



**Regional Forum on Cybersecurity in the Era of Emerging Technologies
&
the Second Meeting of the “Successful Administrative Practices”-2017
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Privacy and Security are two sides of the same coin

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What is Security ?

The state of being free from danger or threat.

What is the difference between privacy and information security ?

- Privacy is not security and security is not privacy, even if these words are interchanged all the time. Let me try to lay out the differences between the two.
- Privacy is concerned with the **collection and use of personal data**. Security is concerned with **protection of that personal data** from unwanted intruders

THE REALITY OF DATA BREACHES

DATA RECORDS COMPROMISED IN FIRST HALF OF 2017

1,901,866,611

10,507,550

records lost or stolen
every day



437,815

records
every hour



7,297

records
every minute



122

records
every second



Number of Breaches Incidents by Industry



HEALTHCARE
228 INCIDENTS

25%



GOVERNMENT
89 INCIDENTS

10%



HOSPITALITY
19 INCIDENTS

2%



FINANCIAL
125 INCIDENTS

14%



TECHNOLOGY
76 INCIDENTS

8%



NON-PROFIT
15 INCIDENTS

<2%



EDUCATION
118 INCIDENTS

13%



OTHER
53 INCIDENTS

6%



INSURANCE
10 INCIDENTS

1%



RETAIL
112 INCIDENTS

12%



INDUSTRIAL
35 INCIDENTS

4%



SOCIAL MEDIA
6 INCIDENTS

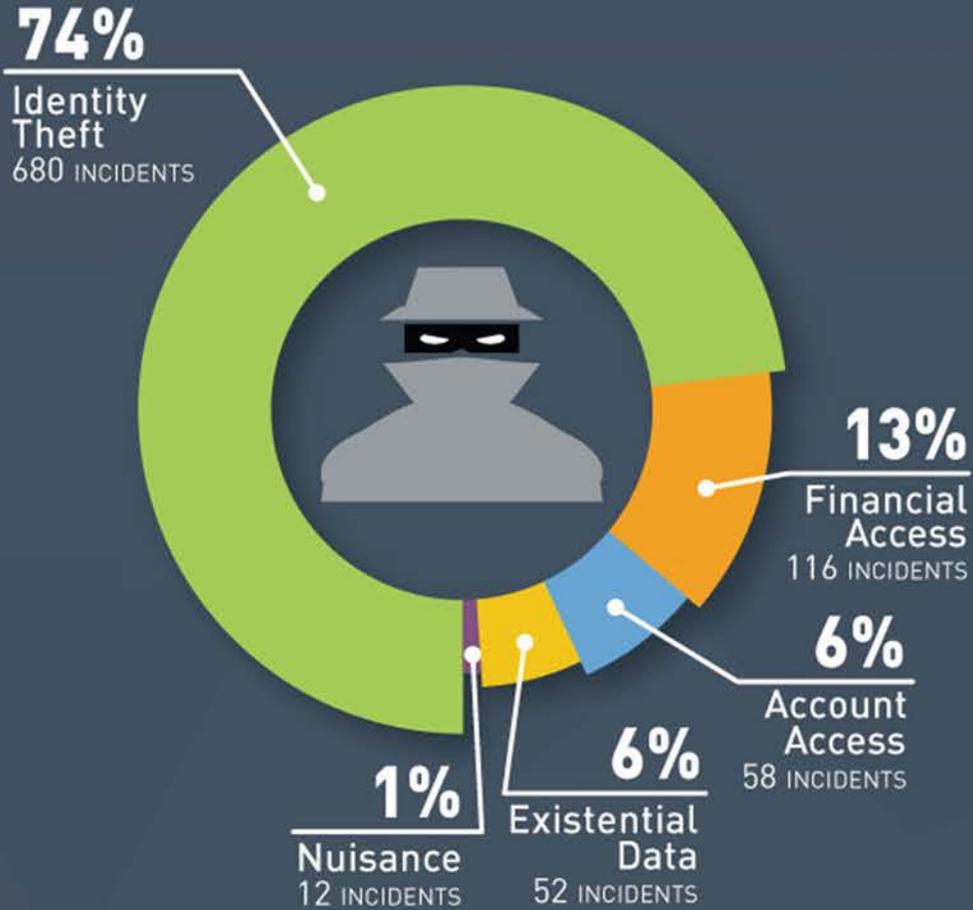
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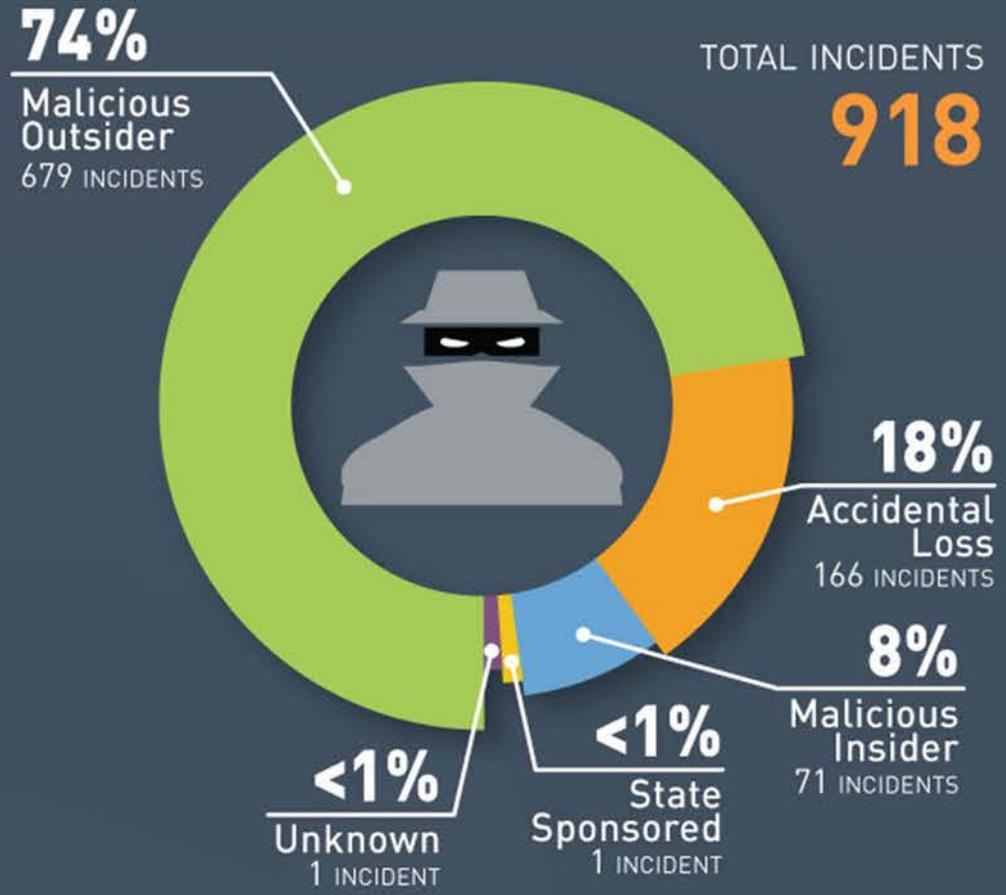
ENTERTAINMENT
32 INCIDENTS

