

STRATEGIC MANAGEMENT TOOLS AND TECHNIQUES USAGE: A QUALITATIVE REVIEW

Albana Berisha Qehaja¹, Enver Kutllovci¹, Justina Shiroka Pula¹

¹Department of Management and Informatics, Faculty of Economy, University of Prishtina, "Agim Ramadani" n.n. 10000 Prishtinë, Republic of Kosovo

Abstract

BERISHA QEHAJA ALBANA, KUTLLOVCI ENVER, SHIROKA PULA JUSTINA. 2017. Strategic Management Tools and Techniques Usage: a Qualitative Review. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 65(2): 585–600.

This paper is one of the few studies to review the empirical literature on strategic management tools and techniques usage. There are many techniques, tools and methods, models, frameworks, approaches and methodologies, available to support strategic managers in decision making. They are developed and designed to support managers in all stages of strategic management process to achieve better performance. Management schools provide knowledge of these tools. But their use in organizations should be seen in practice-based context. Consequently, some questions arise: Do they use these strategic tools and techniques in their workplace? Which strategic tools and techniques are used more in organizations? To answer these questions we have made a review of empirical studies using textual narrative synthesis method. Initially, this study presents a tabulation with a summary of empirical research for the period 1990–2015. The included studies are organized clustering them by enterprise size and sector and by country level development. A synopsis of the ten most used strategic tools and techniques worldwide resulted as follows: SWOT analysis, benchmarking, PEST analysis, "what if" analysis, vision and mission statements, Porter's five forces analysis, business financial analysis, key success factors analysis, cost-benefit analysis and customer satisfaction.

Keywords: strategic tools and techniques usage, strategic planning tools, empirical evidence, narrative synthesis

INTRODUCTION

"Knowledge of what is does not open the door directly to what should be." (Einstein)

Strategic management is about the direction of organizations, most often, business firms. It includes those subjects of primary concern to senior management, or to anyone seeking reasons for success and failure among organizations (Rumelt, Schendel and Teece, 1994). According to Stonehouse and Pemberton (2002), strategic management can be conceptualized as a set of theories and frameworks, supported by tools and techniques, designed to assist managers of organizations in thinking, planning and acting strategically. The strategic management field underwent spectacular growth, especially subsequent to the appearance of Schendel and Hofer's book *Strategic Management*

(1979) and the almost contextual establishment of the *Strategic Management Journal* (SMJ) in 1980, and the *Strategic Management Society* in 1981 (Dagnino and Cinici, 2016). Also, according to Ketchen, Boyd and Bergh (2008), the *Strategic Management Journal* (SMJ) has grown from a nascent outlet devoted to an emerging field of study to become one of the most highly regarded and influential publications within the management discipline.

There is no doubt that strategic management tools and techniques (hereinafter often abbreviated as SMTTs) are important parts of the strategic management process. Strategy tool is a generic name for any method, model, technique, tool, technology, framework, methodology or approach used to facilitate strategy work (Stenfors, Syrjänen, Seppälä and Haapalinna, 2007). According to many authors (Clark, 1997; Clark and Scott, 1999; Frost, 2003) there are certainly numerous techniques, tools

and methods, models, frameworks, approaches and methodologies, which are available to support decision making within strategic management. Even Gunn and Williams (2007) described strategy tools as concepts that assist strategic managers in decision making. Whilst, according to Clark (1997), SMTTs can be included in all stages of strategic management process: situation assessment, strategic analysis of options, and strategic implementation.

Stenfors *et al.* (2007) emphasized that the strategic-level support tools offered to executives are diverse and come from many different disciplines. According to them they: *"can be found at least in the following fields: systems science, systems thinking, operations management, logistics, industrial engineering, decision support systems, expert systems, knowledge management, management information systems, executive information systems, artificial intelligence, business intelligence, online analytical processing, enterprise systems, marketing, accounting and finance."*

Management schools provide knowledge of these tools. Wright, Paroutis and Blettner (2013) summarized the most mentioned strategic tools in the literature of strategic management as follows: Porter's Five Forces Model and Generic Strategies; SWOT; the Resource-Based View of the firm; Value Chain; Boston Consulting Group (BCG) Matrix; McKinsey 7S Framework; Balanced Scorecard; Bowman's Strategy Clock; Strategic Group Maps; Strategic Factor Analysis Summary (SFAS); and Blue Ocean Four Action Framework. These tools are mainly developed by consultants for large international companies (Stenfors *et al.*, 2007). Accordingly, a variety of strategic tools are developed to support managers in strategic decision making (Ramanujam, Venkatraman and Camillus, 1986). Grint (1997) emphasized that at least one new approach to transformation has emerged every year in the last forty years. Oppositely, Porter (1996) highlighted that: *"the quest for productivity, quality and speed has spawned a remarkable number of management tools and techniques... Although the resulting operational improvements have often been dramatic, many companies have been frustrated by their inability to translate these gains into sustainable profitability. And bit by bit almost imperceptible management tools have taken the place of strategy."*

Strategic management has often been criticized on the grounds that it is based upon theoretical principles and not on the realities of management (Berry, 1998). Improving the quality and application of strategic management education is seen as one way to enhance management practice (Baldrige *et al.*, 2004; Bower, 2008; Grant, 2008; Ghoshal and Moran, 1996; Jarzabkowski and Whittington, 2008; Prahalad and Hamel, 1994; Whittington *et al.*, 2003, as cited by Jarzabkowski, Giullietti, Oliveira and Amoo, 2012). So, the use of SMTTs in organizations should be seen in practice-based context. As a result, there are some burning questions on the topic: Do managers use these strategic tools and techniques in their workplace? Which strategic tools

and techniques are used more in organizations? So the main aim of this study is to investigate and analyse whether SMTTs are used by managers and which ones are used more. Consequently, the following research tasks are set:

- Reviewing the empirical literature on SMTTs usage during 1990–2015;
- Discussing the results by enterprise size, sector and by country level development;
- Summarizing the most used SMTTs worldwide.

The authors consider this to be one of the first attempts in this context. Thus, this paper contributes to the existing scientific literature especially in strategic management field. Firstly: this study is likely to contribute to decision makers in increasing the SMTTs usage in their enterprises since there are many benefits from using them. Secondly: it pinpoints the most used SMTTs by different sized enterprises, sector and country level development.

Theoretical insights

Tools for better planning have begun to emerge before the publication of the classic book of Ansoff *"Corporate strategy"*, in 1965 (Hussey, 1997). According to Glaister and Falshaw (1999), at the end of 1970s, strategic planning suffered a downturn in popularity and influence. In large part this was due to the inability of strategic planning tools to deliver what was expected of them.

It is argued that the understanding of strategic tools usage is important for three main reasons. First, it indicates the motivations of managers when using strategic tools. Second, it will be suggestive of the dissemination processes underpinning the application of tools. Third, it assists academics and practitioners in moving away from a normative, rational approach to more humanistic, practice-based approaches to the understanding of tool usage (Gunn and Williams, 2007).

The list of tools that have been developed and proposed by consultants or academics yet never get widely adopted is too long to enumerate (Jarzabkowski and Kaplan, 2015). Although there is no definitive list of SMTTs in literature (Clark, 1997), there have been several attempts to classify them, but these studies are considered secondary. While according to Lisiński and Šaruckij (2006), after extensive research into the literature, a lack of a comprehensive study devoted to strategic planning methods categorisation was noticed.

Various authors have presented a different number of tools for strategic analysis by specifying them as a guide for managers. Among the first authors that have made an assessment and classification of 21 techniques with 11 dimensions were Prescott and Grant (1988), who studied the usage of 21 strategic techniques. While, Webster, Reif and Bracker (1989) compiled the list of 30 most commonly used tools for strategic planning. Clark (1997) investigated 66 SMTTs, from which mainly were used 33 of them. Vaitkevičius (2006) analysed 41 SMTTs. Since,

Lisinski and Šaruckij (2006) presented 28 strategic tools in a dendrogram and made their classification into four main groups.

