



Directions in Retail

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Agenda

- ➔ **1. Setting the stage**
- 2. Evaluation of the Industry**
- 3. Reasons for a new view**
- 4. The Retail Network**



When All the Rules Change.

The Importance of **Inflection Points**.

Social, political, or technological sharp shifts that

- **Change all the rules. Erase conventional wisdom.**
- *Create new winners. Create new losers.*

Shift	Impact on Retail
1950-60's: Automobile society.	Downtown retail declines; A-stores in suburbs
1950-60's: Transistor	Music independence for teens; explosion of rock 'n roll and youth culture
1980's-90's: China opens to the world	Growth of private label, Wal-Mart
2000-2001: Napster, iPod	35% decline in CD sales, 2001-2006*
2007-08-09: the Network, Video, and Personal Converged Devices.	To be determined.

The CEO Perspective...and the CIO Gap

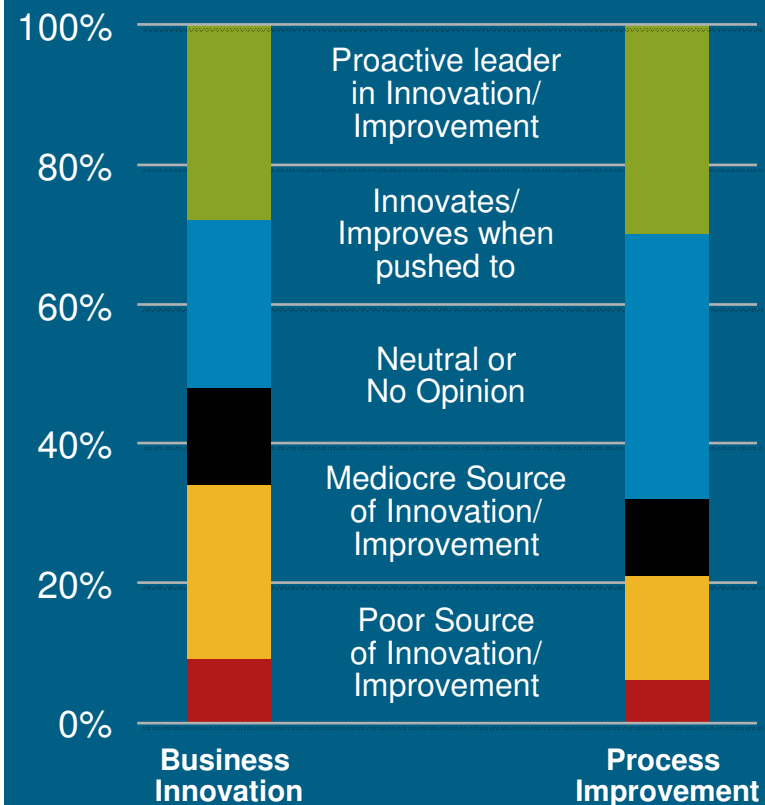
CEOs are expanding the innovation horizon...

CEOs see Business Model Innovation as the means for more lasting differentiation and top-line growth(1)

Essential prerequisites:

- Internal and External Collaboration
 - Partnering outside the organization
- Integration of Business and Technology
 - Beyond alignment

...but they do not view CIOs as proactive business innovators



Source: (1) IBM—CEOs are expanding the innovation horizon; important implications for CIOs, September 2006 (765 CEOs)

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**No two MINIs are exactly alike...
Over 10 million possible configurations**



Almost \$2B in sales of a zero-inventory product (iTunes) and huge demand created with marketing and industrial design



**60,000 people work in P&G Product Supply
from sourcing raw materials to delivering final
product to retail customer partners and consumers**



What Do These Companies Have in Common?



P&G



Continuous Innovation

Customer Focus

Supply Chain Excellence

COLLABORATION

Better Collaboration Essential to Improving Supply Chain



92% of Fortune 500 manufacturers and retailers said that enhancing collaboration would help to address their supply chain issues

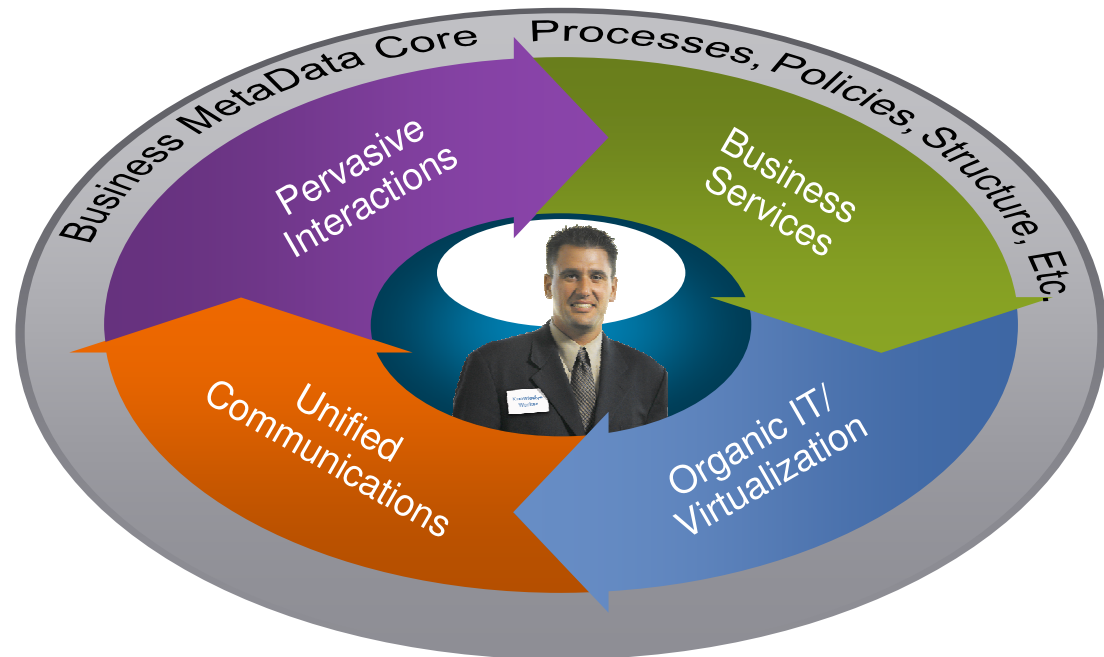
Source: Supply Chain Directions Summit 2006 Survey

Business Network Transformation



Business Network Transformation

- **Converged**, streamlined application and IT infrastructure that supports loosely coupled, dynamic business processes
- Orchestrated from users', industry, and usage-based perspectives - a **User-centric Enterprise**
- Enables rich, **in-context fluidity** between business services, pervasive interactions, unified communications and collaboration (UC2), and legacy IT resources
- Evidences the value of **event-based** business processes
- Manifests **Frictionless, Real-Time, Globally Connected B2B**



Business Network Transformation

BUSINESS NETWORK TRANSFORMATION

Cisco enables a Globally Connected Real-Time Business that **Accelerates Business Innovation** through **In-Context Communications and Collaboration** across the **Borderless Enterprise**.

Borderless Enterprise

- Dynamic Interactions between People, Processes and Business Information, and Systems
- Ability to Sense and Respond to Changing Market events in a Global “Flat Earth” World
- Profitably Grow the Business

Connectivity, Information Flow, Integration & Interoperability

In-Context Communications and Collaboration

- Agile, Information-based Business Execution
- Distributed Decision Making
- Improved Outcomes, Productivity and Organization Performance

Users, Interactions, Experiences and Productivity

Innovation

- Transact Business at the Speed of Change
- Organizational Competencies and Assets Address the Changing Needs of the Business
- Manage Risk as an Asset

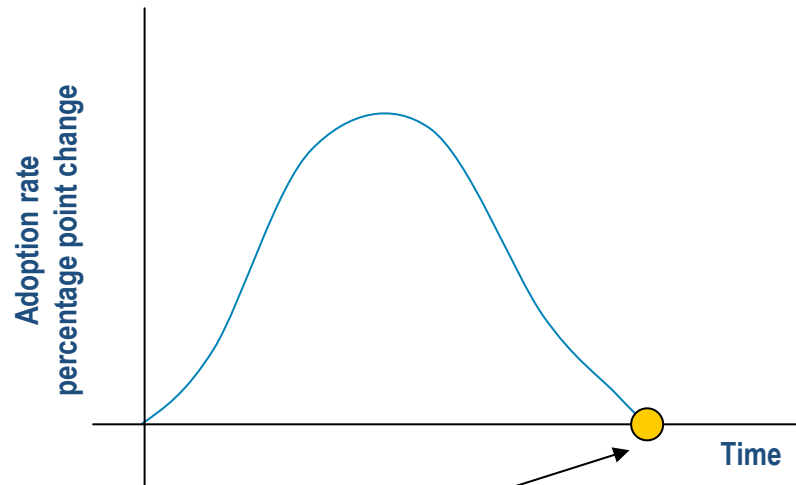
Visibility, Transparency, Awareness and Agility

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Accelerating product life cycles are putting intense pressure to cut costs and reduce risk



Shrinking market opportunity:

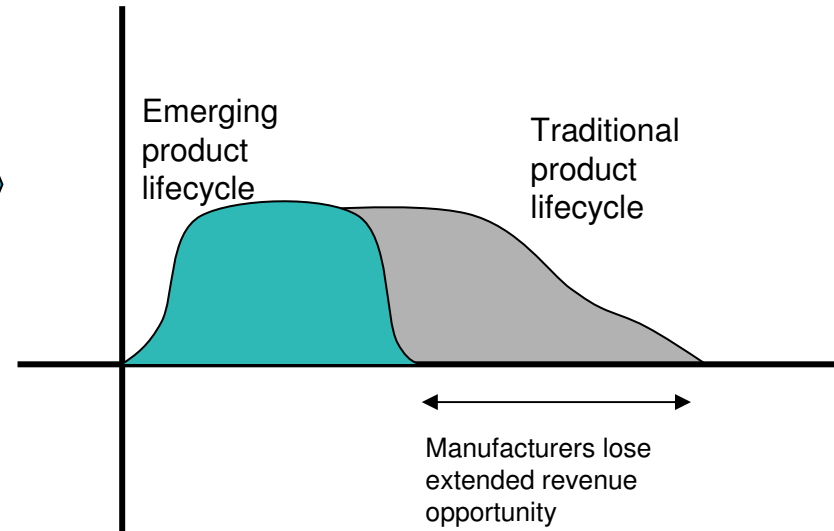
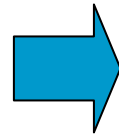
Point at which the adoption rate stagnates or goes negative, when the market is 'saturated.'

For TVs, this point was reached in **36** years.

For VCRs, this point was reached in **27** years.

For CD players, this point was reached in **18** years.

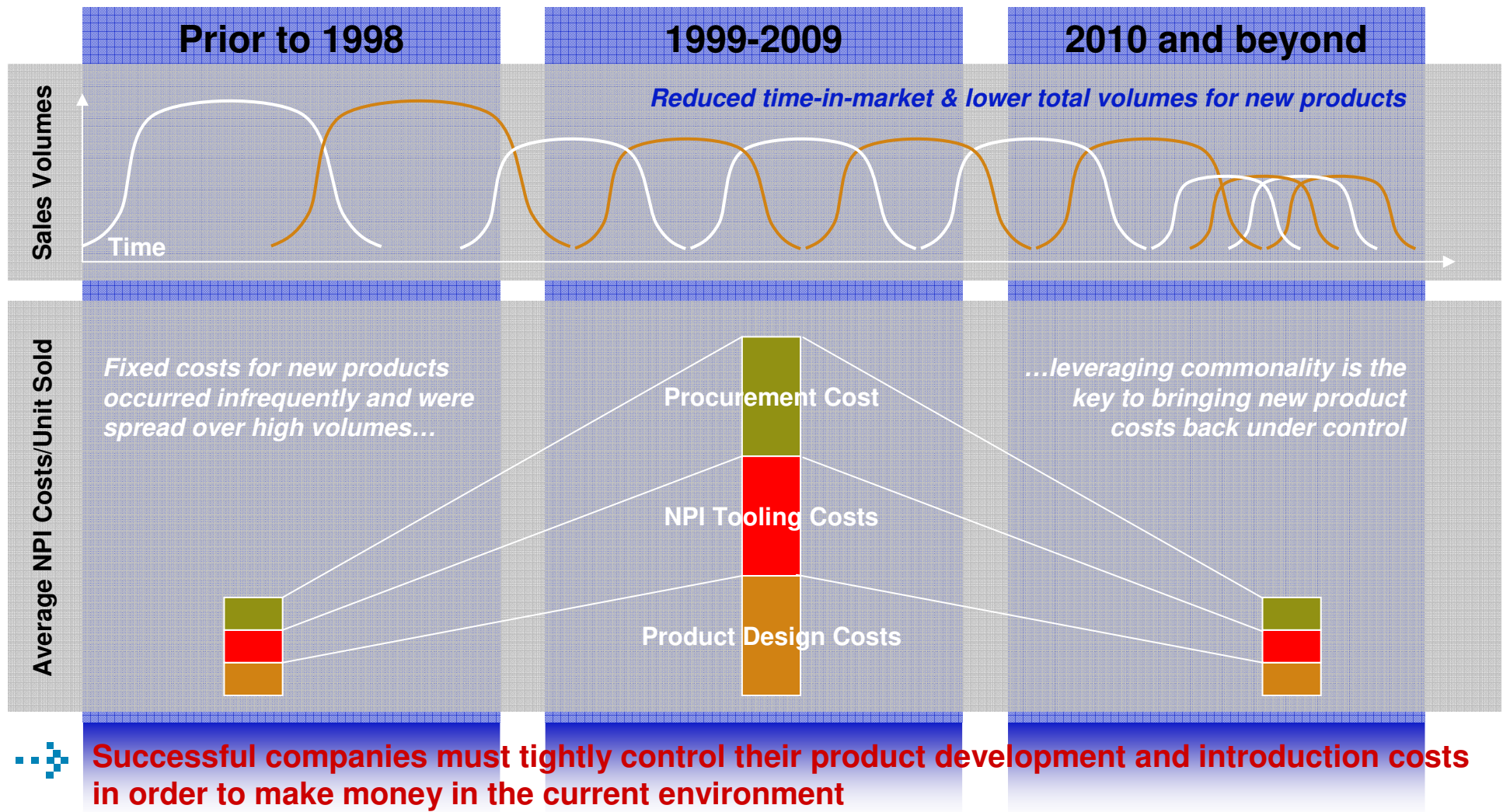
For DVD players, this point might be reached in less than **10** years.



