



Cybersecurity: Retail And Hospitality

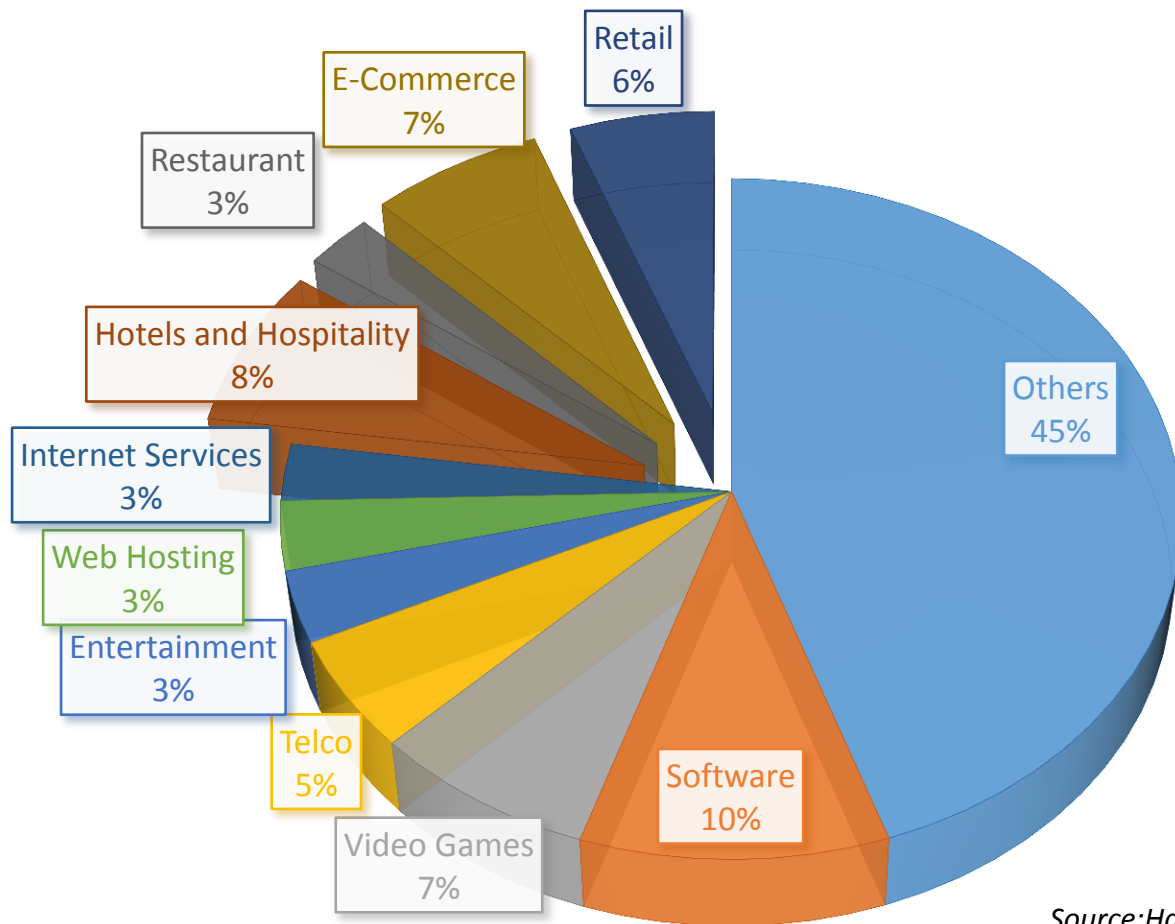
Agenda

- 🗨 The Numbers
- 🗨 Industry Risks
- 🗨 PCI DSS
- 🗨 Countering The Threat
- 🗨 Questions