Knowledge-based global competition has created a need for purposeful strategy work and effective decision-making processes. Companies thrive on growth and competitive advantage and seek more successful ways of working with and managing knowledge (Stenfors *et al.*, 2007). Wright *et al.* (2013) pointed out that under increasingly complex and uncertain environments, managers are expected to recognize and embrace a more complicated (*not simplified*) understanding of an (e) merging world(s), and as such, need at their disposal tools and techniques for better decision making. In these circumstances, companies can benefit more than ever from strategic management, its tools and techniques, as their right use improves the performance and efficiency of enterprises.

There have been many calls from academics to review the role and importance of SMTTs (Clark, 1997; Frost, 2003; Barney and Clark, 2007; Gunn and Williams, 2007; Jarzabkowski *et al.*, 2012; Tassabehji and Isherwood, 2014). According to Knott (2006), the role of SMTTs is: *“a guide to thinking and a starting point for structuring strategic management activity.”* Pasanen (2011) stressed that the role of SMTTs is to facilitate strategy work. According to Webster *et al.* (1989), the use of SMTTs raise the level of strategic thinking' in organizations and the “effectiveness of the strategic planning process”. Afonina and Chalupsky (2012) emphasized that the SMTTs are various tools that support managers in all stages of strategic management – from strategic analysis to the selection of the strategy and its implementation, in order to improve deficiencies in the organization to achieve better performance.

Jarzabkowski *et al.* (2012) provided evidence from a large-scale survey (1407 respondents) on business school alumni' patterns of adoption of those tools, techniques and frameworks typically taught within strategic management education. The results of this study clearly indicated a strong impact of management education in the workplace practice of business school alumni. Even Wright *et al.* (2013) probed the question: *“How useful are the strategic tools we teach in business schools?”* Their findings are promising in a business school context (prior to the manifestation of practice). Gunn and Williams (2007) found that there is a clear relationship between the educational background of the respondents and their use of strategic tools. Those respondents with master's degrees tend to utilize a grouping of tools commonly associated with those taught in business schools as part of management courses (Gunn and Williams, 2007). Unlike others, Vaitkevicius (2007) found that managers in Lithuanian organization defined the SMTTs in the wrong way. According to him: *“one possible way to explain this could be that knowledge gained through general education is not sufficient to engage in effective strategy development.”* Legge, Sullivan-Taylor

and Wilson (2007) emphasized that learning management in schools mainly offers individual career benefits, with limited knowledge and skills transfer in the workplace.

The use of strategic tools in organizations, whilst still fundamental to creating and developing strategy, should be viewed from a practice-based perspective (Gunn and Williams, 2007). There are gaps between the theory of how should SMTTs be used and their real usage (how managers use them). Therefore, recently several authors have introduced into literature a new approach known as *“strategy as practice”* (Whittington, 1996, 2006, 2012; Jarzabkowski, 2004, 2005; Johnson, 2007; Carter, Clegg and Kornberger 2008; Jarzabkowski and Spee, 2009; Golsorkhi, Rouleau, Seidl and Vaara 2010; Vaara and Whittington, 2012).

General, strategic management tools and techniques could bring a lot of benefits for the organizations under the condition that managers have a clear perception/understanding of existing tools and techniques (Afonina and Chalupsky, 2013). The benefits of these tools include: increasing awareness about the business environment, strategic issues, opportunities and threats which help reduce the risk involved in making certain decisions; establishing priorities in large, complex companies and providing a framework for evaluating the relative importance of different business portfolios; and aiding the presentation of complex issues. (Frost, 2003). According to Gunn and Williams (2007), strategic tools can be used to analyze an organization and its environment, or as a mechanism to improve communication, control and coordination. Webster *et al.* (1989) argued that the use of SMTTs will increase the analytical and diagnostic skills of managers. While according to Pasanen (2011) efficiency is the most important advantage of using SMTTs. Also, according to Frost (2003): *“techniques may also aid the presentation of complex issues, and may be seen as valuable communication devices, in addition to their analytical role.”* He added: *“It often becomes possible to reduce many pages of narrative plan to one or two diagrams that result from the use of some of the techniques.”*

Porter (1996) showed his concern regarding the use of SMTTs in the strategic work: He properly stated that SMTTs cannot replace the firm's strategy. Hussey (1997) also stressed out that: *“techniques do not make a strategy: this is the role of managers.”* Whittington (1996) said that SMTTs can help a part of the strategic management process instead of ensuring a replacement for managerial skills and experience.

Managers no longer have the luxury of dealing with a few key issues at a time. They must deal with a multitude of issues from different directions simultaneously. Strategic tools and techniques that help managers deal with these complexities and uncertainties will be much sought after (Wright *et al.*, 2013).

Methodology

The study is based on a systematic review of empirical research on the usage of strategic management tools and techniques. Systematic reviews (or overviews) are syntheses of primary research studies that use (and describe) specific, explicit and therefore reproducible methodological strategies to identify, assemble, critical appraise and synthesize all relevant issues on a specific topic (Carney and Geddes, 2002).

The main method used for synthesizing empirical research was *textual narrative synthesis*. This method could bring together broad knowledge from a variety of methodologies and approaches (Bélanger, Rodríguez and Groleau, 2011). This approach relies primarily on the use of words and text to summarise and explain the findings of the synthesis (Popay *et al.*, 2006). Furthermore, according to Popay *et al.* (2006), there are four main elements of narrative synthesis. We then, followed these steps to conduct a narrative synthesis for this study.

(1) *Developing a theory of how the intervention works, why and for whom*, this is presented in narrative form in the Theoretical insights;

(2) *Developing a preliminary synthesis*. According to Popay *et al.* (2006), the purpose of the preliminary synthesis is to develop an initial description of the results of included studies and to describe patterns across the studies.

As a tool to present the preliminary synthesis we have used Tabulation. See Tab. I. *Comprehensive summary of empirical research on the usage of SMTTs in enterprises*.

(3) *Exploring relationships within and between studies*. The practical work involves using data previously extracted from primary studies to look at the relationships between study results and key aspects of the primary studies, and comparing and contrasting these relationships across the studies (Popay *et al.*, 2006). Tables and graphs are used as tools to present the exploring relationships within and between studies.

(4) *Assessing the robustness of the synthesis*. According to Popay *et al.* (2006), most straightforwardly robustness can be used to refer to the methodological quality of the primary studies included in the review and/or the trustworthiness of the product of the synthesis process. Thus, all primary studies included in this review are published in popular scientific journals and have their main findings are carefully synthesised.

This study included 27 full articles for a usage review of SMTTs. We used Google Scholar with the terms *strategic management tools and techniques*, *strategic planning tools and techniques*, *strategy tools*, *usage*, *use* and *empirical findings*. It resulted with a lot of articles on theoretical insights of SMTTs, then articles focused in a particular tool or technique usage, but we have decisively selected only the articles about strategic tools and techniques usage, as empirical evidence in different countries.

After we selected articles, we have extracted the relevant data from these studies. Additionally, a limited search was undertaken to identify any new study published since the original review was undertaken.

Therefore, study characteristics, context and the main findings are reported according to a tabulation and similarities and differences are compared across studies.

Usually a process of narrative synthesis will involve organising the included studies into smaller groups to make the process more manageable (Popay, *et al.* 2006). Since research papers included in this review have investigated the usage of SMTTs in different sized enterprises, different sectors and different country level development; we used these three levels as clusters for analysis. Widely, empirical research is classified at a global and national level and also in comparative studies between the countries/continents in three time periods (1990–1999; 2000–2009; 2010–2015). Furthermore, they are classified by enterprise size and also by sector in three time periods. Popay *et al.* (2006) empathized: “*Organizing the included studies into groups can also be a useful way of aiding the process of description and analysis and looking for patterns within and across these groups.*”

Moreover, this paper in particular has examined the most used SMTTs resulting from all these empirical studies. In order to make a right comparison between the results of these studies, they are divided into studies by country level development (developed countries, developing countries and transition economies) and by enterprise size (different size enterprises, large enterprises, small and medium enterprises). Two articles were excluded as they didn't provide any information about the size and sector of enterprises.

