



Strategic management

International Journal of
Strategic Management and
Decision Support Systems
in Strategic Management

Vol. 26, No. 2

2021

ISSN 2334-6191 (Online)

UDC 005.21

University of Novi Sad
Faculty of Economics in Subotica

Strategic Management

International Journal of Strategic Management and
Decision Support Systems in Strategic Management

ISSN 1821-3448, UDC 005.21

Strategic Management is a quarterly journal addressing issues concerned with all aspects of strategic management. It is devoted to the improvement and further development of the theory and practice of strategic management and it is designed to appeal to both practicing managers and academics. Specially, Journal publishes original refereed material in decision support systems in strategic management.

Thematic Fields

- Mission and Philosophy of the Organization
- Culture and Climate of the Organization
- Effectiveness and Efficiency of the Organization
- Structure and Form of the Organization
- Strategic Analysis
- Aims and Strategies
- Process of Strategic Management
- Characteristics of Strategic Management in the New Economy
- Contemporary Ontological, Epistemological and Axiological Suppositions on the Organization and its Environment
- Analysis of the Organization and its Interaction with the Environment
- Structure and Dynamics of the Organizational Environment
- Uncertainty and Indistinctiveness of the Organizational Environment
- Synchronic and Diachronic Analysis of the Organizational Environment
- Analysis Techniques of the Organization
- Business Processes, Learning and Development within the Context of Strategic Management
- Evaluation and Measuring of the Potential and Realization of the Organization within the
- Context of Strategic Management
- Strategic Control in Contemporary Management
- Information Technologies in Strategic Management
- Business Intelligence and Strategic Management
- Decision Support Systems and Artificial Intelligence in Strategic Management
- Performance Management Process
- Performance Management System
- Improving Performance
- Strategic Marketing Management
- Strategic Global Marketing Management
- Strategic Services Marketing
- Leadership and Ethics in Strategic Management
- Human Resource Management and Strategy
- Organizational Behaviour, Strategy, and Performance

All scientific articles submitted for publication in Journal are double-blind reviewed by at least two academics appointed by the Editor's Board: one from the Editorial Board and one independent scientist of the language of origin - English. Reviewers stay anonymous. Authors will timely receive written notification of acceptance, remarks, comments and evaluation of their articles.

Strategic Management

International Journal of Strategic Management and
Decision Support Systems in Strategic Management

www.smjournal.rs

Publisher	University of Novi Sad, Faculty of Economics in Subotica Segedinski put 9-11, 24000 Subotica, Serbia Tel: +381 24 628 000 Fax: +381 546 486 http://www.ef.uns.ac.rs e-mail: smjournal@ef.uns.ac.rs
For Publisher	Aleksandar Grubor, <i>University of Novi Sad, Faculty of Economics in Subotica, Serbia</i>
Editor-in-Chief	Aleksandar Grubor, <i>University of Novi Sad, Faculty of Economics in Subotica, Serbia</i>
International co-editor	Jean Andrei, <i>Petroleum-Gas University of Ploiesti, Faculty of Economic Sciences, Romania</i>
National Editorial Board	Dušan Bobera, <i>University of Novi Sad, Faculty of Economics in Subotica, Serbia</i> Otilija Sedlak, <i>University of Novi Sad, Faculty of Economics in Subotica, Serbia</i> Saša Veljković, <i>University of Belgrade, Faculty of Economics Belgrade, Serbia</i> Vesna Milićević, <i>University of Belgrade, Faculty of Organizational Sciences, Serbia</i> Aleksandar Živković, <i>University of Belgrade, Faculty of Economics, Serbia</i> Dejan Petrović, <i>University of Belgrade, Faculty of Organizational Sciences, Serbia</i> Jonel Subić, <i>Institute of Agricultural Economics in Belgrade, Serbia</i> Zoran Simonović, <i>Institute of Agricultural Economics in Belgrade, Serbia</i> Nikola Curčić, <i>Institute of Agricultural Economics, Belgrade, Serbia</i> Drago Cvijanović, <i>University of Kragujevac, Faculty of Hotel Management and Tourism Vrnjačka Banja, Serbia</i> Ivana Simić, <i>University of Niš, Faculty of Economics, Serbia</i> Jovan Zubović, <i>Institute of Economic Science Belgrade, Serbia</i> Nikola Radivojević, <i>Technical College at Applied Studies Kragujevac, Serbia</i>
International Editorial Board	Donatella Privitera, <i>University of Catania, Italy</i> Ignacio De Los Rios Carmenado, <i>Universidad Politécnica de Madrid, Spain</i> Teodor Sedlarski, <i>St Kliment Ohridski University of Sofia, Bulgaria</i> Panagiotis Kaldis, <i>University of West Attica, Greece</i> Aristidis Papagrighoriou, <i>University of West Attica, Greece</i> Petros Kalantonis, <i>University of West Attica, Greece</i> Gheorghe Ileana, <i>Petroleum-Gas University of Ploiesti, Romania</i> Nica Elvira, <i>Faculty of Administration and Public Management, Bucharest Academy of Economic Studies, Romania</i> Andrei Jean Vasile, <i>Petroleum-Gas University of Ploiesti, Romania</i> Konstantin Kostin, <i>Saint-Petersburg State University of Economics, Russia</i> Ilona Bažantova, <i>Charles University in Prague, Faculty of Law, Czech Republic</i> André Boyer, <i>University of Nice Sophia-Antipolis, France</i> Ivan Brezina, <i>University of Economics in Bratislava, Faculty of Economic Informatics, Bratislava, Slovakia</i> Agnes Hofmeister, <i>Corvinus University of Budapest, Faculty of Business Administration, Hungary</i> Pedro Isaias, <i>Open University Lisbon, Portugal</i> Novak Kondić, <i>University of Banja Luka, Faculty of Economics, Banja Luka, Bosnia and Herzegovina</i> Mensura Kudumović, <i>University of Sarajevo, Faculty of Medicine, Bosnia and Herzegovina</i> Vujica Lazović, <i>University of Montenegro, Faculty of Economics, Podgorica, Montenegro</i> Pawel Lula, <i>Cracow University of Economics, Poland</i> Emilija Novak, <i>West University of Timisoara, Timisoara, Romania</i> Elias Pimenidis, <i>University of the West of England, UK</i> Vladimir Polovinko, <i>Omsk State University, Russia</i> Ludovic Ragni, <i>University of Nice Sophia-Antipolis, France</i> Kosta Sotiroski, <i>University „ST Kliment Ohridski“ Bitol, Faculty of Economics Prilep, Macedonia</i> Ioan Talpos, <i>West University of Timisoara, Faculty of Economics, Romania</i>
Assistant Editors	Marion Sakal, <i>University of Novi Sad, Faculty of Economics in Subotica, Serbia</i> Vuk Vuković, <i>University of Novi Sad, Faculty of Economics in Subotica, Serbia</i> Lazar Raković, <i>University of Novi Sad, Faculty of Economics in Subotica, Serbia</i>
Proofreading	Željko Buljovčić
Prepress	Aleksandar Vugdelija
Print	Pressia d.o.o. Beograd
Circulation	150 The Journal is published quarterly.

Strategic Management

International Journal of Strategic Management and
Decision Support Systems in Strategic Management

www.smjournal.rs

ISSN 1821-3448
UDC 005.21
2021, Vol. 26, No. 2

Contents

Yana Seliverstova Workforce diversity management: a systematic literature review	3-11
Kristján Vigfússon, Lára Jóhannsdóttir, Snjólfur Ólafsson Obstacles to strategy implementation and success factors: a review of empirical literature	12-30
József Poór, Agneš Slavić, Milan Nikolić, Nemanja Berber The managerial implications of the labor market and workplace shortage in Central Eastern Europe	31-41
Suzana Đukić, Jelena Stanković Research into unplanned purchases on the Serbian market	42-53
Quang-Huy Ngo The impact of prospecting strategy on small business performance in Vietnam: the role of broad-scope management accounting system	54-63

Workforce diversity management: a systematic literature review

Yana Seliverstova

University of Debrecen, Faculty of Economics and Business, Institute of Management and Organisation Sciences, Debrecen, Hungary

Abstract

The primary task of the paper is to propose a definition of the existing theoretical contributions to the term of workforce diversity management (WDM) in order to systematize present knowledge, clearly understand the definition of WDM in organizations and identify the gaps for future research. In this theoretical study, the Scopus database was used for sampling. 19 studies published since 2015 were identified, and then the selected papers were analysed according to key research definitions. Recently, the idea of diversity management (DM) acquires a new meaning; swiftly expanding its field and circulating around the world. WDM becomes a frequently significant part of Human Resource Management in corporations, as it helps companies to take a sustained competitive advantage in the current globalization and innovative age (Egerova, Jiřincová, Lančarič & Savov, 2013; Manoharan & Singal, 2017). The results of the research show that DM is perceived by a moderate number of existing publications as a method that helps to encompass both: a favourable corporate culture and organizational success. By assessing present studies on DM, the paper contributes to the literature on business and management and demonstrates the potential as the scrutinised field seems to be an attractive area for future research.

Keywords

inclusion, human resource management, labour market, organizations, content analysis.

Introduction

The increasing globalisation and the social changes in the world have lately led to the movement of free labour (Sanghvi, 2019), making the workforce diverse more than ever (Meena & Vanka, 2017; Tamunomiebi & John-Eke, 2020) and almost any organisation is free to form its diverse human capital. These factors have further magnified employees' interaction with each other (Ramsiary & Raya, 2015) and generated new hurdles for firms in every business sector (Shen, Tang & D'Netto, 2014), increasing the necessity for managing a diverse workforce.

Over the past decades, DM has received more attention from researchers. As evident, Figure 1 shows a rising amount of scholarly articles on the subject regarding the business and management field in the Scopus database over the period from 2000 to 2020. A vital rise in publications can be noticed from 2010 due to the increasing variety of human capital and the reasons behind that fact

were explained in previous studies as demographic changes of the labour market, the inclusion of migrants and ease of employee mobility (Özbilgin, Jonsen, Tatli, Vassilopoulou & Surgevil, 2013; Urbancová, Hudáková & Fajčíková, 2020). This proves the relevance of the research topic that is constantly emerging and will make a vast impact on the companies' structure in the future.

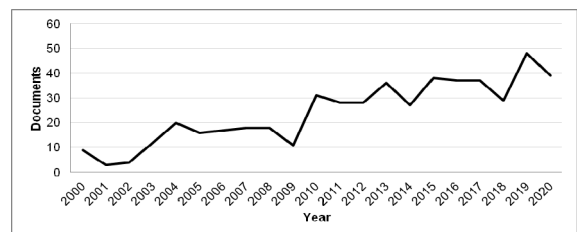


Figure 1 Number of publications on the diversity management topic per year

Source: Scopus, 2020

This theoretical study was conducted to understand how the notion of WDM is explained in business and management literature. Thus, the objectives of this paper are the (1) to analyse the definitions of WDM in the latest studies and (2) to identify current concerns and trend directions for future research on WDM. The systematic literature review was carried out using the Scopus database to examine the above-mentioned objectives. The conclusions are calling for future research and consideration of eliminating limitations in this field.

1. The concepts of workforce diversity management

A comprehensive definition of workforce diversity means heterogeneity and differences among employees in an organisation in terms of race, age, ethnicity, cultural background, physical abilities, religion, gender, sexual orientation, language, education, lifestyle, beliefs, appearance and economic status (Choi & Rainey, 2010; Manoharan & Singal, 2017; Pitts, 2009; Roosevelt Thomas, 1990; Inegbedion, Sunday, Asaleye, Lawal & Adebajji, 2020; Saxena, 2014). The scholars frequently use different terms to refer to DM, such as “equality at the workplace”, “diverse workforce”, “equal opportunities”, and “inclusion”.

The concept of WDM emerged in the USA in the 1980s - 1990s and refers to Equal Employment Opportunity and Affirmative Action and was later basically formulated by Roosevelt R. Thomas Jr. (McDonald, 2010; Bridgstock, Lettice, Ozbilgin & Tatli, 2010; Gröschl, 2011; Rabl, del Carmen Triana, Byun & Bosch, 2020). Later, Fischer (2009) described DM as a management policy that designs to benefit from workforce diversity for the achievement of organisational goals.

In existing literature, a more frequently used definition of WDM belongs to Hubbard (2011), who defined it as “a process of planning for, organizing and supporting these collective mixtures in a way that adds a measurable difference to organisational performance”. However, the analysed papers do not refer to that term; half of them explain DM from the same perspective, as management of individual employees’ differences in order to contribute to organisational performance (Ashikali & Groeneveld, 2015; Köllen, 2016; Lančarič, Chebeň & Savov, 2015; Otaye-Ebede, 2018;

Ohunakin, Adeniji, Ogunnaike, Igbadume & Akintayo, 2019).

Recently, managers and scholars have become more aware that diverseness of employees allows looking at many things and situations outside the box, from different angles and points of view, brings innovation and moves the company towards development and transformation. Therefore, in more recent research, the concept of DM gaining broad meaning, paying attention to the equal employment opportunities and staff well-being and explaining that all employees can pursue their goals without being hindered by gender, race, nationality or other qualities that are unrelated to performance (Ayega & Muathe, 2018; Egerova, 2012).

2. Research methodology

The objective of the study is to examine and synthesize existing research, and, furthermore, deliver the evidence, thus, a systematic review approach will be applied for this study. The systematic review methodology is the most reliable and precise method to collect articles, which have severe conditions for search procedure and paper selection to be included in the research, and typically, carried to assess the nature of existing knowledge and gaps on specific issues on a distinct subject (Mengist, Soromessa & Legese, 2020; Snyder, 2019).

To narrow down the study objectives, the keyword “Workforce diversity management” was applied in titles, abstracts and keywords of publications to investigate relevant literature indexed in the Scopus scientific database. Almost 1400 scientific articles have been found on Scopus. The Scopus database was chosen in view of its significance, interdisciplinary character and focus on high-quality research, published in peer-reviewed journals, acknowledged conferences and books. Data were retrieved on 30 September 2020. Table 1 presents the sampling process divided into five steps with a purpose to identify the studies for the current review.

Table 1 The articles collection method

No	Step of the collection process	N
1	Studies identified in search (Scopus database) by the keyword "Workforce diversity management"	1390
2	Studies identified by applying filters to exclude irrelevant studies (English language, year, subject area)	228
3	Studies identified after reading titles and abstracts	103
4	Studies identified by reading the full articles	46

5	Studies rejected after the analysis of abstracts and full text of articles	84
6	Study of the final research papers	19

Source: The author

To filter the large pool of papers, formation measures were implemented: 1) papers published in the English language; 2) articles published since 2015; 3) articles referring to “Economics, Econometrics and Finance” and “Business, Management and Accounting” subject areas, 4) excluding publications in Agriculture, Health science and Medicine (Scopus filters). After applied filters, 228 articles were identified and attentive abstract reading was performed. The further action was employed, eliminating from the research unsuitable or inaccessible studies for the users of the University of Debrecen. At this stage, 103 studies were identified for further consideration. Third, the abstracts of the papers were analysed with the purpose to exclude irrelevant studies, including articles related to the concept of diversity in top management teams, as it is not a direct focus of this and further research. In sum, a total of 46 studies related to the concept of WDM were read for this article, and as the

fourth step, the review of the full texts was undertaken to identify and eliminate unrelated studies or studies provided little guidance to the research topic. In general, 84 studies were excluded by the author's primary search. As the fourth step, content analysis was applied with the purpose to find the key contributions and to classify existing concepts regarding the research objectives. Thus, at the fifth step, 19 publications were chosen as a final research sample. The complete reading of these articles allows identifying 47 authors attempting to define the DM concept. The findings of the literature review are published on the following pages. Furthermore, the articles cited in the retrieved studies have been evaluated and few of them are included in this research.

3. Literature analysis

In this chapter, further efforts toward identifying the meaning of WDM regarding the previously described methodology were made. Table 2 presents the results of the selected literature for the research analysis.