With time-in-market declining, time-to-market is becoming even more important. Any delay on product launch can mean significant revenue opportunity loss

Source: CE.org; "Maximizing Silicon ROI: The Cost of Failure and Success," nassda, 20 May 2002;

Shorter life cycles and product proliferation can have a crippling effect on competitiveness



Source: IBM Institute of Business Value (IBV) Research

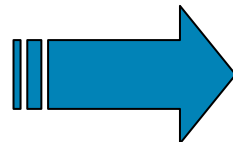
These trends have led to a number of strategic imperatives

- **Focus on core competencies**



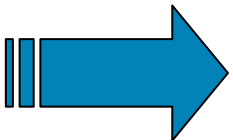
- Outsourcing & managed services

- **Increase industry collaboration**



- Customer & supplier product design and supply chain collaboration

- **Drive increased process standardization**



- Extended enterprise / industry process standardization

Source: ; IBM Institute of Business Value (IBV) and Cisco IBSG research

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Inflection Point...Shifting The Focus From “Transactions” to “Interactions”

TRANSACTIONS	CUSTOMER INTERACTIONS
<p>Machine interfaces</p> <ul style="list-style-type: none">▪ checkout▪ price check▪ warranty▪ rebate▪ return▪ store/inventory locator	<p>Targeted touches</p> <ul style="list-style-type: none">▪ Acknowledge a specific customer when/where they are shopping▪ Provide on-demand and knowledgeable product/shopping assistance▪ Use customer profile to tailor:<ul style="list-style-type: none">• sales process• marketing and promotion• service & support
<p>Customer Value = Efficiencies</p>	<p>Customer Value = Service / Experience</p>

Changing Retail Customer Demands



MITSUKOSHI

Intelligent Fitting Room
Leveraging the IP
phone and RFID
technology for enhance
customer service

買い物客すぐ在庫確認



ICタグ、店頭で便利に

*Retailers are using
technology to
enhance the
customer shopping
experience*

NORDSTROM



Nordstrom's CRM software enables sales staff to view and update customer preferences, data on the sales floor. Alerts staff to arrivals, promotions that meet customer criteria.

Starbucks is deploying touch-screen devices to 4,000 supermarkets to give consumers insight on the best way to enjoy Starbucks coffee at home



Retailers Are Looking For New Ways To Drive Revenue



130 million people watch WAL-MART TV every month. Tesco is deploying Tesco TV throughout 300 stores

Retailers are having to explore new ways to reach market growth expectations with technology



McDonald's is rolling out hotspot technology to store globally



Circle K provides Kiosks with Internet access, bill payment, bank services and revenue-generating video advertising



Starbucks: Music burning kiosks provide a source of revenue growth while driving more traffic to stores

Retailers Are Driving To The Next Level Of Productivity



Apple Store associates are equipped with wireless IP communicators for click-to-talk, paging, and external calling – all by voice command.



Hardee's and McDonald's have implemented VoIP-enabled remote call centers to centralise drive-through orders while reducing order errors

Retailers are enhancing processes with technology to improve productivity



Tesco has wearable computers at 300 grocery stores to improve efficiency of “picking” Tesco.com orders fulfilled by stores

Marks & Spencer is using item-level RFID tags to track inventory, and improve availability of clothing



Mitsukoshi IP Phone applications and RFID

- Improve customer satisfaction through real-time fitting room application
- Cisco 7971 IP Telephone provides low-cost kiosk with color, touch-enabled display
- RFID application allows price scan and lookup services for improved store inventory and catalog access.
- Cisco ISR router and WAN enable secure, real-time access to inventory, POS and payment services from store.



MITSUKOSHI

Intelligent Fitting Room
Leveraging the IP
phone and RFID
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enhanced customer
service

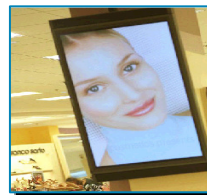
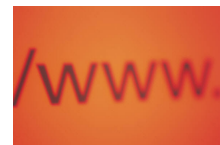
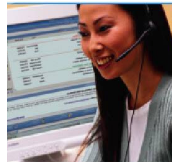


Customer's Business Priorities Will Continue To Increase Store-Level Technology Complexity

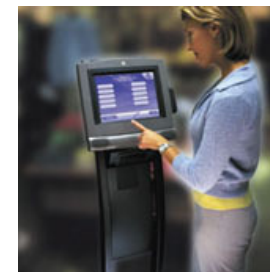
Targeting Multiple Constituents



Through Multiple Types of Media



With Multiple Types of Devices



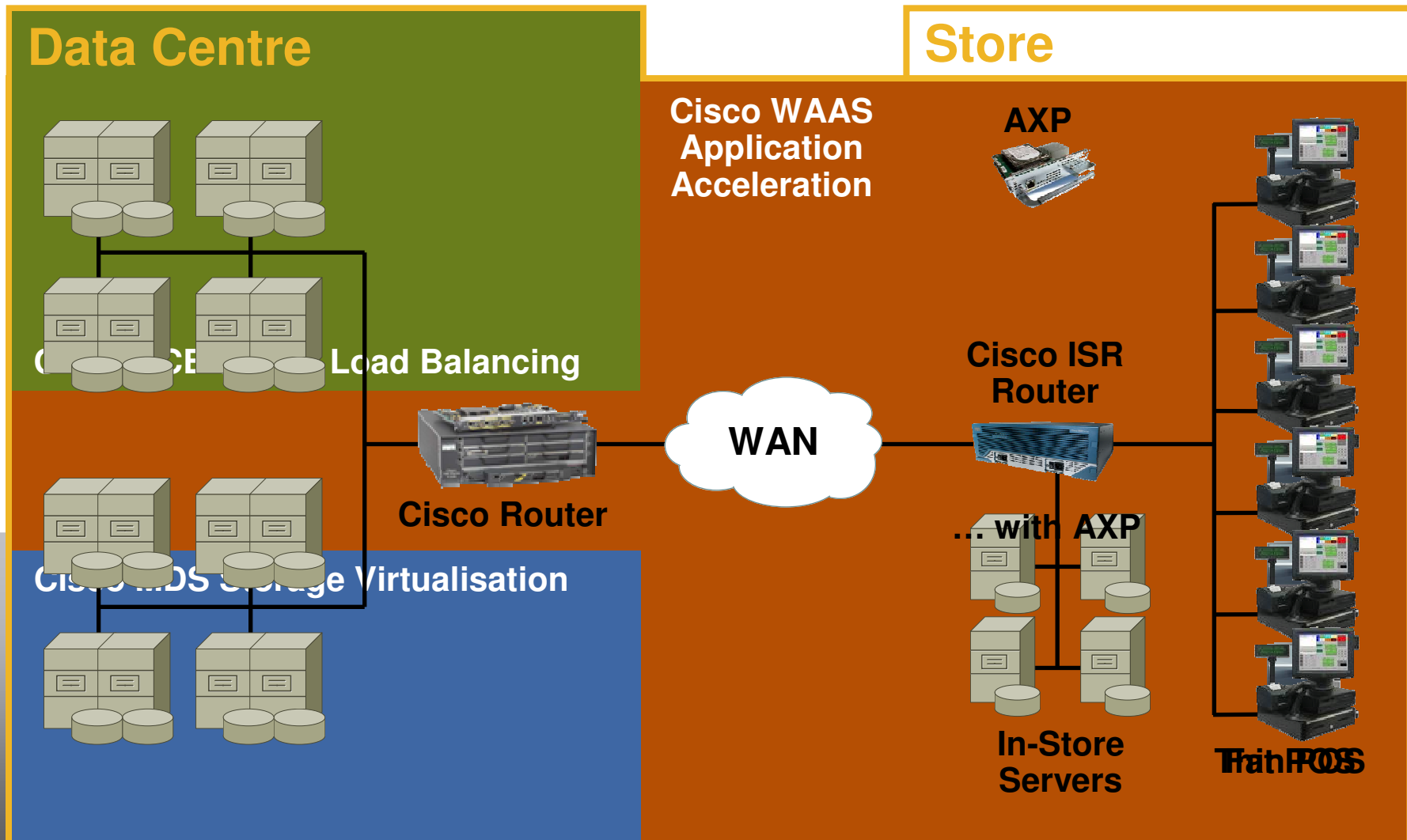
The touch points are limitless...

A Lean and Rich Vision

- ✓ **Servers and applications are moved from the stores to the Data Centre**
Reduce operational costs, improve business agility and application upgrades and roll-outs
- ✓ **Data centre storage and servers are consolidated and virtualized**
Improve efficiency, performance & energy use
- ✓ **Application availability is a focus of the architecture**
Differentiate service delivery, reliability and backup strategies
- ✓ **Holistic and network-centric approach to service delivery and performance**
Meet customers' needs and expectations



Lean Retail Architecture: In a Nutshell



The PCI Data Security Standard

- Published January 2005
- Impacts **all** who:
 - Process
 - Transmit
 - Store cardholder data
- Developed by MasterCard and Visa, endorsed by the other payment brands
- Pertinent for all industries and company size
 - SMB to large enterprise and service providers

Global in nature

Visa says approximately 22% of Tier 1 Merchants are currently compliant.
Computerworld, July 10, 2006.

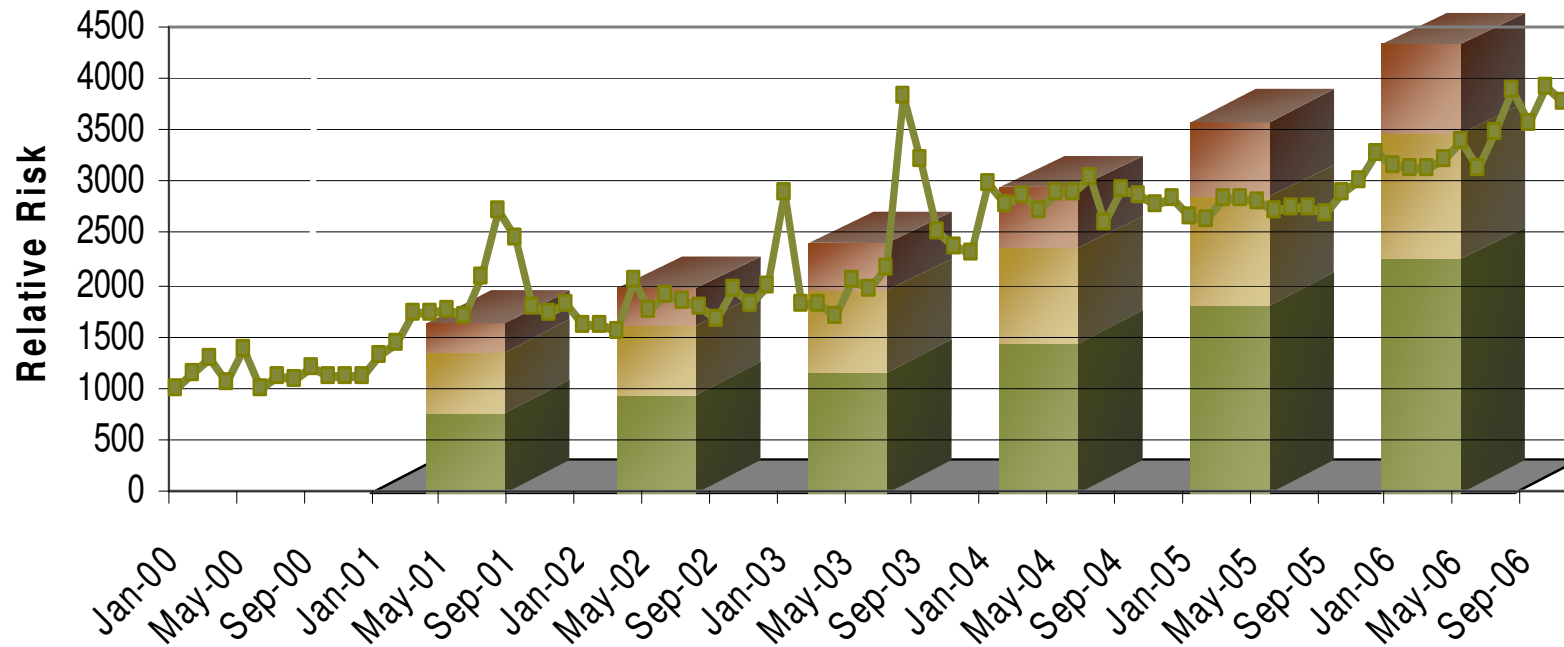


Enterprise Spending and Risk are both Rising

Annual spending on Security HW and SW

Cybertrust Enterprise Risk Index

Relative risk index is rising...