RESULTS AND DISCUSSION

Generally there is a dearth of research investigating, in particular, the usage of SMTTs. From the available studies, the SMTTs usage is analysed by different researchers. Some have contributed in defining and classifying them, others have investigated which SMTTs are used more in different types and sizes of enterprises, while others have investigated the level of their usage and effects.

However, the usage of SMTTs is not discussed enough by academics and practitioners. Clark (1997) and Gunn and Williams (2007) emphasized that there is a lack of studies on the usage of SMTTs in enterprises. While Elbanna (2008) believes that most of the studies are conducted in developed countries and a few of them in developing countries. Aldehayyat and Anchor (2009) pointed out that the strategy academics have paid little attention to the study of the SMTTs usage: “*Instead, they have incorporated tool usage as a small part of their investigations of both developed and emerging market contexts.*” According to Frost (2003), the absence of a strong focus on tools

within the strategic management discipline can be partially attributed to the secondary role that they serve.

Most of the studies support the use of SMTTs as an important part of strategic planning by examining SMTTs as a part of the strategic planning process. Unlike others, Elbanna (2008) argued that some enterprises may use some of the strategic planning tools while having no written strategic plans. Whilst, according to Šuklev and Debarliev (2012), formality of strategic planning and the use of strategic planning techniques might be two different dimensions of strategic planning effectiveness, which should be investigated separately.

The following summarizes the main empirical research by their approach and focus:

- **SMTTs' researches as part of strategic planning process** (Glaister and Falshaw, 1999; Stonehouse and Pemberton, 2002; Tapinos, 2005; Dincer, Tatoglu and Glaister, 2006; Elbanna, 2007; Kume and Leskaj, 2009; O'Brien, 2009; Glaister, Dincer, Tatoglu and Demirbag, 2009; Gică and Balint, 2012; Šuklev and Debarliev, 2012).

- **Focused researches on the usage of SMTTs** (Rigby, 1993; Clark, 1997; Frost, 2003; Ghamdi, 2005; Gunn and Williams, 2007; Stenfors *et al.*, 2007; Vaitkevičius, 2007; Aldehayyat and Anchor, 2009; Pasanen, 2011; Aldehayyat, Al Khattab and Anchor, 2011; Afonina and Chalupský, 2013; Rigby and Bilodeau, 2013; Kalkan and Bozkurt, 2013; Tassabehji and Isherwood, 2014; Rajasekar and Al Raee, 2014; Afonina, 2015; Rigby and Bilodeau, 2015; Nedelko, Potocan and Dabić, 2015).

- **SMTTs' classification researches** (Prescott and Grant, 1988; Webster *et al.*, 1989; Clark, 1997; Knott, 2006; Vaitkevičius, 2006; Savanevičienė, Vaitkevičius and Merkys, 2006; Lisiński and Šaruckij, 2006; Durkáčová and Gontkovičová).

The above empirical studies have explored the application of SMTTs in different countries, enterprises and sectors. It should be noted that these studies have used various lists of SMTTs in their research. The following tabulation summarizes the key data of empirical research on the use of SMTTs in the period 1990–2015.

I: Comprehensive summary of empirical research on the usage of SMTTs in enterprises

Author/Authors Year	Country/Countries	Industry and size of enterprises	Sample size received/sent	Main findings: The most used SMTTs ¹ in respective enterprises
Rigby (1993)	North and South America, Europe, Asia and Africa	DSE ² , DS ³	-	Mission statement, customer satisfaction, total quality management (TQM), competitor profiling, benchmarking
Clark (1997)	UK and New Zealand	DSE, DS	UK: N = 61/1200 NZ: N = 138/400	SWOT analysis, focused groups, budgeting, Porter's 5 forces analysis, PEST analysis
Glaister and Falshaw (1999)	UK	DSE, DS	N = 113/500	"What if" analysis, key success factors analysis, financial competitor analysis, SWOT analysis
Stonehouse and Pemberton (2002)	UK	DSE, PS ⁴ production, service	N = 159	Business financial analysis, SWOT analysis, key competencies, organizational culture, benchmarking
Frost (2003)	Western Australia Singapore, Hong Kong and Malaysia	SME	N = 331/783	SWOT analysis, PEST analysis and budgeting
Ghamdi (2005)	Saudi Arabia	N/I, N/I	N = 72	Key success factors analysis, benchmarking, "what if" analysis
Tapinos (2005)	42 countries, main of them: UK, Singapore, China, USA, Greece etc.	DSE, DS	N = 428/4000	SWOT analysis, benchmarking, cost-benefit analysis, key capability analysis and risk analysis
Dincer <i>et al.</i> (2006)	Turkey	LE ⁵ , production, service	N = 135/638	SWOT analysis, scenario analysis, financial competitor analysis
Gunn and Williams (2007)	UK	DSE, DS	N = 149/800	SWOT analysis, benchmarking, key success factors analysis
Elbanna (2007)	Egypt	DSE, DS	N = 120/350	Financial statements as cash flow, income and budgeting then cost-benefit analysis, SWOT analysis, competitor analysis, portfolio analysis, benchmarking, key success factors analysis
Vaitkevičius (2007)	Lithuania	DSE, DS	N = 216/436	SWOT analysis

Author/Authors Year	Country/Countries	Industry and size of enterprises	Sample size received/sent	Main findings: The most used SMTTs ¹ in respective enterprises
Stenfors <i>et al.</i> (2007)	Finland	LE, DS	N = 182/500	SWOT analysis, Spreadsheets applications, balanced scorecard, risk analysis
Kume and Leskaj (2009)	Albania	DSE, DS	N = 230	SWOT analysis, mathematical and statistical methods, Porter's 5 forces analysis and value chain analysis
Aldehayyat and Anchor (2009)	Jordan	DSE, DS	N = 83/203	Business financial analysis, PEST analysis, Porter's 5 forces analysis, key success factors analysis
O'Brien (2009)	UK, Europe, USA, Australia, New Zealand, Africa, etc.	N/I, N/I	N = 143/883	Forecasting, business financial analysis, project management, brainstorming, SWOT analysis, balanced scorecard, benchmarking
Glaister <i>et al.</i> (2009)	UK and Turkey	DSE, DS	UK: N = 113/500 Turkey: N = 135/638	UK: "what if" analysis, key success factors analysis, financial competitor analysis, SWOT analysis Turkey: economic forecasting models, SWOT analysis and scenario analysis
Pasanen (2011)	Finland	SME, production, service	N = 143	Business strategies, vision and mission statements, strategic alliances, growth strategies, SWOT analysis
Aldehayyat <i>et al.</i> (2011)	Jordan	DSE, hotels	N = 40/60	Business financial analysis, SWOT analysis, PEST analysis, Porter's 5 forces analysis
Afonina and Chalupský (2013)	Czech Republic	DSE, DS	N = 74	SWOT analysis, customer satisfaction, price analysis, analysis of views and employee attitudes, cost-benefit analysis, analysis of employee satisfaction, analysis of customers complaints, Porter's 5 forces analysis, PEST analysis
Gică and Balint (2012)	Romania	SME, DS	N = 200	SWOT analysis, pessimistic and optimistic scenarios
Šuklev and Debarliev (2012)	Macedonia	DSE, DS	N = 212/350	-
Kalkan and Bozkurt (2013)	Turkey	SME, DS	N = 192	Strategic planning, human resources analysis, TQM, Customer Relationship Management (CRM) vision and mission statements, PEST analysis, benchmarking
Tassabehji and Isherwood (2014)	47 different countries: Europe, USA, Canada, India etc.	DSE, DS	N = 458	SWOT analysis, financial forecasting, vision and mission statements, scenario planning, value chain analysis
Rajasekar and Al Race (2014)	Oman	DSE, DS	N = 20/63	Benchmarking, stakeholders analysis and SWOT analysis
Nedelko <i>et al.</i> (2015)	Slovenia and Croatia	DSE, DS	S: N = 155/750 C: N = 185/750	S: Outsourcing, benchmarking, key competencies, knowledge management, TQM etc. C: Vision and mission statements, benchmarking, key competencies, CRM, customer segmentation etc.
Afonina (2015)	Czech Republic	DSE, DS	N = 91	SWOT analysis, customer satisfaction, price analysis, cost-benefit analysis, market share analysis etc.
Rigby and Bilodeau (2015)	Over 70 countries (5 continents)	DSE, DS	N = 13,000	CRM, benchmarking, employee engagement surveys, strategic planning, outsourcing, balanced scorecard etc.

