

Chapter 27

STRATEGIC BUSINESS PERFORMANCE METRICS IN A POSTINDUSTRIAL ECONOMY

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ABSTRACT

Postindustrial economy leads to a qualitative change in manifestation of business activities: in creating new markets (the concept of “blue ocean”), in changing forms and ways of running a business (creating a “web model,” transformation of organizational forms of a business, etc.), in partnerships (the concept of relational behavior of business units), in the need to implement the principles of social responsibility, etc. All this transforms the nature of the economy.

Accordingly, to achieve the competitive advantages, firms, as the main economic entities, must decide how to form such a monitoring system that will quickly track and shape the information base required to make strategic management decisions, and thus meet the requirements of efficiency, reliability, and complexity.

The metrics system of this kind should have two components: a universal (which depends on the specifics of a business and is based on the principles of the Balanced Scorecard concept) and a specific (that takes the specific conditions of a business into account). It should reflect the operational and strategic performance of the business in the following areas: financial, market, organizational (including technological), innovational, social, informational. Setting up such a system can be powered by BI technologies.

The subject of the research is the context of business activity of enterprises in conditions of postindustrial economy and methodological approaches to measurement of their strategic performance. The main objective is to formulate the principles and offer methodological foundations of the definition of business performance metrics in the postindustrial economy in order to track its progress in all contexts of improvement of its strategic position.

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Authors systematized the conceptual approaches to explain the nature of the postindustrial economy stage; grounded the methodological foundations of identification of results of modern business based on the diversity of its contexts; laid the theoretical foundation for creation of metric system for evaluation of strategic business performance; and gave practical advice on choosing strategic business performance metrics for Ukrainian enterprises of various spheres of activity (based on empirical data).

Results of the study are derived from the eight-year long research of business development practices of more than a hundred Ukrainian enterprises and foreign companies represented in the Ukrainian market.

Keywords: strategic performance, performance metrics, postindustrial economy, enterprises, business, controlling

INTRODUCTION

Postindustrial economy leads to a qualitative change in manifestation of business activities: in creating new markets (the concept of “blue ocean”), in changing forms and ways of running a business (creating a “web model,” transformation of organizational forms of a business, etc.), in partnerships (the concept of relational behavior of business units), in the need to implement the principles of social responsibility, etc.

The nature of the economy is changing (the concept of a new theory of economic systems by G. B. Kleiner (2011)). The boundaries of markets are changing radically, and new industries and market niches emerge, leading to the formation of a qualitatively new chain of products and principles of interaction between business entities. The principles and methods of competition between business entities are being transformed as well. In the new environment, competitors become partners, and they deploy network relationships by offering new business models and mechanisms for creating added value.

A revolutionary breakthrough in technology, including in the methods of collection and processing of information, drives changes to approaches for determination of business performance. As the result, the traditional task of developing a system of economic and financial indicators for monitoring and control of accounting data at the operational management level extends to integrating complex business metrics at the strategic level. The report by Deloitte in 2017 in particular, states that today’s new practices look at performance curves and ratings based on richer data, using input from many sources, and in the context of a continuous discussion about things that happened all year—rather than delivering a simple “end-of-year report” that often loses sight of all the things that happen over that 12-month time period (Sloan et al., 2017).

Thus there is a need to define strategic business performance metrics in several contexts – entrepreneurial (search for fundamentally new areas for business development), marketing (use of the entire spectrum of possibilities of studying the needs of customers for keeping their loyalty to a company and its brands), relational (formation and support of network connections of its stakeholders), information (adaptation to a digital economy), economic (support of economic business efficiency in the current and prospect periods).

The subject of the study is the context of business activity of enterprises in the conditions of postindustrial economy and methodological approaches to the measurement of strategic performance.

This article aims to formulate guidelines and offer methodological foundations for defining performance metrics of business in a postindustrial economy in order to track its progress in all contexts of strategic position improvement. To achieve this goal we have to solve the following problems:

- summarize the defining trends of the postindustrial world, which supersedes the changing nature of relations between economic entities;
- determine the nature, types and identify areas of business results based on multi-vector postindustrial economy conditions;
- offer methodological approaches to measuring the results of the postindustrial business;
- develop methodological basis of metric tracking and business evaluation in the strategic perspective.

Results of the study are derived from the eight-year long research of business development practices of more than 100 Ukrainian enterprises and foreign companies represented in the Ukrainian market. Conceptual generalizations about the trends of evaluation of business strategic efficiency were obtained by studying not only the world's best practices but also by interviewing the representatives of domestic companies of various markets, scope and business profiles.

