



Cyber Security in Japan

A Real Quick Overview

Major Cyber Attacks

Japan has been a target



Japan Pension Service

- Data from 1.25 million accounts exfiltrated
- Gov't employee clicked on targeted phishing email attachment
- Employees had been allowed to download and store unencrypted citizen data on desktop PCs
 - Secure data server meaningless in face of lax security practices
- Diet amended Basic Security Law to give NISC jurisdiction over independent agencies such as JPS



- 18 Oct 2015 – Anonymous takes down Narita and Chubu Airport websites for 8 hours
- 10 Dec 2015 – PM Abe's website down for hours
- 13 Jan – Nissan site taken down
- 22-23 Jan – Narita website taken down
- 10 Feb – Nat'l Tax Agency down; JETRO & Japan Securities Finance Co. attacked

National Security Concerns

- Japan recently suffered numerous DDoS attacks against high profile targets by Anonymous
- South Korea subway system and nuclear plant office LAN penetrated by North Korean military hackers
- Sony America devastated by DPRK hacking attack

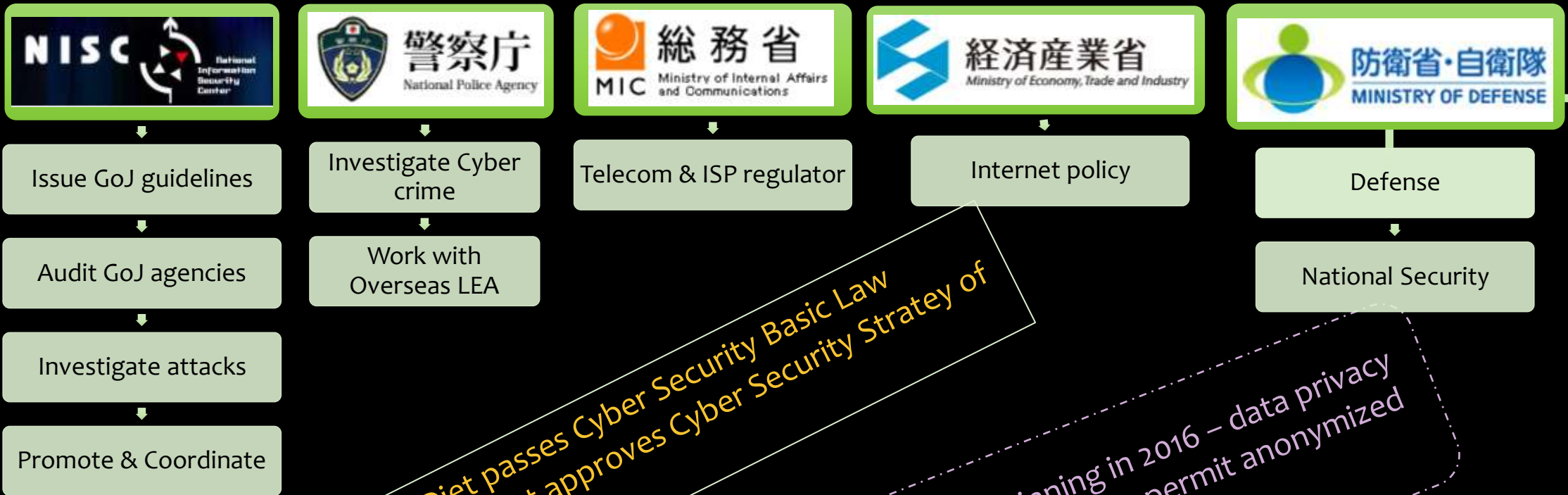
GoJ recognizes the serious risk of cyber attacks and is taking numerous steps to respond to ongoing attacks as well as potential future risks as well

MITSUBISHI HEAVY INDUSTRIES HACKED

TOKYO, 2011 -- Japan's biggest defense maker, involved in sensitive missile, jet & sub production suffers major hack. 45 servers and 38 PCs compromised. At least 8 viruses targeted a shipyard in Nagasaki, sub and nuclear plant factory in Kobe, and missile and rocket facility in Nagoya. China suspected.

