What CISOs need to tell CEOs, CFOs and Directors

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ABOUT ME

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• Security Auditor with Federal Government
• Forensics services and expert witness

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Today’s Presentation

• Threat inventory
• Costs of cyberattacks
• What thieves look for and how and where they find it
• Your data on the dark web
• Building a cyber defense
• Dark web scan

Key Takeaway

There are a lot of bad guys out there, but you can mount an effective and reasonably priced cyber defense.
An informed C-Suite is the gateway to a well protected and defended network.
THREATS ARE ADDITIVE AND EVOLVING

RESOURCE THEFT
1992-2001
10 years

SPAM
2001-2008
8 years

INFORMATION THEFT
2008-2014
7 years

DATA RANSOM
2014-2018
5 Years

TRUST LEVERAGE
2018 - ?
KEY TAKEAWAYS

ADDITIVE

ALWAYS “Evolving”

NEVER ENDING

CAT & MOUSE

“SHOW ME THE MONEY!”
CYBERATTACKS BRING
MORE THAN JUST FINANCIAL CONSEQUENCES

- Financial – direct and indirect
- Damages to the brand
- Employee morale
- Customer confidence
- Bad press
- Fines
- Forensic examinations
- Legal defense and settlements
- Loss of payment card privileges
- Time, resources for remediation and repair
HERE’S WHAT

CYBERTHIEVES ARE LOOKING FOR

- Compromising emails
- Customer financial information
- Employee personal information
- Federal tax employer identification numbers
- Medical records
- Passwords
- Trade secrets
- W2s and tax data
IF THEY’RE NOT LOOKING FOR DATA
THEY COULD BE LOOKING FOR RANSOM MONEY

“2019 WILL BE THE YEAR OF RANSOMWARE RISING
A new business will fall victim to ransomware every 14 seconds in 2019 – and every 11 seconds by 2021, according to Cybersecurity Ventures predictions.”

Source: phoenixNAP IT
IT’S LIKELY THAT CYBERTHIEVES ARE MARKETING YOUR COMPANY DATA ON THE DARK WEB RIGHT NOW

- Blogs
- Bulletin boards
- Forums and chat rooms
- Malwares samples
- Peer-to-peer sharing networks
- Social media feeds
- Web pages
- Web services and servers
HOW CYBERTHIEVES ARE GETTING YOUR COMPANY DATA
WHAT AN AD ON THE DARK WEB LOOKS LIKE

Ad for access to an administrator account

OFFICE 365 ADMIN ACCOUNT OF A LAW FIRM (USA, FL)

$100

You get the access to global admin account which give you access to all email accounts in organization and all the settings!!!
WHAT AN AD ON THE DARK WEB LOOKS LIKE

Ad for the sale of compromised credentials

- Verizonwireless.com: $12, 25 available
- Airbnb.com: $15, 32 available
- Ebay.com: $10, 37 available
- Fido.ca: $20, 93 available
- Chase.com: $25, 15 available
- Citibank: $25, 17 available
- Navylfcational.org: $50, 0 available
- Target.com: $10, 44 available
- Wellsfargo.com: $25, 9 available
WHAT AN AD ON THE DARK WEB LOOKS LIKE

Ad for the lease of a ransomware Trojan

<table>
<thead>
<tr>
<th>PACKAGE #3</th>
<th>1 MONTH C&amp;C Dashboard (RaaS) - Price: 90 USD</th>
</tr>
</thead>
<tbody>
<tr>
<td>- C# FUD Ransomware (AES 256 Encryption with a 64 chars long uncrackable key)</td>
<td></td>
</tr>
<tr>
<td>- C# Decrypter</td>
<td></td>
</tr>
<tr>
<td>- Stub Size: 250kb (unique exe for each buyer)</td>
<td></td>
</tr>
<tr>
<td>- 1 Month C&amp;C Dashboard access (to receive the AES keys from Clients)</td>
<td></td>
</tr>
<tr>
<td>- We take NO FEES from your Clients</td>
<td></td>
</tr>
<tr>
<td>- Features: Delayed Start, Mutex, Task Manager Disabler, UAC Bypass</td>
<td></td>
</tr>
<tr>
<td>- Platform: Windows (both x86 and x64)</td>
<td></td>
</tr>
<tr>
<td>- Support: Limited (initial setup only)</td>
<td></td>
</tr>
<tr>
<td>- Optional: additional Cypert adding 50 USD</td>
<td></td>
</tr>
<tr>
<td>- Optional: additional file types to encrypt for free (for all file types encrypted see FAQ)</td>
<td></td>
</tr>
<tr>
<td>- Optional: additional client banner in your language for free (already present en, ru, ge, fr, es, it, nl)</td>
<td></td>
</tr>
</tbody>
</table>

*Intended to Test our Service*
WE NEED TO BUILD, MAINTAIN AND CONSTANTLY UPGRADE OUR CYBERSECURITY DEFENSE

- Scanning
- Assessment
- Monitoring
- Repair / response plan
- Employee education
HERE’S WHERE & HOW COMPANIES ARE SPENDING THEIR CYBERSECURITY BUDGET

Table 1

<table>
<thead>
<tr>
<th>Market Segment</th>
<th>2017</th>
<th>2018</th>
<th>2019</th>
</tr>
</thead>
<tbody>
<tr>
<td>Application Security</td>
<td>2,434</td>
<td>2,742</td>
<td>3,003</td>
</tr>
<tr>
<td>Cloud Security</td>
<td>185</td>
<td>304</td>
<td>459</td>
</tr>
<tr>
<td>Data Security</td>
<td>2,563</td>
<td>3,063</td>
<td>3,524</td>
</tr>
<tr>
<td>Identity Access Management</td>
<td>8,823</td>
<td>9,768</td>
<td>10,578</td>
</tr>
<tr>
<td>Infrastructure Protection</td>
<td>12,583</td>
<td>14,106</td>
<td>15,337</td>
</tr>
<tr>
<td>Integrated Risk Management</td>
<td>3,949</td>
<td>4,347</td>
<td>4,712</td>
</tr>
<tr>
<td>Network Security Equipment</td>
<td>10,911</td>
<td>12,427</td>
<td>13,321</td>
</tr>
<tr>
<td>Other Information Security Software</td>
<td>1,832</td>
<td>2,079</td>
<td>2,285</td>
</tr>
<tr>
<td>Security Services</td>
<td>52,315</td>
<td>58,920</td>
<td>64,237</td>
</tr>
<tr>
<td>Consumer Security Software</td>
<td>5,948</td>
<td>6,395</td>
<td>6,661</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td>101,544</td>
<td>114,152</td>
<td>124,116</td>
</tr>
</tbody>
</table>

Source: Gartner (August 2018)
Research from industry leaders, including IBM, project that a healthy cybersecurity budget should make up nine to 14% of an overall IT department’s annual budget.

Source: Stratus
Get a copy of this presentation for use in your presentations to the C-Suite.

CYBERSECURITY THREAT LANDSCAPE
PAST, PRESENT, AND FUTURE

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QUESTIONS

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