\$45B

Security Spending: Software, Hardware Services (IDG)

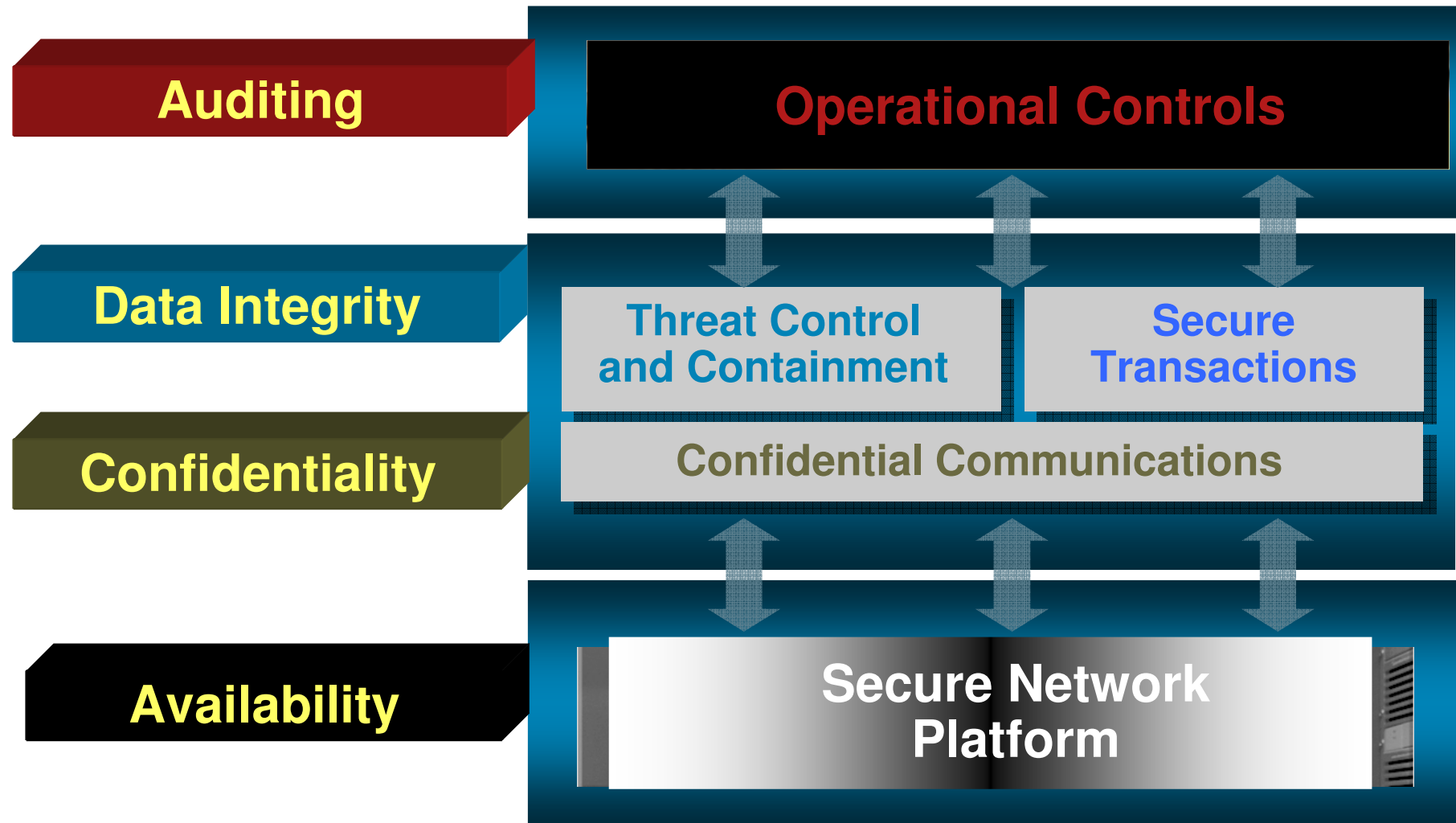
The Risks are Real

Over 312 **disclosed** security breaches through **October 2007**, potentially affecting more than 102 million individuals

1/06 University of Delaware	3/06 Fidelity Investments	6/06 Department of Energy	8/06 Adams State College
1/06 Pittsburg University Medical	4/06 Nationwide Retirement Services	6/06 Minnesota State Auditor	8/06 University of Texas
1/06 Illinois Education Assoc	4/06 US Department of Defense	6/06 ING	8/06 CA Dept of Mental Health
1/06 Oregon Dept of Revenue	4/06 Iron Mountain	6/06 VA Bureau of Insurance	8/06 US Department of Education
1/06 California National Guard	4/06 Fifth Third Bank	6/06 ADP TotalSource	8/06 Sovereign Bank
1/06 Atlantis Resort-Kerzner	4/06 University of South Carolina	6/06 Visa USA	8/06 Federal Motor Carrier Safety
1/06 People's Bank	4/06 Ross-Simons	6/06 National Institute on Health Federal Credit Union	8/06 AT&T
1/06 NYC Teachers' Retirement	4/06 University of Alaska, Fairbanks	7/06 US Citizenship and Immigration Services	8/06 University of Colorado
1/06 Presbyterian Health Care	4/06 Boeing	7/06 Riverside City Hall (CA)	8/06 PortTix
1/06 Notre Dame University	4/06 University of Virginia	7/06 US Navy	9/06 Berry College
1/06 Ken State University	4/06 State of Georgia	7/06 Moraine Park Technical College	9/06 North Carolina Division of Motor Vehicles
1/06 City of San Diego	4/06 Union Pacific corporation	7/06 Mississippi Secretary of State	9/06 Purdue College of Science
1/06 State of Washington Health	5/06 Internal Revenue Service	7/06 PSA Healthcare	9/06 Louisiana State University
1/06 Honeywell International	5/06 Equifax	7/06 Hampton Roads, VA Circuit Court	9/06 Kentucky Personnel Cabinet
1/06 Ameriprise financial	5/06 Northwestern University	7/06 Helnet, Inc.	9/06 US Census Bureau
1/06 Boston Globe	5/06 Hotels.com	9/06 Madrona medical Group	9/06 Nikon world Magazine
1/06 FedEx Freight West	5/06 Wells Fargo	8/06 Hospital corporation of America	9/06 Erlanger Hospital
2/06 Blue Cross Blue Shield NC	5/06 Mercantile Bankshares	8/06 Williams Sonoma, Inc.	9/06 DePaul medical Center
2/06 Ernst & Young	5/06 Minnesota Revenue Dept	8/06 Weyerhaeuser	9/06 Life is Good, Inc.
2/06 US Agriculture Department	5/06 Frost Bank	8/06 Louisiana State University	9/06 General Electric Co.
2/06 Blue Cross Blue Shield FL	5/06 YMCA	8/06 Transportation Security Admin	9/06 University of Texas
2/06 Deloitte & Touche / McAfee	5/06 VyStar Credit Union	8/06 Linden Lab	9/06 University of Iowa
3/06 American International Group	6/06 Federal Trade Commission	8/06 Toyota	10/06 Lexis Nexis
3/06 University of Michigan	6/06 US Navy Recruiting	8/06 Columbus Income Tax Division	10/06 Cumberland County, PA Government
3/06 Verizon Communications	6/06 Fluor Hanford	8/06 MI Dept of Community Health	10/06 Chicago Board of Elections
3/06 General Motors	6/06 Humana Health Plans	8/06 Dept of Veteran Affairs	10/06 Colorado Dept of Human Services
	6/06 Royal Ahold USA	8/06 Illinois Dept of Corrections	
	6/06 Barnard College		

Source: www.idtheftcenter.org

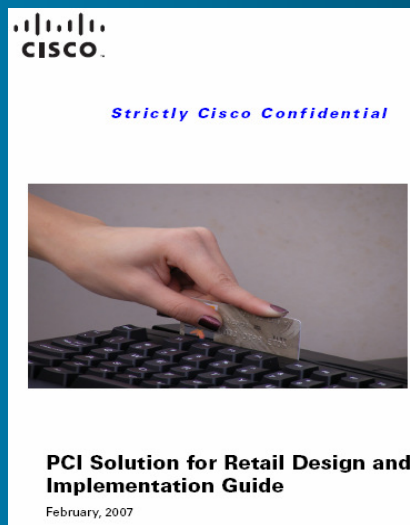
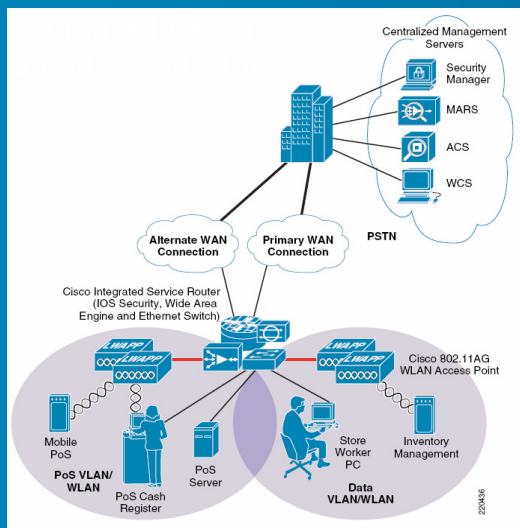
Compliance within the Intelligent Retail Network



PCI Solution for Retail Overview

Cisco Validated Design for Secure Store includes:

- Recommended architecture configurations for Wired and Wireless Store networks.
- Testing in a simulated retail store environment including partners' POS terminals, in-store application server, handheld wireless devices and security software.
- Configuration, Monitoring, and Authentication management systems.
- Architecture design guidance and audit review provided by PCI Audit and remediation partners.



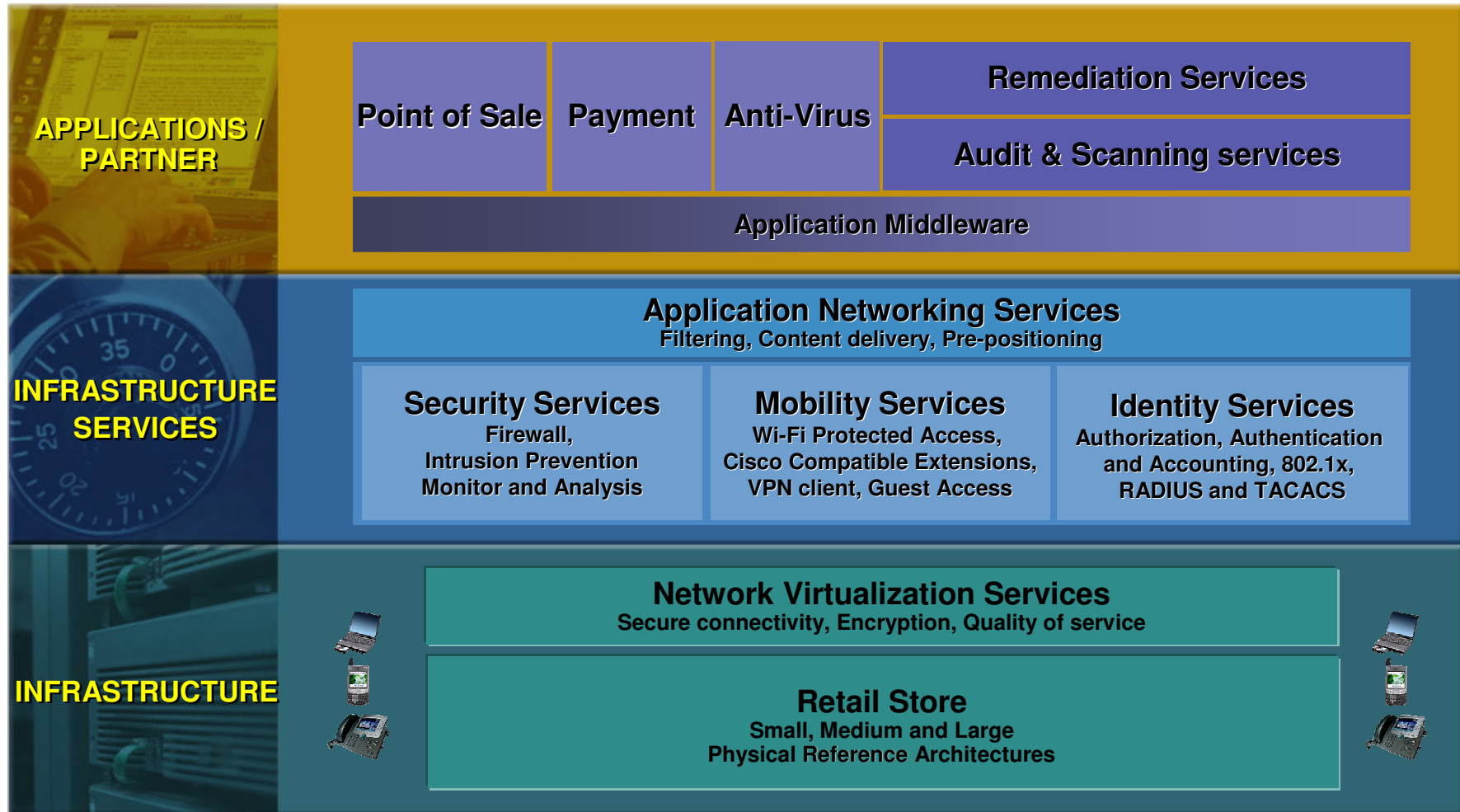
PCI Audit Partner:



Hardware Partners:



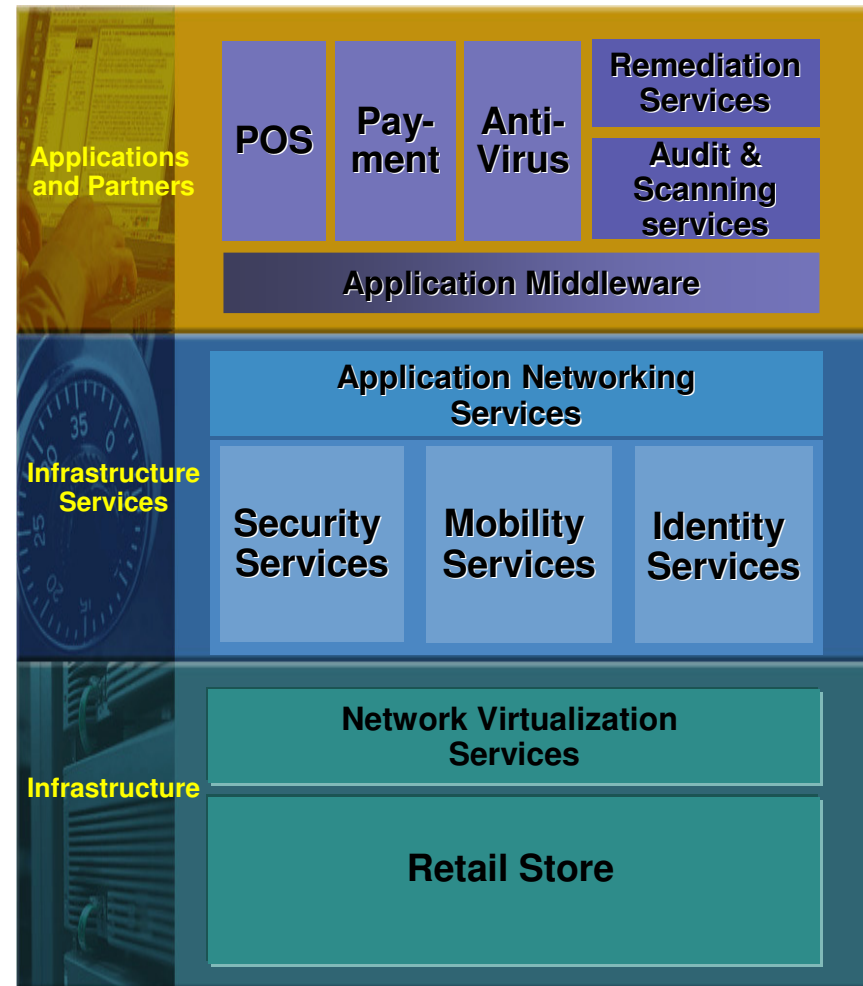
PCI Solution for Retail – SONA Framework



Why SONA?

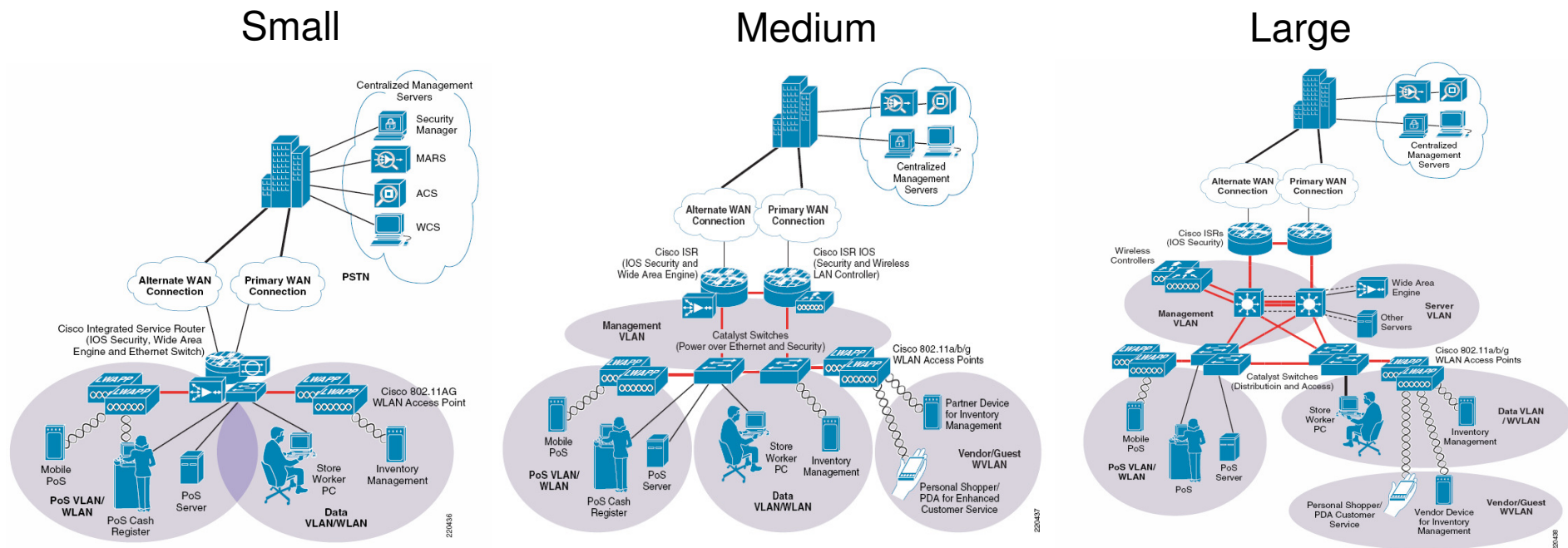
Services – not products - create a PCI Solution

- The process and policy parts of PCI guidelines are easier to standardize across a common set of distributed services.
- Security, Mobility and Identity are shared, reusable network services that include products, management and reporting systems
- Network Virtualization helps to control and reduce costs – fewer store devices are doing more
- Flexibility is increased – the solution is matched to each store's needs delivering consistent services regardless of store size



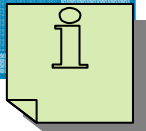
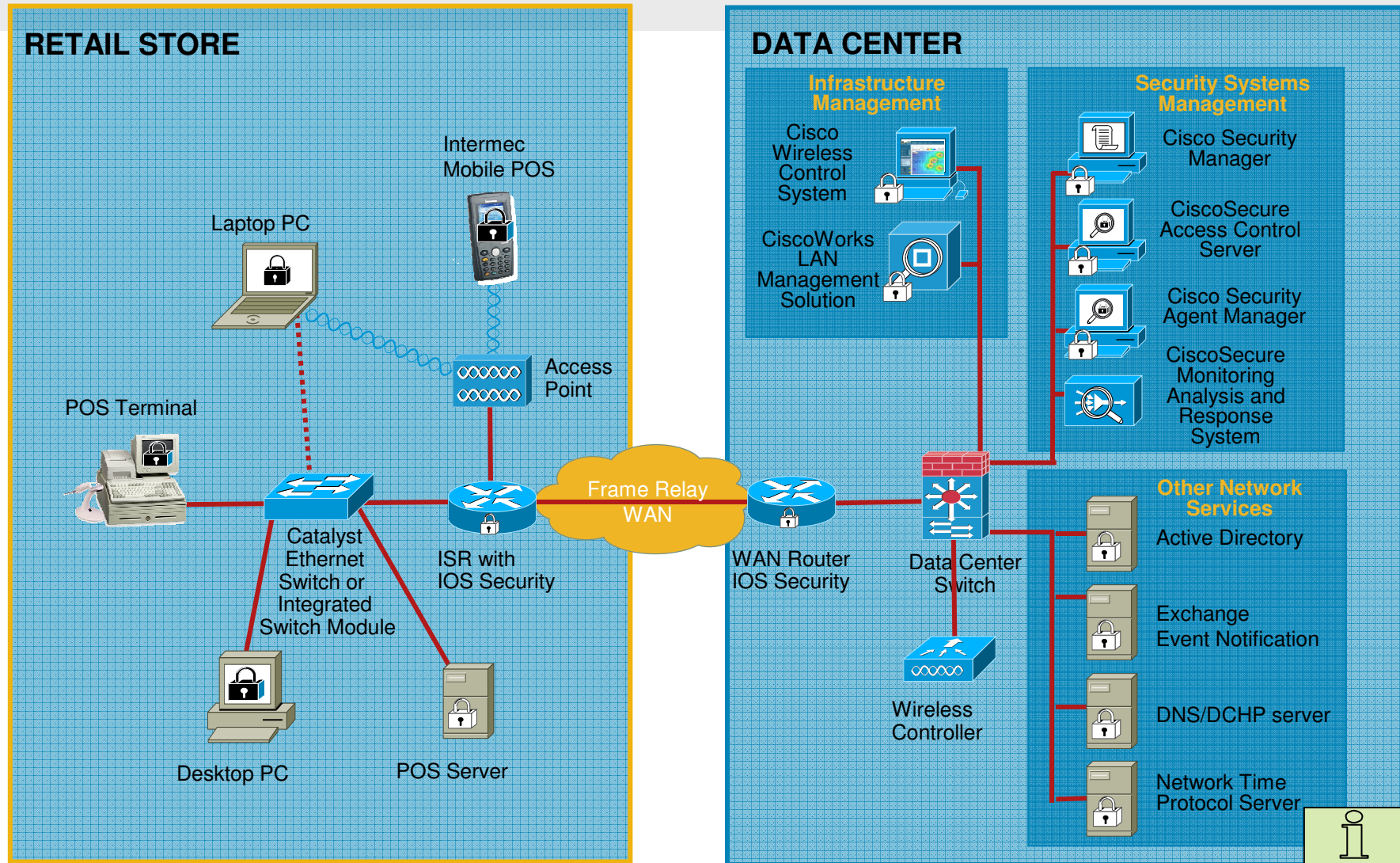
Solution Overview

- Retail store reference architectures audited by Cybertrust for PCI DSS 1.1 compliance



- Detailed report of compliance
- Implementation guidelines
- Full configuration details

PCI Solution for Retail – Conceptual Test Model



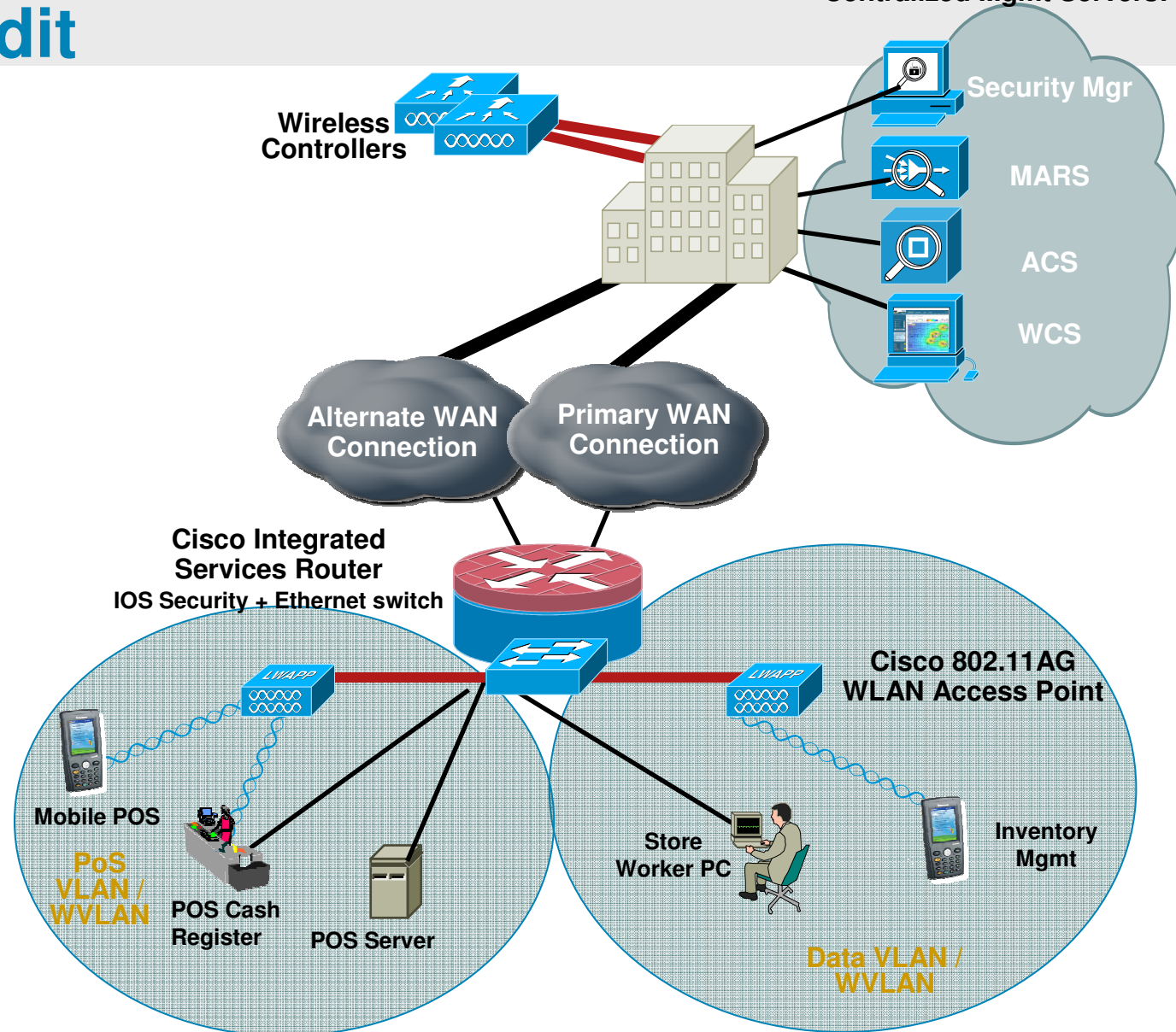
Policies

Small Store Reference Architecture used for Audit

Centralized Mgmt Servers:

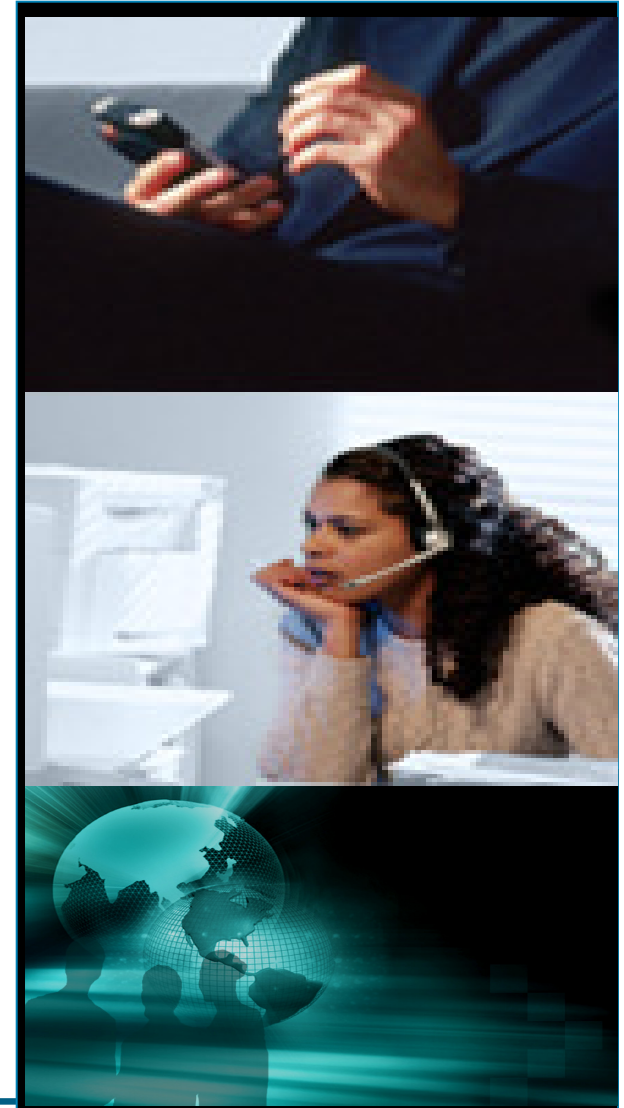
Business Benefits

- Secure Transactions
- Secure Customer Data
- Containing viruses
- Intrusions Detected
- Foundation for compliance



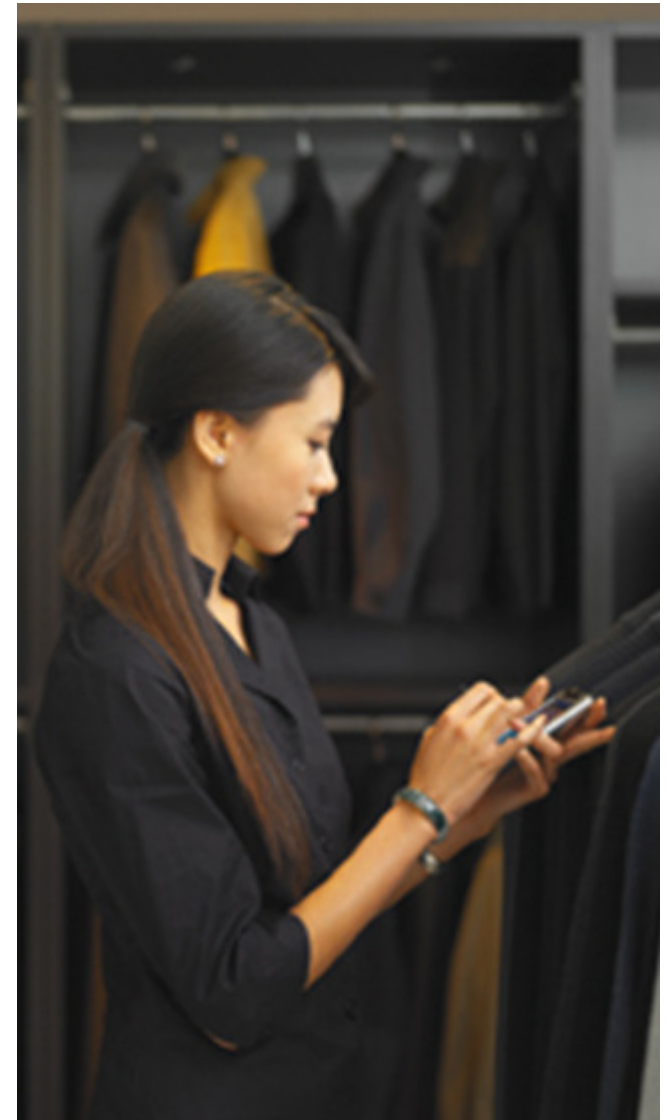
The Four Main Themes in Compliance: Think “CIAA”

1. **Confidentiality** - Keep it Secret
2. **Integrity of Data** - Protect against improper alteration or destruction
3. **Audit/reporting/monitoring/logging** - Security activity must be tracked and auditable to demonstrate compliance and incident investigation
4. **Availability** - Regulated data must be available to authorized users/consumers



It's About Good Business Practices

- Providing a secure shopping environment whether in the store or online
- Prevention of identity theft for customers
- Securely and reliably protecting brand image and assets
- Mitigating financial risk associated with fines and penalties due to failure in compliance
- **Cisco has a validated design guide to follow to help meet PCI**



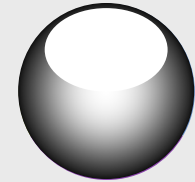
What else? - Cisco Digital Signage

A **Comprehensive Solution** for management, publishing and playback of digital media on networked digital displays

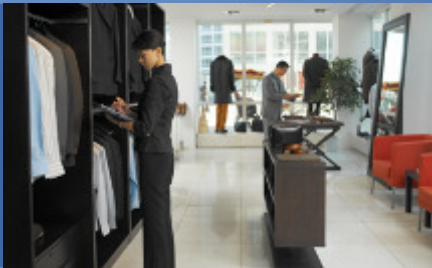


- **Easy to use—simple, intuitive**
Web interface
- **Flexible—provides customers with multiple media formats, customizable screen options, and high-quality content**
- **Integrated/Scalable—Leverages the IP network to manage scalable digital signage networks**

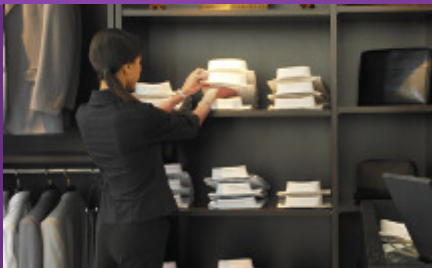
Store Communication Challenges



Customers Do Not Receive Information
When and Where They Need It



Employee Productivity Information Resides
in Multiple Locations and Formats



Corporate Messaging Does Not Reach
All Employees

Shifts in Marketing— Drivers for Digital Signage

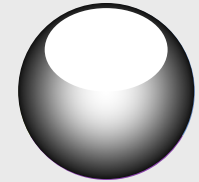
- **Changes in print and TV advertising**
TIVO, Web...
- **Focus of marketing \$**
75% of purchase decisions made in store
<10% advertising \$ in store
- **Marketing mix changes**
Emphasis on “customer experience”
(environment, reduce perceived wait times...)
Desire to align Web and store/ branch experience
- **Personalization and customization**
Meet evolving customer expectations



Digital Signage Applications

Sales and Marketing	Corporate Communications	Training	Information Sharing
			
<ul style="list-style-type: none">▪ Promote, cross-sell, and up-sell▪ Product/service differentiation▪ Enhanced store experience▪ Reduce perceived wait time▪ Advertising revenue	<ul style="list-style-type: none">▪ Direct communications to customers▪ Corporate messaging consistency▪ Executive communications▪ Live broadcasting of company events	<ul style="list-style-type: none">▪ Cost-efficient training to remote employees▪ Information to break rooms, lobbies, etc.	<ul style="list-style-type: none">▪ Directional signage (way-finding)▪ Rapid response communications (i.e. recalls)▪ Emergency/crisis communications▪ Breaking news

Solution Features



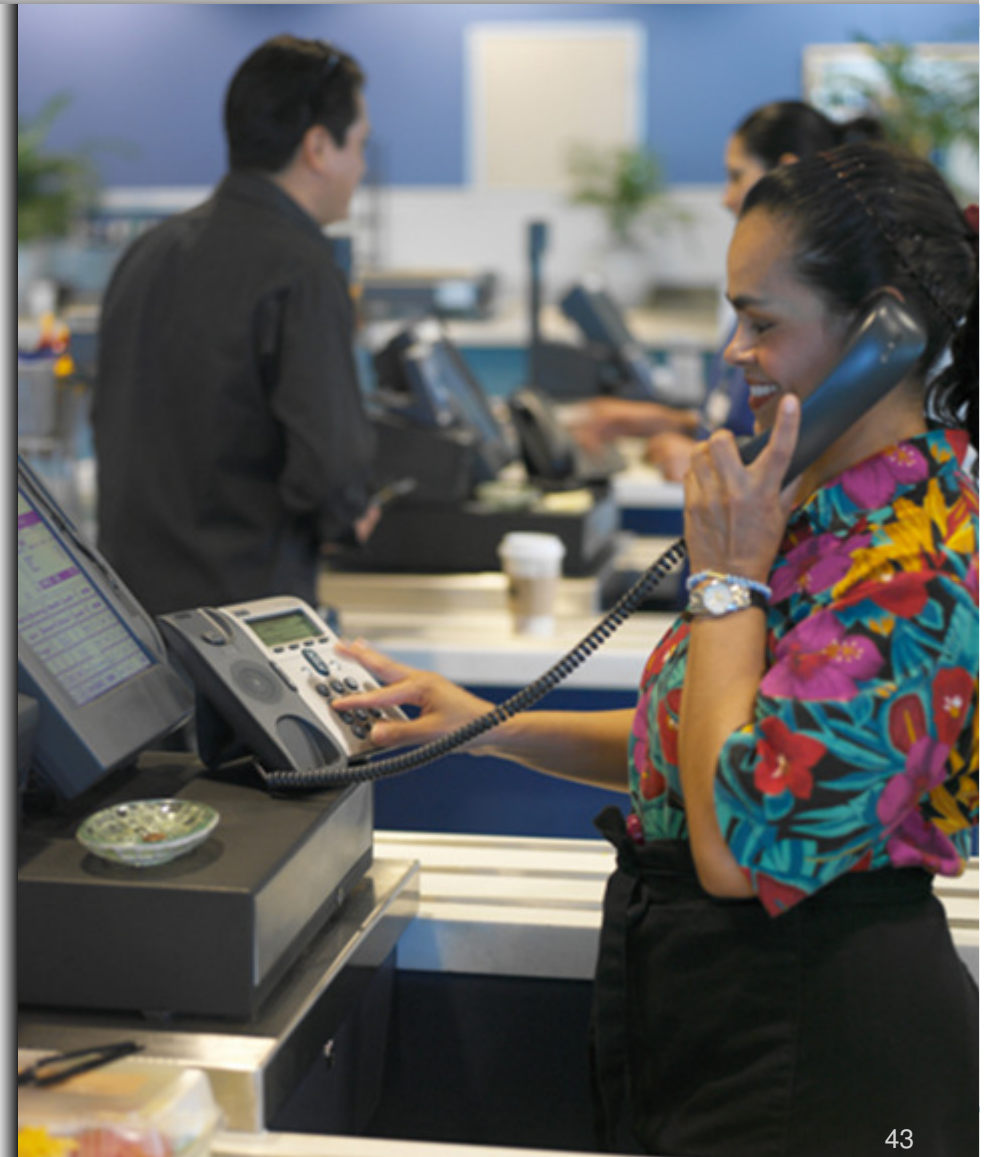
Broadcast text, images, surveys, and audio messaging to specific or groups of IP phones

Scroll images with configurable display durations

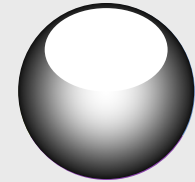
Push content **real-time** or by **scheduled** event to IP phones

Configurability of touch screen display and softkeys to **execute dial out capabilities**

Collection of **survey responses**



Solution Benefits



Customer Benefits

- Dynamic content delivery and faster service for increased satisfaction
- Communication enablement (instant connection to customer service)
- Visual, audio, and interactive content, for richer information exchange



