STUDY OF EXTERNAL AND INTERNAL FACTORS AFFECTING ENTERPRISE’S STABILITY

Catherine G. Zinovieva
Margarita V. Kuznetsova
Tatyana V. Dorfman
Pavel V. Limarev
Juliya A. Limareva

Nosov Magnitogorsk State Technical University, Magnitogorsk, Russia

Abstract. The paper analyzes the factors of enterprise’s stability meaning system’s ability to maintain its qualitative certainty via self-organization targeted to overcome the environment. The authors prove that enterprise’s stability is characterized as system’s activeness and adaptiveness and is formed under the influence of a set of external/internal environmental factors. The first directly depend on enterprise’s operations arrangement, the second are external to that arrangement and are outside of enterprise’s influence zone. So, the most significant direct influence factors are consumers, competitors, suppliers, contact audiences. Indirect influence factors do not act on an enterprise directly but cause the environment to change which may affect an enterprise. This article covers on such factors like economic, state and political, scientific and technological, legal and socio-demographic, etc. Finally the authors come to the strong conclusion: one of the most important ways to enterprise’s stability is the training of organizational culture of staff, featuring its philosophy, its basic operational principles (company’s relationships with suppliers, consumers and competitors), management style, attitude to staff, etc.

Keywords: enterprise’s stability, external environment factors, internal environment factors, direct and indirect influence factors, consumers, competitors, suppliers, contact audiences, activeness, system’s adaptiveness, innovational activity, pre-adaptive elements, human potential.

1. Introduction

An enterprise is one of complex systems functioning as the unity of stability and unsteadiness.

Synergetic approach understands system’s complexity as the ability for self-organization, typical, first of all, for nonequilibrium systems.

Stability of an enterprise may (temporarily) act as equilibrium. In equilibrium state, each element exercises its function, stably and independently from other elements. Meantime the stability of an enterprise is ensured through management, i.e., the ability of entrepreneur/manager to maintain steadiness of functions.

But, as an enterprise is an open system, equilibrium may not be a moment of its existence. Own existence of an enterprise is an open nonequilibrium system capable for self-organization. In that case, the stability mechanism acts otherwise: the system behaves as a whole but the level of elements freedom decreases and coherent interaction of elements, forces, goals, motives, wishes occurs. In such a system, fluctuations are not suppressed but intensified, thus causing the growing role of actions coordination and efforts cooperation inside the system.

The objective of this paper is to prove that stability of an enterprise is characterized as system’s activeness and adaptiveness and is formed under the influence of a set of external/internal environmental factors.

In the economic literature, self-organization is equivalent to self-adjustment borrowed from engineering. But J. M. Keynes in his day showed that self-adjustment idea does not reflect the
specifics of the contemporary economy and causes fatal consequences in practice. Keynes offered to add to self-organization the relative organization on the macroeconomic level. The stability mechanism of a separate enterprise is the same.

So, stability of an enterprise is system’s ability to maintain its qualitative certainty via self-organization targeted to overcome the environment [8].

2. **Choosing methodology.**

To assess the level of stability of an enterprise and build its stable development strategy, the factors affecting operational stability should be analyzed. In the study of those factors we are based on the following methodological provisions:

– stability as a complex dynamic feature is not just subject to the influence of a great number of factors but is formed and maintained by their whole interacting aggregate;

– the influence of any factor depends on the development of other factors and the aggregate of subjective conditions created in the economic system.

Being closely interrelated, stability factors often are oppositely directed affecting enterprise’s operation: some are positive, some – negative. The negative effect of some factors is able to reduce or even eliminate the positive effect of others, and vice versa.

3. **Main part.**

The availability of a great number of various factors makes it necessary to group them. Various characteristics may become the classification basis:

– by place of existence – external and internal;

– by nature of effect – objective and subjective;

– by level of influence – basic and secondary;

– by structure – simple and complex;

– by time of effect – permanent and temporary, etc.

We hold the opinion that enterprise’s stability is formed under the influence of a set of factors of internal and external environment. The first directly depend on enterprise’s operations arrangement, the second are external to that arrangement and are outside of enterprise’s influence zone.

External factors of enterprise’s stability are the conditions which may not as a rule be changed but should be accounted for by the subject of an enterprise as they affect the state of its affairs, i.e., the factors outside an enterprise. External factors are interrelated: change of a one may cause change of others and therefore their effect on enterprise’s stability is correlated.

