# **CYBER RISK**

# Riga, 22nd September 2017 Dr. Andrea Ragozino



# Dr. Andrea Ragozino

#### Carrer

- Tpa and Loss Adjuster for over 7 years. Appointed by Italian Insurers, Lloyd's and Other International Insurers
- Risk manager for over 4 years for several Italian and american Multinational companies
- Broker since 2002, Lloyd's cover holder since 2006 –
   PA, LTI, PI, GL, D&O and PO -



# Dimension of the risk

- 1,6 % of GDP in Developed COUNTRIES =
- 2 times New Orleans hurricane (per year)
- In Western **COUNTRIES** +70% of the Avg costs for claim restoration:
- 1) Business Interruption
- 2) Reputational damages/risks
- 3) Third parties

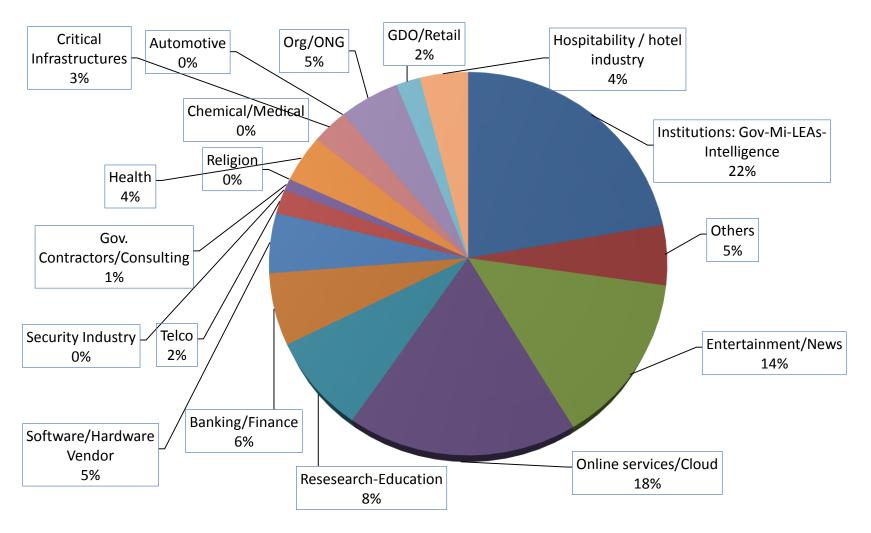


# How to fight the phenomenon – Prevention – Risk assessment

### **Risk Prevention:**

- 1. Anti virus firewall;
- 2. Education of employees for a smart use of company's IT System;
- 3. Fragmentation of archives;
- 4. Disaster recovery plan;
- 5. Business Continuity Plan





AVG COST IN ITALY 1,98 MIO PER CLAIM 2012-2015 was 1,3



# The nature of cyber risk

The cyber risk it's an operative risk associated to the economic loss inflicted to an organization, due to a lack of confidentiality, availability of correct information, and/or informative system own of the third party.

#### Its origin may be:

- Accidental: are events that occur independently by the will of all the parties involved (e.g. Server switch off);
- Deliberate/intentional (es. cyber crime): are events produced by individuals' voluntary actions, in order to achieve personal purpose of various nature (e.g. theft of personal data).

The economic damage to an organization could be produced by the malfunction of the system IT or be the consequence of the malfunction of another system on which there is no control.

The cyber risk could have systemic characteristic, as same as the financial risk. Isolated cases could have implication on bigger basis.



### Potential consequences of a cyber event (accidental or

### intentional)

- Business Interruption
- Reputational damage
- Diffusion of sensitive data (clients, patients, employee, supplier)
- > Violation of financial information; violation bank account
- Violation intellectual property
- > Loss of market share
- Identity fraud
- Legal action from third party
- > Ftc...

### Social involvement

- Moral hazard
- > Frauds
- Legal restrictions
- Profiling
- Privacy



**KEY WORDS**: malware – hackering - Phishing – Pharming (Bank Website clonation) man in the middle – ransomware – crypto locker – DOS (Denial of service / waterfall of data)



## Solutions

PREVENTION –
RISK MANAGEMENT

INSURANCE POLICIES



### **Business Continuity Plan**

The Anglo Lombarda Insurance Brokers Company has two sites. These are in:

- Treviso (North Italy), where some of technical dept. are located and the claims dept. is located, minors administration functions are developed here;
- Naples (South Italy), where the administration and some technical offices are located occupying 2 different sites; the offices are located in the same building on the same floor.