Table 2 systematic literature review sample on workforce diversity management

No.	Year	Author(s)	Article Title	Journal Title
1	2015	Ashikali & Groeneveld	Diversity management for all? An empirical analysis of diversity management outcomes across groups	Personnel Review
2	2015	Lančarič, Chebeň & Savov	Factors influencing the implementation of diversity management in business organisations in a transition economy. The case of Slovakia	Economic Research-Ekonomska Istrazivanja
3	2015	Urbancová, Cermáková & Navrátilová	Human resource diversity management in selected Czech agricultural companies	Agris On-line Papers in Economics and Informatics
4	2015	Cui, Jo, Na & Velasquez	Workforce Diversity and Religiosity	Journal of Business Ethics
5	2015	Ledimo	Diversity management: An organisational culture audit to determine individual differences	Journal of Applied Business Research
6	2016	Köllen	Acting Out of Compassion, Egoism, and Malice: A Schopenhauerian View on the Moral Worth of CSR and Diversity Management Practices	Journal of Business Ethics
7	2017	George, Yusuff & Cornelius	The good, the bad, and the ugly in the melting pot: The challenges of Nigerianising diversity management	Equality, Diversity and Inclusion
8	2017	Kim & Park	Diversity Management and Fairness in Public Organizations	Public Organization Review

9	2018	Raineri	Diversity management in three Latin American countries: an institutional theory perspective	Academia Revista Latinoamericana de Administracion
10	2018	Otaye-Ebede	Employees' perception of diversity management practices: scale development and validation	European Journal of Work and Organizational Psychology
11	2018	Shore, Cleveland & Sanchez	Inclusive workplaces: A review and model	Human Resource Management Review
12	2019	Ohunakin, Adeniji, Ogunnaike, Igbadume & Akintayo	The effects of diversity management and inclusion on organisational outcomes: A case of multinational corporation	Business: Theory and Practice
13	2020	Lee & Kim	Workforce diversity and firm performance: Relational coordination as a mediator and structural empowerment and multisource feedback as moderators	Human Resource Management
14	2020a	Yadav & Lenka	Diversity management: a systematic review	Equality, Diversity and Inclusion
15	2020	Karolidis, Vouzas, Kafetsios & Bellou	Protean Diversity: A Complex Adaptive Systems Perspective on Individuals within Organizations	European Management Review
16	2020	Rabl, del Carmen Triana, Byun & Bosch	Diversity Management Efforts as an Ethical Responsibility: How Employees' Perceptions of an Organizational Integration and Learning Approach to Diversity Affect Employee Behavior	Journal of Business Ethics
17	2020b	Yadav & Lenka	Workforce diversity: from a literature review to future research agenda	Journal of Indian Business Research
18	2020	Sinicropi & Cortese	(Re)Thinking diversity within sustainable development: A systematic mapping study	Corporate Social Responsibility and Environmental Management
19	2020	Li, Wang, Haque, Shafique & Nawaz	Impact of Workforce Diversity Management on Employees' Outcomes: Testing the Mediating Role of a person's Job Match	SAGE Open 10(1)

Source: The author

19 scientific papers published between 2015 and 2020 were identified as a research sample, and the language of the articles is English. After conducted content analysis of the chosen publications included in the research, the sample reveals that only two articles analyse the topic directly and include the literature review on WDM, which is specifically stated in the papers' titles. From the sample we can see two articles written by same authors from India (Yadav & Lenka, 2020a,b). Additionally, there is one study (Shore, Cleveland & Sanchez, 2018), which can also be considered as direct analysis with paraphrased keywords. The majority of papers refers to these concepts less directly and are included in the analysis of the definition of WDM. Table 2 confirms that the majority of the papers

were published in high-ranking journals; three of the studies were published in Journal of Business Ethics (the Netherlands), two in Equality, Diversity and Inclusion (UK).

The analysis of the full text of the sampled papers enables us to identify key research definitions, analyse the terms of DM and, in particular, emphasize the new formulated definition in the existing literature. Table 3 shows the classified key research definitions, along with a summary of their contribution to the research field.

Table 3 The key definitions of the workforce diversity management in research

No.	Key research definition	Author(s)	Key contribution to the definition of WDM
1.	Diversity management defined as management of individual employees' differences to contribute to organisational performance	Ashikali & Groeneveld (2015)	In this study, the concept of DM is explained as effective management of workforce diversity by transforming organizational culture and practices, assessing distinctions among staff, and building a beneficial work atmosphere in which a variety of employees work towards the achievement of organizational success.
		Lančarič, Chebeň & Savov (2015)	The study defines DM as a theory of acknowledging and appreciating the diversity at a workforce in regard to achieving companies' performance. It also explains DM as HRM practice, which increases or maintains variation in the workforce, to ensure that variation in human capital facilitates the achievement of organisational goals.
		Köllen (2016)	The author characterises DM as a questionable theory with various explanations that describe a diverse workforce, targeting to reach organisational goals in varying approaches.
		Otaye-Ebede (2018)	DM is a concept of utilising strategies to magnify the performance of organizations; a component of HR policies and practices; and an inclusive approach which strives to encompass and leverage variations among employees with the purpose to fully utilize individual talents and meet organizational goals.
		Ohunakin, Adeniji, Ogunnaike, Igbadume & Akintayo (2019)	DM is the importance of a variety of employees and effectiveness in the usage of such differences, as well as the application of HRM initiatives for sustaining a diverse workforce and ensuring absence of a negative impact on the companies' achievements and business goals.
2.	Diversity management as the respect of individual characteristics regarding equality and discrimination at workplaces	Urbancová, Cermáková & Navrátilová (2015)	The description of the DM notion underlines the taking of variation in the structure of the labour force such as gender, race, family status, age, sexual orientation, physical and mental abilities as well as eradicating discrimination from top managers.
		George, Yusuff & Cornelius (2017)	The authors describe DM as a "faithful initiative aimed at achieving equal, diverse and equitable representation without compromising merit".
3.	Diversity management considers individual differences to create auspicious working conditions and contribute to organisational performance	Kim & Park (2017)	DM is represented as an important managerial tool against discrimination at the workplace, implemented towards equal employment opportunities and treatment of workers. DM enhances social improvement and management practices in a company, increasing an organization's trust and achieving strong personal and organizational performance.
		Sinicropi & Cortese (2020)	The scholars define DM as a method designed to generate and sustain a favourable atmosphere at a workplace in which all the similarities and dissimilarities of employees are respected and lead to ensure sustainable growth by enhancing workforce potential and maximizing their contribution to the achievement of an organization's strategic goals.
		Yadav & Lenka (2020a)	DM is characterised as a business strategy adopted by organizations to recognise unique knowledge, recruit and create an inclusive workplace for individuals from a variety of backgrounds with a purpose to enhance organizational effectiveness and corporate performance.
		Rabl, del Carmen Triana, Byun & Bosch (2020)	The paper refers to the term called "melting pot" developed in the USA around 1780 and expresses incorporating ethnicity, nationalities, and cultures. The authors argue that DM embodies inclusion and displays a proactive business approach that appreciates diversity and builds a beneficial atmosphere, encouraging achieving business aims such as organizational learning and organizational success.

		Shore, Cleveland & Sanchez (2018)	DM refers to the distinct categories of the workforce that have common cultural or national traits, can fully express themselves while contributing to the organisational goals, but are influenced by employment consequences such as employment opportunities, workplace culture and environment, promotion possibilities notwithstanding professional experience and qualifications.
4.	Diversity management as individual differences among employees	Cui, Jo, Na & Velasquez (2015)	DM is explained by the definition of Harrison and Klein (2007), who provide a general explanation of diversity as "the distribution of differences among the members of a unit with concerning a common attribute, such as tenure, ethnicity, conscientiousness, task attitude, or pay."
		Ledimo (2015)	The definition of DM states that a group of employees is diverse if it consists of people with diverse features on which they base their individuality.
		Lee & Kim (2020)	DM is defined as a combination of individual characteristics among the workforce in an organization.
		Karolidis, Vouzas, Kafetsios & Bellou (2020)	From the authors' perspective, the workforce can differ regarding visible and subjective characteristics in respect of employees' gender, race, age, physical disadvantages, work experience within an organisation, educational level or background, communicative skills, cultural values, belief, marital status, sexual orientation, lifestyle and plenty of other features.
		Yadav & Lenka (2020b)	DM is explained as the composition of work units and an important collective research phenomenon of different aspects of diversity in terms of cultural or demographic characteristics, informational diversity, organizational diversity and cognitive diversity. Furthermore, it cites Jehn et al. (1999), who explored three specific types of workgroup diversity: social category diversity; informational diversity; and value diversity.
		Raineri (2018)	DM relates to the management of employees' variety at work, including social inequalities and physical differences, such as appearance and inherent variations, race and gender.
		Li, Wang, Haque, Shafique & Nawaz (2020)	DM is defined as management of all individual differences such as race, gender, age, cultural differences, education, background, interest, status and physical abilities.

Source: The author

The following four key research definitions of DM were identified: 1. DM defined as management of individual employees' differences to contribute to organisational performance, 2. DM as the respect of individual characteristics regarding equality and discrimination at workplaces, 3. DM as consideration of individual differences to create auspicious working conditions and contribute to organisational performance, 4. DM as individual differences among employees. All the papers explain DM as the management of individual differences among employees; one refers to organisational performance, next cluster explains DM as equality and discrimination at the workplace, the third is the most profitable and combines those two aspects - organisational climate and performance, and the fourth cluster simply explains DM as differences in the workforce. It is worth adding

that almost every of the examined articles assumed that there was no evidence of the benefits of DM in organizations.

Discussion and conclusions

In the past decade, the necessity of WDM in this dynamic and ever-increasing technological age is broadly admitted among researchers, the increasing trend in the number of authors attempting to explain that DM concept can be appreciated. The studied literature allows us to summarize that the main idea of the concept of DM in existing research is the recognition that the workforce of an organization is comprised of diverse individuals with differences, which can be visible (race, ethnicity, age, gender, physical abilities, etc.) and invisible (education, competencies and skills, motivation, work experience, etc.) (Ledimo, 2015; Sinicropi &

Cortese, 2020; Yadav & Lenka, 2020b). Most of the authors acknowledge DM as a tool that has to be considered if an organization wants individuals to contribute to organizational performance. Hardly a fourth of the papers converge on apprehending the potential value of individual differences regarding the creation of a positive environment in which employees are appreciated and their abilities are fully acknowledged.

In an early study on DM (Ghosh, 2016), it was predicted that companies should be careful in managing human capital as the business environment is experiencing an extensive transformation. The study (Sung & Choi, 2019) argues that many organisations were led to re-think and re-design their organisational cultures due to changing demographic dynamics of the labour force. Moreover, in the current circumstances of the COVID-19 restrictions, organizations are put in a quandary and have to revise, invent and implement new policies and practices with a purpose to hire, retain and to rally distributed teams with different backgrounds, which carries both certain difficulties and advantages. Organisations that follow global trends should instantly adjust to the changes (Urbancová et al., 2015). Thus, the new challenge for managers arises in the obstacles, that in current crises, DM has to be implemented and adjust remotely and in a short time, and to show more productive results than ever. As the first step to the implementation of this approach into organisational management, it is crucial for managers to clearly understand the definition of WDM. Therefore, this article contributes to theoretical research by evaluating the DM definition and the materials will be interesting and useful to Human Resources professionals in various sectors of the economy, aimed at long-term business development.

The study has some limitations in the research process. At first, the chosen database (Scopus) does not contain all the contemporary studies on the research topic. The second consists of the limits in the systematic literature review used for the research methodology. Considering these reasons, further in-depth studies within the field can be conducted. Moreover, new research directions could be developed. In particular, it would be interesting to investigate WDM practice and case studies in virtual teams; trends and innovative approaches (digital HR) in DM; and dimensions of diversity that are relevant to the workplace.

In conclusion, it might be stated that the purpose of this article was achieved by analyzing the literature on the theory of managing a diverse workforce in organizations. The results show that the concept of WDM concerning creating a supportive work environment and, at the same time, achieving organizational goals is not very popular in existing research. The application of systematic literature review as a methodology gives the right to conclude that research gaps were identified. **SM**

References

- Ayega, E. N. & Muathe, S. (2018). Critical Review of Literature on Cultural Diversity in the Work Place and Organizational Performance: A Research Agenda. *Journal of Human Resource Management*, 6(1), 9-17. <https://doi.org/10.11648/j.jhrm.20180601.12>
- Ashikali, T., & Groeneveld, S. (2015). Diversity management for all? an empirical analysis of diversity management outcomes across groups. *Personnel Review*, 44(5), 757-780. <https://doi.org/10.1108/PR-10-2014-0216>
- Bridgstock, R., Lettice, F., Ozbilgin, M.F., & Tatli, A. (2010). Diversity Management for Innovation in Social Enterprises in the UK. *Entrepreneurship and Regional Development*, 22(6), 557-574. <https://doi.org/10.1080/08985626.2010.488404>
- Choi, S. & Rainey, H.G. (2010). Managing Diversity in U.S. Federal Agencies: Effects of Diversity and Diversity Management on Employee Perceptions of Organizational Performance. *Public Administration Review*, 70, 109-121. <https://doi.org/10.1111/j.1540-6210.2009.02115.x>
- Cui, J., Jo, H., Na, H., & Velasquez, M. G. (2015). Workforce diversity and religiosity. *Journal of Business Ethics*, 128(4), 743-767. <https://doi.org/10.1007/s10551-013-1984-8>
- Egerova, D. (2012). Diversity management as a crucial issue of the management in the 21st century. *Problems of Management in the 21st Century*, 2(3), 5-7.
- Egerova, D., Jiřincová, M., Lančarič, D., & Savov, R. (2013). Applying the concept of diversity management in organisations in the Czech republic and the Slovak republic – a research survey. *Technological and Economic Development of Economy*, 19(2), 350-366. <https://doi.org/10.3846/20294913.2013.798598>
- Fischer, M. (2009). Diversity management and the business case. In Kraal K., Roosblad J., & Wrench J. (Eds.), *Equal Opportunities and Ethnic Inequality in European Labour Markets: Discrimination, Gender and Policies of Diversity*, 95-118. Amsterdam: Amsterdam University Press. <https://doi.org/10.5117/9789089641267>
- George, O., Yusuff, K.M., & Cornelius, N. (2017). The good, the bad, and the ugly in the melting pot: The challenges of Nigerianising diversity management. *Equality, Diversity and Inclusion*, 36(3), 238-254. <https://doi.org/10.1108/EDI-10-2015-0088>

- Ghosh, K. (2016). Creative leadership for workplace innovation: An applied SAP-LAP framework. Development and Learning in Organizations: *An International Journal*, 30, 10–14. <https://doi.org/10.1108/DLO-04-2015-0041>
- Gröschl, S. (2011). Diversity management strategies of global hotel groups: A corporate web site based exploration. *International Journal of Contemporary Hospitality Management*, 23(2), 224–240. <https://doi.org/10.1108/09596111111119347>
- Hubbard, E. E. (2011). The diversity scorecard: evaluating the impact of diversity on organizational performance (improving human performance). *Burlington: Butterworth-Heinemann*.
- Inegbedion, H., Sunday, E., Asaley, A., Lawal, A., & Adebajji, A. (2020). *Managing Diversity for Organizational Efficiency*. SAGE Open, 10(1). <https://doi.org/10.1177/2158244019900173>
- Karolidis, D., Vouzas, F., Kafetsios, K., & Bellou, V. (2020). Protean diversity: A complex adaptive systems perspective on individuals within organizations. *European Management Review*, 17(4), 857–870. <https://doi.org/10.1111/emre.12399>
- Kim, S., Park, S. (2017). Diversity Management and Fairness in Public Organizations. *Public Organiz Rev* 17(2), 179–193. <https://doi.org/10.1007/s11115-015-0334-y>
- Köllen, T. (2016). Acting out of compassion, egoism, and malice: A schopenhauerian view on the moral worth of CSR and diversity management practices. *Journal of Business Ethics*, 138(2), 215–229. <https://doi.org/10.1007/s10551-015-2599-z>
- Lančarič, D., Čebeň, J., & Savov, R. (2015). Factors influencing the implementation of diversity management in business organisations in a transition economy. The case of Slovakia. *Economic Research-Ekonomika Istraživanja*, 28(1), 1162–1184. <https://doi.org/10.1080/1331677X.2015.1100837>
- Ledimo, O. (2015). Diversity management: An organisational culture audit to determine individual differences. *Journal of Applied Business Research*, 31(5), 1747–1756. <https://doi.org/10.19030/jabr.v31i5.9388>
- Lee, H. W., & Kim, E. (2020). Workforce diversity and firm performance: Relational coordination as a mediator and structural empowerment and multisource feedback as moderators. *Human Resource Management*, 59(1), 5–23. <https://doi.org/10.1002/hrm.21970>
- Li, W., Wang, X., Haque, M. J., Shafique, M. N., & Nawaz, M. Z. (2020). Impact of workforce diversity management on employees' outcomes: Testing the mediating role of a person's job match. *SAGE Open*, 10(1). <https://doi.org/10.1177/2158244020903402>
- Manoharan, A., & Singal, M. (2017). A systematic literature review of research on diversity and diversity management in the hospitality literature. *International Journal of Hospitality Management*, 66, 77–91. <https://doi.org/10.1016/j.ijhm.2017.07.002>
- Mcdonald, D. (2010). The Evolution of 'Diversity Management' in the USA: Social Contexts, Managerial Motives and Theoretical Approaches. Institute of Business Research, Daito Bunka University. *Research Papers*, 1–20.
- Meena, K., & Vanka, S. (2017). Developing an empirical typology of diversity-oriented human resource management practices. *Journal of Management Development*, 36(7), 915–929. <https://doi.org/10.1108/JMD-02-2016-0031>
- Mengist W., Soromessa T., & Legese G. (2020). Method for conducting systematic literature review and meta-analysis for environmental science research. *MethodsX*, 7. <https://doi.org/10.1016/j.mex.2019.100777>
- Ohunakin, F., Adeniji, A., Ogunnaike, O. O., Igbadume, F., & Akintayo, D. I. (2019). The effects of diversity management and inclusion on organisational outcomes: a case of multinational corporation. *Business: Theory and Practice*, 20, 93–102. <https://doi.org/10.3846/btp.2019.09>
- Otaye-Ebede L. (2018). Employees' perception of diversity management practices: scale development and validation. *European Journal of Work and Organizational Psychology*, 27(4), 462–476. <https://doi.org/10.1080/1359432X.2018.1477130>
- Ozibilgin M.F., Jonsen K., Tattli A., Vassilopoulou J., & Surgevil O. (2013). Global diversity management. In Roberson QM, editors. *The Oxford Handbook of Diversity and Work*. Oxford University Press: Oxford, 419–441. <https://doi.org/10.1093/oxfordhb/9780199736355.013.0022>
- Pitts, D. (2009). Diversity Management, Job Satisfaction, and Performance: Evidence from U.S. Federal Agencies. *Public Administration Review*, 69(2), 328–338. <https://doi.org/10.1111/j.1540-6210.2008.01977.x>
- Rabl, T., del Carmen Triana, M., Byun, S.Y., & Bosch L. (2020). Diversity Management Efforts as an Ethical Responsibility: How Employees' Perceptions of an Organizational Integration and Learning Approach to Diversity Affect Employee Behavior. *Journal of Business Ethics*, 161(3), 531–550. <https://doi.org/10.1007/s10551-018-3849-7>
- Raineri, A. (2018). Diversity management in three Latin American countries: an institutional theory perspective. *Academia Revista Latinoamericana de Administración*, 31(2), 426–447. <https://doi.org/10.1108/ARLA-08-2016-0220>
- Ramsiary S., & Raya P. (2015). Diversity Management - A Blend of Literature, *Pacific Business Review International*, 7(10).
- Roosevelt Thomas, R. (1990). From affirmative action to affirming diversity. *Harvard Business Review*, 68(2), 107–117.
- Sanghvi, P. (2019). Diversity and strategic Human Resources management: literature review. *PEOPLE: International Journal of Social Sciences*, 5(2), 153–161. <https://doi.org/10.20319/pijss.2019.52.153161>
- Saxena A. (2014). Workforce Diversity: A Key to Improve Productivity, *Procedia Economics and Finance*, 11, 76–85. [https://doi.org/10.1016/S2212-5671\(14\)00178-6](https://doi.org/10.1016/S2212-5671(14)00178-6)
- Scopus. (2020). Scopus. Retrieved December 2020 from: <https://www.scopus.com/>