Among the total aggregate of external factors of enterprise’s stability, foreign economic trade, production, market, information and innovational infrastructure factors may be specified.

External factors affecting the level of enterprise’s stability are logically divided into two groups:

– direct influence factors;

– indirect influence factors.

Direct influence means the straight impact of environment on an enterprise. Indirect influence is the environmental impact on an enterprise causing changes of its operating conditions.

External factors of direct influence include consumers, competitors, suppliers, contact audiences – those are the factors manifesting through the activity of enterprise’s subjects, although having objective reasoning. An enterprise in the course of its activities continuously interacts with various elements and processes, so a rather significant change of activities always causes the change of an enterprise itself. The reasons like growth of raw materials prices and loan interests, loss of buyers, etc. may change enterprise’s structure, its actual form and size.

The most important factor is *consumers* forming the sales market. There is a widespread point of view that the only true purpose of a business is to create consumers. That means the
following: enterprise’s survival and justification of existence depends on its ability to find consumers of its activity and meet their demands.

In the scientific literature, there are various approaches to consumers classification. To study and analyze the consumers, their aggregate may be grouped as follows:

– direct consumers;
– manufacturers receiving products/services for production purposes;
– intermediaries buying products/services for resale;
– governmental organizations buying products/services for own use.

Regarding the relationships between an enterprise and its products buyer, in the course of business an entrepreneur does not have to enter into relationships with investors on calling for capital (having own capital), does not have to enter into relationships with employees (doing all production activities independently), but there has to be a relationship with the consumer/buyer of products/services. In any case, an enterprise has to cooperate with the consumer as the need for production process arrangement and its length depend on the consumer: it is the consumer which determines whether the production process of a business will further exist. The consumer, from producer’s point of view, is its main partner.

4. Discussion

However, in the contemporary world producer’s dependency on the consumer changed greatly. As noted by J. Baudrillard, the idea of primary needs is a myth [3, p. 54]. The things are not exhausted with what they serve for, but are imposed prestige and signs of social position. Political economy traditionally explains the reasoning of production by the existing needs. As opined by J. Baudrillard, it camouflages the internal feasibility of production order [3, p. 64]. In fact, producers manage the needs via advertising. The real power lies in the real spheres of decision making, management of needs, manipulation of signs and people [3, pp. 99-100].

Thus, that external factor of stability is gradually getting the internal nature.

The main stability factors include the competition of business entities. In many cases, not consumers but competitors determine which kind of products may be sold and at what price. Consumers are not the only object of competition between businesses. The latter may compete for labor resources, materials, capital and the right to use some technical novelties. Internal factors like working conditions, labor compensation, nature of relationships between leaders and subordinates are depending on competitive response. Competitive success is ensured to those which can find new needs, arrange production of new goods and introduce new technologies, thus making competition a tool of economic play, making businesses review their strategies.

Competition affects the quantity and quality of products made, removes inefficient enterprises from production, assists in rational use of resources, prevents from producer’s (monopolistic) dictatorship over consumers.

For growth and prosperity, enterprise’s subject needs capital suppliers. Those may be banks, individuals, governmental institutions engaged in loans granting. The wish of investors to invest their capital may be a certain criterion of enterprise’s success as the higher its performance statements, the higher the probability to get the required funds on good terms and conditions.

The significance of factor suppliers of material resources is characterized by the fact that in an enterprise the portion of material resources in production cost-price is 60-80% and higher.

Contact audiences are the external forces directly affecting enterprise’s decision making due to various kinds of interests related to its business. Contact audiences may be characterized as follows:

– governmental authorities on supervision and regulation of business;
– mass media (advertising agencies, newspapers, magazines, radio and TV);
– public organizations, trade unions, civil public opinion groups, etc.;
– local contact audiences: communities, religious organizations, etc.

Governmental institutions play an important role in regulating the activities of enterprises. Enterprise’s legal status reasons a certain taxation procedure. Various governmental regulators are
authorized to set forth the procedure of financial accounting keeping, issue licenses, set the standards and operating conditions, etc.

Indirect influence factors do not affect an enterprise straightly, but cause the changes in the external environment which may affect an enterprise. They are economic, governmental and political, scientific and technological, legal, socio-demographic and others.

