APPLICATION OF THE BALANCED SCORECARD AS A STRATEGIC MANAGEMENT TOOL IN PRACTICE: A CASE OF SLOVAK TOURISM SECTOR

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Abstract: In this paper, we addressed the analysis of strategic management issues with specific focus on the use of Balanced Scorecard concept within the Slovak tourism enterprises. The main objective of paper is to highlight barriers complicating the application of the above mentioned method into business practice by means of the data obtained from the questionnaire survey. The essence of paper consisted of hypotheses formulated on the basis of literature review with an emphasis on professional publications and research studies conducted so far. Hypotheses were verified by selected statistical methods to explore the potential dependencies between variables. The partial objective of this research study was to point out the importance of Balanced Scorecard concept in terms of enterprise management assessing its performance by financial indicators as well as non-financial indicators.

Key words: Balanced Scorecard, tourism, ownership, personnel resources, Chi-Square Test of Independence.

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INTRODUCTION

The current business environment is characterized by constant changes that companies need to be able to respond flexibly and effectively. The technological advancements in the globalizing world and the rapid change in socio-economic conditions result in the increase of customer demands and expectations (Tuzunkan, 2018a). Thanks to tourism, people are visiting new destinations, but also sport activities in a healthy environment are gaining importance. The practice of sport and leisure has begun to transcend the urban area as people are oriented towards the practice of physical exercise in nature, closely related to environmental requirements (Ilies et al., 2018). Therefore, the modern era combines tourism with physical activities that perfectly regenerate the human body and soul. All these factors include the tourism sector, which is the subject of our research. Employee engagement and employer branding is concerned, we are able to exhaust plenty of these conceptions on the basis of suitably formulated corporate policies and their initiation into real practise (Bendová & Štepánková, 2017).

Business entities must respond to ever-changing market situation and be able to adapt to these changes professionally. In this context, companies need to employ appropriate managers with innovative approaches bringing new business ideas and trends. As reported by Malec, Kiráľová (2018), the most significant competencies demanded from managers are providing a complex view (summary) as well as feedback, time management, leadership and planning, considering both boundaries of eigenvalues with corresponding eigenvectors analytical (resp. smooth) path. Huttmanová (2017) emphasized that the main purpose of human development should be the expansion of human potential. If a company wants to be successful, it is not enough to focus only on financial aspects. Nowadays, the company's success depends increasingly on flexible factors including the non-financial indicators. These considerations closely linked to the ability to continually improve customer or supplier relationships include the ability to learn, the innovative strength of employees and the use of information society opportunities. In this regard, it is important to focus on the area of enterprise performance assessment and management (Šofranková et al., 2017).

The paper deals with the analysis of **Balanced Scorecard (BSC) method**, which is a modern management tool for measuring and managing the performance of an enterprise. According to Kerai, Saleh (2017); Kollberg, Elg (2011), the BSC concept is based on two basic pillars, representing both financial and non-financial indicators. In this paper, an emphasis was put on exploring the BSC method in Slovak tourism conditions, as tourism is one of the most important sectors within the world economy. Health and wellness tourism is now an established international trend for health-conscious consumers looking to improve their welfare (Stará & Peterson, 2017).

THEORETICAL BACKGROUND

Tourism sector is the largest service industry and largest employment generator in the world (Kolosinska et al., 2018; Tuzunkan, 2018b). Tej, Matušíková (2014) emphasized that tourism, mainly as a vital component of the so called leisure industry, has become a significant phenomenon in the last decades and its economic, social, political, cultural and other effects form an indisputable part of the reality transformations today. The definition of tourism is addressed by many Slovak as well as foreign authors, whereas each of them understands this concept from different point of view. In 1990s, the United Nations World Tourism Organization (UNWTO) defined tourism and its related concepts at an international conference in Ottawa. The officially accepted definition of tourism was stated as "the activities of persons travelling to and

