The Changing Face of Supply Chain Security

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Session Agenda

- What is the Supply Chain universe?
- How Supply Chain and related risks have evolved?
- Understanding the risks supply chain brings to an organization
- Approach to minimize security risks and costs in supply chain

Getting your Universe of Suppliers right!!

- SaaS solutions
- Server software solutions
- Solution integrators
- Hardware manufacturer
- Client software solutions
- Hardware reseller
- Hardware testing
- Staff augmentation
- Offshore facilities
- Open source

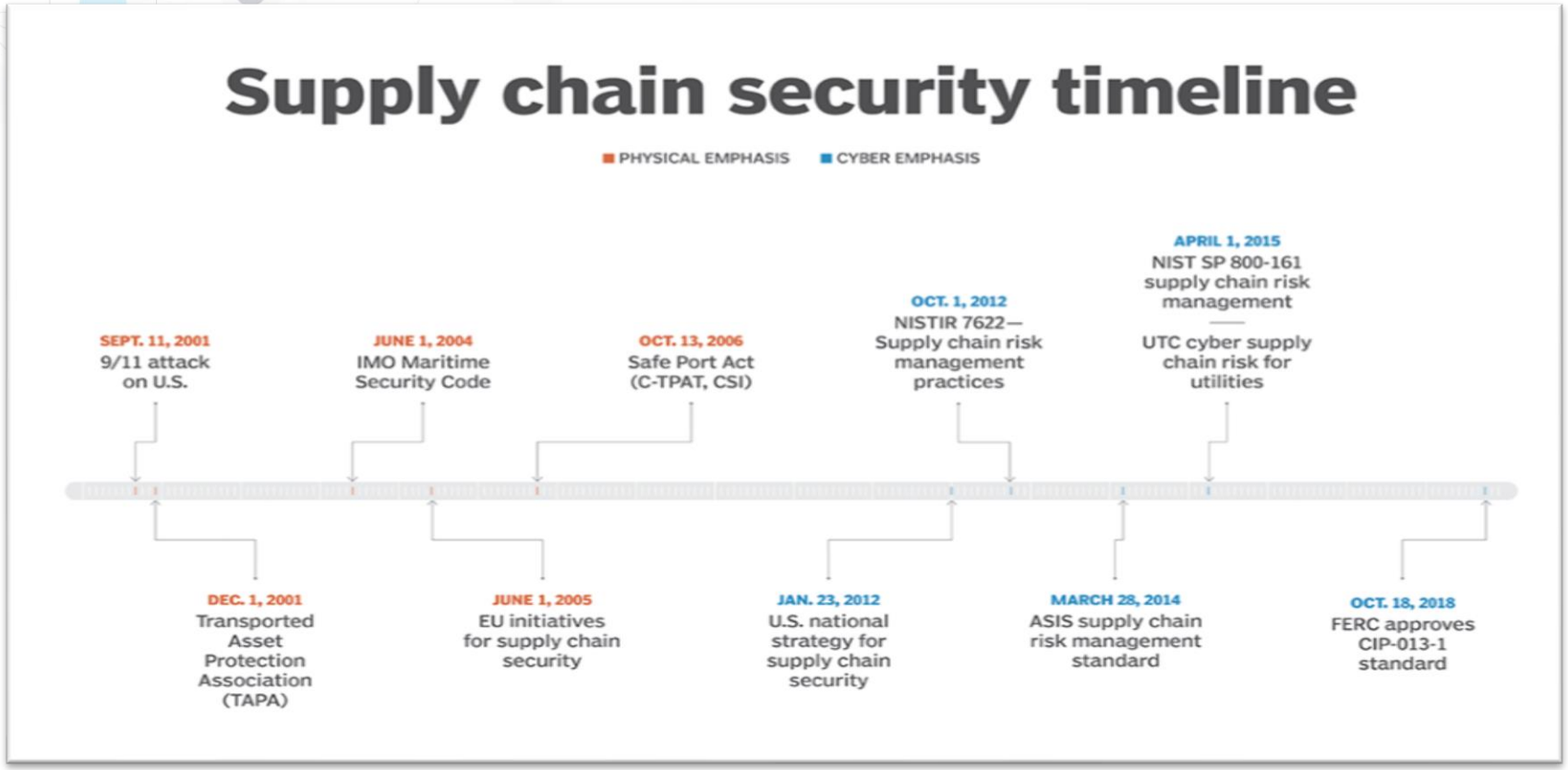
Example – Apple Suppliers List

Apple's Top Suppliers

- Analog Devices
- Glu Mobile
- Jabil Circuit
- Micron Technology
- Murata Manufacturing Ltd
- Nidec
- Qualcomm

Source: Investopedia

Changing face of Supply Chain Security



- Pirates (Theft)
- Script kiddies (hacking as a hobby)
- The insider (disgruntled employee)
- Criminal Gangs (hacking for financial gain)
- Nation-states (More strategic, Espionage)
- Terrorists (hacking to terrorize)

Source: TechTarget

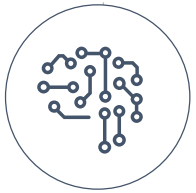
Technology Enablers for Intelligent Supply Chain

IoT & Edge

- Cloud-based tracking and visibility
- Predictive Quality
- Real-time availability of Supply Chain data & synchronized IT systems
