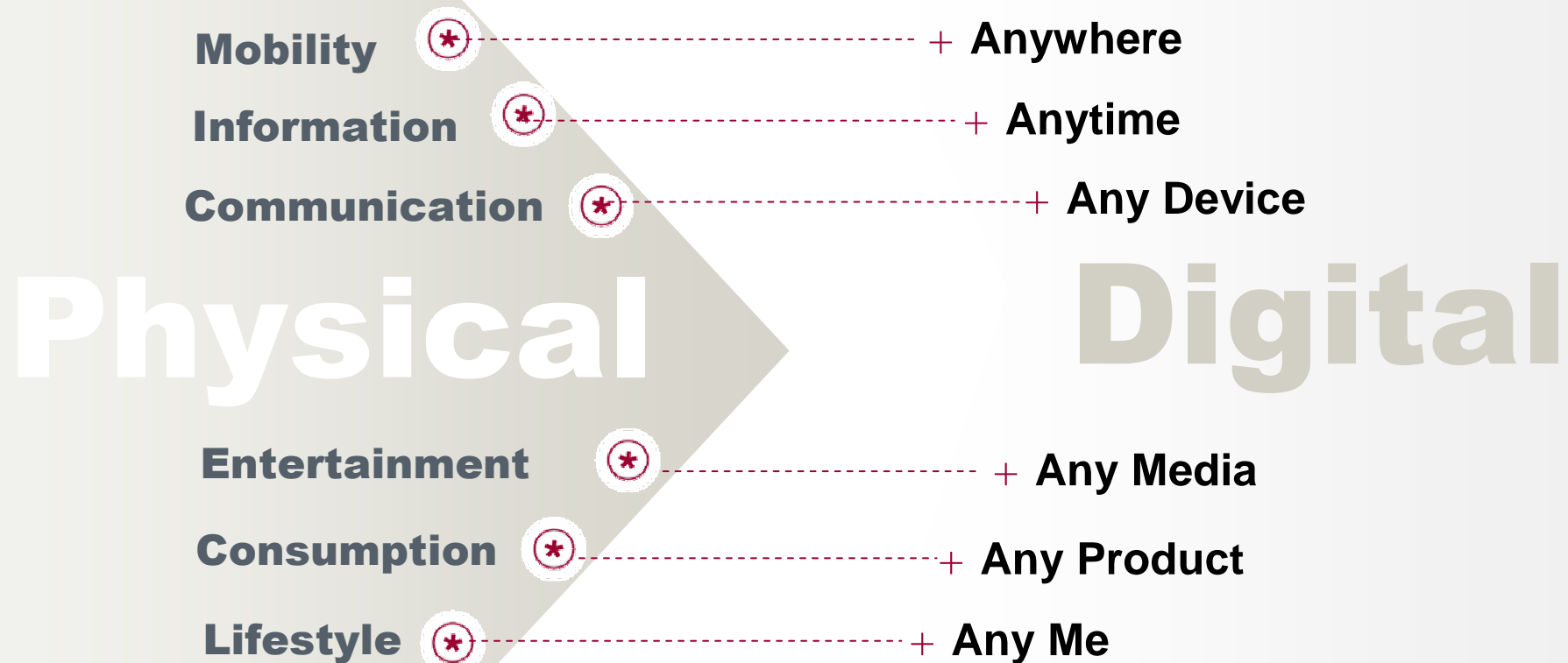
New Directions in Technology and Healthcare: The “Any Era”



Welcome to the “Any Era”



The “Any Era” Has Arrived



Driving A Dramatic Increase In Networked Interactions

It's Real, It's Global

1b Internet users, 35% of users in Asia

180m global
broadband subscribers

70m Chinese
Internet users under 30

2b wireless users

2b cumulative iTunes

100m YouTube
video views daily

106m MySpace Users

136m registered Skype users

57m active blogs

We See It Every Day

30b address requests

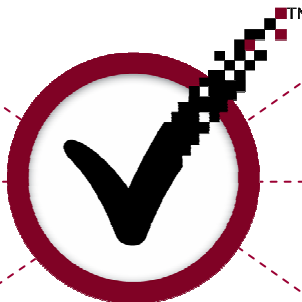
2b security events

500k video downloads

200m SMS messages

800k Picture Mail
messages sent

100m VeriSign Secured™
checkmark views



The Consumer Is in Charge

End-to-End Products Work



Mobile Entertainment

iPod + iTunes



PDAs (Blackberry / Treo)