staying in places outside their usual environment for not more than one consecutive year for leisure, business and other purposes not related to the exercise of an activity remunerated from within the place visited" (United Nations World Tourism Organization, 2017). According to the United Nations (2010), tourism is a social, cultural and economic phenomenon related to the movement of people to places outside their usual place of residence, pleasure being the usual motivation. The activities carried out by a visitor may or may not involve a market transaction, and may be different from/or similar to those normally carried out in his/her regular routine of life. As reported by Gúčik (2013), tourism has acquired an interdisciplinary character with the essence to satisfy specific human needs. Author defines tourism as "a set of activities aimed at satisfying the demand for traveling and staying outside the place of permanent residence and usually in free time for the purpose of relaxation, education, health improvement, entertainment, cultural and sport activities or business trips". Tourism is considered as a system composed of different elements that have certain interconnections among themselves, or they can be easily created. According to Orieška (2012), "tourism is an open and dynamically evolving system that consists of two subsystems: the tourism subject and the tourism object". There are some links not only between these subsystems, but also between tourism and other systems constituting the surrounding (external) environment-economic, social, cultural, legislative, technical, technological and environmental environment. By author Baiburiev et al. (2018), tourism has a significant impact on economy and social development of the region, contributing to the flow of currency, creating new jobs, improving infrastructure, etc.

Improving the overall results in the tourism sphere also depends on the appropriate choice of methods supporting the performance improvement of tourism enterprises. In this study, we have focused on the BSC method representing a wide-spread strategic management tool. The essence of the above mentioned concept is to provide a comprehensive overview of both financial and non-financial indicators through four core perspectives that link business strategies and visions to individual goals and measures (Handoko & Wehartaty, 2017; Hladchenko, 2015). On basis of their expert observation, the authors of the BSC Norton and Kaplan (1996) offered four perspectives which make the basis of the given methodology. Characteristics of the four basic perspectives represent the following activities: financial perspective look at an enterprise from the point of view of its owners. The goals related to growth, cutting the cost, investments, and sustaining in the market and so on are set up. The goals are related to traditional financial indicators. Customers´ perspective looks at an enterprise from the point of view of customers. Increasing the share in the market, satisfaction of customers, gaining new customers, increasing profit per customer or return of customer are frequent goals.

The perspective of internal processes follows the goals related to processes that must be improved to reach the goals set up in financial and customers´ perspectives. Emphasis can be put on, for example, on the goals in the domain of value chain, innovative and operative processes. The perspective of learning and growth is focused on the goals related to the infrastructure and education of an enterprise. The authors of the conception do not recommend following more than twenty indicators in an enterprise. Doing so, an enterprise avoids following useless indicators and can concentrate its capacities on more important activities (Kaplan & Norton, 1996, 2005).

In the Slovak business environment, the BSC is not a commonly used method, but its application into practice is the subject of many research studies. In 2017, Bain & Company conducted a worldwide survey on a sample of 3,800 business entities to identify the most important concepts and tactics that companies are using today. The following

