

PERFORMANCE MANAGEMENT IN SMALL AND MEDIUM-SIZED MANUFACTURING ENTERPRISES OPERATING IN AUTOMOTIVE IN THE CONTEXT OF FUTURE CHANGES AND CHALLENGES IN SR

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Abstract: The aim of the paper is to review and outline the strategic changes and their main impact on the developing of KGI and KPI indicators in the selected performance management model that is the Balanced Scorecard, further referred to as BSC. The monitored market subjects are primarily both the micro and the small and medium-sized enterprises in the automotive industry in the Slovak Republic. The paper focuses on both modern and traditional performance indicators. The core of the analytical part is the review of the current situation of the selected KGIs of the automobile industry in Slovakia and the analysis of the predicted changes that have been transferred into the individual BSC perspectives and particular KGI and KPI indicators. The discussion and recommendation contain the analysis of the key strategic changes, threads and adaptability to the challenges of industry 4.0 in the Slovak Republic. It is especially a systemic perspective on the subject and the analysis of the specific changes in the strategic, operative and process-related indicators including the updated data from the automotive industry that is so enlightening. The paper also outlines the possible solutions and measures in relation to the monitored changes of the selected and most frequently used KGI indicators. Moreover, it could be very useful when the performance management models are implemented in small and medium-sized enterprises in the conditions of Slovak reality.

Keywords: business strategy, performance management models, future changes, automobile industry, KGI, KPI, Balanced Scorecard

1 Introduction

The paper is focused on the frequently discussed topic of the approaching changes in the internal conditions of businesses in Slovakia. Its objective is to simulate the incoming strategic changes under certain conditions, along with their impacts on the formation of the business performance management model and its changes for specific KGI and KPI indicators. The selected model is the Balanced Scorecard and the focus of research is mainly on small and medium-sized enterprises. The category of micro, small and medium-sized enterprises (SMEs) consists of businesses employing less than 250 persons, with the annual turnover not exceeding EUR 50 million and / or the total annual balance sheet amount not exceeding EUR 43 million. The given classification is an excerpt from Article 2 of the Annex to Recommendation 2003/361 / EC. The importance of the topic is confirmed by the fact that the automotive industry is a key branch of the Slovak economy. The automotive industry accounts for up to 30% of the total industry, which is obviously a large proportion. Moreover, there is a significant risk for Slovakia if it fails to deal with the approaching challenges in terms of both the macroeconomic and microeconomic perspective of the individual companies.

The main concepts of the paper are ‚strategy‘, ‚performance‘, and ‚future direction‘ of the small and medium-sized enterprises in the automotive industry in Slovakia. Their selection is directly derived from changes which seem to come from several directions and are examined by various authors. In this context, the term of ‚Industry 4.0‘ is used most often at first. It refers to the process of optimizing production processes using state-of-the-art technology to increase production. The concept originated in Germany in 2013. It was an initiative of the German government which was analysing the impact of new technologies on the country's economy at that time. The Slovak economy is very closely tied to the German one in the common European market and will therefore be significantly affected by the process of the coming years.

Ludbrook et al. (2019) said that although the relevance of business models for sustainable innovation in Industry 4.0, only limited research has been conducted on this topic.

The program of Industry 4.0 is about to integrate horizontally and also vertically within the society. This step is also considered to be the Fourth Industrial Revolution in terms of the development of production (Wang et al., 2016).

In the next step there is often mentioned the arrival of new technologies, artificial intelligence, robotization, and subsequently also the arrival of autonomous vehicles, which will lead to the reduction of the number of vehicles on the roads, the product turnover cycle should be prolonged and the quality of production will probably also be improved. At the same time, digitization, dematerialization, demonstration, greening and more democratization will take place. The whole environment where the businesses operate is expected to change gradually. New business models are already being discussed within the enterprises. In fact, the approach to employees and the prevailing corporate culture should gradually change. Not only linear changes are predicted, but also exponential ones, the failure of which means that many businesses will cease to exist.

