



William Paterson University Cyber Event

Verizon Presenter



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**Education, Healthcare & State
Government**

- **Verizon**
- **GTE**
- **Kaiser**
- **US Army Air Cav - Aerial
Observer & Information
Security Officer**



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IFF(Identify Friend or Foe)



DBIR Trivia

Question 1

What was the first year Verizon published the DBIR?

A. 2007

B. 1997

C. 2017

DBIR Trivia

Question 2

According to the Verizon DBIR, what is the average time to discover a data breach?

A. 8 Days

B. 28 Days

C. 208 Days

DBIR Trivia

Question 3

According to the Verizon DBIR, what is the average time for a Bad Actor to actually perform a data breach?

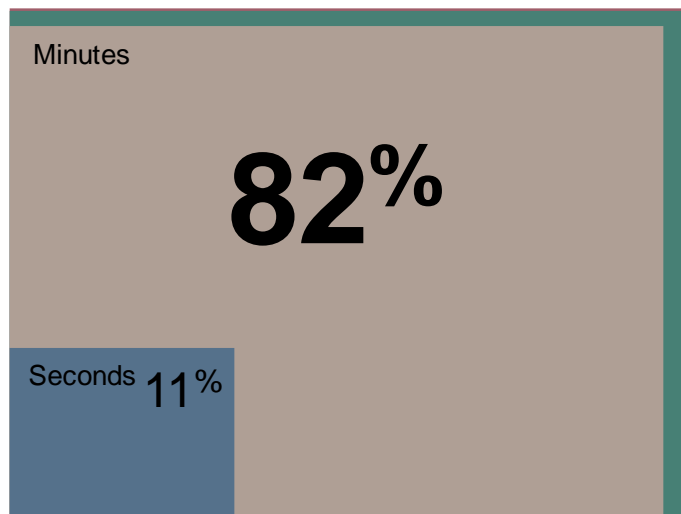
A. Minutes

B. Hours

C. Days

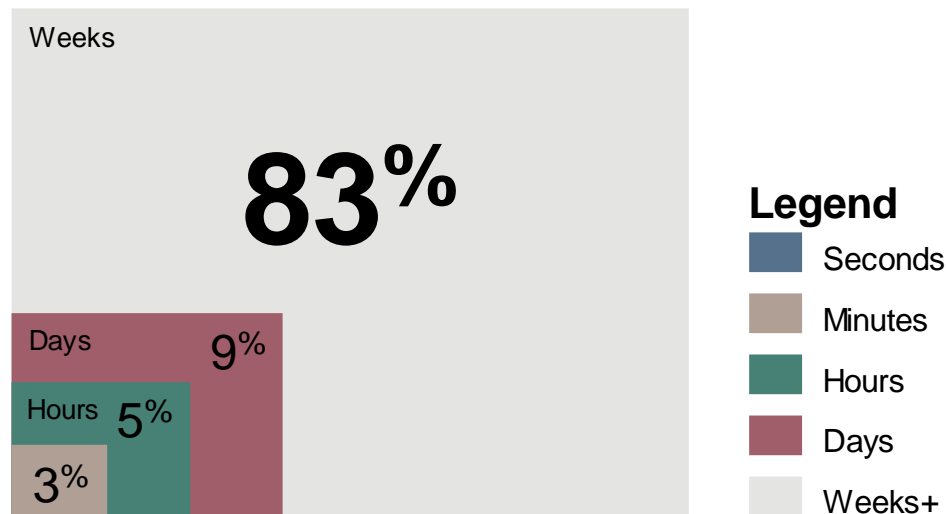
Cyber attacks happen faster and are harder to catch.

Time to compromise



One in nine (11 percent) of compromises happened in seconds. Almost all (93 percent) happened within minutes.

Time to discovery



Just three percent of compromises were detected within minutes, and only 17 percent in days. Eighty-three percent took weeks or more to discover.