- Shen, J., Tang, N., & D'Netto, B. (2014). A multilevel analysis of the effects of HR diversity management on employee knowledge sharing: The case of Chinese employees. *The International Journal of Human Resource Management*, 25(12), 1720–1738. <https://doi.org/10.1080/09585192.2013.859163>
- Shore, L. M., Cleveland, J. N., & Sanchez, D. (2018). Inclusive workplaces: A review and model. *Human Resource Management Review*, 28 (2), 176-189. <https://doi.org/10.1016/j.hrmr.2017.07.003>
- Sinicropi, S., & Cortese, D. (2020). (Re)Thinking diversity within sustainable development: A systematic mapping study. *Corporate Social Responsibility and Environmental Management*, 28(1), 299–309. <https://doi.org/10.1002/csr.2050>
- Snyder, H. (2019). Literature review as a research methodology: An overview and guidelines. *Journal of Business Research*, 104, 333-339. <https://doi.org/10.1016/j.jbusres.2019.07.039>
- Sung, S.Y. and Choi, J.N. (2019). Contingent effects of workforce diversity on firm innovation: high-tech industry and market turbulence as critical environmental contingencies. *The International Journal of Human Resource Management*, 1-27. <https://doi.org/10.1080/09585192.2019.1579243>
- Tamunomiebi, M. D., & John-Eke, E. C. (2020). Workplace Diversity: Emerging Issues in Contemporary Reviews. *International Journal of Academic Research in Business and Social Sciences*, 10(2), 255–265. <https://doi.org/10.6007/IJARBS/v10-i2/6926>
- Urbancová, H., Cermáková, H., & Navrátilová, M. (2015). Human resource diversity management in selected czech agricultural companies. *Agris on-Line Papers in Economics and Informatics*, 7(3), 79-87. <https://doi.org/10.7160/aol.2015.070308>
- Urbancová, H.; Hudáková, M.; Fajčíková, A. (2020). Diversity Management as a Tool of Sustainability of Competitive Advantage. *Sustainability*, 12(12), 5020. <https://doi.org/10.3390/su12125020>
- Yadav, S., & Lenka, U. (2020a). Diversity management: A systematic review. *Equality, Diversity and Inclusion*, 39 (8), 901-929. <https://doi.org/10.1108/EDI-07-2019-0197>
- Yadav, S., & Lenka, U. (2020b). Workforce diversity: from a literature review to future research agenda. *Journal of Indian Business Research*, 12(4), 577–603. <https://doi.org/10.1108/JIBR-08-2019-0243>

✉ Correspondence

Seliverstova Yana

PhD Student
University of Debrecen, Hungary
Faculty of Economics and Business
4032 Böszörményi út 138, Debrecen, Hungary
E-mail: seliverstova.ys@gmail.com

Obstacles to strategy implementation and success factors: a review of empirical literature

Kristján Vigfússon

School of Social Sciences, Reykjavík University, Reykjavík, Iceland

Lára Jóhannsdóttir

Faculty of Business Administration, University of Iceland, Reykjavík, Iceland

Snjólfur Ólafsson

Faculty of Business Administration, University of Iceland, Reykjavík, Iceland

Abstract

The purpose of this study is to identify obstacles and success factors evident from empirical studies affecting strategy implementation and to provide an overview of the empirical literature. A systematic literature review (SLR) was used to analyze thirty-five peer-reviewed empirical articles. All of the 35 research papers selected in this review use primary data gathered from the organizations studied. This study of empirical research has identified 16 obstacles that can hinder strategy implementation and 18 success factors that can facilitate implementation. This study highlights factors that are dualistic, meaning that they contain both elements of obstacles and key success factors. The dualistic factors should therefore be considered in the strategy implementation process. Research gaps are identified. They include lack of studies on how to overcome obstacles to strategy on the one hand and on employee influence on implementation on the other. The differences among industries, countries, or cultures regarding implementation have not yet been explored at any depth. The paper adds to theoretical and practical knowledge based on the systematic overview it provides on strategy implementation from 1980 until 2020. The paper enriches the practical knowledge relevant to those implementing strategies, as it captures and identifies the dualistic factors affecting strategy implementation.

Keywords

strategy, implementation, execution, obstacle, barrier, success factor

Introduction

Strategy formulation has been studied and discussed in academia for half a century, but less attention has been paid to the implementation of a strategy (Aaltonen & Ikävalko, 2002; Alexander, 1985; Al-Ghamdi, 1998; Noble, 1999a). Unlike strategy formulation, strategy implementation is extremely difficult and its research history has been seen as fragmented and eclectic (Blahová & Knápková, 2010). Strategy implementation, nevertheless, is seen as a very important field having a crucial influence on organizations and

their performance (Hrebiniak & Joyce, 1984). Implementation is also fundamental for the effective functioning of any organization and for a business strategy to succeed (Hrebiniak, 2006; Schilit, 1987) and can be a crucial element for creating a competitive edge, which is the core aim of any strategy formulation and implementation (Giles, 1991). Multiple scholars have consequently called for more research on strategy implementation to fill the identified knowledge gap (Atkinson, 2006; Beer & Eisenstat, 2000; Noble, 1999a). Although attention of academics has increased on strategy implementation over the last

decade, managers are still facing remarkably similar problems concerning implementation (Hrebiniak, 2013).

Research has shown that a relatively small percentage of planned strategies in organizations are implemented (Mintzberg & McHugh, 1985) and too many strategies seem to fail in the implementation stage because either implementation is poorly managed or has not taken place. Therefore, scholars have underlined the importance of avoiding implementation barriers and pitfalls, since most strategies falter during implementation (Allio, 2005). It is not an overstatement to say that if the strategy formulated never gets implemented, the time, resources and capital of the company have been wasted. This is, for instance, highlighted by Olson, Slater and Hult (2005, p. 47.) who state that “doing” is much harder than “dreaming.” Hrebiniak (2006) agrees with Olson et al. (2005), as he emphasizes that managers know how to plan and formulate a strategy, but not how to implement it. Studies have shown a very high failure rate of strategy implementation, ranging between 50% and 90% (Kaplan & Norton, 2001; Miller, 1997). A more recent study suggested that some of the evidence supporting these percentages is outdated, fragmentary, or lacks scientific rigor and, therefore, numbers should be taken with caution (Cândido & Santos, 2015).

Differences between strategy implementation and strategy execution are not so clear in the literature, as many scholars use the concepts as synonyms (Hrebiniak, 2006). For instance, Li, Guo-Hui and Eppler (2010) report in their research that there seemed to be a consensus of using strategy implementation as a key word in the field of strategy implementation/execution, and that few generally use strategy execution concept (Li et al., 2010). Therefore, in this study, strategy implementation and execution will be used synonymously, in line with Hrebiniak's (2006) and Li et al. (2010) conclusion.

As depicted in Figure 1, the strategic management process can be described in three main phases: *formulation*, *strategy implementation*, and *evaluation* (David & David, 2013). Inside these phases, the authors identified the following seven steps that have to be completed during the process: developing the vision and the mission for the organization, scanning the internal and external environment, setting objectives, choosing strategies, and implementing and evaluating its performance.

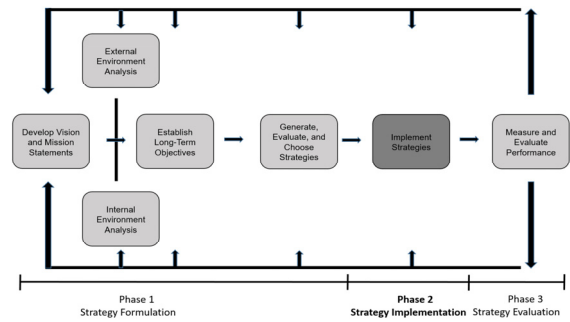


Figure 1 Model of the strategic management process (the strategy implementation phase is bolded to underline that it is the subject of this article).

Source: David & David, 2013, p. 61

The first phase of the strategic management model (i.e., formulation) has been well studied (Miller & Friesen, 1978; Mintzberg & Lampel, 1999; Pettigrew, 1992) as has the role of structure and the strategy process (Galbraith & Nathanson, 1978; Noble, 1999b). The third phase, strategy evaluation, has also been studied by a number of scholars, including Daft and Macintosh (1984), Littler, Aisthorpe, Hudson and Keasey (2000), and Simons (1994). Concerning measurement and evaluating strategy performance, which can be seen as part of the strategy evaluation method, a number of studies have also been carried out. Kaplan and Norton are among the scholars focusing on this aspect, but their emphasis has mostly been on the balanced scorecard, which is widely used to map, measure, and monitor business or corporate strategy (Kaplan & Norton, 2000, 2004, 2008). The second phase, strategy implementation, is understudied in the literature.

A call has been made by managers for strategy implementation guidelines (Hrebiniak, 2006). To respond to this call, scholars have introduced frameworks and conceptual models of strategy implementation (Brenes, Mena & Molina, 2008; Hrebiniak, 2013; Okumus, 2003; Pryor, Anderson, Toombs & Humphreys, 2007; Safdary et al., 2014). However, most of these frameworks are conceptual and descriptive and have limited practical implications (De & Janssen, 2001; Engert & Baumgartner, 2016).

The 5Ps model of strategy implementation, suggested by Pryor et al. (2007) is a tool that can help organizations to achieve implementation as a core competency (See Figure 2). The 5Ps model has five critical elements surrounding the concept of strategy implementation: purpose, principles, processes, people, and performance. The model also focuses on sub-elements or specific activities

and functions, such as structures, systems, leadership behaviour, human resource policies, culture, values, and management. To ensure successful strategy implementation, the 5Ps model provides an integrated structure, which needs to be fully aligned for maximum efficiency (Pryor et al., 2007). In this study, the 5Ps model is used as an analytical framework to identify success factors and obstacles facilitating or hindering strategy implementation. The 5Ps model was chosen because not only is it conceptual but also based on integration of theory and experience from diverse business disciplines, providing an effective and pragmatic approach for strategy implementation (Pryor et al., 2007).

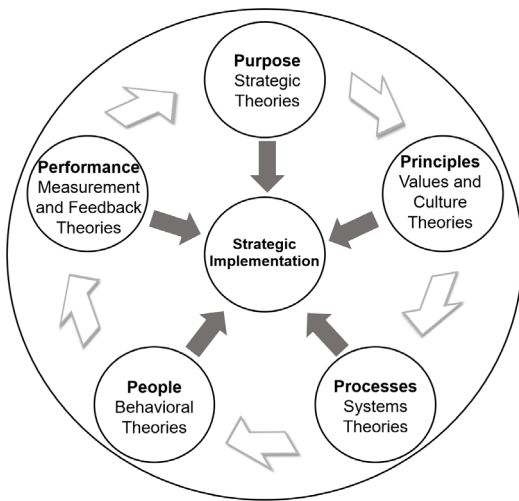


Figure 2 5Ps model of strategy implementation.
Source: Pryor et al., 2007, p. 8.

At least four literature reviews on strategy implementation have been carried out, i.e. by Noble (1999a), Li et al. (2010), Alharthy, Khan, Rashid & Pagliari (2017) and Tawse and Tabesh (2020). First, Noble (1999a) performed a mixed-conceptual and empirical implementation-related review and found implementation to be a complex phenomenon and that strategy formulation and implementation are intertwined processes. Noble's findings showed three main themes of enquiry. The first theme concerned managers' behaviour, especially when managers may engage in self-interest behaviour that can impair the implementation. The second theme covered strategic consensus among managers and key external stakeholders. The third theme related to involvement of employees as early as possible in the process, the adaptation of businesses and their culture to the changing environments, as well as managers' leadership styles (Noble, 1999a).

Second, Li et al. (2010) conducted also a mixed study of both conceptual and empirical papers, largely supporting the conclusions of Noble's (1999a). Their findings indicate that people issues received the most attention, and most of the studies explored middle managers and their influence on strategy implementation. The reviewed studies present an unclear picture of the relationship among communication, commitment, and consensus, which has been researched by a number of scholars (Alexander, 1985; Floyd & Wooldridge, 1997; Guth & Macmillan, 1986; Rapert, Velliquette & Garretson, 2002). Very few studies focus on the effect that the relationships among different strategy levels have inside a company, such as business and/or operational level on implementation. In addition, there seemed to be a trend in studies towards developing frameworks and model-based approaches to strategy implementation (Li et al., 2010).

Third, Alharthy et al. (2017) explored current research and a systematic search process was carried out ending with 47 papers related to the topic. As in both Li et al. and Nobles' research both conceptual and empirical papers were analysed. They found out that many organizations could not maintain competitive advantage despite having strong strategy in place. This was mostly due to lack of achievement at the strategy implementation stage as leaders and top management did not pay enough attention to the implementation. Many other factors were also neglected, and the paper specifically stated the necessity in future research to use empirical data from organizations where strategy has been implemented (Alharthy et al., 2017).

Forth, Tawse and Tabesh (2020) performed a review of the literature studying both conceptual and empirical papers focusing on organizational factors that impact strategy implementation effectiveness. The outcome of their work was an introductory framework which builds on the previous findings of Noble (1999a) identifying conditions of strategy implementation effectiveness. These conditions are the structural and interpersonal capabilities managers may employ to be able to select and carry out managerial actions that create the conditions for strategy implementation effectiveness (Tawse & Tabesh, 2020).

The purpose of this study is to identify obstacles and success factors evident from empirical studies affecting strategy implementation. To address the issue, this study provides an overview of major

empirical research on strategy implementation obstacles and success factors from 1980 until 2020. It identifies the major obstacles hindering strategy implementation as well as the key factors for successful implementation with a focus on identifying possible gaps in the literature. As the literature is fragmented and still in development, scholars have called for additional empirical studies to explain successful strategy

implementation in different types of organizations, industries, and businesses (Baumgartner, 2014; Klettner, Clarke & Boersma, 2014).

Empirical papers used in this literature review have been listed (See Table 1) and the empirical papers used in the four reviews done by, Noble (1999), Li et al. (2010), Alharthy et al. (2017) and Tawse and Tabesh (2020).