Business strategy as one of the proven tools and success factors can capture the incoming changes and adapt to them, as it is claimed by Mc Kinsey, for example. Henry Mintzberg characterizes the strategy by the means of the alternative ‚Five P’s‘, and so are we. In a systemic perspective the strategy is characterized as a Plan, the direction as a Pattern in the sense of Code of Conduct in the following period. Moreover, there is also a Position focused on defining specific products and markets in detail even at the lowest level. Furthermore, there is Perspective, which is focused on the way an organization makes things, and finally there is Ploy, which is a specific manoeuvre to outwit the rivals and competitors. The basis for a strategy creation is a traditional Porter's model, which defines its essence as a competitive advantage that a business possesses, develops and maintains even in the future. The coming changes are going to test the essence of the strategy which will either help the businesses or make them gradually cease to exist, which will eventually prove their functionality. Considering the focus of the selected strategies, it can be concluded that the product differentiation strategy is going to become prominent in relation to the future changes. In fact, it is an individualization of product together with a leading position at low costs, which is a significant challenge for current businesses and emphasises the need for establishing savings at every level.

According to Frosen et al. (2016), from the perspective of business marketing, the most widely used strategies used by businesses are marketing performance measurement and market orientation. However, experts have not yet agreed on the optimum combination of these two strategies to maximize business performance.

Considering the viability of strategy and the fulfilment of strategic objectives, the authors are inclined to accept Thompson-Strickland's (2007) concept, which states that a business strategy is made up of activities and business attitudes that lead employees to achieve their business performance. They also state that the strategy is both proactive and reactive. In the real world, it is certainly not possible to predict and plan all possible changes, such as natural disasters, political changes, changes in laws, new technological discoveries or others. This implies that the strategy must inevitably be flexible enough to respond to these unforeseen changes and must therefore appropriately combine the planned activities with sufficient scope to respond adequately to current developments. Steinöcker (1992) offers a complementary view of these changes. He points out to what individual businesses need to do in order to meet the demands that they will face in the future. First and foremost, they will have to both tackle and avoid problems by prevention and a long-term comprehensive and systematic perspective. It is also essential to constantly question the validity of one's own

patterns of thought and behaviour. It is necessary to follow new paths, analyse concepts of things and then act quickly and create one's own concept of business performance.

Suryasaputra et al. (2011) states that it is very important to keep business performance at a good level in the long term in order to make business sustainable. Business performance includes four criteria: sustainable development, corporate social responsibility, stakeholder theory and corporate responsibility theory.

According to Richard et al. (2009), any scientific work on business performance must be based on very solid theoretical foundations, as the whole issue of business performance is very complex. Nevertheless, it is one of the most important measures for a management to evaluate the success of a business. Performance evaluation must not only be determined by individual indicators in the business but must be very complex and subject to consistent validation of results. It should not be ignored that the business performance is also influenced by countermeasures that could result in the reduction of its performance.

For the purposes of this paper, performance is considered from the systemic perspective. This point of view is very often used by the ISO 9000 series standards, but they do not define it. The European Foundation for Quality Management (EFQM) defines performance as „measure of achieved results by individuals, groups, organizations and processes“¹ Performance therefore represents a kind of intermediate step for increasing the business value, which can be understood vice versa, that it is possible to measure the value of the company thanks to its performance and a selected KGI. For example, Neumaierová and Neumaier (2002) maintain that the value of a business is determined by its performance. In order to increase the value of a business, it is necessary to increase its performance by proper management. That is, if we want to improve business performance, we should effectively manage and enhance the performance of business core processes (through KPIs) to meet the strategic goals and vision of the business. Suddenly, a question arises, how to achieve this? What will be changed, reclassified and added within the performance management model in the context of future changes in the automotive industry? These are questions that form the core of the theoretical and practical part of our paper. Our intention is to be of assistance to small and medium-sized enterprises despite the fact that the researches confirm there are few Slovak managers who are familiar with this method and use it in their business. The manager's task is to maintain adequate growth of the company (Vochozka, 2011).

Sabbagh et al. (2019) argue the automotive industry has also begun to change globally in recent years as management tends to view car manufacturing as a service. Therefore, car manufacturers focus more on identifying the management of overall quality and financial and non-financial KPIs.

Moreover, for the purposes of this paper, it is necessary to emphasise that so far there has not been carried out a comprehensive study of the BSC introduction as a performance management model and the implementation of a business strategy in the Slovak Republic (Gavurová, 2011, p. 165). We have tried to undertake our own research through a questionnaire survey, but the return rate of the questionnaires was only 1% of the total number of questionnaires sent, which in any case is not a relevant sample for our paper. It should also be noted that there is relatively little empirical evidence of how many Slovak businesses are or have implemented the BSC system and, above all, whether it is functional.

