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MECHANISMS PROVIDING FOR SUSTAINABLE DEVELOPMENT OF LOGISTIC ACTIVITIES OF AN ENTERPRISE

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This article deals with the description of mechanisms providing for sustainable functioning of logistic activity of an enterprise. The work highlights a possibility of developing business continuity scheme with respect to logistic activity of an enterprise – at the expense of diagnostics of alterations affecting the status of the system. It should be pointed out that alterations affecting the activity may be both of negative and positive nature. Special attention should be paid to positive changes where attempts aimed at implementing some improvements intervene in the sustainable process of functioning and may result in loss of stability. In the process of stability analysis, the extent of loss of control is revealed if the parameters go beyond the minimum standards. Eventually, the circumstances affecting stability of logistic activity performance are revealed, and the degree of their influence upon the stability is estimated. The level of loss of stability is examined through estimating the loss of enterprise value.

As a result, some compensatory mechanisms are developed, enabling one to respond timely and to restore the sustainable functioning of logistic activity. Practical usage of that technique makes an enterprise ready both for negative impacts from external environment and for introducing some in-house improvements.

Keywords: stability, interrelations, value of business

1. Introduction

Modern management is an open business system functioning in the context of a large number of various interrelations. These interrelations are both internal ones connected with the enterprise management structure, and external ones describing the enterprise's interrelations with customers, suppliers, partners, etc. All of the above-mentioned aspects in the aggregate increase the complexity of managing enterprise, resulting in loss of sustainable functioning in a number of cases – even if the impacts rendered upon the system are insignificant.

On the other hand, functioning under the circumstances of a quickly changing external business environment makes managers to respond to deviations quickly, which inevitably leads to loss of stability. As a result, recovery of stability takes place under force-majeure conditions. Due to the circumstances described above, the availability of mechanisms ensuring sustainable functioning of enterprise becomes increasingly important. Development of such mechanisms would allow one to pass from disaster recovery over to a clear-cut system of pre-emptive impacts enabling one to respond timely if some deviations in activity take place. Furthermore, using such an approach would allow one to save resources necessary to recover stability, and would also enhance the business readiness to changes.

2. Sustainable Functioning of Enterprise

Within the context of this work, the term "stability" shall be construed as the reproduction of the system's property of symptoms-based coincidence prior to and after the changes brought about by certain factors. The sustainable development of enterprise, in its turn, is ensured due to the process improvement based on implementing the changes. Therefore, to ensure a quick and adequate response to changes affecting operation of an enterprise, managers should have a profound and comprehensive understanding of business processes of the enterprise, which would allow them to recover the required properties of the business system without any loss of stability and also enhance the business readiness to changes.

To achieve a definite level of stability, the enterprise should set up the required ranges within which the functioning deviation would be within tolerable limits. Therefore, a constant monitoring of the enterprise status allows one to reveal timely any deviations occurring in the enterprise activity. This approach implies not only working out reciprocal measures but, first of all, the enterprise's readiness for making timely and appropriate responses to occurring deviations in its activity.

The next important aspect related to the investigation of stability of an enterprise is revelation of factors affecting the loss of stability. In process of functioning of an enterprise, its activity is subject to the influence of impacts of various origins. Investigation and systematisation of these impacts helps one better understand their nature and estimate the level of their influence upon the stability of the enterprise activity and the level of their threatening that stability. All the impacts can be provisionally split up into two classes of impacts, differing by the level of their identification and the scale of their manifestation [1]. This classification has been made by analogy with the works by Walter Schuhart dedicated to classification of errors for engineering systems (See Table 1).

Table 1. Errors of the first and the second type

Type of errors	**Interpretation**	**Actual reasons**
Errors of first type	The errors are caused by some special sole causes	Actually, nothing special or exceptional has been observed. These errors were caused by the usual effect of the system, its random deviations caused by general (usual) reasons.
Errors of second type	Interpretation of the same errors, inaccuracies, and deviations as a manifestation of general reasons	In effect, these errors were defined by some particular (special, specific, exceptional) reasons.

Let's consider the importance of understanding the errors of the 1st and 2nd type when passing over from an engineering system to the business system.

