



**WHERE DOES
CYBERSECURITY GO
FROM HERE?**

**HANG ON – IT'S ABOUT TO
GET WEIRD**

Richard Bird
Chief Customer Information Officer

“THAT GUY”

- 20 plus years in corporate roles
 - M&A (app, infra, ops)
 - IT Ops (infra, app, sec)
 - “C” (CIO, CISO)
 - Banking, high tech manufacturing, fintech
- Solving problems – customer, operations, technology and security
- Was the buyer and operator for a long time
- Translate complexities into understand-ables: regulations, tech strategies, business requirements

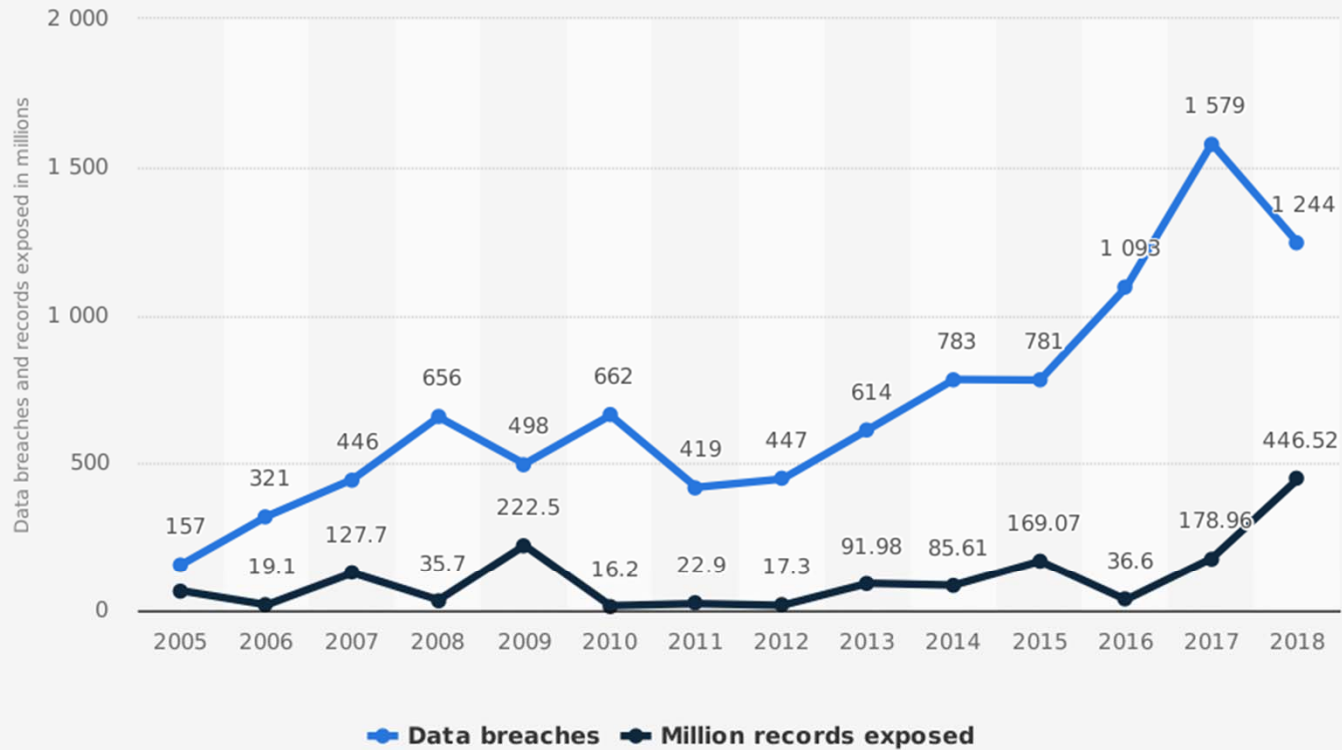


THE OUTCOMES – FOR 2018

- According to the Identity Theft Resource Center
 - 388 fewer breaches in 2018, but 248,902,586 more unique identity records were stolen just in the United States
 - 446,515,334 unique records were exposed
- According to Herjavec Group
 - Total global losses to cybercrime damages will be \$6 trillion worldwide
 - That's doubling in 6 years - \$3 trillion lost worldwide in 2015
- According to Gartner
 - \$114 billion in total information security product and services spend
 - Which means, globally – we spent \$114 billion to lose somewhere between \$4 and \$5 trillion

Which of these results or forecasts suggests that we're "winning"?

