



# ***Cybersecurity Best Practices for Journalists***

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@pgm

2016 ACES national conference, Portland, OR





# TODAY'S SIMPLE AGENDA FOR A COMPLEX PROBLEM

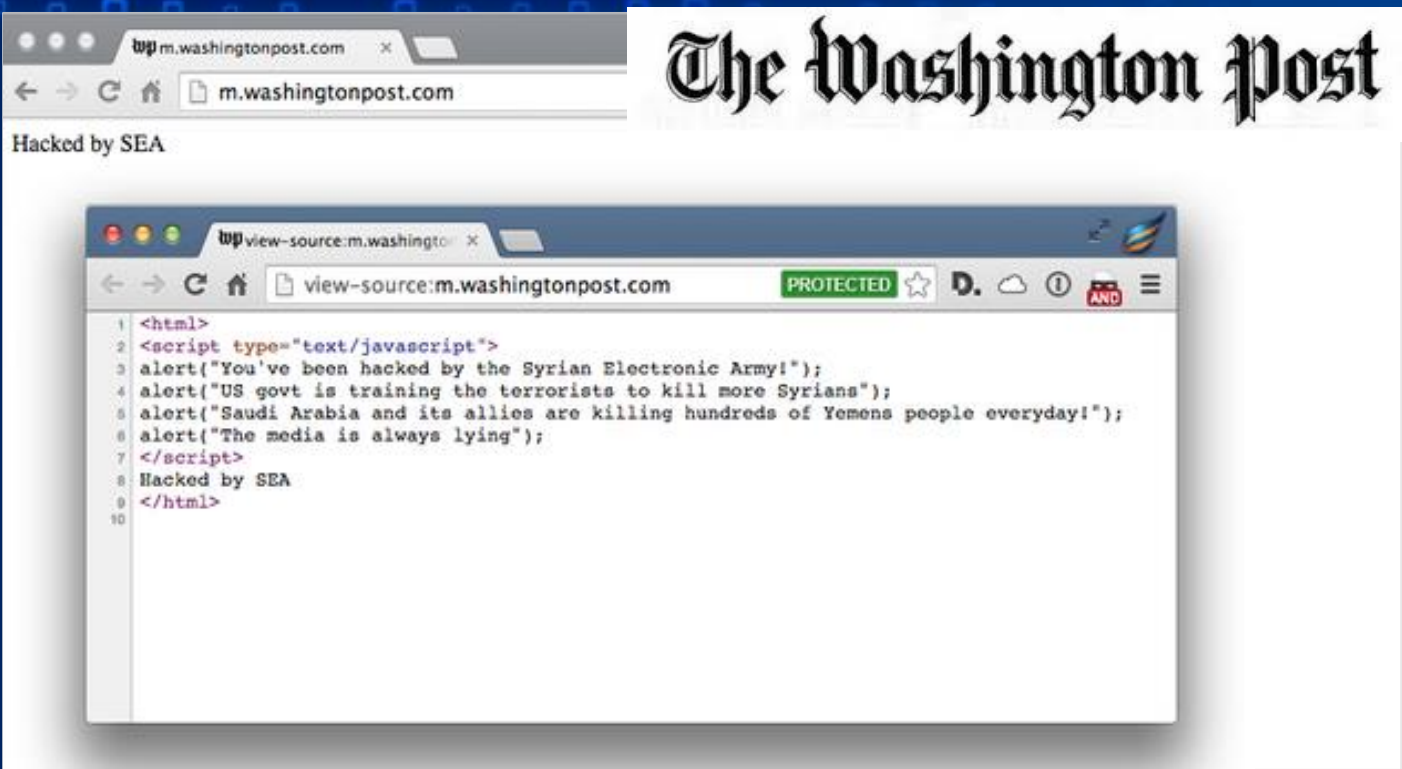
- › What is the problem?
- › What you can do about it right now?
- › Q&A

@Newscycle\_News

@pgm



# THE PROBLEM IS REAL, IT'S GLOBAL, AND IT'S URGENT





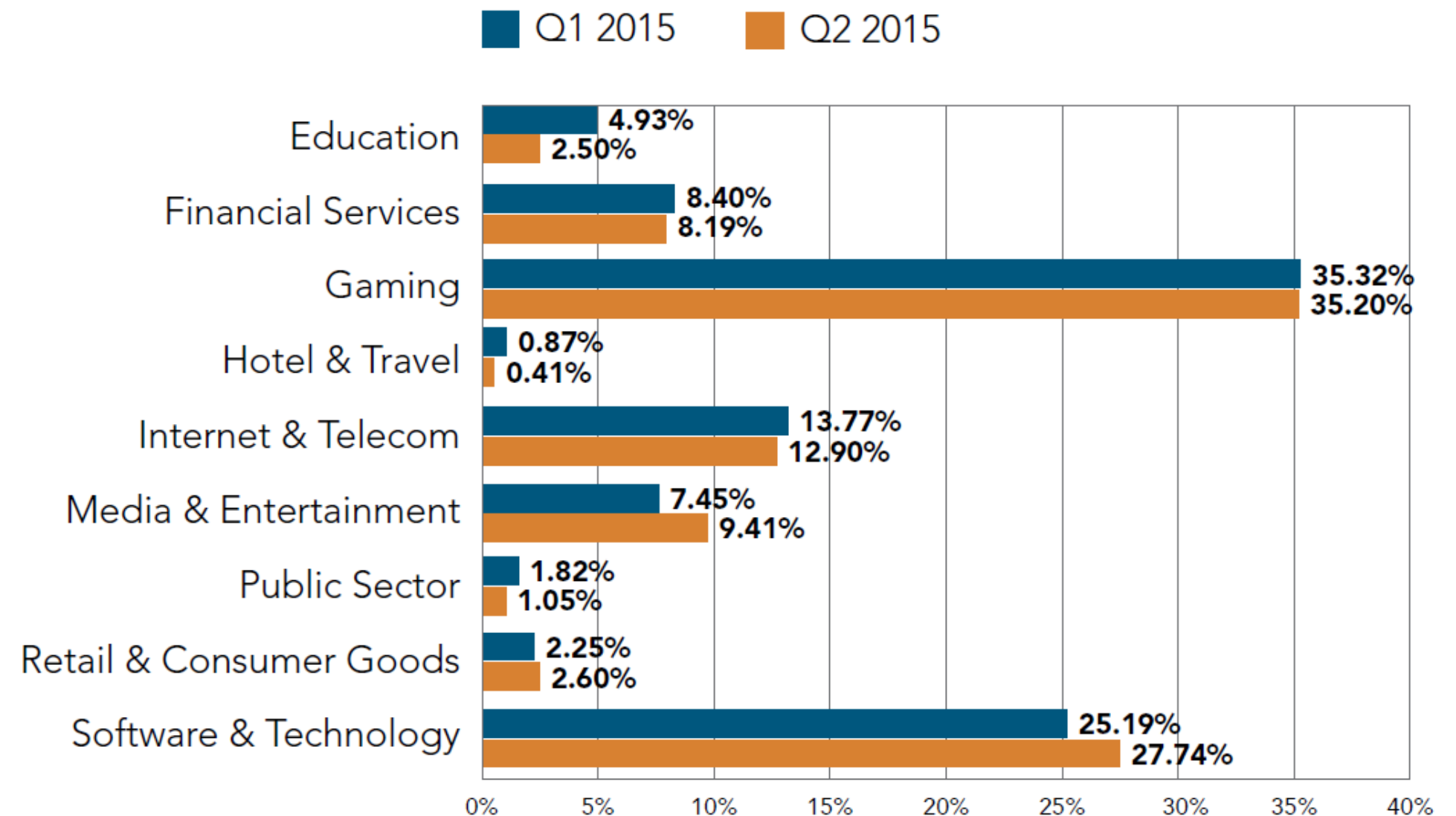
## HOW BAD IS IT?