A very important aspect that should be understood is that business is an open-type system whereby it is subject to the influence of a large number of external factors, which makes the system more complicated and less predictable as compared to an engineering system. As a consequence, the importance of understanding the nature of errors only increases, calling for a more profound investigation and understanding. As a result, one can understand the nature of errors only under the condition of a profound understanding of all the interrelations connected with the activity of an enterprise – both of in-house and external character.

The importance of understanding the nature of errors is connected, first of all, with the fact that managerial staff is frequently apt to taking corrective actions immediately to neutralize the consequences of the errors. As a result, due to a wrong interpretation of errors connected with customary malfunctions in the system operation, an intervention into the stable and efficient process takes place, changing the system's business architecture.

There is some other danger behind it, when errors of exceptional character are taken for customary malfunctions in the system operation. As a result, the processes calling for serious corrections continue to function according to old regulations, and, in the course of time, the enterprise starts facing an emergency situation which must be eliminated immediately. However, since these processes claim for a serious intervention, the business system loses its stable condition for a long time [1].

The next important aspect that should be understood is that loss of stability may occur in the process of improving the enterprise's activities, since the improvements introduced are often an intervention in the stable process. Therefore, there occurs a trade-off of continuous improvement of activity against intervention in stable process, – that may lead to loss of stability.

Under the currently existing fast-changing conditions of the external environment, understanding of the importance of sustainable development gradually comes to the fore, since a customer operating within instability environment and oriented towards a long-term cooperation will naturally select enterprises featuring a higher stability level, which will allow them to provide for continuous and uninterrupted operation. Therefore, managerial staff should not focus on failure recovery only ("suppress fire") – since that will not promote the development and the growth of the enterprise [2]. Neglecting the stability enhancement problem will eventually result in ever-increasing situations of the "suppress fire" type at the enterprise, and each time it will become ever more difficult to handle such situations. On the other hand, one of the main tasks faced by managerial staff to-date should become the provision of continuous and uninterrupted customer-service operation. It is exactly such a stable work that would attest to a high stability level of enterprise and its ability to respond expeditiously to the occurring adverse effects.

3. Logistic Activity of Enterprise

The term “logistics” stems from the Greek word *logistike* that means “brainwork, computation, expediency”. The ancient Romans construed this term as “food distribution”. In Byzantine (Eastern Roman) Empire logistics was deemed to be a means of organizing munitions and army control. For historical reasons, logistics as a practical activity developed due to military arts. For example, in the First Millennium A.D., military lexicon in a number of countries used to connect logistics with transportation management, army armament, planning and supplying troops with material resources, store holding etc.

There is a plenty of definitions of the concept of logistics. The broadest interpretation construes logistics as controlling all kinds of flows: material, traffic, power, financial flows etc.), existing within the framework of a business system. Control of any object implies, first of all, taking a decision and then its practical implementation. To be able to take decisions, certain knowledge is necessary (science), – while to implement decisions taken some specific actions should be taken (activity). To that end, logistics can be considered as science, on the one hand, – and as economic activity – on the other.

Logistics as a branch of science develops scientific methods and mathematical models allowing one to plan, monitor, and control transportation, warehousing and other material and intangible operations performed in the process of:

- bringing staples and materials to industrial enterprise;
- the intra-factory processing of staple, materials, and semi-finished products;
- bringing end products to customer according to customer’s requirements;
- transferring, storage, and handling of the corresponding data.

Logistics as economic activity is a process of controlling movement and storage of staple, materials, semi-finished products and end products across the logistic chain from the primary source of staple to end user, – and the data exchange connected with those operations.

The logistic activity investigated in this work will be considered from the standpoint as suggested by Igor Ansoff in 1969 in his book “Business strategy”. Igor Ansoff is known as the Founding Father of the concept of strategy. The approach suggested by him defines logistic activity as a process of turning resources into products (Fig.1).

Despite logistic activity being exercised at operational level, it is very closely connected with other levels of management such as tactical and strategic ones. This is related to the fact that, in order to ensure a successful implementation, logistic process poses some requirements to other structures and receives from them ready-made solutions on prospective functioning. The performance quality of logistic activity depends on how synergic that system is.

