

FEEDBACK AND LOGISTICS CONTROLLING

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Abstract: The following things led to that the feedback, the supervision and improvement of the processes have become more pronounced: continuous rise in the importance of logistics; increase in complexity of its content; its activity becoming more complex. These activities are necessary for the optimum information supply. The intensification of market competition requires the corporations to possess exact and up-to-date information about their activities. Complexity of the logistics system presumes a parallel application of an effective feedback, supervision and management system simultaneously with the given logistics system. The indispensability of logistics is also proved by the fact that it can be found sporadically (in the form of logistics departments) or in a complex way in case of each organization. The logistical approach means a huge support in the management since it contains the complexity, the handling as a unit in order to ensure a harmony of the different corporate departments and part activities. In addition to the professional application of a logistics system, there is an opportunity to coordinate the relations inside an organization as well as between the organizations and to handle them as a unit. The sine qua non of the success of logistical processes is a harmony of the devices applied. The controlling system is a device for feeding back the processes of a corporate system. By means of the checkpoints intercalated into the processes, the logistics controlling provides information for the leadership which contributes even more to the complex approach of logistics system. By dint of the logistics controlling, the monitoring and coordination of every logistical part activity become possible with the help of information supply ensured by the logistics controlling. The logistics controlling reviews, assesses and coordinates; these activities have an effect on the cost and income management. Its reason is to be searched in the built-in checkpoints which allow a retrospection of the results of corporate processes, if necessary, a formation or improvement of the processes. The cost and income management includes the most critical points of the operation of enterprises since it can be posited that, despite the dissimilar activities and management of organizations with different profiles, the common interest of every organization is to reach the better results, and with it, the higher profit and indeed to maximize it as well as to reduce or minimize the costs related to the activities. The simultaneous application of a logistical system approach and controlling even more allows the control, if necessary, a formation and development of the processes. In the life of corporations, these activities are able to appear as a tool increasing the competitiveness, efficiency. Summarizing the above, the reasons of applying the controlling system are the minimal possibility of errors and the opportunity for reaching the maximum profit which are outcomes from the information supplying, leading and coordinating functions of the system. I have carried out an empirical research regarding the following questions. What opinion do the organizations hold on the significance of feedback? How are their activities influenced by the

application of a logistics controlling system or the lack of it? Have the organizations experienced an improvement in their economic results thanks to the feedback and the accurate information supply? What areas have been affected by the introduction of a logistics controlling system?

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1. General Introduction

The elaboration of a system contributing and supporting a well-functioning, smooth and effective management is indispensable in our current world where the present and future, the success and fiasco of the firms and corporations are determined by the market and the competitive situation evolved there. A benefit of the logistics system is the system approach which handles each organization as a complex, according to it, organizes their activities in a merged way and as a unit.

In addition to the continuous rise in the importance of logistics which involves that the content complexity increases and the activities become more complex, the feedback, the supervision and improvement of the processes also become more and more important in order to contribute to the supply of current information. An accurate and up-to-date knowledge about the organizations and their activities enables the corporations to remain in the market.

Basis of the successful operation of a logistics system is the accurate and up-to-date knowledge of the organizational processes, the documentation and review of their results. Access to information i.e. the feedback is necessary for the tasks mentioned before.

The controlling system is developed for the feedback of activity, results of a corporate logistics system. By means of the checkpoints intercalated into the processes, the logistics controlling provides information for the leadership in order to increase the complex approach of logistics system. The simultaneous application of a logistical system approach and controlling even more allows the control, if necessary, a formation and development of the processes. In the life of corporations, these activities are able to appear as a tool increasing the competitiveness, efficiency.

The difficulty of information management is caused by the fact that it is not enough to generate information but data with appropriate contents shall be created. Namely, we in vain have information without useable data contents because we cannot apply them since they answer not the current questions so they become unnecessary. An attentive and professional elaboration of the feedback points of a controlling system makes it possible to form such information which has a correct data content and can be used effectively (Fenyves, 2013). The adequate information and the feedback related to the organizational operation lend an enterprise flexibility and easier adaptability (Tarnóczy et al, 2011).

According to Maczó et al. (2001) the logistics controlling helps to manage the logistical activities by performing actions of logistical planning, plan-fact analysing and information-providing. However, as the logistics permeates the organizations, the needs of departments shall be handled and reached by squaring them with the total needs of corporation.

By applying the logistics controlling system professionally, we can get those data having proper content which present an opportunity to respond to the market changes rapidly, to comply with them i.e. to fit in a new environment quickly.

Nagy et al. (2010) thinks that the controlling can provide a consonance between the environment, strategy and structure of an organization. By means of this, the planning, reporting and information supply are organized into an integrated system. Hanyecz (2006) presents the controller's role in the process in such way that the controlling shows itself as a cooperation of the leader and controller. Since a system vainly operates well if the "system administrator" is not appropriate, the efficiency will go to waste.

