

## Conference Paper

# Economic Aspects of Information Security

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## Abstract

In this article economic aspects of information security are analyzed, the key issues of information security in economy and further measures for its facilitation are specified.

**Keywords:** information security, economic aspect, information, security.

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## 1. Introduction

In the current information environment of the XXI<sup>st</sup> century the economic aspect of information security is increasingly gaining importance for the well being of any country. Economic stability and sustainable development of economy have always been top priority objectives of any government.

Any country's information security is an integral characteristic of the state of its economic system and provides, in its turn, the overall condition of the whole set of interrelated structural components, with those being macroeconomic, investment security, security of power supplies and innovations, financial, social, foreign trade, food and demographic security.

## 2. Literature overview

The issue of economic aspects of information security has been analyzed by many Russian and international scientists. The impact these aspects have on information security has been studied, in particular, by Sukach E.I., Karaseva E.I., Ratobylyskaya D.V., Zherdetskiy Yu.V. [1], Lance J. Hoffman [2], Simonov S.V. [3], Petrenko S.A. [4]. Nonetheless, global issues related to economic aspects of information security, its functioning and overall information protection do not lose relevance and require further research.

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### 3. Problem statement

Among other things, the purpose of this article includes theoretical analysis and identification of key economic aspects (components) of information security. As a theoretical and methodological basis for the study, scientific and analytical articles and monographs were used.

### 4. Results

As follows from the study, the key economic aspects of information security include:

- Legal;
- Software and technical;
- Organizational.

The legal aspect includes information system protection and the use of licensed software applications only.

The software and technical aspect involves ensuring information security via applying security measures to prevent unauthorized access to data, web monitoring systems, antivirus and cryptographic facilities, data back-up systems and identity verification systems.

The organizational aspect includes business activity that eliminates the mere possibility of an unauthorized acquisition of confidential information.

Among the most pressing issues of information security in economy, the following can be determined:

- Cyberspace security and control of unauthorized access to information.
- Advancement of infosphere regulatory environment.
- Investment needed to catch up with the backlog in information technologies.
- Use of the state-of-the-art software and hardware.

Taking into account current globalization trends due attention should be paid to the organizational aspect which is to:

- Ensure identification and allocation of resources necessary to enhance information security;
- Provide a background for a sustainable and competitive growth of economy;

- Promote favorable investment climate.

The software and technical aspect is also of great importance for ensuring and enhancing information security of a country for it facilitates:

- Advancement of domestic information industry in line with the current global political situation;
- Development of software and hardware for cryptographic information security that would protect information assets from unauthorized access and ensure confidentiality;
- Licensing and development of criteria for technology certification.

## 5. Conclusion

Given the current geopolitical environment, information security is determined as one of the most important areas of economic development of any country. The fundamental economic aspects of information security include legal, software and technical, and organizational aspects.

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