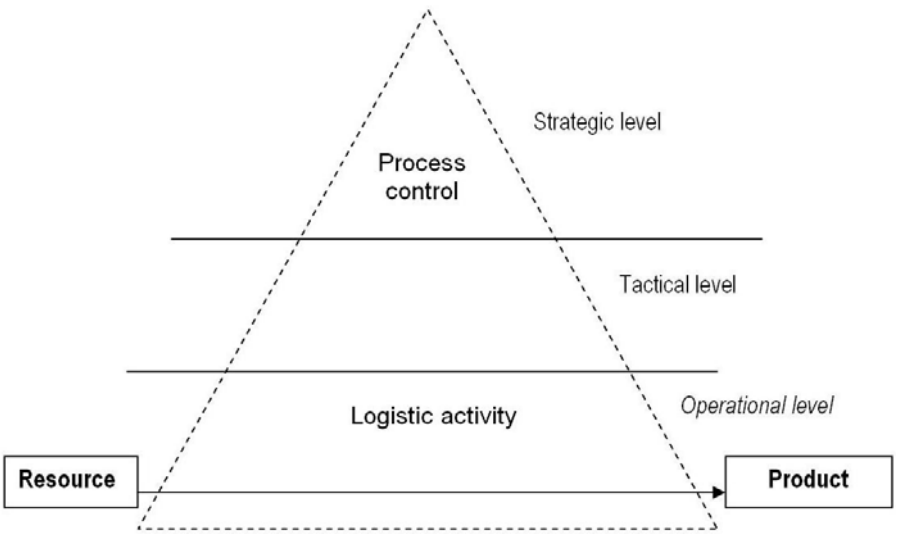

Figure 1. The concept of logistics activities

By transforming Ansoff’s diagram, we shall now examine end-to-end logistic process going along the logistic chain – starting from the initial supplier of resources through all the intermediary stages up to the products’ getting to end user. This logistic chain can be presented with the help of the reference model of the logistic chain SCOR (Fig. 2). Supply Chain Operations Reference model (SCOR) was developed and is currently being improved by the international Supply Chain Council (SCC) as an inter-branch

standard for regulating supply chain management. The SCOR model was developed to give companies a chance of communicating in the language of common standards, to compare themselves with competitors, and to learn from companies operating in the same field or in other fields.

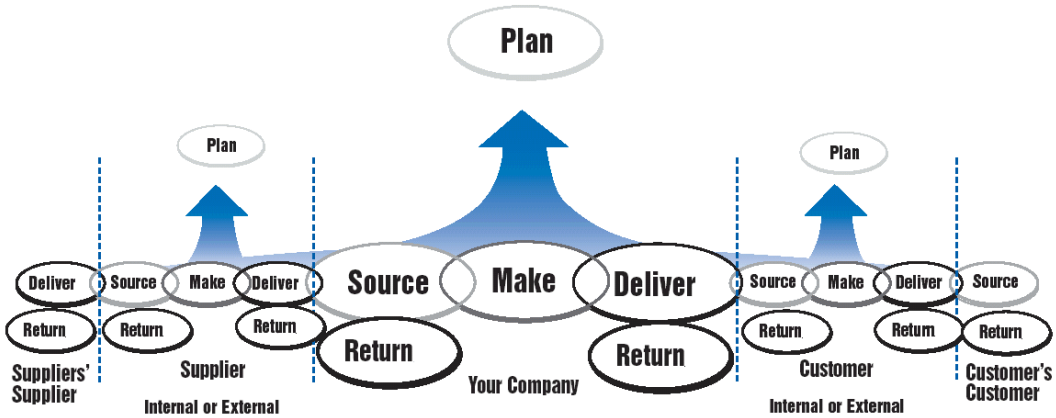

Figure 2. Components of the supply chain

As it is seen on Figure 2, the full logistic chain consists of five main kinds of activity: Plan, Source, Deliver, and Return. Let's consider each of the stages of the logistic chain more in detail [3].

In process of the activities related to purchasing, key elements of purchasing managements are defined. Various procedures are determined like estimating and selecting suppliers, checking quality of supplies, entering into contracts with suppliers etc. All the procedures connected with receiving materials are considered: acquisition, reception, transportation, incoming inspection, organization, storage etc. Attention should be paid to the fact that, to ensure a high-quality running of that activity, it should be based on user's requirements to end product, added to the requirements posed to staple and materials.