2 Literature research

2.1 The performance and choice of the management model of the business performance

Since more specific understanding of a business performance is classified according to the relationship between interest groups in a business, it is necessary to fully answer to the question for

whom, or in regard to whom we manage, assess, interpret, and evaluate the business performance. In this case, business management is to be dealt with. Its decision-making consists in implementing business strategies and specific strategic goals, which follows the broad line of this article. The Balanced Scorecard (BSC) is considered as an integrated strategic system of assessing and managing the business performance and which is able to construct reliable indicators. The system was developed at the beginning of 1990s by economists R.S. Kaplan and D.P. Norton, who published the first article on this issue in journal *Harvard Business Review* in 1992 (Gavurová, 2012), published a book called 'Balanced Scorecard: Translating Strategy Into Action' in 1996. The authors (2008, p. 62) dealt not only with an overall management of the system of the company management and a plan for a successful implementation of the strategy, but also with a set of managerial instruments illustrated in the examples of HSBC Rail, Cigna Property and Casualty and Store 24.

Veber (2009, p. 540) argues that what is here to be dealt with is a method that establishes a relation, i.e. unavoidable connection between company's policies implemented in strategic business plans and operational activities focused on assessing the performance. After all it refers to a controlling instrument with a wide range of application. Its advantages are dynamics, complexity and it also provides a double feedback which means that the management must supervise the performance of prescribed activities using KGI and KPI methods so that employed techniques result in achieving goals of defined strategic aims, which may currently be highly appreciated. This model is rather complex in relation to the time summary of the system; it connects the conception, strategy and operational goals and can be continuously updated and improved. The bright side of the Balanced Scorecard and carefully chosen performance indicators is that it permanently enhances the competitiveness, makes a greater use of tangible and intangible assets of the company by abandoning efforts which do not lead to achieving goals so that losses are incurred. Besides, it also partially assesses potential risks, which means that the company becomes more transparent and straightforward for its management. It is a technique that helps link together goals and activities from individuals, teams and departments to the whole enterprise. It thereby helps the enterprise be successful and financially stable on a long-term basis. On the other hand, the drawbacks are that such a situation may arise when this system of the performance management was not accepted by employees so that defined standards and overall required performance would fail to be fulfilled. The next considerable threat might be an inadequate support of the top management or inconsistent methodology of following separate KGI and KPI in regard to the responsibility. However, these drawbacks can also be overcome if identified and tackled on time.

Chiang and Lin (2009) declare that BSC is an ideal complementary instrument for the Data Envelope Analysis (DEA). These two models may also complement each other. BSC can provide outputs of the performance for DEA and DEA may define benchmarking for companies relying on inputs and outputs. The results showed a mutual relationship between BSC and DEA. Eliat et al. (2008) argue that the combination of BSC and DEA can be used for assessing the success rate and attractiveness of projects to customers. Managers of these companies can thereby acquire greater knowledge of how the company's development influences its clients.

What is evident is that it is the right choice of the model of the performance management of the corresponding indicators, assessment methods and the assessment of the business performance together with its specifications that may touch on central issues and shortcomings which need to be tackled (Kožená and Jelínková, 2014). Wagner argues (2009, p. 56) that a business should obtain a complete information support regarding the management of the business performance in relation to its strategy, tactics and operation. We can thereby say that to know, assess and manage the business performance is necessary not only in the present situation, but its significance

will also be acquired in the future. Currently, most of the popular opinions on managing performance of organizations result from a very careful consideration which, according to Wagner (2009, p. 34), might be posed as a challenge: ‘An effort to a mutual integration and harmony of individual performance aspects is the best way to bring about a synergic effect from which the organization and all interest groups in its environment may benefit.’ In our opinion it is this interesting challenge that best illustrates methods and complexity of the performance management model and points out not only the comprehensiveness or specificity of the issue of performance management, but also the extraordinary ability of the management model to adapt, which is highly useful in the group of small and medium-sized manufacturing enterprises existing in the automotive industry in Slovakia.

2.2 The model of the performance management of the Balanced Scorecard and KGI and KPI indicators

Wagner (2009, p. 231) argues that it is possible to divide the monitored performance parameters BSC into four basic groups labelled as perspectives:

1. Financial perspective.
2. Customer perspective.
3. Internal processes perspective.
4. Knowledge and growth perspective.