This allows us to propose a *hypothesis* about the possibility of creating a metric system of strategic businesses performance that will allow to quickly monitor and shape the information base required to develop the strategic management decisions, and thus meet the requirements of efficiency (by the criteria value benefits and costs), safety (by the criteria of reliability and preservation) and complexity (by the criteria of coverage of business contexts). The metrics system of this kind should have two components: a *universal*, that is independent of the specifics of a particular business and is based on the principles of the Balanced Scorecard concept (BSC, Kaplan & Norton, 2005) and a *specific* (that takes into account the specifics of a particular business) and reflect the operational and strategic business performance in the following areas: financial, market, organizational (including technical and technological) innovation, social, and information. Setting up such a system can be based on the business intelligence (BI) technologies.

METHODS

The methodological basis of research is formed by the evolutionary paradigm of economics, based on the research by J. Schumpeter (1982) R. Nelson and S. Winter (2004) and assumptions of the systemic concept by J. Kornai (1998) according to which the "world view" of the economy appears as an arena of emergence, interaction, transformation and elimination of economic systems. Under this paradigm, the preferences of economic agents are emerging not independently, but under the significant influence of the system of which those agents are a part of (Kleyner, 2011, 794-795).

In this study, we assumed that the problem of the development of a methodology for measuring the impact of business in the postindustrial economy is systemic and is located at the junction of theoretical and applied research.

The review of papers on business performance published during the last two decades suggests that the interest of scholars and practitioners is caused by the need for finding an effective model of a company performance tracking and evaluation, taking into account the high dynamism of its environment and its multi-vector activities for maintenance of a sustainable competitive advantage. In our opinion, there are several substantive areas of research in this field.

First, there are ongoing debate about the nature of the firm and its environment that raise questions of the typology of economic systems (basic typology of economic systems in the space-time parameters by G. B. Kleiner, 2011), the separation of an organization and its environment, the transparency of borders of an organization (for example, in a network structure), the degree of hostility/friendliness of the competitive environment (the concept of “co-competitiveness” by M. Branderburher & J. Neylbaff, 1998). In the context of our study, it opens the discussion about the “scaling” of the company operation.

Second, the theory of enterprise strategy continues to develop. Strategy schools summarized on the verge of XX and XXI centuries by H. Mintzberg et al., (2009), probably will not cover all the modern manifestations of the strategic behavior of companies. That allows some researchers to argue about the “death” of the business strategy (2017). Thus, the search of the ways to achieve and maintain the competitive advantage of a firm in the “era without laws” (P. Drucker) remains up-to-date. In this context, we face the question of the choice of indicators of the success of competitive firms that would be relevant and reliable for making appropriate management decisions.

Third, we have to admit that the publications covering issues of developing a system of metrics of companies’ operation are focused mainly in the management accounting, budgeting or controlling writings, including such by C. Drury, J. Foster, D. Han (1997), and C. Hornhren. These researchers cover the metrics system for monitoring and control with emphasis on structuring and registration of information on planned and actual company operations with the aim to improve the function of control over its economic efficiency.

The key empirical data about the defining characteristics of modern businesses represented on the Ukrainian market was obtained by questioning the representatives of over 100 companies that was conducted during the period of 2009-2016. The questionnaire was developed by a team of researchers including V. Verba (2010), O. Hrebeshkova (2012, 2016), O. Kyzenko (Hrebeshkova and Kyzenko, 2012), (Kyzenko and Hrebeshkova, 2016), (Vostryakov, 2012) and O. Grebeshkov (2010).

The theoretical basis of our research is based on the concept of the relational behavior of an enterprise (Grebeshkova and Grebeshkov, 2013), (Hrebeshkova, 2010), (Hrebeshkova, 2010), enterprise information strategy concept (O. Grebeshkov, 2012), the methods for identification of critical business performance indicators in production and non-production businesses (Hrebeshkova and Kyzenko, 2012), (Kyzenko, 2013), (Kyzenko and Grebeshkova, 2014), the use of modern information technologies in company management (Grebeshkova et al., 2016), the statistic data on the profitability of Ukrainian enterprises in various sectors of business and their innovation activity (according to reports of State Statistical Office of Ukraine), as well as the numerous published results of researches in strategic management and controlling by Ukrainian and foreign scientists.

SYSTEMATIZATION OF CONCEPTUAL APPROACHES TO EXPLANATION OF THE NATURE OF A POSTINDUSTRIAL ECONOMY IN THE CONTEXT OF BUSINESS PERFORMANCE MEASUREMENTS

The economy of XXI century acquires characteristics that distinguish it radically from the previous order. The modern economy is an information-rich system with complex (sometimes – latent) relationships between diverse actors who are guided in their actions by the multi-directional factors and cause unpredictable influence on each other. There is a high (and constantly growing) level of interdependence between the various economic entities: consumers and producers, owners, managers and employees, communities, public institutions and regulatory bodies. Hence the need emerges to identify their interests and levers of influence on activities of coordination of companies' operation, on the synchronization of goals and the development objectives of individual companies with the needs of these influential groups, formation of a system of indicators that can provide all interested parties (stakeholders) with relevant and comprehensive information that can impact its development (Hrebeshkova, 2016).

