

The Model of Sustainable Performance of Small and Medium-sized Enterprise

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An enterprise as a core of any economic system has a great impact on sustainable development of a state or region. Small and medium-sized enterprises (SMEs) are socially and economically important for their national economies, since they represent about 99 per cent of all active enterprises in the European Union. The importance of SMEs to the EU economy indicates the need to assess their performance in order to find appropriate performance measurement and management tools. These issues become very topical during the period of global economic recession.

Making profit is most often mentioned as an integral goal of any enterprise. However, it should be emphasized that profit is the result of a comprehensive process of the creation of added value. This process can be managed by using a system approach. It means that the value maximization opportunities depend on harmonious and purposeful interactions between enterprise separate processes or functional units.

Development of any enterprise is related to the future opportunities, risks and uncertainty. Therefore, profit making ability of an enterprise depends on managers' skills to apply modern business management methods and tools. The more mature are the business activities, the higher is the probability of an enterprise to face failure. Long-term existence of an enterprise depends on its ability to utilize resources efficiently and to create profit, taking into consideration the influence of business environment and its related factors. While measuring the performance of an enterprise, the company's life cycle concept should be considered as well.

The problems within an enterprise arise from improper activities, incompetence or even negligence. Performance measurement system can significantly influence and support SMEs' organizational development. Effectiveness and efficiency shall be manifested in all business processes of an enterprise. Performance evaluation should be based on the criteria associated to the field of activities of a particular enterprise and particular manufacturing technology. The system should be comprised of measures, related not only to operations, but also to organization and management of the enterprise.

The goal of the research is, studying the performance of SMEs and the factors affecting performance achieving, to propose performance measurement concept encouraging the sustainable development of SMEs and to suggest performance evaluation approach.

Keywords: *SME, sustainable performance, model, enterprise life cycle.*

Introduction

The most popular form of business in Latvia is the limited liability company, which according to LURSOFT data, in the period from 1991 until 2010, accounts for approximately 60 % of the total number of registered companies. Using data about the registration and liquidation of this particular form of business in period from 1991 until 2009, the authors conclude that 1278 Ltd have not survived until the age of 7 years, and it corresponds to 22.9 %, but among enterprises, which would have to reach the age of 15 years, more than 70 % have been liquidated. Analyzed statistical data prove that the total number of businesses increases by approximately 50 % of the increase in the number of newly founded businesses, thus indirectly indicating problems of enterprises viability, which creates a necessity to evaluate SME performance results.

Previously conducted research works in the field of performance evaluation of SMEs have not solved all the arising problems due to the specific industry issues. Besides, several disputable questions exist, for instance, whether large companies' performance measurement models can be applied for the needs of small and medium-sized enterprises. How enterprise performances are connected with certain parameters of an enterprise life cycle? It indicates the necessity for continuation of studying the above-mentioned issues in order to find practical solutions.

The **goal** of the research is, studying the performance of SMEs and the factors affecting performance achieving, to propose performance measurement concept encouraging the sustainable development of SMEs and to suggest performance evaluation approach.

The **object** of the study is SMEs from the sub-sector of manufacturing industry in Latvia. To achieve the goal the following **research methods** were used: quantitative and qualitative methods, including monographic or descriptive method, analysis, synthesis method, and the method of sociologic research – survey; statistical research methods, including grouping, comparison, analysis of relative and average indices, correlation analysis. Calculations and data processing were carried out using Microsoft Excel and EViews software.

Methodological justification of an enterprise sustainable development

According to the authors' opinion, sustainability of an enterprise on a micro level has certain similarity with the conception of sustainable development on a macro level; for this reason economic development and sustainability of the state and region can be reached, if their structure elements – industry sectors, enterprises and organizations are viable. Basing on various scholars' researches on the issues of sustainable development (Cameron *et al.*, 1987; Dixon, 2003; Hockerts, 1999; Fiksel, 2001; Banerjee, 2003; Bansal, 2005; Ruzevicius, Serafinas, 2007; Grybaite, Tvaronaviciene, 2008; Ciegis *at al.*, 2009 and others), the authors conclude, that the main point of a concept of «sustainable development» is - coordinated and systemic advancement of economic subject towards the aim takes place only when all three dimensions of sustainability: social, economic and ecologic - are incorporated simultaneously into the subject activities. In this respect the following factors of sustainable development, that are common to all enterprises, can be mentioned: 1) income, which is formed by consumers (clients) utilizing products and services, produced by the enterprise; 2) financial stability and positive dynamics of profitability; 3) competences and skills of the personnel; 4) inclusion of ecological issues in the enterprise's management process; 5) positive attitude of the society towards the performance of the enterprise. In conformity with these factors it can be concluded that several sub-systems exist within the enterprise simultaneously, and they can be characterized by variability and dynamism. In its turn, sustainability of the system demands stability and continuity. Principle of the system homeostasis foresees ability and tendency of the system to reach stability, which is the basis of equilibrium state. In order to enable the enterprise to develop sustainability, taking into consideration social responsibility and business ethics as well as stakeholders' interests, all sub-systems of the enterprise have to be transformed under the action of dimensions of the sustainability. In the authors' opinion, the principles of sustainable performance and development of the enterprise can be determined by the following aspects: 1) principle of the system, which foresees self-preservation of the system, interaction among elements of the system, and system's ability to accumulate material, information and energy flows that are utilized in realization, cooperation and coordination of functions; 2) principle of continuity determines system requirements for a correction mechanism, which supports, helps to adjust in changing situations and to react to changes in due time; 3) principle of adequacy determines mutual compliance and compatibility of the system elements with sub-systems of the enterprise and external environment, and in practice it is manifested as a united approach to the realization of probability cases; 4) principle of efficiency determines necessity that economic result from the activities exceeds expenditures.