In order to carry out a closer and more in-depth analysis of individual perspectives and their indicators, Table 1 from Fibirová (2005, p. 47) was drawn up for that purpose. The table focuses on separate KPI indicators according to the perspectives. However, we must not omit that the compilation of the table considers only the then conditions and the analytical part will deal with its updates to the current situation and expected future challenges.

Tab. 1: KPI indicators according to perspectives and their relations to output indicators

Indicators of the financial perspective			
Output indicators	Driving forces		
	Marketing mixture	Costs reduction	Exploitation of resources (investments)
Economic value added (EVA), EBIT, ...	Generation of sales according to segments of customers, % yields from new products and customers, the development of the profit rate in relation to customers, ...	Costs reduction (costs management), ...	The return of investments % expenses of the research and development, ...
Indicators of the customer perspective			
Output indicators	Driving forces		
	Time	Quality	Price
The volume of sales (in Euro, pieces) % share on the market, % share of a customer, the profit rate	% meeting of the deadline, the reasonable time of the feedback, % service interventions, ...	The number of complaints, the number of guarantee repairs, questionnaires on the subjective quality assessment, ...	% comparison of prices with competing parties, % comparison of prices with the last period, the measuring price per unit, ...
Indicators of the internal processes perspective			
Output indicators	Driving forces		
	Duration of the process	The process quality	The process costs
The deadline for repaying the costs, the development from the „profit“ of selected products, ...	The net duration of the process to the overall duration of the implementation of the products, % number of new products, investments ...	The degree to which the product is damaged, the amount of waste, % of processes with a statistical control, ...	The use of ABC method, ...
Indicators of the knowledge and growth perspective			
Output indicators	Driving forces		
	Employees' abilities	Abilities of the	Motivation

		IT system	
The assessment of employees' satisfaction (questionnaire), ...	The ratio of engaging strategic jobs, fluctuation, ...	The ratio of covering strategic information, % of data in real time	% of motivated managers, employees and the degree of knowledge of the project,

Source: Fibirová (2005, p. 47).

KGI (Key Goal Indicators) refer to summarized key goal indicators of the financial performance, i.e. in Table 1 referred to as output indicators; these indicators have been set according to process goals resulting from the strategic document and the enterprise's conception. They demonstrate what should be achieved by the whole business process (the establishment of goals). The concept of KGI arises from COBIT¹ methodology. They establish the goal from which KPI (Key Performance Indicators) are derived. These indicators assess the performance of an already specific process through the establishment of partial goals. Considering standard and modern models, the most convenient is their mutual combination so that the monitored enterprise may achieve a great profit and far-reaching effect. KPI constitute key indicators that express the required performance (quality, effectiveness and economy).

Pavelková et al. (2018) analysed the identification of KPI combined with the indicator of Economic Value Added (EVA) in the area of automotive industry in the Czech Republic.

Gavurová (2012) argues that this method has not been so far much employed in Slovakia, mostly in a view of the fact that the use of this method had not been extensively explored by companies. On the other hand, the Czech Republic has had this method thoroughly adopted and results show that only 55% of companies confirmed a sound knowledge of BSC; however, they do not plan to implement it in the future. As a matter of fact, only 3% of companies in the Czech Republic make use of BSC system. Furthermore, 20% of companies admitted that they would like to play BSC system in the future and 17% of companies have never heard about the system.

2.3 Selected KGI indicators and their calculation

The assessment of financial performance through key goal indicators is implemented in our article by a financial benchmark of economic value added even when it is not proved that enterprises use it. The reasons to choose this benchmark are for instance that it enables to work out a value and reliably estimate the participation of individual subjects in the overall outcome, by means of which BSC enables generous rewarding and motivation. Režňáková (2010, p. 14) argues that focusing on one key goal prevents conflicts of all business participants. The calculation of the economic profit (over-profit) from operational activities (EVA₂) is carried out in the analytical part using a profit rate indicator of the equity ROE. An advantage of EVA is also the relatively simple approach compared to other evaluation criteria (Stehel and Vochozka, 2016).

$$EVA = VI * (ROE - Nv) \tag{1}$$

Where:
 VI – enterprise's equity,
 ROE – equity profit rate,
 Nv – equity costs.