Voice + Email + Internet +
SMS / MMS



Computer Gaming

X-Box + Online
Gaming Network



Home Entertainment

HP Smart TV
WiFi and Home Media Centers



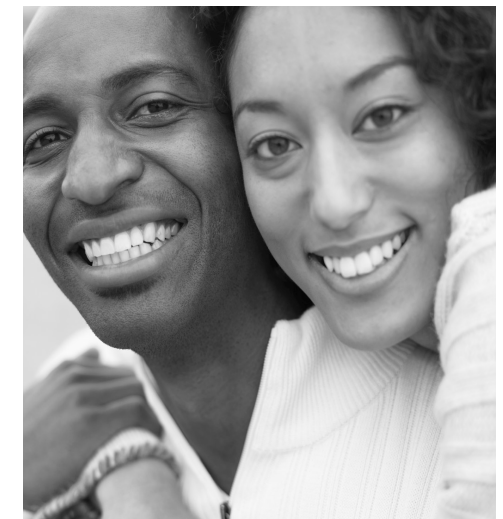
Customer Self-care Web Sites

Online Billing, Payment
and Account Review

End-to-End Solutions Win!

Trend Towards Consumerism in Healthcare

- + Healthcare *consumer* vs. recipient
 - Individuals have greater control over decisions affecting health care
 - Mandated transparency cost and quality information
 - Tools to make better health decisions and healthcare spending choices
 - Consumers review multiple sources of information, compare and evaluate the cost and quality of available services.
- + User experience expectations measured against standard in other industries (entertainment, financial services)



The Any Era Consumer (Media example)



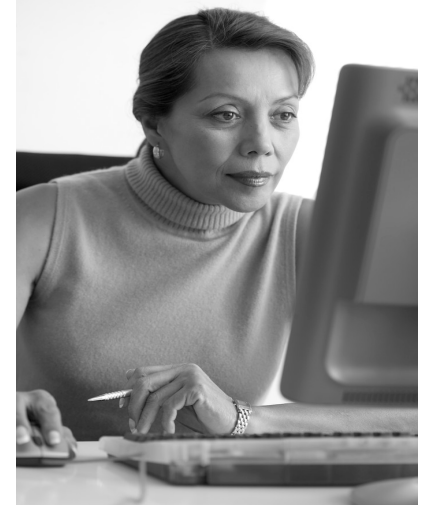
- + Audience media diet, behavior, and expectation are changing
 - Online
 - On the phone
 - On television
 - In their home....
- + And they are demanding greater control over what, when, and where they will watch

Consumers are place-shifting and time-shifting to make their own schedules

Consumers are interacting socially around content

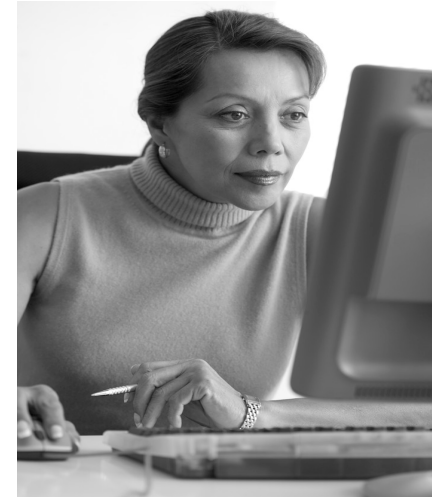
Any Era Consumer Expectations of Healthcare

- + Access to relevant and transparent information
- + Anywhere, anytime, at any point of care
- + Social consumers and caregiver communities or networks forming around health and wellness
- + Convenience and ease of use are important
- + **Privacy and security must be ensured**

