2015 VERIZON DATA BREACH INVESTIGATIONS REPORT

What Are The Threats?

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Phishing Remains A Serious Threat

Our data suggests that phishing attacks could be becoming more effective:

23% of recipients opened phishing messages

11% clicked on attachments

82 seconds before a campaign gets its first click

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Common Vulnerabilities Dominate

We saw more than **7 million** vulnerabilities exploited in 2014

But just 10 accounted for 97% of attacks

We found more attacks dating back to 2007 than from any year since. And most attacks exploited vulnerabilities where a patch has been available for months, often years.

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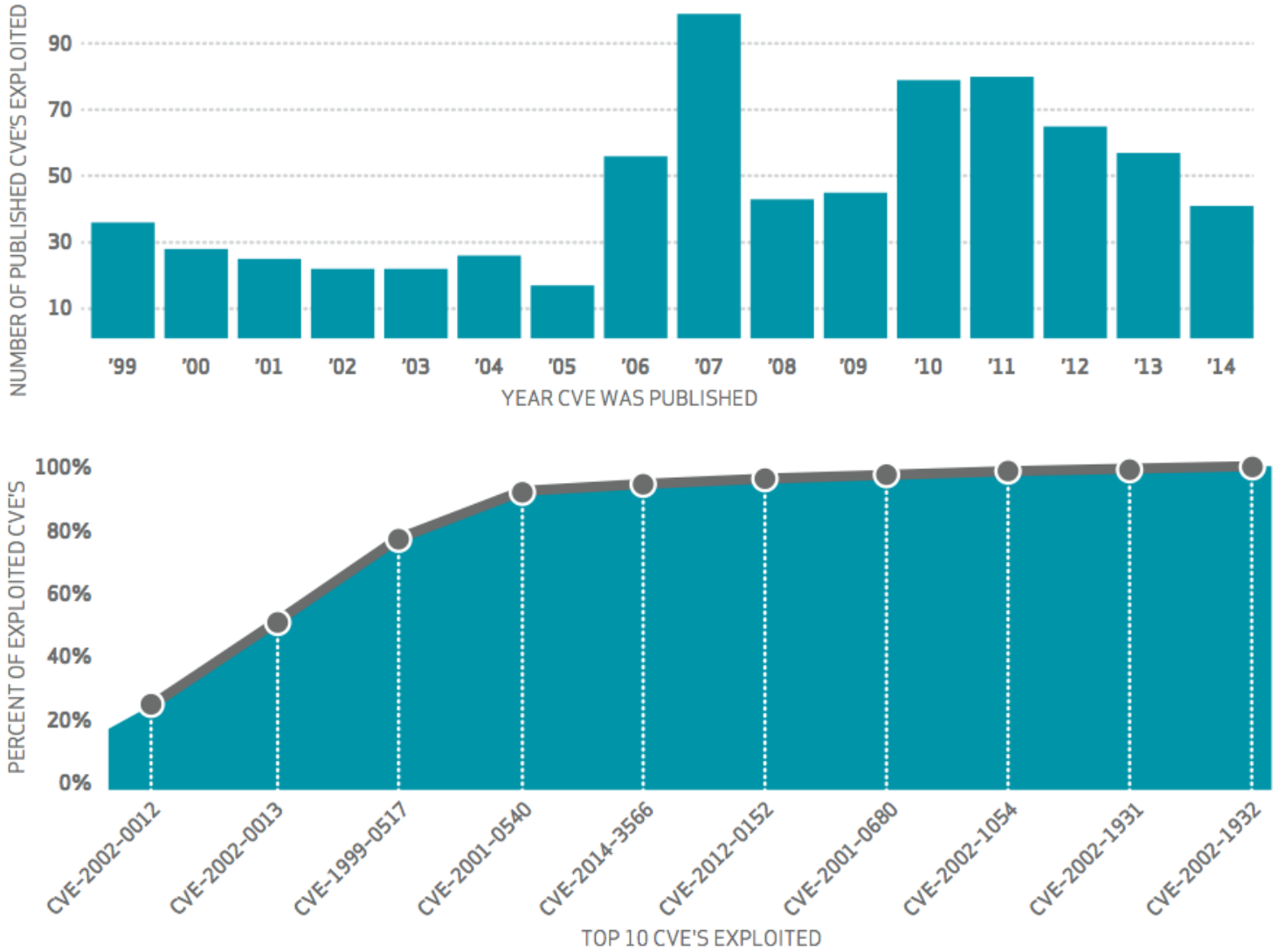
Vulnerabilities & Patching



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How Can You Make Sense Of All The Threats?