The aim of logistics controlling is to possess a permanent economic control among the costs and incomes as well as the planned and fact data of them, to obtain and analyse those decision-preparing information being necessary and essential for the leadership which contribute to the success of corporate activity

The goal of my research is to collect such information which helps to present the results of the operation of a feedback system built on the corporate logistics and to prove that the application of a logistics controlling system contributes to the optimization of corporate operation.

2. Subject of Research

The basic multitude of my research has been constituted by such organizations whose activities are closely linked to the logistical processes as well as the controlling, including the logistics controlling system, has an important role within the organization.

The examination sample contains, according to distribution in the national economy, enterprises located in the agriculture, industry and service-providing sector as well.

Thanks to the complexity of logistics, it is present in each of the national economic sectors; therefore I have passed the questionnaire edited by me to 202 enterprises. In case of the classification by size, I have applied those size categories which are used in case of statistical statements and worked up on the basis of the headcount of employees:

- 0-9 heads micro-organization,
- 10-49 heads small-sized enterprise,
- 50-249 heads medium-sized enterprise,
- 250 heads < big enterprise.

Enterprises participating in the research have emerged from every group of the size categories. One of the viewpoints for choosing the basic multitude was that the organizations should get into the sample irrespectively of their size, methodized during the processing.

In order to form a sample being relevant from viewpoint of the examination, I have examined the organizations' size as well as nature of their main activities together and I have obtained the following results illustrated by Figure 1:

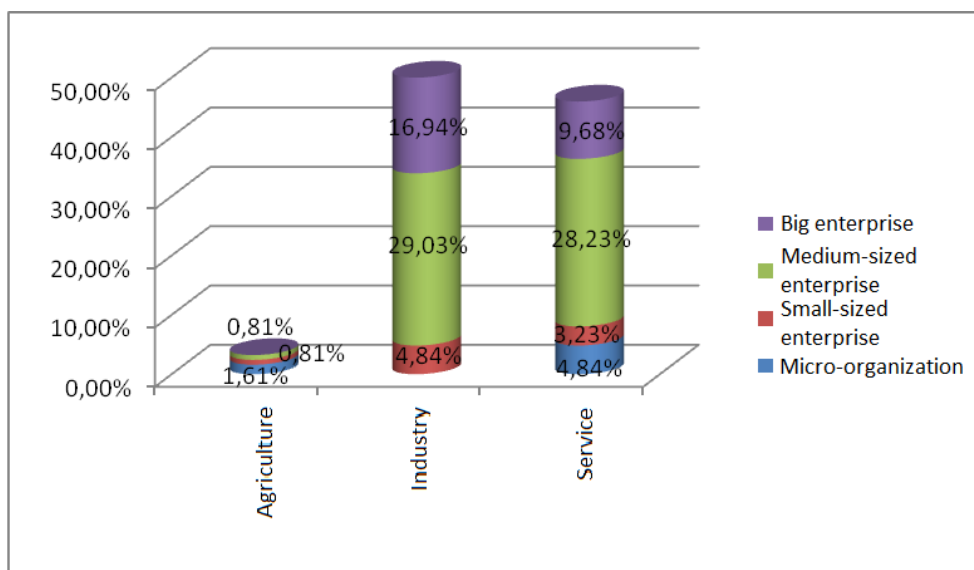


Figure 1: Classification of the examined organizations according to size and nature of main activity

Source: Own editing based on the research

Considering the Figure 1, it can be unequivocally stated that the vast majority of the organizations can be found in the industry (50.8%) and the service-providing sector (46.0%). And considering their size, the medium-sized enterprises (57.2%) and big enterprises (26.6%) dominate.

Due to their rate being irrelevant from viewpoint of the examination, I remove the organizations working in the agriculture from the sample and I continue to deal with the organizations located in the area of industry and service-providing, including the medium-sized and big enterprises.

3. Method of Research

The method of my research work was of empirical and theoretical character. My methods of examination can be divided into three groups:

- Theoretical research, by means of which I have established the examination of the subject-matter;
- Practical experiences obtained during the research as well as the processing and assessment of my results;
- Theoretical background as well as comparison of the practical experiences.

My examination was based on the questionnaire drawn up by me. The applied questionnaire embraces several topics as well. I have worked with both open and closed question. In case of certain questions, a given respondent could mark more than one alternative.

The recording of questionnaire has been performed via Internet or within the framework of personal interviews. I have attached invitation letters to the questionnaires sent by e-mail via Internet. I have collected 87.9% of the questionnaires by means of Internet while in case of 12.1%, a personal interview has been performed. The low measure of personal interviews is explained by the

territorial deconcentration of the companies. Choice of the participants in research was based on the way mentioned before, their logistics activity. According to Malhotra (2002), the questionnaire-based research shall meet three requirements:

- The questions shall be formed in such way which the interviewed person is able to and willing to answer;
- Interest shall be aroused, the respondent shall be prodded to complete the questionnaire;
- Accurate answer options shall be given in order to minimize the response faults.