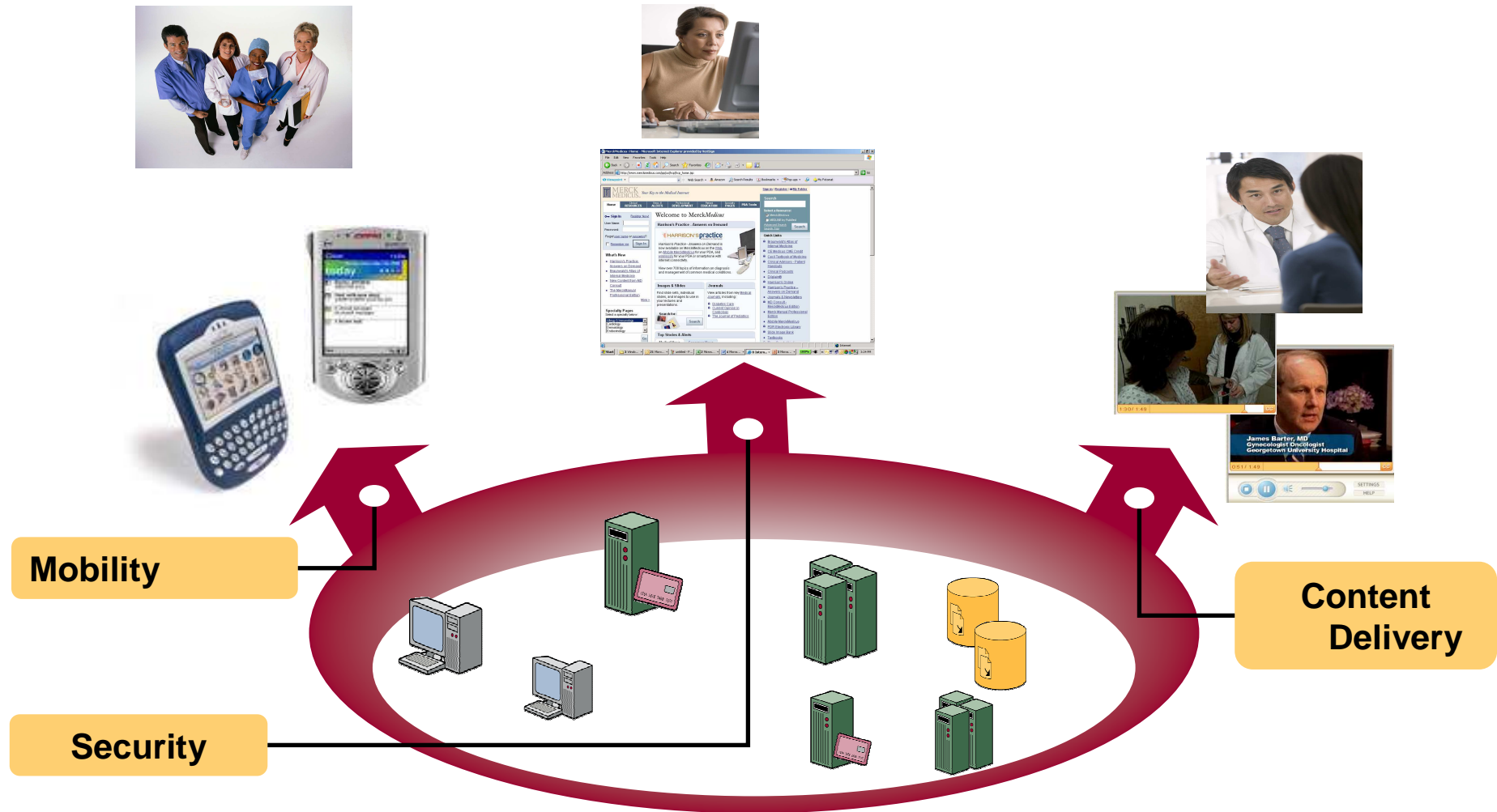


Any Era Stakeholder Requirements

- + **Patients** -online access to appointment scheduling, health records, lab results, insurance plans, payment information, and prescription renewals.
- + **Physicians and other healthcare professionals**, - Download rounds, access lab and imaging results and review electronic medical records.
- + **Hospitals administrators** - extensive connectivity to other constituents in order to use assets more effectively, improve the speed and accuracy of care-to-cash cycles, attract and retain healthcare professionals, improve patient care, and reduce costs.
- + **Pharmacies** - online access to patient records, complete and accurate prescriptions, and up-to-date payer plan formularies and other information to help them deliver quality care, reduce administrative costs, and improve cash flow.
- + **Payers and employers** - clean, up-to-date health and care information to help manage the cost and performance of products and services and to develop new offerings that help members and customers achieve their healthcare objectives.