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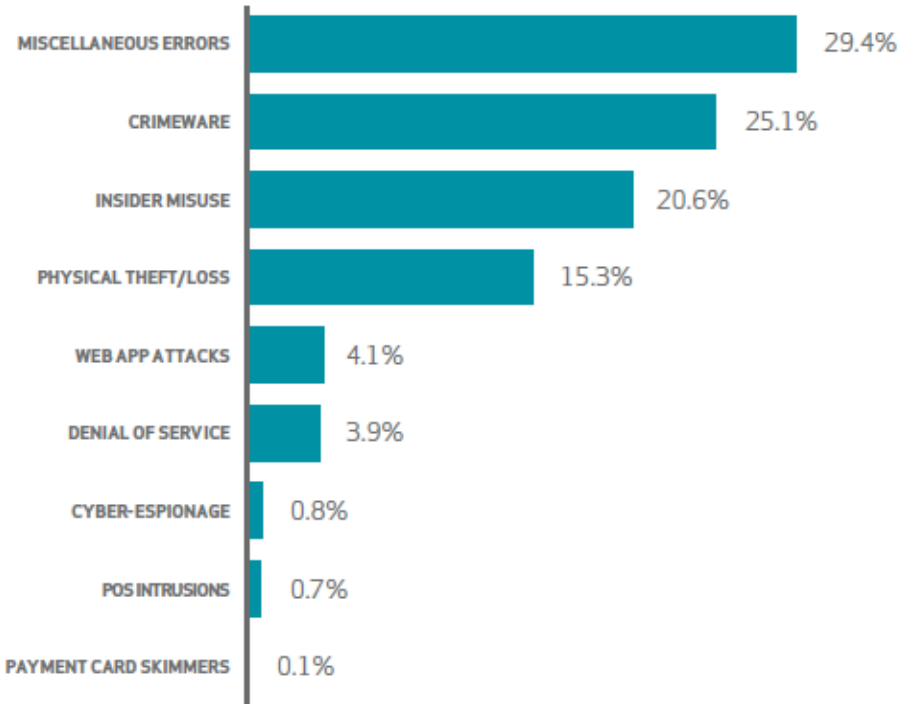
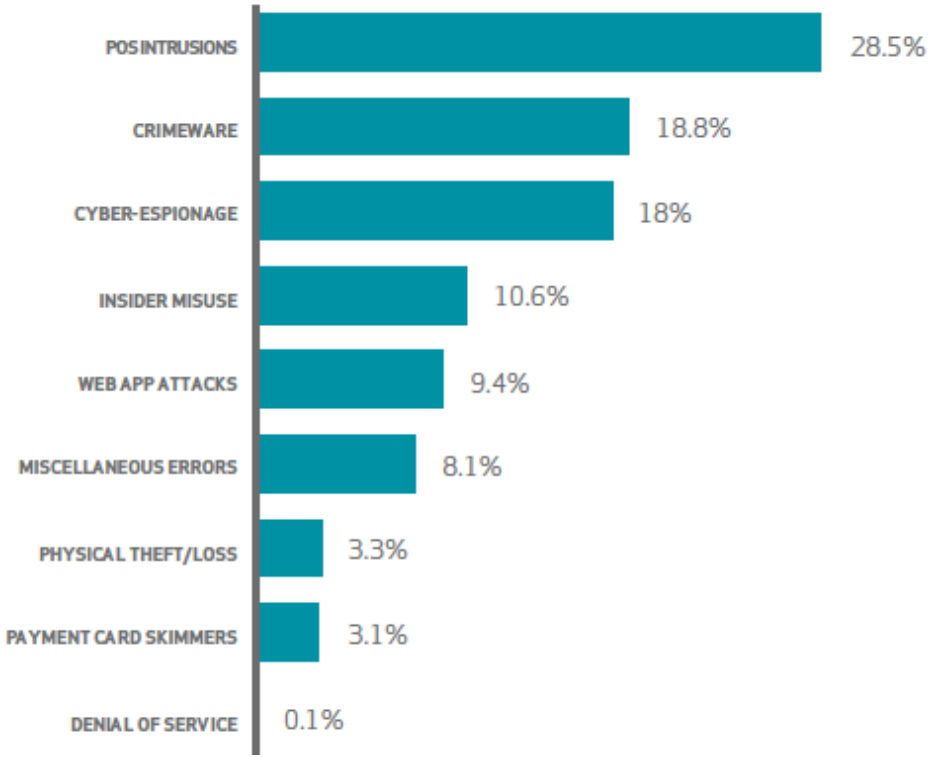
Incident classification patterns: Frequency



across incidents



across breaches

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What Are The Biggest Threats To Your Organisation?