- › A recent *Global IT Security Risks* survey conducted by international software research group Kaspersky Lab found that **42% of media companies around the world experienced some form of DDoS attack in the last 12 months.**
- › The same study found that **only 38% of media companies surveyed are actively taking DDoS counter-measures.**

## HOW BAD IS IT?

- › According to an October 2015 **Akamai survey on internet security**, the media industry saw an increase in the percentage of DDoS attacks, from 7.45 percent in Q1 2015 to **9.41 percent in Q2 2015**.

### DDoS Attack Frequency by Industry

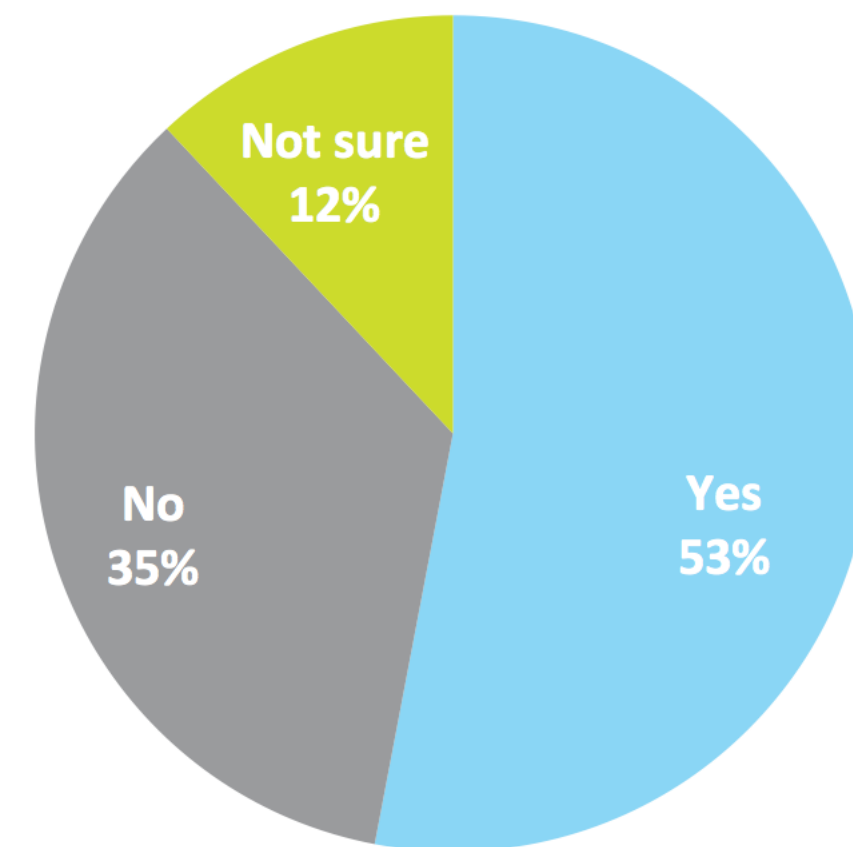




# PREVALENCE

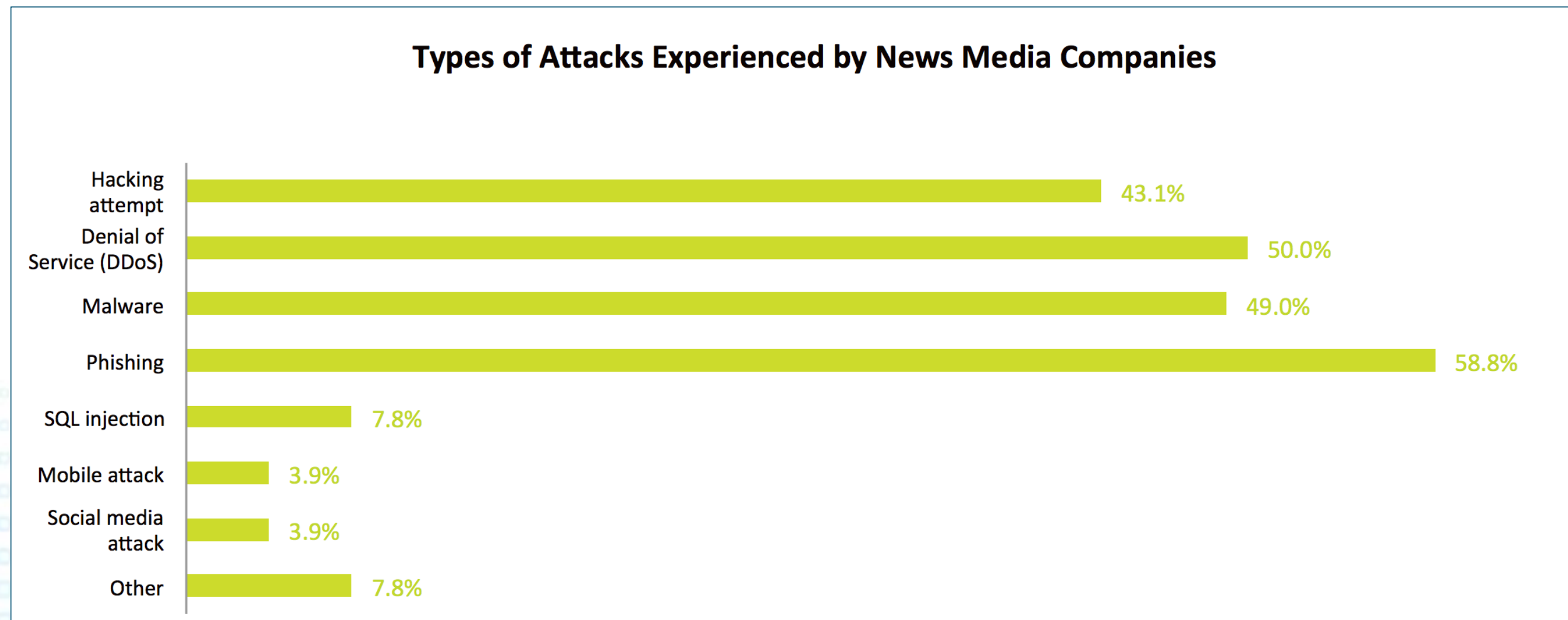
- › 53 percent of news media companies were hacked or suffered a data breach since the beginning of 2014. Another 12 percent were not certain if their businesses had been attacked or compromised, while 35 percent reported no attacks.

**Has your company experienced a cyber-attack or data breach within the past two years?**



# ATTACK TYPES

- › The most common type of cyberattack reported is phishing (59 percent), followed by Distributed Denial of Service attacks (50 percent), malware (49 percent), and hacking attempts (43 percent).