- Camera/video analytics

Advanced Analytics

- Demand Forecasting
- Capacity Planning
- Routing Optimizationn
- Advanced procurement with collaborative optimization

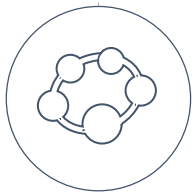


AI & Cognitive

- Picking
- Palletizing
- Automated CKD assembly in smaller lot sizes
- Demand Forecasting

Graph Technology

- Integrated Business Planning
- Network design & simulation
- Supply Chain Visibility

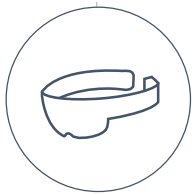


Blockchain

- Traceability
- Supply Chain Logistics
- Supply Chain Finance

Digital Workplace

- High-impact Work management
- Collaboration & communication



Mixed Reality

- Glasses based picking in warehouse
- Displays on packaging
- Displays on products managed by manufacturer

3D Printing

- New Production Locations
- New supplier configurations
- New production materials

TSMC's iPhone chip attack is a wake-up call for enterprise security

Enterprises at every level of connected manufacturing must wake to the reality that they are already under attack.

Weapon of mass disruption: supply-chain attacks in the manufacturing industry

NotPetya - a Threat to Supply Chains

Malware Takes Aim at the Supply Chain

A new threat is gaining momentum – and it shows no sign of abating for a simple reason: It's effective and difficult to combat