Annual number of data breaches and exposed records in the United States from 2005 to 2018 (in millions)



Source
Identity Theft Resource Center
© Statista 2019

Additional Information:
United States; Identity Theft Resource Center; 2005 to 2018

WE GOT HERE BY DESIGN

The history of information security is the history of traditional defensive warfare tactics....

- **Firewalls** – Emperor Augustus, 20 B.C.
- **Encryption** – cyphers, codes, puzzles
- **Authorization** – seals, couriers, signets
- **Networks** – mazes, groundworks, tunnels
- **Authentication** – call and response, code words
- **Isolation** – moats, walls, containers, air gaps, segmentation
- **Attack surface**



WHAT ABOUT THAT CLOUD... YOU KNOW, ALL THAT CLOUD STUFF?

The "cloud" didn't innovate past boundaries, borders and perimeters...

It simply moved data and applications to a bigger and more interconnected set of data centers with buckets

Ever seen an infrastructure diagram for a cloud data center?

Regardless of the hardware – we're now seeing repeats of the same human errors related to security that we used to/still see on-prem

CAN'T WE JUST MAKE PEOPLE MORE "CYBER" AWARE?

- Security outcomes haven't changed, even with more money, energy and resources spent on awareness training
- Most companies rarely exceed an annual training for all associates
- Virtually no companies have security awareness training for their customers

So, why don't security awareness campaigns get us the results we want?



HEY DAVE – DON'T CLICK THAT LINK

20% of Americans don't lock their doors
And
63% of all burglary losses had no forced entry

13% of Americans don't wear a seat belt
And
47% of crash fatalities were unbuckled drivers

14% of Americans still smoke
And
90% of lung cancer patients were or are smokers

Almost all fall deaths in US National Parks were in locations where signs clearly marked the dangers and were ignored – in most recent times – to get that “perfect” selfie.

DO YOU WANT SECURITY OR DO YOU WANT TO BE A PEOPLE PERSON?

- Governance
- Policy
- Standards
- Operating Procedures

Identity Management

- On-boarding
- Off-boarding
- Transfers
- Death
- **Contractors**

Identity Control

- All access is known
- All access is authenticated
- All access is approved
- All access is authorized
- All access is certified



MANAGEMENT OR CONTROL?

Access Management Is Administration



Access Control Is Security

* Simplifies the control obligations required by SOX – which applies to 4,300 US companies and several hundred or more foreign countries with US operations

Regulatory Driven Disruption

Today

US

- S.3744: Senate Data Care Act
- Enhanced Cybersecurity Regulation
- Federal (US) Data Privacy?

EU

OPEN
BANKING
EUROPE



Digital Single
Market
Cybersecurity

Tomorrow

eID.AS → For the people

enisa → Active enforcement

→ Bi-Lateral Agreements

Technology Driven Demands

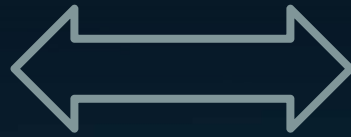
- 1 API all the things!
- 2 Hybrid by design (not by accident...)
- 3 Data driven, continuous authentication
- 4 Intelligence focused on the identity (not the asset)

Authentication Becomes Everything....

- **Inevitable collision between CIAM and workforce**
 - **Healthcare, insurance and banks in particular exposed to the multi-personality risk associated with employees who are also customers**
 - **Identity Proofing is just the beginning**
 - **Global Authentication Authorities will begin to aggregate enough data and intelligence to start the long needed process of unifying digital self with analog self**
 - **One “self” instead of hundreds**
-

Global Authentication Evolution

Workforce
Identity



Customer
Identity

Identity
Proofing



Global
Authentication

Global
Authentication



Unified
Identity

Open Banking to Open Business to Open Everything



BANKING



RETAIL



HEALTHCARE



GOVERNMENT



Richard Bird
Chief Customer Information
Officer
C: 614-218-0673

www.linkedin.com/in/rbird
richardbird@pingidentity.com
www.richardbird.com



The background image shows a laptop screen on the left displaying a dashboard with various application icons like Google Gmail, Google Calendar, and Ping Prodigence. On the right, a hand holds a smartphone displaying a green checkmark and the word 'Authenticated'. A red square with the 'Ping Identity' logo is centered over the image.

Ping
Identity®