¹ Most used tools have derived from empirical results of different studies. The number of tools defined as the most commonly used, varies from study to study.

² Different size enterprises.

³ Different sectors.

⁴ Particular sector/s.

⁵ Large enterprises.

Source: Authors.

II: Summary of empirical research on the usage of SMTTs according to their level of study

Researches	Time period		
	1990–1999	2000–2009	2010–2015
At country level	Glaister and Falshaw (1999) – UK	Stonehouse and Pemberton (2002) – UK Ghamdi (2005) – Saudi Arabia Dincer <i>et al.</i> (2006) – Turkey Gunn and Williams (2007) – UK Elbanna (2007) – Egypt Vaitkevicius (2007) – Lithuania Stenfors <i>et al.</i> (2007) – Finland Kume and Leskaj (2009) – Albania Aldehayyat and Anchor (2009) – Jordan	Pasanen (2011) – Finland Aldehayyat <i>et al.</i> (2011) – Jordan Afonina and Chalupský (2013) – Czech Republic Gică and Balint (2012) – Romania Šuklev and Debarliev (2012) – Macedonia Kalkan and Bozkurt (2013) – Turkey Rajasekar and Al Race (2014) – Oman Afonina (2015) – Czech Republic
At global level	Rigby (1993–1999), Bain & Company	Rigby (2001) Tapinos (2005) Rigby and Bilodeau (2007) O'Brien (2009)	Tassabehji and Isherwood (2014) Bain & Company (Rigby and Bilodeau, 2010–2015)
Comparative studies	Clark (1997)	Frost (2003) Glaister <i>et al.</i> (2009)	Nedelko <i>et al.</i> (2015)

Source: Authors.

Empirical research by the level of study

The Tab. II summarizes empirical research on the use of SMTTs nationally, globally and comparative studies between the two countries or continents. The summary of these studies is divided into three time periods.

As shown in the Tab. II, the majority of empirical research is conducted at country level, then at the global level and there are few empirical research that compare the use of SMTTs between two countries or continents. Also, the data in the table above indicate that the fewest researches on the use of SMTTs are conducted in the period 1990–1999, then follows the period 2010–2015, whilst, as seen in the period 2000–2009 are done most of the researches. Although the period 2010–2015 compared to previous periods as the period would have to take into account the empirical research in the years 2016–2019, in the way the comparison to be completed for three decades separately.

Empirical research by enterprise size and sector

Economic literature contains major differences in the definition of small and medium enterprises. Statistical agencies, international organizations, governments of independent countries emerge with different definitions and categorizations for businesses which do not reflect the differences between them (Berisha and Shiroka-Pula, 2015).

The following table summarizes the researches on the SMTTs by enterprise size¹ and sector², and time period.

The Tab. III shows that researches on the use of SMTTs are conducted primarily in enterprises of different sizes and different sectors, followed by researches in SME and different sectors. After them come the researches that did not specify the enterprise size nor the sector and finally come researches in SME and particular sectors. While, the fewest researches are focused on large enterprises (all sectors) and DSE (particular sectors). From all summarized researches in Tab. I, only four of them have analysed the usage of SMTTs in particular on one or two specific sectors.

Kalkan and Bozkurt (2013) found differences in the use of SMTTs by size enterprise and sector. Whereas, Glaister and Falshaw (1999) found relatively few significant differences in the findings between firms in the manufacturing sector and firms in the service sector. Also, according to the results of Stonehouse and Pemberton (2002), there are few significant differences between sectors, with the exception of SWOT analysis which was used more in the service sector. Unlike, Aldehayyat and Anchor (2009) did not find significant differences between the three sectors on the use of SMTTs, except in the case of PEST analysis, which was used more by industrial sector.

The empirical research on the usage of SMTTs mainly has been conducted in enterprises of different sizes (68 %), followed by SME (23 %) and fewest only in large enterprises (9 %).

1 Enterprise size is taken according to the criteria used in respective researchers.

2 Different sectors (DS) are considered the researches conducted in three or more sectors. While particular sectors (PS) are considered researches conducted only in one or two sectors.

III: *Empirical research by enterprise size and sector*

Researches by enterprise size and sector	Time period		
	1990–1999	2000–2009	2010–2015
Enterprises of different sizes (DSE) and different sectors (DS)	Rigby (1993) Clark (1997) Glaister and Falshaw (1999)	Tapinos (2005) Gunn and Williams (2007) Vaitkevičiū (2007) Kume and Leskaj (2009) Aldehayyat and Anchor (2009) Glaister <i>et al.</i> (2009)	Afonina and Chalupský (2013) Šuklev and Debarliev (2012) Tassabehji and Isherwood (2014) Rajasekar and Al Race (2014) Nedelko <i>et al.</i> (2015) Afonina (2015) Rigby and Bilodeau (2015)
Enterprises of different sizes (DSE) and particular sectors (PS)	–	–	Aldehayyat <i>et al.</i> (2011) <i>Hotels</i>
Large enterprises (LE) and different sectors (DS)	–	Stenfors <i>et al.</i> (2007)	–
Large enterprises (LE) and particular sectors (PS)	–	Dincer <i>et al.</i> (2006) <i>production and service</i>	–
Small and medium size enterprises (SME) and different sectors (DS)	–	Frost (2003) Elbanna (2007)	Gică and Balint (2012) Kalkan and Bozkurt (2013)
Small and medium size enterprises (SME) and particular sectors (PS)	–	Stonehouse and Pemberton (2002) <i>production and service</i>	Pasanen (2011) <i>production and service</i>
Researches that did not specify the size of the enterprises or the type of sectors	–	Ghamdi (2005) O'Brien (2009)	–

Source: Authors.

IV: *Empirical research by country level development and time period*

Empirical research by country level development	Time Period		
	1990–1999	2000–2009	2010–2015
Developed countries	Clark (1997) Glaister and Falshaw (1999)	Stonehouse and Pemberton (2002) Gunn and Williams (2007) Vaitkevičiū (2007) Stenfors <i>et al.</i> (2007)	Pasanen (2011) Afonina and Chalupský (2013) Gică and Balint (2012) Nedelko <i>et al.</i> (2015) Afonina (2015)
Developing countries	–	Ghamdi (2005) Dincer <i>et al.</i> (2006) Elbanna (2007) Aldehayyat and Anchor (2009)	Aldehayyat <i>et al.</i> (2011) Kalkan and Bozkurt (2013) Rajasekar and Al Race (2014)
Transition economies	–	Kume and Leskaj (2009)	Šuklev and Debarliev (2012)
Developed countries, developing countries and transition economies	Rigby (1993)	Frost (2003) Tapinos (2005) O'Brien (2009) Glaister <i>et al.</i> (2009)	Tassabehji and Isherwood (2014) Rigby and Bilodeau (2015)

Source: Authors.

V: Empirical research by the country level development and enterprise size

Country level development	Enterprise size		
	DSE	LE	SME
Developed countries	Clark (1997) Glaister and Falshaw (1999) Gunn and Williams (2007) Vaitkevičius (2007) Afonina and Chalupský (2013) Nedelko <i>et al.</i> (2015) Afonina (2015)	Stenfors <i>et al.</i> (2007)	Stonehouse and Pemberton (2002) Gică and Balint (2012) Pasanen (2011)
Developing countries	Aldehayyat and Anchor (2009) Aldehayyat <i>et al.</i> (2011) Rajasekar and Al Race (2014)	Dincer <i>et al.</i> (2006)	Elbanna (2007) Kalkan and Bozkurt (2013)
Transition economies	Kume and Leskaj (2009) Šuklev and Debarliev (2012)	–	–
Developed countries, developing countries and transition economies	Rigby (1993) Tapinos (2005) Glaister <i>et al.</i> (2009) Tassabehji and Isherwood (2014) Rigby and Bilodeau (2015)	–	Frost (2003)

Source: Authors.