The distance between Naples and Treviso is about 880 km so we could exclude that even a Nat-Cat event could affect both towns.

Our Business continuity plan is based on the idea that a theft or a fire or any other event could stop the activity of one office.

As reported and described in our IT DRP, the two server located respectively in Naples and in Treviso store exactly the same data, so the misfunction of one of it do not stop any activity or any data access.

So in case one of the server doesn't work anymore it is enough to configure a new access, it could take few minutes, and all the people based in the destroyed site could work having access to all his/her files, emails, accountancy and so on....

All policies and all proposal forms and any other important document is scanned in a folder linked to the administrative position of every single client.

We also have 2 different phone lines and data providers, in case one has a shot-down we can pass all our communication to the other one (one is via cable and one wi-fi)



### Disaster Recovery Plan

In case of natural catastrophe, Anglo Lombarda has predisposed an emergency plan.

Every designed partner has one pre-arranged charge with the same characteristics for every city.

#### TREVISO, recovery actions:

in Treviso, the following partners have received a charge and each of them is furnished of one alternative email for all partners and one mobile-phone number, as following below:

#### Mr. Mauro Martini:

Backup Email on international hosting: anglolombarda tv@gmail.com: this email is accessible from any internet point.

Mobile phone number.....authorized to the international calls

He has an emergency office at his home in Treviso - ....., (at about 500mts far from the office), provided with compatible connections with the Anglo Lombarda's Backup system.

#### Mr. Martini Mauro has the followings duties:

if possible, he will move the backup system to the emergency office and, connecting it to the notebook, he will put it in communication, through net internet, also in the office of Naples.

if impossible by an infrastructures demolition, the office of Naples, that has a backup copy (transmitted before by vpn net), it will directly manage both the weekly stored database and the index book clients.

If the nets traditional internet won't work, will be activated an alternative internet connection through an Tim Hdspa one.

In the case of impossibility to use any internet net, the backup will be printed and the communications will be managed through traditional post.

#### NAPLES, recovery actions:

in Naples, the following partners have received a charge and each of them is furnished of one alternative email for all partners and one mobile-phone number, as following below:

#### Mr. Lodovico Bocchini:

Backup Email on international hosting: anglolombarda na@gmail.com: this email is accessible from any internet point.

Mobile phone number: ....., authorized to the international calls

He has a emergency office at his home in Via .......—Giugliano in Campania (at about 20kms far from the office), provided with compatible connections with the Anglo Lombarda's Backup system.

#### Mr. Lodovico Bocchini has the followings duties:

if possible, he will move the backup system to the emergency office and, connecting it to the notebook, he will put it in communication, through net internet, also in the office of Treviso.

if impossible by an infrastructures demolition, the office of Treviso, that has a backup copy (transmitted before by vpn net), it will directly manage both the weekly stored database and the index book clients.

If the nets traditional internet won't work, will be activated an alternative internet connection through an Tim Hdspa one.

In the case of impossibility to use any internet net, the backup will be printed and the communications will be managed through traditional post.



Riga, 22<sup>nd</sup> Sept. 2017



Dear e-resident,

A group of international security researchers has identified a potential security vulnerability that affects the use of Estonia's ID cards and digital IDs.

When notified, Estonian authorities immediately took precautionary measures, including closing the public key database, in order to minimise the risk while the situation can be fully assessed and a solution developed.

According to current information, this security risk is still theoretical and no one's digital identity has been misused. You can continue to access your digital ID through your digital ID card. Should the situation change, you will be notified immediately.

This issue affects everyone with an Estonian ID card and digital ID issued after 16 October 2014 so the Estonian Prime Minister Jüri Ratas is speaking about this issue today to explain that the digital security of citizens, residents and e-residents will always be a top priority for Estonia.

We will keep you updated on any developments and you can also email us at <u>e-resident@gov.ee</u> if you have any questions.

We are grateful to the researchers for uncovering this issue and providing us with the opportunity to ensure our digital society can emerge stronger and more secure.

Kaspar Korjus Managing Director, e-Residency



# Questions?