Source: Verizon 2016 Data Breach Investigations Report

Data Breach Investigations Report (DBIR)

2017



THERE'S ONLY ONE
*DATA BREACH
INVESTIGATIONS
REPORT (DBIR).*

- THE LEADING DATA SECURITY REPORT **FOR TEN YEARS.**
- **MILLION'S OF DOWNLOADS / WIDELY USED / REFERENCED.**
- TURNS DATA INTO **USEFUL, ACTIONABLE INFORMATION.**

2008



2009



2010



2011



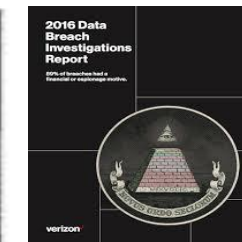
2014

2012



2015

2013



2016



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Industry DBIR (Data Breach Investigations Report) Contributors

Types of organizations

- ISACS
- Law Enforcement Agencies
- CSIRT's
- Cyber Centers
- Forensic Providers
- Infosec Product and Service providers



2017 Data Breach Investigations Report (DBIR)

Lift the lid on cybercrime.

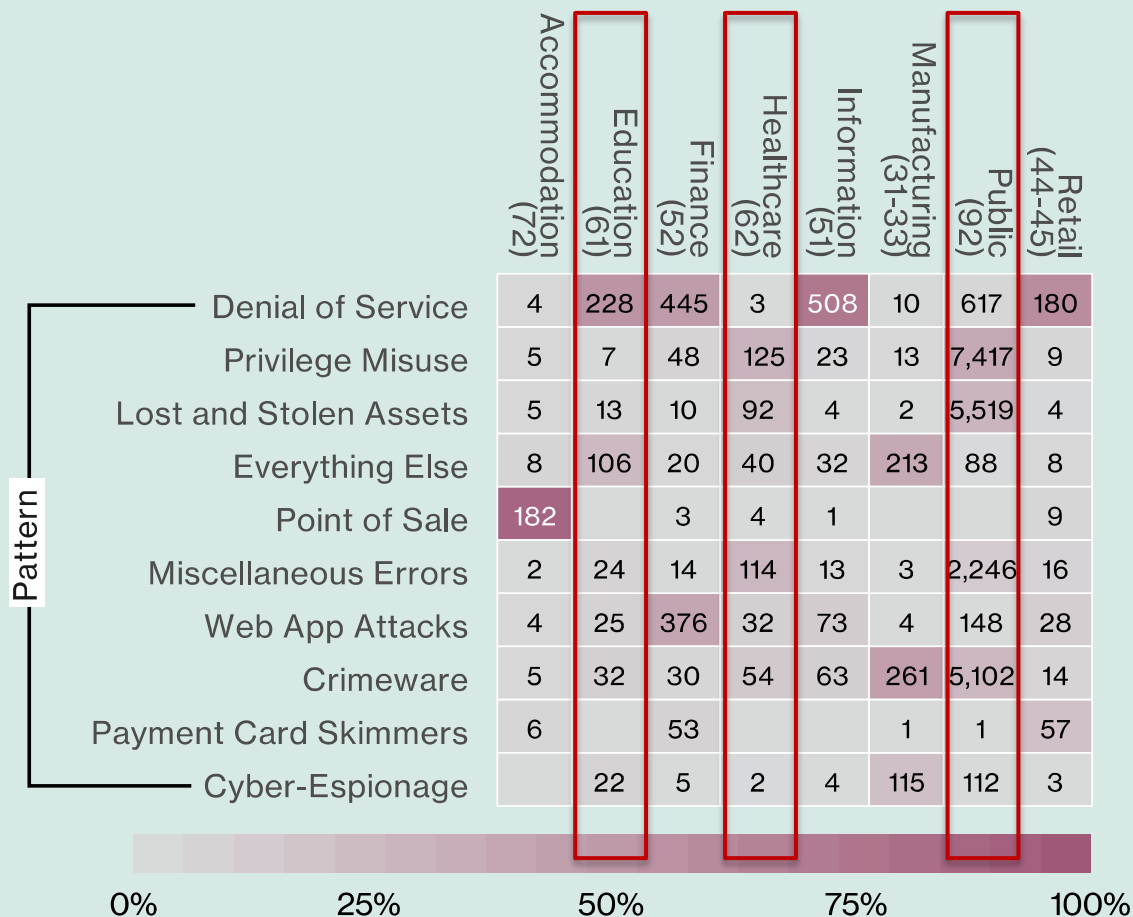
10th
edition

65
contributors

1,935
breaches

42,068
incidents

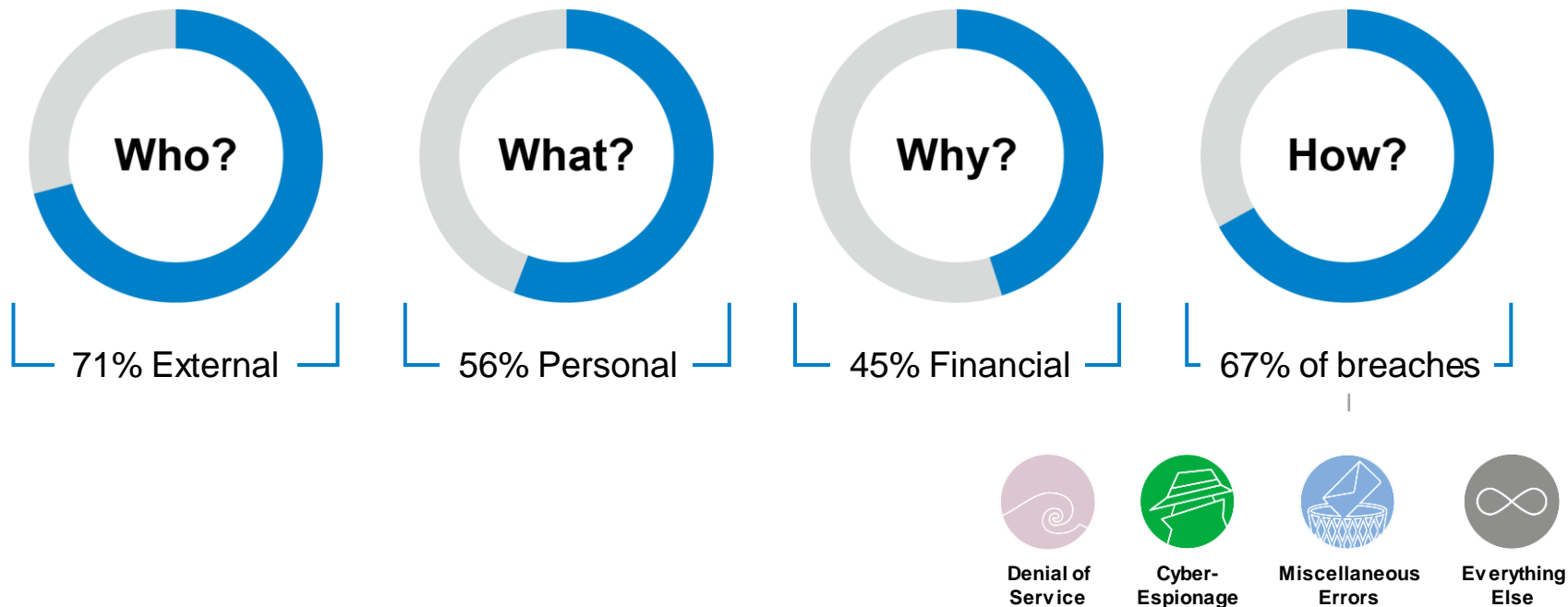
What's the Biggest Threat you Face?