In 1985, in his work “Economic Institutions of Capitalism,” A. Williamson put “relational contracting” on a par with “markets and hierarchies,” although the study of the problem remained outside the scope of the study (Uilyamson, 1996).

The value of the provisions of relational theory in the analysis of enterprise development strategy is to recognize the possibility of coexistence of the strategy of competitive confrontation and strategy of protectionist cooperation. Given the instability of terminology, we consider it appropriate to, first of all, clarify the concept of “relational space of an enterprise.” In our opinion, relational space of an enterprise should be interpreted as a space formed by a network of bilateral relations between enterprises and other economic and/or governmental entities to form a “security zone” as a consequence of collective action partners. The main feature of the relational space is the increased (compared to other sectors and areas of activity) level of “comfort” for the company due to the lack of direct conflict of interest between its subjects in strategic action. Enterprise within its relational space has two main goals – to achieve development goals and to reduce the severity of competitive tension through the principles of partnership (Hrebeshkova, 2010).

Relational models of the behavior of enterprises are the least understood and controversial aspect of the studied subject. The process of formation of enterprise relational space (especially in Ukrainian practice) should be recognized as poorly structured. Accordingly, there is a high degree of individualization of the conclusions and relevant decisions of the persons involved in such processes.

Practice proves that the strategic partnerships exist in almost all sectors of the economy and is an essential factor for the growth and development of enterprises. One of the main causes of a partnership is to try to overcome the uncertainty in the external environment and adapt to new and unpredictable processes in the global economy that require for modern companies to search for new ways of development. Building partnerships through the involvement of companies that carry out activities outside of the “strategic core” of a business, promotes the efficient allocation of resources and minimizes costs, hence promotes a competitive advantage in the market.

Conceptually partnership involves joint efforts of two (or more) companies for the joint creation of value with a fair distribution of results among partners. However, the complexity and uncertainty of the phenomenon of a strategic partnership in the modern economy, the multiplicity of its features and multi-variant formats and methods of interaction between participants determine a plurality of views on the nature of the phenomenon. Due to the striking quote by sociologist Carmen Malena, “despite the statute” of a catchy word” and generally positive implication, partnership remains poorly defined and controversial category in the highest degree” (Malena, 2004).

Strategic partnerships as a model of strategic behavior of enterprises can be interpreted in two ways: on the one hand, partnership is a lever of development of a particular competitive advantage, ie competitive model of market behavior of enterprises; on the other – partnership is one way to avoid the competition and can be considered as the relational model of market behavior that is based on the desire of enterprises to establish relations with each other (Garrette and Pierre, 1995).

By establishing relationships with various partners, companies try to “organize the market” in order to avoid dangerous situations. In some cases, instead of maximizing profits and minimizing costs trying to find a “fair” (in economic terms) solutions that will significantly reduce the risk and uncertainty in the market.

As noted above, the conceptual basis of the new approach to the analysis of the competitive advantages of companies and their development strategies was laid by J. Dayyer and H. Singh, whose merit is the study of economic rent associated with the activities of the network. They defined “relational” rent as a “profit jointly created as a result of relationships of exchange, which can not be obtained by any firm in isolation from each other and which can be created only through joint idiosyncratic efforts of partners specialized to their alliances” (Dyer and Singh, p. 665). The sources of relational rents are the assets, specific to particular relationships, procedures of knowledge sharing, complementary resources, and skills, effective management of inter-firm interactions. J. Dayyer and H. Singh also noted that resources that are responsible for the creation of relational rents are beyond the control of individual firms, as they are the “property” of the system of the pair and network relationships.

Thus, summarizing the main provisions of the relational approach, we conclude: 1) a company can gain an advantage over competitors by forming relationships with other market participants; 2) the source of the benefits of partnership lies in specific assets, competence, and dynamic abilities, jointly owned by the partners; 3) dissemination of knowledge and competencies among the partners as well as investments in specific relational assets contributes to growth of relational rents.

Besides business interactions, the integral part of the modern relational behavior of the company is its relationship with other key stakeholders – governmental and non-governmental organizations, the media, citizens, and communities.

Analyzing the results of our survey of Ukrainian enterprises and organizations of various industries (energy, mechanical engineering and metallurgy, chemicals and pharmaceuticals, construction, food industry, insurance, banking, sales and communications, travel services) (Hrebeshkova, 2014), we can make some conclusions on the relational space of Ukrainian business. Almost regardless of the industry, the vast majority of surveyed firms recognizes their respective owners and customers (1st place in the overall ranking of stakeholders), senior managers (2nd place), middle management (3rd place), employees (4th place) and their

suppliers (5th place) as the most influential stakeholders. Among these stakeholder groups, only customers and suppliers are the “external” stakeholders. So, we can draw conclusions about the orientation of domestic business to meet the needs of the “internal” stakeholders.