Table 1 Empirical papers studied in four strategy implementation reviews

Papers studied in this review		Papers studied	Papers studied	Papers studied	Papers studied
Year	Empirical research	Noble (1999)	Li et al. (2010)	Alharthy et al. (2017)	Tawse & Tabesh (2020)
1980	Waterman, Peters & Phillips				
1980	Bourgeois	x			
1984	Gupta & Govindarajan	x	x		
1985	Wernham	x	x		
1985	Alexander		x	x	
1986	Nutt	x	x		x
1986	Guth & MacMillan	x	x	x	
1988	Govindarajan	x	x		x
1989	Hambrick & Cannella	x			x
1990	Wooldridge & Floyd		x		x
1996	Walderseel & Sheather	x			
1998	Al - Ghamdi			x	
1999	Corboy & O'Corrbui				
2000	Beer & Eisenstat		x	x	x
2001	Rapert et al.		x		x
2001	Okumus		x		x
2002	Aaltonen & Ikavalko			x	
2002	Heide, Grønhaug & Johannessen		x		x
2005	Shah				
2006	Hrebiniak		x	x	x
2006	Schaap		x		x
2008	Crittenden & Crittenden			x	x
2008	Brenes, Mena & Molina		x	x	x
2010	Cater & Pucko				
2010	Sorooshian, Norzima, Yusof & Rosnah				
2011	Alamsjah				
2012	Håkonsson, Burton, Obel, & Lauridsen				
2012	Mollahoseini & Ahmadkhani				
2013	Al-Kandi, Asutay & Dixon			x	
2013	Pella, Sumarwan, Daryanto & Kirbrandoko				
2015	Sabourin				

2016	Gębczyńska				
2018	Köseoglu, Yazici & Okumus				
2019	Tawse, Patrick & Vera				
2020	Köseoglu, Altin, Chan & Aldrag				
	Number of research	8	14	9	12

Source: The authors

The structure of this article is as follows: Section 2 describes the method and analysis employed for carrying out this literature review. The results are presented and discussed in Section 3. Section 4 covers the conclusion.

1. Research method

The purpose of this article is to review the literature on empirical studies on strategy implementation using existing research to create new knowledge, as proposed by Torraco (2016). The research follows the guidelines offered by Nakano and Muniz (2018) on how to write a literature review for empirical papers. To fulfill the objective of building a standalone review of the empirical literature and identifying knowledge gaps concerning strategy implementation in organizations, relevant studies have been reviewed and analyzed. All of the 35 research papers selected in this review use primary data gathered from the organizations studied.

1.1. General database search

The method employed was to collect and analyze empirical peer-reviewed scholarly articles in the field of business strategy implementation. For this purpose, a standardized and rigorous methodology, as suggested by Nakano and Muniz (2018), was applied. It includes a useful method to build a standalone systematic literature review (SLR). The literature databases used to access the peer-reviewed studies in this field were *Scopus*, *Web of Science*, and *ProQuest*. All searches were conducted in the search window of each database with the tools supplied and the content was displayed based on a number of criteria presented, in Table 2. The content was provided in order of relevance extracted from the titles, abstracts, and keywords of the articles.

Table 2 Criteria for systematic literature review

Factors	Criteria for all searches
Publication	Peer-reviewed academic articles and book chapters
Sector	Companies and organizations

Text	Full text available online
Content	Strategy implementation obstacles/barriers/failures and levers/key success factors
Type of research	Both qualitative and quantitative studies
Timeframe	1980–2020
Language	English

Source: Nakano & Muniz, 2018

1.2. Focused searches

The initial search results shown in Table 3 are displayed for *Scopus*, *Web of Science*, and *ProQuest* databases. The numbers displayed in the Database column in Table 3 refer to the search string used for each database; the search strings are:

Search string 1; “Strategy implementation” AND “obstacle”

Search string 2; “Strategy implementation” AND “lever”

Search string 3; “Strategy implementation” AND “barrier”

Search string 4; “Strategy implementation” AND “key success factor”

Search string 5; “Strategy implementation” AND “failure”

Table 3 Results from the searched databases

Scopus	Number of articles found	Number of articles relevant for this research
1	26	5
2	35	1
3	8	2
4	10	2
5	46	1
Total	125	11
ProQuest	Number of articles found	Number of articles relevant for this research
1	25	1
2	15	1
3	115	0
4	14	1
5	8	0
Total	177	3

Web of Science	Number of articles found	Number of articles relevant for this research
1	12	4
2	37	2
3	9	0
4	7	0
5	53	0
Total	118	6

Source: The authors

During the second selection, the following criteria were used for inclusion of papers:

1. Empirical studies
2. Articles published in academic journals
3. Research methods described
4. Content focused on strategy implementation obstacles and/or success factors

At this stage, 20 papers were included. This means that paper not containing evidence of strategy implementation obstacles and/or key success factors were outside the scope of this article. In other cases, the papers were outside the scope of this review if the content was not in English, even though the titles and abstracts were, or if they provided only short overviews rather than research outcomes and/or had very limited or no discussion about research methods.

1.3. Additional searches through references

To ensure access to articles, both open source and non-open source, the Icelandic National Library database was used, but it provides access to articles through databases such as EBSCOhost, ProQuest, Scopus, and Web of Science. In the case where access was not granted via the national database, access to articles was bought through the University of Iceland or Reykjavík University. Backward and forward snowballing technique, using the reference list and citations, was applied to identify new papers as recommended by Wohlin (2012).

An additional search of the literature was carried out in accordance with a technique recommended by Webster and Watson (2002; i.e., identifying additional references from key articles). Some of the articles referenced research and articles outside of the search scope but focused on similar topics according to their title, authors, and journals in which they were published. Therefore, 35 articles were included in the final review: 20 based on a focused search and 15 from the additional search.

The search engine *Google Scholar* was used to find these 15 articles.

1.4. Analysis

In step one, the context of the articles was analyzed based on the information available in the articles themselves. In step two, the content of the selected articles was analyzed based on the guidelines on how to write a literature review for empirical papers (Nakano & Muniz, 2018). In step three, analytical tools were used. The analysis was conducted in three consecutive steps:

Step One: Research context

- Organizational type studied
- Strategic level
- Industry
- Countries
- Perspective

Step Two: Research objectives, findings, and methodology

- Author
- Objectives of the research
- Main findings
- Methodology

Step Three: Analysis of obstacles and success factors

- The 35 articles were categorized into two main groups: a) research focused on strategy implementation obstacles and b) research focused on strategy implementation success factors.
- The content of those research items was analysed in Excel and using the Mind Map software.

2. Results

As Table 4 reveals, the articles analyzed in step one deal with different contexts and external environments. The analysis was based on the type of organization studied, including private companies (Co), public organizations (PO), companies owned by either private and public owners, public/private/partnerships (PPP), and/or non-profit organizations (NPO). The studies have also been conducted on different levels within the organizations (i.e., corporate or business level or lower operational levels). Furthermore, different perspectives have been studied related to strategy implementation. Those taking part in strategy implementation can be senior and top managers, middle or lower managers, employees, or a mixture

of all positions. Top and senior managers can be presidents, owners, board members, and/or high-ranking executives, such as chief executive officers (CEO), chief finance officers (CFO), and chief operating officers (COO).

Table 4 Research context

Author	Organization type	Strategic levels	Industries studied	Countries studied	Perspective
Waterman (1980)	Co	Corporate/business unit	Mixed	US	Top management
Bourgeois (1980)	PO	Business level	Service, manufacturing, and high-tech	US	Top management
Gupta & Govindarajan (1984)	Co	Business level	Mixed	US	Top management
Wernham (1985)	PO	Corporate level	Telecom	UK	Middle management
Alexander (1985)	Co	Business level	Mixed—72 firms on the Fortune 500 list—industrial, retail, utilities, and services	US	Top management (CEOs)
Nutt (1986)	Co, PO, NPO	Corporate and business level	Services providers	US & Canada	Top management (CEOs, COOs, and CFOs)
Guth & Macmillan (1986)	Co	Business level	Mixed	US	Middle management
Govindarajan (1988)	Co	Business level	Automotive, petroleum, food, chemical, aerospace, electronics retail, etc.	US	Middle management and top management
Hambrick & Cannella (1989)	Co	Business level	Chemical	US	Top management
Wooldridge & Floyd (1990)	Co	Business level	Banks and manufacturers	US	Middle management
Walderseel & Sheather (1996)	NA	NA	Mixed services, software, insurance, etc.	Australia	Middle managers and senior management
Al-Ghamdi (1998)	NA	NA	NA	UK	NA
Corboy & O'Corrbui, (1999)	Co	NA	NA	US	Top management
Beer & Eisenstat (2000)	Co	Corporate and business level	NA	NA	Top and middle management
Okumus (2001)	Co	Corporate, business, and operational level	Hotel services	NA	Top and middle management and employees
Rapert et al. (2002)	NA	Functional level	Health care	US	Top and middle management
Heide et al. (2002)	Co	Business and functional levels	Ferry cruise	Norway	Top and middle management and employees
Aaltonen & Ikävalko (2002)	Co, PO	NA	Service industry	NA	Top, middle, and operational management
Shah (2005)	NA	NA	Mixed	India	Middle- and lower-level managers
Schaap (2006)	NA	NA	Gaming industry	US	Senior-level managers
Hrebiniak (2006)	NA	Corporate & business level	Mixed	US	Top and middle managers
Crittenden & Crittenden (2008)	NA	NA	Service, B2B, nonprofit and consumer industries	US	NA

Brenes et al. (2008)	Co, PO	Business level	Mixed	Latin America	Top management
Cater & Pucko (2010)	Co, PO, PPP	Business level	Mixed. Manufacturing, services, trading, etc.	Slovenia	Top management
Sorooshian et al. (2010)	NA	NA	Manufacturing in agriculture	Iran	Top management
Alamsjah (2011)	Co	NA	Mixed. Finance, manufacturing, plantation, and mining.	Indonesia	Middle management
Håkonsson et al. (2012)	NA	NA	Manufacturing	Danish SMEs	Top management
Mollahoseini & Ahmadvani (2012)	Co	NA	Food	Iran	Executives, middle management, operational managers, and experts etc.
Al-Kandi et al. (2013)	Co	NA	Banking	Saudi Arabia	Middle management
Pella et al. (2013)	NA	Business level	Mixed	Indonesia	Top and middle management
Sabourin (2015)	NA	NA	Mixed	Canada	Top management
Cebczynska (2016)	Co, PO, PPP	Business and operational levels	Mixed. Transport, finance, mining, industrial process, etc.	Poland	Top-, middle-, and lower-level managers
Köseoglu et al. (2018)	NA	NA	Hotel business	Turkey	Senior and human resource management
Tawse et al. (2019)	NA	NA	NA	NA	Top management
Köseoglu et al. (2020)	Co	Business level	Hotel business	China/Hong Kong	Top management

Source: The authors

2.1. Objectives of empirical studies, findings and methodology

In accordance with the guidelines proposed by Nakano et al. (2018), the structure of Tables 5 - 8 is based on when the relevant articles were published, author(s), research objective(s), findings, and methodology. The review included articles published between 1980 and 2020; each of the four tables covers 10 years.

In the early work of various scholars (see Table 5) related to strategy implementation, the focus was on understanding and explaining the concept of strategy in organizations in terms of how it enhances competitive advantage and improves a company's performance (Bourgeois, 1980;

Hrebiniak & Snow, 1982; Nutt, 1983; Waterman et al., 1980; Wooldridge & Floyd, 1990). In the 1980s, research also focused on obstacles to strategy. Two of these early studies identified a list of obstacles that must be addressed in the formulation process, as a poor strategy formulation approach can lead to strategy obstacles later in the process (Hambrick & Canella, 1989), whereas others need to be addressed in the implementation stage (Alexander, 1985; Wernham, 1985). As can be seen in Table 5, studies of middle management emerged concerning how implementation factors influence middle management (Wernham, 1985) and how middle management can influence implementation (Guth & Macmillan, 1986).

Table 5 Empirical strategy implementation literature (1980–1989)

	Authors	Objective	Findings	Methodology
1	Waterman et al. (1980)	To build a model that can facilitate strategy implementation.	It is not adequate to look just at strategy or structure. Complex variables, like goals, management styles, and skills, come into	Case study. Interviews with executives from 7 companies.

			play.	
2	Bourgeois (1980)	To identify the importance of consensus, goals and means.	Strategy makers should concentrate on reaching consensus rather than focusing on goals when formulating a strategy.	Questionnaires sent to top management in 12 public corporations.
3	Gupta & Govindarajan (1984)	To study managerial characteristics affecting strategy implementation.	Unit would benefit for having managers with marketing and sales experience that are willing to take risks and have greater tolerance to ambiguity.	Mailed survey within 58 strategic business units (SBU) within eight Fortune 500 firms.
4	Wernham (1985)	To study how factors influence the implementation of strategy among senior and middle management.	Factors included were the availability of resources, top management support, history of past implementation, and size of implementation unit.	Case study in one public company (British Telecom). Semi-structured interviews conducted.
5	Alexander (1985)	To identify strategy implementation obstacles faced by top management.	Major strategy obstacles were, lack of time allocated, unexpected problems, lack of coordination, and activities were not effective.	A questionnaire was distributed to 93 top executives. Follow-up interviews with 21.
6	Nutt (1986)	To determine if different tactics affect implementation.	Four types of implementation tactics were used in 93% of cases (intervention, persuasion, participation, and edict).	Self-report study of 90 middle managers. Written real-life cases.
7	Guth & Macmillan (1986)	To examine the scope and effects of strategy intervention.	Middle managers who believe their self-interest is compromised can redirect strategy, delay, and sabotage or reduce quality of implementation.	Multi-case study with 91 case studies. Data collection based on in-depth interviews.
8	Govindarajan (1988)	To study budget evaluative style and competitive strategy.	Organization structure, control systems, managers' characteristics, and firm focus are effective in achieving strategy implementation.	Questionnaire used for data collection from 24 firms on the Fortune 500 list.
9	Hambrick & Cannella (1989)	To study how to convert a new strategy into competitive success.	Keys to implementation are, broad participation at the formulation stage, carefully assessing obstacles, making early use of levers, selling strategy to stakeholders, and responding as events arise.	A case study of one company. Interviews with top management.

Source: The authors

From 1990 to 1999, as can be seen in Table 6, empirical research continued to centre on identifying key success factors for strategy implementation as well as strategy obstacles and pitfalls (Al-Ghamdi, 1998; Corboy & O'Corrbui,

1999). Middle-management studies continued; one study conducted by Wooldridge and Floyd (1990) examined middle and senior managements' perception of their contributions and their strategic involvement.

Table 6 Empirical strategy implementation literature (1990–1999)

	Authors	Objective	Findings	Methodology
10	Wooldridge & Floyd (1990)	To study the strategic involvement of middle managers.	CEOs believe that middle managers make a meaningful contribution. Middle managers expect and desire strategic direction. Involvement by itself does not cause commitment.	Interviews and questionnaires were used to collect data from 157 respondents in 20 organizations.
11	Walderseel & Sheather (1996)	To study if and how the type of strategy implemented influences the implementation.	Effects of strategy on leaders' behavior and choices of implementation actions. Results show that strategic context influences managers' implementation intentions.	Data were collected through surveys and assignments. A simulation was used to test managers. Case analysis was also used.
12	Al-Ghamdi (1998)	To replicate Alexander's (1985) study of strategy implementation.	Six major strategy implementation obstacles were identified. Communication, management support, and effective information systems	Surveys used to collect data from 24 companies.

			were key to successful implementation.	
13	Corboy & O'Corrbui (1999)	To identify and study strategy implementation obstacles.	Individual responsibilities for implementing change are not clear, senior managers withdraw when implementation begins. Lack of understanding of implementation.	Role-play simulation by CEOs and senior managers.

Source: The authors

Between 2000 and 2009 (see Table 7), several authors presented models and frameworks based on the empirical data collected. For instance, Okumus (2001) integrated 10 key variables into a conceptual framework of implementation that was later developed into an implementation model of strategic content, context, process, and outcome (Okumus, 2003). In their conceptual framework of key dimensions of strategy implementation, Brenes et al. (2008) developed a framework based on data

collected in 81 organizations in Latin America. Hrebiniak (2006) studied obstacles and how to overcome them, offering a conceptual framework on key decisions and how to translate strategy into short-term metrics and to implement it in the organizational context. Scholars continued to collect empirical data on strategy implementation obstacles and success factors throughout the decade.

Table 7 Empirical strategy implementation literature (2000–2009)

	Authors	Objective	Findings	Methodology
14	Beer & Eisenstat (2000)	To identify strategy implementation obstacles and how to overcome them.	Top-down laissez-faire senior management style, unclear strategy, and conflicting priorities could hinder successful strategy implementation. Ineffective senior management team, poor vertical communication, coordination across functions, lack of leadership skills, business, and borders can affect implementation.	A qualitative study, in total 100 interviews. Meetings with top managers and middle managers. A total of 150 units inside 12 companies were studied with an in-depth examination of 4 companies.
15	Okumus (2001)	To study the implementation process of strategic decisions.	Variables identified through literature review play important roles in designing and implementing strategies. Three new variables identified: multiple project implementation, organizational learning and working with external companies.	A study using interviews, observations, and document analysis. Case study of two hotel groups.
16	Rapert et al. (2002)	To study if the frequency of communication between marketing and top management has a positive effect on strategic consensus.	Identified six strategy implementation obstacles: poor vertical communication and coordination across functions, top-down laissez-faire senior management style, unclear strategy, and conflicting priorities.	Qualitative and quantitative research. A survey was mailed to 1,000 CEOs and marketing executives with 322 responses. Followed by 30 in-depth interviews.
17	Heide et al. (2002)	To identify barriers to successful strategy implementation.	Different kinds of communication problems were key barriers to strategy implementation.	Case study. Data were collected from business unit staff members through 42 structured interviews.
18	Aaltonen & Ikkävalko (2002)	To identify strategy implementation obstacles in service organizations.	Important to align systems and structure with strategy. Frequent vertical communication and strategic consensus can improve organizational performance.	Qualitative research. A case study of 12 service organizations with 298 interviews.
19	Shah (2005)	To identify strategy implementation obstacles helping organizations to implement strategy more successfully.	Companies most frequently experienced 11 obstacles during strategy implementation.	Data collected with a questionnaire from 145 managers in 35 industries.
20	Schaap (2006)	To study the relationship between leadership behavior and successful strategy implementation.	Frequent communication up and down organization structure enhances consensus and fosters shared values. Plans must be developed and tasks, timeframes, and responsibility must be specified.	Close-ended questionnaire was used and mailed to the participants and 120 responded.