Equity costs (Nv) generally refers to opportunity costs which depend on the risk from business activities of the company. The higher the risk is, the higher the required profit rate of the company's equity and the equity costs are. According to Fotr and Souček (2011, p. 118) the formula for calculating equity costs is devised as follows:

1 COBIT refers to a framework of the most useful approaches to IT governance). This integration is carried out by connecting business and IT goals, defining benchmarks and models for assessing whether the required goals have been achieved and assuming responsibilities of individual owners of business or IT processes. [Cit. 27.1.2019] Available on [www:https://managementmania.com/sk/cobit-5-control-objectives-for-information-and-related-technology](https://managementmania.com/sk/cobit-5-control-objectives-for-information-and-related-technology).
 2 The calculation was verified in a real business whenever it was possible.

$$PV = ro + RP_3 \quad (2)$$

Where:

PV – the required profit rate of the equity

ro – the profit rate of risk-free investments (including without limitations the profit rate of bonds and debentures)

RP – risk premiums $RP = \beta$ coefficient \times (Rm-Rd),

β_4 – coefficient (professional approach) – if a company which has not penetrated the stock market is to be dealt with

Rm – the average annual profit rate of stock market shares portfolio

Rd – the average annual profit rate of bonds

Other monitored factors which are often considered as companies' KGI include the net profit, growing total revenues in terms of the growth rate or achieved level of the overall added value, the work productivity and combined indicators such as the average profit margin or a gross margin. All these factors were calculated according to Finstat methodology.

3 Materials and methods

The analytical part in connection with the monitored businesses is based on data of Finstat, where data from the financial statements of particular businesses are found in the most up-to-date form. The combined data available as of 7 May 2019 were used to calculate the indicators and thus one block of data consists of the 2016 financial statements and the other block presents the financial statements for 05/2019, which are available for 2017 and 2018. The data are adjusted to average or sum or expressed in % and absolute in Euros. The methodology of performance calculation consists of modern and traditional methods of financial character. Based on this classification, the specific and most commonly used KGIs are defined.

4 Result

4.1 Current state of achieved KGI in automotive industry SR 2016-2018

The following Tables 2 and 3 show not only clearly the absolute and value differences between businesses but also the differences in the weighted average cost of capital achieved or, in terms of profitability, the average profit and gross margin and indicative changes between the periods under review. I am talking about the indicative changes because the year 2018 is not yet finalized and much depends on what type of method a person chooses for which indicator. As the selected indicators are not particularly demanding except for the EVU, I will stay with them in particular. Although its values are negative, see below, does not mean that all businesses have it negative. In 2017, 24% of indicators achieved a positive EVA indicator and in 2018 it was 20% of companies. In terms of the volume of its creation and size structure, these were mainly medium-sized and large companies. In terms of focus it was SK NACE 29310 i.e. manufacture of electrical and electronic equipment for motor vehicles and manufacture of motor vehicles. We would like to point out that there is a lot of room for improvement of this indicator also in other SK NACE and if we look at both tables we find that in year-on-year comparison it worsened.

3 The calculation of the equity costs often involves a specific risk surcharge, which is also included in our calculation. This surcharge considers the size of the enterprise according to its capitalization. The capitalization was verified in various ways and, eventually, it was the value of enterprise assets that was chosen for that purpose (CFO, 2014).

4 Beta coefficient shows a degree of volatility throughout changes in debts via the difference between the beta for an indebted company debt-free company. The coefficient consists in that debts included in the capital structure increase the risk for the investor to invest in the equity (the debts are superior to owner's investment in the equity). Debt-free companies typically demonstrate a lower beta (unlevered beta), which indicates lower risks compared to indebted companies (levered beta). The coefficient is calculated as follows:

$$\beta_1 = \beta_u + \beta_u \cdot CK + \frac{(1-Sdp)}{VK}$$

Tab. 2: Selected indicators of KGI for 2016 (in EUR'000)

Types of businesses (EUR)	Overall profit (EUR)	Total sales (EUR)	EVA together (EUR)	Average WACC (%)	Average profit margin (%)	Average gross margin (%)	Additional value (EUR)
small	4,933	202,091	-7 757	53.49	303.31	33.15	48,247
micro	7,100	124,249	75,271	44.74	-17,784.64	-5.16	12,253
medium	34,237	1,597,105	-10,255	28.70	46.04	23.70	219,471
large	593,198	2,493,8020	-134,131	24.58	-321.92	-12.94	3,209,112
total sum	639,468	26,861,466	-76,873	38.43	-6,236.71	4.78	3,489,083

Source: Authors.