# PwC REPORT ON SECURITY AND THE MEDIA INDUSTRY

**Data is central to digital media industry business models**

**Digital media companies use data for:**

- Collecting user-generated content
- Communicating via social media
- Customer credit card information
- Conducting business operations

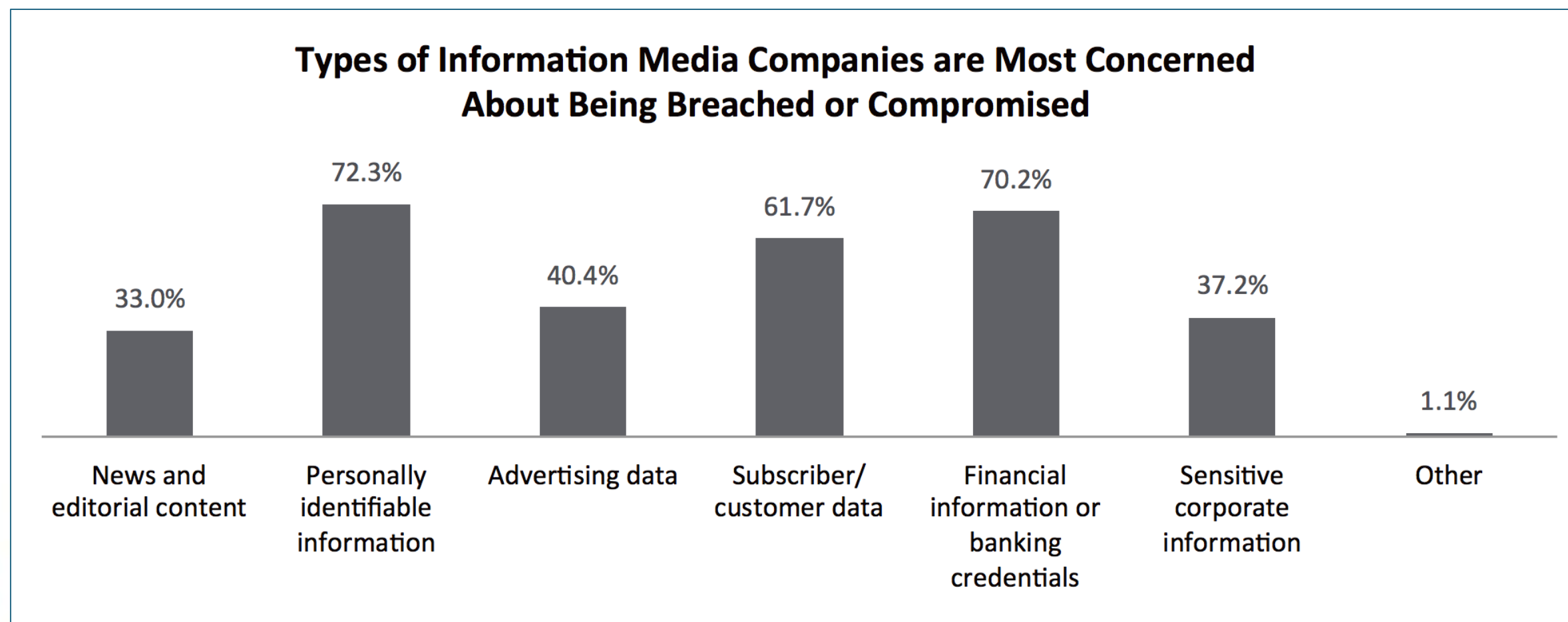


Source: *PricewaterhouseCoopers*



# INFORMATION AT RISK

- Over 72 percent said they are most concerned about personally identifiable information (PII) being breached or compromised. 70 percent are concerned about breaches in financial information or banking credentials. Hacking of subscriber and customer data is cited by 62 percent of respondents.





# PwC REPORT ON SECURITY AND THE MEDIA INDUSTRY

## Costs of a data breach

Data breaches can have major consequences for digital media companies

- Negative press reports
- Loss of business
- Penalties
- Class-action lawsuits



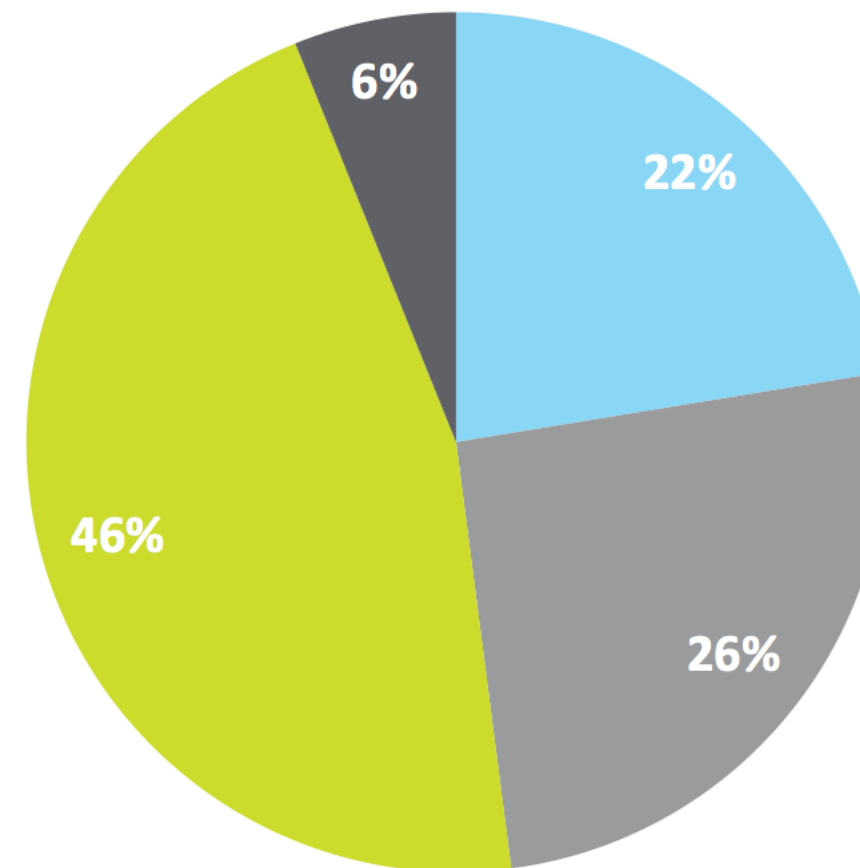
Source: *PricewaterhouseCoopers*



# FOCUS

- › Almost half of all Newscycle survey respondents indicate that their company does not currently employ someone whose main function is to oversee cybersecurity or information security.