Figure 1 presents the top 10 management tools used in business practice (including the BSC method) over the years 2015 – 2017. According to Bain & Company's research, the BSC method fluctuated around the middle of compiled ranking, so it implied that approximately half of the surveyed enterprises used this modern performance method. Based on the above mentioned research we can state that the BSC concept is still up-to-date and successfully applied tool for measuring and managing business performance.
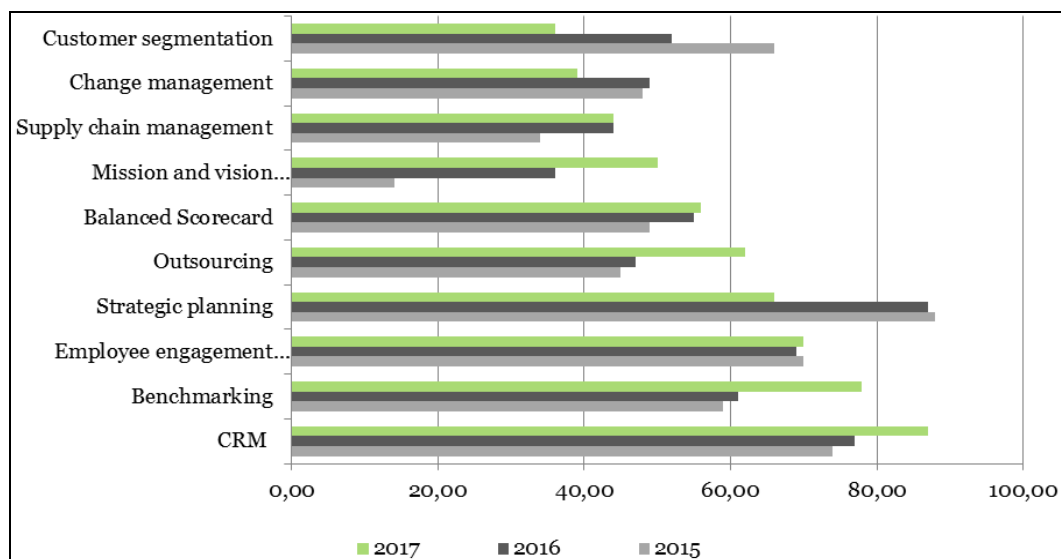
Figure 1. Top 10 management tools and their application in business practice (worldwide, in %)

In Slovakia, the research study focused on the BSC method was carried out by author Karabašová (2010), who dealt with the issue within her PhD thesis. Data were obtained from a total of 110 Slovak enterprises. Based on the findings, only 6.00% of the analysed companies used the BSC concept (on average). Another and more up-to-date research focused on the issue of BSC was realized by the authors Lesáková, Dubcová (2016) 6 years later. However, there were no significant changes as the evidence from this study suggested that only 9.15% of Slovak enterprises decided to apply the above mentioned concept. Compared to other European enterprises using the BSC method at the average level of 53%, this result is considered to be undoubtedly insufficient (Bain & Company, 2017).

MATERIALS AND METHODS

The presented paper was focused on the BSC concept and its use within the tourism sample companies. In particular, we explored barriers as well as factors influencing the BSC use in Slovakia. The intention was to reveal statistically significant relations among the above mentioned factors through the verification of formulated research hypotheses. The relevant data from enterprises operating in the tourism sector was obtained by the questionnaire method. Currently, information is disseminated mainly thanks to information technology (IT) and devices, so we decided to submit a questionnaire compiled using Google form application. Questions were asked in the form of choice answers and the determination of their importance according to the Likert scale. The Likert scale represents a type of scale that consists of series of statements and mostly five options reflecting the degree of agreement or disagreement of respondents. Thus, the

range captures the intensity of their feelings for a given item (Široký, 2010). The compiled questionnaire was divided into two basic parts. The first one consisted of identification questions focused on the size of enterprises, the form of their ownership, category and class. The second part of the questionnaire concerned the strategy and enterprise performance management with a more detailed focus on the BSC concept. Based on the most comprehensive analysis of the BSC concept, we concentrated on finding answers to questions about the frequency of the BSC method use, the reasons complicating its application in practice and what are the preferences of the individual indicators within the BSC perspectives. Another important choice in compiling and submitting the questionnaire was to find a suitable, quality and relevant database to make our research sample representative. For the purposes of this study, the database of enterprises operating in tourism sector was obtained from the Slovak Business Agency (SBA), which is a crucial and the oldest specialized non-profit organization for the support of small and medium-sized enterprises in Slovakia. The questionnaire was submitted to a total of 616 enterprises operating in the Slovak tourism sector. However, of all the questionnaires sent, the return of questionnaires reached the level of 9.47% (60 questionnaires received).