Tab. 3: Selected indicators of KGI for 2017-2018 (in EUR'000)

Types of businesses	Overall profit (EUR)	Total sales (EUR)	EVA together (EUR)	Average WACC (%)	Average profit margin (%)	Average gross margin (%)	Additional value (EUR)
Small	-5.160	252.168	-31.053	17.24	-7,130.63	-8.72	45,092
Micro	11.682	52.887	-54.077	35.67	-14,326.28	4.55	8,194
Medium	38,343	1,834,439	-35,136	30.32	116.39	24.95	249,832
Large	580,727	25,225,826	-150,526	35.95	110.16	21.22	3,379,657
Total sum	602,228	27,365,320	-270,792	31.68	-6,576.31	9.46	3,682,775

Source: Authors.

4.2 KGI and KPI in the context of future changes

The following subchapter of the analytical part deals with the pillars of the whole model of business performance management from the organizational, procedural and target but also human point of view, supplemented by particular possible indicators of KGI and KPI together with the anticipated future changes the businesses will have to face in the near future to face. Table 4 thus represents an update of the perception of performance indicators of the BSC management model used so far by Fibrová (2005, p. 47).

Tab. 4: Key future prospects for KPIs and KGIs

Indicators for the financial perspective				
Driving forces (KPI)				
Output	Marketing mix	Cost reduction	Individualization and personalization	Use of resources (investments)
Economic Value Added (EVA), Discounted Cash Flow, Market Value Added (MVA), EBIT1, EBITDA2, etc.	Changing the overall business and marketing system will increase the difficulty of across-the-board evaluation, but the indicators of sales growth and profitability development ban. remain.	Reducing costs and generating savings together with their monitoring and evaluation (savings mainly in raw materials, energy and materials).	Not only in access to external but also to internal subjects. In the promotion of creativity and innovation, thus enabling the continuous growth of the added value of each individual in the company (increase in investment in human capital).	Pressure to accelerate return on investment (period), growth in R&D spending, information and security system. Monitoring via IRR, NPV and others
Indicators for customer perspective				
Driving forces (KPI)				
Output	Time	KGI	Time	KGI
Sales volume (in Euros, pcs), % market share, % customer share and stability = satisfaction, Profit margin, Product profitability, etc.,	% meeting deadlines, average response time, % service interventions, the range of services at the price of the product will increase. And building the long-term. Relations gets in the forefront.	Sales volume (in Euros, pcs), % market share, % customer share and stability = satisfaction, Profit margin, Product profitability, etc.,	% meeting deadlines, average response time, % service interventions, the range of services at the price of the product will increase. And building the long-term. Relations gets in the forefront.	Sales volume (in Euros, pcs), % market share, % customer share and stability = satisfaction, Profit margin, Product profitability, etc.,
Internal business process perspective indicators				
Driving forces (KPI)				
Output	Duration of the process	Process quality	Effectiveness	Process costs
Cost reimbursement period, Value added creation, Labor productivity per employee, per hour,	Net processing time to total product lifetime, % number of new products and close trend monitoring. Trend shortening and streamlining process through the system of improvement proposals (indicators in terms of their benefits).	Product damage rate, amount of waste, % of processes under control. This is done using robotic systems – cognitive technologies, autonomous systems, miniaturization and systematic collection, sorting and evaluation of data.	Continuity of production, monitoring and evaluation of specific types and causes of downtime, delays in fulfilling orders. Frequency of problems, failures and their nature and identification of the exact causes and ensuring remediation in a short time in order to minimize costs.	Use of improvement methods such as ABC, Six Sigma, Cost Attack, Reengineering, Outsourcing, Kaizen etc.

Indicators for learning and growth perspectives				
Output	Driving forces (KPI)			
KGI	Employee skills	Capabilities of information system	Complexity	Motivation
Measuring employee satisfaction, monitoring trust in a company and attitude to corporate culture and values. Including risk assessment, Altman Z-score and monitoring external development of selected sectoral macroeconomic indicators.	The ratio of occupation of strategic jobs and turnover in these jobs. Substitutability. A system of lifelong learning and regular monitoring of access to change. Appeal for flexibility and a positive approach to change.	Strategic information coverage ratio. A system of sorting information into meaningful and meaningless is likely to be one of the key algorithms bringing meaningfulness into a very large and ever-increasing flow of information.	Reflecting in customer and employee satisfaction and SME collaboration to get bigger projects. Localization in the environment and cooperation with surrounding institutions. Greening.	% of motivated executives, employees, level of awareness of projects and events, support of teamwork and building relationships of full trust among them in terms of meeting the common corporate goal (s).

