SENSATO

CYBERSECURITY SOLUTIONS

2013

Founded to Safeguard Healthcare & Critical Systems

2014

Introduced NIST 800-53/HIPAA Rapid Assessment Program

2015

Named Top-500 Most Innovative Cybersecurity Firm

Founded Hacking Healthcare Conference

2016

Introduced first Security Operations Center for Healthcare Sensato-CTOC

Formed non-profit Medical Device Cybersecurity Task Force

Named 2016 Frost & Sullivan Visionary Leader in Cybersecurity

2017

Introduced the Cybersecurity Tactical Training Center

CYBERSECURITY TACTICAL OPERATIONS CENTER
CTOC
SENSATO

CYBERSECURITY TACTICAL TRAINING CENTER
CTTC
SENSATO

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CYBER SECURITY SOLUTIONS

Advisory Services

- Incident Response Planning
- Penetration Testing
- Vulnerability Assessments
- Incident Response Planning
- Cyber Range
- Medical Device Security

Managed Services

- Security Operations Center

SENSATO CYBER SECURITY SOLUTIONS

Software

- Honeypots
- Breach Detection

Sensato-ISAO

FDA

Microsoft

ComplyAssistant

DIVURGENT

Homeland Security
Science and Technology

ALIEN VAULT

GREATER NEW YORK HOSPITAL ASSOCIATION
GNYHA

NEW JERSEY HOSPITAL ASSOCIATION
NJHA

38% Increase in Cyberattacks

PWC Global State of Information Security Survey 2016

20% Increase on Cybersecurity Spending

PWC Global State of Information Security Survey 2016

23% Increase in Cost of Attack [$4M]

2016 Cost of Data Breach Study – Poneman & IBM

$1,367 average cost of exploit kit [44% decrease over 2015]

2016 Cost of Data Breach Study – Poneman & IBM

40% decrease average cost executing an attack

HelpNet Security – The Economics of Hacking 4/26/2016

<24 hours time for attack to breach a target [72% decrease over 2015]

Verizon 2016 - DIBR

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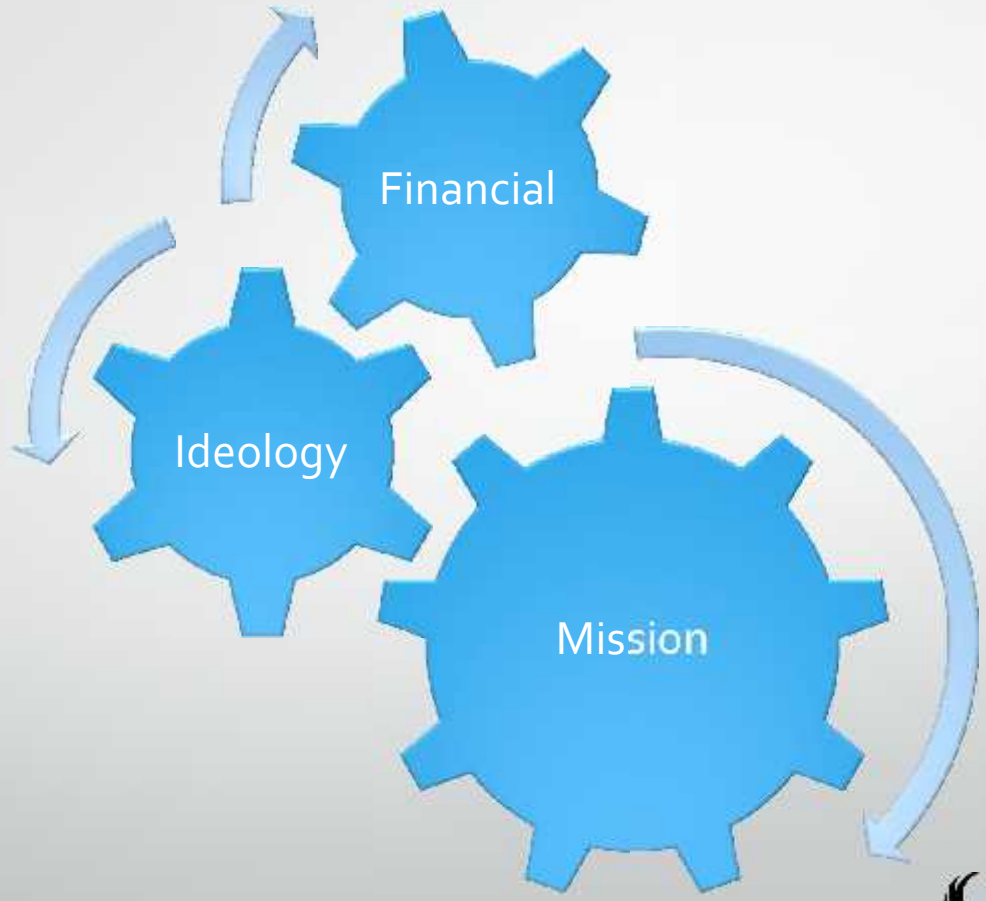
Attacker Motivations



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Motivation	Attacker Type	Sophistication Level
Mission	Nation State	High
Ideology	Terrorist/Activist	Medium
Financial	Criminal	High

June 27 – 07:00AM EST: A cyberattack is launched against Nuance at a Ukraine office.