Empirical research by country level development

The classification of countries is based on the World Bank report (2014), “*World Economic Situation and Prospects*”. Consequently, the following table shows a classification of researches of developed countries, developing countries, transition economies and those who have researched in countries with different levels of development.

The Tab. IV indicates that the most researches on the use of SMTTs are conducted in developed countries followed by developing countries. After them come the researches in various countries with different development levels. While it seems that there is a lack of the researches in transition economies.

Empirical research by country level development and enterprise size

Regarding the results of empirical studies for the most used SMTTs, these are analysed divided by the country level development and enterprise size. However, it should be noted that this analysis did not include the results of empirical research by Ghamdi (2005) and O'Brien (2009) because we didn't have information about enterprise size researched by them. Also, the results analysis of the usage of SMTTs in developed countries has included empirical research that has made a comparative study between two countries, as researched countries belong to the category of developed countries (Clark, 1997; Nedelko *et al.*, 2015).

The most used SMTTs were analysed according to the country level development and enterprise size. The research results show that managers use SMTTs in their workplace. Surely, there are differences in usage of them among enterprises according to their size, sector and country level development as well. The results are discussed below in details.

It is noted that enterprises of different sizes (DSE) of developed countries used more variety of SMTTs (total 22 SMTTs resulted as the most used) than large enterprises (LE) (total four SMTTs) and SME (total seven SMTTs).

The results of some studies show that the use of strategic tools and techniques was more common in the larger companies (Stonehouse & Pemberton, 2002; Elbanna, 2007; Aldehayyat & Anchor, 2009; Aldehayyat *et al.*, 2011; Pasanen, 2011; Kalkan & Bozkurt, 2013; Rigby & Bilodeau, 2015). According to Rigby and Bilodeau (2015), the larger the company, the more likely it is to use the vast majority of tools. According to them, on average, large companies used 8.1 tools in 2014 compared with midsize firms' usage of 7.6 tools (up from 6.8 in 2012) and smaller companies' usage of 5.3 tools.

Empirical studies conducted in DSE and SME (Glaister & Falshaw, 1999; Stonehouse & Pemberton, 2002; Gunn & Williams, 2007), resulted in SWOT analysis as the most used tool. While, according to the results of empirical studies in DSE (Glaister & Falshaw, 1999; Gunn & Williams, 2007), the most used tools were: SWOT analysis, key success factors analysis, “*what if*” analysis of and competition

analysis, etc. Unlike the results of Stonehouse and Pemberton (2002) and Gunn and Williams (2007), where benchmarking resulted as the most used tool, this was not the case with the results of Glaister and Falshaw (1999).

Two empirical researches by Stenfors *et al.* (2007) and Pasanen (2011) are included from Finland. The first study investigated the usage of SMTTs in LE, while the second one investigated the usage of SMTTs in SME. Results of Stenfors *et al.* (2007) noted that the simplest tools were most popular. According to them, the use of SMTTs at strategic-level is not widespread, since only one third of the respondent companies use them. Unlike the unsatisfactory results of Stenfors *et al.* (2007), according to Pasanen (2011), 75 % of SME used business strategies and the vision and mission statements. Also, resulted nine SMTTs over the average rate of satisfaction from their usage. If we compare the results of two studies in Finland, only SWOT analysis results as the same used tool.

Findings of Vaitkevičius (2007) study suggest that strategic management in Lithuanian organizations is to a little extent based on formal analysis. It is characterized by intuitive application of strategic management tools accompanied by especially sophisticated strategic analysis (not based on hard data). This claim is partly confirmed by an especially frequent application of a SWOT analysis in strategic management of Lithuanian organizations.

Two researches on the use of SMTTs (Afonina & Chalupský, 2013; Afonina, 2015) are conducted in the Czech Republic. The first study involved different SME and sectors, while the second one included DSE, also from different sectors. The results of these studies are similar. The research findings indicate extensive use of strategic management tools and techniques among Czech companies. It has been found that 14 of 19 SMTT used by over 50 % of sampled organizations. Even here SWOT analysis resulted as most used tool in Czech enterprises, similar to the results in British enterprises (Gunn & Williams, 2007), Australian enterprises (Frost, 2003), Finnish enterprises (Stenfors *et al.*, 2007; Pasanen, 2011), Lithuanian enterprises (Vaitkevičius, 2007), Romanian enterprises (Gică & Balint, 2012) and Turkish enterprises (Dincer *et al.*, 2006).

According to Gică & Balint (2012), a percentage of 55.5 % of the 200 surveyed SME, said they did not develop strategic plans in writing. Most companies that elaborate written strategic plans are medium sized, having 10 to 49 employees, active for no more than five years. Their study shows that the most commonly used tools are SWOT analysis 49.5 % and pessimistic and optimistic scenarios 43.5 %. Unlike the Czech enterprises that used on average 14 SMTTs (Afonina, 2015), the Romanian enterprises used one or two (1–2) SMTTs (Gică & Balint, 2012).

It should also be noted that in all types of enterprises in developed countries the SWOT analysis appears to be the most used tool. Beside SWOT analysis, other tools used in LE and SME are

not the same. Two other tools, vision and mission statements and scenario analysis, resulted as the most used tools in DSE and SME in developed countries.

In developing countries, results showed that diversity of used tools is higher in SME (13) than in LE (3) and DSE (7). Even here it is noted that the SWOT analysis has resulted as one of the most used tools regardless of the enterprise size. Beside this tool, no similarity was noticed in the tools used in LE and SME. While a similarity of results was noticed for DSE and SME. The most used tools in DSE and SME in developing countries appeared to be: business financial analysis, SWOT analysis, PEST analysis, benchmarking and key success factors analysis.

Ghamdi (2005) conducted a study in Saudi Arabia. It resulted that thirteen tools and techniques were used frequently. However, almost half of the respondents said that they don't use SMTTs in their planning activities.

Two research studies were conducted in Turkey by Dincer *et al.* (2006) and Kalkan and Bozkurt (2013). The first research involved LE in the manufacturing and service sector. The second research included SME in different sectors. Dincer *et al.* (2006) found that enterprises used very few SMTTs. Also, according to Kalkan and Bozkurt (2013), the use of SMTTs is uncommon in SME. Unlike other research results, here SWOT analysis and scenario analysis resulted among the least used tools. It is worth mentioning that these two tools were the two most used tools in Turkish LE (Dincer *et al.*, 2006).

Elbanna (2007) has conducted a research in SME of different sectors in Egypt. He found a little difference of SMTTs usage between manufacturing and service firms.

Aldehayyat and Anchor (2009) and Aldehayyat *et al.* (2011) conducted research in Jordan. Both studies were conducted in DSE, unlike the first one was focused in various sectors, and the second one in the hotel sector. The results of the first study show that the use of strategy tools and techniques was more common in the larger companies. According to Aldehayyat and Anchor (2009), this could be explained by the greater financial and human capability of larger companies. Also, managers were aware of most strategy tools and techniques, but they did not always use them. The findings of the second study were very similar to results of Aldehayyat and Anchor (2009). The exception is the SWOT analysis which was not among the most used tools in DSE (DS), while in the hotel sector resulted as one of the most used tools.