Source: Authors according to structure by Fibírová (2005, p. 47).

4. 3 BSC in the automotive industry in Slovakia

One of the aims of this paper was to make a detailed analysis of the state of BSC implementation in Slovakia. For this purpose we created a questionnaire which contained all the necessary questions. However, the return on questionnaires⁵ reached only 1% and it is therefore impossible to draw relevant conclusions under such conditions. Until businesses are obliged to respond to questionnaires of this type, or they are taken over by the statistical office or other institution, which will be legally captured, the information is likely to be absent in the long run. What is certainly a pity, because they would also represent a kind of benchmarking or an incentive to improve specific businesses.

5 Discussion

As only a small part of the business has an established performance management system in terms of implementation, we have also looked at the research that deals with this phase and verifies the success of this model. Gavurova says (2011, p. 175) in her partial research on the implementation phase of BSC that 56% of respondents see the greatest benefits in the fact that implementing this system results in the increase of the strategic performance of the business and 44% of them see these benefits in the change of the perspective, which means that data actually needed for management are preferred over the financial indicators. It is a sample of mostly medium-sized and large enterprises that are not focused on the selected sector of the economy. The key to the selection is to know and implement the BSC. There is a very interesting conclusion in connection with the gradual development of this model and its latest phase. Up to 80% of respondents in the Slovak Republic, who draft a strategic map⁸ at the organizational level, report that the use of the BSC system has significantly improved values of at least 3/4 indicators. The remaining 20% do not monitor this information. Only 50% of businesses have noticed this significant improvement without a strategic map. Let us examine the strategic map (3rd generation BSC) a little closer. Its creation is associated with the aim of linking visions, missions and strategies with goals within the individual perspectives.

Amini and Bavil (2011, pp. 220-228) also defend the important position of strategic maps in their case studies from a particular business. They point out to the difficulties and emphasise the need for a strict focus on the specific conditions of each business and the necessity to improve acceptance by all personalized sections of the business. Garengo and Biazzo (2012, pp. 79-102) presents a somewhat broader concept of the measurement system for business performance of small undertakings. He points out to a one-sided and top-down approach in relation to the transformation strategy, which considers business activities, but it does not take into account the fact that small businesses do not to give great importance to formalizing strategic decisions. Therefore, it points out to the need for an individual approach to each business. Thus, he proposes a methodology for these businesses which would link a real strategy to an intended strategy, which emphasises the process of observation and the clarification of vision. However, we consider this approach appropriate when a small business attempts to gradually implement a performance management model, which is rather a

first step. Especially these abilities to transform the strategy, and to develop and focus on systematic long-term, purposeful and accepted perceptions of objectives in terms of the BSC's performance management model are essential for the capacity to rise to the challenges. There are other research works carried out, for example, in the conditions of American businesses from the Balanced Scorecard Institute (BSI8). Other research focuses on the implementation phase in terms of IT infrastructure, e.g. Sandkuhl, Meissen and Hacker (2003, pp. 26-30). The so-called moral point of view is especially important in each sphere. No matter if it is in the context of the setting of goals, implementation, calculation of methodology or other business impacts affecting not only the business environment but also the employees, see the moral dilemma of economic optimization examined by Vochozka, Stehel and Maroušková (2018, pp. 1331-1338).

Considering the current perspectives of future development and the necessity of updating these trends or changes to BSC, it is important for the business to have them established at least in the basic structure. If they are not established, they can be built with respect to the challenges and future trends. Stanek and Ivanov (2017) claim small and medium-sized enterprises have long neglected the relations of business opportunities to the general characteristics of social consumption, in other words, it has been a poorly interconnected business with market needs.