Anywhere, Anytime, any Point of Care



Mobility*

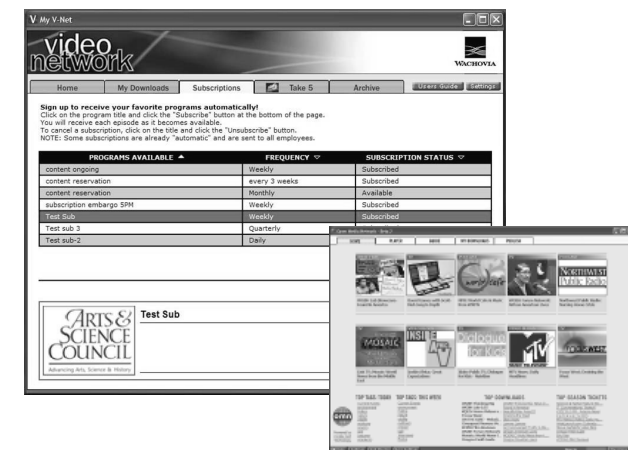
- + Appointment Reminders
- + Medication Reminders
- + Accessing Patient Records
- + ePrescribing
- + Patient Paging In Outpatient Clinics
- + Disease Monitoring and Management
- + Clinical Trials
- + Monitoring
- + Medical Alerts
- + Medication Compliance Monitoring
- + Patient Identification and Location
- + Clinician Identification and Location
- + Asset Tracking and Stock Control
- + Training and Education
- + Patient Entertainment And Communication
- + Patient Notes Dictation
- + Administration At The Point Care
- + Remote Consultation (Telemedicine)



* 101 Things to do with a Mobile Phone in Healthcare,
Steinkrug Publications Ltd

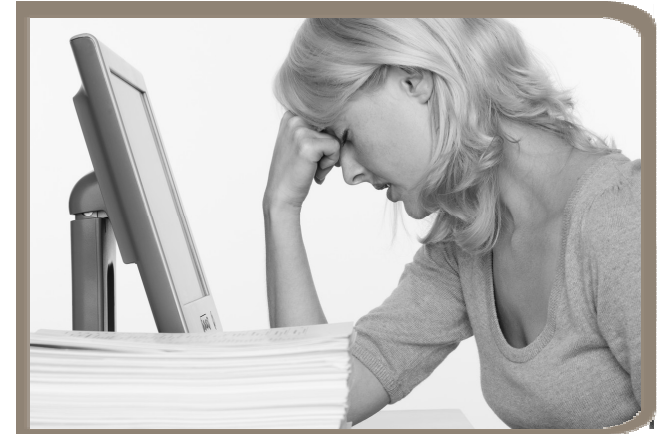
Content Delivery

- + Message and Information Delivery
 - SMS, MMS, IM, eMail....
- + Collaboration
- + The healthcare industry is one of the leading consumers of rich content media
 - On-demand video is cost effective for large communities and organizations



Constituent Security Concerns

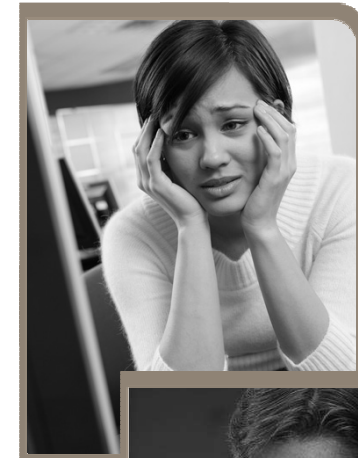
- + Competition for consumer health spending
 - User experience to online services and information access can be competitive differentiator
- + Impact of security incidents on reputation
 - Security breaches impact consumer loyalty and confidence
- + Cost of in-house compliance and security expertise
 - Compliance issues constantly changing
 - HIPAA
 - Data breach laws
 - Data privacy laws
 - Security threats constantly changing
 - Difficult and costly to retain IT security talent