In partnership groups of the “internal” stakeholders (owners and managers of all levels) are the most trusted ones, that was noted by more than 50% of the respondents. Ukrainian businesses refer with distrust to partnerships with supervisory and regulatory authorities (tax, fire, sanitation centers, etc.), local authorities and government agencies and the media.

In this context among the most interesting was the data about the results of partnerships with stakeholders that are essential for companies which include: growth in profitability (as stated by 69%), increase in sales (63%), the formation of positive reputation (59%), cost reduction (50%). Consequently, the vast majority of respondents focus on the financial (monetary) indicators of the success of strategic business activity.

In addition to the theory of stakeholders by E. Freeman (Freeman, 1984) and the concept of sustainable development, the ideas and practice of CSR are based on the concepts of business ethics (Velasquez, 1988), corporate social performance (Wartick and Cochran, 1985), the social contract (Donaldson, Dunfee 2002) and corporate citizenship (Mele, 2008).

It should be noted that the role of social responsibility in the business environment as such is still under discussion. The CSR proponents insist that companies that follow the principles of social responsibility along with their intended purpose (providing revenue for the owners) have a broader function – to meet the needs of various sectors of society. Opponents of the concept of CSR see socially oriented activities of a company as a strategy of “flirting” with the public, which does not affect the effectiveness of key business functions of the company.

Building management reporting based on CSR should be made with consideration to the interpretation of the role of business in society for the company. However, the issue remains controversial.

In a corresponding study (Hrebeshkova, 2016) we have formulated the basic principles for reflection of the results of social-oriented behavior in the management reporting of a company.

First, a company is successful if it generates results in three domains – economic, social and environmental, and is able to report these results (ie to monitor and evaluate them), that is provided through reporting on a “Triple Bottom Line” formulated by J. Elkington, 1994.

Second, in the absence of direct methods of performance evaluation of the social and environmental domains, there is a need for selection of a nonfinancial performance tracking and measurement indicators. The problem of different dimensions of a company social responsibility assessment can be solved by the balanced approach of financial and non-financial drivers of performance based on the concept of Balanced Scorecard (BSC) by D. Kaplan and R. Norton (Kaplan et al., 2005).

Thirdly, social responsibility is possible in case of the adequacy of company performance to the interests of its stakeholders. Consequently, there is a problem of identification of these interests and their coordination, especially in cases where these interests are contradictory.

Taking into account the trends that define the postindustrial economy, what should be considered as business outcomes? Is it enough for a firm to track the performance of its economic and financial “health” to achieve and retain a sustainable competitive position? Will this approach provide a strategic impact – the extent of achievement of the desired results in a competitive environment, taking into account the expectations of all interested

parties (stakeholders)? Answers to these questions are in the plane of the development of strategic metrics of a company considering all of its' relational behavior effects.

The results of our previous studies (Grebeshkova, 2016) suggest that the world practice of strategic management is enriched by fundamental developments in the field of improving the methodological tools for measuring and analytical support of the company's strategy, including Performance Measurement Models, Data Envelopment Analysis, Balanced Scorecard, Tableau de Bord, the Productivity Measurement and Enhancement System (ProMES), the Business Management Window, Total Quality Management, Total Performance Scorecard, management support information systems (ERP), Key Performance Indicators (KPI), etc.

However, each of these concepts is based on a specific set of indicators. Excess of indicators and the difficulty of gathering of actual information does not help to focus on identification of promising opportunities, which provide support for the company's competitive advantages. As a result of natural evolution, BI tools are now being used as a platform for ready-made business-oriented products for business performance management (BPM).

It should be noted that today BI solutions are unprecedentedly accessible to business from the point of view of technical simplicity of implementation, as well as in terms of cost (Grebeshkova, 2016). In this regard, it is worth paying attention to Microsoft Power BI, a product that is not only incredibly simple in terms of scaling and functionally rich, but is also cost-affordable, because the basic package of services is free of charge and allows you to analyze up to 10 thousand lines of data hourly. The MicroStrategy product stands alone in the market for business intelligence products, which provides the functionality of all BI styles in a single architecture, delivering them in a single interface. MicroStrategy provides the user with more than 100 statistical, analytical and financial functions, and data mining functions to create business metrics and high-level KPIs, and perform complex statistical analysis. Other BI technologies provide only fragments of BI styles, using various user interfaces and metadata, as well as various security models for each BI style. Every year new players appear on the market of business analytics, which is striving to provide an even wider range of analytical services and simplify the use of such tools in the daily work of the manager and analyst even more.