21	Hrebiniak (2006)	To identify and evaluate factors that play a significant role in strategy implementation.	A strategy implementation framework that consists of internal and external contexts, and processes and outcomes proposed.	Survey of fixed and open-ended questions. Panel discussion used. Data were collected from 433 managers.
22	Crittenden & Crittenden (2008)	To determine why strategic planning efforts and implementation fail.	Successful implementation is based on various strategic elements, such as supportive policies and systems. Most systematic strategy implementation needs more integrative methodology.	A mixture of primary and secondary data were collected from 29 organizations.
23	Brenes et al. (2008)	To measure the effect of key variables on successful implementation.	Five key success factors were identified for implementing a business strategy successfully.	Survey questionnaire were mailed and 81 companies responded.

Source: The authors

In Table 8, strategy implementation and how it affects a company's performance can be seen as the main focus of studies between 2010 and 2020. For instance, Sorooshian et al. (2010) examined the relationship between strategy implementation and the performance of small- and medium-sized manufacturing companies and found that leadership style, structure, and resources supporting implementation affect financial organizational performance. Another study found that inadequate leadership and employees' reluctance to share their knowledge have a negative effect on organizational performance (Cater &

Pucko, 2010). Furthermore, other issues affecting the organizations' performance indicators concerning implementation include not carrying out comprehensive analysis and planning and a lack of training in combination with low levels of employee motivation (Köseoglu et al., 2018). Authors continued to bridge the knowledge gap by studying factors affecting poor implementation (Mollahoseini & Ahmadkhani, 2012; Pella et al., 2013), success factors, and the importance of organizational culture and how it can contribute to successful strategy implementation (Alamsjah, 2011; Al-Kandi et al., 2013).

Table 8 Empirical strategy implementation literature (2010–2020)

	Authors	Objective	Findings	Methodology
24	Cater & Pucko (2010)	To identify obstacles of strategy implementation and how they affect performance.	The biggest obstacles having negative effect on performance are inadequate leadership and employees' reluctance to share their knowledge.	Questionnaires sent to managers and board members in 172 companies.
25	Sorooshian et al. (2010)	To study the relationship between strategy implementation and performance.	Strategy implementation drivers, such as leadership, structure, and human resource management, contribute to a company's performance.	Questionnaires sent to managers; 163 answered the survey.
26	Alamsjah (2011)	To study interrelated key success factors for strategy implementation by middle managers.	Five interrelated factors contribute to successful implementation, including clarity of strategy, corporate culture and effective management communication.	Survey of fixed questions and open-ended questions aimed at 158 middle-level managers.
27	Håkonsson et al. (2012)	To study how and if an executive style determines strategy implementation and performance.	The failure to align SME executive style and strategy leads to performance loss. Alignment is key when it comes to driving change and innovation.	Data gathered from 241 companies on strategy and 303 companies on executive style.
28	Mollahoseini & Ahmadkhani (2012)	To identify strategy obstacles.	Number of obstacles such as organizational, planning, managerial, staff, and environmental obstacles identified.	Study using interviews, focus groups, and questionnaire, with 205 respondents.
29	Al-Kandi et al. (2013)	To identify what determines successful strategy implementation.	Identification of process and personnel, project, religion, and organizational factors.	Study using questionnaire with a sample of 120.

30	Pella et al. (2013)	To study if and how strategy implementation problems affect strategy implementation.	Seven major obstacles identified. Included, corporate scorecard, information technology, performance appraisal, management and financial support.	A survey was conducted in 60 Indonesian companies, and gathered 194 responses.
31	Sabourin (2015)	To understand the underlying drivers of performance in strategy execution.	Four drivers identified, rules, emotions, initiatives, immediate action, and integrity.	Study using survey questionnaire to 484 managers and 180 responded.
32	Cebczynska (2016)	To verify to what extent corporate strategy is reflected in lower managerial levels.	Strategy implementation is most lacking on an operational level and lack of training of employees affects their awareness of the corporate strategy.	Research conducted in 30 Polish enterprises by questionnaire.
33	Köseoglu et al. (2018)	To examine potential barriers to the implementation of strategic decisions.	Identified 41 barriers to implementation and at least 20 of them had influence on performance and operation.	Research conducted in Turkish hotels by questionnaire with 118 responses.
34	Tawse et al. (2019)	To study top managers' struggle with the transition between strategy formulation and implementation.	Top managers tend to focus on strategy formulation and planning but fail to embrace the problem solving and complexity of implementation.	Research based on interviews with CEOs.
35	Köseoglu et al. (2020)	To study how managers perceive strategic management process.	Managers in this study agree that communication and people management are the key success factors in strategy implementation.	Study using interviews with 21 managers.

Source: The authors

Table 9 summarizes the research methods employed for all articles reviewed. The majority of studies gathered data using questionnaires, 12 studies used interviews, and 4 studies employed mixed methods of both interviews and questionnaires. Other studies employed focus groups (Mollahoseini & Ahmadkhani, 2012), simulations (Walderseel & Sheather, 1996), role play (Corboy & O'Corrbui, 1999), observations (Okumus, 2001), panel discussions (Hrebiniak, 2006), and self-reporting real-life cases (Nutt, 1986). Some of the studies used one or more researched methods. In some cases the limitation of the research was not outlined in the reviewed articles. Nevertheless, identified limitations were related to the data collection methods, which in many cases were based on a single method, revealing a lack of triangulation (Cater & Pucko, 2010; Govindarajan, 1988; Heide et al., 2002; Walderseel & Sheather, 1996). Validity and generalization of some of the studies are limited based on the small sample used (Heide et al., 2002; Schaap, 2006). Some of the studies use self-reported data collection methods, which can be biased based on perspective (Cater & Pucko, 2010; Håkonsson et al., 2012).

Table 9 Summary of research methods

Research methods	Number
Questionnaires	22
Interviews	13
Interviews & questionnaires	4
Case studies	4
Multi-case study	1
Focus groups	1
Simulations	1
Role play	1
Observations	1
Panel discussion	1
Self-reported real-life cases	1

Source: The authors

2.2. Analysis of obstacles and success factors

Step three, as described in Section 2.4, focuses on the analysis of the content of the papers. First, Table 10 shows the 16 obstacles and the 18 success factors identified in the 35 articles and demonstrates the range of factors identified from the literature sources. The factors have been grouped based on the 5Ps model introduced by Pryor et al. (2007) into purpose, principles, process, people, and performance. Second, Table 10 illustrates a pattern that emerged when comparing the content of all the obstacles and the

success factors: Many of the obstacles and the success factors identified can simultaneously be viewed as obstacles hindering implementation and factors necessary for successful implementation.

Based on this analysis related factors affecting strategy implementation are paired (see the grey area and the arrow in Table 10) and the articles that reference each factor are reported in parentheses.

Table 10 Related obstacles and success factors influencing strategy implementation, grouped according to the 5Ps Model Pryor et al. (2007). (Article numbers in Table 5 – 8 are given in parentheses)

Obstacles		Success factors
Purpose		
Inadequate leadership (5,14,19, 21,24)	<--->	Leadership styles and motivation (11,22,23,25,27,29)
Goals and tasks not defined (5,12,13,19,21,28,30)	<--->	Goals and objectives linked to strategy (1,18,31,34)
Management style and lack of support (4,7,13,14,24,28)	<--->	Management style and support effects implementation (3)
Unclear strategy (14,21,24,33)	<--->	Well-defined strategy (2,6,35)
External barriers (5,17,28)		Tactics support implementation (6)
		Broad strategy formulation (9)
		Different strategies for business units (8)
Principles		
Inadequate change management (4,21,24,33)	<--->	Change management lead by executives (23,25,29)
Cultural problems (17,21,24,28)	<--->	Shaping corporate culture (22)
No guidelines to implement (21,32)		Organizational learning (15,22)
Process		
Poor communication (14,17,24)	<--->	Frequent communication (16,18,20,22,26,29,35)
Lack of time (4, 5, 12)	<--->	Timeframes and priorities set (18,20,29,34,35)
Lack of resources (17,24)	<--->	Existing resources (22,25,35)
Unexpected problems (5,12,33)		
People		
Limited commitment and understanding (13,19,28)	<--->	Shared understanding (2,9,10,16,18,20,31,35)
Inadequate staff capabilities (5,14,17,19,24,32)		
Performance		
Limited alignment and coordination (5,12,14)	<--->	Alignment and integration (1,15,18,22,27,31)
IT do not support or monitor strategy (4,5,12,19,24,33)		Monitoring strategy (22,35)
		Staff accountable for task and action (20,23,26,31)
		Tying awards with implementation (18,20,22)

Source: The authors

Figure 3 shows the obstacles and the success factors affecting strategy implementation grouped graphically based on the five elements of purpose, principles, process, people, and performance from the 5Ps model (Pryor et al., 2007). These five elements in Figure 3 are displayed in one circle each. Inside each circle both success factors and obstacles are displayed in smaller ovals. The grey

ovals in Figure 3 connect identified obstacles within each element and the success factors which can simultaneously be viewed as obstacles hindering implementation and factors necessary for successful implementation. These factors are all demonstrated in grey and are called dualistic factors hereafter. Outside the grey ovals are obstacles in each element and inside are the success

factors in each element, all demonstrated in white.

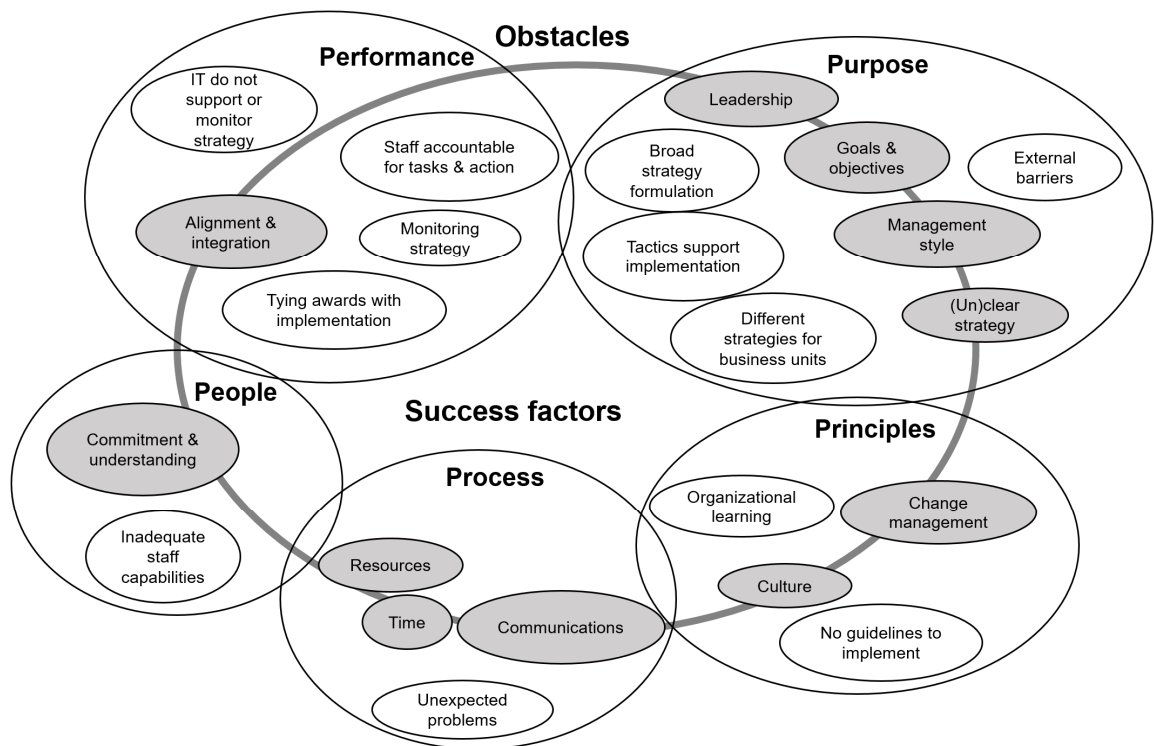


Figure 3 Strategy implementation obstacles and success factors

Source: The authors

The following discussion centres on the dualistic factors identified in Table 10 presented in Figure 3. The first of the dualistic factors in the purpose element is leadership, which focuses on leadership support, motivation, and style influencing implementation. Shah (2005) underlined that commitment and support refers to involvement and overall responsibility of top management, which should be accountable for the implementation process. This responsibility, according to Shah, cannot lie anywhere else in the organization, as top managers are accountable for the performance of an organization as a whole. The second dualistic factor brings forth the importance of defining objectives, setting goals, and linking them to the business strategy and the competitive environment as vital aspects related to implementation (Beer & Eisenstat, 2000). Setting key performance indicators is not only inadequate in many organizations but is also seen as challenging, and this is even harder to accomplish at lower levels in organizations (Aaltonen & Ikävalko, 2002). The lack of indicators, objectives and goal setting can, therefore, hinder implementation. Employees often do not have a

road map for implementation, as there are no clear key indicators for the performance of each person or position (Pella et al., 2013). The third dualistic factor is management style, which has been identified in a number of studies. Wernham emphasized that top management support was important for successful implementation and is one of the rare points on which most experts can agree (1985). Beer and Eisenstat (2000) indicated that frequent absence of senior management during strategic decision-making would affect the implementation. Some studies have also shown that senior management tends to withdraw when implementation begins and their lack of support can consequently affect the implementation (Corboy & O'Corrbui, 1999). The fourth dualistic factor highlights the importance of having a clear strategy for successful implementation. A number of researchers have come to this conclusion (Alamsjah, 2011; Beer & Eisenstat, 2000; Cater & Pucko, 2010; Köseoglu et al., 2018). Hrebiniak (2006) stressed that poor or vague strategy limits the implementation effort and therefore is a major obstacle as good execution cannot overcome various shortcomings of a bad strategy or poor

implementation efforts.

There are two dualistic factors in the principle element, change management and culture. Change management was identified by Hrebiniak (2006) and he determined that the inability to manage change and the importance of reducing resistance to change was the topmost challenge and obstacle for managers. Cater and Pucko (2010) found that managers lack capabilities to implement change management in Slovenian companies, which supports Hrebiniak's conclusion. Crittenden and Crittenden (2008) found that company internal culture plays a vital role as a driving force in successful implementation. They also found that different cultures between silos can have a negative influence on implementation (Crittenden & Crittenden, 2008). The importance of culture has been identified as a major obstacle or success factor by a number of authors (Brenes, 2008; Heide, 2002; Köseoglu et al., 2018; Sorooshian et al., 2010).

The first dualistic factor in the process element is communications, which highlights the importance of frequent and clear communication and the issues which can arise with a lack of communication. Alamsjah (2011) found that it is not enough just to have a clear strategy it needs to be communicated through the organization and be translated into execution plans. Rapert et al. (2002) highlighted that vertical communication and shared understanding play a key role in the process. Similar findings are discussed by Schaap (2006) on the importance of communications to help employees understand the strategy being implemented. The second dualistic factor in the process element is time and importance of timeframes being set. A number of studies have shown the importance of realistic timeframes, as strategy implementation takes more time than commonly allocated (Al-Ghamdi, 1988; Alexander, 1985). Al-Kandi et al. (2013) indicated that, if timeframes were set, they had to be followed up with detailed planning and implementation must be put ahead of other managerial commitments. The resource factor is the third factor in the process element. Crittenden and Crittenden (2008) found it was not only important for companies to have access to resources but also to decide when and where to allocate them, whether it is money, people, time, or capabilities.

The only factor in the people element emphasizes that commitment and shared understanding of the strategy influences successful

implementation (Rapert et al., 2002), but so does the importance of building up consensus in the implementation process to foster shared attitudes and values (Schaap, 2006).

Last, performance element has one dualistic factor, which is alignment and coordination which has been identified by a number of scholars. Strategy alignment is the important process of linking the organization's structure and resources with its strategy and external business environment (Aaltonen & Ikävalko, 2002; Al-Ghamdi, 1998; Beer & Eisenstat, 2000; Håkonsson et al., 2012; Okumus, 2001).