4%

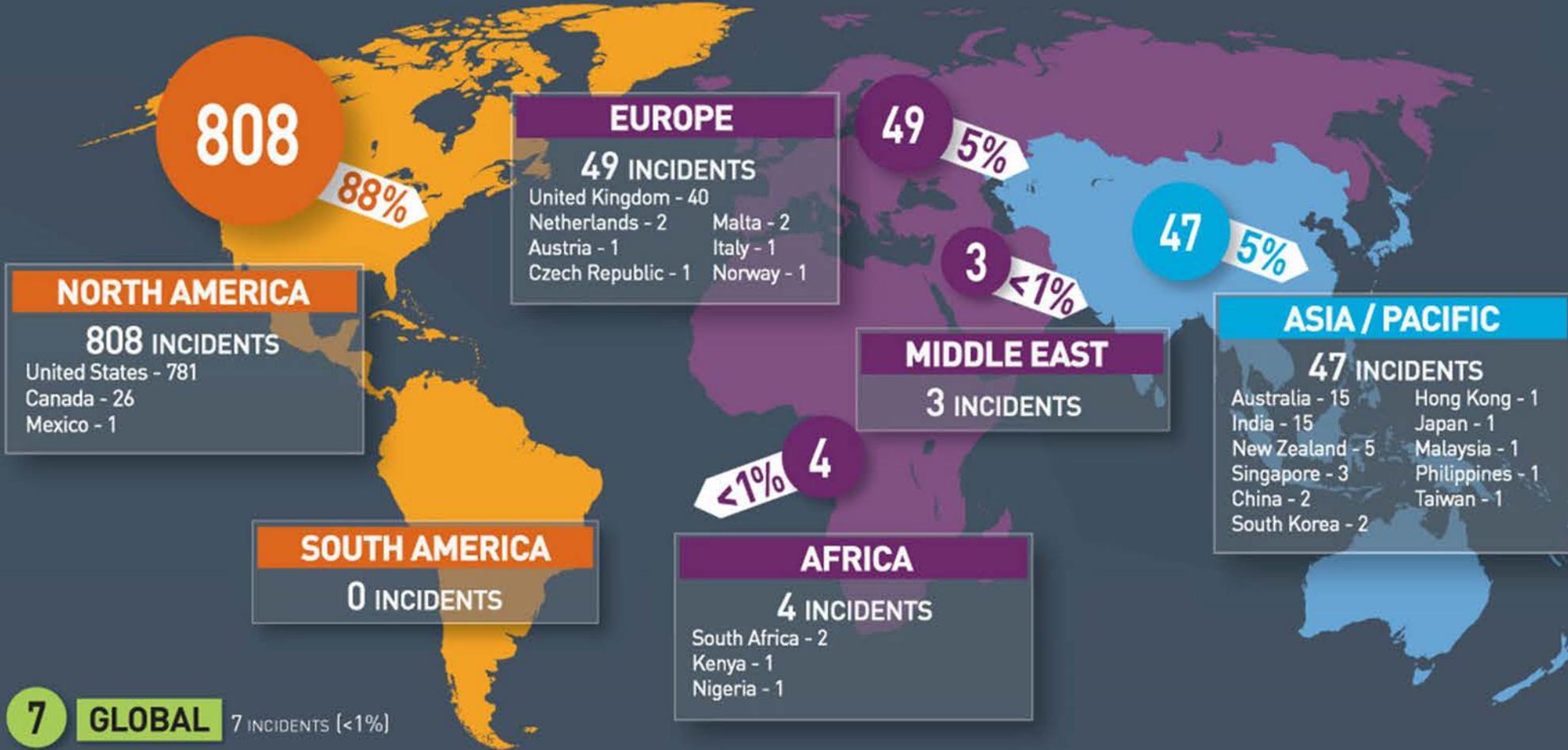
Number of Breach Incidents by Type



Number of Breach Incidents by Source



Breach by Region*



15 TERRIFYING STATISTICS ON YOUR CELLPHONE ADDICTION



The average person checks a cellphone **110 times** a day



12% of adults use their phones in the shower

40% check their cellphones in the toilet

In the shower their phones are used

15%



In the toilet cellphones are checked

40%

75% of users check their smartphones after sleep



50% feel uneasy when they leave phones at home



61% sleep with phones turned on under a pillow or next to bed

77% of parents and teens have argued about smartphone usage

56%

of users check their smartphones before sleep



1 in 5

people aged 18-34 have used their smartphones during

40%

of users check their devices over the weekend



50%

of teens admit that they are addicted to their phones

26%

of car accidents caused by phone usage



44%

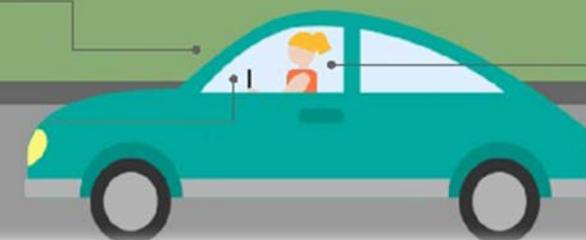
check job-related email daily while on vacation