Education Sector Examples



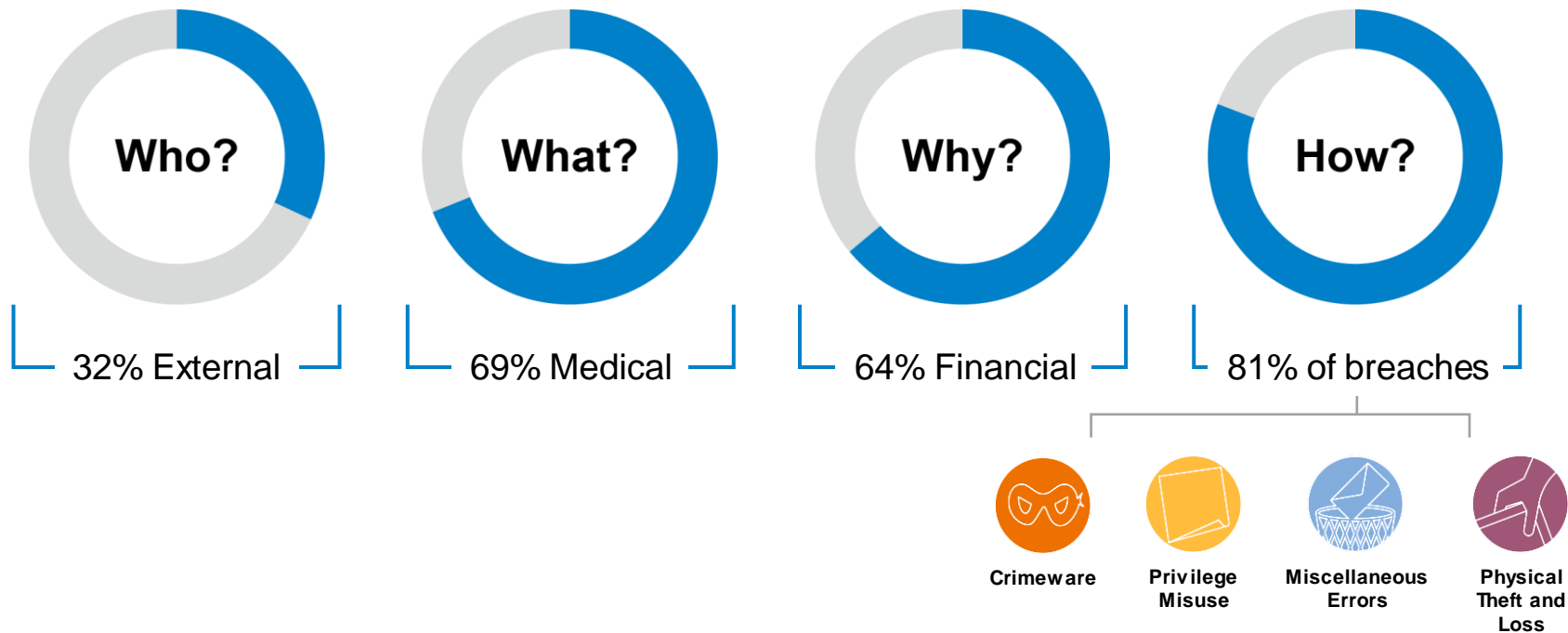
Education



Healthcare Sector Examples



Healthcare

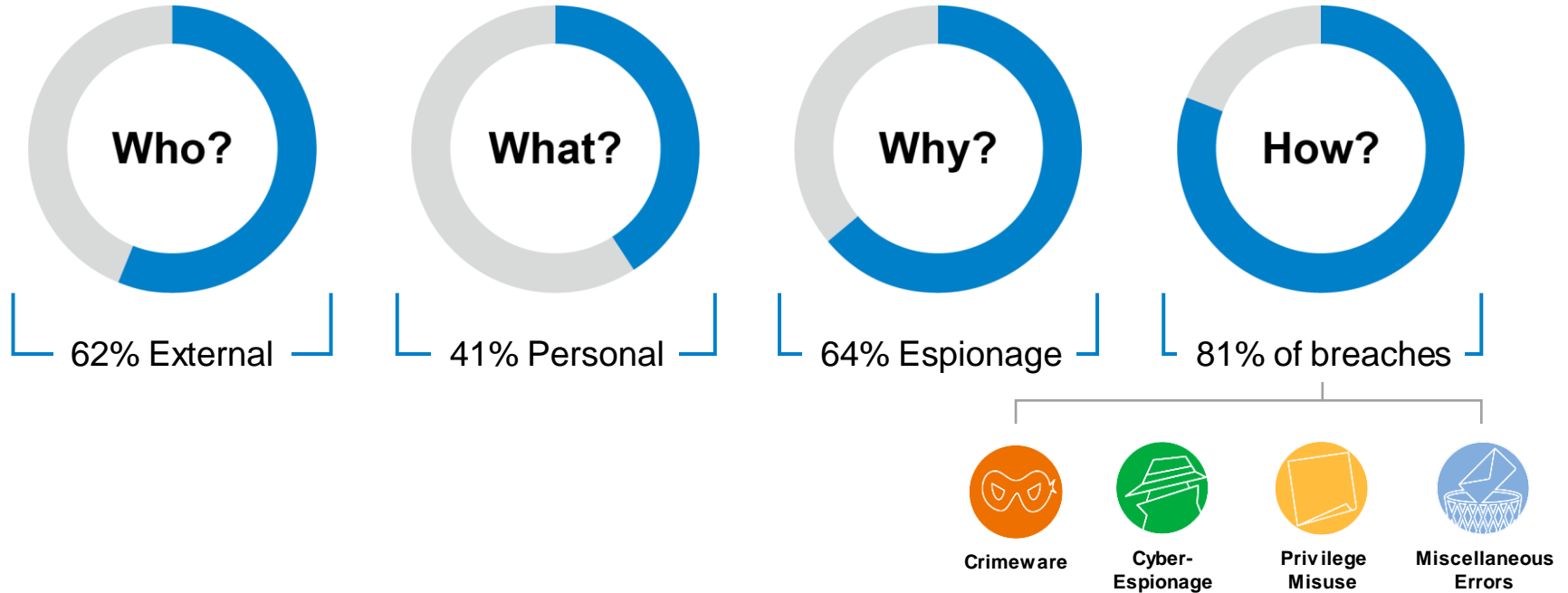


Public Sector Examples



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Public Sector

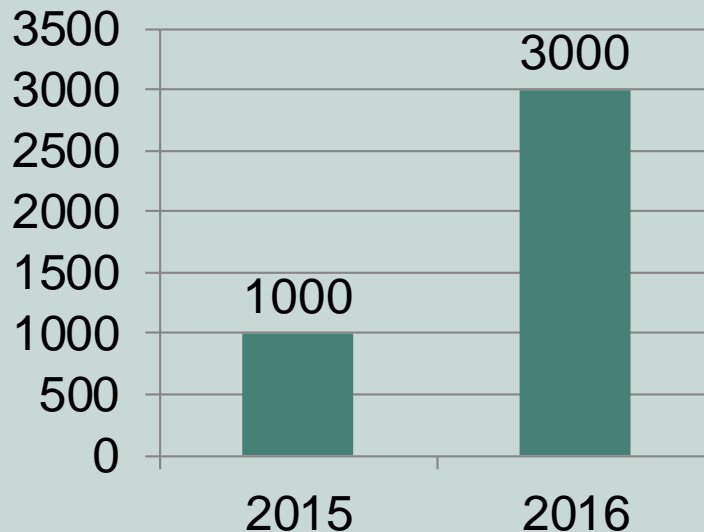




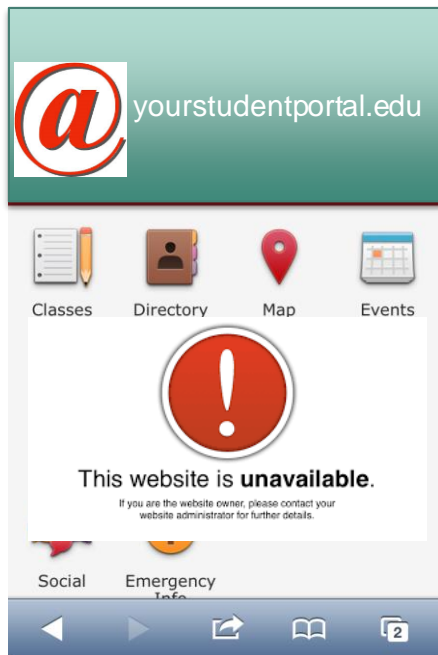
Ransomware

- **Frequency:** 50% increase
- **Attack Vector:**
 - web drive-by downloads supplanted by email this year.
 - Social actions, notably phishing, in 21% of incidents, up from just 8% in the 2016
- **Top Target:** Public Sector

Attacks / Day



Distributed Denial of Service (DDoS)



“26% of all security incidents were DoS attacks.*”

No organization is immune to attack:

- Criminal organizations, hackers, protestors and government-sponsored groups are driving up the frequency and peak volume of attacks.
- Attack services and new technology are lowering barriers to entry.

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Prepare

Have a plan & test it on a regular basis!

Proactive

Protect user identities and applications!

Partner

People are the key, make sure you are not alone!

DBIR Quick Takeaways

- ✓ Be vigilant
- ✓ Make people your first line of defense.
- ✓ Only keep data on a “need to know” basis.
- ✓ Patch promptly.
- ✓ Encrypt sensitive data.
- ✓ Use two-factor authentication.
- ✓ Don't forget physical security.

Breaking News!

The 2018 Data Breach Investigations Report will be available April 10th!

<http://www.verizonenterprise.com/verizon-insights-lab/dbir/>