GoJ Agencies with Cyber Security Roles

Cabinet Secretariat's Cyber Security Strategy Headquarters



• Nov 2014 – Diet passes Cyber Security Basic Law
• Nov 2014 – Cabinet approves Cyber Security Strategy of security with growth

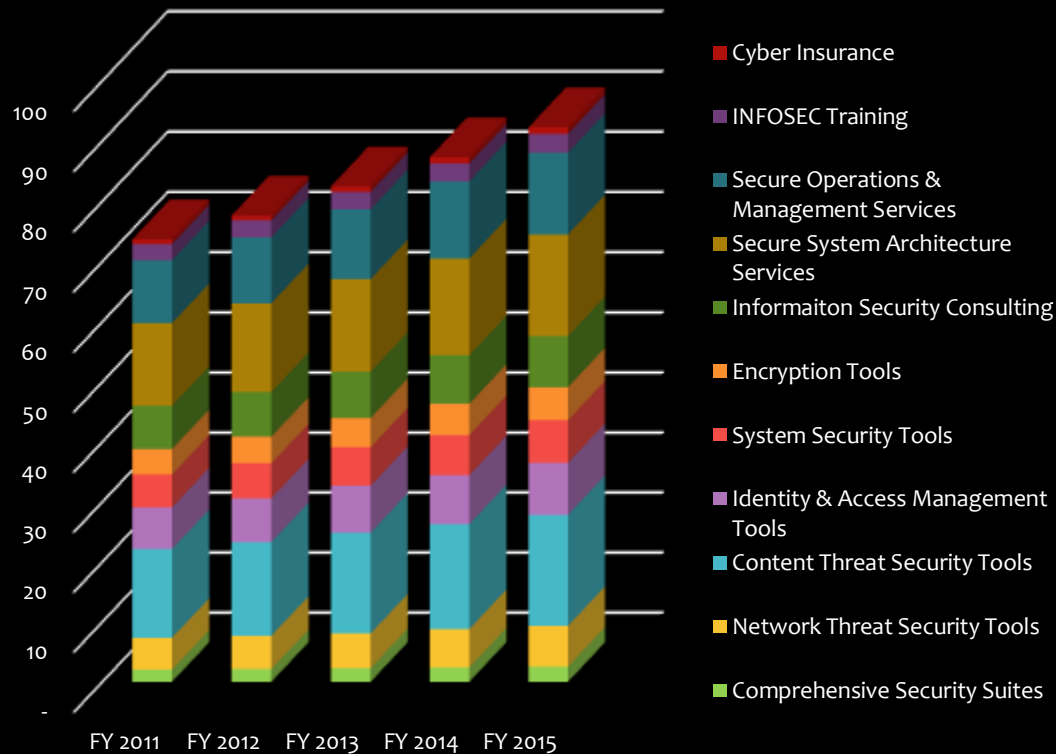
• My Number Law beginning in 2016 – data privacy
• Data Privacy act amended to permit anonymized personal data use for big data