Employee Benefits

- Consistent communication of corporate messaging
- Increased message penetration into the associate ranks
- Real-time communication for alerts and new directives

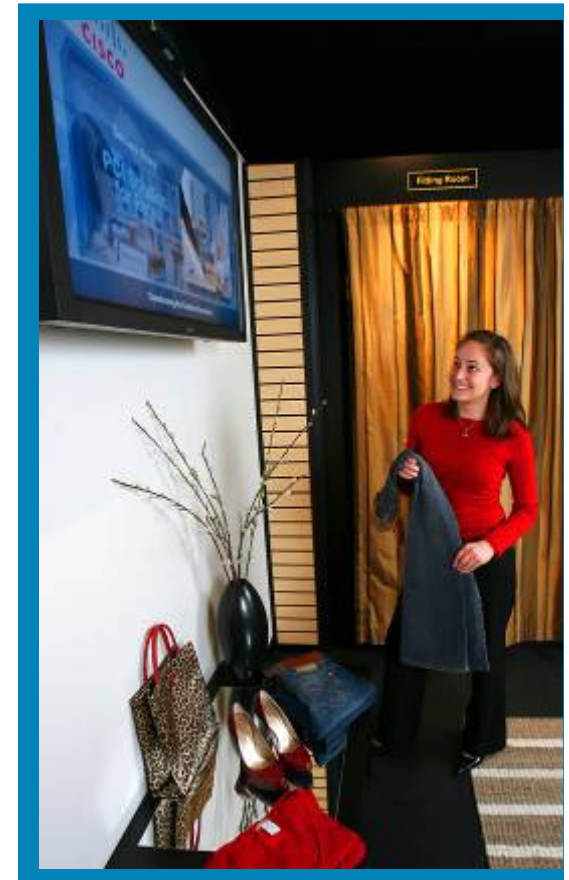


Retailer Benefits

- Affordable end devices, for flexible placement throughout the store
- Ability to target the audience (customers, employees, managers)
- Collection of customer and employee feedback through survey tool

Benefits of In-Store Media

- Increasing revenue and profits
 - RSR business case showed 1.1% increase in revenue and 5% increase in operating income in Year 1
 - Increasing to 2.3% revenue increase and 10.4% operating income increase in year 2
- Soft benefits
 - Building the brand
 - Employee training through brand exposure of viewing
 - Increased customer awareness of add-on products and services
 - Perceived shorter wait times in line



Where does it increase sales?

- Does a mood/brand create a sale? – It can!
- Does a direct ad improve sales?
- Does a discretionary ad improve add-on sales?
- Does observation of customer behavior improve sales?

Dwell times for digital media

Compliance of displays

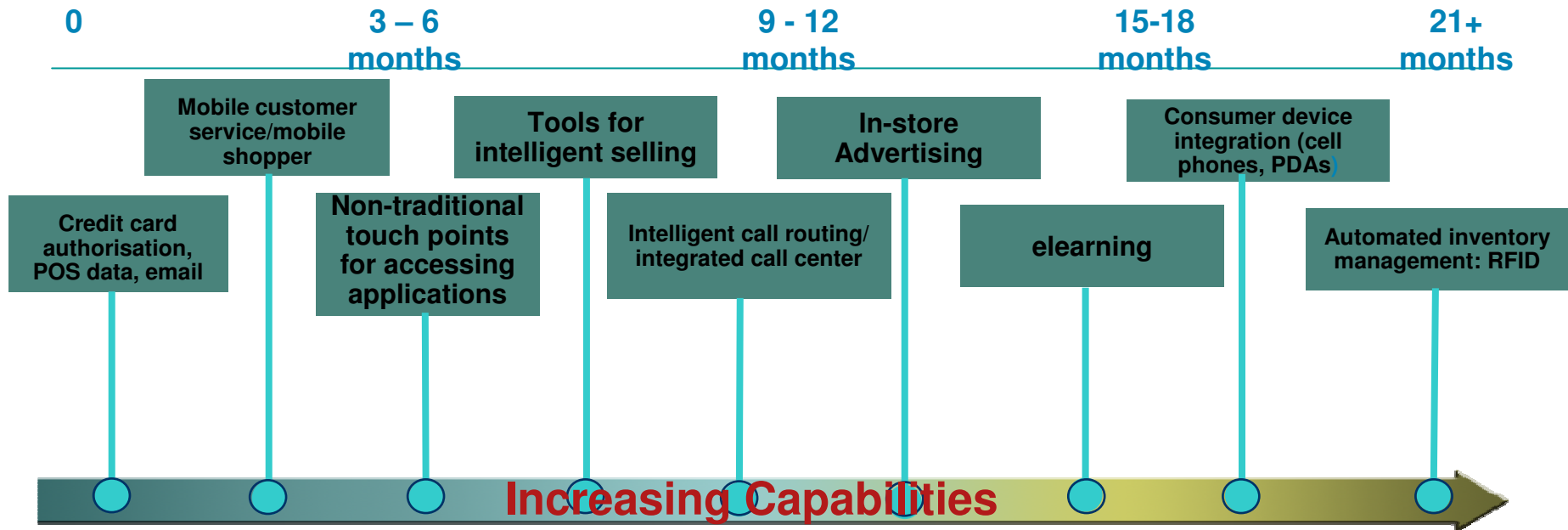
Compliance of employee greetings

End-cap display performance



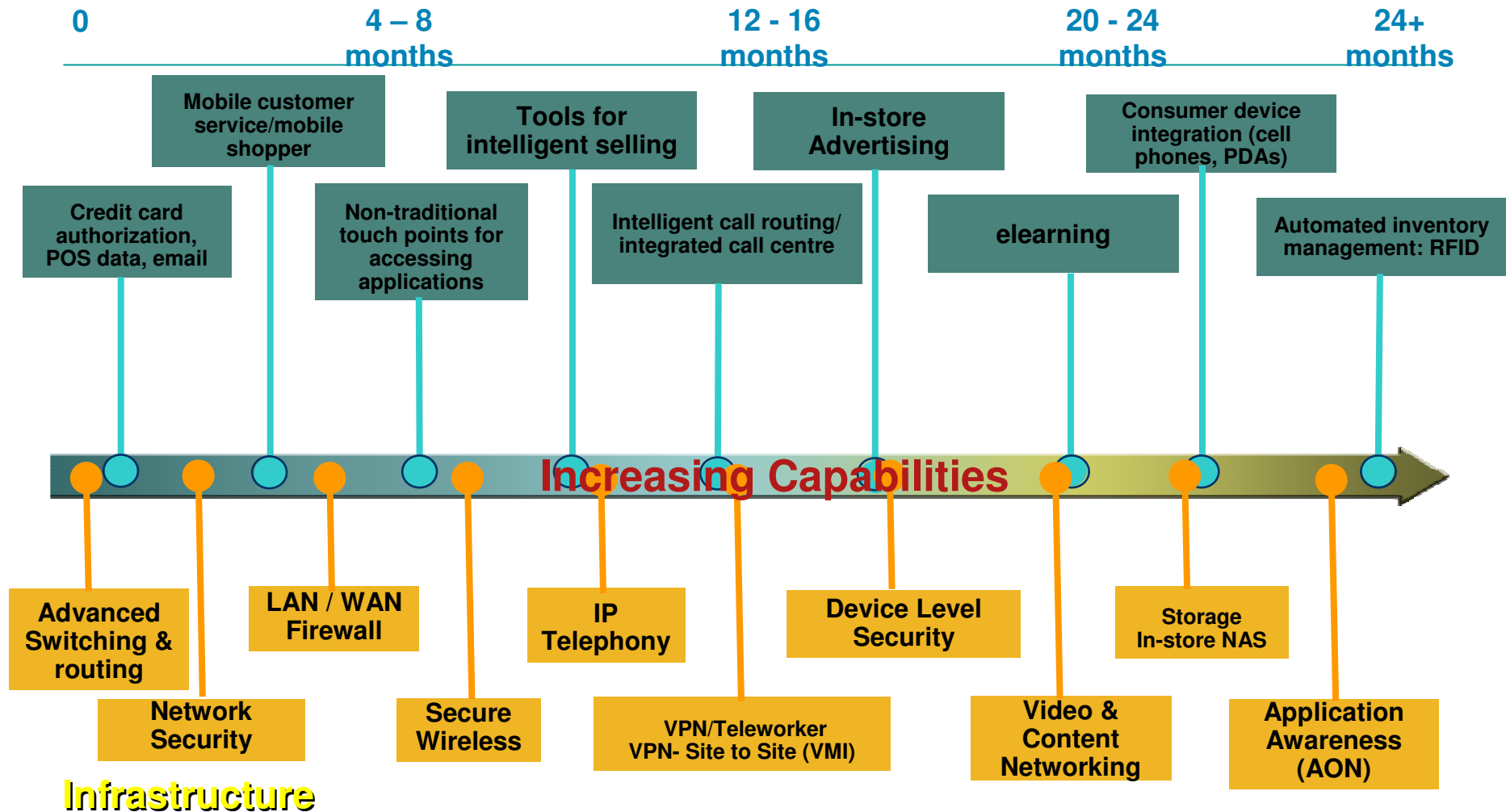
As Retailers Look To Increase Their Store Business/Application Capabilities...

Applications



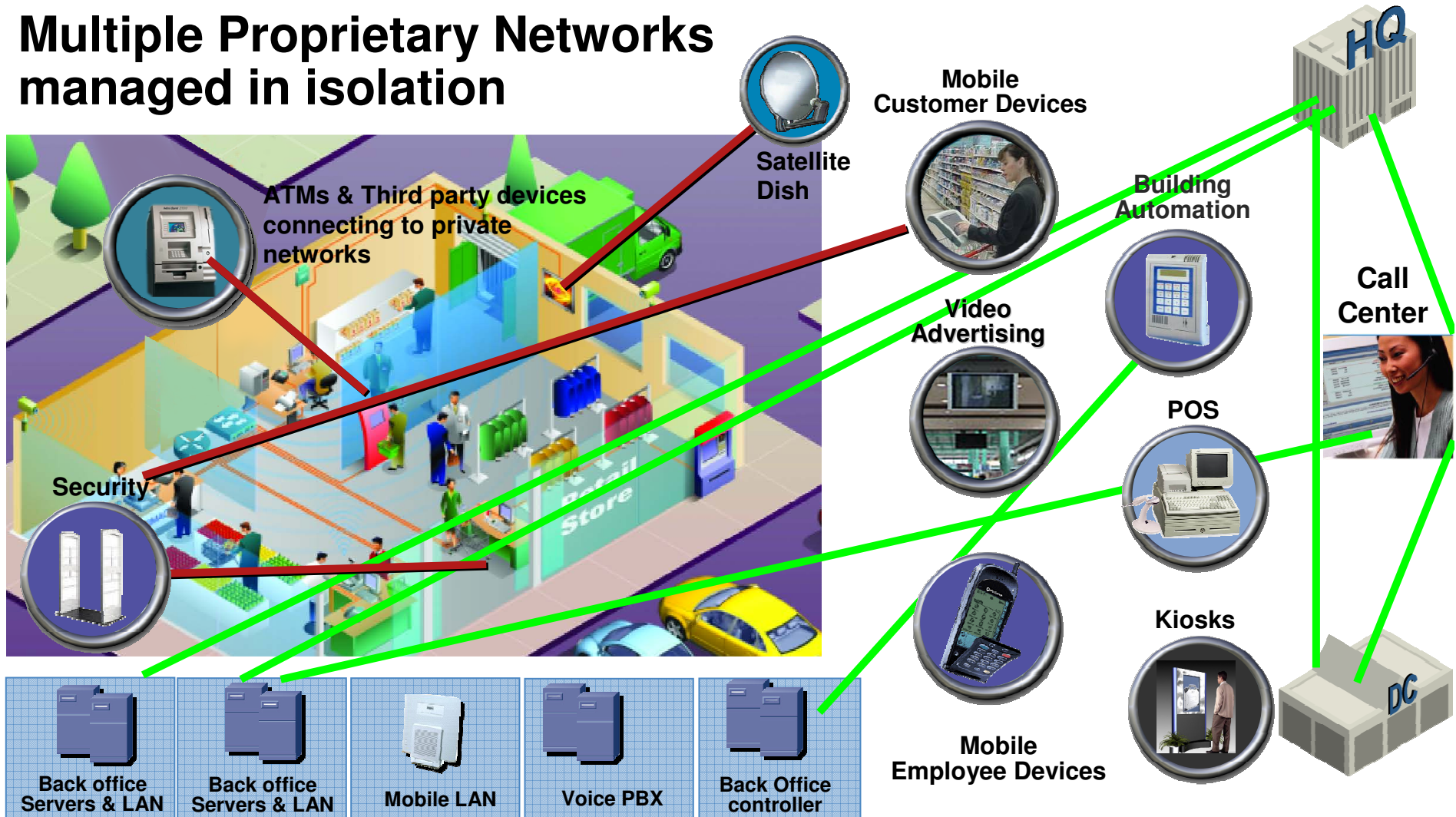
...They Need To Build An Infrastructure Roadmap

