

SIGNIFICANCE OF INFORMATION SECURITY IN A COMPANY

„The secret of business is to know something that nobody else knows.”

Aristotle Onassis

STRESZCZENIE

Artykuł podejmuje problematykę znaczenia informacji w przedsiębiorstwie. Zawiera prezentację bezpieczeństwa informacji jako przedmiotu badań naukowych, omawia pojęcie informacji, jej cechy i rodzaje. Przedstawia nowoczesne firmy jako przedsiębiorstwa informacyjne, których najważniejszym aktywem jest informacja zapewniająca przewagę nad konkurencją, decydująca o sukcesie lub porażce.

Utrata informacji stanowiących tajemnicę przedsiębiorstwa może oznaczać utratę reputacji, zakończenie działalności na określonym rynku lub wywołać odpowiedzialność prawną. A zatem w dobrze pojętym interesie przedsiębiorstwa należy wdrożyć kompleksowe procedury zarządzania informacjami – politykę bezpieczeństwa informacji.

1. INFORMATION SECURITY AS A SUBJECT OF RESEARCH.

Information security is a subject of different science disciplines that might be grouped by a goal, methodology, area of research and its results. Some of them are presented below:

- **Legal science** (constitutional, criminal, civil, administrative), which main goal is an assessment of current directives of behavior, that were created in accordance to existence and functioning of a state or another ordered community [1]. It particularly applies to comments to legislation of classified information security[2], personal data [3] and other secrets controlled by a state government [4] as well as the ones that apply to business sector institutions[5];
- **sociology**, studying the way a particular society functions and changes, how it works and all the processes and structures. Characteristic part is played in that by

research taking up growth of importance of the information society[6] and also importance of information itself in a national security system[7];

- **technical science**, studying practical aspects of information security, especially in crisis situation[8];
- **economy**, studying influence that information has on economical development[9];
- **computer science**, showing importance of modern information technologies for transferring, processing and securing information[10];

and many others like e.g.: **criminology** [11], **political science** [12], **marketing** [13], **military science** [14].

The disciplines of science listed above do not take into consideration various factors determining the information security, they limit to their own research area only. All of mentioned above became base to creation, at the turn of the XX and the XXI centuries, an absolutely new science concerning security of mankind and society - „**Securitology**”, that in its researches includes varied objective and subjective factors, socio-psychological and cultural, political and legal, natural and technical, macro- and micro-economical, which determine threats and stay in mutual unbreakable connections [15].

At present main representatives of this fully shaped discipline of science are: **Leszek F. Korzeniowski** [15], **Ladislav Hofreiter** [16], **Josef Janošec** [17].

2. INFORMATION IN A COMPANY

2.1.1.1. CONCEPT OF INFORMATION

Information is a complex concept defined in various ways depending upon what discipline of science is a definition made by. Thus the concept is different in the sciences where the most stress is put on its immaterial nature, different one in computer science, which assumes that message brings information only when it removes uncertainty and assumes that “every information is a message but not every message is an information”, and the last concept based upon the humanities, philosophy and legal science which show human nature of the information.

As a result of comparison of the above **Grażyna Szpor** composed a definition, that seems to be very accurate, which says that “**information is a transferable immaterial good that decrease uncertainty**” [18].

With reference to the information management definition made by **Leszek F. Korzeniowski** deserves attention. His definition says that “**information is a**

content transferred thru announcement that enables understanding sense (meaning) of data and relations between them”[19].

2.1.1.2. CHARACTERISTICS OF INFORMATION

Classification of characteristics of information is as complicated as the concept of information itself. There might be distinguished by many criteria depending on type and usage of the information. It seems anyway, that the most important characteristic of the information is its **quality**, which level is defined, among others, by:

- topicality;
- integrity;
- accountability;
- accuracy;
- reliability;
- usefulness;
- value.

Fulfillment of the above conditions gives the bottom line to secure principles of **confidentiality** for the information. There is no point to keep the information in secret that is not up-to-date, reliable and useful.