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Incident Patterns by Industry

CRIMEWARE	CYBER-ESPIONAGE	DENIAL OF SERVICE	LOST AND STOLEN ASSETS	MISCELLANEOUS ERRORS	PAYMENT CARD SKIMMERS	POINT OF SALE	PRIVILEGE MISUSE	WEB APPLICATIONS	
1%			1%	2%		91%	5%	1%	ACCOMMODATION
	9%			27%			45%	18%	ADMINISTRATIVE
32%	15%		11%	26%			9%	9%	EDUCATIONAL
				13%		73%	7%	7%	ENTERTAINMENT
36%			2%	7%	14%		11%	31%	FINANCIAL SERVICES
1%	4%		16%	32%		12%	26%	9%	HEALTHCARE
14%	37%		2%	5%			7%	35%	INFORMATION
34%	60%						4%	1%	MANUFACTURING
	14%				7%		79%		MINING
	8%		25%	17%		8%	33%	8%	OTHER SERVICES
25%	52%		2%	10%		5%	4%	4%	PROFESSIONAL
51%	5%		3%	23%			11%	6%	PUBLIC
11%					10%	70%	3%	5%	RETAIL

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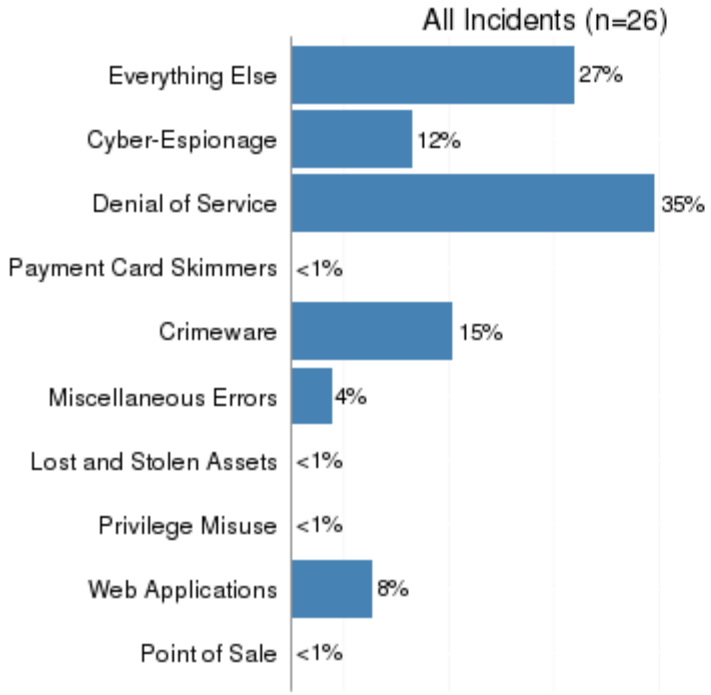
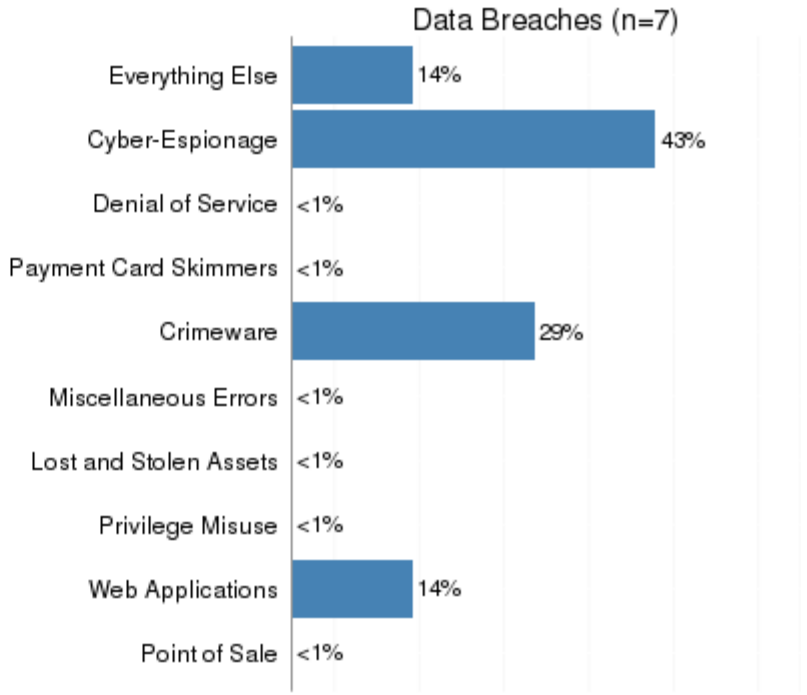
Telecommunications Patterns