75%

of users admit that they have texted at once while driving

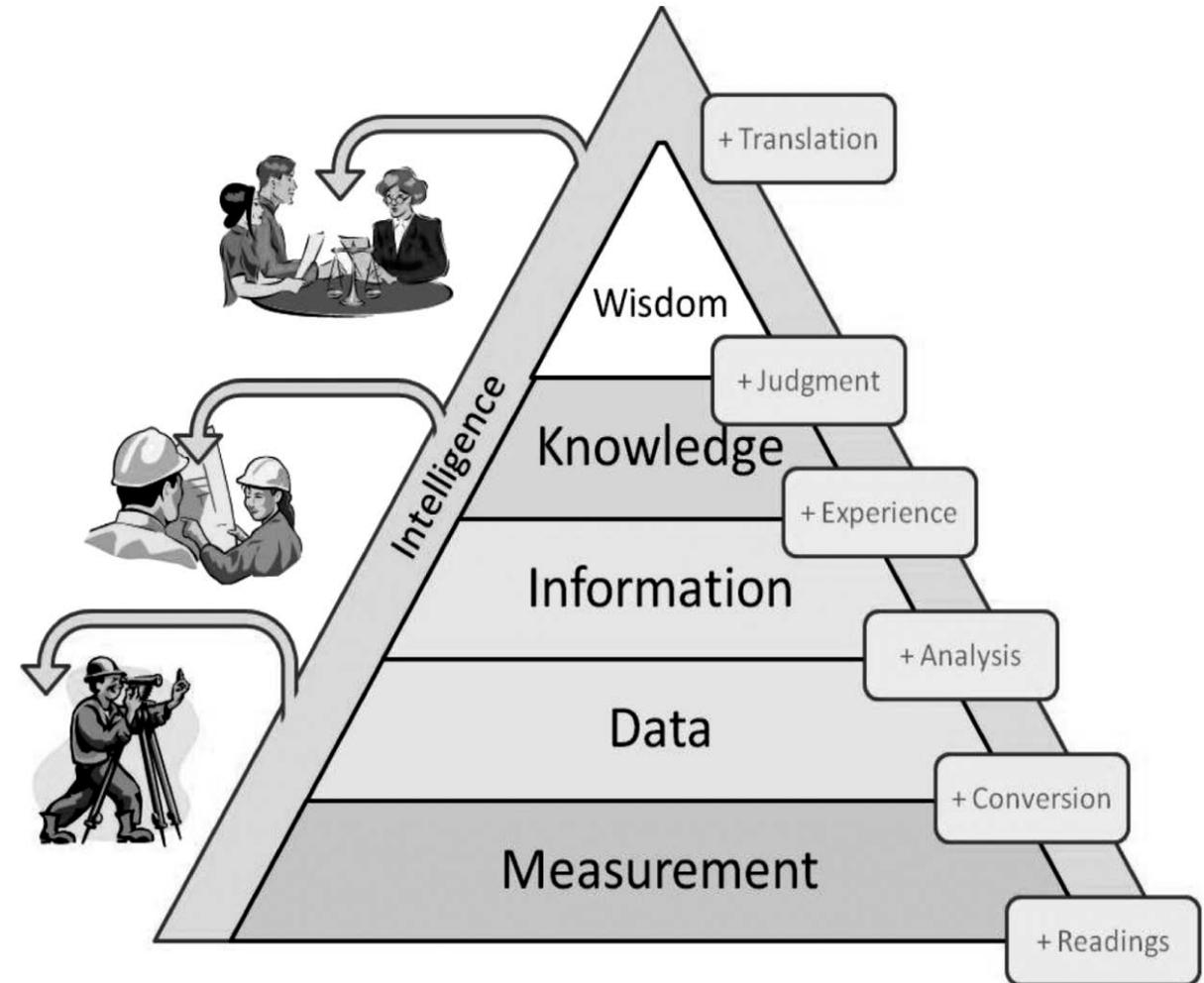
56%

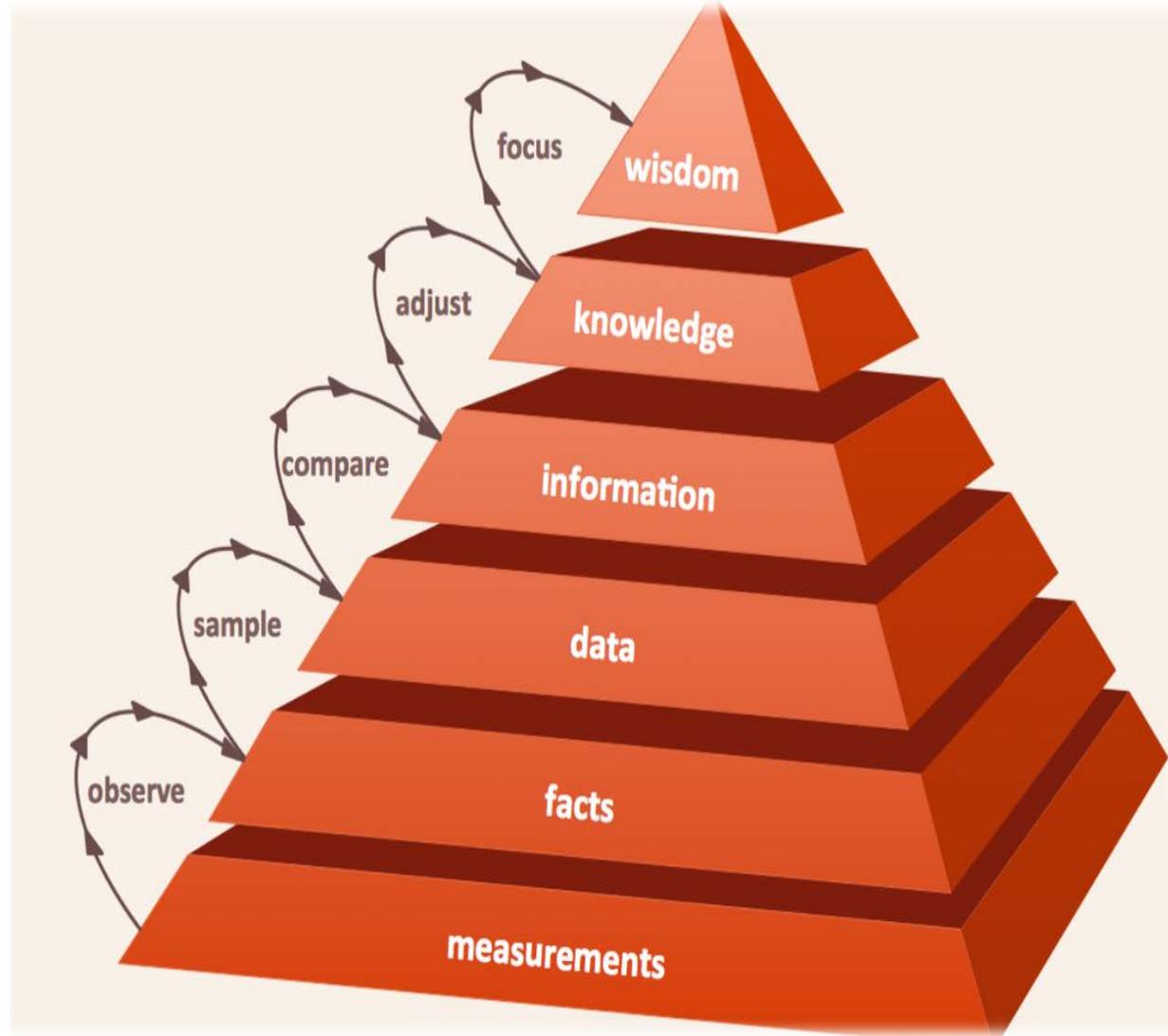
of parents check their devices while driving



What is “Information”

Information (shortened as **info**) is that which informs. In other words, it is the answer to a **question** of some kind. It is thus related to **data** and **knowledge**, as data represents values attributed to parameters, and knowledge signifies understanding of real things or abstract concept







Information Security (infosec)

Strategies for managing the processes, tools and policies necessary to prevent, detect, document and counter threats to digital and non-digital information. Infosec responsibilities include establishing a set of business processes that will protect information assets regardless of how the information is formatted or whether it is in transit, is being processed or is at rest in storage



Conclusion

Protecting the **confidentiality, integrity and availability** of information regardless of the form of data (electronic, paper base, conversation, and/or other forms);
Protecting information from unauthorized access, use, and / or disclosure.

One thinking that “control” is the central purpose of information security is a common misconception.



Privacy is personal

It is the understanding between a customer and a company about what information will be collected and how it will be used. We give up personal data in exchange for services we want. For example, if I want to buy a book online, I understand that I have to provide the vendor my name, address, and credit card information so I can receive that book. I entrust my personal information with the understanding that the bookseller will not use my information for any other reason. It will maintain the privacy of my personal data.