Conclusion

Research on strategy implementation is still in its early days, with a limited number of empirical studies completed. Most of the effort has historically been focused on strategy formulation and process and less on strategy implementation, let alone studies grounded in empirical data.


The findings suggest and synthesize that empirical research has so far identified 16 obstacles that can hinder strategy implementation and 18 key success factors that can facilitate implementation. This study also draws the attention to, and highlights, factors that are dualistic, meaning that they contain both elements of obstacles and key success factors. The dualistic factors, or elements, should therefore be considered in the strategy implementation process.

The theoretical implication of the study is that it provides an overview of major empirical research concerning strategy implementation obstacles and success factors conducted from 1980 until 2020. Older studies providing the review of the literature reach back to 2010. Furthermore, previous literature reviews combine a mixture of conceptual and empirical research, as presented in Table 1, and have left out number of empirical papers that are included in this particular review. Therefore, this systematic review offers a more holistic overview of implementation obstacles, success factors, and dualistic factors, than previous studies.

The paper also enriches the practical knowledge on implementation obstacles, success factors, and dualistic factors which are of relevance for those implementing strategies, such as managers and other implementers. Another benefit offered to practitioners is how these factors are categorized based on the five critical elements presented in the 5Ps model including the concepts of strategy implementation, namely: purpose, principles,

processes, people, and performance.

Ample room exists for further study on strategy implementation obstacles and understanding how to overcome them, a problem that seems to occur repeatedly in the strategic process. Studies that combine the identification of obstacles and uncover workable solutions are lacking. Additionally, a substantial lack of studies exists on employee influence on strategy implementation, both positive and negative aspects, which may be crucial to gain a better understanding of why and how so many strategy implementation projects fail, or succeed in some cases. Strategy implementation literature could benefit from a greater number of studies employing observation, focus groups, and panel discussions, which could add value and new perspectives to the understanding of the topic in question. The differences among industries, countries, or cultures regarding implementation have not yet been explored at any depth.

One of the limitations to this study is that selection bias of authors and subjectivity may have influenced the exclusion of articles but several techniques were used to mitigate this risk. This review relies on databases that support keyword search, where search strings must be identifiable. This approach used could overlook important literature and restrict accessibility of sources. Furthermore, this review article focuses solely on full-text articles published in English and last, a small number of articles analysed limits the generalizability of the findings. 

References

- Aaltonen, P., & Ikävalko, H. (2002). Implementing strategies successfully. *Integrated Manufacturing Systems*, 13(6), 415–418. <https://doi.org/10.1108/09576060210436669>
- Alamsjah, F. (2011). Key success factors in implementing strategy: Middle-level managers' perspectives. *Procedia - Social and Behavioral Sciences*, 24, 1444–1450. <https://doi.org/10.1016/j.sbspro.2011.09.049>
- Alexander, L. D. (1985). Successfully implementing strategic decisions. *Long Range Planning*, 18(3), 91–97. [https://doi.org/10.1016/0024-6301\(85\)90161-X](https://doi.org/10.1016/0024-6301(85)90161-X)
- Al-Ghamdi, S. M. (1998). Obstacles to successful implementation of strategic decisions: The British experience. *European Business Review*, 98(6), 322–327. <http://dx.doi.org/10.1108/09555349810241590>
- Alharthy, A. H., Khan, F., Rashid, H., & Pagliari, R. (2017). Identification of Strategy Implementation Influencing Factors and Their Effects on the Performance: International Journal of Business and Social Science, 8(1), 34–44. <http://dspace.lib.cranfield.ac.uk/handle/1826/11802>
- Al-Kandi, I., Asutay, M., & Dixon, R. (2013). Factors influencing the strategy implementation process and its outcomes: Evidence from Saudi Arabian banks. *Journal of Global Strategic Management*, 2(7), 5–15. <https://doi.org/10.20460/JGSM.2013715662>
- Allio, M. K. (2005). A short, practical guide to implementing strategy. *Journal of Business Strategy*, 26(4), 12–21. <https://doi.org/10.1108/02756660510608512>
- Atkinson, H. (2006). Strategy implementation: A role for the balanced scorecard? *Management Decision*, 44(10), 1441–1460. <https://doi.org/10.1108/00251740610715740>
- Baumgartner, R. J. (2014). Managing corporate sustainability and CSR: A conceptual framework combining values, strategies and instruments contributing to sustainable development. *Corporate Social Responsibility and Environmental Management*, 21(5), 258–271. <https://doi.org/10.1002/csr.1336>
- Beer, M., & Eisenstat, R. A. (2000). The silent killers of strategy implementation and learning. *Sloan Management Review*, 41(4), 29–40.
- Blahová, M., & Knápková, A. (2010). Effective strategic action: From formulation to implementation. 2010 International Conference of Economics, Business and Management, 61–65. Manila, Philippines.
- Bourgeois, L. J. (1980). Performance and consensus: Summary. *Strategic Management Journal*, 1(3), 227–248. <https://doi.org/10.1002/smj.4250010304>
- Brenes, E. R., Mena, M., & Molina, G. E. (2008). Key success factors for strategy implementation in Latin America. *Journal of Business Research*, 61(6), 590–598. <http://dx.doi.org/10.1016/j.jbusres.2007.06.033>
- Cândido, C. J. F., & Santos, S. P. (2015). Strategy implementation: What is the failure rate? *Journal of Management & Organization*, 21(2), 237–262. <https://doi.org/10.1017/jmo.2014.77>
- Cater, T., & Pucko, D. (2010). Factors of effective strategy implementation: Empirical evidence from Slovenian business practice. *Journal for East European Management Studies*, 15(3), 207–236. <https://doi.org/10.5771/0949-6181-2010-3-207>
- Corboy, M., & O'Corrbui, D. (1999). The seven deadly sins of strategy. *Management Accounting: Magazine for Chartered Management Accountants*, 77(10), 29–30.
- Crittenden, V. L., & Crittenden, W. F. (2008). Building a capable organization: The eight levers of strategy implementation. *Business Horizons*, 51(4), 301–309. <https://doi.org/10.1016/j.bushor.2008.02.003>
- Daft, R. L., & Macintosh, N. B. (1984). The nature and use of formal control systems for management control and strategy implementation. *Journal of Management*, 10(1), 43–66. <https://doi.org/10.1177/014920638401000105>
- David, F. R., & David, F. R. (2013). *Strategic management: Concepts and cases: A competitive advantage approach*. Upper Saddle River, NJ: Pearson.
- De, F. J. A., & Janssen, A. (2001). Implementing a strategy successfully. *Measuring Business Excellence*, 5(4), 4–6. <https://doi.org/10.1108/13683040110411223>
- Engert, S., & Baumgartner, R. J. (2016). Corporate sustainability strategy – bridging the gap between formulation and implementation. *Journal of Cleaner Production*, 113, 822–834.

- <https://doi.org/10.1016/j.jclepro.2015.11.094>
- Floyd, S. W., & Wooldridge, B. (1997). Middle management's strategic influence and organizational performance. *Journal of Management Studies*, 34(3), 465–485. <https://doi.org/10.1111/1467-6486.00059>
- Gębczyńska, A. (2016). Strategy implementation efficiency on the process level. *Business Process Management Journal*, 22(6), 1079–1098. <https://doi.org/10.1108/BPMJ-01-2016-0004>
- Galbraith, J. R., & Nathanson, D. A. (1978). *Strategy implementation: The role of structure and process* (7th ed.). St Paul, MN: West Publications.
- Gębczyńska, A. (2016). Strategy implementation efficiency on the process level. *Business Process Management Journal*, 22(6), 1079–1098. <https://doi.org/10.1108/BPMJ-01-2016-0004>
- Giles, W. D. (1991). Making strategy work. *Long Range Planning*, 24(5), 75–91. [https://doi.org/10.1016/0024-6301\(91\)90254-L](https://doi.org/10.1016/0024-6301(91)90254-L)
- Govindarajan, V. (1988). A contingency approach to strategy implementation at the business-unit level: Integrating administrative mechanisms with strategy. *Academy of Management Journal*, 31(4), 828–853. <https://doi.org/10.5465/256341>
- Gupta, A. K., & Govindarajan, V. (1984). Business unit strategy, managerial characteristics, and business unit effectiveness at strategy implementation. *Academy of Management Journal*, 27(1), 25–41. <https://doi.org/10.2307/255955>
- Guth, W. D., & Macmillan, I. C. (1986). Strategy implementation versus middle management self-interest. *Strategic Management Journal*, 7(4), 313–327. <https://doi.org/10.1002/smj.4250070403>
- Håkonsson, D. D., Burton, R. M., Obel, B., & Lauridsen, J. T. (2012). Strategy implementation requires the right executive style: Evidence from Danish SMEs. *Long Range Planning*, 45(2–3), 182–208. <https://doi.org/10.1016/j.lrp.2012.02.004>
- Hambrick, D. C., & Cannella, A. A. (1989). Strategy implementation as substance and selling. *Academy of Management Executive*, 3(4), 278–285. <https://doi.org/10.5465/AME.1989.4277401>
- Heide, M., Grønhaug, K., & Johannessen, S. (2002). Exploring barriers to the successful implementation of a formulated strategy. *Scandinavian Journal of Management*, 18(2), 217–231. [https://doi.org/10.1016/S0956-5221\(01\)00007-0](https://doi.org/10.1016/S0956-5221(01)00007-0)
- Hrebiniak, L. G. (2006). Obstacles to effective strategy implementation. *Organizational Dynamics*, 35(1), 12–31. <https://doi.org/10.1016/j.orgdyn.2005.12.001>
- Hrebiniak, L. G. (2013). *Making strategy work: Leading effective execution and change*. Upper Saddle River, NJ: Pearson Education.
- Hrebiniak, L. G., & Joyce, W. F. (1984). *Implementing strategy*. New York, NY: Macmillan.
- Hrebiniak, L. G., & Snow, C. C. (1982). Top-management agreement and organizational performance. *Human Relations*, 35(12), 1139–1157. <https://doi.org/10.1177/001872678203501205>
- Kaplan, R. S., & Norton, D. P. (2000). Having trouble with your strategy? Then map it. *Harvard Business Review*, 78(5), 167–176.
- Kaplan, R. S., & Norton, D. P. (2001). The strategy-focused organization. *Strategy & Leadership*, 29(3), 41–42. <https://doi.org/10.1108/sl.2001.26129cab.002>
- Kaplan, R. S., & Norton, D. P. (2004). Measuring the strategic readiness of intangible assets. *Harvard Business Review*, 82(2), 52–63.
- Kaplan, R. S., & Norton, D. P. (2008). Mastering the management system. *Harvard Business Review*, 86(1), 29–48.
- Klettner, A., Clarke, T., & Boersma, M. (2014). The governance of corporate sustainability: empirical insights into the development, leadership and implementation of responsible business strategy. *Journal of Business Ethics*, 122(1), 145–165. <https://doi.org/10.1007/s10551-013-1750-y>
- Köseoglu, M. A., Yazici, S., & Okumus, F. (2018). Barriers to the implementation of strategic decisions: evidence from hotels in a developing country. *Journal of Hospitality Marketing & Management*, 27(5), 514–543. <https://doi.org/10.1080/19368623.2018.1402723>
- Köseoglu, M. A., Altin, M., Chan, E., & Aldrag, A. F., (2020). What are the key success factors for strategy formulation and implementation? Perspective of managers in hotel industry. *International Journal of Hospitality Management*, 89(6), 1–9. <https://doi.org/10.1016/j.ijhm.2020.102574>
- Li, Y., Guo-hui, S., & Eppler, M. J. (2010). Making strategy work: a literature review on the factors influencing strategy implementation. In F. W. Kellermanns & M. Mazzola (Eds.), *Handbook of research on strategy process* (pp. 165–183). Cheltenham, England: Edward Elgar.
- Littler, K., Aisthorpe, P., Hudson, R., & Keasey, K. (2000). A new approach to linking strategy formulation and strategy implementation: an example from the UK banking sector. *International Journal of Information Management*, 20(6), 411–428. [https://doi.org/10.1016/S0268-4012\(00\)00036-0](https://doi.org/10.1016/S0268-4012(00)00036-0)
- Miller, S. (1997). Implementing strategic decisions: four key success factors. *Organization Studies*, 18(4), 577–602. <https://doi.org/10.1177/017084069701800402>
- Miller, S., & Friesen, P. H. (1978). Archetypes of strategy formulation. *Management Science*, 24(9), 921–933. <https://doi.org/10.1287/mnsc.24.9.921>
- Mintzberg, H., & Lampel, J. (1999). Reflecting on the strategy process. *Sloan Management Review*, 40(3), 21–30.
- Mintzberg, H., & McHugh, A. (1985). Strategy formation in an adhocracy. *Administrative Science Quarterly*, 30(2), 160–197. <https://doi.org/10.2307/2393104>
- Mollahoseini, A., & Ahmadvhani, H. (2012). Surveying and identifying the factors affecting successful implementation of business strategies in companies of Fars Province industrial towns (case study: companies of food industries). *International Journal of Business and Social Science*, 3(1), 265–272.
- Nakano, D., & Muniz Jr., J. (2018). Writing the literature review for empirical papers. *Production*, 28, e2070086. <https://doi.org/10.1590/0103-6513.20170086>
- Noble, C. H. (1999a). The eclectic roots of strategy implementation research. *Journal of Business Research*, 45(2), 119–134. [https://doi.org/10.1016/S0148-2963\(97\)00231-2](https://doi.org/10.1016/S0148-2963(97)00231-2)

- Noble, C. H. (1999b, November 1). Building the strategy implementation network. Retrieved September 27, 2018, from http://link.galegroup.com/apps/doc/A58381515/AONE?s_id=googlescholar
- Nutt, P. C. (1983). Implementation approaches for project planning. *Academy of Management Review*, 8(4), 600–611. <https://doi.org/10.5465/amr.1983.4284660>
- Nutt, P. C. (1986). Tactics of implementation. *Academy of Management Journal*, 29(2), 230–261. <https://doi.org/10.5465/256187>
- Okumus, F. (2001). Towards a strategy implementation framework. *International Journal of Contemporary Hospitality Management*, 13(7), 327–338. <https://doi.org/10.1108/09596110110403712>
- Okumus, F. (2003). A framework to implement strategies in organizations. *Management Decision*, 41(9), 871–882. <https://doi.org/10.1108/00251740310499555>
- Olson, E. M., Slater, S. F., & Hult, G. T. M. (2005). The importance of structure and process to strategy implementation. *Business Horizons*, 48(1), 47–54. <https://doi.org/10.1016/j.bushor.2004.10.002>
- Pella, M. D. A., Sumarwan, U., Daryanto, A., & Kirbrandoko, K. (2013). Factors affecting poor strategy implementation. *Gajah Mada International Journal of Business*, 15(2), 183–204. <https://doi.org/10.22146/gamaijb.5702>
- Pettigrew, A. M. (1992). The character and significance of strategy process research. *Strategic Management Journal*, 13(S2), 5–16. <https://doi.org/10.1002/smj.4250130903>
- Pryor, M. G., Anderson, D., Toombs, L. A., & Humphreys, J. H. (2007). Strategic implementation as a core competency. *Journal of Management Research*, 7(1), 3–17.
- Rapert, M. I., Velliquette, A., & Garretson, J. A. (2002). The strategic implementation process: Evoking strategic consensus through communication. *Journal of Business Research*, 55(4), 301–310. [https://doi.org/10.1016/S0148-2963\(00\)00157-0](https://doi.org/10.1016/S0148-2963(00)00157-0)
- Sabourin, V. (2015). Strategy execution: Five drivers of performance. *Journal of Strategy and Management; Bingley*, 8(2), 127–138. <https://doi.org/10.1108/JSMA-06-2014-0048>
- Safdary Ranjbar, M., Akbarpour Shirazi, M., Lashkar Blooki., M. (2014). Interaction among intra-organizational factors effective in successful strategy execution: an analytical view. *Journal of Strategy and Management*, 7(2), 127–154. <https://doi.org/10.1108/JSMA-05-2013-0032>
- Schaap, J. (2006). Toward strategy implementation success: an empirical study of the role of senior-level leaders in the Nevada gaming industry. *UNLV Gaming Research & Review Journal*, 10(2), 13–37.
- Schliit, W. K. (1987). An examination of the influence of middle-level managers in formulating and implementing strategic decisions. *Journal of Management Studies*, 24(3), 271–293. <https://doi.org/10.1111/j.1467-6486.1987.tb00703.x>
- Shah, A. M. (2005). The foundations of successful strategy implementation: overcoming the obstacles. *Global Business Review*, 6(2), 293–302. <https://doi.org/10.1177/097215090500600208>
- Simons, R. (1994). How new top managers use control systems as levers of strategic renewal. *Strategic Management Journal*, 15(3), 169–189. <https://doi.org/10.1002/smj.4250150301>
- Sorooshian, S., Norzima, Z., Yusof, I., & Rosnah, Y. (2010). Effect analysis on strategy implementation drivers. *World Applied Sciences Journal*, 11(10), 1255–1261.
- Tawse, A., Tabesh, P. (2020). Strategy implementation: a review and an introductory framework. *European Management Journal*, 39(1), 22–23. <https://doi.org/10.1016/j.emj.2020.09.005>
- Tawse, A., Patrick, V. M., & Vera, D. (2019). Crossing the chasm: Leadership nudges to help transition from strategy formulation updates to strategy implementation. *Business Horizons*, 62(2), 249–257. <https://doi.org/10.1016/j.bushor.2018.09.005>
- Torraco, R. J. (2016). Writing integrative literature reviews: Using the past and present to explore the future. *Human Resource Development Review*, 15(4), 404–428. <https://doi.org/10.1177/1534484316671606>
- Walderseel, R., & Sheather, S. (1996). The Effects of Strategy Type on Strategy Implementation Actions. *Human Relations*, 49(1), 105–122. <https://doi.org/10.1177/001872679604900105>
- Waterman, R. H., Peters, T. J., & Phillips, J. R. (1980). Structure is not organization. *Business Horizons*, 23(3), 14–26.
- Webster, J., & Watson, R. T. (2002). Analyzing the past to prepare for the future: Writing a literature review. *MIS Quarterly*, 26(2), XIII–XXIII.
- Wernham, R. (1985). Obstacles to strategy implementation in a nationalized industry. *Journal of Management Studies*, 22(6), 632–648. <https://doi.org/10.1111/j.1467-6486.1985.tb00015.x>
- Wohlin, C. (2014). Guidelines for snowballing in systematic literature studies and a replication in software engineering. *EASE '14: 18th International Conference on Evaluation and Assessment in Software Engineering*, 38, 1–10. <https://doi.org/10.1145/2601248.2601268>
- Wooldridge, B., & Floyd, S. W. (1990). The strategy process, middle management involvement, and organizational performance. *Strategic Management Journal*, 11(3), 231–241. <https://doi.org/10.1002/smj.4250110305>

