

# **Global Cyber Security Trend**

#### **Quick Intro**



Born & bred, schooled and educated in Kenya...

An Experienced Banker.

10 Solid Years in IT Security.

IT Security Specialist with a fe

Certifications;

Computer Hacking Forensic Investigator – (CHFI)
Certified Ethical Hacker – (CEH)

EC – Council Certified Security Analyst – (ECSA)

Certified Information Systems Security Professional – (CISSP)

Certified Information Security Manager – (CISM)

Certified Information Systems Auditor – (CISA)



# The fortunes are Changing



# The world's most valuable resource is no longer oil, but data. {The Economist May 6<sup>th</sup> 2017}



#### **Global Trend**



#### Only Two things;

- It's a Money minting business.
- The Situation will only get worse...

Information is beautiful Checkpoint threat map Have I been pwned?

# Everything's getting hacked



- Brands are getting hacked.
- Media organizations are getting hacked.
- Tech companies are getting hacked.
- "Dating" websites are getting hacked.
- •Small companies are getting hacked.
- Critical infrastructure is getting hacked.
- National political parties are getting hacked.
- Elections are getting hacked.

#### **Motivation???**





Fin7 Hacking Group makes USD 50 Million per month.

wired.com

#### Motivation???



CYBER RISK

AUGUST 6, 2019 / 4:28 AM / A MONTH AGO

# North Korea took \$2 billion in cyberattacks to fund weapons program: U.N. report

Michelle Nichols

4 MIN READ



UNITED NATIONS (Reuters) - North Korea has generated an estimated \$2 billion for its weapons of mass destruction programs using "widespread and increasingly sophisticated" cyberattacks to steal from banks and cryptocurrency exchanges, according to a confidential U.N. report seen by Reuters on Monday.

#### •Reuters.com

#### Motivation???



### FBI Arrests Nigerian Suspect in \$11 Million BEC Scheme

Scam Targeted UK Affiliate of US Heavy Equipment Firm Caterpillar, Prosecutors Allege



bankinginfosecurity.com

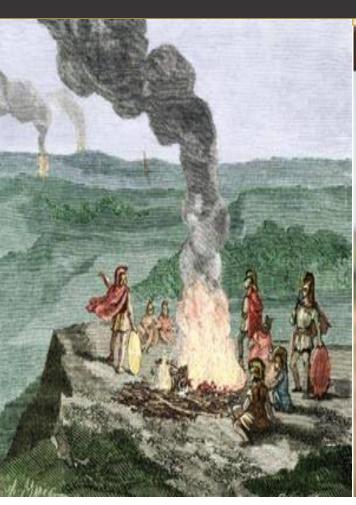
## **Bonus: Personal Security**





# When Everything was Secure



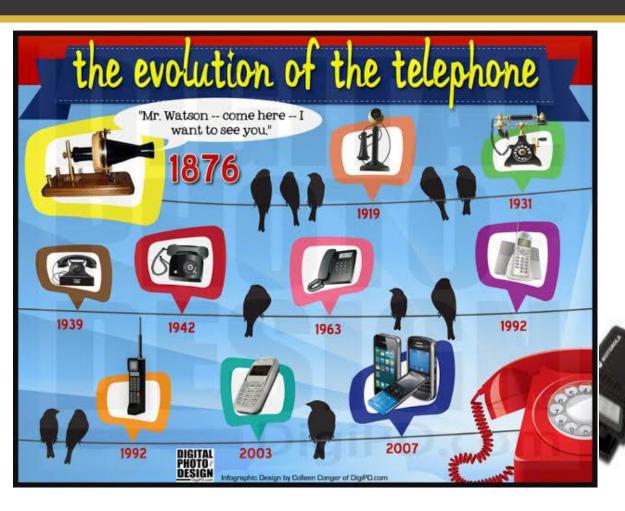






# **Beginning of Chaos...**







# Here we are...





# 3 Points Only...



- •What data is available about me, and where is it stored?
- •What are the risks that I'm going to guard against?
- •What are the impacts to my privacy?



# 1 Passwords: Secure your Logins



- •Scenario: You use a password at a mom-and-pop website to create an account. That website gets hacked, and it turns out the company stored your password in plain text in their database. If you re-use that password for another sensitive account (bank, social media, email , etc.) an attacker can use it to access your other accounts.
- •Solution: Use password managers.