Indirect influence environment is usually more complex than that of direct influence. Top management, taking incomplete information as the basis and trying to prognosticate possible consequences for an enterprise often has to rely upon the suggestions about such environment.

For efficient interaction with the external environment, the leader has to continuously analyze the dynamics of such environment (changing structure of factors) taking into account the following:

- structure of factors is rather complex and there is plenty of factors;
- the level of each factor’s impact on business structure is different;
- some factors are continuous, others – short-term;
- external environment changes are mobile, chaotic and rather violent, making hard to monitor them.

To ensure survival and achievement of the goals to be sought, enterprise’s subject should be able to efficiently response and adapt to the changing environment.

Enterprise’s stability is system’s activeness and adaptiveness.

Adaptiveness is the representation in the reflecting system of the specifics of the reflected one, or system’s response to environment’s influence. Adaptiveness in the general sense is characterized as passive adaptation of a system to the external environment [2]. It is oriented at the compensation of negative consequences caused by external factors. Enterprise’s adaptiveness is characterized by its ability to change the functioning method in compliance with the environment’s changes and may not be considered absolutely passive as it is exercised through conscious activity of individuals – employees and owners of an enterprise. Nevertheless, it is relative activeness as it is forced by external factors.

Activeness suggests feasible response of a system directed to the external environment and related to the elimination of negative external factors by acting on the elements of the environment producing them [7]. Enterprise’s activeness is the implementation of measures aimed at decrease of external environment factors’ dependency. However, if during the adaptation the dependency is decreased by elimination of the influence of factors, active behavior suggests preventive measures of an enterprise aimed to eliminate the external environment factors.

W.R. Ashby [14] worded the basic principle of systems stability – law of requisite variety, according to which only a variety may destroy a variety so the variety of system’s states should not be lower than external environment’s variety. N.V. Chepurnykh notes: If an enterprise is capable to affect the external environment’s factors, it may be used for reducing environment’s variety [12, p. 76]. We opine that through adaptiveness an enterprise reduces the variety of the external environment by eliminating its factors. Enterprise’s active behavior contributes to the growth of the variety of states of an enterprise itself.

Enterprise’s adaptiveness as a way of functioning in compliance with the external environment changes regarding direct factors of the environment is characterized by the level of control of enterprise’s top management over its liabilities.

In economic literature on business matters some four groups of enterprise’s stability factors are specified:

1) innovations and investments;
2) resources and their use (material/financial, human, technical/technological facilities, information);
3) marketing quality and level of use;
4) organizational culture of a business.

It should be noted that the above groups include dozens of specific factors selectively acting in each business structure.
An enterprise may increase the variety of its states and keep ahead of the environment’s variety via production optimization, introduction of new technologies and kinds of products. Enterprise’s effect on the environment is achieved by establishment and development of competitive advantages causing the consumer market structure to change ensuring reliability of raw materials and semi-finished products supply and sales. According to M. Porter’s theory of five competitive forces [18], achievement of competitive advantages by an enterprise is ensured by the developed technology, innovative equipment, intellectual resources and other elements.

Enterprise’s stability may be ensured either via keeping traditional business forms or via innovations.

Innovation notion relates to a new product or service, their production method, novelties in organizational, financial, scientific and research and other spheres. Any improvement ensuring costs saving or creating any conditions for such saving may be deemed an innovation. The innovational process combines science, technology and management covering the aggregate of production, exchange, consumption relationships. Under institutional evolutionary theory, a number of models was developed explaining company’s development as the result of its innovative activity. J. Schumpeter specified seven directions of innovative changes on the microlevel: products, technologies, sale markets, raw materials, semi-finished products, organizational structure principles. Through innovations, an enterprise increases the variety of products range, resources used, production and management methods.

It was found that between innovative growth and relative quality of products there is a certain correlation, while enterprises offering a great number of new products compared to its competitors the probability to offer more useful products from consumer’s point of view is higher.

Intensive development of production implies opportunity to increase production output without extra resources as distinct from extensive development which is oriented to call for extra production resources [13]. Intensive use of resources means the introduction of new technologies and production optimization. An essential consequence of the intensification process is growing products quality while cutting cost-price, which makes them more attractive for consumers. Therefore, an enterprise becomes less dependent on certain buyers’ groups. The use of new saving technologies enables to increase production output using less resources and makes production more flexible and not dependent on a particular kind of resource. Meantime, cutting cost-price makes price increase on raw materials and semi-finished goods a less substantial factor.