**Does your company currently have someone whose main function is in cybersecurity or information security?**



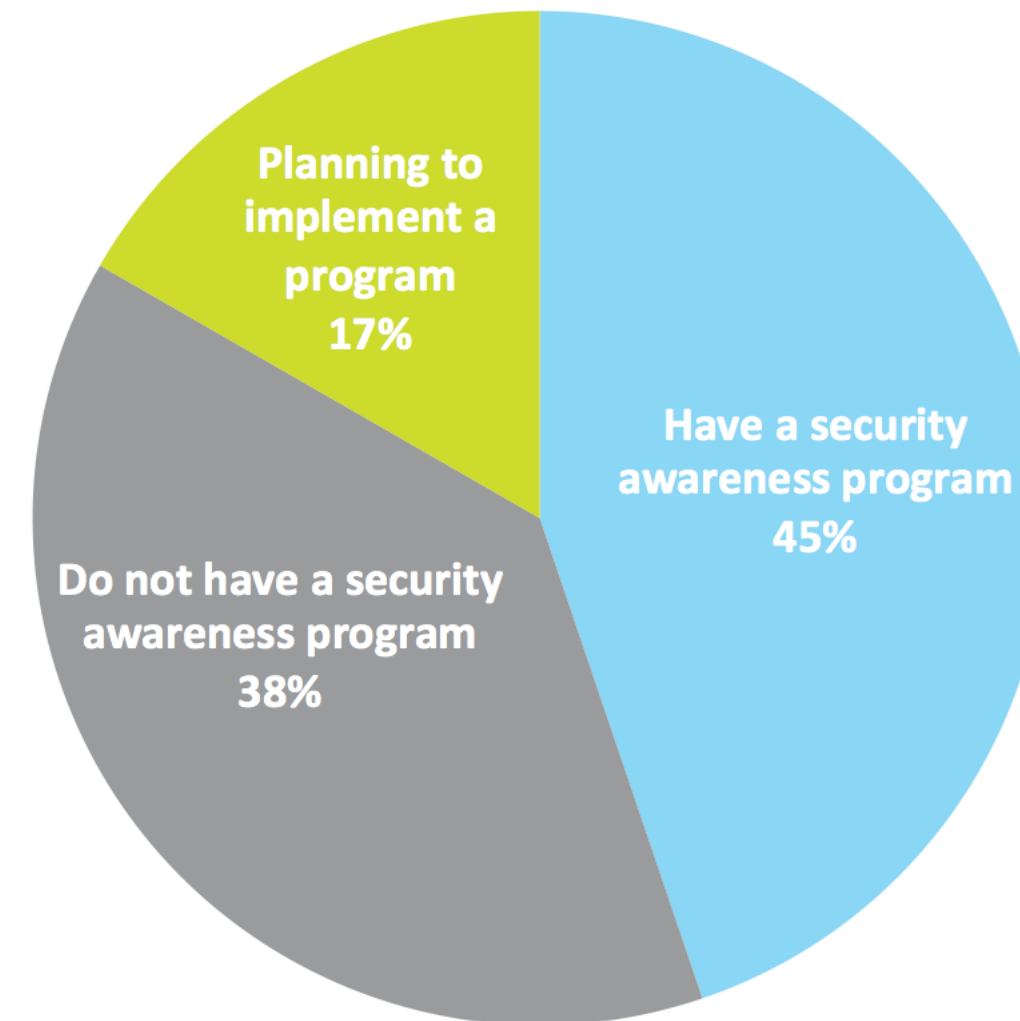
- Yes, we have an individual in this role
- Yes, we have a department responsible for this function
- No, we do not currently have someone in this role
- This function is performed by a third-party company



# AWARENESS

- › 38 percent of media companies surveyed do not have a security awareness program in place today.

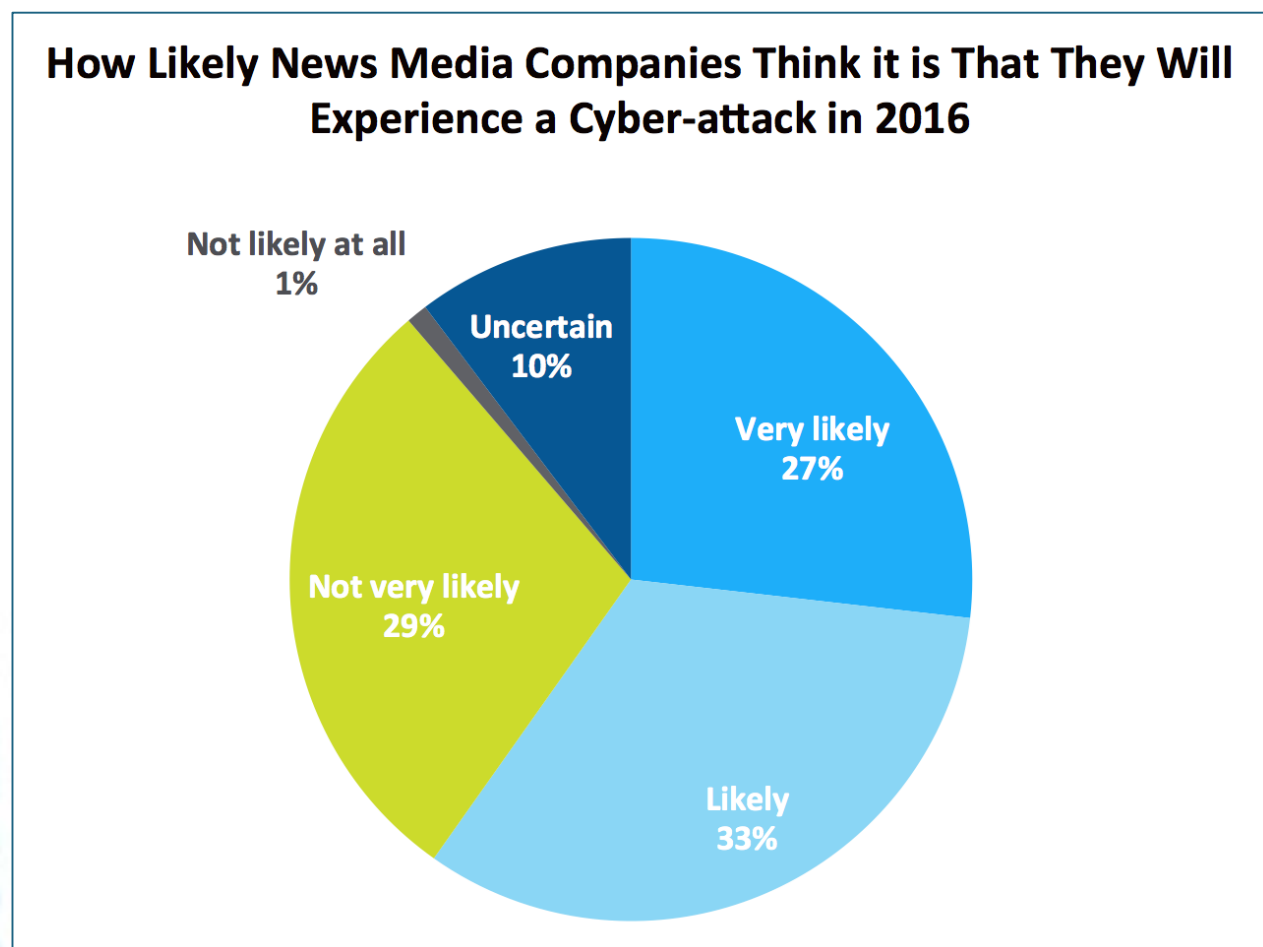
**Percentage of News Media Companies with a Security Awareness Program**