Applications



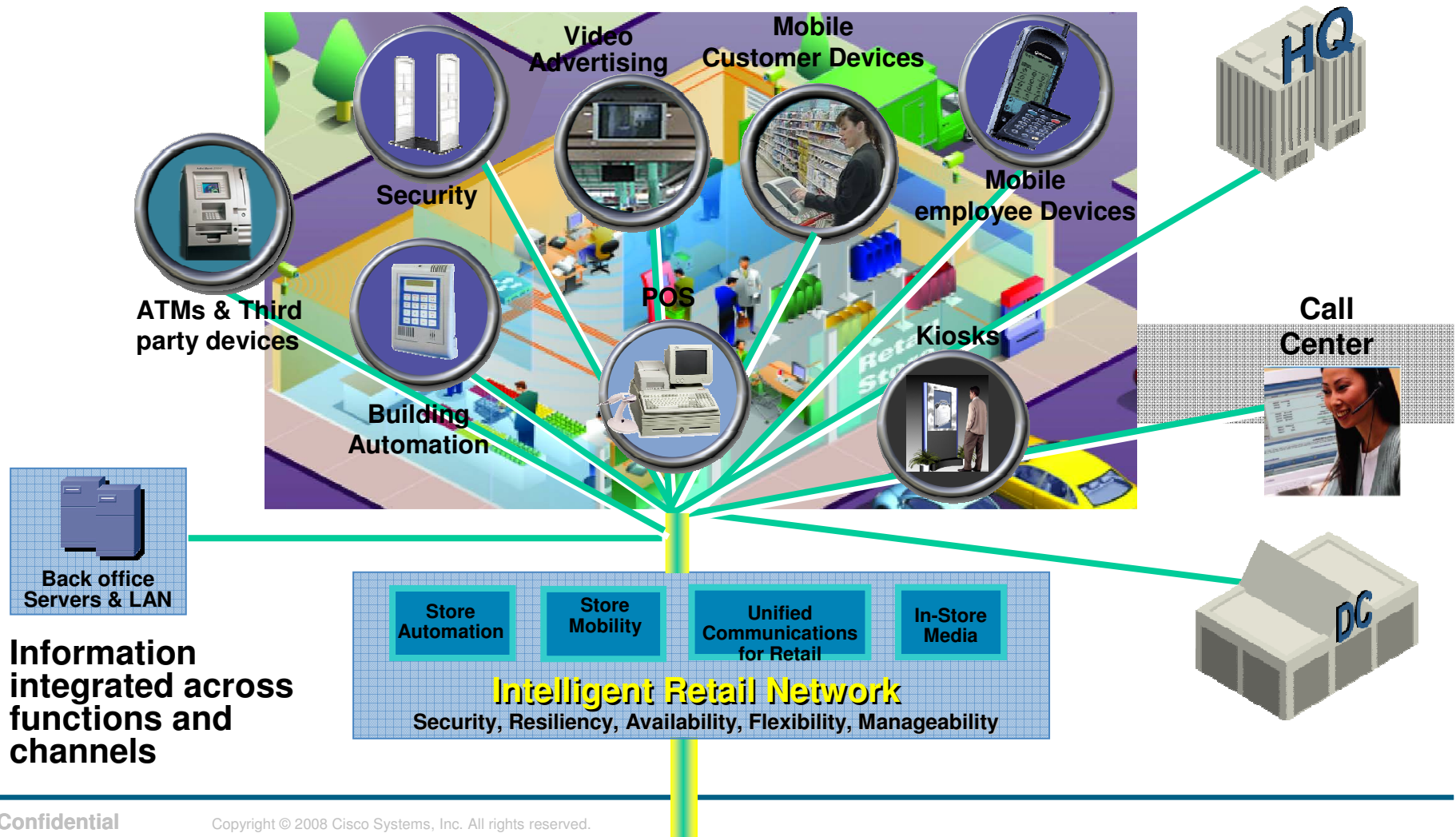
Complex Traditional Store Infrastructure Contributes To These Barriers

Multiple Proprietary Networks managed in isolation



The Intelligent Retail Network Delivers Common Services To All Devices And Applications

Single Network Centrally Managed And Secured



The Opportunity for Cisco's Customers



- The next generation of Retail is about collaboration
- Industries who leverage the flexibility and improved time to market that the network brings are emerging as the winners in today's economy
 - Within their function
 - Across the enterprise
 - With customers
 - With partners and suppliers
- Linking the Network back through the supply chain and to the customer to create value is key to success

COLLABORATION





FANCL

Eric Chan

FANCL LESS IS MORE.

Who is FANCL

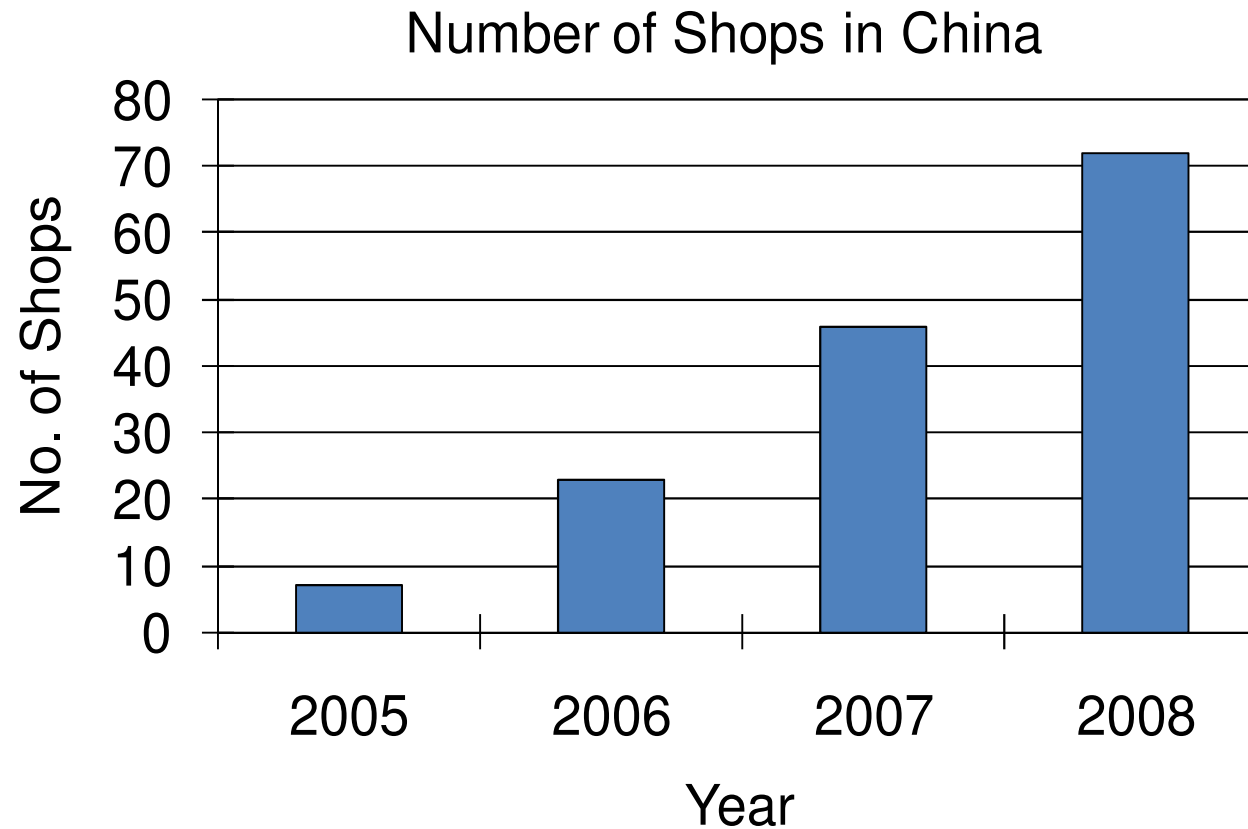
- FANCL is the largest preservative free cosmetics and skincare company in Japan
- Annual sales over US\$1 billion
- 320 stores in Asia

FANCL LESS IS MORE_®

What is Our Growth in China

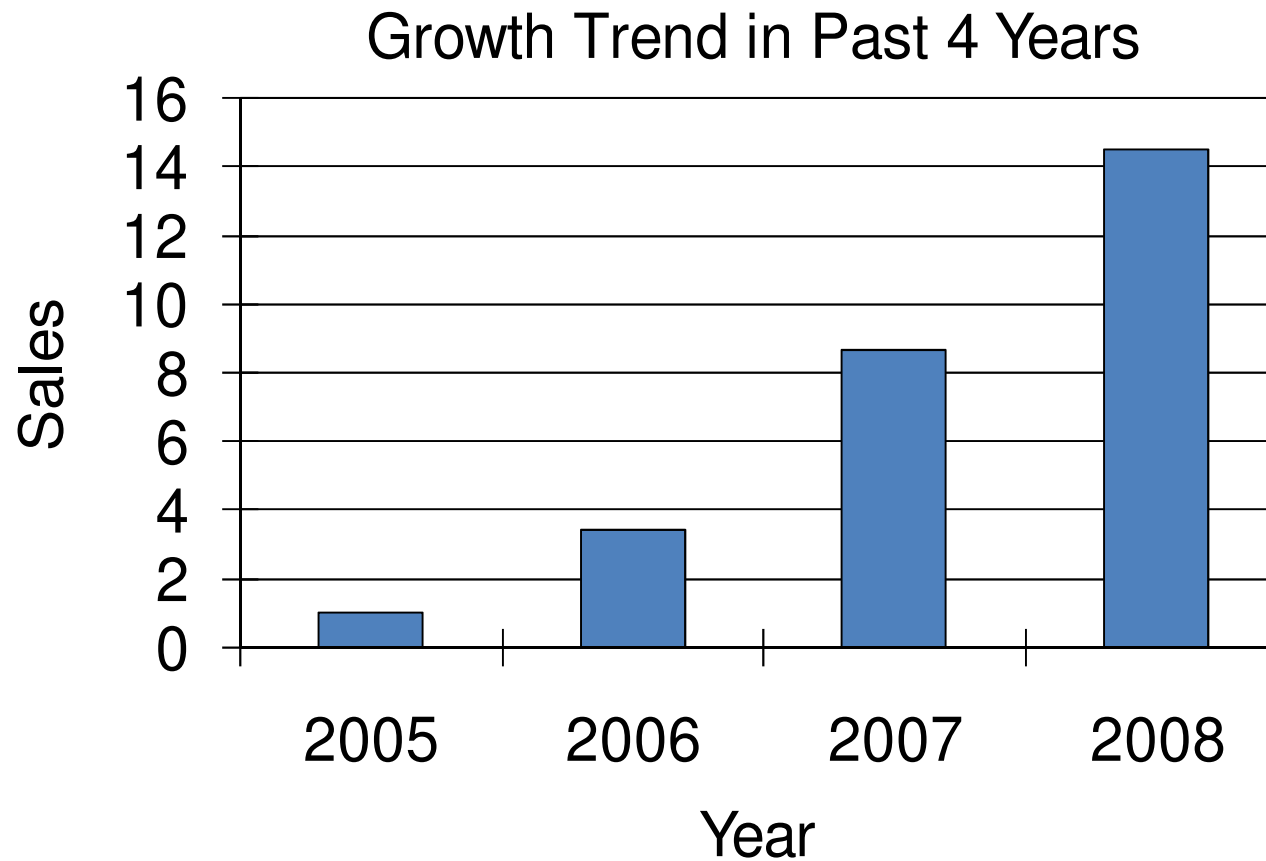
- We are the fastest growing imported cosmetics brand in China
- 33 Shops in Hong Kong
- 72 Shops in China in 17 Cities

What is Our Growth in China



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What is Our Growth in China



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FANCL shopping Trends

- FANCL is focused on satisfying customer expectations, creating a more agile organization and building for the future thru expansion.
- The advent of the "digital native" shopper
- FANCL needs to be more flexible and agile.
- The future enterprise architecture needs to smoothly migrate from current systems and provide flexibility for business needs and applications that may not be invented yet.

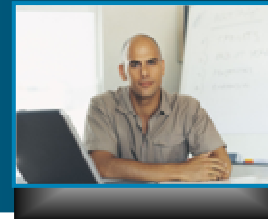
Shifting The Focus From “Transactions” to “Interactions”

TRANSACTIONS	CUSTOMER INTERACTIONS
<p>Machine interfaces</p> <ul style="list-style-type: none">▪ checkout▪ price check▪ return▪ store/inventory locator	<p>Targeted touches</p> <ul style="list-style-type: none">▪ Acknowledge a specific customer when/where they are shopping▪ Provide on-demand and knowledgeable product/shopping assistance▪ Use customer profile to tailor:<ul style="list-style-type: none">• sales process• marketing and promotion• service & support
<p>Customer Value = Efficiencies</p>	<p>Customer Value = Service / Experience</p>

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Business Priorities Will Continue to Increase Store-Level Complexity

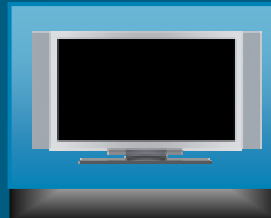
Technology Is now Targeting Multiple Constituents



Through Multiple Types of Media



With Multiple Types of Devices



Example: Bottom Line Growth through Efficiencies

Fast and Accurate In-Store Response

Wireless IP Communicators Enable Click-to-talk, Paging, and External Calling—all by Voice Command



Lower Costs and Improved Service

VoIP-Enabled Remote Call Centers to Centralize information flows. Migrate this into centralized TelePresence Call Centers between stores and remote locations



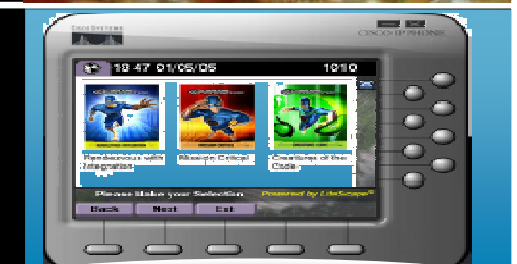
Mobility for Flexible, Efficient POS Support

Mobile POS Makes the Sale at the Point of Decision—and, at Heavy Traffic Times



Workforce Management

Task management and labor management tools on IP phones enable stores to be more efficient and lower payroll costs



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Examples: Top Line Growth through Customer Experience

Digital In-Store Advertising

Producing Documented Sales Uplift



Multi-Channel:
On-Line In-Store

Internet access of store stocks, ordering and shipment opportunities for customer access



Mobility for Flexible,
Efficient POS Support

Integrate CRM into POS with information full handheld capabilities



Virtual Inventory
Seamless Multi-Channel

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Integrate all back end systems into a single store view of operations. More than just a simple communications system to solve this.



