

Theoretical aspects of strategic sustainability of a trading enterprise under digitally transforming economy

Yuri Malenkov ¹, Irina Kapustina ^{2*}, Victor V Shishkin ¹ and Victor I Shishkin ¹

¹ Saint-Petersburg State University, Universitetskaya emb., 7–9, Saint Petersburg, 199034, Russia

² Peter the Great St. Petersburg Polytechnic University, Polytechnicheskaya str., 29, Saint Petersburg, 195251, Russia

* E-mail address: ivk65@list.ru

Abstract. This article observes the theoretical issues concerning strategic sustainability of trading enterprises in the new conditions of economy digitalization. The need for digital control of the strategic sustainability within trading enterprises is explained. The article examines the contradictory nature of the current approaches to the most important categories of the strategic sustainability within the enterprises. Among them are stability, sustainability and competitiveness that hinder digitalization of the strategic management processes. This paper also proposes a new category of strategic sustainability which eliminates these contradictions within an enterprise based on the methodology of systemic dialectics and determining its nature. Various approaches to digital characteristics of the strategic sustainability within enterprises are considered together with their shortcomings associated with the lack or digital immeasurability of a whole range of elements. The article proposes a conceptual model for assessment of the strategic sustainability within the enterprises based on a set of digital components that most significantly affect it. The model stems from the synthesis of aspects typical for both the external and the internal environment of enterprises determining their strategic sustainability and the perspectives for their digitalization.

1. Introduction

Competitiveness, stability and development represent the integrative characteristics within the category of strategic sustainability. They are crucially important for the development of the viable approaches to management in the current rapidly changing management environment. In the current economic climate, the digitalization of economy significantly contributes to the changes in modern management and requires clarity and absence of contradictions in determining the nature of these categories. But when it comes to the scientific research, the theoretical categories listed often get mixed and may even contradict one another and the real processes of the enterprise development. That leads to mistakes in defining strategies of the enterprise development. While trying to quantify sustainability of their firms, managers can not reach consensus due to the diverse interpretation of the notion. As a result, today on the Russian market we can frequently observe the loss of strategic sustainability within a range of trade networks and enterprises that were unable to effectively manage their development. With the transition to the digital economy, research on the theoretical aspects of



strategic sustainability is highly important due to the fact that the lack of quantitative estimates in this area makes it impossible to set up the high-quality development strategies.

Numerous scientific works point out the theoretical mergence of such basic categories as sustainability, stability and development. Due to the statement that “there can be no sustainable development – if there is development, then there is no stability” [1] and due to the definition of sustainability in the Philosophical dictionary (1999) [2], these categories are often confused. For example, according to Begun T.V. (2012) statement “in science, the sustainability of a phenomenon or process means its non-susceptibility to fluctuations and changes; hardness, durability, reliability; constancy...” [3]. But at the same time, the concepts of sustainability and stability are confused, which is a serious theoretical mistake. Other experts believe that, on the contrary, such categories as sustainability and development can not be combined at all. As a result, it is unclear how to measure the development process and evaluate it with the use of digital approaches.

We believe that the notions of strategic sustainability and stability should be distinguished. Strategic sustainability is the ability of a system to recover from the external and internal impacts and changes, while stability is keeping a certain range of system parameters unchanged or allowing them to change within preset limits. The development of systems can be stable, however, not sustainable, when the system maintains its parameters within the established limits, however, is unable to change in the conditions of strong external influence and changing environment. On the other hand, the systems development can be sustainable but not stable, when a number of parameters within the system fluctuate and change considerably over various periods of time. Numerous enterprises serve as examples. The Walmart trade network achieved its leadership by establishing the leadership strategy based on computer use in management and implementation of new techniques of interaction with customers, which in fact, significantly violates the principles of development stability [4].

More contradictions arise while considering the economic category of sustainability through observing the development pace of trade enterprises and its relationship to the pace of market life cycle. According to Bakalskaya E. and Duvanova E. (2008), an enterprise is considered sustainable if its growth rate is higher than the rate of change of the market and, conversely, unstable, if lower [4].

Judging from the dynamics of the Walmart stock price (Figure 1), we can see the lack of stability within the trade enterprise. However Walmart is considered one of the most sustainable companies in the world. The periods of both, sustainable growth and sharp downturns that differ greatly from the market movement characterize the dynamics of the Walmart stock price. We can not call such a development stable, but it is possible to say it is strategically sustainable, due to the fact that the company's shares are highly listed on the market and its brand managed to stay at a high level even if the stability of development was violated. Walmart's leadership in the field of digital technologies in trade is among the most important factors of the company's success.