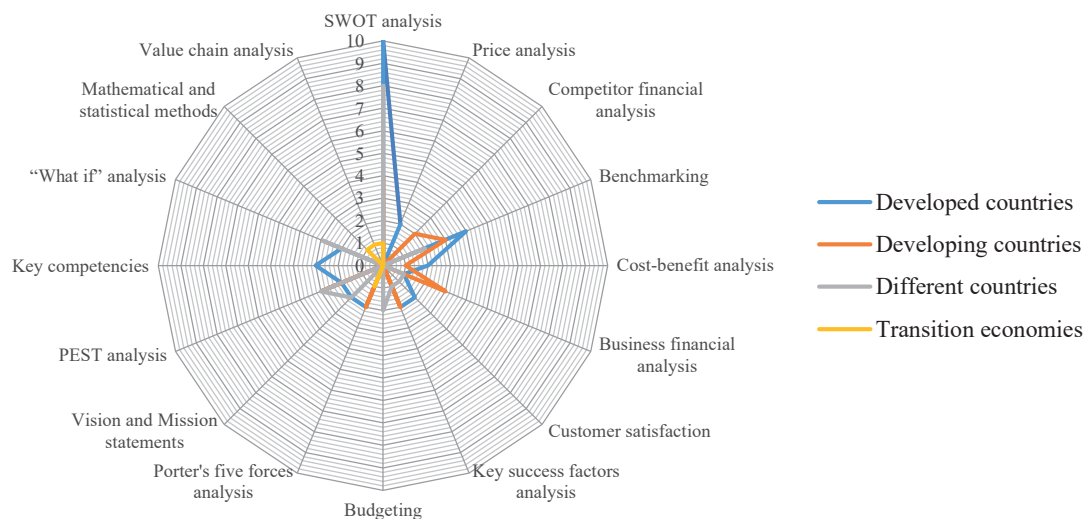
One of the latest studies is conducted from Rajasekar and Al Racee (2014) in Oman. According to them, on average, almost 30 % of the organizations in Oman never or very rarely use strategic planning tools.

None of the researches in transition countries do analyse in particular the usage of SMTTs but only as part of the strategic management process. Therefore,

VI: Summary of the ten most used SMTTs by country level development

Summary of the ten most used SMTTs by country level development			
Developed countries	Developing countries (excluded research results of Ghamndi, 2005)	Transition economies	Developed countries, developing countries (excluded research results of O'Brien, 2009)
SWOT analysis Benchmarking Key competencies Customer satisfaction Key success factors analysis Price analysis Cost-benefit analysis Porter's five forces analysis PEST analysis "What if" analysis	SWOT analysis Business financial analysis PEST analysis Benchmarking Porter's five forces analysis Key success factors analysis Competitor financial analysis Stakeholders analysis Strategic planning Cost-benefit analysis	SWOT analysis Mathematical and statistical methods Porter's five forces analysis Value chain analysis	SWOT analysis "What if" analysis PEST analysis Vision and Mission statements Benchmarking Budgeting Financial forecasting Economic forecasting models Key success factors analysis Customer satisfaction

Source: Authors.



1: The ten most used SMTTs by country level development
Source: Authors.

the research of Šuklev and Debarliev (2012) does not mention researched strategic tools, whereas Kume and Leskaj (2009) identified four most used tools in DSE. Even here SWOT analysis leads as the most used tool.

Empirical research conducted globally, in countries with different development level, resulted that only SWOT analysis is the same tool used in DSE and SME.

Based on the above results, the most commonly used tools regardless of the country level development resulted in: SWOT analysis and Porter's five forces analysis. While the most used tools in developed countries and developing countries resulted benchmarking, key factors of success analysis and cost-benefit analysis.

It is noted that some of the tools used by enterprises in developed countries are not used in developing countries, as customer satisfaction and "what if" analysis.

Tab. VII and Fig. 2 show the most used SMTTs by enterprise size.

Based on the results above, the following tools have proven to be the most used, regardless of the enterprise size: SWOT analysis, PEST analysis, benchmarking, cost-benefit analysis, "what if" analysis and vision and mission statements. It is worth noting that the key success factors analysis and Porter's five forces analysis were among the most commonly used tools regardless of the country level development. But, here it is noticed that these two tools are not among the most used tools by SME. It is also noted that strategic planning, budgeting and business strategies are not the most used tools in SME versus large enterprises.

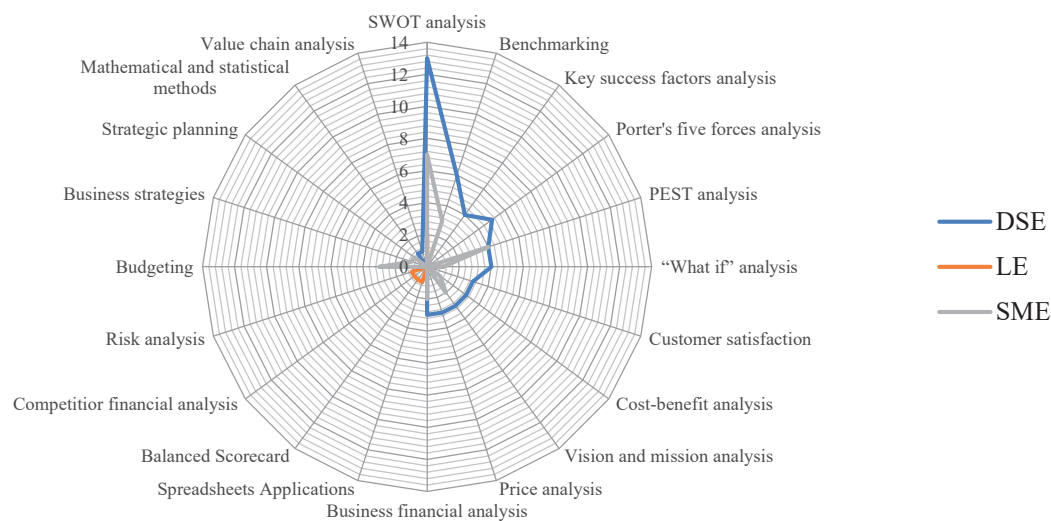
The Tab. VIII presents the ten most used SMTTs according to the results of 25 different empirical studies, regardless of the country level development or enterprise size.

Obviously SWOT analysis resulted as the most used tool worldwide, regardless of the country level

VII: Summary of the most used SMTTs by enterprise size

The most used SMTTs by enterprise size		
DSE	LE	SME
SWOT analysis Benchmarking Porter's five forces analysis Key success factors analysis PEST analysis "What if" analysis Customer satisfaction Cost-benefit analysis Vision and mission statements Price analysis	SWOT analysis Spreadsheets Applications Scenario analysis Balanced Scorecard Competitor financial analysis Risk analysis	SWOT analysis PEST analysis Budgeting Benchmarking Vision and mission statements Business financial analysis Strategic planning Business strategies Pessimistic and optimistic scenarios Cost-benefit analysis

Source: Authors.



2: The ten most used SMTTs by enterprise size

Source: Authors.

development or enterprise size. So, SWOT analysis resulted as the most used tool in 22 (88 %) studies out of 25 (100 %). Then, comes benchmarking and PEST analysis as the most used tools after SWOT analysis.

The diagram below presents the ten most used tools out of 100 % of the whole usage. The size

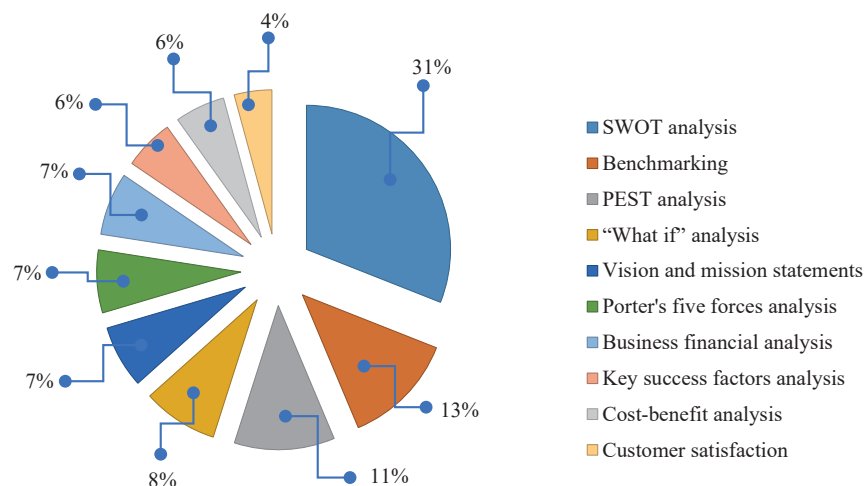
of each slice presents the proportional use of a particular tool to the category's percentage of the pie.