The production-related activity includes all the elements connected with technological and production cycle. At that stage, all the production operations, quality control, packing, and storage of ready-made products are exercised. In process of running that activity, some technological changes and deviations are possible; production facilities control is exercised, production schedules are compiled etc. This activity is run based on the requirements to product, which, in their turn, shape the requirements posed to selected technology and the entire production cycle.

On finishing the stage connected with production, it is followed by the stage connected with products delivery. Within the framework of that activity, order management, warehouse and transportation control is exercised. Order management implies the establishment and registration of orders, shaping value, and selecting configuration of commodity. This field also includes the establishment and running of customer base, handling the database on commodities and prices, and debtors and creditors control. Warehouse control implies selection of commodities and listing them on a single order, packing and shipping commodities for consumers. Transportation control implies haulage control. All these kinds of activities will be governed by requirements to delivery quality – such as speed, accuracy, timeliness of delivery, etc.

The return of defective and excessive products and those to be repaired is exercised within the framework of the return-connected activity. This activity may become necessary at any of the stages of logistic chain. For example, at the "source" stage a necessity of goods return may occur if any discrepancies in the number or quality of commodities and materials delivered by suppliers are found. On the other hand, the "deliver" stage also implies the necessity of return or improvement if customers reveal some discrepancies.

The planning-related activity is one of the key aspects in logistics. The scope of that activity implies determination of sources of supply, generalization and ranking of priorities, planning reserves, definition of requirements posed to distribution system, setting up volumes of production, supplies of staple, materials, and end products. At that stage, planning of all kinds of resources (human, production, and financial ones) is performed; besides, at that stage decisions related to enterprise management in general and logistic activities in particular are taken. Exactly at the planning stage, all the events connected with the definition of the required stability level should be arranged with respect to all stages of the logistic chain. Moreover, the planning stage should be connected with tracing ways of achieving sustainable performance and defining the steps to be taken to recover stability if any deviations in the activity occur.

On having examined the specific features of logistics activity, let's pass over to the examination of the procedure of its research. The essence of logistic activity will be disclosed through the investigation of its content and properties. Since any research is based on a problematic situation to be resolved – initially, the object and the subject of research should be defined.

There exists a large number of definitions of object and subject of research. Within the framework of this article, the following definitions will be accepted as presented in Table 2.

Table 2. The object and subject of research

Object	Subject
Object is a process or a phenomenon giving rise to problematic situation and taken by researcher for studying.	Subject is what is located within the framework and the limits of the object.
Object is the part of scientific knowledge dealt with by researcher.	Subject of research is the aspect of the problem through investigation of which, researcher cognizes the integral object, singling out its main and the most essential properties.

Therefore, object and subject of research – as scientific categories – correlate as general and particular. Within the framework of this article, the object of research will be the provision and organization of logistic activities, while the subject of research will be the description of the provision and organization of logistic activities. In other words, the subject of research is the business process describing logistic activity. Having defined the object of research, we can present the procedure of its investigation as a scheme (Fig. 3).