Figure 1. Dynamics of the Walmart stock price 2013–2018 [6].

Another widespread definition of strategic sustainability is based on competitiveness. According to Rychihina N. (2008), “strategic sustainability of an enterprise is defined by us as the ability to create, develop and maintain competitive advantages in the long-term” [7]. Dudin M. and Lyasnikov N. hold a similar point of view (2009) [8].

However, it is also possible to say that strategic sustainability is the most important competitive advantage for the company. The definitions observed allow the logical circle to be completed. There are approaches that divide strategic sustainability into the following types: market sustainability, human resources sustainability and technological sustainability. Nonetheless, such division does not resolve the problem, but only transfers it to a lower level.

The approaches of foreign scientists, such as Peter E. Wells (2013), mainly focus on the balance of environmental, technological and business outcomes [9]. The existing approaches almost never consider the new conditions created by the transition to the digital economy.

2. New approach to the category of strategic sustainability

In our view, first of all, it is necessary to define time frames to evaluate the strategic sustainability of an enterprise. Malenkov Y. (2011) suggested evaluating effectiveness and sustainability of an enterprise comprehensively within three time frames: long-term (more than 5 years), medium-term and short-term. Enterprise strategies frequently crash due to failures at the operational and tactical

level [11]. The main weaknesses in strategic management processes are digital control and forecasting of the enterprise development. Typical examples are when successes in the short-term periods obscure major miscalculations in the medium and long-term periods.

In order to eliminate the contradictions listed above we propose a new category of strategic sustainability within an enterprise. We consider it as the ability of the company's owners, managers and staff to define, forecast and control the levels of important development parameters on the basis of digital methods, thus, ensuring the stabilization of the system, combined with its interruption as a result of changing goals, methods, technologies and strategies, but taking into account a number of system characteristics that ensure the system's integrity (property, break-even, resources, control) in both common and crisis changes of external and internal environments. Therefore, we eliminate contradictions between stability and development, sustainability and competitiveness. The system's viability includes the preservation of the main part of the enterprise owners and their natural successors, security from hostile takeovers, ongoing improvement, development of the ability to get through the periods of demand decline, reliance on internal funds, growth of human capital (most importantly its intellectual component), low turnover, high motivation of staff, risks diversification [11]. Unlike homeostasis that requires maintaining dynamic balance while keeping the same parameters stable [12], economic systems are able to temporarily change any of their parameters in order to reach a new level of development. Significant market success has always been achieved through violating the homeostasis model and sometimes even its complete destruction, nevertheless, also through maintaining the company's strategic sustainability. For example, such companies as Virgin, WalMart, Apple, Microsoft etc. have significantly changed themselves, at the same time influencing markets and competitors. In their studies Kim and Moburn (2004–2018) examined the enterprise's ability to abruptly change its parameters and influence the market [13]. A number of trade networks that happened to be unable to foresee the market's fluctuations, have reduced profitability by 40% in recent years [14]. Today, among the most important factors affecting strategic sustainability of the enterprise's development are the new conditions created by digital economy, including direct contracting without intermediaries, new terms for access to credit, deep marketing analysis of consumer behavior and alternative sources of financing, etc.

3. The main digital components of strategic sustainability within trade enterprises

Digital assessment of strategic sustainability within trade enterprises is required due to the fact that in many Russian regions, including the depressed ones, trade is the leading area of employment. Therefore, trade contributes greatly to resolving the crucial issue of employment. For instance, trade is the leading area of employment in the Pskov region where 16% of the total number of workers in the region's economy is employed in the sector [15].

Some studies suggest that a range of indicators should serve as a basis for sustainability assessment. According to Martinska E. (2017), the region's GRP and certain social and environmental characteristics should be used to assess sustainability of regions [16]. However, we believe that this approach overlooks two important aspects of sustainable development within regions and enterprises: environmental changes and enterprise's conditions (pace of innovation, investment, efficiency) [17].

Yashin (2015) suggests observing the key products of a production enterprise as the core elements of its strategic sustainability [18].

In our opinion, this is not enough to assess the strategic sustainability, since the company may have these components present, but due to changes in demand, export-import conditions, an enterprise that was competitive yesterday becomes bankrupt. These factors include changes in demand and conditions for export and import. Numerous examples of large trade networks confirm that. Today the majority of such companies find themselves in an uncertain position and some even change ownership, as it happened with the "Magnit" trade network.

