Delivering the Human Network

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Systems Engineer, Consulting Systems Engineer
Cisco Enterprise Sales

January 11, 2007
Agenda

- Our Culture and History
- Our Strategic Approach
- Our Technology Strategy
- Our Services Experience
- Our Results
- Our Roles
- Q&A
Our Culture and History
Cisco Systems: Worldwide Leader in Networking for the Internet

Cisco Products Power the Internet

Cisco Runs Its Business on the Internet
“Customer success and satisfaction are at the heart of Cisco’s business strategy and key drivers of our current and future success”

John Chambers, President and CEO
Cisco at Work—Corporate Culture
Cisco’s History of Customer Satisfaction

- 10+ years of history—formally tracking customer satisfaction
- Central part of Cisco’s culture
- Customer satisfaction tied to the bonus plan
- Organizational ownership

Source: Independent research study; measured on a scale of 0 to 5
Innovation Milestones

- Started at Stanford
- Shipped Multiport Communications Interface (MCI)
- First acquisition—Crescendo; released 3000, 4000 & 7000 series routers
- Entered service provider market; released Gigabit Switch Router (GSR)
- Released wireless LAN products
- Developed CRS-1 Carrier Routing System
- Catalyst 6500 >$20B sales
- Shipped 8 millionth IP phone
- Surpassed 3M wireless access points installed


- Shipped first router; developed IGRP protocol
- IPO; 192 employees
- Released Catalyst switch
- Shipped first IP telephone; developed optical strategy
- Acquired Andiamo through spin-in; acquired Linksys
- Introduced integrated services router; acquired Scientific Atlanta
Our Strategic Approach
Customer Focus—Market Segments
What Customers Are Telling Cisco

Customers Are Facing Complex Challenges
- Global competition/consolidation
- New business models
- Rising customer/citizen expectations
- Macro-uncertainties
- Security

Customers See the Network as an Enabler
- Convergence
- New services
- Wired/wireless integration
- Application/process integration
- Productivity

Customers Want a System, Not Individual Parts
- Self defending
- Manageability
- End-user transparency
- Total cost/investment protection
- Architecture
Cisco’s Blueprint for the Future

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<th>FY07 Initiatives</th>
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<td>Network as the Platform</td>
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Cisco’s 3–5 Year Technology Vision:
The Intelligent Information Network

- **PHASE 1**: The Intelligent Movement of Data / Voice / Video Across a System of Networks
- **PHASE 2**: Virtualized Networking Resources
- **PHASE 3**: Application-Enhancing Services

Network Intelligence

INTEGRATED TRANSPORT

INTEGRATED SERVICES

INTEGRATED APPLICATIONS
Cisco’s 3–5 Year Technology Vision: Transferring Intelligence into Value

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<th>From</th>
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<td>Packet-Oriented Networking</td>
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<td>Route-Level Resiliency</td>
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<td>Fixed Asset Utilization</td>
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Cisco Technology Strategy: Architectures Tailored to Our Customers

INTELLIGENT INFORMATION NETWORK

SERVICE PROVIDER

IP NGN

- Increase revenue
- Customer loyalty
- Reduce OpEx/CapEx

CONSUMER

The Connected Home

- New digital lifestyle
- Entertainment on demand
- Easy to use
- Affordable

ENTERPRISE

Service-Oriented Network Architecture

- Increase revenue
- Increase flexibility
- Improve customer relationships
- Reduce costs

COMMERCIAL

Smart Business Communications Architecture

- Increase revenue
- Customer intimacy
- Low complexity
- Advanced services
- Competitive advantage
Technology Strategy
Cisco’s Technology Strategy

Global Systems Approach

SMARTEST

Convergence
Security
Quality of Service
Availability
Manageability

FASTER

Routers and Switches
Silicon
Hardware
Lower Cost

LASTING

Architecture
Generational Approach
Investment Protection

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R&D Commitment

$4B R&D SPEND *

R&D as % of Revenue

Source: Yahoo Finance, Company Financial Statements

*Total four quarters ending 7/29/06
Cisco—The Technology Innovator

- $4 billion R&D investment annually
- 17,000 engineers working in more than 10 major labs worldwide
- #1 in most markets in which we compete
- Over 110 companies acquired
- More than 2,300 patents issued to Cisco inventors in last 10 years

MAJOR INNOVATIONS

- Multi-Protocol Routing and Switching
- Voice over IP
- WiFi wireless
- Largest contributor to IETF, IEEE
In the Future Everything Will Be Connected

Devices connected to the Internet

Source: Forrester Research, as cited in BusinessWeek.com, 2/20/05
The Communications System of the Future

...everything will be connected by IP
People to people - SIP
People to machine - HTML
Machine to machine - XML

The network will be the secure, value-add platform for all communications
What is Required?
Intelligence Migrating into the Network

APPLICATIONS
- Firewall
- SBC
- Call Admission Control (CAC)
- Email
- ERP
- Voice Mail
- WAN