The authors conclude that the sustainability of the enterprise depends on the management system of the enterprise, which provides effectiveness and efficiency of sub-systems, taking into consideration deviations from the

state of equilibrium. It demands concretization of the possibilities of practical application of sustainable development concept in the enterprise, taking into consideration that all the processes supporting sustainability of the enterprise are mutually connected, interact, and functional process of each management level is being implemented through the dimensions of sustainability. Thus, the quality of the enterprise management influences the total result, taking into consideration innovative potential of the enterprise, which includes: 1) management systems (speed of decision-making, delegation of powers, management style); 2) finances (possibilities to attract funds, amount of equity); 3) employees (qualification, motivation); 4) technologies (complexity of processes, flexibility, expansion possibilities); 5) production (market share, sale segments, proportion of quality and price).

In his turn, a human being as a special element and factor of the enterprise system complicates functionality of the system with his social expressions, because only a human being can create an idea in this system and implement it. The authors conclude that viability of the enterprise in a long-term period depends on the innovative potential, which is based upon a creative approach that is being implemented by all the stakeholders of the enterprise – not only employees, but also shareholders and customers. It is justified by the results of the implemented activities – discussions in the enterprises, obtained during the SOCIALSME project funded by the Leonardo da Vinci Program.

Important factors for the sustainability of the enterprise are being formed in the social environment. Social capital (McElroy, 2001; Trigilia, 2001; Williamson, 2002; Lengnick-Hall & Lengnick-Hall, 2003; Bosma *et al.*, 2004; Rust *et al.*, 2005; Westlund, 2006; Savaneviciene, Stankeviciute, 2010) can be considered as one of the potentials of the enterprise development, which increases return from the use of other capitals. Therefore, to provide a possibility to acknowledge the linkage of the social capital with the enterprise performance in the context of sustainable development, management of social and customers' capital has become of vital importance. It influences productivity, competitiveness and sustainable development of the enterprise (minimizes operative expenditures for obtaining information, accelerates circulation of information, lessens asymmetry of information and enhances development of new knowledge).

In order to improve efficiency of the system, which results from both enterprise management and government efficiency, also small enterprises shall seriously turn to evaluation of its performance. Performance measures characterize the fulfilment of goals, but they can be used also as a strategic tool of the enterprise management.

Completing Stafford Beer's (Beer, 1973) idea about the significance of enterprise indicators (liquidity, profitability and productivity) in providing sustainability of the system, the authors consider that three levels of performance are being formed in the enterprise: *actual, target (planned) and standard (see Figure 1)*.

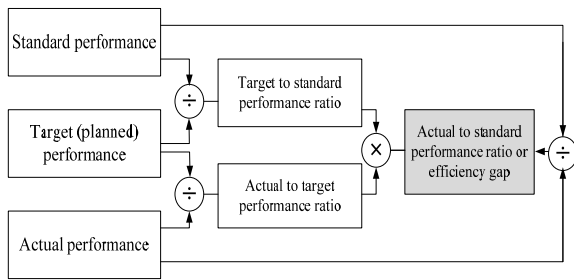


Figure 1. Authors' proposal for performance measurement on different management levels of an enterprise

Actual performance of the enterprise is being formed in the current time as an actual return from the utilization of existing resources, taking into consideration existing restrictions. *Target (planned) performance* corresponds to the return that the enterprise plans to obtain from the utilizing of existing resources, taking into consideration existing restrictions. On its turn, *potential (standard) performance* of the enterprise is an eventual return that can be obtained by the enterprise if it develops existing resources, takes off the restrictions and uses the opportunities, which can be achieved taking into consideration influence of factors maintaining sustainable development of the enterprise. Potential performances of the enterprise include unused opportunities, which are the subject of possible development through using innovations and competent enterprise management.