General Guyaux, a French expert on economic intelligence, said that “**information is valuable only when a proper person gets it in proper time**” [20].

2.1.1.3. TYPES OF INFORMATION IN A COMPANY

Owing to the subject of this article types of the information processed in a company are to be differentiate by criteria of accessibility and security:

- **classified information**, these are data defined by legal acts (national, international), which illegal discloser might endanger vital interests of the state, international organizations, especially related to a defense system and public safety;
- **personal data**, these are all the information concerning identified person or possible to be identified;
- **business secrets**, these are classified information received in relation with the job, e.g. medical, lawyer, bank;
- **entrepreneur’s secrets**, these are all closed for public knowledge information including technological, technical, organizational data and other of high economical value;

- **public information**, that is considered to be any information about public affairs which are to be made available to citizens by the government or its contractors;
- **neutral information**, these are unclassified information and there is no obligation to disclose them to the public knowledge.

Considering business reasons only the most important group of the information processing in a company are these related directly to its economic activity, defined in the doctrine as “**entrepreneur’s secrets**”.

2.1.1.4. INFORMATION ENTERPRISE

In the modern world, described by many as information one, business comes into a new economic era based on the information – where the power is not knowledge itself but rather access to the information. Share of information resources in the entire value structure of all actives in the company may reach up to 80%. Significance of the information to the company is shown the most forcibly in analysis of the list of 500 firm, that made the biggest income last year. The list is compiled and published (since 1955) by an American magazine Fortune, which its name - **Fortune 500** – came from [21]. Since 2000 the very top of the list has been occupied by companies that have built their power not by “sweat and steel” but thru taking advantage of the information. Also among firms that main objective is making material goods there has been made some changes in grasping the true value of the information. Fact of that was confirmed by the public opinion poll conducted in 2000 inside the group from the Fortune 500. Results showed that in every 6 USD of market value of those firms, 5 dollars represented their information resources and only 1 dollar material and financial ones [22].

An international expert on business security **Donald L. Pipkin** says that “**Information is the most precious property of any firm regardless of whether it is a secret recipe, better production process or a list of clients. Information are things that gives a company advantage over competitors. Effective usage of the information in the company is something that decides of success or failure; it has become crucial factor of successful business.**” [23].

3. INFORMATION SECURITY POLICY

As we may see the information is the key active of every company. If we can determine real value of the information we possess , we will be able to determine level of losses we will suffer from when our information is stolen, intercepted, changed or deleted. Therefore security of the business information is to be the very essential rule of managing the firm.

The information has many faces. It may be stored in computers, distributed thru networks, printed, handwritten and exchanged during talks. Both the information itself and

elements of the information system are the vital actives of the company, therefore it is necessary to undertake all available steps to secure the information continuously, in spite of its form or carrier. In this very moment it is important to be aware that **majority of the intellectual property of the company is placed inside its employees' brains**. [23]

Taking above under consideration it is necessary to prepare and put into practice the information security policy in the company. The policy should determine **comprehensive procedures of conduct, set of laws, rules and practical hints describing way of managing, securing and distributing the information inside the institution, related entirely to the problem of securing the information processed traditionally as well as in computerized systems**. This kind of activity is timeless and it creates long-term image of the firm [24].

It seems that one of the best pattern for creating the information security policy there are recommendations and procedures included in the international norms ISO/IEC 27001:2005 and ISO/IEC 17799:2005.

RÈSUMÈ

Importance of the information security in the company are very accurately included in **Leszek F. Korzeniowski's words "when the information is stolen nothing is lost seemingly – the owner still has the information but worthless."** [25]

At the end of the article I wish to present alarming results of the newest researches conducted by Kroll Ontrack – the world leader in the information security – showing that despite the policy is effective, as many as 61% of employees expose their companies to loss of sensitive information using their private unsecured storage devices at work. [26]

Obligation to put the policy into practice in every company seems to be undisputed.

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