OS AND MIDDLEWARE
- Mobile Management
- Load Balancing
- Web Virtualization

QoS
- TDM Voice Systems

Call Control
- VOICE APPS

TDM
- TDM SYSTEMS
Cisco’s Technology Strategy Architectures Tailored to Our Customers
From Technologies to Systems & Solutions

From

- IP Telephony
- Data Center Switches
- Routers and Switches
- Wiring Closets
- A Transport Network

To

- Enterprise Collaboration Systems
- Computer Virtualization Systems
- Enterprise Communications Systems
- Access Management Systems
- A Services Network
Routing, Switching, ATs...Tightly Integrated

Cisco’s Networking Roots
Switching    Routing    Software

#1
Looking to the Future: The Evolution of the Network

- Best in Breed Networks
- End-to-End Networks
- Network of Networks
- Intelligent Information Network Network as the Platform

1990 2000 2010
Our Customers Enable Life’s Experiences

Enterprise

Service Providers

Data, Voice, Video, Mobility

Commercial

Consumer

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The Network Changes How People, Companies, Countries Experience Life

Work

Live

Network is the Platform

Learn

Play

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Lead the Experience
Cisco Runs Its Business on a Cisco Infrastructure

>300 x Content Engines

2923 x Switches

46,200 Unity Users

120 x MDS 9000 Multilayer Directors

47,000 x Cisco Security Agents

2510 x Voice and Remote Gateways

2136 x Routers

3100 x Access Points

66,000 x IP Telephones

24,500 x IP Communicator/Softphones
Our Results
Cisco’s Financial Strength

- $17 billion cash and investments

Note: By fiscal year, excludes one-time charges/gains
Cisco Continues to Innovate

- Develop New Technology
  - AON, IP Telephony, Wireless

- Start New Business Models
  - Linksys, Meeting Place, NetSolve

- Partner with Other Companies
  - Network Admission Control (Microsoft, Symantec, others)

- Pursue Acquisitions
  - 100+ Acquisitions

- Design New Products
  - CRS-1, IOS XR, Integrated Services Router

- Spin in Investments
  - Andiamo
Cisco Business Relationships

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My Role
Business Concerns

- Is my network ready for voice?
- Is my network ready for video?
- Is my network secure?
- Is the technology ready?
- Are my people ready for this “new technology”
- Can I bridge the gap between technology architectures and my business needs?
Individual Contributor: Systems Engineer

Who Am I?

- Technical Sales person- I need to have a strategy to convince my customer to buy Cisco and I also need to explain and architect technologies.

What do I do?

- Build network architectures that solve business needs.
- Build End-State architecture for customer networks 2-3 years in the future.
- Drive technical, service, and product issues that span multiple administrative domains/organizations
- Become a trusted advisor to customer, accelerate and increase the sales opportunity.
- Maintain knowledge across Cisco’s major product families.
Large Financial Secure WAN Architecture
Catalyst 6500 Software Modularity – High Availability Scenarios: Unplanned Downtime

1. Fault occurs in modular process
2. Process restarts with state checkpointed (graceful restart kicks in if needed)
3. If failure occurs in IOS Core or the microkernel, switchover to redundant Supervisor occurs

![Diagram of primary and secondary supervisors with stateful switchover](image-url)
Why Cisco TelePresence
Business Model Changes

- **In-Person Experience—Non-Verbal, Human Factors**
  Decision Making / Improved Trust
  Employee / Customer / Partner / Supplier Relationships

- **Next Generation Productivity**
  New Business Models … Support, Sales, Engineering
  Improved Reach / Agility / Lead time to meet
  Business Continuity – Disasters / Pandemics etc.
  Less travel – Equally Effective – Quality of life

- **Technology will apply to applications in all our markets and verticals in many forms over time**
  Work — Virtual Meeting, Virtual Specialist in Branch, Virtual Assistant
  Live — Virtual Health Care, Tele-medicine, Visit Family
  Play — Being at the Game while dining at a restaurant
  Learn — Virtual Teachers in remote classrooms
Where do I spend my time?

Advising Customers
• 16 Different Customers
• Local, Global: Finacial, Biotech, Retail, Hi-tech

Present to Interested Parties about Cisco Solutions
• Customers- Product updates, Architectures
• Internal- Best Practices, Account Managers, NPI

Account Strategy
• Work with Account Manager to develop Account Strategy
• Develop strategy and gather account intelligence- AM, BU, and Other Acct.

Technology
• Constantly review technology innovations- Internal/External
• Evaluate Technology for testing and deployment in customer networks
• Recommend technologies to Customer base.
What makes me successful?

- Technological breadth: IP routing to LAN and WAN technologies to servers and data center solutions.
- Experience and knowledge: Working across the networking space.
  - Combination of technical and business acumen derived from working at Cisco and network industry companies.
  - Communicating articulately up and down the management chain from CxO level down to network operator.
  - Ability to influence customers, SE’s, partners, and engineering.
  - Continual innovation and generation of new approaches to solve problems.