- •Location Data Leak: home address, work address, routine, when your home is unoccupied, child's school, "second home", ...
- Apps: Do you really need those functions and apps.
- •Hot-spots: They may not be legitimate
- •Social-Media: internet never forgets, do you really need to broadcast all that?.. An account gets hacked you are all gone...





- •Social-Media: Internet never forgets, do you really need to broadcast all that?.. An account gets hacked you are all gone...
- •Wild trap: Hunting ground for criminals
- •The geolocation embedded in your posts, combined with other subtle cues, allows people to identify you.
- •What does the providers gain in return? Are they really for free?





- Cloud is simply someone's computer.
- •Decide what you want in cloud and what you don't. An encrypted and backed up personal hard-drive may still be a choice.
- Forget about urls and attachments from unknown senders.
- Set-up recovery emails.
- •Discern between what to put on email, voice and oneon-one.

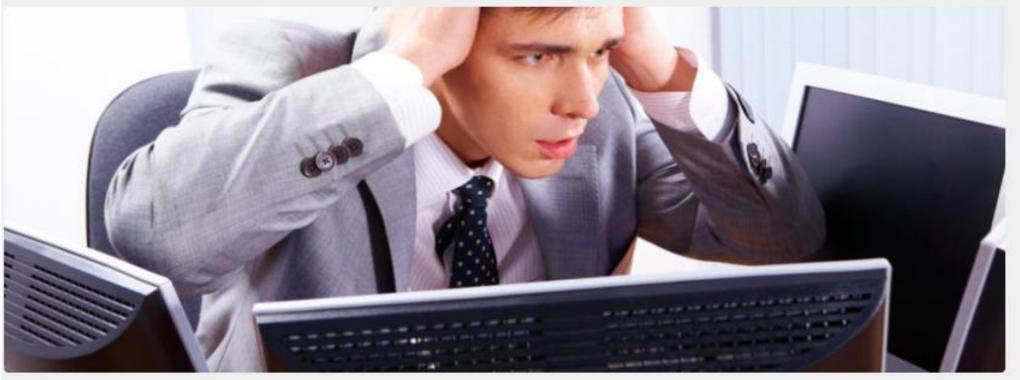
# 5 The rest: Extra mile...



- •What happens when your computer, external hard drive, smart phone or tablet are stolen?
- •What do you stand to lose in those instances, just the hardware or more?
- •Would you consider encryption?

### Impact to Business





3 Companies that Went Out of Business Due to a Security Breach

#### Total closure



#### 1. Code Spaces

According to SC Magazine, Code Spaces, a former SaaS provider, is one of nearly 60% of small businesses that fail within six months of being hacked. The company was accessed via its Amazon Elastic Compute Cloud control panel. The hackers erased data, backups, offsite backups, and machine configurations before attempting to extort the business by claiming a "large fee" would resolve their issues. Code Spaces took steps to change all of its passwords, but the damage was done. The criminal had already created backup logins. Code Spaces was unable to continue operations as it acknowledged that the company had suffered debilitating damages to both its finances and reputation.

#### 1. Nirvanix

Although the details of the swift Nirvanix departure are unclear, consumers were left scrambling for new providers and services. It only took six weeks for the vendor to transform from business as usual to demanding customers remove their data quickly and with little notice. The company went belly-up not much later.

#### 1. MyBizHomepage

The online company was once valued at \$100 million, but when the chief executive fired the chief technology officer and two other senior officers, who did not agree with the owner's decision not to sell the company, the trio launched a revenge attack that crippled the site. After the company spent over \$1 million in an attempt to resolve the breach, the company's board decided to take the site down because it had been rendered useless.

#### **Losses to Business**



- Loss of Business During the breach.
- Cost of recovery
- Reputational damage
- Heads rolling...
- Basically, it will never be the same again

# **Curbing Cyber threats**



#### Things will only get worse for now....

- This is where the money is currently.
  - Gold Mine for cyber criminals.
  - Cash cow for Governments.
  - Money tree for IT Security Technology companies.
  - A jackpot for Security services vendors "conmen".
- Extremely unskilled IT Security staff.
- Borderless/perimeter-less Organizations.
- The executives walking in the Dark.
- Poor Security Investment.

## **Curbing Cyber threats...**



#### **But there is still Hope**

- Know thy Assets (Asset Inventory).
- Security Awareness & Training.
- Get skilled / Upskill your IT Security Staff.
- Fund Security projects adequately and Demand ROSI
- Have a security Framework and be true to it.



#### **End of presentation**



# Questions?