The authors consider that it is possible to improve efficiency by utilizing the enterprise performance measurement system, which includes the dimensions of sustainable development in combination with the elements – processes supporting sustainable development of the enterprise: *production process, sales process, personnel management process, financial management process, accounting process.*

As a result of the interaction between management levels and functional fields and taking into consideration management level, the following issues and characteristics incorporated in performance measures are being formed: 1) a strategic level – the strategic layout of production machines, choice of placement, development of new products, planning of labour force long-term development, providing profit, selection of accounting technical solutions; 2) an administrative level – management of production flows and schedules, development of production price policy and sales promotion campaigns, providing wages, social benefits and acquisitions, analysis, budget planning, supervision of expenses and income, supervision of prime costs; 3) a knowledge level – development and designing of new products, analysis of the market situation, research, identification of clients, forecasting employees development and careers, analysis of customers cash flow and survey of possibilities for decreasing risks, forming investment portfolios; elaboration of accounting methodology in the enterprise; 4) an operational level – performance of production machines, load control, quality and material consumption analysis; resources and time invested in customers' service; personnel training and environment maintenance expenses, supervision of customers' cash flow and

accounting transactions, implementation of accounting operations.

According to the authors' viewpoint, sustainable development drives the enterprise to changes, which are connected with a process of achieving results and their assessment: 1) on the level of enterprise management, especially in a strategic and knowledge management level and 2) in functional fields, where the role of personnel as an element of social capital is emphasized. The authors demonstrate their approach to enterprise performance measurement in the context of sustainable development, which is incorporated in the levels of enterprise management and functional areas, in a pyramid shape Figure 2.

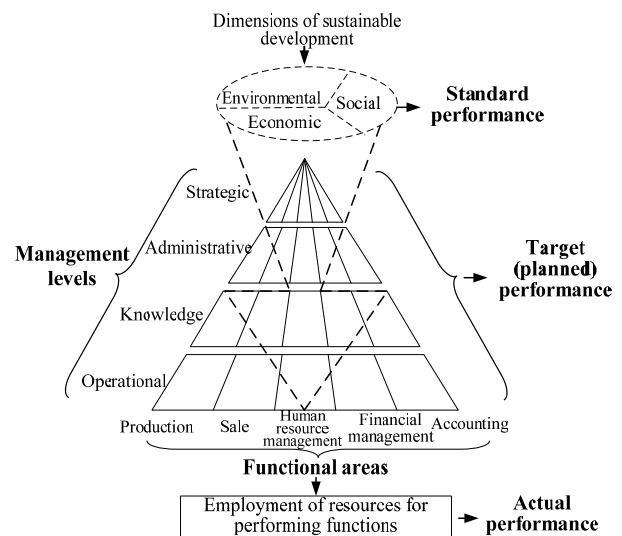


Figure 2. Application of an enterprise sustainable performance measurement system

The authors consider that it is impossible to apply standardized, identical indicators for performance assessment to all enterprises, because each enterprise is a unique formation, which is characterized by its belonging to the particular sector, organizational structure, enterprise management style, sector's market share and other significant differences.

Works (Neely, 1999; Neely, 2002; Barney, 1991; Laitinen & Chong, 2006; Gulbro *et al.*, 2000; Basu, 2001), where different authors study the methods of results assessment, indicate two directions of research: 1) which indicators are to be included in the system of performance assessment and 2) which characteristics indicators of an integrated results assessment system should possess. It is being recognized that models and proposals for effective management, which are created based upon research carried out in large companies, are not to be applied to small enterprises directly, not only because of limited resources, but also due to other factors, for instance, kind of management organization differs. As well features of enterprise life cycle (ELC) should be considered in this context.

During the period of its existence, the enterprise as a social-economic system passes through different functional stages, which in literature are defined as enterprise life

cycle. Concept of ELC (Greiner, 1972; Cameron *et al.*, 1987; Hanks *et al.*, 1993; Adizes, 1999; Epstein & Roy, 2001; Robinson & McDougall, 2001; Masurel & van Montfort, 2006) was created within the enterprise management theory with an aim to explain changes in the enterprise in the context of time. The life cycle of a particular enterprise is tightly connected with a life cycle of the sector, which, on its turn, is determined by the life cycle of a particular industry, enterprise and product or service.

Several related industries may operate within one branch. They may be in a certain life cycle stage (growth, maturity, decline), where enterprises operate in different stages of their development and produce goods, which, in their turn, are subjected to evolutionary processes in the same way. Life cycle stages of industry may be different in different countries, because needs of customers differ according to their life level.

Total life cycle of an enterprise consists of phases and stages. Phase is period of time, during which organization changes substantially, for instance, system of values or management approaches. According to the aim, phases may be divided into stages. One phase may include several stages and each of these stages possesses characteristic features. In literature there is no uniform division of enterprise life cycles in stages, as well there is no uniform approach regarding number of stages and methodological grounds for defining the stages. Defining borders of the stage period is difficult, because: 1) particular characteristics are being observed through the whole life cycle of the enterprise and have no defined boundaries; 2) different authors use different approaches to divide enterprise life cycle emphasizing various unique parameters of the cycle stages, which may be connected with different objects chosen for research. A common feature of all the models of the enterprise life cycle is that cyclic development of the enterprise can be foreseen, and the enterprise shall be able to function under the existing conditions with a future vision, where development possesses consequent and qualitative changes.