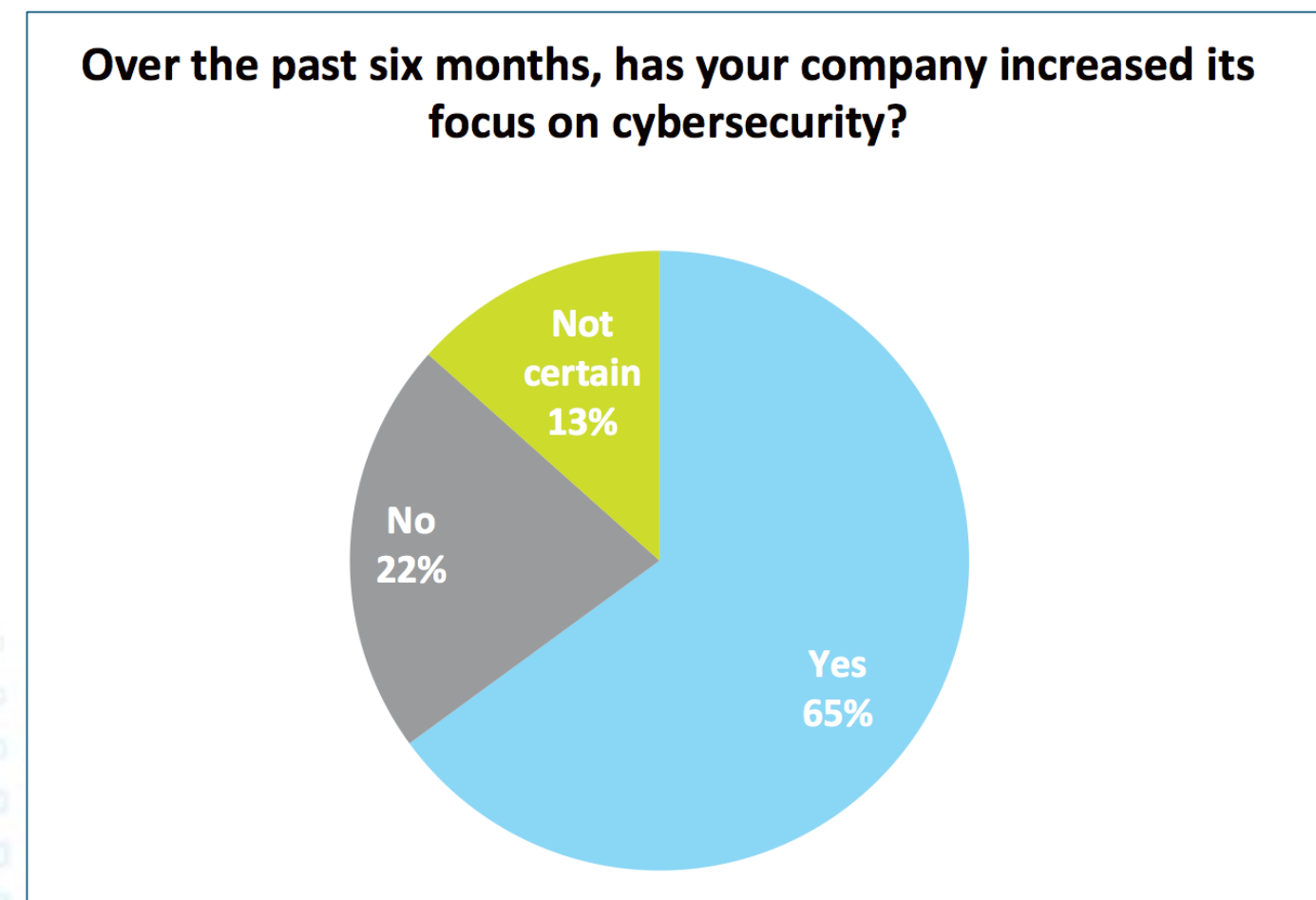


# FORWARD LOOK

- › **60 percent** of respondents predict that a cyberattack against their media company is likely or very likely to occur in 2016.



- › In the face of the growing threat of cyberattack, **65 percent** have increased the focus on cybersecurity in the past six months.





[https://www.youtube.com/watch?v=bjYhmX\\_OUQQ](https://www.youtube.com/watch?v=bjYhmX_OUQQ)



# WHAT CAN YOU DO ABOUT IT?

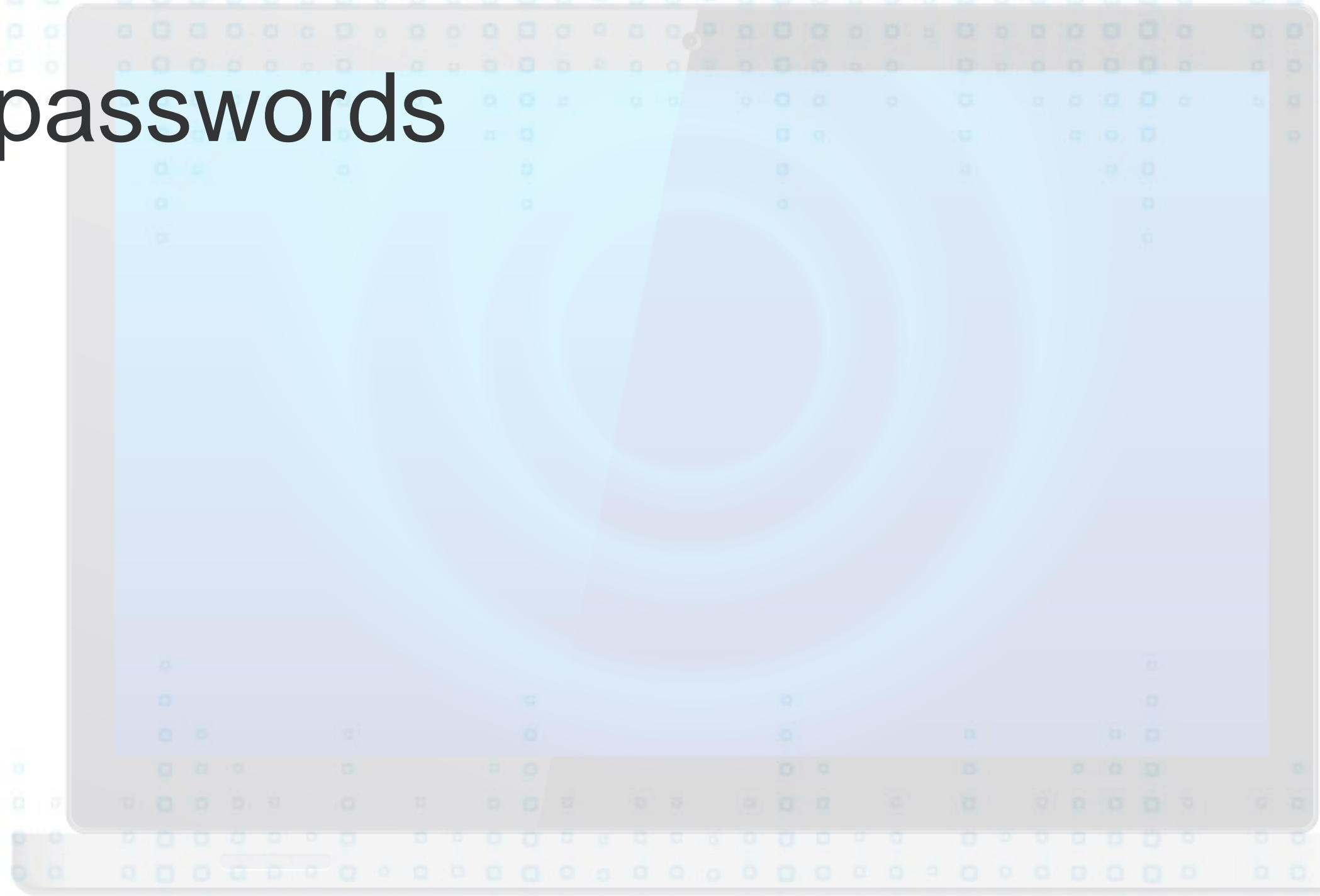
› Here are **four quick wins** ...