Increasing innovations quantity and quality, intensifying and diversifying production, an enterprise may affect the environment’s variety via increasing the variety of own states: product differentiation and production line expansion, opportunities for consumption of larger volume of interchangeable resources, products quality improvement, increasing number of buyers and markets.

Staff is the central factor of any enterprise. This is because an individual, his/her norms of behavior and values greatly determine the achievement of enterprise’s goals. To ensure staff’s normal working conditions, it is required to take into consideration individual skills of employees, develop their creative potential and apply it, accounting for socio-psychological and physiological needs of people, improve professional training thus ensuring social and psychological stability of the staff team. The account for those aspects should be the cornerstone of enterprise’s potential.

The model of keeping enterprise’s stability suggests the availability of two parameters at least: business efficiency and free acts of the leader and the staff. Freedom means growing role of choice of each element functioning as acts of certain subjects.

Systems methodology worded so-called law of varieties exchange: in social systems, dropping variety on the macrolevel (economic life of the society) is accompanied by growing variety on the microlevel (in our case, we may speak of an enterprise) [11, p. 125].
This, the ability of top management to manage human resources rapidly taking into consideration the growing role of employee’s personality, knowing his/her motivations, ability to create them and align with enterprise’s goals may become a reserve of enterprise’s stability.

Transferring the center of gravity to an individual, a manager creates the conditions for a new level of system’s existence where an individual acts not as a cog in the management system machine in general but as an independent element.

From the point of view of system management methodology, organizational activity should be aimed at the development of active, constructive consciousness, accounting for free choice alternatives of production parties. As opined by I. Novik, systems analysis of alternatives suggests three main methods:

1) analysis of compliance level of living program and its implementation tool;
2) pros and contras analysis enabling to assess objective/subjective conditions in the state of instability;
3) estimating consequences of alternatives [11, pp. 122-123].

To solve the strategic tasks, the information on the environment is required. Information flows as a means of control ensure enterprise’s links with markets, consumers, scientific and engineering novelties, thus achieving enterprise’s work optimization. Meantime, the information collected on the organizational environment should possess a number of characteristics: reliability (assuredness in non-distortion of the information received), timeliness (no delays in getting the information required), trustworthiness, exactness (quality characteristic describing object’s condition), sufficiency (information about an object should cover all of object’s state), necessity (only necessary knowledge about an object is permitted), usefulness (effect of its use should exceed the costs on its receipt), regularity, etc.

Information’s impact on sustainable development may open new opportunities by solving the following tasks:
– growing requirements to information quality and content;
– defining enterprise’s need for information by kinds and forms;
– defining basic directions on collecting, processing and storing initial data;
– planning actions on collecting and exchanging information between enterprise’s divisions; ensuring feedback;
– creating database used in the course of development and implementation of marketing programs, planning and control at an enterprise;
– creating system for meeting the technical needs in connection with collection, processing and storage of information; automation and computerizing of administrative and management work;
– development of protection and security of information.

The information system’s efficiency which determines stable operation of an enterprise is determined by flexibility, i.e., the ability to timely describe emerging problems and give possible solution variants, thus checking for potential opportunities of an enterprise, tasks and goals, alternative solutions, possible risks and effect.

Thus, information forms manager’s ability to analyze and choose alternatives, i.e., contributing to the creation of internal variety for keeping enterprise’s stability.

It also should be noted that the decisive role in enterprise’s dynamics is played by the subject – the manager. The abilities ensuring system’s self-organization in crisis conditions depend on so-called pre-adaptive elements. (Pre-adaptation is the emergence of some or other useful characteristics in changing systems before they become actually useful [4, p. 79]). On the personal level it means cognitive complexity of thinking, high variation of human behavior and motivation.

T.I. Zaslavskaya [7] opines that the most important and decisive feature ensuring social integrity is human potential. A subject (a manager) should be correctly motivated, possess professional knowledge, morals, ability to think progressively.

6. Conclusion.

Thus, one of the most important ways to enterprise’s stability is the training or organizational culture of employees [5], characterizing enterprise’s philosophy, its basic principles (interrelation of enterprise’s subject with suppliers, consumers and competitors), management style,
of enterprise’s subject with suppliers, consumers and competitors), management style, attitude to employees, etc.

Stability is one of the sides of dynamic existence of an enterprise, the other side is its development.

References