Moreover, there is outsourcing and offshoring that have developed a new business space in terms of cooperation with large businesses. It has enabled to transfer the cost and efficiency problem to small and medium-sized subcontractors, but it puts pressure on them to build up inevitable savings and reduce fixed costs. The situation is beneficial for big entities, who deal with sales. However, constant pressure remains on the costs of the small and medium-sized enterprises. Subcontracting chains have emerged in the automotive industry. Transnational businesses are going to try to push Slovakian subcontractors into maximum responsibility for their economic results and eventually transmit problems on them, which will probably cause that the subcontractors will make effort to reduce their dependency on transnational businesses. Other changes include the creation of so-called personalized economy, offering quality of services along with preserving and supporting human creativity, implementing environmental standards within society or developing services related to personal development, which not only do open up other business opportunities for companies but also greater opportunities for the development of their own employees. Since there is a continuous debate about the so-called information society, it is information with its accuracy, availability, security, comprehensiveness and timeliness that is and will be of the greatest importance. Current and anticipated disproportions in the area of taxes, levies, administration and forms of assistance are not addressed in the paper.

Societies 4.0 and 5.0 mean a complex social transformation. The development of a shared economy in terms of new communication with customers, the development of autonomous transport systems, which will change the nature of local transport, personalized smart technologies and greening processes, while minimizing waste will be crucial to the automotive industry. This is a change in two principles from the perspective of business philosophy, which are namely personality and complexity. It will require a new quality of cooperation of small and medium-sized enterprises with each other. Consequently, trust, cooperation and correctness will have to return into their relationships, as they will not be able to operate without the change of thinking and attitude. Especially small and medium-sized enterprises will play a particularly important role in the adaptation process, as they will know the specific conditions that will enable them to transform specifically under the influence of the fundamental changes mentioned above. Their adaptability will be crucial. The question is how to transform? These changes can be transformed into the internal business environment precisely through the business performance management model and selected KGI and KPI indicators that ensure regular monitoring and

implementation of the necessary measures to manage the changes.

As it seems to be clear that the overall extent of the change is expected to be in relation to introducing robots, digitization and artificial intelligence processes, therefore these changes in particular will need to be incorporated in three key phases, namely:

- to identify the expected processes and their possible impacts on the business,
- to create a model image of a particular virtual form of the future situation and to identify the directions of its future development in relation to the monitored business,
- to implement the adaptive processes to the coming change by a transformation into the performance management model.

6 Conclusion

The objective of the paper was to evaluate the current situation in terms of applied performance management models in automotive of the SR, with a focus on most widely used KGI. The next step was to update the individual perspectives and adapt them to the new conditions by means of learning about strategic changes and their main impact of the formation of KGI and KPI indications in a selected performance management model (BSC).

In short, in order to maintain the efficiency, bottom-up innovating will be necessary, as well as to learn constantly, cross discipline boundaries, and to have a complex view of the future in order to be able to update the business vision and strategy. Another step will be integration of exponential technologies, IT, greening, humanization, and developing the employee creativity, and as a priority, to integrate them into the processes as much as possible.

In the context of current situation in which the businesses operate, all the aforementioned assumed changes represent an area or a network of intersecting opinions, interests, and strategies. However, one thing is clear: the current strategic goals of small and medium-sized enterprises in the form of increasing profit, expanding the customer portfolio in terms of series-produced products will gradually cease to work as the overall trade and marketing systems have been changing. The decisive changes will include a new form of communication with customers, business partners, individualization of the production as well as the approach to the entities that are in contact with the company, a significant increase in using software in business processes, which is a crucial factor of flexibility, greening, and mainly the directed and individual promotion of human resources education, since those are the carriers of change. Relations will be reconsidered in terms of a kind of partner dialogue creating the prerequisites for a ration and joint pooling of forces in order to achieve a joint effect and maximum benefit, which is not possible without mutual trust.

First of all, it will be inevitable to introduce BSC performance management system and consider it in terms of the company vision, culture, long-term success, and solution of an expected situation in the context of a continuous integration of resulting changes as much in advance as possible. This is also confirmed by selected KGI indicators for automotive of the SR between 2016 and 2018. In terms of risk for small and medium-sized enterprises, lack of information and enormous pressure put on saving and streamlining can be the Achilles heel. In terms of company specialization in order to achieve permanent success, the authors share the opinion of Košťuriak and Chal' (2008, p. 61, p. 31), who see the following as the decisive focus:

1. systematic innovations a permanent ability to change,
2. development of human resources in a company, creating values and development of business culture.

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