Security is impersonal

Security is not concerned with what is collected or how it is used. Rather, security guards the personal data I provide to a vendor from those who shouldn't see it and ensures that when that data needs to be seen, it's in the right format and is accessible. More simply, security is a wall around the castle, and just as there can be many different walls around a castle, there can also be many different walls of security around my personal data. Security walls can include network protection, encryption, and authentication, to name just a few, and companies spend a lot of money on these walls.

Google's Collecting Your Location

According to the investigation, Google's surreptitious location data collection practice has been in operation **since the start of 2017**, and isn't limited to users with location data enabled, or users connected to cell towers: Android phones connected to the Internet via Wi-Fi were also transmitting location data to Google. Even devices that have gone through a factory reset were found to be transmitting private data back to the company.

The bad news: you can't turn this off. **The good news:** Google told Quartz that it's discontinuing this practice by the end of November.



Areas of security

- Physical security
- Operations security
- Network security
- Personal security
- Information security
- Communications security



Physical Security

Strategies to protect people, physical assets, and the workplace from various threats.

Fire, unauthorized access & natural disasters





Operations Security

Securing organization's ability to carry out it's operational activities without interruption or compromise



Network Security

Protection of an organization's data networking devices, connections, contents, and the ability to use that network to accomplish the organization's data communication functions





Communications Security

Protection of an organization's communications media, technology, and content, and its ability to use these tools to achieve the organization's objectives





Information Security

Includes the broad areas of information security management, computer and data security, and network security.





Personal Security

Overlaps with physical security in the protection of the people within the organization

FAMOUS TECHNICAL ATTACKS



PHISHING – SMISHING - VISHING

Phishing is a new term of the century which is used to take over a private information from a user. Your natural response to this statement is, of course, "yea but I am not so simply fooled." And of course you aren't. This is why phishers use a technique called "social engineering".



SPOOFING

Spoofing, is a practice in which communication is sent from an unknown source as a source known to the receiver.



SPAM E-MAILS

This is a mass e-mail system. Hundreds and thousands of e-mails are sent to the victim. This is tightly related with phishing attempt.



BAITING (CURIOSITY – PROMISE)

Similar to phishing. However, what distinguishes them from other types is the promise of an item or good that hackers use to entice victims. Baiters may offer users free movie downloads, if they surrender their login credentials to a certain site.

FAMOUS TECHNICAL ATTACKS

TAILGATING (UNAUTHORIZED ACCESS)



A person impersonates a delivery driver and waits outside a building. When an employee gains security's approval and opens their door, the attacker asks that the employee hold the door.



PRETEXTING

The attacker uses a believable reason to impersonate an authority, pretend to be a fellow employee, IT representative, or vendor in order to gather confidential or other sensitive information

Quid Pro Quo



An attacker makes random calls and offers a gift or benefit in exchange for a specific action or piece of information.



SOCIAL NETWORKS

Facebook are a social engineer's paradise. A social engineer can find out so much about you. People post information about where they work, what they like to do. A social engineer can use the information on your social networking page in a number of ways



Who should care about security?

Information security is the responsibility of every member of an organization, but managers play a critical role

Data Security

Data security is commonly referred to as the confidentiality, availability, and integrity of data. In other words, it is all of the practices and processes that are in place to ensure data isn't being used or accessed by unauthorized individuals or parties. Data security ensures that the data is accurate and reliable and is available when those with authorized access need it. [A data security plan](#) includes facets such as collecting only the required information, keeping it safe, and destroying any information that is no longer needed. These steps will help any business meet the legal obligations of possessing sensitive data.





CIA +

Confidentiality

Integrity

Availability

Privacy

Identification

Authentication

Authorization

Accountability

Data Privacy

Data privacy is suitably defined as the appropriate use of data. When companies and merchants use data or information that is provided or entrusted to them, the data should be used according to the agreed purposes. The Federal Trade Commission enforces penalties against companies that have negated to ensure the privacy of a customer's data. In some cases, companies have sold, disclosed, or rented volumes of the consumer information that was entrusted to them to other parties without getting prior approval.