Consumer Security Concerns

Is my information private and secure

- + eHealth Vulnerability Reporting Program Study
 - Electronic health record systems remain vulnerable to security risks
- + PricewaterhouseCoopers/*CIO Magazine* State of Information Security survey
 - 77% of U.S. hospitals and health systems are not confident in their information security.
 - In the past year, 39% of U.S. hospitals and health networks had negative security-related events
 - 25% reported confidential records were compromised and 10% reporting that the breach resulted in legal exposure.
- + Health Industry Insights Survey
 - 86% of respondents concerned about the health industry's ability to protect the privacy of personal health information in deploying electronic medical records.



Headlines Reinforce Concerns

Negative Media Coverage Saturated With Bad News

In 2007, an IT services vendor places 867,000 military health records on unsecured server

Washington Post

California fines health plan \$200,000 for exposing the confidential health information on a publicly Web site

PrivacyRights.org

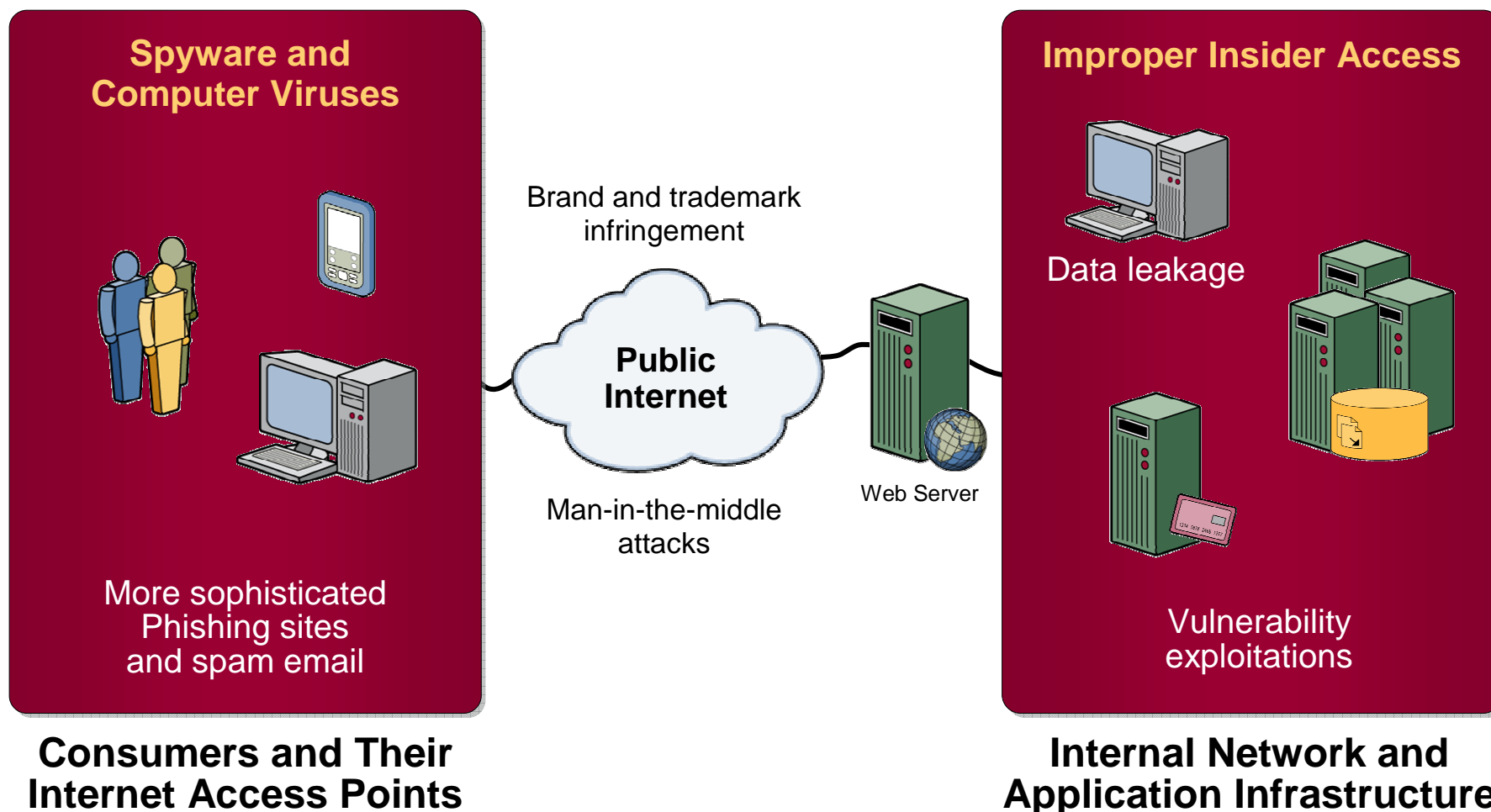
Between 250,000 and 500,000 people were victims of medical identity theft in 2003 alone.