For the needs of this survey, the return rate ranging around 10% was considered to be standard, so the results obtained were relevant. In this regard, the following hypotheses were set to support the aim of the paper:

H1: We assume that there is a statistically significant relationship between the ownership (Slovak or foreign) of enterprises operating in the Slovak tourism sector and the use of BSC method to measure their enterprise performance.

H2: We assume that there is a statistically significant relationship between the lack of personnel resources and putting the BSC method into business practice within the Slovak tourism sector.

From the research methods, descriptive statistics, contingency tables, comparative analysis, synthesis, selection, induction and deduction were employed to evaluate the data obtained. In order to verify the formulated hypotheses, the Pearson's Chi-square Test of Independence was applied and processed in the DELL Statistica software, 5.5th edition. In addition, we also used the standard deviation method as it was considered a suitable method for determining certain dependencies in this research. In the following Table 1 are stated formulas for calculating the selected indicators.

RESULTS DISCUSSIONS

The research we conducted in the Slovak tourism sector was focused on the BSC concept use and possible barriers complicating its application in business practice.

In European or American countries, the BSC method is much more used than in Slovakia. Gartner's research in 2015 came to conclusion that more than 50% of large US companies applied the BSC method to measure enterprise performance. Based on the results of recent global study provided by Bain & Company, the BSC method ranked 5th within the top 10 most widely used management tools (Iervolino & Decker, 2015).

Such a high percentage of using the BSC method abroad encouraged us to analyse this concept in Slovak conditions. In accordance to above mentioned theoretical approaches to the solved research problem and knowledge about the use of BSC method, we explored whether there is a statistically significant dependency between the frequency of BSC use and the ownership of enterprises operating in Slovak tourism sector. From the point of view of enterprise ownership, we have focused and distinguished between domestically and foreign owned companies. The research studies mentioned in the previous section clearly point to the fact that businesses abroad use

the BSC concept much more than in Slovakia. Thus, we explored whether the application of BSC method into Slovak business practice is affected by origin/type of enterprise ownership and whether the foreign owners operating in Slovak business conditions use the BSC method more often. Therefore, data from questionnaires were processed only by respondents using the BSC in practice. As a suitable method for verifying a given hypothesis and detecting dependencies between the specified variables, the Pearson's Chi-square Independence Test was applied. Using this method, we calculated the Chi-square Test characteristics and subsequently compared with the critical table value for the selected profitability of errors and identified the degree of freedom. Table 2 contains the expected dependencies of the enterprise ownership.

Table 1. Calculation of the selected indicators (Data source: Marcheová et al., 2011)

| Indicator	Formula	Author and description	Explanatory note
Pearson's Chi-square Test of Independence	$\chi^2 = \sum \dfrac{(f_e - f_t)^2}{f_t}$	The Chi-square statistic is a non-parametric tool designed to analyze group differences when the dependent variable is measured at a nominal level created by Karl Pearson in 1900.	χ^2 – the Chi-square value subsequently compared to a table value based on the selected error probability, f_e – the empirical frequency of observed variables, f_t – the theoretical frequency of observed variables.
Standard Deviation	$s = \sqrt{\dfrac{1}{n} \sum_{i=1}^{n} (x_i - \bar{x})^2}$	Standard deviation is a measure that is used to quantify the amount of variation or dispersion of a set of data values. The name "standard deviation" came from Karl Pearson.	s – standard deviation, x_i – the observed values of the sample item, $\bar{x}$ – the mean value of these observations, n – the number of observations in the sample.

Table 2. The results of testing a hypothesis using the Pearson's Chi-square Test of Independence

Pearson's Chi-square Test of Independence	
Calculated value	p = 0.0467
Error profitability	α = 5% (0.05)
Degree of freedom	DF = 1.00
Critical value	$\chi^2 = 0.01$

The results of Pearson's Chi-square Test of Independence reflecting the direct relation of these two variables by XY Scatterplot are graphically presented in Figure 2.