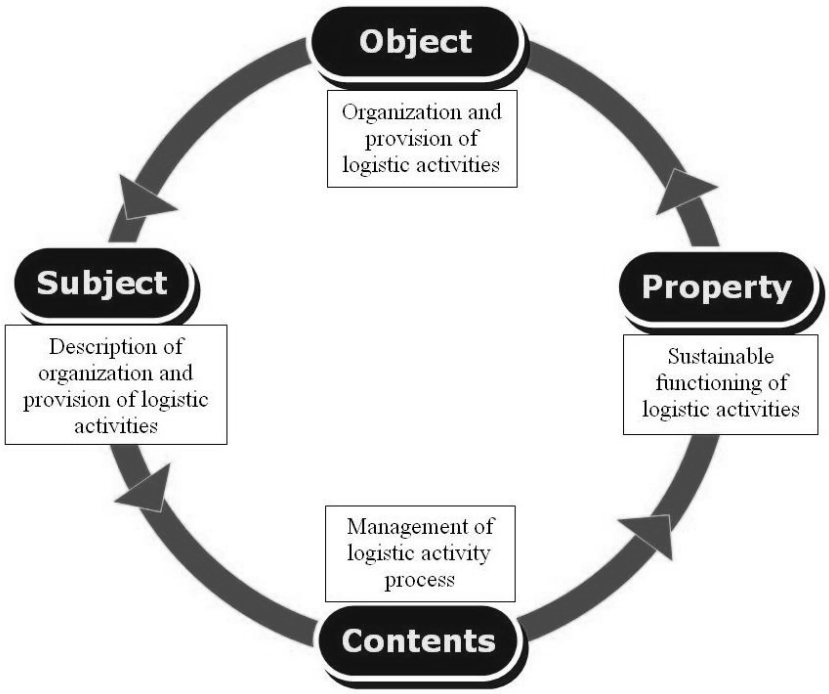

Figure 3. The procedure of studying the object of investigation

The procedure will be run as follows. At the first stage, a transfer from the object of research to the subject of research will be made. This step is necessary to provide for the cognition of the object of research through singling out the subject. Exactly at this stage, description of the organization and the provision of logistic activity should be made. The second stage of the investigation implies a transition from the object of research to learning its content. As a result, it becomes possible to make a transition from the description of logistic activity to managing the process of logistic activity. At the third stage, a

transition from the contents of the subject of research to learning its properties is made. As a result, sustainable functioning of logistic activity is provided and the characteristics of object of research are made more precise – due to understanding of the content and the properties of the object of research.

4. Diagnostics of Stability of Functioning of Logistic Activity

This article suggests that company value should be used as a complex factor enabling one to estimate stability level. Any change in value will attest to fluctuation of sustainable functioning, irrespective of whether the value increases or disintegrates. The point is that even positive changes affecting the activity of an enterprise may lead to loss of stability.

This is because the company value should be construed as the company's ability to generate future cash flows. In a simplified version, the value can be defined according to the formula as follows:

$$\sum_{t=1}^{N} PV_t = \sum_{t=1}^{N} \frac{FV_t}{(1+d)^t}, \tag{1}$$

where: PV_t – the current value of cash flows;
FV_t – the future value of cash flows;
d – the discount rate.

After substituting the formula used for cash flow definition into the value calculation, the expression assumes the form as follows:

$$\sum_{t=1}^{N} PV_t = \sum_{t=1}^{N} \frac{\mathrm{Pr}_t + Dept_t - \Delta WCap_t - \Delta A_t}{(1+d)^t}, \tag{2}$$

where: Pr – net profit;
Dept – depreciation;
$\Delta WCap$ – additional investments into circulating capital;
ΔA – additional investments into the main assets.

Therefore, stemming from value equation, one can see a number of advantages of value as against other key indices of business. Through value monitoring, a company aims at increasing cash flows and its value in middle-term and long-term periods rather than making profit within a short-term period. Since profit is just a constituent part of a cash flow, checking profit does not provide for a full picture of the results of enterprise activity. Moreover, profit reflects financial result only, while under modern circumstances, the estimation of enterprise's capacity of opposing impacts from various factors comes to the fore. One more important aspect claiming attention is using cash flows discounting when estimating value. Such an approach takes into account time-related value of cash which is directly connected with investment risk level and functioning of enterprise [4].

Therefore, when value of business is used as a criterion for estimating sustainable functioning – we can assert that the estimation will take into account both quantitative and qualitative characteristics. The quantitative characteristics will be taken into account at the expense of calculating the value of cash flows and all of their constitutive parameters (profit, depreciation, investments into the main assets and the circulating capital etc.). Qualitative characteristics, in their turn, will be taken into account at the expense of calculating the discount rate which should reflect quality of management, investment risk, macroeconomic parameters, country exposure, etc.

In process of business value investigation, one can develop a hierarchy of factors affecting the cost value, and logically estimate each factor's susceptibility to changes. This approach allows one to reveal the level of value changing under the influence of each factor. As a result, there occurs a possibility of influencing the most sensitive parameters of the system when the system loses sustainable functioning – to reduce the time of recovering stability and bring the system to stable condition.

5. Working out Compensatory Mechanisms for Timely Response when Stability is Lost

Before we start describing the compensatory mechanisms, we should make it clear as far as basic notions are concerned – such as characteristics, factors, and changes in the system status, which stem from the definition of stability.

Any system, including a business one, is characterized by a variety of characteristics the number of which can actually be any and it will be connected with those tasks only that are faced by the system. In this respect, estimation of sustainable functioning implies that one has to select the most important characteristics out of the overall number of those – i.e. the ones that most fully characterize the system status.