After being introduced to opinions of experts about the opportunities and limitations of the use of ELC concept, the authors define the practical opportunities and limitations of the use of enterprise life cycle phases in the Table 1.

Table 1

Opportunities and limitations of the use of enterprise life cycle model

Opportunities	Limitations
1. To foresee consequent stages of enterprise development	1. Impossible to define unequivocally separate stages
2. To characterize qualitatively each stage of enterprise development	2. Impossible to define particular time of the beginning and end of the stage
3. To choose the most appropriate performance strategy for the particular stage of development	3. Impossible to define length of the stage

The authors conclude: 1) enterprises can get through separate stages (phases) at a different pace; 2) the age of the enterprise is not tightly connected to life cycle stages

(phases); 3) each of these stages (phases) possesses different problems, which are determined by qualitative and quantitative changes in both external and internal environment of the enterprise; 4) enterprise performances are connected with certain parameters, which change along with a transfer from one stage (phase) of a life cycle to another; 5) threats and risks in different stages (phases) of a life cycle differ.

Therefore, enterprise management, which is oriented towards solving problems, which are characteristic to the particular stage (phase) of ELC, shall be considered as a condition enabling the enterprise to maintain sustainable performance.

Design of empirical research

The authors carried out empirical research with an aim to find out the opinion of respondents (experts) about external and internal factors influencing the enterprise's performances, significance of performance measures in different stages of ELC, and how the process of achieving goals is influenced by cooperation with business partners.

Survey questions were about the linkage between macroeconomic factors and factors determining demand and enterprise internal environment factors, which influences an enterprise performance in general. Survey questions were divided into 6 groups: the 1st group characterized critical influence of macroeconomic external environment and demand factors on the enterprise performance in different phases of ELC (questions 1–6); the 2nd group comprised questions about the level of skills and abilities to be identified in the internal environment of the enterprise, which define forming of the enterprise offer and influence also performance (questions 7–21); questions of the 3rd group are about performance features, which are the basis for indicators describing performance (question 22–28); the 4th group represents questions connected with the social dimension of the enterprise sustainable development, which is characterized by social relations between employees and customers and the influence of these relations on achieving goals of the enterprise and its performance (questions 29–50); questions of the 5th group are about acknowledging significance of various resources according to investment of these resources into the final product (questions 51–57); the 6th group contains questions, which are about identifying unfavourable factors that are being formed in both external and internal environment of the enterprise and on the level of social relations (questions 58–63).

In total, 23 questionnaires were processed, and they present the following statistics: 1) according to the position of respondents in the enterprise, 13.0 % of them are owners–managers of the enterprise; 2) 5.3 % – hired managers of the enterprise, 21.7% respondents correspond to the status of medium level managers; 3) according to the size of the enterprise – 13.0 % of them belong to the group of microenterprises, 65.2 % – comply with the parameters of small enterprises and 21.8 % are medium-sized enterprises; 4) according to the length of enterprise existence – 21.7% of these enterprises exist for less than 5 years, 43.5 % are 5-10 years old and 34.8 % are older than 10 years; 5) according to the affiliation to the sector – 82.6 % of them are

connected to the manufacturing industry, but 17.4 % – with trade.

Data obtained from the questionnaires were generalized, grouped and ranged by using *MS Excel PivotTable* tools. In order to obtain ordinal scale (rank) measurement, a bigger or smaller rank has been assigned to each factor on the ordinal scale. According to answers given by respondents, evaluation is made according to a 5-point system according to 5 criteria: *does not influence at all* – 1 point; *does not influence significantly* – 2 points; *partly does not influence* – 3 points; *influences* – 4 points; *influences a lot* – 5 points. The authors accept that separate phases of the cycle form the total life cycle of the enterprise, and obtained evaluations are gathered to assess the influence of each element over the whole life cycle of the enterprise.

As in analysis process of separate factors, conditional evaluation, which is based on determining ranks, was used, for defining interaction (linkage closeness) between separate factors and features, the authors carried out a correlation test. Coherence of rank features are defined using Spearman's (r_s) and Kendall's (r_k) rank correlations coefficients (using EViews 6.0 software). In order to obtain statistically valid determination of interaction between separate external environment factors and other manifestations influencing effectiveness of enterprise performance over different phases of ELC, the authors select those pairs of factors, which are characterized by Spearman rank correlation coefficient r_s at the n number of observations ($n=23$), with the degree of freedom $v = n-1$, if the following conditions is fulfilled: 1) coherence is statistically significant at the two-sided significance level with validity level ($\alpha = 0.05$), if $r_{s \text{ computed}} \geq r_{s \text{ critical}}$, where $r_{s \text{ critical}} = 0.428$; 2) coherence is statistically significant at the one-sided significance level with validity level i ($\alpha = 0.05$), if $r_{s \text{ computed}} \geq r_{s \text{ critical}}$, where $r_{s \text{ critical}} = 0.368$.