✉ Correspondence

Kristján Vigfússon

Reykjavík University, School of Social Science

Menntavegi 1, 103 Reykjavík, Iceland

Ph: +354 8602077

E-mail: kristjanv@ru.is

The managerial implications of the labor market and workplace shortage in Central Eastern Europe

József Poór

Janos Selye University Komarno, Slovakia

Agneš Slavić

University of Novi Sad, Faculty of Economics Subotica, Serbia

Milan Nikolić

University of Novi Sad, Technical Faculty „Mihajlo Pupin“, Zrenjanin, Serbia

Nemanja Berber

University of Novi Sad, Faculty of Economics Subotica, Serbia

Abstract

In the recent years the labor market of the Central and Eastern European (CEE) countries has changed a lot. One of the main business challenges in the CEE region is the worker shortage. The possible reasons of this phenomenon are the emigration of the labor force from the countries of the former Eastern Bloc to the Western countries, the negative demographic tendencies in the region, the effects of economic crisis and the significant wage differences in the countries of European Union. This paper presents the first results of an international research conducted in six countries from the CEE region (Austria, Czech Republic, Hungary, Romania, Serbia and Slovakia) on the reasons and managerial implications of the current labor force shortage. The research questionnaire was filled out in 797 companies and institutions in the CEE region. In our paper we will show the size, ownership and the sectoral distribution of our sample, as well as the average turnover rate, the average time to fill a position in, the positions hard to fill in, the possible reasons of labor shortage and the successful organizational and governmental programs to deal with labor market shortage. The obtained results may be a useful input for the formulation of human resource management programs in the organizations facing with labor market shortage in Serbia and other CEE countries.

Keywords

labor market, workplace shortage, turnover, HRM, CEE region

Introduction

The labor market is one of the components of the market economy and as such it is an economic institution whereby labor is distributed and redistributed. The exchanges result in the integration of workers with work experience (workplaces) and in their movement between work relations (workplaces). Labor markets are currently in a phase of cyclical recovery and undergoing structural transformation due to globalization, demographic trends, advancing

digital technologies and changes in labor market institutions (Brunello & Wruuck, 2019). Currently, the modern economies experience a period that may be characterized by two major restrictions: first, the economic restriction, induced by increasing population with growing demands, aimed to improve their life conditions; and second, but not least, the required economic growth has to be achieved amid the worsening of the global economic situation (Popescu, Andrei, Nica, Mieilă & Panait, 2019). New technologies,

robotization and artificial intelligence will also certainly have an impact on the labor market. Some scholars claim that labor shortages will soon disappear due to a new type of robotization. The global economic downturn resulted in high unemployment in many European countries, which has often been followed by a sharp fall in the unemployment rate. There are already labor shortages in many areas in the labor market, and organizations are currently finding it difficult to fill vacancies, i.e. the number of shortage occupations is increasing (McGrath, 2019). Moravcikova and Balaz (2020) claim that labor shortage will increase in the future.

The lack of qualified human resources and permanent battle for suitable staff, together with preserving of human resources belong to the most important manpower questions and problems for the corporations in today's business environment (Bejtkovský, 2018). Besides, the high employee turnover is one of the biggest challenges for all organizations, since it can bring along economic, psychological and organizational consequences. Nowadays, organizations are paying increasing attention to this issue, as they have become aware of the fact that high employee turnover also has a negative impact on organizational performance (Chen, Lin & Lien, 2010). Complex interpersonal relationships within an organization can increase turnover further, since employees need to put a lot of energy into managing their own relationships with their colleagues (Zhang, 2016). Determining the optimal rate of turnover is not an easy process, as one would think that very low turnover is ideal for organizations. However, this is not entirely true, since too low turnover implies that there is no movement and development within an organization, as everything is constant and the whole organization might be stagnating without any growth. High turnover, on the other hand, indicates wastage and chaos, suggests processes that a given business should eliminate, and measures must be taken to reduce them (Huselid, 1995).

Considering all of the above, the labor market is heading to a future where labor shortages will increase and employee retention will be an ongoing challenge. The reduction of employee turnover is becoming increasingly difficult. In the future, organizations will focus on this issue, and competition for skilled workers will become fierce. Businesses that will be able to retain their valuable employees and decrease turnover will gain a competitive advantage. How? Primarily, by

providing a working environment that employees find proper and pleasant (Surji, 2013). It is important to state that current working arrangements focus on employees' new knowledge, skills, and abilities especially in terms of problem solving, critical thinking, creativity, people management, coordinating with others, emotional intelligence, judgment and decision-making (Héder, Szabó & Dajnoki, 2018). Wages and other forms of remuneration are also important, though this tendency is being weakened by other employee needs. In the case of manual staff, another important factor is the way they are treated by their managers. If employees are recognized, appreciated and their needs are taken into account, it motivates them to perform better and to become committed to their organization. In addition to, Szabó-Bálint (2019) emphasizes the importance of career management in employee retaining.

The aim of this paper is to present the results of an international research on the labor shortage in Central and Eastern Europe (CEE). The presented results include the turnover rates, the average time to fill a position in, the positions hard to fill in, the possible reasons of labor shortage and the successful organizational and governmental programs to deal with labor market shortage. The data from Czech Republic, Hungary, Romania, Serbia, Slovakia and Austria may point out on the reasons and managerial implications of the current labor force shortage.

1. The labour market of Central and Eastern Europe

With exception of Austria, the countries studied in the region are part of the former socialist bloc. Each country was affected by the change of regime in 1989 and by the break-up of the former Soviet Union. It is important to highlight that market economy in Central and Eastern Europe is not the same as the general prosperity caused by the market development in Western and South Europe (Mitrović-Mitrović, 2019). The transitions in Central and Eastern Europe were characterized by political battles, new economic entrants, foreign investors, cross-border businesses, economic policy shifts and constant economic flux. Almost all countries in the region started to develop and have grown into major economic players today. Roman and Strat (2018) emphasize that in the current post crisis context in the Eastern European countries, forging policies for attracting foreign direct investments, needs to

become a continuous concern for private investors and also for regional and local level authorities due to the fact that these investments can be: an important source of taxes and incomes for the local budget, an important source of jobs for the local community and also a relevant aspect that can mitigate the migratory outflows. One of the key issues in these countries today is the dramatic increase in labor shortages, which has been influenced by a variety of factors, namely outbound labor migration after the change of regime, unfavorable demographic factors, the economic downturn as well as wage differences within the EU (Brixiova, Li & Yousef, 2009). Chivu, Ciutacu and Georgescu (2015) underline that statistic data seem to indicate that the trend in household income, particularly in the new member states, does not argue for a growth of economic and social cohesion.

The studies of Poór et al. (2020) based on longitudinal and international comparisons show that although the Central and Eastern European region and the human resource management practices of single CEE countries have brought about a variety of changes in the first two decades of the 21st century, their deviations from different regions of the world, as well as their solutions, prevailed as well.

At the beginning of 2020s the labor markets of Central and Eastern European countries are facing a number of challenges. The demand for skilled labor is growing rapidly. Excess labor supply has largely become a thing of the past, and it is unusual for job seekers to struggle to find a job.

Rather, employers need to make increased efforts to find the right candidates. Consequently, it is not the improvement of selection processes that causes problems for businesses but the problem of not having enough candidates (a recruitment “pool” shortage). New technologies trigger a need for new ways of communication in recruitment. In addition, today's generation has different expectations from the workplace. The members of Generation Y are less loyal to their organization; however, at the same time, they want to be proud of their job and of the company they work for (digitalhungary.hu, 2019).

Outbound labor migration has been increasing along with people's willingness to work abroad. The EU accession of post-socialist countries brought along a new wave of migration between member states and generated new developments. The new type of migration is driven by finding new jobs. Thus, skilled labor is leaving Eastern Europe and moving to Western Europe in order to improve individual standards of living. Consequently, labor shortages are becoming frequent in labor exporting countries, and organizations find it increasingly difficult to fill vacancies. To sum it up, migration is one of the most important features of globalization which significantly influences world economy and has a crucial role in tackling the shortage of labor and skills (Maruszewska & Przybylska, 2009).

Table 1 presents the main labor market indicators of the analyzed six countries.

Table 1: The main labor market indicators of the analyzed countries (2019)

Country	Population	GDP growth (%)	Unemployment (%)
Austria	8 858 775	1,5	8,5
Czech Republic	10 649 800	2,5	2,9
Hungary	9 772 756	5,0	3,5
Romania	19 401 658	3,0	4,0
Serbia	6 963 764	4,8	9,5
Slovakia	5 450 421	1,3	4,9

Source: National statistical institutes, Tradingeconomics, 2020

Among the analyzed countries Romania has the biggest population, almost 20 million. The second in the line is the Czech Republic with more than 10 million people, while Hungary has a little bit less than 10 million inhabitants. Austria has almost 9 million, Serbia almost 7 million, while Slovakia about 5.5 million inhabitants.

There was economic growth in each researched country in 2019. Based on data published by the individual statistical offices, we assert that the most significant GDP growth was

in Hungary, amounting to 5%. The GDP of Hungary has grown in the country year on year, with 4.1 and 4.9 percent in 2017 and 2018, respectively. Hungary is followed by Serbia with a 4.8% growth. The Serbian economic performance has been fluctuating in the last few years. There has also been negative growth since 2010, but the country is making extended efforts to meet its targets, in support of its planned EU accession in 2025. The next country is Romania with a 3% quarterly growth according to figures.

GDP growth in the country has slowed down over the past two years, while in 2017 there was an 8.9% quarterly growth. The latest data show that due to positive changes Romania has managed to maintain a 3% growth, but according to S&P forecasts, its development will slow down over the next few years and GDP growth will fall under 2%. Since the forecasts indicate a change in trends, it is difficult to make estimates. The next country is the Czech Republic with its 2.5% GDP growth. Its economy is characterized by innovation and efficiency, but similarly to the situation in the previously analyzed countries, the slowing down of the GDP growth has been experienced in comparison with the figures from two or three years ago. Austria has shown a slight GDP growth of between 1.5% and 3% in recent years, with recent results showing an interim growth of 1.5%. With a 1.3% growth, Slovakia is the slowest growing country among the analyzed ones (Tradingeconomics, 2020).

Serbia and Austria have the highest unemployment rates among the surveyed countries. The unemployment rate in 2019 was 9.5%. But from 2012 when the unemployment rate was 25.5% or in January of 2019 when it was 12.9% there is a tendency of decline in this important labor market indicator. There may be several reasons for it. Economic analysts claim that the main cause is emigration of Serbian labor force to Western Europe. The Austrian rate has been increasing over the past few months, and interim data from 2019 suggested a slowing economic growth, bringing about higher unemployment. The forecasts proved to be correct, and the number of people out of work went up accordingly. The Czech Republic and Hungary are the countries with the lowest jobless rates. Since GDP growth has slowed down in Czech Republic, and it is soaring in Hungary, the causes of these low rates are subject to further research (Tradingeconomics, 2020).

2. Research methodology

The aim of our research was to show the situation in the labor markets of the researched countries and to identify the organizational tools for employee retention and the government measures aimed to alleviate labor market tensions based on the answers of our respondents.

The international research project was conducted in 2019 in eight European countries: Czech Republic, Poland, Lithuania, Hungary, Romania, Serbia, Slovakia and Austria, but in this paper we present the results for six countries from the Central and Eastern European region (Czech Republic, Hungary, Romania, Serbia, Slovakia and Austria). For data gathering a standardized on-line questionnaire was used, which consisted of four parts: the main features of the surveyed organizations; questions regarding turnover and labor shortages; organizational (corporate and institutional) and governmental measures and programs aimed at employee retention; and the respondents' opinions and experiences regarding robotization. The respondents were HR managers presenting the company or institution where they work.

The following research data will be shown in this paper: the size, ownership and the sectoral distribution of our sample, as well as the average turnover rate, the average time to fill a position in, the positions hard to fill in, the possible reasons of labor shortage for different employee categories (higher educated professionals, salespeople, administrative staff and blue collar workers) and the successful organizational and governmental programs to deal with labor market shortage. The findings presented in this report are based on general statistical methods (mean, frequency and distribution).

Table 2 presents data on the research sample, the distribution of respondents by countries.

Table 2: Distribution of responses from different countries (N, %)

Country	N	%
Hungary	277	35
Czech Republic	249	31
Romania	77	10
Slovakia	53	7
Serbia	76	9
Austria	65	8
Total	797	100.0

Source: Primary research results by the authors

The most responses were collected from Hungary (35%) and Czech Republic (31%). The lowest number of respondents was provided by Serbia (9%) and Austria (8%).

The third table shows data on the sample structure, by the company ownership.

Table 3: Distribution of responses by company ownership (%)

	HU	CZ	RO	SK	SR	AT	Total
Domestic private	43	50	86	56	34	73	57
Domestic public	17	16	5	12	7	14	12
Foreign owned	37	26	5	26	50	3	24
Mixed ownership	3	8	4	6	9	10	7
Total	100	100	100	100	100	100	100

Source: Primary research results by the authors

The most respondents were in domestic private ownership (57%). The remaining consisted of foreign-owned companies (24%) and of those in mixed ownership (7%). The domestic public sector institutions made up to 12%. It is important to state that the highest proportion of domestic private companies was present in Romania (86%),

the highest proportion of domestic public institutions were present in Hungary (17%), the foreign owned companies dominated the Serbian sample (50%), while the proportion of mixed ownership was present in Austria (10%).

The next table presents data on the industrial (sectoral) distribution of our sample.

Table 4: Distribution of responses by industry (sector) (%)

	HU	CZ	RO	SK	SR	AT	Total
Industry	36.1	31.9	20.0	21.6	10.3	8.5	21.3
Trade	12.0	18.1	20.0	23.5	37.9	0.0	18.5
FMCG	1.2	1.1	1.3	2.0	1.7	1.7	1.5
Finance sector	5.6	2.2	5.3	3.9	13.8	11.9	7.2
Informatics	4.4	4.4	13.3	2.0	10.4	5.1	6.6
Telecommunications	1.6	0.5	2.7	0.0	1.7	1.7	1.4
Logistics services	5.6	6.0	2.7	7.8	0	3.4	4.2
Energy	0.8	1.6	1.3	7.8	1.7	1.7	2.5
Agriculture	1.6	4.9	1.3	2.0	1.7	0	1.9
Services	19.1	18.9	22.7	27.4	10.4	44.1	23.8
Public administration	3.2	5.5	1.3	2.0	5.2	6.8	4.0
Other	8.8	4.9	8.1	0.0	5.2	15.1	7.1
Total	100	100	100	100	100	100	100

Source: Primary research results by the authors

The majority of responses were collected from the service sector (23.8%), industry (21.3%), and trade (18.5%).

Table 5 shows data on the size of the responding organizations, regarding the number of their employees.