World Privacy Forum

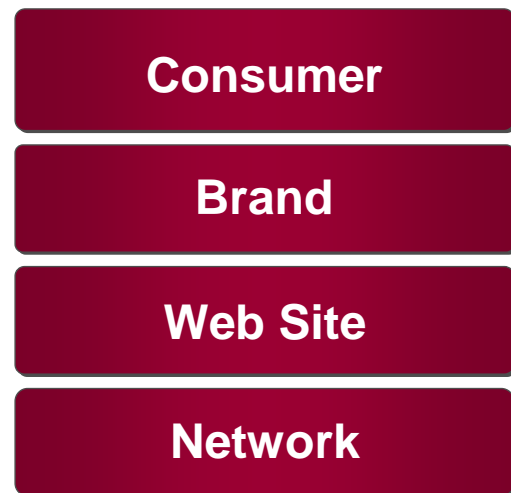
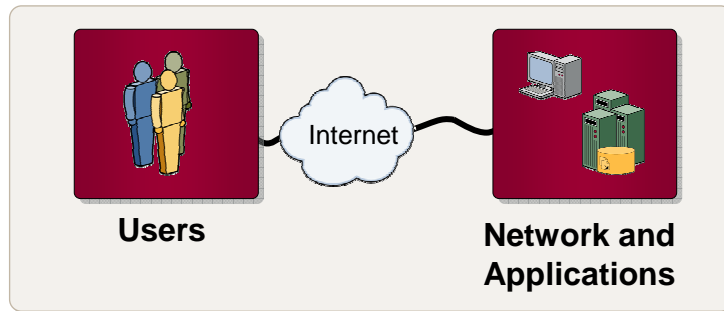
2006 hackers data breach at an Ohio hospital included bank account information of 12,000 donors, and the personal and medical records of 230,000 patients.