According to opinion of Rubin et al. (2010), the questionnaire-based survey can be advantageous because it gives an opportunity to examine a numerous basic multitude, to analyse in detail, it is well-generalizable – depending on the subject. The aim of my research was to prove that the feedback i.e. the application of logistics controlling has a positive effect on the management of organizations and it provides an opportunity for reduction of the costs.

4. Results of Research

More than 80% of the examined organizations apply a controlling system. Each of the appliers have agreed in that introduction of the system was an advantage for the organizations. However, not every organization has experienced improvement in the cost and revenue data by applying the controlling system. Considering the ones applying the controlling system as 100%, less than half (44.3%) experienced a positive change in their cost and revenue data while 55.7% of the users did not experience a change of this kind in results of the management. Table 1 illustrates this fact.

Table 1: Effect of the application of controlling system in the examined organizations

Experiences regarding the application of controlling system			
Ones which experienced improvement			Ones which did not experience improvement
44.3%			55.7%
Nature of improvement			
Revenue growth	Stock value reduction	Cost reduction	
88.4%	58.1%	65.1%	

Source: Own editing based on the research

The above-described facts may include a contradiction but, by a more thorough examination of the organizations, we can observe that the application of a controlling system does not necessarily appear in the financial results immediately. Initially, after introducing the system, a step forward can be experienced “only” in operational practices of the organizations and positive financial implications will join later.

In case of the organizations under examination, the most characteristic effects of logistics controlling were as follows:

- quality of the performance of logistics has improved as a result of the feedback from the application,
- functioning and operation of the enterprises has become more cost-effective,
- the organization has been adapting better to the market changes since the beginning of application

The logistics controlling has a complex effect on the applying organizations as it is presented by Table 2.

Table 2: Effect of the logistics controlling on the organizations by activity area

Description	Revenue growth	Stock value reduction	Cost reduction	Ones which experienced improvement
Industry	60.5%	44.2%	48.8%	74.4%
Service	27.9%	14.0%	16.3%	25.6%
Total	88.4%	58.1%	65.1%	100.0%

Source: Own editing based on the research

74.4% of the organizations experiencing an improvement in connection with the application of logistics controlling system are active in the industrial sector while 25.6% of them operate in the service-providing sector. Organizations involved in the examination have experienced positive changes in three particular areas confirming the improvement by numbers. A revenue growth has been realized in 88.4% of the cases, a stock value reduction in case of 58.1% and cost reduction in case of 65.1%. Based on the distribution of these results occurring in the area of industry and service-providing, we can say that the logistics controlling has a bigger effect in case of the organizations located in the industrial sector and specifically dealing with tangible products than in case of the enterprises carrying out service-providing activities.

Measure of the effect of logistics controlling is shown by Table 3.

Table 3: Measure of the effect of logistics controlling by activity area

Description	Revenue growth	Stock value reduction	Cost reduction
Industry	5-10%	20-25%	10-15%
Service	10%	15%	10-15%

Source: Own editing based on the research

According to the data of Table 3, we can make the following statements. Extents of the positive changes helped by the logistics controlling are different in each sector of the economy. According to the content of this table, once more the organizations operating in the industrial areas have realized greater revenue growth (5-10%) as well as stock value reduction (20-25%). Workers in the service-providing sector have also experienced an improvement but its extent lags behind the industry.

Extents of the experienced improvements are equal in one area, both sectors have realized a 10-15% cost reduction by means of the application of logistics controlling. Reduction of the costs has come forward in the extent of direct variable costs linked to the production, activity. The costs of logistics account for approximately half of the aforementioned costs (52-55% in the industry, 40-45% in the service-providing sector). This means that the positive effect of logistics controlling on the logistics activity greatly contributes to the organizational cost reduction.

5. Conclusion

It becomes increasingly clear for the managers that the rise in importance of the logistics, its system "permeating everything" as well as the maintenance and occasional increase of its effectiveness cannot lack the feedback to the managers as well as the related supervision.

The major expectation of our world developing rapidly and being in a constant competition as well as the involved markets from the organizations (aimed at remaining in the market competition) is to ensure the transparent management as well as to maximize the profit and reduce the costs according to the environmental conditions.

In order to fulfil these two targets, a transparent management becomes indispensable, the results of which are continuously reported to the leadership in consequence of the periodic feedbacks.

My examinations have verified that the vast majority of organizations involved in the research apply logistics controlling systems which greatly contributed to the

reduction of their costs as well as their stocks by means of its continuous information supply and ensuring a possibility to intervene thereby. Its effect is complex and affects not primarily the costs. The system forwards the enterprises to the reduction of their costs and increase of their revenues by way of optimizing the processes of an organization.

According to the results, the application of a logistics controlling system greatly establishes the attainment of an effective management and provides a significant support in order to reach the long-term success.

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