June 27 – 07:14AM EST: The attack is successful and has the following impact:

- 14,800 servers are impacted
  - 7,600 will be destroyed beyond repair.
- 26,000 workstations are impacted.
  - 9,000 will be destroyed beyond repair.

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Recovery efforts will cost over $60M

Nuance team members will work 24x7 for six weeks before getting a day off.

The company realizes about $125M in potential business losses and impact.

Nuance was the victim of NotPetya – a very violent strain of the Petya virus:

- Not Petya is not ransomware.
- There was no exfiltration of data.
- There was no command & control.

The only mission of this attack was to destroy systems using a highly effective cybermunition.

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Cyber Spies

- FBI reports at least 108 nations have active cyber spy groups.
- The nation state typically appoints a proxy.
  - Chinese Unit 61398 has a 130,000 square foot/12 story facility that employs thousands of operatives.
- Highly Sophisticated
- Cross Over to Cyber Criminal Groups
  - Providing Testing Services
  - Beta Programs

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Robin Sage

N8 at NETWARCOM

Norfolk, Virginia Area | Computer & Network Security

Current	• N8 at Naval Network Warfare Command
Past	• Intern at Government Agency
Education	• Massachusetts Institute of Technology • St. Paul's School
Recommendations	1 person has recommended Robin
Connections	147 connections
Websites	• Where I Work • Dark Side of Security • My Facebook
Twitter	• robinsage
Public Profile	http://www.linkedin.com/in/robinsage

Summary

I have been in the computer hacking scene for over ten years. During this time I have penetrated hundreds of networks as a professionally contracted hacker and was empowered by the adrenaline rush of breaking into secured facilities of Global 500 companies and various governments. Because of my style and diverse areas of expertise, many of my friends refer to me as the real life Abby Sciuto of NCIS.

Established profiles on LinkedIn and Facebook

Friended CIO at NSA, Congressman, Northrop and Lockheed Executives

Started to get requests to interview and sponsorship for secret clearance.

Befriended Army Ranger deployed to Afghanistan, who sent photos to her with embedded GPS information.

Received confidential documents and invitation to speak on cyber war and security at the Pentagon

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Cyber Criminals

- Highly Organized
- Collaborate Deeply
- Extreme Incentives
  - Contests
  - Recognition
- Full Time Positions with Benefits
- Crime-as-a-Service
  - RaaS
  - Multilingual Call Centers
    - Support Scams
    - "Yes" Scam
    - Disaster Scams
- Utilization of Big Data Analytics to value data and create hostage situations.

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The Attacker's Perspective

NIST Top-10

Addresses 80% of NIST 800-53

Addresses HIPAA

Qualifies as a risk assessment for HIPAA

Provides a manageable foundation for ultimately achieving 800-53

Allows flexibility in prioritization and project management.

1. Business Associate Management
2. Qualification & Training
3. Education
4. Executive Intimacy
5. Incident Response
6. Monitoring
7. Old Technology
8. Patch Management
9. Relevant Practices
10. Single Authority

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Dirty dozen phases

Phase I

Relevant Practices

Patch Management

Old Technology

Education & Awareness

Phase II

Qualification

Executive Intimacy

Monitoring

Incident Response

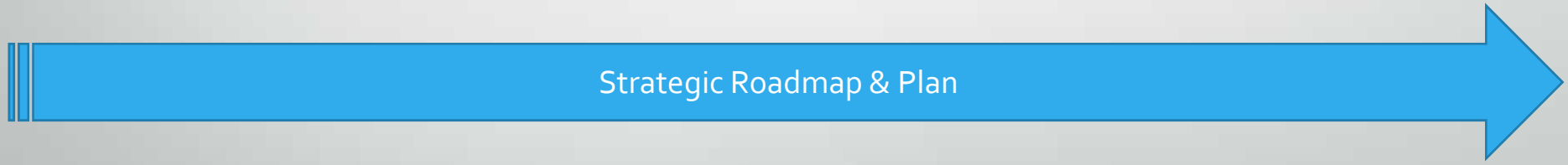
Phase III

Business Associate Management

Single Authority

Medical Device Security

Operational Systems Security



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CYBER SECURITY SOLUTIONS

Attacker Innovation

Eliminate the Rules

Dare To Try

Failure Becomes a Known Entity

No Political Correctness

Audacity

They Do Not Believe What Everyone Believes

They Believe in Wonderment

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