METHODOLOGICAL BASIS OF THE IDENTIFICATION OF RESULTS OF MODERN BUSINESS BASED ON THE VARIETY OF ITS CONTEXTS

Given the conditions of the postindustrial era and based on the philosophy of the system paradigm of economic systems, the strategic performance metrics of businesses should be defined in several contexts:

- 1) entrepreneurial (innovative), reflecting the success of innovative search of areas for business development and implementation of management technologies of their development;
- 2) marketing – the use of the entire spectrum of opportunities to identify customer needs to support their loyalty to the company and its brands;

- 3) relational – creation and support of partnerships with all groups of stakeholders;
- 4) informational – adaptation to a digital economy;
- 5) economic – observance of the economic efficiency of business in the current and future periods.

Let's show the logic and methodical basis of allocation of those contexts of business activity of the company in the conditions of the postindustrial economy (Table 1).

We believe that the main purpose of the company's strategy is to achieve a long-term competitive advantage for providing renewable distinctiveness and profitability (Nalyvayko, 2001, p. 27). Thus, in the current situation, companies have constantly been in search of promising areas to implement their business ideas and technologies (including management, information, and communication) which allow maintaining the high dynamics of development. Based on these requirements, there is a problem of converting any company to a business organization aimed at achieving success through the continuous generation and implementation of innovations in all areas of its life – the operational, financial, human, organizational, economic, managerial, information and communication and so on. The integral result of the business context of entrepreneurial activity of the company should become a highly competitive status of a company. A justified approach to assessment of the competitive status was developed by I. Ansoff (1989) using the following indicators: the relative level of strategic investments; the relative level of "optimal" strategy of the organization; level of mobilization capacity, i.e., the level of matching of the internal potential of organization to its "optimal" strategy.

Table 1. Examples of metrics of strategic results of the company in the context of its business activity

Context	Strategic result	Examples of metrics/parameters for evaluation
Entrepreneurial	High competitive status of the company	Technological innovation Management innovation Increasing productivity
Marketing	The increase of in-market presence High-value consumer products Growing brand value	Positive dynamics of profitability A significant and growing market share Consistently high customer loyalty
Relational	Systemic integrity of the company Social value of business The legitimacy of business Ecologic aspect of business	Consistently high loyalty of all groups of stakeholders
Information	Information sufficiency of business Business information value	The increasing value of information products
Economic	Economic efficiency	Value of a company The growing economic value added

Of course, the success of any business activity is determined by the market. Therefore the company has to work on a complete customer satisfaction through its products (available and potential). The discovery of “blue oceans” (Kim, 2013) business transformation to the “theatrical performance” for customers to create additional value by increasing of the “emotional component” of the product (Joseph, 2011) – these are just some examples of problems faced by the new era. The strategic result of marketing context of the business activity is increasing of firm presence in the market.

Both business and marketing contexts involve balancing of interests of various groups of influence (stakeholders) – business partners and competitors, consumers and business owners, senior management and governing institutions, communities and employees and so on. So the goal is to balance the interests of all key stakeholder groups of the company to maintain system integrity in the triad “business - society – environment.” For today’s companies, one way (but not the only!) of implementation of this task is through the corporate social responsibility policy (Hrebeshkova, 2016) and partnerships portfolio (Hrebeshkova, 2012). That’s why the relational context of business activity has a *high level of loyalty of all groups of stakeholders* as the strategic results.

Information context of business activity of the company must be recognized as a backbone under conditions of the postindustrial economy. Competitive advantages of modern companies have informational nature because in the structure of assets of the world’s leading companies the largest portion belongs to the intangible assets. In addition, the information today turns out to be a real resource, the art of work with which defines the strategic success of the company. In addition, the building of an effective “information business profile,” which includes understanding and tracking the company’s information needs and creating information products is the key to the high competitive status of the company. Confirmation of the validity of the information component in the strategic management of the company comes through the actively spreading BI-technologies that can not only monitor performance but also form a kind of information model of a company as a complex open system. The strategic outcome of information context, we believe, is to achieve information sufficiency of a business, which refers to the adequacy of the company’s information sources and their compliance with the information needs of key stakeholder groups of the company.

Cost-effectiveness is the determining result of business activity and an evidence of the firm’s ability to compensate wasted resources by received revenues. Therefore, it’s the cost that remains the strategic indicator of business success.

The main problem of the existing systems of indicators of business performance assessment is to overcome the excessive concentration on financial information through providing attention to details in various information domains: technological (technology of processing and transfer of information and technology of production of goods and services), legal, socio-cultural. It is the “weak signals” in these areas that can adequately transform the business model of the organization, allowing it to respond to external changes on time.

