Data Security and the Impact on Supply Chain Risk Management

CW Foong
Director of Supply Chain Transformation
Data Management, Analytics and Solutions Architecture
State of Security

38% Increase in security threats (2015 vs. 2014)

80% Breaches originate with 3rd parties

50% U.S. companies have no 3rd party cyber-risk assessment processes

2015 International Data Group Inc. The Global State of Information Security Survey

2015 Sana Institute Whitepaper "Combating Cyber Risks in the Supply Chain"

2015 PWC US State of Cybercrime Survey
Who Poses the Biggest Threat?

- Hackers
- Malicious Users
- Organized Crime
- Hactivist
- Nations

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What is a **Value Chain**?
The end-to-end lifecycle for hardware, software or services that deliver value

What is **Cisco’s Value Chain**?
The third-party ecosystem supporting the lifecycle of Cisco solutions

**Value Chain Stages**

- Design
- Plan
- Source
- Make
- Quality
- Deliver
- Sustain
- End of Life
Cisco Supply Chain Security

WE DRIVE
WE PROTECT
WE ENABLE
Supply Chain Security Risk

Threats
- Manipulation
- Disruption
- Corporate Espionage

Exposures
- Counterfeits
- IP Misuse/Data Security Breach
- Taint
Supply Chain Security Risk

Top Supply Chain Security Threats

- Denial of services
- Social Engineering
- Malware
- Account Privilege Misuse
- Forgery or Copy
- Tampering Modification Substitution
Layered Approach

The **RIGHT SECURITY** in the **RIGHT PLACE** at the **RIGHT TIME**

**LOGICAL SECURITY**
- Secure development lifecycle
- Data Protection Program
- Role-based access policy & management

**TECHNICAL SECURITY**
- Encryption
- Smart chips
- Data extracting test beds

**PHYSICAL SECURITY**
- Camera monitoring
- Security checkpoints
- Electronic or biometric access control

**BEHAVIORAL SECURITY**
- Increases awareness of insider threats
- Employs “human sensing”
- Builds a security culture and behaviors
Understanding Privacy, Security and Data Protection

Close the drapes and blinds

Collect your assets (children, items in the safe, pictures, and the dog)

Lock the doors and turn on the alarm
Three Interrelated Disciplines

Data Security
Data Protection
Data Privacy
Strategic Considerations

- Customer & Market Expectations
- Competitive Differentiation
- Risk Landscape
- Legal Obligations

Cisco’s Data Protection Program
Cisco’s Data Protection Program

- Policies and Standards
- Identification and Classification
- Data Risk and Organizational Maturity
- Incident Response
- Oversight and Enforcement
- Privacy by Design & Int’l Privacy Policy
- Security by Design & Data Loss Prevention
- Awareness and Education
Thank You.