PrivacyRights.org

The Threats are Everywhere



Layered Security Approach is Needed



Identity and Fraud Protection

- Strong Authentication
- Fraud monitoring

Reputation Monitoring

Verification

Defense

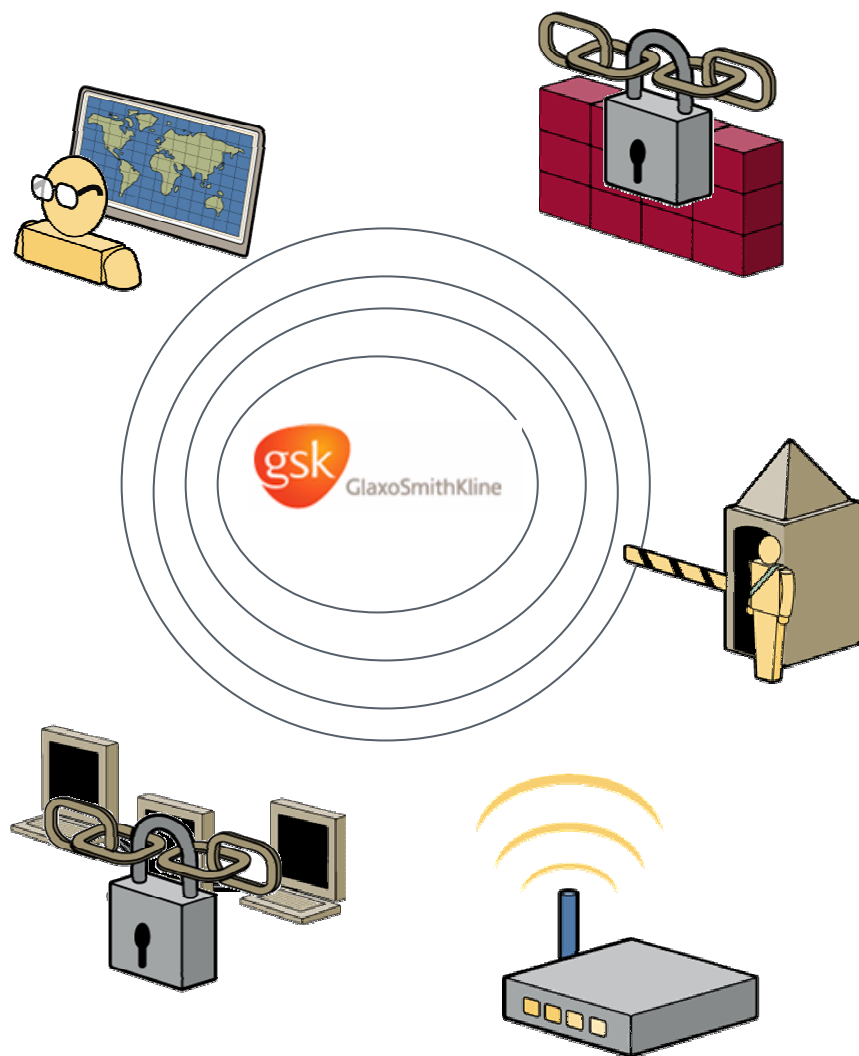
- Internal and External Threats
- Compliance

Infrastructure Requirements

- + Broad network access and availability
- + Risk management, regulatory compliance
- + User / Constituent Identity protection
- + Secure mobility
- + Secure networks, transactions, data



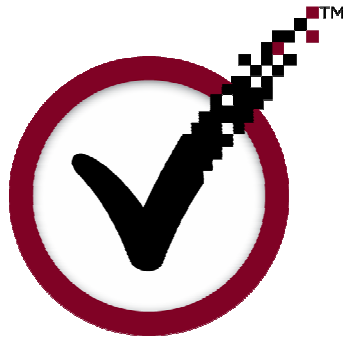
VeriSign® Layered Security at GlaxoSmithKline