Based on the hypothesis verification via the above mentioned statistical test, we can conclude that there is a statistically significant relation between the analysed group of enterprises owned by Slovak and foreign investors and using the BSC method. This relation results from the calculated p value, which is lower than 0.05 (the significance level of 5%). Thus, there is a statistically significant relation between these factors and the hypothesis **H1 was accepted.** One of the main prerequisites for successful implementation and handling of the BSC concept depends on appropriate personnel resources, whereas well-trained and socially mature employees represent a big advantage for enterprises. As the Tootell et al. (2009) stated "since 1980s there has been an

increasing emphasis on the importance of HR measurement". Huselid, Becker and Beatty (2005) declared that the elements in the HR Scorecard are key leading indicators for workforce success. These theoretical approaches led us to determine the following hypothesis by examining whether there is a statistically significant relation between putting the BSC method into practice and the lack of personnel resources.
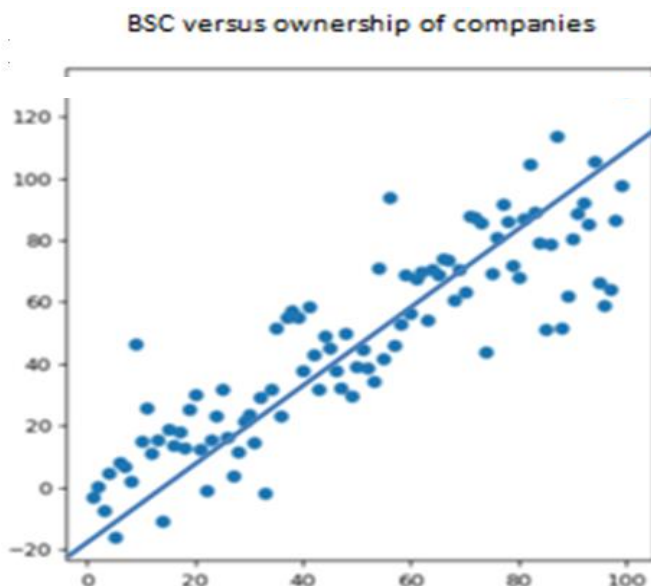
Figure 2. The BSC method versus the ownership of companies

To verify the second hypothesis, we asked respondents to specify reasons hindering the use of BSC concept in practice. This question was formulated in the format of the five-stage Likert scale, where respondents could express their agreement or disagreement with the submitted statement. When evaluating, we analysed the frequency of responses and the standard deviation value. However, one enterprise from the entire research sample marked a different option as it was offered, whereas the enterprise refused to publish results and information that could be revealed.

Table 3. Statistical assessment of reasons hindering the use of BSC concept in practice

| Reason	Mean	Min.	Max.	Standard Deviation	The most common answer	Frequency of the most common answer
Inability to clarify the current enterprise strategy	3	1	5	1.22	3	9
High financial costs of using the BSC method	3	1	5	1.10	3	11
Lack of personnel resources	4	1	5	1.17	3	7
Considering the BSC concept just as the current trend	3	1	5	1.17	3	8
Inconsistency between managers' ideas	3	1	5	1.10	3	10
Other reasons	3	3	3	1.00	3	1

We consider this reason unfounded, as the BSC concept serves for internal needs and it is not a concept that makes the enterprise more visible or vulnerable than any external statement. The reasons complicating the BSC concept use and their statistical processing are stated in the following Table 3.

Subsequently, using the Pearson's Chi-square Test of Independence Test, we verified the hypothesis based on the assumption that there is a statistically significant relation between putting the BSC method into practice and lack of personnel resources. Table 4 contains the expected frequency of dependencies on the lack of personnel resources related to the use of the BSC concept.