The Relationship Between Data Security and Data Privacy

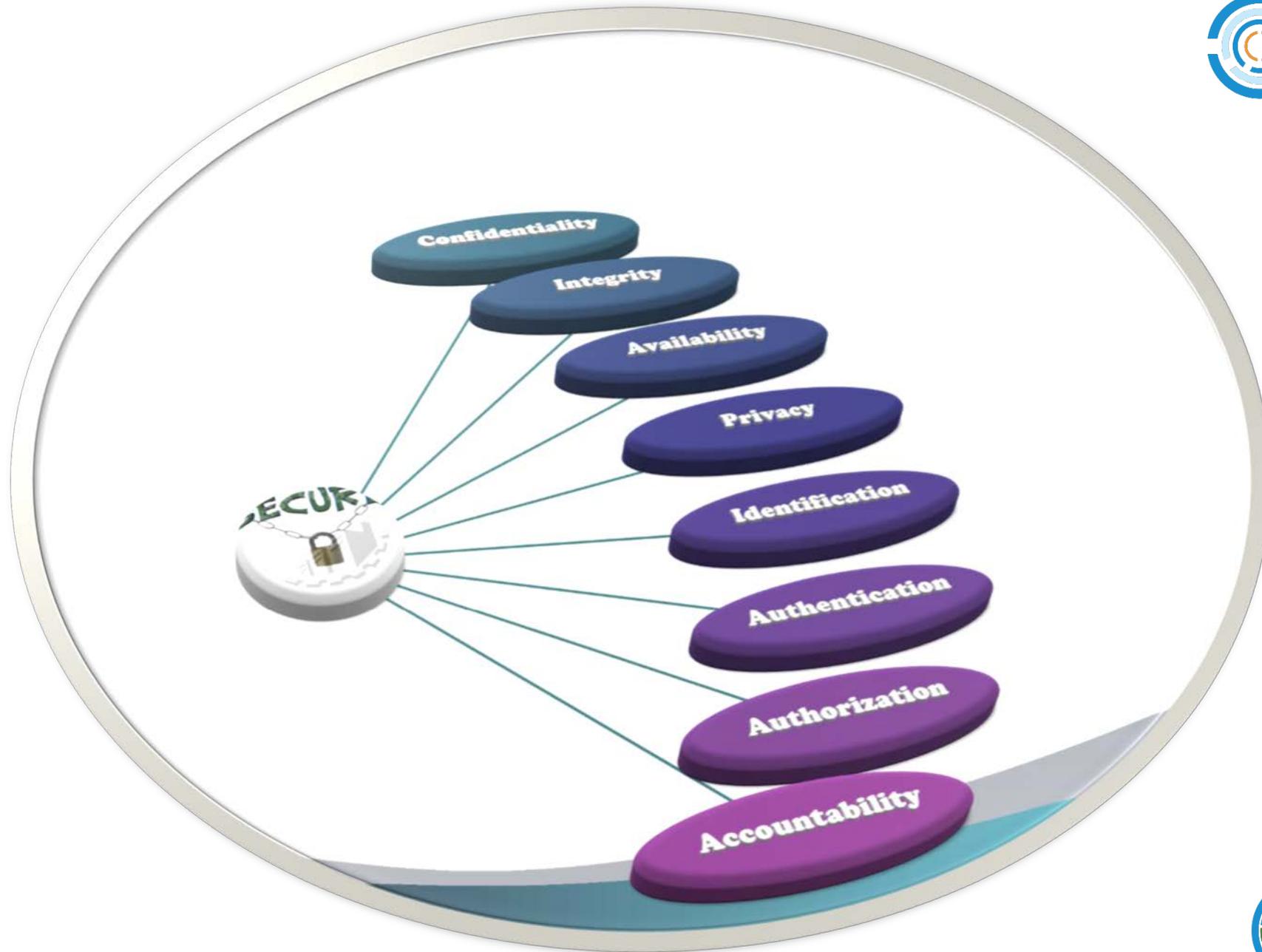
Companies need to enact a data security policy for the sole purpose of ensuring data privacy or the privacy of their consumers' information. More so, companies must ensure data privacy because the information is an asset to the company. A data security policy is simply the means to the desired end, which is data privacy. However, no data security policy can overcome the willing sell or soliciting of the consumer data that was entrusted to an organization.



How Companies Ensure Data Privacy Through a Data Security Policy

Making sure all company data is private and being used properly can be a near-impossible task that involves multiple layers of security. Fortunately, with the right people, process and technology, you can support your company's data security policy through continual monitoring and visibility into every access point. EIQ Networks provides [managed security services](#) that can extend your team's capabilities and help keep data privacy in tact for your company.







Thank You