According to Frost (2003), researchers think that managers prefer this tool (SWOT) because it is familiar and easy to use, requires no training or specific competencies to understand and apply.

VIII: The most used SMTTs, derived from Tabs. VII and VIII

The ten most used SMTTs	
Type of tool	Percentage
1 SWOT analysis	88 %
2 Benchmarking	36 %
3 PEST analysis	32 %
4 "What if" analysis	24 %
5 Vision and mission statements	20 %
6 Porter's five forces analysis	20 %
7 Business financial analysis	20 %
8 Key success factors analysis	16 %
9 Cost-benefit analysis	16 %
10 Customer satisfaction	12 %

Source: Authors.



3: The ten most used SMTTs
Source: Authors.

CONCLUSION

This paper is one of the few studies to review the empirical literature on strategic management tools and techniques usage. The research questions of the paper were: Do managers use these strategic tools and techniques in their workplace? Which strategic tools and techniques are used more in organizations? To answer these questions we have made a review of empirical studies using textual narrative synthesis method. Initially, this study presents a tabulation with a summary of empirical research for the period 1990–2015. The included studies were organized clustering them by enterprise size and sector and by country level development.

The research results show that managers use SMTTs in their workplace. Surely, there are differences among enterprises according to their size, sector and country level development as well.

The research results indicate that enterprises of different sizes (DSE) of developed countries used more variety of SMTTs (22 SMTTs resulted as the most used) than large enterprises (LE) (four SMTTs resulted as the most used) and SME (seven SMTTs resulted as the most used). The results of some studies (Stonehouse & Pemberton, 2002; Elbanna, 2007; Aldehayyat & Anchor, 2009; Aldehayyat *et al.*, 2011; Pasanen, 2011; Kalkan & Bozkurt, 2013; Rigby & Bilodeau, 2015) show that the use of SMTTs was more common in the larger enterprises. It should also be noted that in all types of enterprises in developed countries, SWOT analysis resulted to be the most used tool. Beside SWOT analysis, other tools used in LE and SME were not the same. While two other tools, the vision and mission statements and scenario analysis, resulted as the most used tools in DSE and SME in developed countries.

As per developing countries, research findings indicate that diversity of used tools is higher in SME (13) than in LE (3) and DSE (7). Even here it is noted that the SWOT analysis has resulted as one of the most used tools regardless of the enterprise size. Beside this tool, there is not noticed any similarity in the used tools in LE and SME. While it is noticed a similarity of the results for DSE and SME. The most used tools in DSE and SME in developing countries resulted to be: business financial analysis, SWOT analysis, PEST analysis, benchmarking and key success factors analysis.

None of the studies in transition economies did analyse in particular the usage of SMTTs but only as part of the strategic management process. Therefore, the study of Šuklev and Debarliev (2012) did not mention which SMTTs were investigated, whereas Kume and Leskaj (2009) identified four most used tools in DSE. Even here SWOT analysis resulted as the most used tool.

Empirical research conducted globally, in countries with different country level development, resulted that only SWOT analysis was the same tool used in DSE and SME.

The most commonly used tools regardless of the country level development resulted: SWOT analysis and Porter's five forces analysis. While the most used tools in developed countries and developing countries resulted benchmarking, key factors of success analysis and cost-benefit analysis. Some of the tools used by enterprises in developed countries were not used in developing countries, as customer satisfaction and "what if" analysis.

The following tools have proven to be the most used, regardless of the enterprise size: SWOT analysis, PEST analysis, benchmarking, cost-benefit analysis, "what if" analysis and vision and mission statements. It is worth noting that the key success factors analysis and Porter's five forces analysis were among the most used tools regardless of the country level development. But here it is noticed that

these two tools were not among the most used tools by SME. Also, it is noted that strategic planning, budgeting, and business strategies were not the most used tools in SME versus large enterprises.

As a conclusion, the ten most used SMTTs according to the results of 25 different empirical studies, regardless of the country level development or enterprise size resulted as follows: SWOT analysis, benchmarking, PEST analysis, "what if" analysis, vision and mission statements, Porter's five forces analysis, business financial analysis, key success factors analysis, cost-benefit analysis and customer satisfaction.

It should be noted that researchers have not used the same questionnaires, which means they have used questionnaires that had listed various tools.

REFERENCES

- AFONINA, A. 2015. Strategic management tools and techniques and organizational performance: Findings from the Czech Republic. *Journal of Competitiveness*, 7(3): 19–36
- AFONINA, A. and CHALUPSKÝ, V. 2012. The current strategic management tools and techniques: The evidence from Czech Republic. *Economics and Management*, 17(4): 1535–1544.
- AFONINA, A. and CHALUPSKÝ, V. 2013. Investigation of strategic management tools and techniques. *Acta Universitatis Agriculturae et Silviculturae Mendelianae Brunensis*, 61(4): 833–840.
- ALDEHAYYAT, J. S. and ANCHOR, J. R. 2009. Strategic planning tools and techniques in Jordan: awareness and use. *Strategic Change*, 17(7–8): 281–293.
- ALDEHAYYAT, J. S., AL KHATTAB, A. A. and ANCHOR, J. R. 2011. The use of strategic planning tools and techniques by hotels in Jordan. *Management Research Review*, 34(4): 477–490.
- BARNEY, J. B. and CLARK, D. N. 2007. *Resource-based theory: Creating and sustaining competitive advantage*. Oxford: Oxford University Press.
- BÉLANGER, E., RODRÍGUEZ, C. and GROLEAU, D. 2011. Shared decision-making in palliative care: A systematic mixed studies review using narrative synthesis. *Palliative Medicine*, 25(3): 242–261.
- BERISHA, G. and SHIROKA-PULA, J. 2015. Defining small and medium enterprises: a critical review. *Academic Journal of Business, Administration, Law and Social Sciences*, 1(1): 17–28.
- BERRY, M. 1998. Strategic planning in small high tech companies. *Long Range Planning*, 31(3): 455–466.
- CARTER, C., CLEGG, S. R. and KORNBERGER, M. 2008. Strategy as practice. *Strategic Organization*, 6(1): 83–99.
- CLARK, D. N. 1997. Strategic management tool usage: a comparative study. *Strategic Change*, 6(7): 417–427.
- CLARK, D. N. and SCOTT, J. L. 1999. Strategic level MS/OR tool usage in the United Kingdom and New Zealand: A comparative survey. *Asia-Pacific Journal of Operational Research*, 16(1): 35–51.
- DAGNINO, G. B. and CINICI, M. C. (Eds.). 2016. *Research methods for strategic management*. New York: Routledge, Taylor and Francis Group.
- DINCER, O., TATOGLU, E. and GLAISTER, K. W. 2006. The strategic planning process: evidence from Turkish firms. *Management Research News*, 29(4): 206–219.
- DURKÁČOVÁ M. and GONTKOVIČOVÁ M. B. D. 2014. The usage of management tools in the business process management. *Manažment v Teórii a Praxi*, 10(1–2): 4–12.
- ELBANNA, S. 2007. The nature and practice of strategic planning in Egypt. *Strategic Change*, 16(5): 227–243.
- ELBANNA, S. 2008. Planning and participation as determinants of strategic planning effectiveness: evidence from the Arabic context. *Management Decision*, 46(5): 779–796.
- FROST, F. A. 2003. The use of strategic tools by small and medium-sized enterprises: an Australasian study. *Strategic Change*, 12(1): 49–62.
- GEDDES, J. and CARNEY, S. 2002. *Systematic reviews and meta-analysis. Evidence in mental health care*. Brunner Routledge.
- GHAMDI, S. M. 2005. The use of strategic planning tools and techniques in Saudi Arabia: An empirical study. *International Journal of Management*, 22(3): 376–395.
- GHAZINOORY, S., ABDI, M. and MEHR, M. A. 2011. SWOT methodology: a state-of-the-art review for the past, a framework for the future. *Journal of Business Economics and Management*, 12(1): 24–48.
- GICĂ, O.A. and BALINT, C. I. 2012. Planning practices of SMEs in North-Western region of Romania – An empirical investigation. *Procedia Economics and Finance*, 3: 896–901.
- GLAISTER, K. W. and FALSHAW, J. R. 1999. Strategic planning: still going strong? *Long Range Planning*, 32(1): 107–116.
- GLAISTER, K. W., DINCER, O., TATOGLU, E. and DEMIRBAG, M. 2009. A comparison of strategic planning practices in companies from the UK and Turkey. *Journal of Management Development*, 28(4): 361–379.
- GOLSORKHI, D., ROULEAU, L., SEIDL, D. and VAARA, E. (Eds.). 2010. *Cambridge handbook of strategy as practice*. Cambridge: Cambridge University Press.
- GRINT, K. 1997. *Fuzzy management: Contemporary ideas and practices at work*. Oxford: Oxford University Press on Demand.