What Does the Cisco Retail Platform Deliver?

Compatibility

Any Device; Any Application

Cost Effectiveness

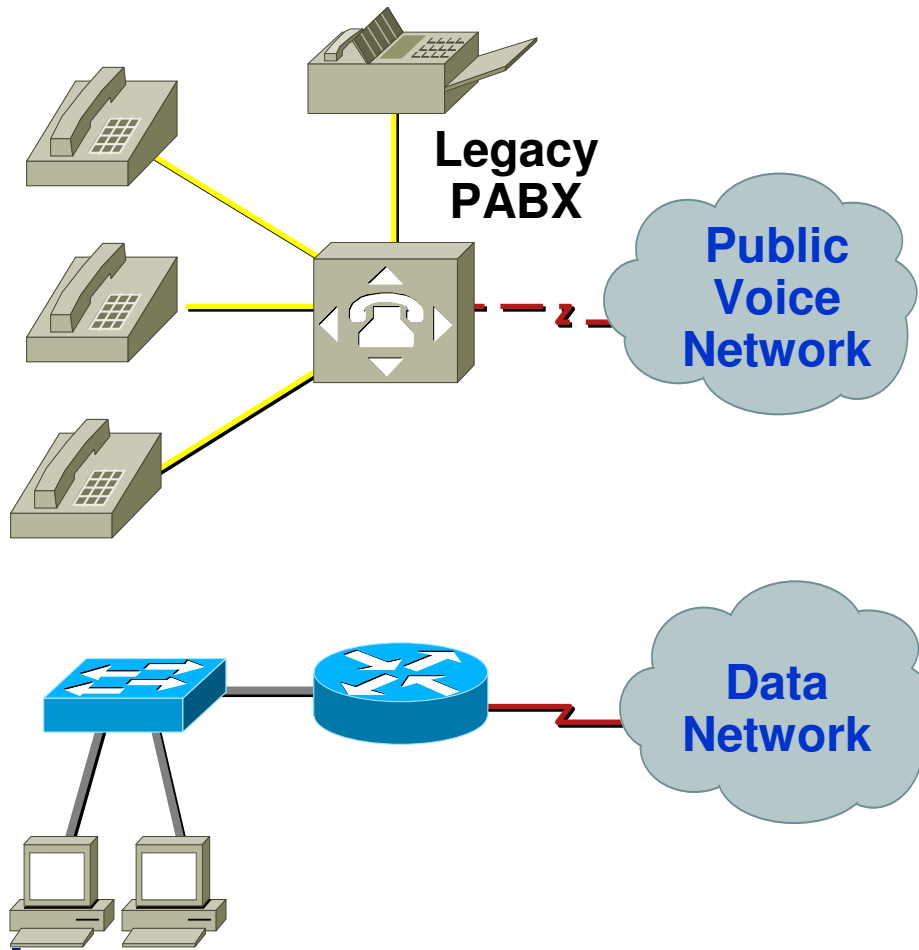
One Network for Voice, Data and Video

Security

End Point to End Point

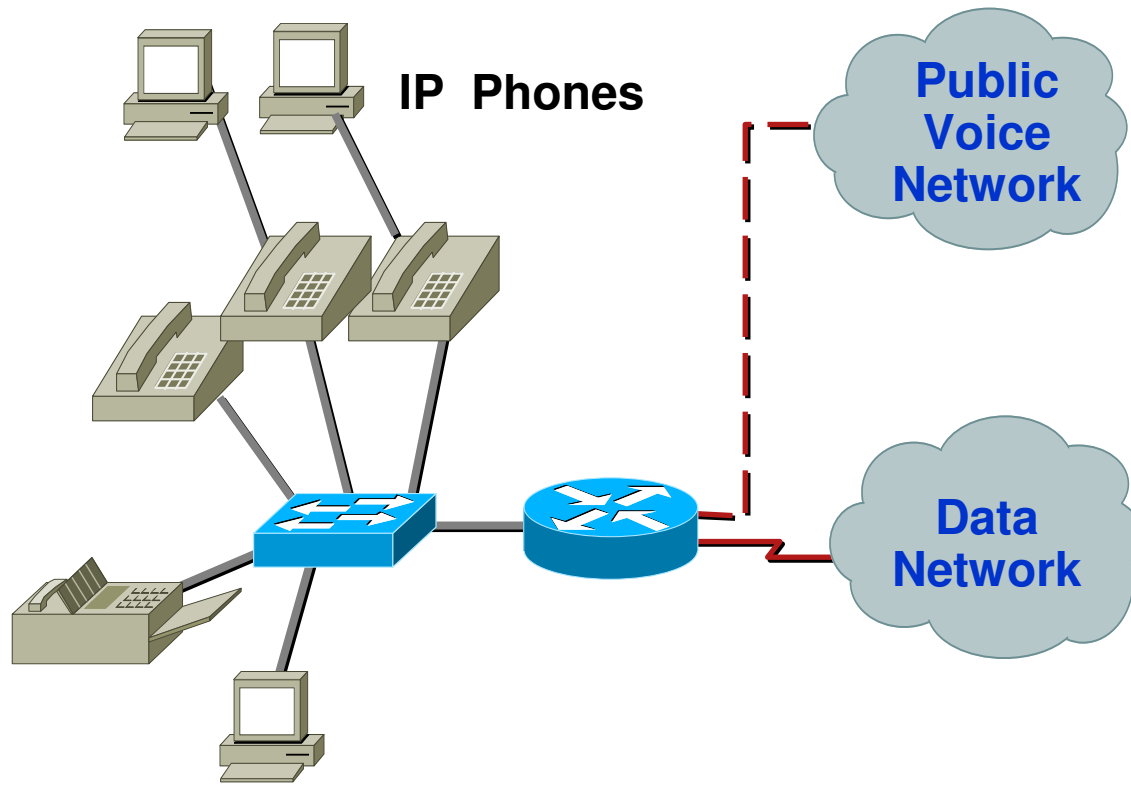
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FANCL Store Today – Duplicate Infrastructure



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FANCL Converged Architecture

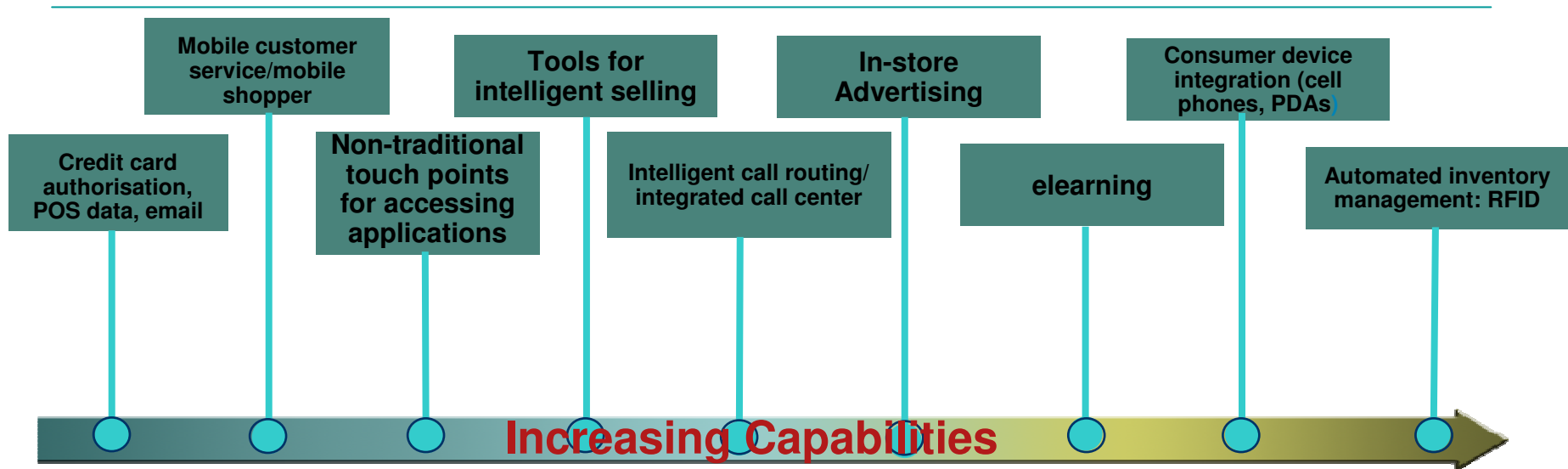


- **Builds the base for expanded capabilities and experiences**

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Roadmap To Increase the Store Business/Application Capabilities...

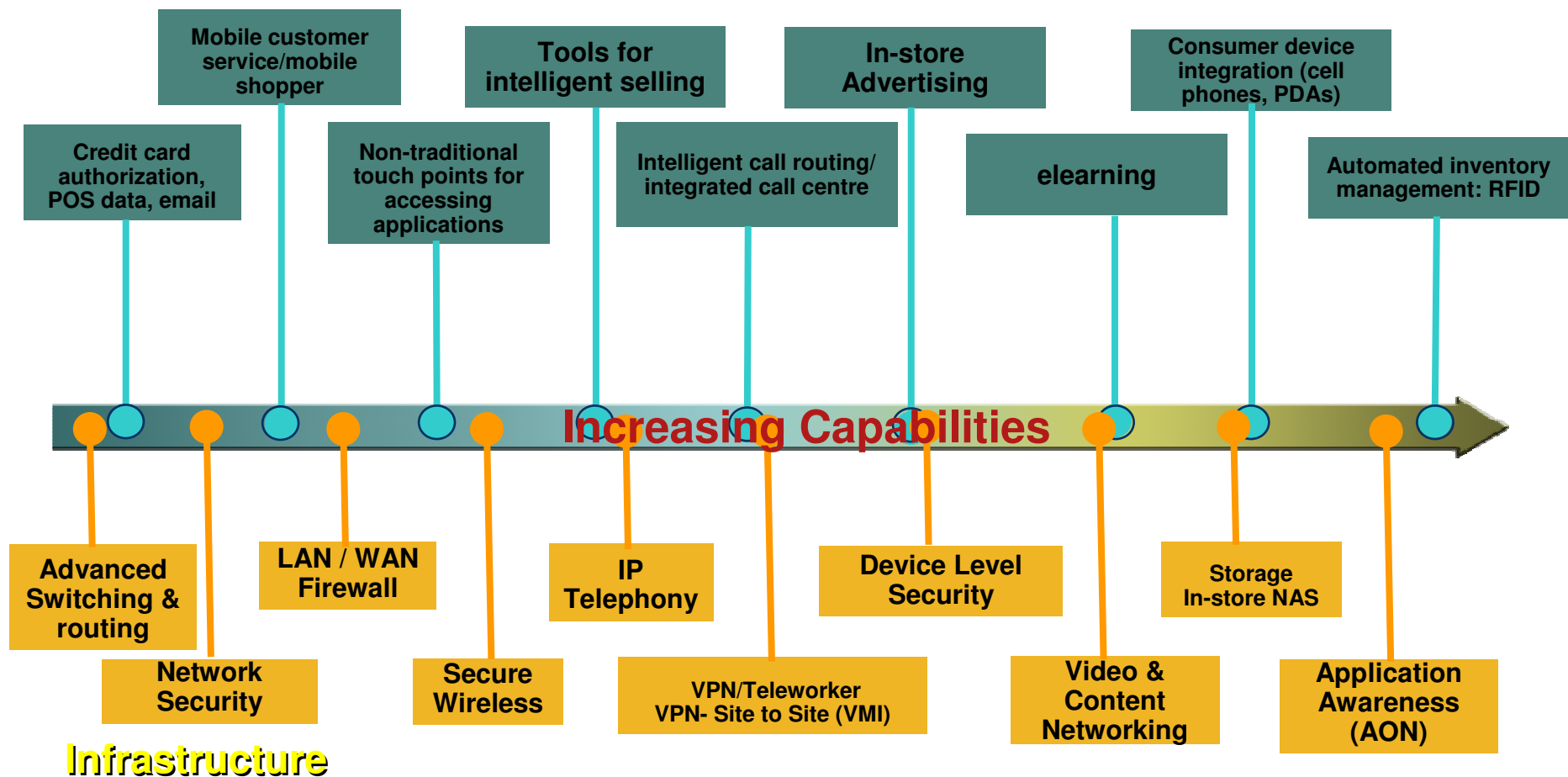
Applications



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...The Need To Build An Infrastructure Roadmap

Applications





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