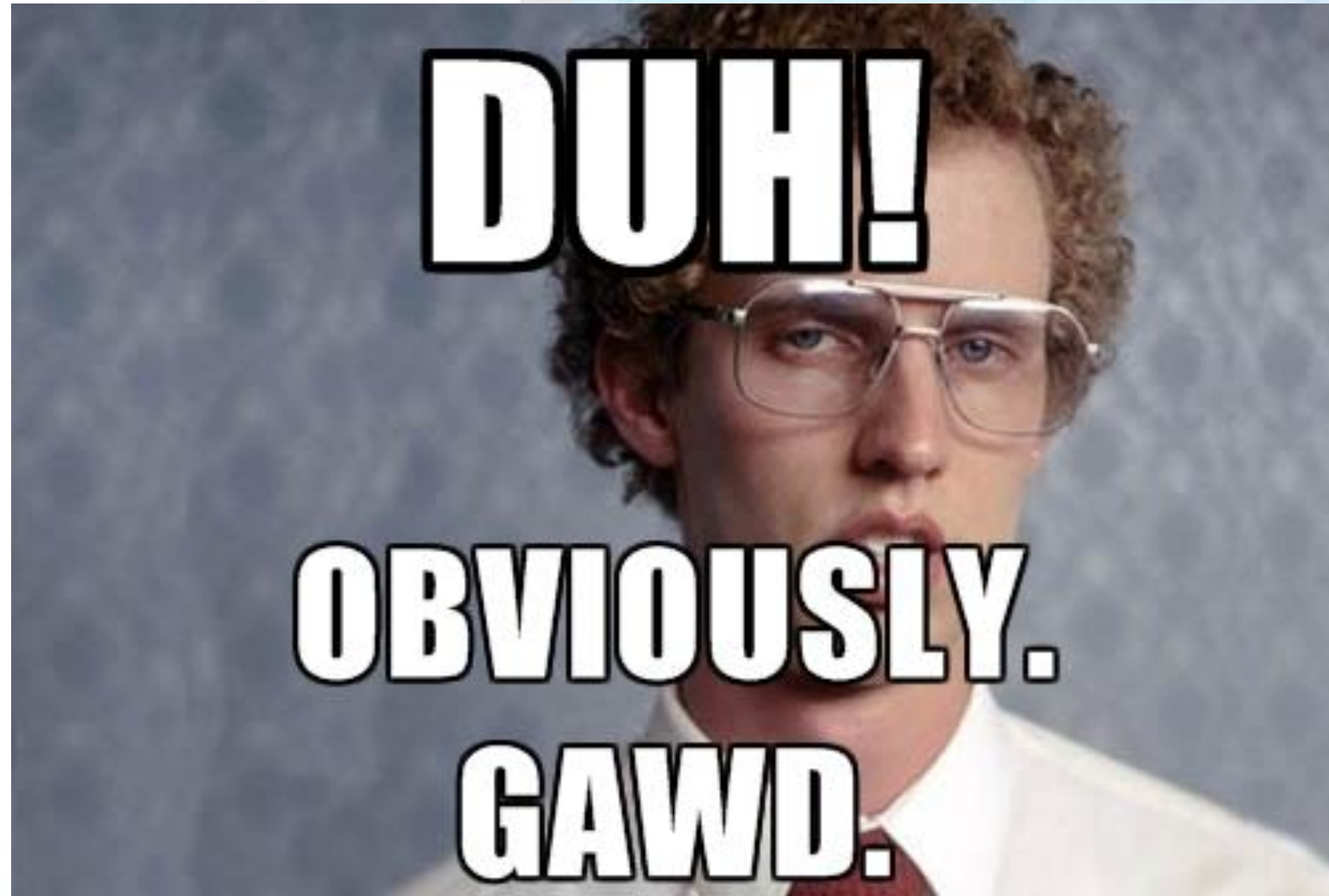
# WHAT CAN YOU DO ABOUT IT?

## 1. Strengthen your passwords



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### Who's Got the Toughest Password?

A password study at Carnegie Mellon University (CMU) discovered a disturbing trend for companies looking to hire business school graduates — they consistently create the weakest passwords. Not surprisingly, people associated with CMU's computer science and technology school chose the strongest passwords. In short, given the same number of attempts, an experienced offline hacker could gain 124 business school passwords for every 68 computer science school passwords.

#### FACTS:

Password Weakness at CMU (From Weakest to Strongest)



Source: <http://grahamcluley.com/2013/08/pet-name-passwords/>



# WHAT CAN YOU DO ABOUT IT?

## 1. Strengthen your passwords

### TOP 20 MOST COMMON PASSWORDS *(as a percentage of all passwords)*

1. 123456	4.1%	11. login	0.2%
2. password	1.3%	12. welcome	0.2%
3. 12345	0.8%	13. loveme	0.2%
4. 1234	0.6%	14. hottie	0.2%
5. football	0.3%	15. abc123	0.2%
6. qwerty	0.3%	16. 121212	0.2%
7. 1234567890	0.3%	17. 123654789	0.2%
8. 1234567	0.3%	18. flower	0.2%
9. princess	0.3%	19. passw0rd	0.2%
10. solo	0.2%	20. dragon	0.1%

Source: Skyhigh 2016 analysis of 11 million passwords for cloud services users



# WHAT CAN YOU DO ABOUT IT?

## 1. Strengthen your passwords

*Think outside these top-ten most popular password types:*

- |   |   |    |                        |
|---|---|----|------------------------|
| 1 | Pet's name                                    | 6  | Birthplace             |
| 2 | A significant date (i.e. wedding anniversary) | 7  | Favorite holiday       |
| 3 | Relative's birthday                           | 8  | Favorite football team |
| 4 | Child's name                                  | 9  | Current partner's name |
| 5 | Family member's name                          | 10 | The word 'password'    |