- GUNN, R. and WILLIAMS, W. 2007. Strategic tools: an empirical investigation into strategy in practice in the UK. *Strategic Change*, 16(5): 201–216.
- HUSSEY, D. E. 1997. *Strategic management: From theory to implementation*. England: Butterworth-Heinemann.
- JARZABKOWSKI, P. and SPEE, A. 2009. Strategy-as-practice: A review and future directions for the field. *International Journal of Management Reviews*, 11(1): 69–95.
- JARZABKOWSKI, P. and KAPLAN, S. 2015. Strategy tools-in-use: A framework for understanding “technologies of rationality” in practice. *Strategic Management Journal*, 36(4): 537–558.
- JARZABKOWSKI, P., GIULIETTI, M., OLIVEIRA, B. and AMOO, N. 2012. “We don’t need no education” – or do we? Management education and alumni adoption of strategy tools. *Journal of Management Inquiry*, 22(1): 4–24.
- JOHNSON, G. 2007. *Strategy as practice: research directions and resources*. Cambridge: Cambridge University Press.
- KALKAN, A. and BOZKURT, Ö. Ç. 2013. The Choice and use of strategic planning tools and techniques in Turkish SMEs according to attitudes of executives. *Procedia-Social and Behavioral Sciences*, 99: 1016–1025.
- KETCHEN Jr., D. J., BOYD, B. K. and BERGH, D. D. 2008. Research methodology in strategic management. *Sage*, 11(4): 643–658.
- KNOTT, P. 2006. A typology of strategy tool applications. *Management Decision*, 44(8): 1090–1105.
- KUME, V. and LESKAJ, E. 2009. Strategic management aspects in Albanian companies. *Analele Stiintifice ale Universitatii “Alexandru Ioan Cuza” din Iasi*, 57: 353–368.
- LEGGE, K., SULLIVAN-TAYLOR, B. and WILSON, D. 2007. Management learning and the corporate MBA: situated or individual?. *Management Learning*, 38(4): 440–457.
- LISIŃSKI, M. and ŠARUCKIJ, M. 2006. Principles of the application of strategic planning methods. *Journal of Business Economics and Management*, 7(2): 37–43.
- NEDELKO, Z., POTOCHAN, V. and DABIĆ, M. 2015. Current and future use of management tools. *E+M Ekonomie a Management*, 18(1): 28–45.
- O’BRIEN, F. 2009. Supporting the strategy process: A survey of UK OR/MS practitioners. *Journal of the Operational Research Society*, 62(5): 900–920.
- PASANEN, M. 2011. Strategic management tools and techniques in SMEs. In: *Conference on Interdisciplinary Business Research 2011*. Society of Interdisciplinary Business Research.
- POPAY, J., ROBERTS, H., SOWDEN, A., PETTICREW, M., ARAI, L., RODGERS, M. and DUFFY, S. 2006. *Guidance on the conduct of narrative synthesis in systematic reviews*. A Product from the ESRC Methods Programme. Version 1.
- PORTER, M. E. 1996. What is strategy? *Harvard Business Review*, 74(6): 61–78.
- PRESCOTT, J. E. and GRANT, J. H. 1988. A manager’s guide for evaluating competitive analysis techniques. *Interfaces*, 18(3): 10–22.
- RAJASEKAR, J. and AL RAEE, A. 2014. Organizations’ use of strategic planning tools and techniques in the Sultanate of Oman. *International Business Research*, 7(3): 159–177.
- RAMANUJAM, V., VENKATRAMAN, N. and CAMILLUS, J. C. 1986. Multi-objective assessment of effectiveness of strategic planning: a discriminant analysis approach. *Academy of Management Journal*, 29(2): 347–372.
- RIGBY, D. 1993. How to manage the management tools. *Planning Review*, 21(6): 8–15.
- RIGBY, D. and BILODEAU, B. 2013. *Management Tools & Trends 2013*. London: Bain & Company.
- RIGBY, D. and BILODEAU, B. 2015. *Management tools & trends 2015*. London: Bain & Company.
- RUMELT, R. P., SCHENDEL, D. E. and TEECE, D. J. 1994. *Fundamental issues in strategy: A research agenda*. Boston, MA: Harvard Business School Press.
- SAVANEVIČIENĖ, A., VAITKEVIČIUS, S. and MERKYS, G. 2006. Model of strategic analysis tools typology. *Engineering Economics*, 2(47): 99–109.
- STENFORS, S., TANNER, L., SYRJÄNEN, M., SEPPÄLÄ, T. and HAAPALINNA, I. 2007. Executive views concerning decision support tools. *European Journal of Operational Research*, 181(2): 929–938.
- STONEHOUSE, G. and PEMBERTON, J. 2002. Strategic planning in SMEs-some empirical findings. *Management Decision*, 40(9): 853–861.
- ŠUKLEV, B. and DEBARLIEV, S. 2012. Strategic planning effectiveness comparative analysis of the Macedonian context. *Economic and Business Review for Central and South-Eastern Europe*, 14(1): 63–93.
- TAPINOS, E. 2005. *Strategic development process: Investigating the relationship between organisational direction and performance measurement* Doctoral dissertation. University of Warwick.
- TASSABEHJI, R. and ISHERWOOD, A. 2014. Management use of strategic tools for innovating during turbulent times. *Strategic Change*, 23(1–2): 63–80.
- VAARA, E. and WHITTINGTON, R. 2012. Strategy-as-practice: taking social practices seriously. *The Academy of Management Annals*, 6(1): 285–336.
- VAITKEVIČIUS, S. 2006. Modelling of strategic analysis in strategic management. *Engineering Economics*, 4(49): 37–47.
- VAITKEVIČIUS, S. 2007. Application of strategic management tools in Lithuania: Managers’ knowledge and experience. *Engineering Economics*, 4(54): 70–77.

- WEBSTER, J. L., REIF, W. E. and BRACKER, J.S. 1989. The manager's guide to strategic planning tools and techniques. *Planning Review*, 17(6): 4–48.
- WHITTINGTON, R. 1996. Strategy as practice. *Long Range Planning*, 29(5): 731–735.
- WHITTINGTON, R. 2006. Completing the practice turn in strategy research. *Organization Studies*, 27(5): 613–634.
- WHITTINGTON, R. 2012. Big strategy/small strategy. *Strategic Organization*, 10(3): 263–268.
- UNITED NATIONS. 2014. *World economic situation and prospects 2014*. New York: United Nations.
- WRIGHT, R. P., PAROUTIS, S. E. and BLETTER, D. P. 2013. How useful are the strategic tools we teach in business schools? *Journal of Management Studies*, 50(1): 92–125.

Contact information

Albana Berisha Qehaja: albana.berisha@uni-pr.edu
Enver Kutllovci: enver.kutllovci@uni-pr.edu
Justina Shiroka Pula: justina.pula@uni-pr.edu