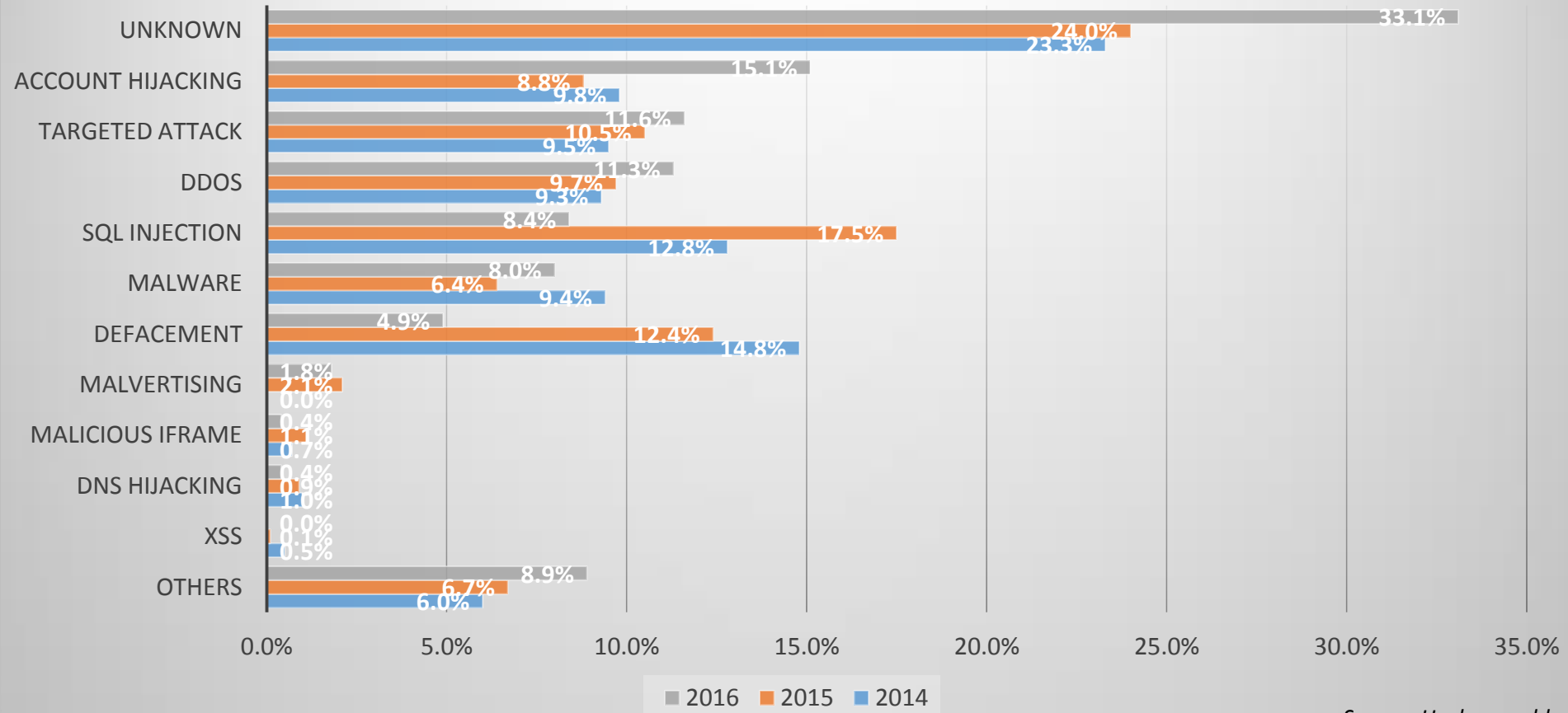


TOP INDUSTRY TARGETS

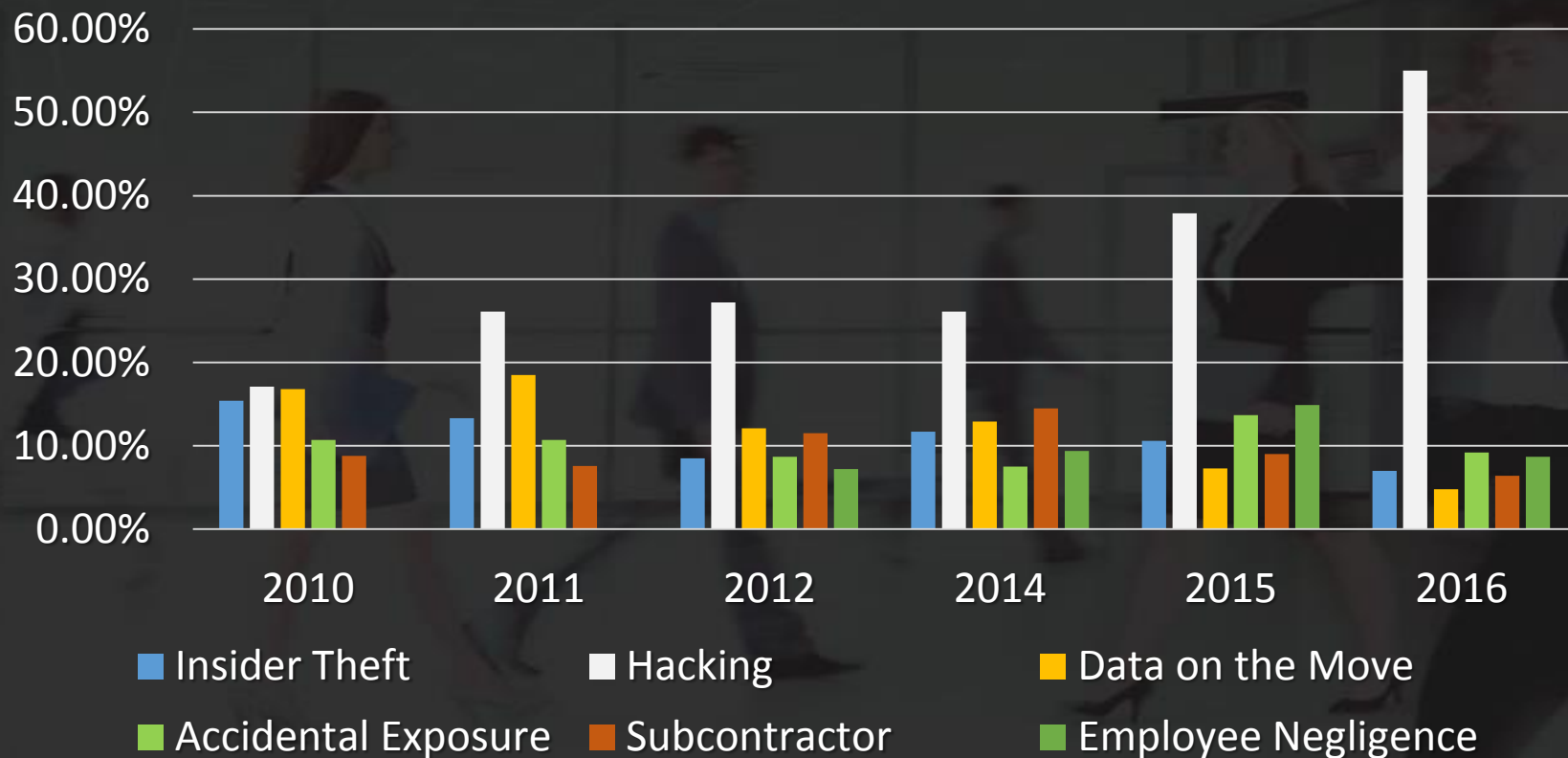
24%



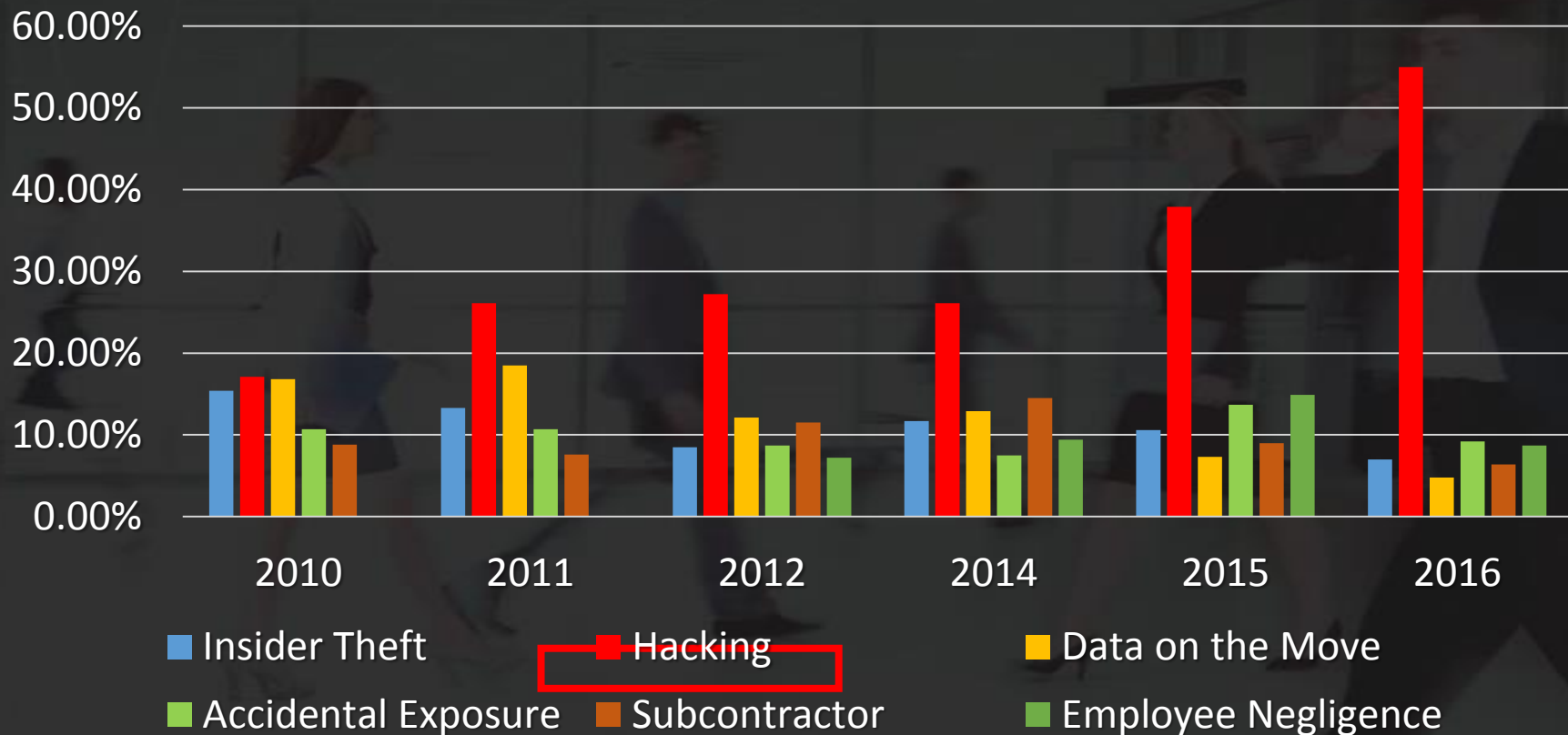
Top 10 Attack Techniques 2014 vs 2015 vs 2016



Causes/Type of Breaches (2010 – 2016)



Causes/Type of Breaches (2010 – 2016)



A man wearing a Guy Fawkes mask, a symbol often associated with hacktivism, is sitting at a desk outdoors. He is wearing a dark suit and is looking at a piece of paper in his hand. In front of him is a vintage computer monitor displaying some text, and a keyboard is visible. The background shows a tree trunk on the left and a blurred outdoor setting.

the average data breach
cost per victim, is nearly

\$158 per compromised record

So you're telling
me that....