Problems in securing Supply Chain

- Control over the entire Supply chain universe
- Problems of scale

There's no single source of truth inventory

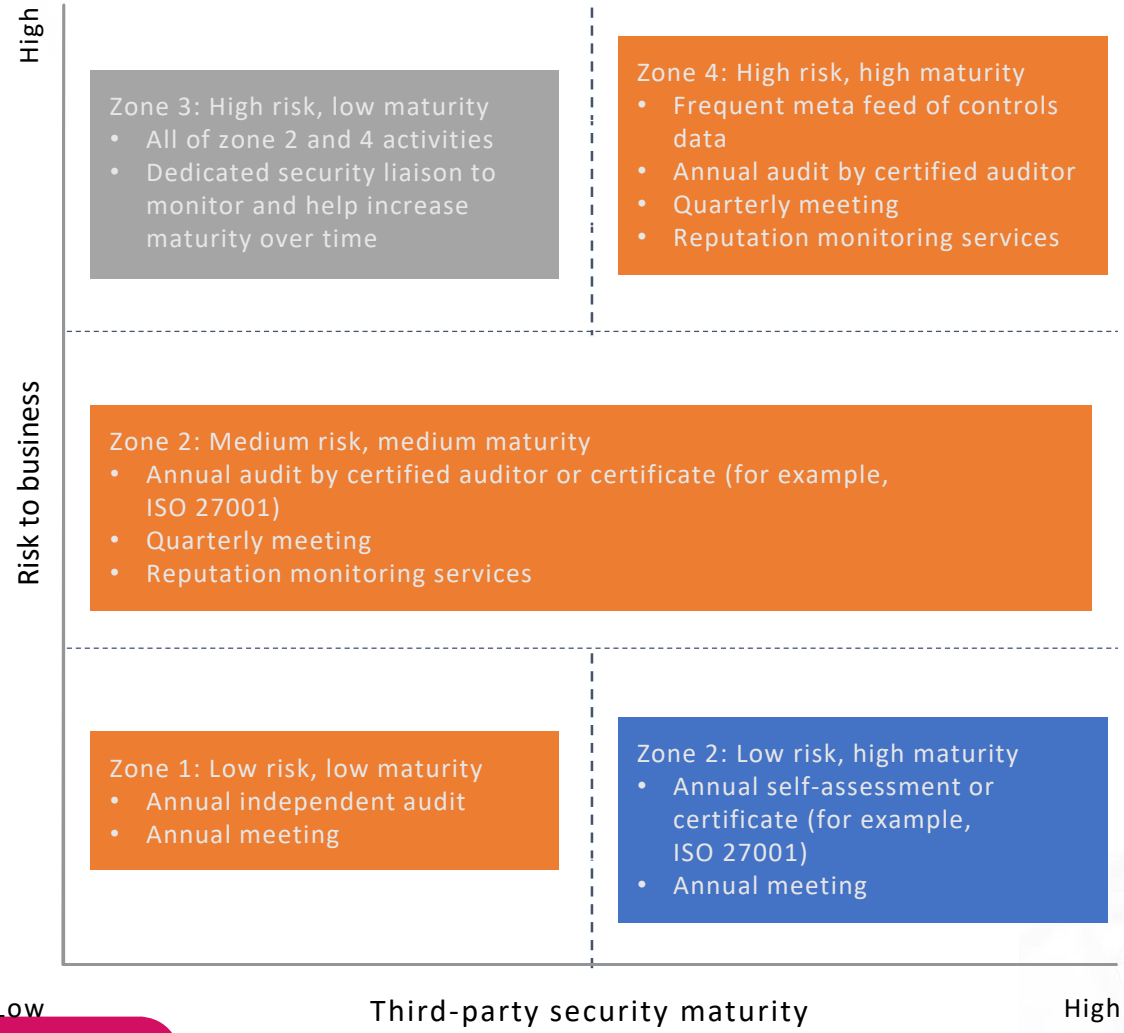
It's unlikely that an organization would cease or terminate an agreement with a third party that's unable to meet their control requirements

Contracts aren't used effectively

ROI isn't measurable or impactful

Third-party risk management programs are mostly informal and ineffective

Point-in-time assessments don't work



Think lifecycle rather than point in time

1 Pre-selection

- Upfront engagement

2 Selection

- Profiling
- Assurance (as needed)
- Remediation

3 Contracting

- Profile and assurance input to contract
- Escalation to governance, when needed

4 Ongoing monitoring

- Profiling
- Assurance (as needed)
- Remediation

5 Termination

- Termination via contract and governance

Learnings/Insights

- Questionnaire is often very ineffective
- Software purchases evolve very fast and point in time assessments fail
- Point in time assessments versus continuous security
- Hardware or services purchased often come now with software embedded and are not verified
- Prioritization criteria is not revised often to see what is falling through the cracks.
- Contract language very vague or in actionable
- Vetting all suppliers

Questions

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