Factors influencing the status of a business system can be divided into two groups: the external and the internal ones. The external factors are those affecting the system from the environment side – such as economic situation, competition, customers' demands, etc. The internal factors comprise changes in parameters of the system proper – like for instance, the internal business architecture, the interrelationship between units and participants of business activities, the technologies applied, etc. With respect to the system and its characteristics, the factors act as a reason for changes, while the changes proper – as an integral result of the effect rendered by the factors.

Since this article's framework implies that change in stability will be estimated at the expense of the enterprise's value level being changed, – a change in the system's status will be examined from the standpoint of affecting the magnitude of value. These impacts can be exercised by the following methods: 1) quantitative (Qn), 2) qualitative (Ql), 3) relative (Rl), 4) QnQl, 5) QlRl, 6) QlRl, 7) QnQlRl, – as well as 8) (I) – identical, which means lack of any changes and retaining the system in the initial condition [5]. The quantitative changes may comprise changes of the magnitude of a cash flow – such as investments, profit, contributions made into circulating capital (floating assets) and the main assets, depreciation, and other characteristics leading to those changes. The qualitative changes may comprise such ones that affect the magnitude of discount rate and will be connected with investment risk, quality of management, etc.

Therefore, having determined the nature of the changes, one can see that some anti-transformations are required to compensate for them – which will mean an increase or decrease of the value of characteristic as against its initial state; this will be able to reduce the current changes to identical ones. In the most common case, the number of such anti-transformations may be seven – exactly as many as the number of possible impacts on the system (Table 3).

Table 3. Kinds of possible impacts on the system

Kinds of changes	Qn	Ql	Rl	QnQl	QnRl	QlRl	QnQlRl
Responses to changes	-Qn	-Ql	-Rl	-Qn-Ql	-Qn-Rl	-Ql-Rl	-Qn-Ql-Rl

These mechanisms can be realized only provided that the system – in response to the transformation that took place – is capable of working out a respective anti-transformation reducing it to the identical one. At first, we shall assume for the sake of simplicity that the changes and the responses to them as presented in Table 3 are of opposite signs but have equal absolute values. The quantitative aspects will be considered below; so far, we shall believe that Qn (-Qn) = I (not only for Qn but for all the remaining kinds of changes). Since changes going on in the system may assume both positive and negative nature, – with the total number of possible changes increasing up to 64 – taking into account all possible combinations of the main transformations and their anti-transformations each by 8 (Table 4).

As it is seen from Table 4, any transformation inside the system has the corresponding anti-transformation capable of reducing any impact to the identical one. Therefore, Table 4 is a model of the system containing the full set of compensatory mechanisms, providing stability for the system. Of course, the system presented in Table 4 is the ideal one, but now we will consider some more real system as an example, which has an incomplete set of compensatory mechanisms.

In the common case, bringing the system to the stability status is possible not only through the respective transformation but also through a sequence of a few elementary transformations under the impact of which the system goes back to the status of stability. Let's examine an example where anti-transformation (-QnQl) is absent in the system to change the form (Qn-Ql); however, if the system still has a possibility of making transformations (Qn-Rl) and (-QnRl) – in such a case, formation of the following chain (Qn-Ql)* (Ql-Rl)*(-QnRl) = I, also leading to an identical result. At that, the sequence of transformations will be as follows: (Qn-Ql)*(Ql-Rl) = (Qn-Rl) and (Qn-Rl)* (-QnRl) = I. Therefore, it can be seen that even if the system is incapable of directly compensating for some individual forms of change – still there is a possibility of building up a compensatory chain that will lead to recovery of stability.