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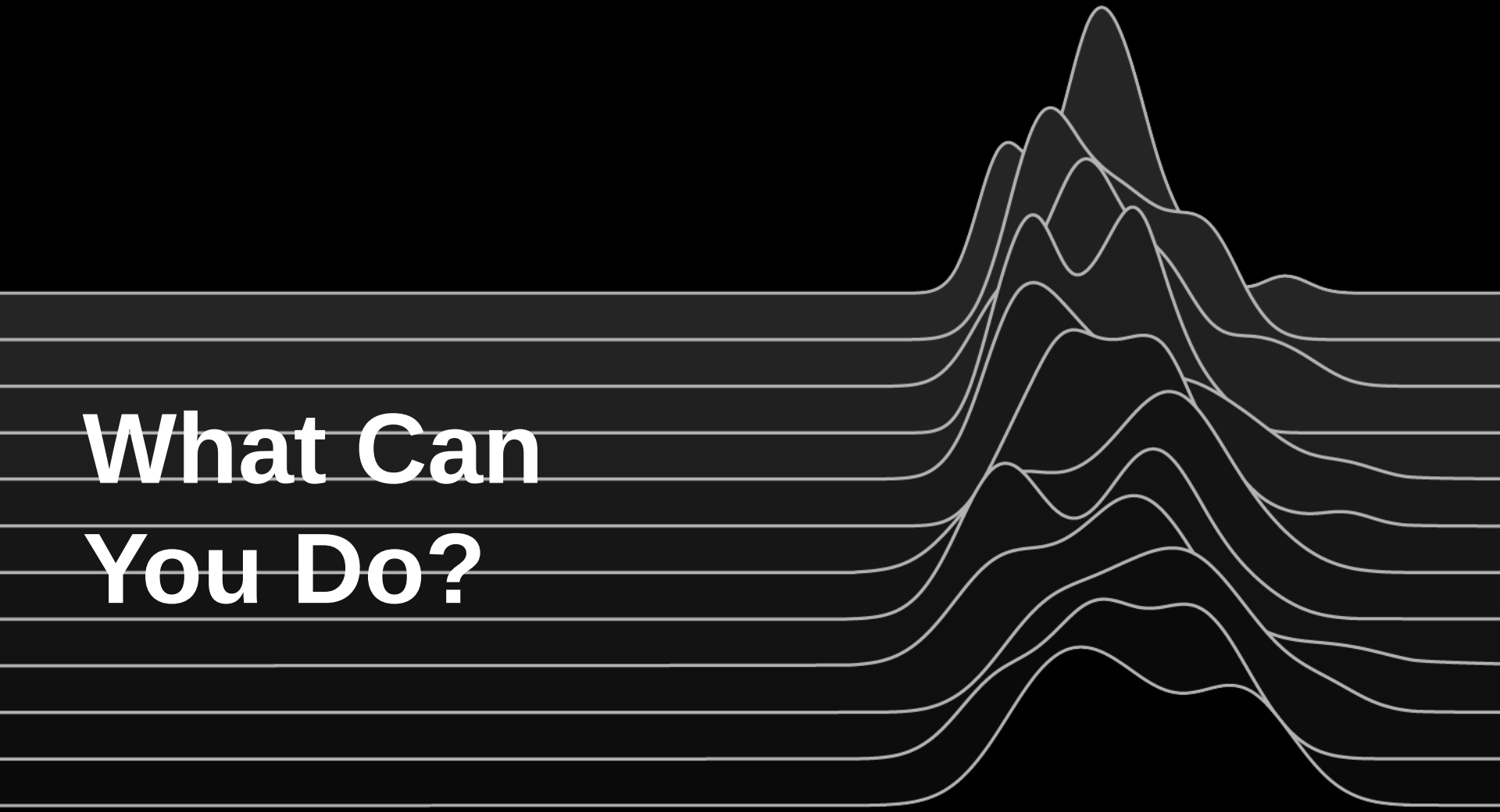
What Can You Do?



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Cyber-espionage

When state-affiliated actors breach an organisation, targeting intellectual property.

What can you do?

- ✓ Patch promptly.
- ✓ Monitor email links and attachments.
- ✓ Use anti-virus and modern anti-malware tools.
- ✓ Train users on the risks of phishing.

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Crimeware

Any use of malware to compromise systems. Typically opportunistic and motivated by financial gain.

What can you do?

- ✓Patch anti-virus and browsers.
- ✓Enable two-factor authentication.
- ✓Implement configuration change monitoring.

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Denial of Service (DoS) Attacks

Use of “botnets” to overwhelm an organisation with malicious traffic and bring business operations to a halt.

What can you do?

- ✓Have a plan.
- ✓Make sure it works.
- ✓Separate data so that less important systems don’t become a gateway to critical ones.

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Thank You

Any Questions?

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Additional Information

- Download DBIR – www.verizonenterprise.com/DBIR
  - For 2015 Verizon are CHECK approved
  - 2015 is the first year HMGov has contributed to DBIR
- Learn about VERIS - www.veriscommunity.net and http://github.com/vz-risk/veris
- Ask a question – DBIR@verizon.com
- Read our blog - http://www.verizonenterprise.com/security/blog/
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