According to research results, companies are still in captivity of financial indicators. In particular, results of our research of problems of development of Ukrainian enterprises (Verba and Hrebeshkova, 2010) show that 54% of respondents consider the optimization of the financial resources as the most important aim; 50% are aware of the need to enter new markets (usually regional); 49% are potentially ready to increase production. The concern is the fact that only 36% of respondents expressed interest in finding ways to address the problem of staff, 25% – the need to deal with technological upgrades and only 7% – consider

potentially changing business operation profile. Therefore, it should be noted that the operational tasks are dominating among the aims of Ukrainian companies, while the strategic perspective is considered to be a minor domain, or is not being taken into account at all.

THE THEORETICAL BASIS OF METRIC SYSTEM OF EVALUATION OF STRATEGIC BUSINESS PERFORMANCE

Such metric system can have two components – the *universal* (which depends on the specifics of a particular business and be based on the principles of the Balanced Scorecard concept) and *special*.

The database, that is formed in the process of strategic and current monitoring is considered as a basis for strategy development. Strategic control through appropriate metrics can be viewed as a cross-functional strategic management process in relation to the different time phases of the strategic process which must constantly actualize the database on the results of the strategic process.

Universal metric system. The effectiveness of the strategy is defined as the extent of achievement of outlined strategic goals of the enterprise. Universal metrics are suitable for all enterprises, while special ones are set depending on the operational flow of the company (Hrebeshkova and Kyzenko, 2013).

The universal strategic goal of an enterprise is its survival (preservation of existence) in the long term as a result of the acquisition of relatively sustainable competitive advantages, sources of which lie in the unique characteristics of the company – its competencies, dynamic capacities (Teece, 2007) and as a result – exceptional market position.

The mechanism of manifestation of the dynamic capabilities of the company can be described in such a logical sequence (Hrebeshkova, 2012). Initially, the company gets inputs that are available on the market and combines them (in their composition those inputs become specific factors, resources or assets). These combinations are unique competencies of the firm with which it creates products and services. However, to ensure a steady demand for its products in terms of permanent changes in the business environment, companies must have the ability to recognize new business opportunities and competitive “Challenges” and get economic benefits by executing adaptive management decisions and by adequate organizational restructuring (competencies transformation). Given the crucial role of competencies in organizing entry into dynamic capabilities, we hypothesize the possibility of identifying the dynamic capacity of the company through of its competence indicators.

It is advisable to identify competencies by the five levels (Verba and Hrebeshkova, 2004) 1) individuals (professional competencies); 2) roles, that team members perform in groups (role competencies); 3) performing certain functions in the production and sale of products (functional competence); 4) enterprise as market participant (strategic competence); 5) uniqueness and distinctiveness of the enterprise (core competencies). The first two levels form a group of so-called personal competence, others – level of organizational competence, the good configuration of which could result in dynamic abilities of the company.

The system of indicators to track the dynamic abilities of development should reflect the performance of the enterprise in the four areas of its operations and certify the achieved level of competitiveness. Given the lack of methodological materials in this area, we solve this

problem in the context of a balanced scorecard of the company (BSC) proposed by D. Norton and R. Kaplan (2005) (Table 2).

The use of this system of measurement of the effectiveness of the company in the context of our study is feasible due to several arguments, including:

- the BSC concept is based on strategic grounds, thus allowing to reflect the ability of the organization in strategic foresight;
- the BSC takes into account both financial and non-financial projections, which are essential to reflect company capabilities in the managerial sphere and in the area of organizational learning;
- the basis of BSC lays in the idea of mutual interdependence of strategic objectives, evaluation indicators and their targets and policy measures and initiatives of the company, which allows displaying the dynamic nature of the existing capabilities of the company.

It should be noted that the system of key indicators shown in Table 2 is largely a theoretical construct and requires adaptation and expansion for a particular company.

Special metrics system takes into account the specific conditions of a particular type of business by operating flow of the company: job shop, batch, assembly line and continuous flow (Cheyz et al., 2008). The choice of the type of production flow is based on requirements to the volume of products, and uniqueness of the finished product, but not on an industry the company belongs to. Therefore, production or services within a single business line can be characterized by different types of operational flow. For example, catering services, fast food is a mass production by type of production line, while the restaurant is a job shop production. These characteristics are a manifestation of the core competencies of enterprises as a source of its distinctiveness in a market environment, and consequently, form the specifics of control system of indicators of strategic performance reflecting the strategic and operational performance of business in the following domains: financial, market, organizational (including technical and technological) innovation, social, informational. Setting up such a system can be powered by BI.

Today Business Intelligence (BI) technology is the core of a business performance monitoring system and a tool for prospective financial business planning. As an information support tool for making managerial decisions, the system of strategic metrics is a model that allows systemizing disparate indicators for calculating key economic indicators and to interpret the influence of certain factors on business performance when changing individual elements of a business model.

These systems of strategic metrics allow concentrating the attention of the manager on solving managerial tasks related to reducing the negative impact of environmental factors, modeling the outcome of various options for action and monitoring possible outcomes of decision making. Such systems support various managerial decisions – from operational ones to strategic ones and facilitate the interpretation of huge volumes of information about changes in the external and internal environment of enterprises.