1x Compromised
Server



10,000x Stolen Records

@ \$158 Cost Per record

\$1,580,000



Industry Risks: Retail



Cyber Attacks: Retail



Industry Risks: Hotels



Cyber Attacks: Hotels

A close-up photograph of a laptop lid covered in numerous stickers. The stickers include a blue 'LOOK AHEAD' sticker with a fox, a 'Firefox OS' logo, a 'fedora.' logo, a large 'HACKER' oval, a 'CANAINIA METADISTRIBUCIÓN GNU LINUX' sticker, a 'barcamp' sticker, and a circular 'ROCK CONTRA LA GUERRA' sticker. The laptop is resting on a wooden desk, and a person's hand is visible in the background.

PCI DSS



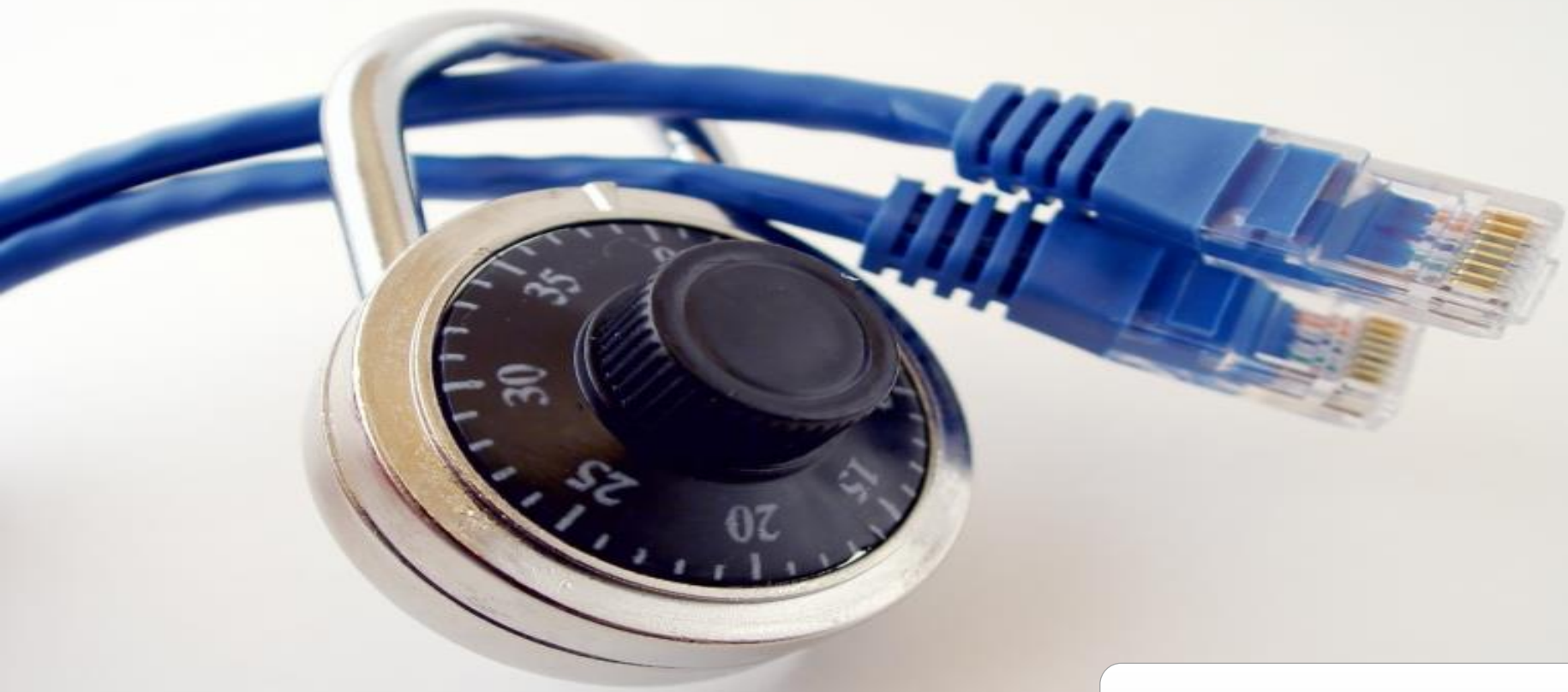
PCI DSS Compliance Levels

PCI Level	Your Business Does:	You Need To Perform:
Level 4	< 20,000 eCommerce transactions per year	Annual Risk Assessment using SAQ
	< 1 Million other transactions per year	Quarterly PCI ASV Network Scans
Level 3	>= 20,000 transactions per year	Annual Risk Assessment using SAQ
	< 1 Million transactions per year	Quarterly PCI ASV Network Scans
Level 2	>= 1 Million transactions per year	Annual Risk Assessment using SAQ
	< 6 Million transactions per year	Quarterly PCI ASV Network Scans
Level 1	6 Million transactions per year	Annual Internal PCI QSA Audit
	Or more	Quarterly PCI ASV Network Scans

PCI DSS Requirements

- Network Security
- Data Protection
- Vulnerability Management
- Access Control
- Monitoring and Testing
- Security Policy





Network Security

Data Protection





01011110000011
0100011101010
01000101010101
11111000101010
0101010011110



Vulnerability Management

Access Control



Windows\system32\cmd.exe - ping 192.168.1.1 -t

```
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=167ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
est timed out.
from 192.168.1.1: bytes=32 - MISCOMPARE at offset 1 - time=2ms
est timed out.
from 192.168.1.1: bytes=32 time=4ms TTL=100
from 192.168.1.1: bytes=32 time=5ms TTL=100
from 192.168.1.1: bytes=32 time=387ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=108ms TTL=100
est timed out.
from 192.168.1.1: bytes=32 time=1ms TTL=100
est timed out.
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
from 192.168.1.1: bytes=32 time=1ms TTL=100
from 192.168.1.1: bytes=32 time=5ms TTL=100