In order to evaluate the influence of external environment, the authors chose six external environment factors of influence. The classification of factors and their choice is justified by theoretical and empiric research carried out by the authors within the frames of this research: 1) *obstructive factors, expressions of which may cause stress, critical impact on enterprise performance and results* – tax law; availability of qualified labour force; availability of financial resources; infrastructure of business; 2) *driving factors, which create positive influence enhancing competitiveness* – consumer purchasing power, entrepreneurship support policy.

Results of the empiric research work on the critical influence of the enterprise external environment during different phases of ELC

Whilst the enterprise is being formed and grows (growth phase) majority of external environment factors are critical (1st rank) (three most critical factors – tax law, consumer purchasing power and business infrastructure). When the enterprise has reached optimal production amounts and stability (maturity phase), significance of external environment factors are still on high level (three most critical factors – consumer purchasing power, qualified labour force and tax law). For the enterprise,

which loses its potential and starts aging, consumers purchasing power and tax law are of the most critical influence. According to significance, evaluations of both factors correspond to the 1st rank. The authors conclude that, first of all, in different phases of a life cycle, the number of factors of influence changes according to the length of enterprise existence, because the sequence of ELC phases is logical and connected with the time factor. Secondly, directions and manifestations of factor influences become more complicated, when the enterprise reaches maturity and aging phases.

Results of the empiric research work on the significance of the influence of the enterprise internal environment during different phases of ELC

New enterprises (performance experience up to 5 years) connect enterprise performance (1st rank evaluations), first of all, with image and reputation of the enterprise, personnel qualification and level of employees satisfaction. In achieving goals orientation is towards the importance of relations with external clients. Respondents (enterprises) that operate for 5 to 10 years, mention the ability to improve enterprise inner processes as the most significant factor. In achieving goals, they mention timely information exchange among employees and mutual reliability among employees as significant. Respondents (enterprises) that have been operating for more than 10 years, give high assessment (in the level of the 1st rank) only to secure and stable relations with customers, and see an opportunity to achieve goals based upon employees loyalty towards the enterprise, which is supplemented by timely information exchange.

Quality level of clients' service and social contacts on the level of employees and cooperation partners affecting achievement of enterprise goals and creating linkage with other manifestations (with value system of the enterprise, which corresponds with the one of business partners and united value system in the enterprise itself), influence enterprise performance in its growth phase as central factors that correlate with other factors.

Results of the empiric research work on the significance of enterprise performance features during different phases of ELC

All performance features during ELC are being considered as important (1st rank). However, the three most important features in the whole ELC are the following ones: 1) rate of asset turnover (4.81 points), which is being preserved also in growth, maturity and aging phases; 2) ability to provide revenues (4.69 points), which is recognized as important during growth and maturity phases, and 3) ability to ensure achievement of the goal – profitability (4.68 points), which is being considered as an important performance feature during enterprise decline phase.

It can be stated that the following statements are statistically valid (more than 95%) and are characterised by significant density:

1) during the enterprise growth phase there is very significant linkage between the rate of asset turnover and cost structure ($r_s = 0.61$; $p\text{-value} = 0.0022$), where cost structure demonstrates significant closeness with broad range of goods and services ($r_s = 0.44$; $p\text{-value} = 0.0348$); product promotion campaigns ($r_s = 0.45$; $p\text{-value} = 0.0297$) and possibilities to plan and coordinate the performance of the enterprise ($r_s = 0.49$; $p\text{-value} = 0.0181$);

2) during the enterprise maturity phase the same performance measures as in a growth phase are significant and very significant, linkage between structure of assets and: 1) cost structure ($r_s = 0.68$; $p\text{-value} = 0.0004$), 2) ability to fulfil obligations ($r_s = 0.70$; $p\text{-value} = 0.0002$) and 3) ability to achieve goals (productivity) ($r_s = 0.68$; $p\text{-value} = 0.0004$), are mentioned.

3) during the enterprise decline phase performance measure – profitability demonstrates the linkage with the group of factors, which incorporates social relations within the enterprise and with clients: 1) transactions with equal

partners ($r_s = 0.60$; $p\text{-value} = 0.0027$); 2) contacts of business partners in governmental and municipal institutions ($r_s = 0.55$; $p\text{-value} = 0.007$), 3) business contacts of the enterprise employees ($r_s = 0.54$; $p\text{-value} = 0.0276$).

Consolidated results of the empiric research work

Results of the empiric study confirmed the results of the theoretic research and the approach for assessing of SME performance according to the ELC phases. External and internal factors influencing the performances of the enterprise and performance indicators to be supervised principally according to the phases of the ELC in correspondence with their significance, were justified, as well as model of sustainable performing of small and medium-sized enterprises, taking into consideration phases of the enterprise life cycle, was elaborated (Table 2).