Table 2. The system of key indicators for tracking development of dynamic capabilities of an enterprise

BSC Projections	Indicators for the components of the dynamic capabilities of enterprise			
	Strategic foresight	Transactions management	Innovation and changes management	Investments
Finance	Enterprise value	Relational rents	Innovation effectiveness	Return on investments
Clients (markets)	Dynamics of customer base	Business network branching	Forms of partnerships and their efficiency	Cost-effectiveness of switching to another client
Business processes (organization)	Formation of organizational capital	Formation of relational capital	Innovational level of organization	Indicators of implementation of investment decisions
Training and development	Reduction of unpredictability of the market environment	Reducing transaction costs	Level of innovation activity of the enterprise	Level of investment activity of the enterprise

Source: (Hrebeskova and Malyarchuk, 2013, p. 324-325).

Currently, thanks to modern means of communication and information technology, access to information is almost unlimited. It is possible to process huge data sets and quickly transfer information over long distances. Thus, the problem of information asymmetry in solving management problems is transformed into the problem of the need for a qualitative approximation of the information flow in order to identify relevant information in relation to a management decision.

During one strategic cycle, the company's information database should be considered not only to monitor the reachability of the current strategic plan, but also to update the database for a new strategy planning cycle.

The difficulty in forming a database, which can also be used for strategic planning purposes, is due to the fact that strategic decisions are one-off and require specific initial financial and non-financial information. Information for strategic planning cannot be obtained from the usual financial, tax and statistical (management) accounts for past periods.

When forming a system of strategic business performance metrics for enterprises, it is necessary to take into account the relationship with the process of solving such problems at the level of an enterprise:

- establishment of quantitative and qualitative objectives of the enterprise;
- responsibility for strategic planning;
- development of alternative strategies;
- the definition of "critical" external and internal conditions are used as the basis for strategic plans;
- the definition of "narrow" and the search for "weak" places;

- determining the main controlled indicators in accordance with the established strategic objectives;
- comparison of the planned (normative) and actual values of the controlled indicators in order to identify the causes, perpetrators, and consequences of these deviations;
- analysis of economic efficiency (especially innovation and investment).

In the practice of strategic management of domestic enterprises, such tools as analysis of balance sheet, results, profit and loss were widely disseminated; calculation of costs, and their coverage; system of planning, information, control; system of indicators; ABC analysis; calculation of profitability of investments; break even analysis programs to reduce and optimize costs; portfolio analysis; plans, strategies; life cycle analysis; cost analysis; analysis of working hours; performance analysis; re-engineering of business; analysis of internal and external environment; analysis of investments; analysis of innovation activities. Depending on the specific business type (production, credit, insurance), its size and management structure, the set of tools can vary. However, the most wide-spread discussion is the question of introducing the management accounting system and using the BSC methodology at enterprises.

Analysis of the application of analytical tools for measuring business performance based on the results of a study of more than 100 Ukrainian enterprises of various spheres of activity, scales and regional affiliation, conducted with the participation of authors in 2009-2016. It showed that 68% of sample companies have experience in implementing budgeting, 22% – management accounting systems, 17% – Balanced Scorecard.

PRACTICAL ADVICE ON CHOOSING A STRATEGIC BUSINESS PERFORMANCE METRICS FOR UKRAINIAN ENTERPRISES OF VARIOUS SPHERES OF ACTIVITY (BASED ON EMPIRICAL DATA)

For segmentation of management information on the interdependence between management decisions on strategic choice of business development directions and the level of reimbursement of operating and investment costs during its operation, we propose to use the step-by-step aggregate costs calculation method, the essence of which is in grouping expenditures that are relevant to the level of strategic choice and determining the appropriate target and actual indicators of marginal revenue. Formation of the strategic performance metric based on the criteria for cost recovery and evaluation of business performance enhances the objectivity and timeliness of the strategic choice of the company's development direction.

At the first stage, it is necessary to analyze the factors of formation of income (relational context) from the maintenance of a separate business line (business context) and determine the target level of annual revenues in selected market segments (the marketing context). The next stage is the grouping of current or planned expenditures by the levels of strategic choice and determination of the amount of expenditures per one year (economic context). Using the step-by-step calculation method we determine the target indicators of marginal revenue and profit for the selected strategic steps of the strategic choice (economic context), controlling the performance of the business model in real time (informational context).