Olympic CSIRT under Cabinet

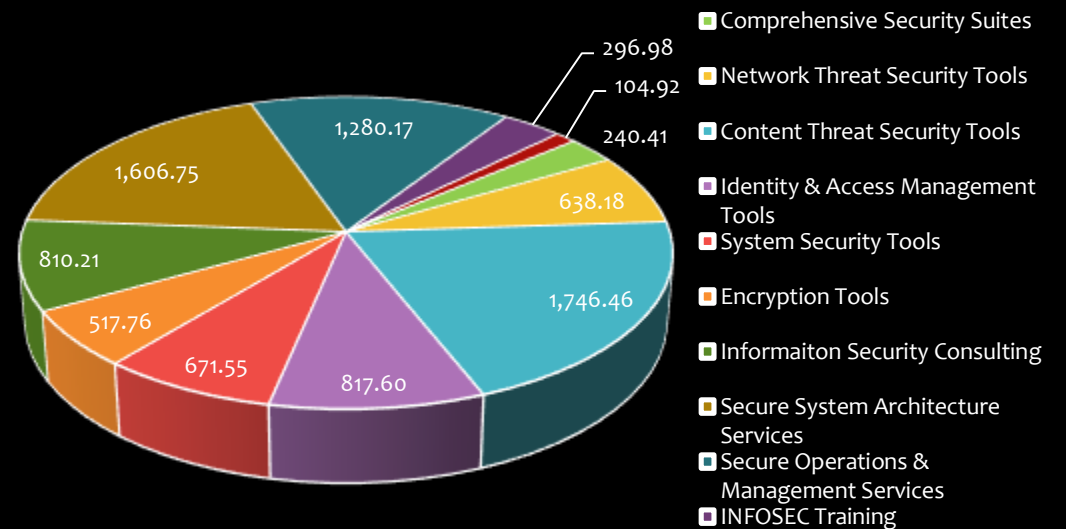
Japan's Cyber Security Market

Over USD \$9b in 2015

Japan's Cyber Security Market



Cyber Security Sub Sectors



Human Resource Gap

Jobs outnumber skilled domestic labor pool

Human Resources

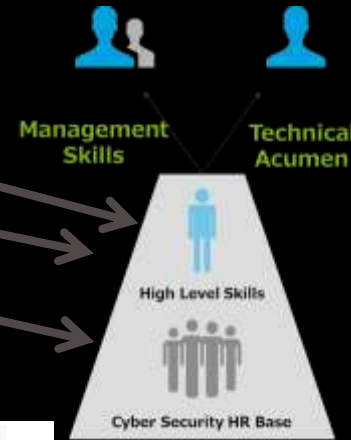
265K INFOSEC industry employees

160K lack required skills

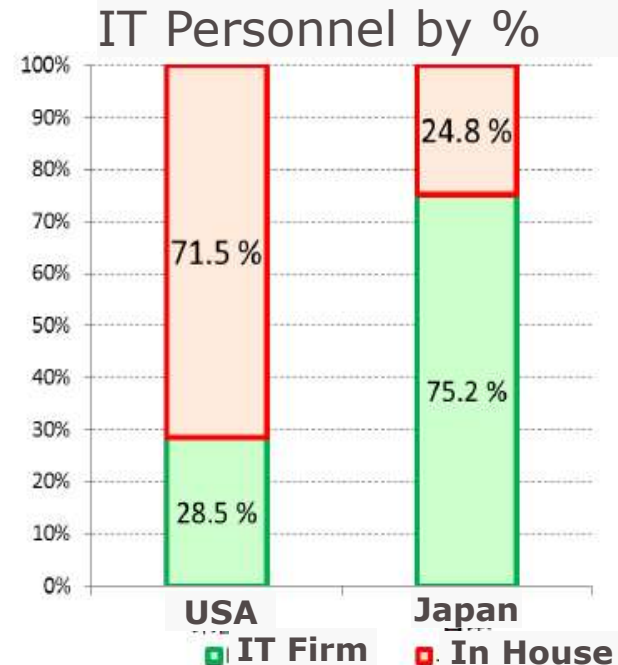
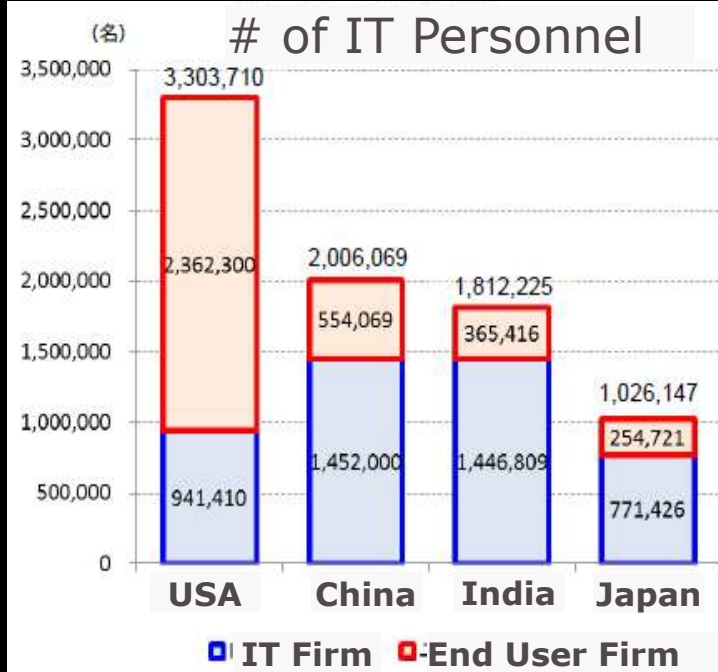
80K positions unfilled

Needs

- High End Training
- Places to use & Refine skill
- More Training



Over half of Japanese Companies lack CISO



- Keidanren formed 30-company Cybersecurity Working Group
- Diet funded additional technologists for IPA & NISC
- METI introduced Cyber certifications to encourage training
- Brisk sales for some US vendors (SANS, Offensive Security)



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Wrap Up

- Japan is a target for Cyber espionage & Cyber crime
- GoJ taking action on multiple levels
- Still needs to catch up, but moving
- G-7, World Rugby Cup 2019, and 2020 Olympics creating pressure
- Cyber talent serious bottleneck – Training needed
- Cyber Security market should near \$10b in 2016

Sources

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