Table 2

Factors influencing the enterprise performance and performance measures corresponding to the phases of ELC according to their significance

ELC Growth phase	ELC Maturity phase	ELC Decline phase
<i>Factors of external environment influencing performances according to their significance:</i>		
<i>External macro-environment</i>		
Tax laws	Tax laws	Tax laws
<i>External micro-environment</i>		
Consumer purchasing power Qualified labour force Contacts with business partners in external environment Resource access	Consumer purchasing power Qualified labour force Obtaining new information Equal partners	Consumer purchasing power Qualified labour force Availability of external financial resources Relations with clients
<i>Factors of internal environment influencing performances according to their significance:</i>		
<i>Social</i>		
Quality level of clients' servicing Secure and stable relations with clients Intercommunication among employees	Quality level of clients' servicing Secure and stable relations with clients Intercommunication among employees	Secure and stable relations with clients
<i>Environmental</i>		
Ability to improve products	Ability to improve products Wide assortment of goods and services Ability to react to changes in market Ability to introduce innovations	Ability to improve products Wide assortment of goods and services Ability to react to changes in market Possibilities to improve manufacturing processes
<i>Goal achievement: Value system of the enterprise, which is suitable for business partners; enterprise-wide uniform value system; mutual trust of employees</i>		
<i>Performance features according to their significance</i>		
Rate of asset turnover Ability to provide revenues Cost structure	Rate of asset turnover Ability to achieve goal (productivity) Ability to provide revenues	Ability to achieve goal (profitability) Rate of asset turnover Cost structure
<i>Performance indicators to be supervised principally according to their significance</i>		
Liquidity Marginal revenues	Liquidity Productivity	Profitability Liquidity
Indicators of social and environmental factors according to the specifics of the sector		

OF – obstructive factors; DF – driving factors

Taking into consideration significance of the performance features in each phase of ELC, in each phase of a life cycle the totality of performance indicators that are to be supervised principally, is being formed. It indicates enterprise ability of sustainable development in a long-term period, taking into consideration requirements of short-term stability, which provide possibility to manage

the enterprise effectiveness. In the model of SME sustainable performing several stages are mentioned and performance of them shall be in a particular order, which is demonstrated by the authors in the Figure 3.

First of all, the *phase of enterprise life cycle* shall be determined. Afterwards *continuous improvement process, which is directed towards ensuring sustainable*

development, shall be implemented (determining performance measures to be supervised principally and their target values, according to the goal; performance and the analysis of the goal and performance measures; the development of the action plan and adjustment of the target values of performance measures).

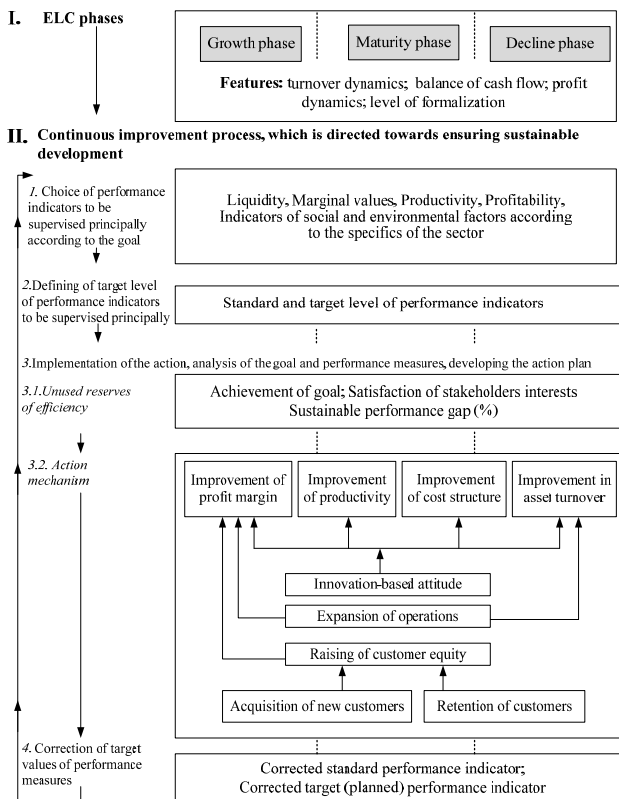


Figure 3. Model of sustainable performing of small and medium enterprises in the context of ELC

The developed model of SME sustainable performing has been tested in the sector of printing in manufacturing industry.

Conclusions

Developing the model of sustainable performance of small and medium enterprises in the context of ELC, the following conclusions have been made:

1. Ability of the enterprise to function in a coordinated and systemic manner, without losing capacity of performance in indefinite future, shall be connected with sustainable development, which incorporates all three dimensions: social, economic and ecologic. The basis for implementing sustainability is formed by the enterprise management systems, which provide functional efficiency and effectiveness of sub-systems, taking into consideration principles of sustainable performance.
2. Significant factors providing sustainability of the enterprise are formed in the social environment, because, in the context of an enterprise performance, management of knowledge, human and social capital is the «process of value creation», which shall be maintained taking into

consideration the peculiarities of human resources management.