Table 4. All possible combinations of the main transformations and their anti-transformations

	I	**Qn**	**Ql**	**Rl**	**QnQl**	**QnRl**	**QlRl**	**QnQlRl**
I	I	Qn	Ql	Rl	QnQl	QnRl	QlRl	QnQlRl
-Qn	-Qn	I	- QnQl	- QnRl	Ql	Rl	-QnQlRl	QlRl
-Ql	-Ql	Qn-Ql	I	-QlRl	Qn	Qn-QlRl	Rl	QnRl
-Rl	-Rl	Qn-Rl	Ql-Rl	I	QnQl-Rl	Qn	Ql	QnQl
-Qn-Ql	-Qn-Ql	-Ql	-Qn	-Qn-QlRl	I	-QlRl	-QnRl	Rl
-Qn-Rl	-Qn-Rl	-Rl	-QnQl-Rl	-Qn	Ql-Rl	I	-QnQl	Ql
-Ql-Rl	-Ql-Rl	Qn-Ql-Rl	-Rl	-Ql	Qn-Rl	Qn-Ql	I	Qn
-Qn-Ql-Rl	-Qn-Ql-Rl	-Ql-Rl	-Qn-Rl	-Qn-Ql	-Rl	-Ql	-Qn	I

Compensatory chains may consist not of two or three links only as it is shown in the above-mentioned example, but they may be longer, of course, which also leads to the required result. However, it must be borne in mind that the longer the compensatory chain is, the more time the system will require to compensate for changes. That's why the system recovery time claims careful attention, too. Otherwise, a situation may occur when the system disintegrates before it has had time to respond [5].

The general algorithm of stability recovery is presented on Figure 4.

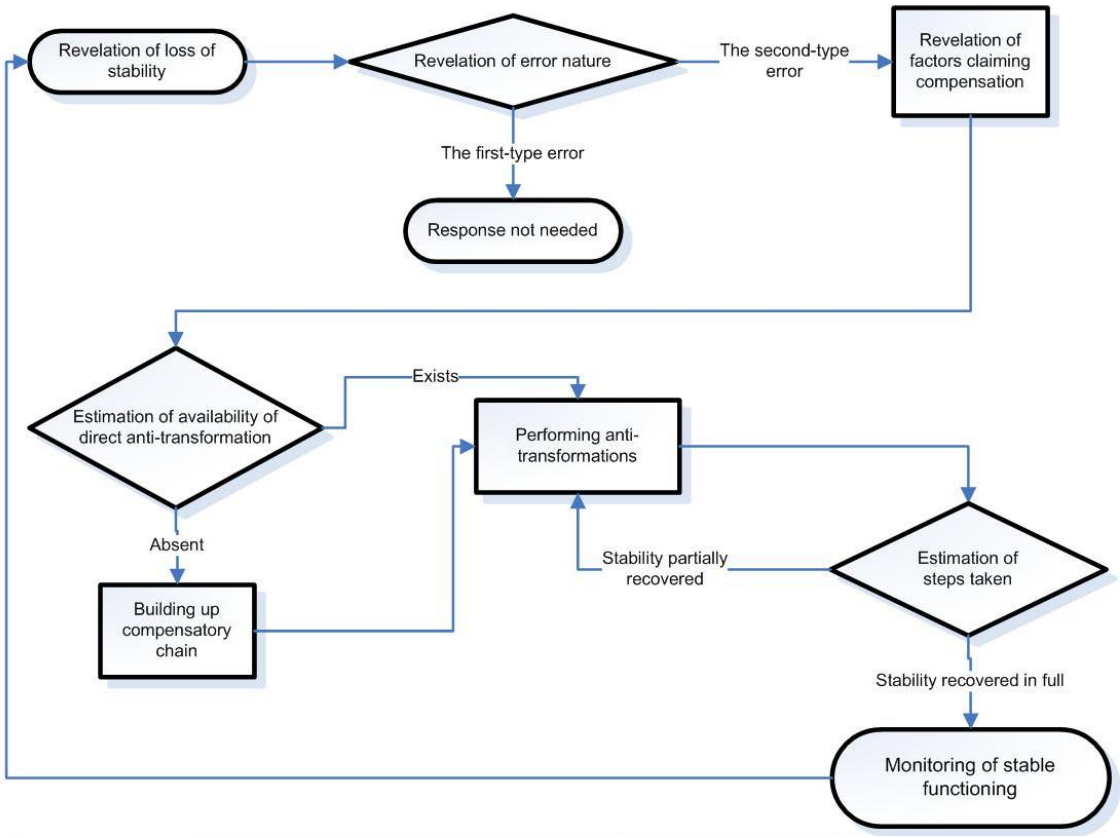

Figure 4. The algorithm of stability recovery

The above-stated algorithm is implemented as follows. If any loss of stable functioning, determined by a change in the enterprise value, is revealed – the nature of those changes should be found out first. If the changes are connected with the first-type errors, the system does not claim any corrections, because otherwise the steps taken may imply intervention in the stable, smoothly running process. However, if the changes are connected with the second-type errors – one should reveal factors affecting change in value and claiming for compensation. After that, the possibility of direct anti-transformation of