Following the basic principles of building a step-by-step cost estimate, let's present this approach on the example of the restaurant business. Based on the results of a survey of a group of managers of full-service restaurants in Kyiv, conducted by O. Kyzenko in 2012-2014. In restaurants, the share of fixed costs in the cost structure is 75%, including annual expenses for covering capital costs in the form of depreciation – up to 30%, general production costs – up to 9%, administrative expenses – up to 36%. Variable costs account for only 25% of the total costs of the enterprise. Accordingly, the major share of fixed costs is the one of covering investment costs in the form of depreciation charges. In terms of the degree of comfort, the level of service and the volume of services provided, restaurants are divided into three classes: *luxury*, *supreme* and *first class*, which determines the amount of required capital expenditure for the establishment of the restaurant. Thus, the restaurant business is characterized by the fact that at the stage of establishment of an enterprise a number of necessary investments and future operating expenses directly depends on the strategic choice of the owner with regard to the specific characteristics set of the enterprise.

The first level of strategic choice is the choice of the restaurant class. According to this strategic choice, it is necessary to analyze the form of organization and business structure (the ratio of “online” and “offline” elements of organizational design tools), personnel and technical equipment. The value of these indicators is calculated for one year of the company's work based on the standard term for covering investment costs.

In terms of 1 year (quarter) of the restaurant operation, you need to calculate the following indicators.

- In the “Restaurant location” domain: total area of the restaurant, m²; the total area of the adjacent territory, m²; land fees, UAH; the cost of registration of the allowing documentation, UAH; architectural and construction project and engineering and construction works, UAH.
- In the “Personnel” domain: the total number of employees (by type of work and category in accordance with the staffing table), staff costs (except cooks, barmen, waiters and other categories directly engaged in serving guests).
- In the “Technical Equipment” domain: the cost of additional services, UAH; material and technical equipment of premises for guests, kitchen, bar, administrative premises (by the type of equipment, including software).

The resultant indicator of the strategic choice for choosing a restaurant class is “marginal revenue 1,” which is calculated for one year (quarter) of the restaurant's work as the difference between income and expenses related to the choice of restaurant class.

The second level of strategic choice is the choice of restaurant specialization. For this strategic choice, it is necessary to analyze the costs for the following items: design and decoration work in the guest rooms; furniture and branded clothing, table textiles, tableware, guest appliances, glassware for a bar. The values of the indicators are calculated for one year (quarter) of the restaurant's work based on the standard term for covering investment costs. The resultant indicator for the selection of the specialization of the restaurant is “marginal revenue 2,” which is calculated as the difference between “marginal revenue 1” and the costs associated with the choice of specialization of the restaurant.

The third level of strategic choice is the menu exclusiveness. These costs should be grouped by the product groups in the menu, separating the marginal revenue cost between the

two groups in proportion to the shares of the respective groups in the sales revenue during the average year. The last element on the third level of strategic choice is the Administration. Administrative and managerial costs, marketing training costs and special events, utilities and other operating expenses should be deducted from the “marginal profit 4” indicator, forming a pre-tax profit target, which is an indicator of business performance.

The application of the step-by-step method of calculation allows the formation of a database of management accounting, creating prerequisites for identifying expenses relevant to a certain factor of restaurant success (both current and investment), which can be calculated on average per 1 seat for a certain billing period. Such an approach makes it possible to assess the economic efficiency of the institution’s performance for such traditional indicators as the occupancy rate of the restaurant (in percent) and the turnover of one seat. In addition, this approach allows us to consider the complex impact on the efficiency of the restaurant as a marketing indicator, and financial to create an effective pricing policy.

Marketing indicators are used by both internal and external recipients of information. In the group of marketing indicators, it is advisable to include indicators that characterize the main components of the restaurant’s popularity: a successful location, a high level of service culture, a “tasty” kitchen. Financial indicators are used mainly by internal users of information. In a group of financial indicators, it is advisable to include indicators that characterize the main financial results of the restaurant’s operation during the reporting period, for example, profit, marginal revenue, reflecting the financial success of the restaurant. These indicators are in direct correlation with the level of prices in the restaurant, which should reflect the expectations of the consumer of the restaurant product for marketing components that affect the choice of the institution.

This approach changes the process of determining the metrics of the economic efficiency of companies. Analysis of these metrics allows us to develop a program for companies’ long-term development in the context of strategic decisions and competitive behavior.

CONCLUSION

Summarizing the above, we can draw the following conclusions. In the conditions of a postindustrial economy, the condition of economic processes changes, affecting the behavior of market subjects. Financial indicators of business valuation in the current period have ceased to be sufficiently informative for interested stakeholders in assessing the success and prospects of the business. This determines the need to expand the contexts in which strategic business metrics are presented. We supplement the economic context by informational, entrepreneurial, marketing and relational contexts.

In further researches it is important to specify the way of expansion and the managerial audit of strategic metrics in the business, informational and relational contexts. Primarily this is to do with the expansion of the capabilities of enterprises to work with information, and the formation of network interaction between economic actors and the rapid development of technological innovation. Such studies will make it possible to generalize the experience of choosing the strategic metrics for individual sectors of the economy or economic clusters, enhancing their practical importance.

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