VeriSign® Layered Security at GSK

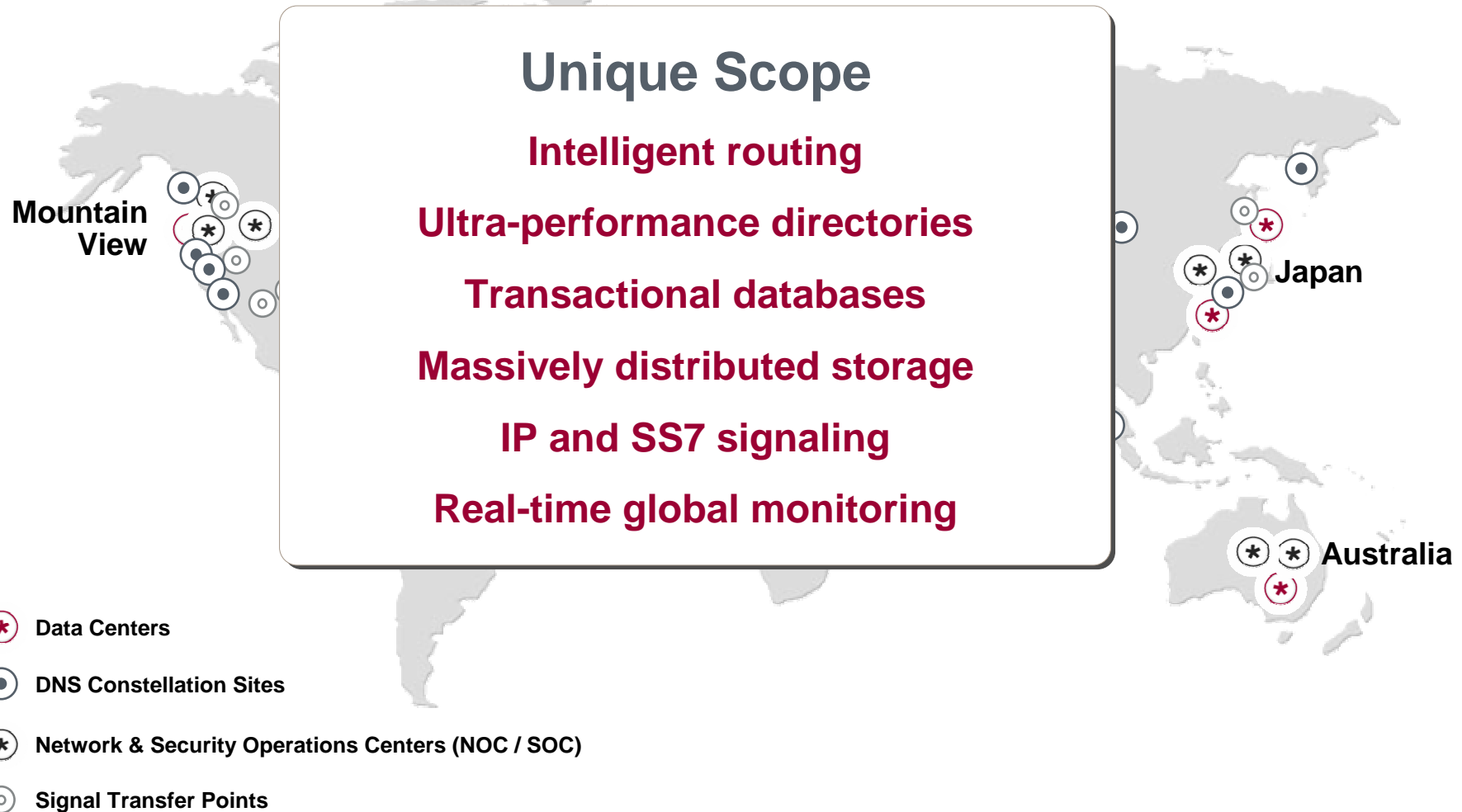
- + Firewall Management and Monitoring
 - More than 80 devices in multiple global locations
- + Network Intrusion Detection Management and Monitoring
 - More than 70 devices in multiple global locations
- + Wireless Intrusion Prevention
 - Leveraging VeriSign's newly announced Wireless Intrusion Prevention service
- + Threat Intelligence
 - Provides and gives unique early threat warnings

Simple Global Mission



***Enable and Protect
the World's
Networked Interactions***

VeriSign Digital Infrastructure



VeriSign Digital Infrastructure

Unmatched Scale

70+ global points of presence

400K+ customers worldwide

64Gb+ of network bandwidth

15,000+ computing devices





Over 1,000 technology personnel

Over 30b interactions per day

Mountain
View

Japan

Australia

-  Data Centers
-  DNS Constellation Sites
-  Network & Security Operations Centers (NOC / SOC)
-  Signal Transfer Points

VeriSign Digital Infrastructure

Global Advantage

99.999% availability

Built for resiliency and instant scalability





Network, protocol and device interoperability

Global view into IP-based interactions and threats

Mountain View

Japan

Australia

-  Data Centers
-  DNS Constellation Sites
-  Network & Security Operations Centers (NOC / SOC)
-  Signal Transfer Points

Wrapping-up

- + The Any Era is here...
- + Consumers are in charge...
- + Expectations are evolving...
- + Key building blocks include:
 - Mobility
 - Content Delivery
 - Security
- + VeriSign is here to help

Questions



QUESTIONS + ANSWERS