# WHAT CAN YOU DO ABOUT IT?

## 1. Strengthen your passwords

1Forrest1





# WHAT CAN YOU DO ABOUT IT?

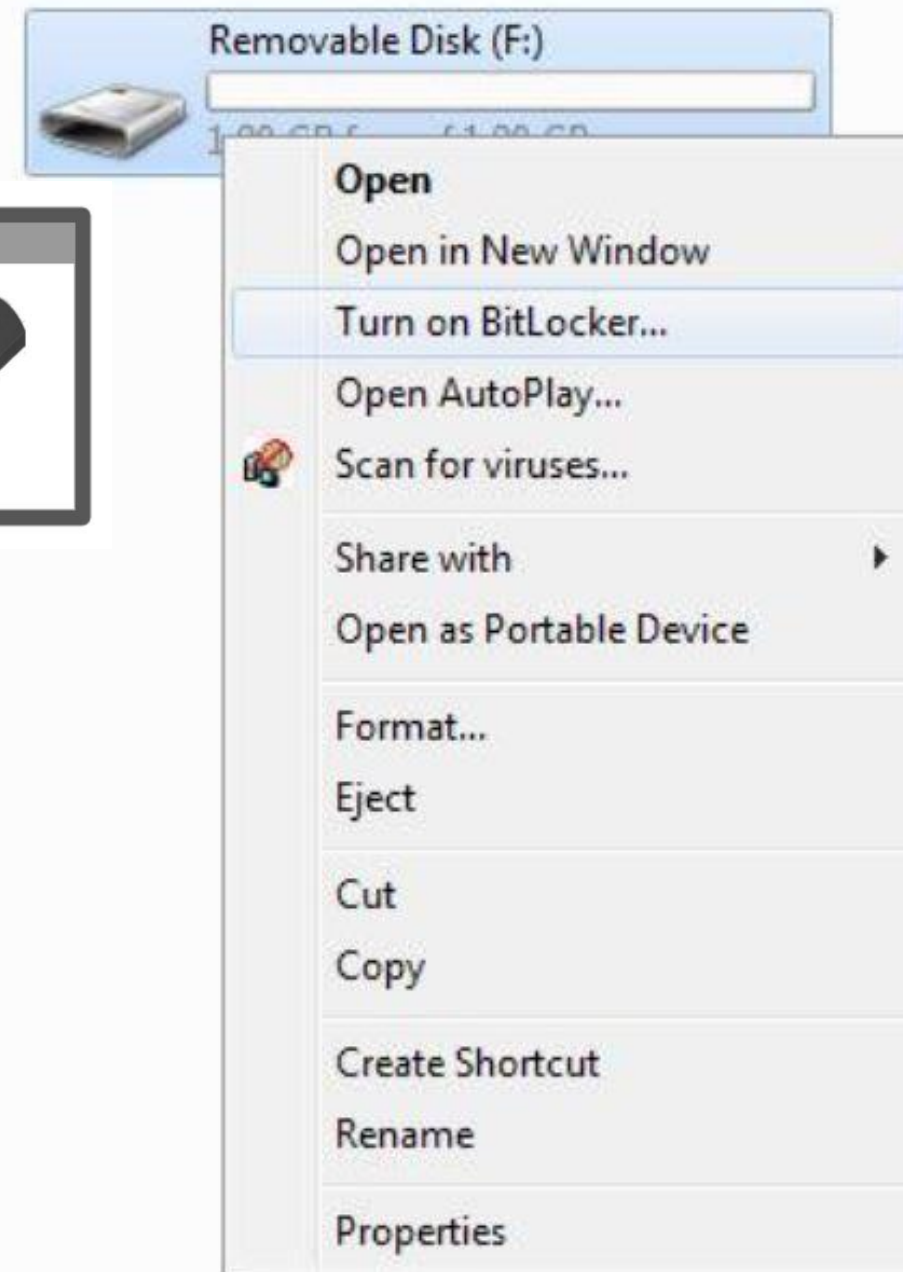
## 2. Encrypt your USB drives





# WHAT CAN YOU DO ABOUT IT?

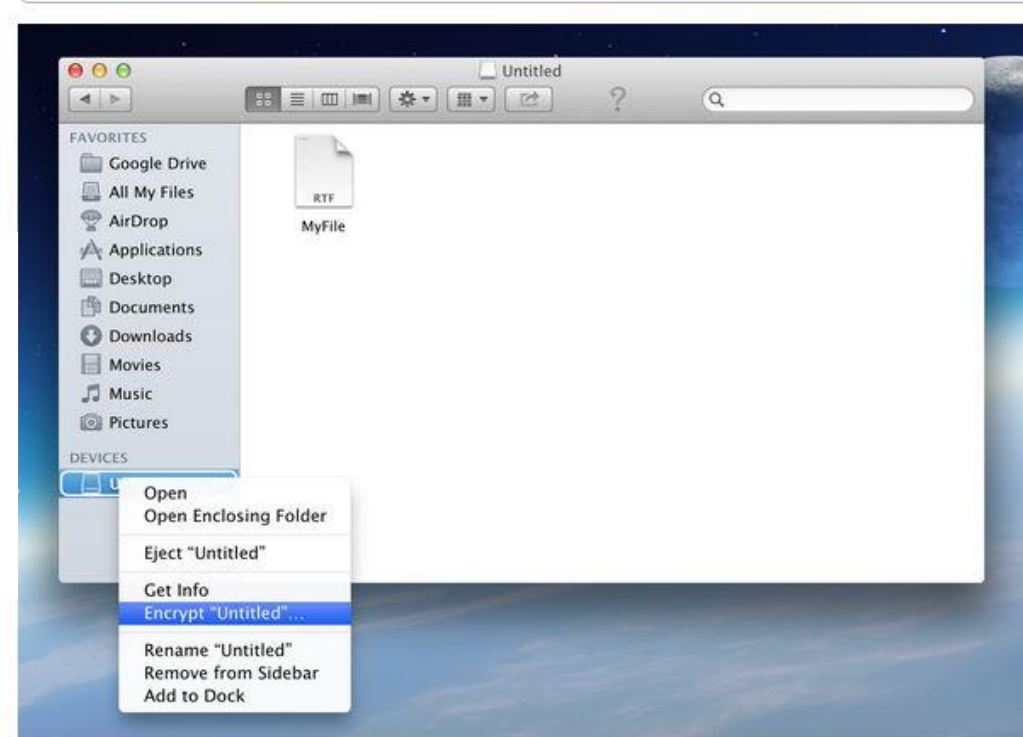
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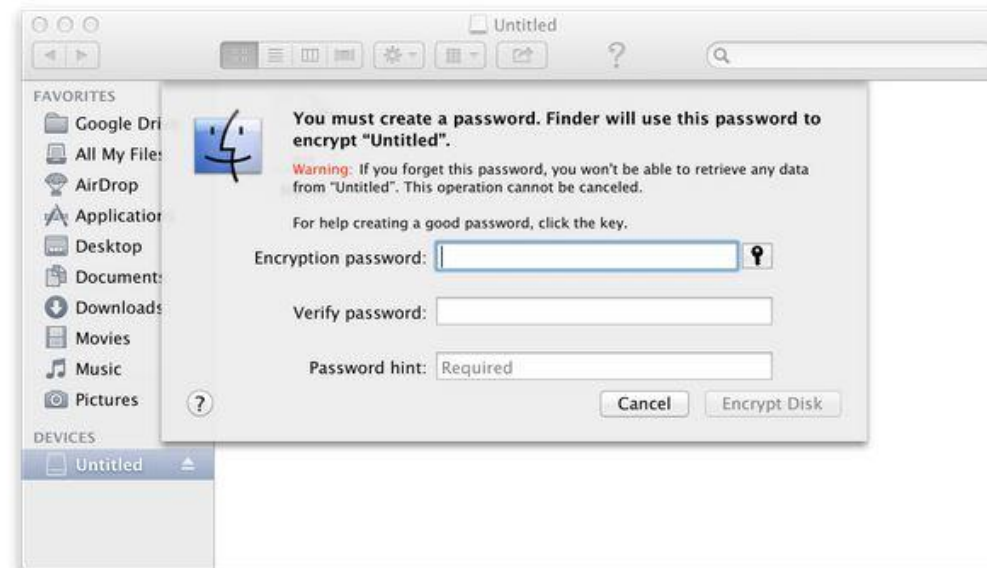


# WHAT CAN YOU DO ABOUT IT?

## 2. Encrypt your USB drives



From here select the *Encrypt* option.