the revealed factors should be estimated. If direct anti-transformations are available – taking compensating steps is possible at once. If direct anti-transformations are missing – then, initially, a compensating chain should be built up which would enable one to recover the lost stability; – and only after that, anti-transformations should be conducted. On having performed compensating steps, their efficiency should be estimated. Therefore, if stability has been recovered in full, any additional anti-transformation cycle may be required only partially. This situation may occur under real circumstances when transformations and their anti-transformations are not equal-in-magnitude. In such a case of incomplete compensation of initial effect, residual variation may also be considered as a disturbing factor which can be compensated quantitatively – by repeated the anti-transformation cycle as many times as is required.

6. An Example of Applying Compensatory Mechanism

As an example, let us examine the situation implying a reduction of shipping volume at a transport enterprise. As a result, considerable reduction of the cash flow value takes place, leading to the collapse of the enterprise value and, as a consequence – to loss of sustainable functioning. To recover stability, managers start finding out the nature of the deviations that have occurred. If managers decided that those changes were connected with a change of the market situation, and just held hand in response – type I error would be made. In the given example, the actual reasons of the deviation that has occurred are the following:

- low labour discipline resulting in failure to meet the deadline of supplies;
- a rapid turnover in staff leading to insufficient qualification of the staff;
- launching an aggressive advertising campaign by business rivals, attracting new customers to them and affecting the revenues of the enterprise in question.

Therefore, since the deviations that have occurred are connected with a second type error – they claim some anti-transformations to be made in order to eliminate them. As one can see from the analysis of the reasons for loss of stability, the deviations are both of qualitative and quantitative nature. Consequently, the deviation has the form as follows (-Qn-Ql). Let's assume that there is lack of direct anti-transformation (QnQl) for this change, and a possible compensatory chain should be developed. There is a possibility of making transformations (Ql-Rl) and (QnRl), which makes it possible to build up the compensatory chain as follows: (-Qn-Ql)* (Ql-Rl)* (QnO)=T, with the chain enabling one to recover the lost stability. The implementation of this compensatory mechanism is exercised as follows. The transformation (Ql-Rl) is connected with an improvement of qualitative characteristics of the enterprise – such as client confidence, risk level recession, growth of the company's image; all those characteristics are being improved due to changing the internal affairs such as introducing more rigorous self-discipline and enhancing control by the management. The transformation (QnRl), in its turn, provides for a growth of quantitative indicators (through the growth of cash flows) as a result of the improvement of the relations with customers, partners, and subcontractors.

The efficiency of the steps taken will be evaluated at the expense of estimating the change of the enterprise value. A competent exercising of all the steps described above will provide for the value increase since the compensation of qualitative deviations will result in lowering the discount rate. As a result of such an impact upon the qualitative and the quantitative characteristics of business activities, the enterprise value will increase, which will attest to the recovery of stability that had been lost previously.

7. Conclusions

In process of the work performed, the importance of understanding and provision of sustainable functioning of an enterprise in the modern context is shown. The relevance of this study is connected, first of all, with the fact that enterprises are currently facing the necessity of operating under the circumstances of keen competition, rigorous requirements from customers, and the quickly-changing external business environment. All those conditions not only enforce enterprises to conduct monitoring of their activities and to respond to occurring situations, – but also make them maintain constant alert with respect to possible changes. Such an approach makes enterprises investigate the nature of deviations occurring in their activities, and respond only if changes may lead to a serious loss of stability and they are not connected with usual fluctuations in business system operation. To make the stability recovery steps equivalent to deviations occurring, enterprises are offered to work out compensatory mechanisms capable of eliminating negative consequences – which should be done before failures occur.

The approach suggested in this work can enable an enterprise to perform a profound analysis of stability of functioning, to detect – in timely manner – hazardous fluctuations of stability that are detected

through estimation of value, – and also make a timely response to changes using the compensatory mechanisms developed. The application of the suggested technique will enable enterprises to put more emphasis on stable functioning and raise the stability level of their activity considerably.

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