3. It is impossible to apply standardized, identical indicators for performance assessment for all the enterprises, because each of them in a way is a unique formation identified by belonging to a particular sector, as well as organizational structure and management style of the enterprise.
4. An enterprise sustainable performance is connected with certain parameters, which change along the transfer from one stage of the life cycle to another. These parameters change, because goals, strategy, organizational structure, processes, technology and culture change. Thus the enterprise management, which is directed towards solution of the problems that are characteristic to the respective phase of the enterprise life cycle, is to be considered as a pre-condition enabling enterprise sustainable performance.

Several proposals how to increase efficiency and effectiveness of small and medium-sized enterprises were made:

1. In order to improve the results achieved by small and medium-sized enterprises and maintain sustainable development, the authors recommend complementing indicators of the enterprise management system with economic, environment and social indicators, which correspond to the specifics of the sector of the particular enterprise. It shall be done to define standard and planned indicators in each dimension of sustainability.
2. Indicators, which are to be supervised principally and correspond to the phase of an enterprise life cycle, should be included in the competence of the enterprise financial and management accounting along with other indicators selected by the enterprise and characterizing enterprise performances. It shall be done to provide sustainable development and management decision-making in due time to reach this goal.
3. Taking into consideration the phases of an enterprise life cycle and applying the developed model of sustainable performing for small and medium-sized enterprises, it can be used for performance control and management in the context of sustainable development, and SMEs can improve their action mechanism according to the actual needs of the enterprise.
4. Publicly available statistical data should be complemented with the following indicators: investments in human resources – *improvement of knowledge and professional skills, which is financed by the employer, and number of sick-leave days (hours) within the accounting period* in order to obtain complete quantitative information about processes that characterize investment of enterprises in solving environmental and social issues by sectors and in the state in general, which is necessary to determine standard performance measures of the enterprise.

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Guna Ciemleja, Natalja Lace

Smulkiųjų ir vidutinių įmonių darnios veiklos modelis

Santrauka

Įmonė kaip bet kurios ekonominės sistemos pagrindas turi didžiulį poveikį valstybės arba regiono darniai plėtrai. Smulkiosios ir vidutinės įmonės yra socialiai ir ekonomiškai svarbios savo nacionalinėms ekonomikoms, nes jos sudaro apie 99 proc. visų veikiančių įmonių Europos Sąjungoje. Bet kurios įmonės plėtra yra susijusi su ateities galimybėmis, rizika ir netikrumu. Taigi įmonės pelno kūrimo galimybės priklauso nuo vadovo gebėjimo taikyti modernius valdymo metodus ir priemones. Problemų įmonėje kyla dėl neteisingų veiksmų, nekompetencijos ir net aplaidumo. Veiklos matavimo sistema gali gerokai paveikti ir padėti smulkiosioms ir vidutiniosioms įmonėms plėtotis.

Tyrimo tikslas – ištirti smulkiųjų ir vidutinių įmonių veiklą bei tuos veiksnius, kurie veikia jų veiklą, pasiūlyti veiklos matavimo koncepciją, skatinančią tų įmonių darnų plėtojimąsi ir pasiūlyti veiklos vertinimo požiūrį.

Tyrimo objektas – smulkiųjų ir vidutinių įmonių veikla Latvijoje. Buvo panaudoti kiekybiniai ir kokybiniai tyrimo metodai. Skaičiavimai ir duomenų apdorojimas buvo atlikti naudojant *Microsoft Excel* ir *EViews* programas.

Populiariausia verslo forma Latvijoje yra uždaroji piniginių srautų kompanija, kuri 1991–2010 m. sudarė 60 proc. visų registruotų kompanijų. Remdamiesi šio verslo registracija ir bankrotais 1991–2009 m., autoriai daro išvadą, kad 1278 kompanijos nesulaukė ir savo septynerių metų amžiaus. 70 proc. tokių įmonių buvo likviduotos. Statistiniai duomenys rodo, kad viso verslo padidėjimas yra 50 proc. Tai pasiekta dėl naujų įmonių atsiradimo, todėl įmonių sėkmės problema, jų veiklos rezultatų vertinimas yra labai svarbi užduotis.

Šio straipsnio autorių nuomone įmonės darna mikrolygiu yra kažkuo panaši į darnios plėtros koncepciją makrolygiu. Tokiu būdu gali būti pasiekta valstybės ir regiono plėtra, jeigu jų struktūriniai elementai – pramonės sektoriai, įmonės ir organizacijos – sėkmingai dirba. Autoriai prieina prie išvados, kad svarbiausias koncepcijos bruožas yra darni plėtra, t. y. kai visi darnos veiksniai (socialiniai, ekonominiai ir ekologijos) veikia vienu metu.

Įmonės darnios plėtros veiklą lemia šie aspektai: 1) sistemos principas, kuris numato pačios sistemos išlikimą, atskirų sistemos elementų sąveiką, gebėjimą kaupti materialiuosius, informacijos ir energijos srautus, kurie panaudojami realizacijai, bendravimui ir funkcijų koordinavimui; 2) tvarumo principas lemia sistemos reikalavimus ir pataisymo priemones, kurios palaiko ir padeda prisitaikyti prie pokyčių ir reaguoti į juos reikiamu laiku; 3) adekvatumo principas apibrėžia sistemos elementų atitikimą ir konkurencingumą prieš vidinius ir išorinius veiksnius, t. y. jis atsiranda numatant galimus atvejus; 4) našumo principas lemia būtinybę numatyti, kad ekonominis veiklos rezultatas viršytų išlaidas.

