SUPPLY CHAIN MANAGEMENT AND INFORMATION SECURITY
SUMMARY

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Any activity carried out on the market involves inseparable logistical activities. This is necessary because orders are being fulfilled within this area, but there is also a certain relationship with the customer. Therefore, logistics mainly determines the success of the project in question. In addition, it should be borne in mind that the activities carried out are carried out at the level of internal operations, but also external ones. The former involve the transmission of information largely between the various divisions of the company. External activities, on the other hand, are a way out to customers, suppliers, intermediaries, but also competition. In the latter case, it is mainly about going into certain co-operations and creating opportunities to cooperate in order to exchange mutual views, experiences. This expands knowledge, and innovations are being created that are of great importance for the development of logistics activities.

Logistics activities are also largely dependent on the introduction of technological solutions. Thanks to them, you can share relevant information faster. In addition, it is much easier to complete the order. This aspect is of particular importance, since today a lot of emphasis is placed not only on the quality of the products offered, but also on the speed in the execution of the order. It is for this reason that modern technologies that are used in the supply chain are considered to succeed in conducting market activities. However, this would not be possible if it were not for adequate investment. It is also thanks to them that archiving documents are simplified. It is no longer necessary to create a separate warehouse that collects data, and there is no need to spend time there to find certain information. This is possible because modern solutions allow not only to collect information, but also to analyze and combine certain information with each other. Thanks to them, the whole company is functioning successfully, and logistics is much simpler. Furthermore, certain actions are improved on this basis, which can often condition the success of a particular project as well as the whole activity, as only in such a way can it be possible to respond to the necessary changes.

Nevertheless, this certification is a burden for entrepreneurs. This is because you need to choose the right group of people to be responsible for supervision and access to information. In addition, the inclusion of any personal data even requires appropriate

safeguards. After all, it is not difficult to perform certification. Nevertheless, such a task must be carried out safely. For example, no customer chooses to entrust their information if they do not know that they are properly protected. To do this, solutions at the level of the structure of the company can also be carried out, but it is also worth complementing these activities with systemic action. In addition, it is also useful to hire another company for this purpose, which will develop the entire security system. It is also worth pointing out that regardless of the choice of method, it is also worth following the latest reports in this regard.

This discourse was *intended* to identify factors determining the security of information in the *supply chain management process in companies operating in international markets.*

The following specific objectives are complemented by these issues:

a. *Identify areas that are particularly important for information security.*

b. *Comparative analysis of risk counter-threats in relation to possible costs arising from weaknesses in the information management process.*

c. *Identify elements that need to be changed along with a counter-measure proposal for identified threats.*

d. *Create recommendations to improve the processing process of information in management in the international supply chain.*

Choosing this topic is not accidental, because the author himself works in an enterprise that operates on the international market. He therefore knows the issues of logistics activities, but also the acquisition of the necessary products for activities in foreign markets.

At work, it was also decided to put in place certain research problems. These, in turn, are divided into a major research problem (referring directly to the topic of work) and detailed research problems. Therefore:

The main research problem is as follows:

What are the factors determining the security of information in the supply chain management process in companies in the metal industry operating in international markets?

Detailed research problems:

a. *What are the areas particularly important for information security?*

b. *What costs do you have to rely on the costs of misconduct in the information management process?*

c. *What elements require changes in the area under investigation?*

d. *How can I counteract identified threats be addressed?*

In response to the above, hypotheses were established. These point certain assumptions of the researcher and therefore indicate the expected effect of the study. Therefore:

The main hypothesis is the assumption:

Ensuring the security of information in the supply chain process management system reduces the risk to businesses and facilitates the meet of current market requirements.

In turn, the specific hypotheses are:

a. *Information security disorders in the supply chain management process can cause irreversible negative consequences for the company.*

b. *The right level of security of information collected in the company's resources facilitates the supply chain management process.*

c. *The right level of security of information collected in the company's resources increases the credibility of the company in the eyes of customers and cooperating companies and thus improves its competitiveness in the market.*

d. *The appropriate level of security of information exchanged between entities in the supply chain is necessary to maintain the mutual credibility of the relationship between the participants in this process and aims to ensure the continuity of the conduct of the subjective activities.*

In order to verify the above assumptions, it became necessary to carry out certain studies. These were carried out in three groups of subjects. One of them was entrepreneurs who introduced technological solutions. The second group were entrepreneurs only innovating this kind of innovation. The last group was created by entrepreneurs not intending to introduce them. This allowed you to get to know different opinions in the scope under consideration. The author wanted to collect opinions in equal groups. Nevertheless, the opinions of 260 respondents were finally gathered. Therefore, the study used a diagnostic survey, an AHP method and an interview. This allowed you to verify the most important issues several times.

With regard to the above, it should be borne in mind that four chapters are made up of this discourse. Each of them raises different issues, but only by analyzing them in their entirety can be finally verified the interesting aspects for the author. It is therefore possible to implement these methodological issues.

Therefore, the first chapter was intended to indicate the specificities of the management and supply chain. First, it was determined by the same connection and the objectives pursued by it. These issues cannot be discussed if the aspects in the scope and the integration, as well as the digitization and supply chain, are further addressed, which was further complemented by the indication of the technologies supporting the supply chain. Therefore, it is considered that in this chapter all concentration is directed at the supply chain and the scope of its operation. This is an introduction to interesting issues for the author.

The second chapter of the considerations was subjected to the characteristics of the information society in the context of the management. This is further combined with the specifics of management. However, these issues have yet to be addressed by another important issue for this discourse, namely the indication of the safety application for e-functioning. It was the dissemination of the Internet that has increased interest in e-functioning, which currently conditions for market competitiveness and the response to the modern needs of customers.

Chapter three is a description of the data risks. These issues somehow combine the considerations of Chapter one and the second. Therefore, aspects of the rules, traditional documentation and electronic documentation were addressed. On this basis, it describes acceptable possibilities for protection. Nevertheless, this level focused only on the theoretical dimension. This is important because the regulations themselves are too small range of action. They must therefore be further complemented, as a small range of activities can be a problem for further activity and result in difficulties in functioning.

Chapter four presents the results of own research in the field of security and data in the supply chain. However, these actions began by establishing methodological issues in the research carried out. Further presented the specifics of the supply chain of the entities studied. It was then focused on the information that companies manage. Later in the study, it was checked what of the policy holders and the data are used in each area in selected examples. Against this background, in turn, the n-language data management model was developed to meet your current needs.

The work ends with a summary, bibliography and an annex.

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