We suggest a conceptual assessment model for strategic sustainability of an enterprise that is based on a combination of digital components that significantly influence the company's sustainability. They include:

1. Digital quality level of the enterprise strategy (whether it meets the criteria of the effective strategy).
2. Dynamics of effective demand for the enterprise's products and the variety of trade companies.
3. Dynamics of demographics and changes in the age groups of consumers.
4. Dynamics of the people's income in population groups and regions.
5. Dynamics of state support of enterprises.
6. Dynamics of the competition level in the region.
7. Barriers to trade market access for large, medium and small businesses.
8. Credit availability.
9. Pace of innovation as well as implementation of the digital economy technologies.
10. Dynamics of management and its quality.
11. Dynamics of strategic competitiveness in terms of technologies returns on investments, perspectives.

Assessment of strategic sustainability can be carried out using the method of indicator construction according to the above mentioned groups and combining them into a single multi-criteria model. Our approach is different from the existing ones because what we offer is not only indicators, but a synthesis of parameters and external-internal environments of an enterprise that determine its strategic sustainability. The entire approach is aimed at the realistic and reliable digital assessment of strategic sustainability.

4. Conclusions

1) Digital characteristics of the development processes within trade enterprises and others are required to provide effective management; however, the possibilities to apply them today are considerably limited. Digital technologies can not be effective enough to assess the results of development in case the theoretical contradictions in approaches to the categories of sustainability, stability and competitiveness are not eliminated. According to studies, there are no contradictions observed between the categories of stability and sustainability, if the dialectics of the enterprise development is taken into account. Competitiveness is a factor of strategic sustainability, but not vice versa.

2) Experts suggest a number of approaches to assess strategic sustainability. However, there implementation may trigger problems preventing digitalization. They include: immeasurability of some characteristics, lack of important criteria for sustainable development, lack of systematic relationship between the criteria providing logical sequence of strategic sustainability.

3) Model structure for digital assessment of strategic sustainability within an enterprise is suggested on the basis of combinations of digital components that significantly affect sustainability. At the same time, the core point is represented not by the internal capabilities of an enterprise, but by the digital quality level of the enterprise strategy, demand and its dynamics, quantitative changes in the external and internal environments of an enterprise, as well as strategic competitiveness.

4) It is recommended that the Ministry of Industry and Trade include the set of digital assessment of strategic sustainability within trade enterprises in the system of monitoring and forecasting the sector development, which will significantly improve the quality of management.

Acknowledgment

The article was prepared as part of the work on the grant of Russian Foundation of Basic Research (No. 18-010-01204).

References

- [1] Moiseev N (2000) *The Fate of Civilization. The Path of Reason* (Moscow: Languages of Russian Culture) 224
- [2] Gubsky E F 1999 *Philosophical Encyclopedic Dictionary* (Moscow: Infra Publishing) 569
- [3] Begun T 2012 *Sustainable development: Definition, Concept, Factors in the context of single-industry cities Economics, Management, Finance: Proceedings of the II Int. Sci. Conf.* 158–63.
- [4] WalMart: Success in Retail, <https://www.vestifinance.ru/articles/99356>
- [5] Bakalskaya E and Duvanova E 2008 *Russian Entrepreneurship* **9** (80) 161–65
- [6] Dynamics of Walmart Stock Price, <https://www.finanz.ru/aktsii/walmart>
- [7] Rychikhina N 2008 *Stability of an Enterprise* **10** (115) 57–62
- [8] Dudin M and Lyasnikov N 2009 *Entrepreneur's Guide* (Moscow: Centrpoligraf) 220
- [9] Wells P E 2013 *Business Models for Sustainability* (Northampton: Edward Elagard Publishing) 178
- [10] Malenkov Y 2011 *Strategic Management* (Moscow: Prospect Publishing) 224
- [11] Malenkov Y 2010 *Euro-Mediterranean Economic and Finance Review* **5** (N2) 74–89
- [12] Homeostasis, <http://ponjatija.ru/taxonomy/term/2082>
- [13] Kim W C and Mauborgne R 2004 *Blue Ocean Strategy* (Boston: Harvard Business School Press) 256
- [14] On the Edge of the Debt Trap. Trade Networks Have Begun to Go Bankrupt, <https://lenta.ru/articles/2016/09/23/dolgi/>
- [15] Condition and Development of Competitive Environment in the Markets of Goods and Services in the Pskov Region, <http://economics.pskov.ru/normativnye-akty/razvitie-konkurencii>
- [16] Mardenskaya E 2017 *Regional Economy: Theory and Practice* **15** (8) 1488–1500
- [17] Malenkov Y 2002 *New Methods of Investment Management* (Saint Petersburg: Business Press Publishing) 206
- [18] Yashin N and Grigoryan E 2015 *Bulletin of the Saratov State Socio-Economic University* **55** 18–22

Reproduced with permission of copyright owner. Further reproduction prohibited without permission.