# WHAT CAN YOU DO ABOUT IT?

## 2. Encrypt your USB drives

CompTIA USB Drop Social Experiment –  
October 2015



17%

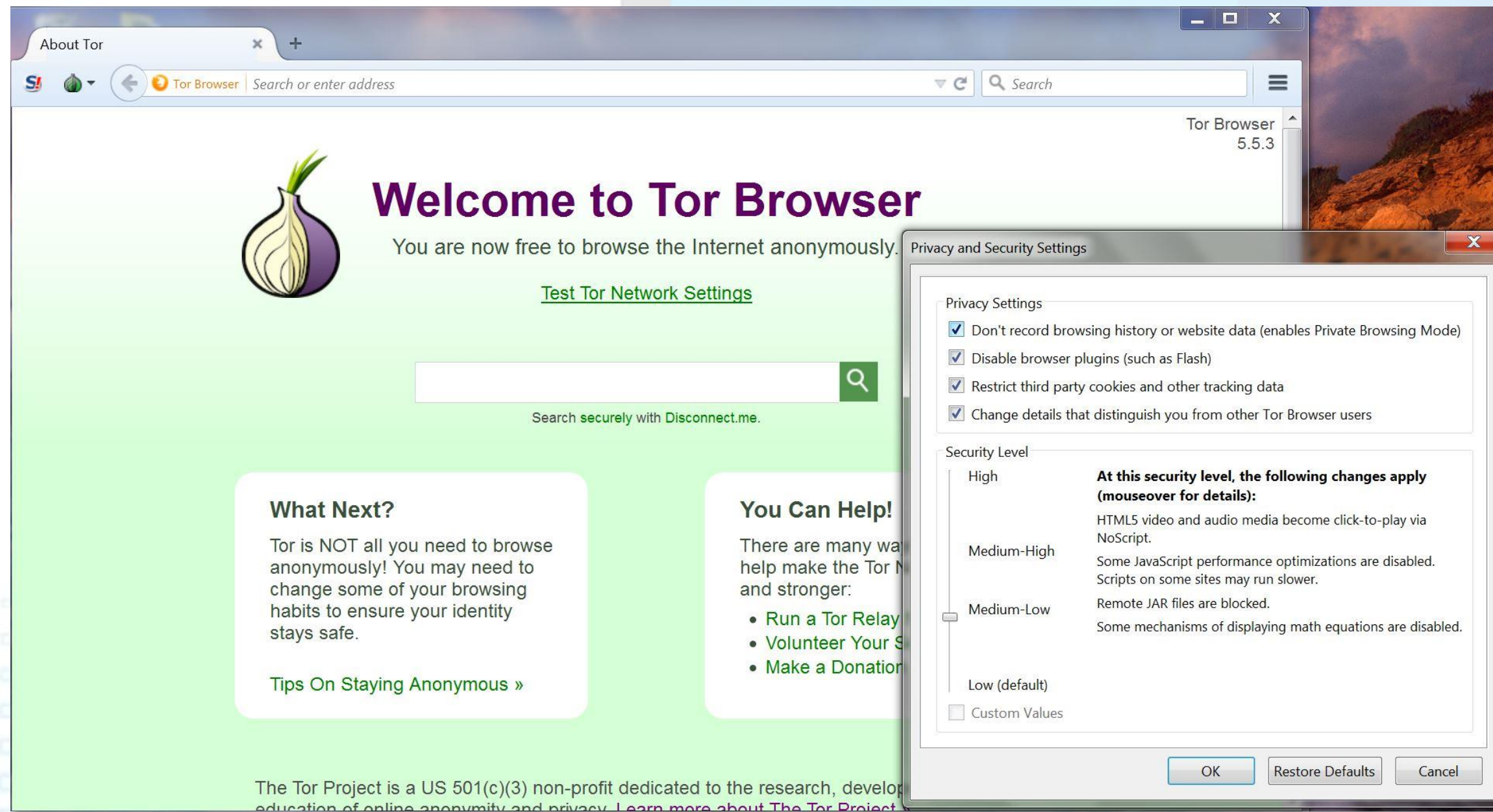
of employees  
plugged the found  
USB stick into their  
device

200 unbranded USB sticks were dropped across high traffic public spaces – such as airports, coffee shops and public squares in business districts – including Chicago, Cleveland, San Francisco and Washington D.C. The sticks were preprogrammed with text files prompting anyone who plugged the found USB sticks in to email a specific address or click through a trackable link.



# WHAT CAN YOU DO ABOUT IT?

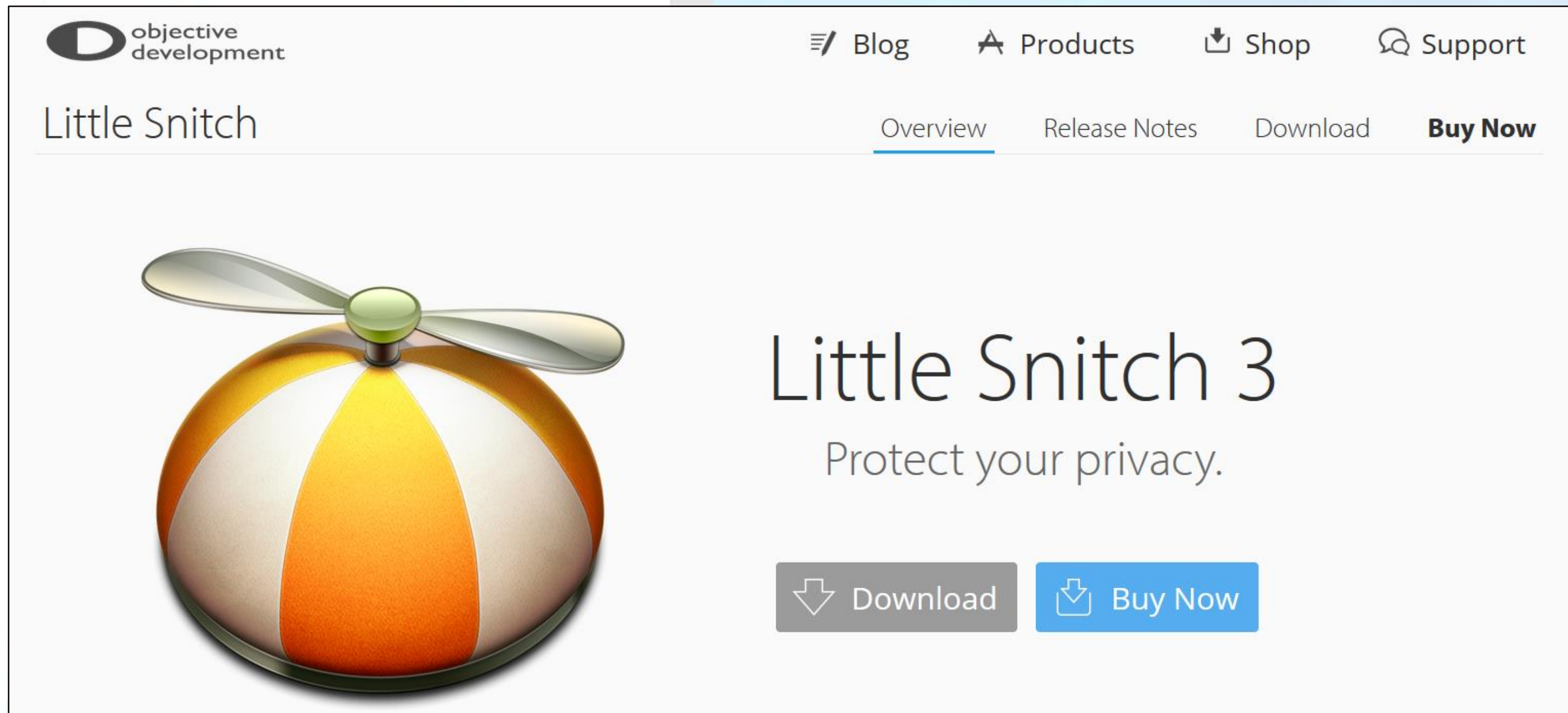
## 3. Consider a new web browser





# WHAT CAN YOU DO ABOUT IT?

## 3. Or, get an app that monitors network activity





# WHAT CAN YOU DO ABOUT IT?

## 4. Stay vigilant against **malware** and **phishing**





## WHAT CAN YOU DO ABOUT IT?

### 4. Stay vigilant against **malware** and **phishing**

- Dangerous files include those with a **.exe** extension
- If you run Java, the **.jar** extension can be dangerous as it triggers the execution of Java programs
- Other extensions that should set off red flags are **.bat**, **.cmd**, **.com**, and **.sbr**. These programs can be used to steal information off your computer, use your computer as a way to infect others, or delete your data completely.



## SUMMARY: FRONT END DEFENSES

1. Strengthen your passwords
2. Encrypt your USB drives
3. Consider a new web browser
4. Stay vigilant against malware and phishing

# DON'T FORGET THESE BACK-END PROTECTIONS

› **CSC** quick win controls ...

1. Application whitelisting
2. Standard, secure system configurations
3. Patch systems and software promptly
4. Reduce number of users with administrative privilege



**COUNCIL ON  
CYBERSECURITY**  
LE CONSEIL DE LA CYBERSÉCURITÉ



# Q & A

Thank you.

For additional information, please contact us:

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