

UNIVERSITY OF TIRANA FACULTY OF ECONOMY DEPARTMENT "STATISTICS AND APPLIED INFORMATICS"



# INFORMATION SECURITY MANAGEMENT (INFORMATION SECURITY RISK MANAGEMENT IN PUBLIC INSTITUTIONS IN ALBANIA)

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### Motivation

- Information Security Risk Management (ISRM) is very important because helps the organizations to adapt cost effective security measures.
- The perception is that public institutions do not need structured information security because they are not part of a competitive environment and tend to have more streamlined IT infrastructure.
- Public institutions have very sensitive information that often are targets of espionage or terrorist attacks.

## Motivation (cont.)

- During the financial crisis of 2008, our country as part of the global market, was hit too. Only in two first years investments fell sharply from 25% in 2008 (the year of the beginning of the crisis) to 18% in 2010.
- This research analyzes these concerns about risk management of information security in the public sector by considering the context of Albania which is struggling for becoming a developed country.

### Defining the problem

- Risks the possibility of unfavorable or unwanted circumstances are and have always been a part of our daily life.
- Risk analysis and risk assessment is not a new field of research and has a long tradition.
- The origin of risk management to identify, analyze, evaluate and address risk has its beginnings with modern industrialization back as the 16th century.
  - Formation of the insurance business after the Great Fire of London in 1666 and the establishment of maritime security by Edward Lloyd (now Lloyds of London) 1680.
- In informatics, first security standards were developed in the 1980s to protect information and data. The first of its kind was Trusted Computer System Evaluation Criteria (TCSEC) (US DoD, 1988) to evaluate the effectiveness of computer security controls - referred to as the Orange Book.

# Defining the problem(cont.)

Risk management involves three major enterprises:

- Risk identification the examination and documentation of the current state of IT in organization and the risks that it faces;
- Risk assessment the determination of how exposed or vulnerable are information assets of the organization.
- Risk control the application of controls to mitigate the risk of data in an organization.

# Objectives

The objectives of this research are to:

- explore and analyze practices and models of risk management of information security in the Albanian public institutions,
- analyze how they are influenced by the role and scale of the use of IT in the institution
- identify the problems and challenges facing information security

# The Goal

• The goal of the research is to increase the performance of the security risk management achieving effective and cost-effective IT.

#### The research questions

Objectives and the goal of the research will be achieved through three questions that address the problem.

- Q1. What is the dominant model in the risk management of information security in the public institutions in Albania?
- Q2. What are the obstacles faced by public institutions in managing security risk?
- Q3. How to improve risk management model in public institutions?

# Methodology

- Case Study Research- We used this strategy because in this study it is difficult to isolate the phenomenon from the environment where it takes place.
- Questionnaires and Interviews techniques that we selected for our study data collection is the use of questionnaires and interviews.
- Other As part of the methodology chosen, also will take into consideration the documents of the institutions which include strategic and operational plans and Institution IT policies, procedures and reports.

#### **Expected results**

This study aims:

- To utilize the advantages of using models of information security risk management information systems,
- To bring the concepts of the field in a standard and updated manner.
- To establish a risk management model suitable for the environment of public institutions in Albania.

# The work carried out so far

- Identifying the list of employees of public institutions to be interviewed;
- Drafting and sending the questionnaires to be fulfilled by IT staff (including management and support);
- Collection of the completed questionnaires.

#### Thank you for your attention!