est timed out.
from 192.168.1.1: bytes=32 time=3ms TTL=100
from 192.168.1.1: bytes=32 time=324ms TTL=100
from 192.168.1.1: bytes=32 time=2ms TTL=100
```

**Monitoring
and Testing**

Security Policy



A word cloud is displayed on a tablet screen, centered around the word "Cybersecurity". The word "Cybersecurity" is the largest and most prominent, written in a bold, orange, sans-serif font. Surrounding it are various other words in different sizes, colors (including orange, brown, and black), and orientations, all related to the theme of cybersecurity. The words include: "security", "information", "computer", "networks", "also", "Computer", "understand", "one", "various", "events", "includes", "important", "public", "cybersecurity", "categories", "equipment", "disasters", "made", "threats", "unauthorized", "system", "protection", "first", "mechanisms", "including", "private", "seven", "known", "classified", "techniques", "whole", "computing", "Internet", "attacks", "unintended", "covers", "processes", "services", "smartphones", "typically", "well", "securing", "computers", "field", "computer-based", "protected", "change", "unplanned", "types", "destruction", "natural", "devices", "access", "seven", "known", "classified", "techniques", "whole", "computing", "Internet", "attacks", "unintended", "covers", "processes", "services", "smartphones", "typically", "well", "securing", "computers", "field", "computer-based", "protected", "change", "unplanned", "types", "destruction". The tablet is black with a white screen, and the word cloud is set against a white background. The tablet is resting on a wooden surface, and a silver and black pen is visible in the bottom left corner. In the background, there are some round, golden-brown cookies on a white plate.

Fortify Your Defenses

- **Network Security**
- **Cloud Security**
- **Internet of Things**
- **Policies and Procedures**
- **BYOD Considerations**
- **Patches and Updates**
- **Network Segmentation**



Educate Your Customers

- **Malware**
- **Phishing**
- **Password Attacks**
- **Denial of Service Attacks**
- **MITM Attacks**
- **Drive-by Downloads**
- **Malvertising**



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