Table 4. The results of testing a hypothesis using the Pearson's Chi-square Test of Independence

Pearson's Chi-square Test of Independence	
Calculated value	$p = 0.0496$
Error profitability	$\alpha = 5\% \ (0.05)$
Degree of freedom	$DF = 1.00$
Critical value	$\chi^2 = 0.01$

The results are graphically illustrated in Figure 3 reflecting the direct relation of these two variables by XY Scatterplot.
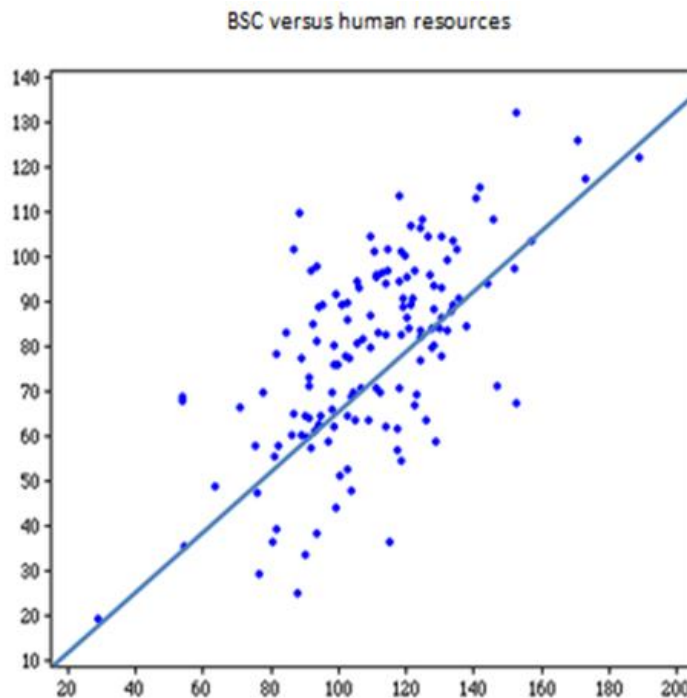
Figure 3. The BSC method versus the lack of personnel resources

Based on the result we can conclude there is a statistically significant relation between putting the BSC concept into practice and the lack of personnel resources. This statistical relation can be determined from the calculated p value bellow 0.05 (the significance level of 5%). Thus, the hypothesis **H2 was also accepted**.

The presented research was focused on the analysis and confirmation of the assumption that the ownership and the lack of personnel resources have a significant impact on the putting the BSC concept in Slovak tourism enterprises. To conclude, both premises were validated successfully using selected statistical tests.

CONCLUSION

In the area of business performance and measurement system, many studies have been realized to create a management tool supporting the continuous improvement and performance evaluation of business processes. Enterprise performance measurement is actually characterized by two basic and quite different views. The first one is focused on the financial aspects perceived by investors as a financial investment increasing the company's value. The second approach to performance evaluation perceives the enterprise as a socio-economic system and a complex network of internal and external interconnections that also needs to be balanced. In this perspective, the BSC performance measurement methodology provides a strategic view of the enterprise management, vision, mission and strategy, not excluding performance measurement both financially and non-financially. In this paper, we addressed the analysis of BSC method, its application as well as shortcomings in the Slovak tourism sector.

The research consisted of several partial analyses based on the formulated hypotheses to explore potential interconnections influencing the BSC method use and its well-established concept in business practice. From the subsequent statistical verification of the hypotheses, we can confirm that there is a statistically significant relation between the ownership of enterprises (in the case of both Slovak and foreign owners) and using the BSC method. Putting the BSC method into practice is also influenced by lack of personnel resources, which was confirmed by statistical verification of the second formulated hypothesis. Summarizing the research, our findings and recommendations could be formulated as follows. Enterprises operating in the Slovak tourism industry perceive that performance measurement on the basis of financial indicators is currently inadequate and even inappropriate for the future-oriented businesses and success.

Otherwise, non-investing in employees and other non-financial indicators will threaten the company's competitiveness and sustainable growth. Despite the fact that investing in non-financial indicators causes a short-term deterioration of the company's financial situation, it does not lead to serious problems or bankruptcy. On the contrary, these investments will ensure profitability and an increase in the company value in the long term, which is the main goal of the company's owners.

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