Papildant Stafford Beer (1973) idėją apie įmonės rodiklių (pinigai, pelnas, našumas) svarbą sistemos darniai plėtrai, galima teigti, kad įmonėje susidaro trys veiklos lygiai: tikrasis, planuojamas ir standartinis. Tikrasis įmonės veiklos lygis susidaro esamuoju metu kaip tikrosios pajamos panaudojus esamus išteklius, atsižvelgiant į apribojimus. Planuota veikla atitinka pajamas, kurias įmonė planuoja gauti iš esamų išteklių, atsižvelgiant į apribojimus. Standartinė veikla yra laipsniška graža, kurią gauna įmonė, jeigu ji plėtoja esamus išteklius, pašalina apribojimus ir pasinaudoja galimybėmis, siekiant palaikyti darnią įmonės plėtrą. Potenciali įmonės veikla apima visas panaudotas galimybes, kurios ir yra įmonės darnios plėtros pagrindas. Didelį vaidmenį atlieka inovacijos ir kompetentingas įmonės valdymas.

Autoriai mano, kad įmanoma pagerinti našumą panaudojant įmonės veiklos matavimo sistemą, kurią sudaro darnios plėtros elementai ir kiti aspektai: įmonės gamybos proceso efektyvumo veiksniai, pardavimų procesų naujovės, personalo valdymo procesų tobulinimas, finansų ir atskaitomybės procesų laikymasis.

Darni plėtra skatina įmonės pokyčius, kurie yra glaudžiai susiję su pasiektais rezultatais ir jų įvertinimu įvairiais lygiais: 1) įmonės valdymo lygiu, ypač strateginiu ir žinių valdymo lygiu; 2) funkcinio lygiu, kai ypač svarbus personalo vaidmuo.

Autoriai pabrėžia, kad neįmanoma taikyti standartinių rodiklių vertinant veiklą, nes kiekviena įmonė yra unikalus darinys, kurį apibūdina jo priklausymas tam tikram sektoriui, savita organizacinė struktūra, valdymo stilius, rinkos dalis ir kiti skirtumai.

Buvo atliktas empirinis tyrimas, kurio tikslas – sužinoti ekspertų nuomonę apie vidinius ir išorinius veiksnius, kurie daro įtaką įmonės veiklai, atskiroms įmonių plėtros pakopoms ir kaip partneriai veikia tikslų įgyvendinimą.

Apklauso klausimai buvo paskirstyti į 6 grupes: pirmajai grupei buvo svarbi makroekonomikos išorės aplinka ir jos įtaka atskiroms plėtroms pakopoms, antrajai grupei buvo svarbu išaiškinti vidinės aplinkos galimybes (7–21); trečioji klausimų grupė buvo susijusi su įmonės veiklos bruožais (22–28); ketvirtoji klausimų grupė buvo susijusi su įmonės darnios plėtros socialiniais aspektais, t. y. su santykiais tarp darbuotojų ir klientų bei šių santykių svarba siekiant įmonės darnios plėtros tikslų (29–50); penktos grupės klausimai buvo susiję su įvairių išteklių svarba, investicijų galimybėmis (51–57); šeštoji grupė – tai klausimai, kurie turėjo padėti išaiškinti nepalankius darnios įmonės plėtros veiksnius, kurie veikia įmonę tiek iš vidaus, tiek iš išorės (58–63).

Empirinio tyrimo rezultatai patvirtino teorinius teiginius apie smulkiųjų ir vidutinių įmonių veiklos įvertinimo būtinybę, atskirų veiklos lygių rodiklių svarbą, įmonės gyvavimo ciklo nustatymo svarbą, įmonės darnios plėtros modelio sukūrimo būtinybę.

Smulkiosios ir vidutiniosios verslo įmonių darnios plėtros modelį sudaro dvi pakopos: 1) įmonės gyvavimo ciklo nustatymas; 2) darnios įmonės plėtros proceso tęstinumas. Antroji modelio pakopa – nuolatinis įmonės tobulinimo procesas – sudaro keturias sudėtines dalis: 1) faktinių, standartinių ir planuotų rodiklių įvertinimas, kuris turi būti labai gerai atliktas; 2) nepanaudoto našumo nustatymas; 3) veiksmų, skirtų nepanaudotiems ištekliams atskleisti, nustatymas; 4) veiklos pagrindinių vertybių perversinimas.

Smulkiųjų ir vidutinių įmonių darnios veiklos modelis buvo išbandytas pramonėje.

Raktažodžiai: *smulkiosios ir vidutinės įmonės, darni veikla, modelis, įmonės gyvavimo ciklas.*

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