Table 5: Distribution of responses by employee number (%)

	HU	CZ	RO	SK	SR	AT	Total
0-1 persons	12.7	2.2	7.9	17.6	0	5.5	7.6
2-9 people	17.9	16.0	26.4	25.5	12.0	10.9	18.1
10-50 people	9.5	27.6	19.8	19.6	14.0	12.7	17.2
51-100 people	15.1	12.7	17.1	5.9	2.0	10.9	10.6
101-250 people	0.0	13.3	10.5	11.8	16.0	0.0	8.6

251-500 people	9.1	12.2	3.9	3.9	7.0	18.2	9.1
501-1000 people	8.3	5.5	3.9	2.0	4.0	10.9	5.8
more than 1.000 people	27.4	10.5	10.5	13.7	45.0	30.9	23.0
Total	100	100	100	100	100	100	100

Source: Primary research results by the authors

The majority of the respondents (62.1%) belong to small or medium sized organizations, regarding the number of their employees. The micro organizations make the 25.7%, while the small organizations the 42.9% of our sample. The large organizations with more than 250 employees

make the 14.9% of the sample, while the very large organizations with more than 1000 employees make a significant proportion of the sample, its 23.0%.

The table below presents data on the annual revenues of the analyzed companies.

Table 6: Distribution of responses by annual revenues (%)

	HU	CZ	RO	SK	SR	AT	Total
Less than 30. 000	5.4	14.0	18.3	14.0	0.0	0	8.6
30.001-300.000 EUR	17.1	28.7	31.1	38.0	9.8	10.2	22.5
300.001-3.000.000 EUR	17.5	27.0	23.9	18.0	23.5	18.4	21.4
3.000.001 -30.000.000 EUR	26.2	14.0	16.9	10.0	23.5	28.6	19.9
30.000.001-300.000.000 EUR	13.8	9.6	4.2	14.0	11.8	28.6	13.7
More than 300.000.000 EUR	20.0	6.7	5.6	6.0	31.4	14.2	13.9
Total	100	100	100	100	100	100	100

Source: Primary research results by the authors

Almost the third (31.1%) of our sample has less than 300 000 EUR annual revenue, while about one fourth (27.6%) of them has more than 30 000 000 EUR annual revenue.

managers; for higher educated professionals; for salespeople; for administrative staff; and for blue collar worker will be presented in 3 categories: low (below 5%), medium (6-20%) and high (more than 20%).

3. Research results

Among the research results the turnover rate on organizational level; for upper and middle

Table 7: Turnover level (%)

	HU			CZ			RO			SK			SR			AT			Total		
	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H	L	M	H
The whole organization	32	50	18	55	40	5	46	39	15	48	40	12	40	45	15	40	48	12	43	44	13
Upper and middle managers	82	14	4	83	13	4	90	8	2	85	15	0	75	19	6	81	16	3	83	14	3
Higher educated professionals	65	30	5	82	12	6	67	24	9	81	19	0	51	38	11	64	33	3	67	26	7
Salespeople	64	27	9	62	33	5	72	13	15	80	16	4	44	28	28	57	37	6	63	26	11
Administrative staff	62	31	7	71	23	6	85	13	2	73	20	7	57	41	2	62	31	7	68	27	5
Blue-collar workers	41	40	19	42	45	13	55	24	21	47	36	17	57	20	23	58	28	14	50	32	18

L= low turnover rates (0-5 %), M= medium turnover rates (6-20%), High turnover rates (20% and more)

Source: Primary research results by the authors

The analyzed organizations at organizational level face with medium level of employee turnover. The highest turnover rate in all countries except Serbia is for the category of blue-collar

workers. In Serbia the highest turnover is present for salespeople. The lowest turnover rate in all countries is present for upper and middle managers.

The next table shows data on the jobs (positions) which are hard to fill in the analyzed countries.

Table 8: Jobs hard to fill (%)

	HU	CZ	RO	SK	SR	AT	Total
Accountant	2.3	2.7	3.2	2.1	4.3	10.0	4.1
Administration	6.5	9.6	6.3	8.5	0	0.0	5.1
Assistant	0.5	3.4	1.6	0	0	10.0	2.6
Construction	0.5	0.7	3.2	0	0	0	0.7
Consultant	0.5	0	0.0	0.0	4.3	5.0	1.6
Driver	3.7	2.7	4.8	10.6	4.3	0.0	4.3
Engineer	20.9	11.0	34.9	21.4	17.4	15.0	20.1
Finances	3.7	3.4	0.0	0.0	4.3	0.0	1.9
Health care workers	0.5	0.0	0.0	0	0	5.0	0.9
Leader	1.8	2.1	6.3	2.1	4.3	15.0	5.3
Logistics	0.5	0.7	0.0	2.1	0	0.0	0.6
Manager	4.1	6.8	1.6	6.4	4.3	20.0	7.2
Manual worker	36.8	36.4	28.6	29.9	26.2	10.0	28.0
Project Manager	1.8	2.7	0.0	0.0	0	5.0	1.6
Salesperson	11.7	8.2	7.9	10.6	30.6	5.0	12.3
Technician	2.3	9.6	0.0	2.1	0	0.0	2.4
Other	1.9	0.0	1.6	4.2	0.0	0.0	1.3
Total	100	100	100	100	100	100	100

Source: Primary research results by the authors

The jobs hard to fill in Hungary, Czech Republic, Romania and Slovakia are those of manual workers and engineers. In Serbia the position of salespersons, while in Austria the position of managers is the hardest to fill.

The next data are on the period of time necessary to fill a vacancy in weeks.

Table 9: Time period needed to fill a vacancy (weeks)

	HU	CZ	RO	SK	SR	AT	Total
Weeks	10.032	10.566	6.885	8.245	9.083	10.95	9.293

Source: Primary research results by the authors

The average time period needed to fill a vacancy in the analyzed six countries in 9.3 weeks. The shortest time period is needed in Romania (6.9 weeks), while the longest in Austria (10.95 weeks).

The next four tables show data on the causes of labor shortage for different employee categories (higher educated professionals, salespeople, administrative staff and blue collar workers).

Table 10: Causes of labor shortages - higher educated professionals (Rankings: 1=not at all, 5=very typical)

	HU	CZ	RO	SK	SR	AT	Total
Competition between you and competitors	3.16	3.18	3.48	2.91	3.04	2.72	3.08
Very low wages	2.81	2.92	2.50	2.62	3.42	3.21	2.91
Lack of skilled labor	2.90	3.16	3.16	2.74	3.00	3.22	3.03
Emigration abroad	2.48	2.18	2.91	2.75	3.04	2.33	2.62
Lower unemployment due to economic growth	2.18	2.61	1.84	2.46	2.26	2.5	2.31
Fewer working people available due to population decreases	1.90	2.09	2.24	1.92	2.29	2.17	2.10
Problems of the education system	2.51	2.42	2.65	2.21	3.29	2.39	2.58
Bad working conditions	1.68	1.87	1.52	1.32	2.54	1.83	1.79

Underdeveloped transport infrastructure (difficulties in getting to work)	1.61	2.13	1.74	1.69	1.58	2.44	1.87
Work-life balance problems	2.26	2.59	1.91	1.80	3.33	2.59	2.41

Source: Primary research results by the authors

The main causes of labor shortage for higher educated people in the six analyzed countries are the competition between the employers and the lack of skilled labor.

Table 11: Causes of labor shortages - salespeople (Rankings: 1=not at all, 5=very typical)

	HU	CZ	RO	SK	SR	AT	Total
Competition between you and competitors	2.6	2.97	2.86	2.81	3.78	2.59	2.94
Very low wages	2.48	2.81	2.40	2.68	3.91	2.71	2.83
Lack of skilled labor	2.38	2.80	2.54	2.50	3.61	2.65	2.75
Emigration abroad	2.05	1.97	2.43	2.46	2.87	1.76	2.26
Lower unemployment due to economic growth	1.88	2.59	1.70	2.48	1.86	2.35	2.14
Fewer working people available due to population decreases	1.88	2.18	1.98	2.39	2.26	2.12	2.14
Problems of the education system	2.05	2.24	2.39	1.96	2.70	2.53	2.31
Bad working conditions	1.71	2.05	1.43	1.79	3.48	2.18	2.11
Underdeveloped transport infrastructure	1.47	2.23	1.79	1.96	2.22	2.24	1.99
Work-life balance problems	2.06	2.56	2.08	1.82	3.17	2.44	2.36

Source: Primary research results by the authors

The main causes of labor shortage for salesperson in the six analyzed countries are the competition between the employers and the very low wages.

Table 12: Causes of labor shortages – administrative staff (Rankings: 1 = not at all, 5 = very typical)

	HU	CZ	RO	SK	SR	AT	Total
Competition between you and competitors	2.91	2.98	2.70	2.49	2.14	2.79	2.67
Very low wages	2.89	2.76	2.40	2.80	3.52	3.64	3.00
Lack of skilled labor	2.48	2.84	2.72	2.56	2.24	3.21	2.68
Emigration abroad	2.02	1.87	2.30	2.41	2.00	1.64	2.04
Lower unemployment due to economic growth	2.26	2.52	1.95	2.61	1.80	2.62	2.29
Fewer working people available due to pop. decreases	1.90	2.05	2.17	2.31	1.81	1.86	2.02
Problems of the education system	2.32	2.47	2.67	2.36	2.33	2.5	2.44
Bad working conditions	1.77	1.81	1.59	1.74	2.67	2.46	2.01
Underdeveloped transport infrastructure	1.72	2.16	1.77	1.94	2.43	2	2.00
Work-life balance problems	2.12	2.34	2.14	2.06	2.90	2.64	2.37

Source: Primary research results by the authors

The main causes of labor shortage for administrative staff in the 797 analyzed organizations are the very low wages and the lack of skilled labor.

Table 13: Causes of labor shortages – blue collar workers (Rankings: 1 = not at all, 5 = very typical)

	HU	CZ	RO	SK	SR	AT	Total
Competition between you and competitors	3.17	3.24	3.12	3.00	2.63	2.58	2.96
Very low wages	3.26	3.14	2.63	3.08	3.84	3.67	3.27

Lack of skilled labor	3.08	2.81	3.24	3.39	2.42	2.83	2.96
Emigration abroad	2.74	2.18	3.33	3.16	3.05	1.67	2.69
Lower unemployment due to economic growth	2.53	2.70	2.39	2.59	2.00	2.36	2.43
Fewer working people available due to population decreases	2.32	2.26	2.60	2.54	2.16	2	2.31
Problems of the education system	2.52	2.19	2.67	2.46	2.42	2.67	2.49
Bad working conditions	2.22	2.27	2.02	2.21	3.05	3.08	2.48
Underdeveloped transport infrastructure (difficulties in getting to work)	1.91	2.29	2.42	2.46	2.37	2.08	2.26
Work-life balance problems	2.49	2.38	2.49	2.62	2.74	2.67	2.57

Source: Primary research results by the authors

The main causes of labor shortage for blue collar workers in the analyzed organizations are the very low wages, the lack of skilled labor and the competition between the employers. In

Romania the main cause is the emigration abroad.

The next table shows the five most efficient organizational tools which may be used to facilitate employee retention.

Table 14: The five efficient organizational tools for employee retention (1=not efficient, 5 = the most efficient)

	HU	CZ	RO	SK	SR	AT	Total
Atypical forms of employment		2		1		4	1.2
Business car allowance					3		0.5
Competitive salary and remuneration system	5	5	5	5	5	1	4.3
Employee satisfaction and commitment programs					2		0.3
Flexible working hours	3	3		3	4	3	2.7
General competence assessment and development programs						2	0.3
Health insurance programs			3				0.5
Improvement of working conditions	2	1		2	1		1.0
Key man retention program	1						0.2
Life insurance			2				0.3
Pension insurance programs			1				0.2
Performance evaluation and bonus system	4	4	4	4		5	3.5

Source: Primary research results by the authors

The obtained data clearly indicate that competitive salaries and efficient performance management system (performance evaluation and bonus system) are among the most important

organizational tools applied to improve retention.

The last table shows data on the respondents' opinion about the most efficient governmental measures to solve the problem of labor shortage.

Table 15: The five efficient governmental measures to alleviate labor shortages (1=not efficient, 5 = the most efficient)

	HU	CZ	RO	SK	SR	AT	Total
Atypical forms of employment (part-time work. distributed job and telecommuting)	1	1	1	2	1	4	1.7
Corporate nursery and kindergarten support	2			1		3	1.0
Encouragement and supporting of training programs (dual training. special training programs)		4	2	3	2	5	2.7
Extension of the wage subsidizing system	5	5	5	5	5	2	4.5
Housing subsidies (construction. workers' hostels. etc.)	4	2	4	4	4		3.0
Language teaching for foreign workers					3	1	0.7
Transport development. commuting contribution	3	3	3				1.5

Source: Primary research results by the authors

The extension of wage and housing subsidizing systems and the support of various training programs are the most important

governmental measures to reduce labor shortage, by the opinion of the interviewed HR managers.

Conclusion

The results of the research on labor market situation and labor shortage in Hungary, Czech Republic, Romania, Serbia, Slovakia and Austria conducted in 2019 on the sample of 797 HR managers who filled out the on-line questionnaires for their company show that the analyzed organizations at organizational level face with medium level (6-20%) of employee turnover. The positions of manual workers and engineers are the hardest to fill in. The average time period needed to fill a vacancy in the analyzed six countries is 9.3 weeks. The main causes of labor shortage for higher educated people are the competition between the employers and the lack of skilled labor. For salesperson these are the competition between the employers and the very low wages. The main causes of labor shortage for administrative staff are the very low wages and the lack of skilled labor, while for the blue-collar workers these are the very low wages, the lack of skilled labor and the competition between the employers. Among the organizational tools applied to improve retention the most effective are competitive salaries and efficient performance management systems, while among the governmental measures to solve labor shortage the most effective are wage subsidizing and housing subsidizing systems and the support of various training programs. The obtained results may be a useful input for the formulation of human resource management programs in the organizations facing with labor market shortage in CEE region.

The topic of labor shortage in Central and Eastern Europe, as a complex issue can be researched and explored from many different aspects. Consequently, there are several research limitations that need to be mentioned here. Data collection in six countries is a rather complex task. The different number of responses in each analyzed country is the result of the different opportunities and data collection experiences of research partners. Since the research was basically conducted as a benchmarking, the responses collected in the analyzed countries are not representative. We plan to extend the data analysis, and conduct multivariate statistical analyses, too.

Since we have completed the primary analysis of the research data, in the spring of 2020 the global Corona virus epidemic has

appeared, and created a significantly different labor market situation. Now, in April of 2020, it seems that the biggest labor market challenge in Central and Eastern Europe is not the labor shortage, but the economic paralysis, unemployment, job shortages, and sheltering at home. The economic and social crisis and unemployment have reappeared in the six countries studied, just like at other parts of the world. This situation makes it more important to continue the research on the labor market situation and its effects on employees and employers, too. **SM**

References

- Bejtkovský, J. (2018). Factors influencing the job search and job selection in students of Generation Y in the Czech Republic in the employer branding context. *Management & Marketing. Challenges for the Knowledge Society*, 13(3), 1133-1149. <https://doi.org/10.2478/mmcks-2018-0028>
- Brixiova, Z., Li, W. & Yousef, T. (2009). Skill shortages and labor market outcomes in Central Europe. *Economic Systems*, 33 (1.), 45–59. <https://doi.org/10.1016/j.ecosys.2008.07.002>
- Brunello, G., & Wruuck, P. (2019). Skill shortages and skill mismatch in Europe: A review of the literature. *IZA-Institute of Labour Economics*, 12346, 4-34
- Chen, M. F., Lin, C. P. & Lien, G. Y. (2011). Modeling job stress as a mediating role in predicting turnover intention. *The Service Industries Journal*, 31 (8), 1327-1345. <https://doi.org/10.1080/02642060903437543>
- Chivu, L., Ciutacu, C., & Georgescu, L. (2015). Household income in Romania. A challenge to economic and social cohesion. *Procedia Economics and Finance*, 22, 398-401. [https://doi.org/10.1016/S2212-5671\(15\)00310-X](https://doi.org/10.1016/S2212-5671(15)00310-X)
- DigitalHungary.hu (2019). Új korszakba lépett be a munkaerőpiac. Retrieved November 29, 2019, from <https://www.digitalhungary.hu/e-volution/uj-korszakba-lepett-be-a-munkaeropiac/4410/>
- Héder, M., Szabó, S., & Dajnok, K. (2018). Effect of labour market changes on HR functions. *Anali Ekonomskog fakulteta u Subotici*, (39), 123-138. <https://doi.org/10.5937/AnEkSub1839123H>
- Huselid, M. A. (1995). The impact of human resource management practices on turnover, productivity, and corporate financial performance. *Academy of Management Journal*, 38 (3), 635-672. <https://doi.org/10.2307/256741>
- Maruszewska, K., & Przybylska, J. (2009). International Migration as a Factor of Labour Market Competitiveness. *Stimulating of Competitiveness of Labour Market, Economics & Competition Policy*, (15), 32-46.
- McGrath, J. (2019). *Analysis of shortage and surplus occupations based on national and Eurostat Labour Force Survey data Shortages and surpluses 2019*. Brussels: European Commission Directorate-General for Employment Social Affairs and Inclusion Directorate.
- Mitrović, J., & Mitrović, V. (2020). The development of

- social entrepreneurship and the perspective of its further affirmation in the overall development of Serbia. *Anali Ekonomskog fakulteta u Subotici*, 55(42), 81-97.
<https://doi.org/10.5937/AnEkSub1942081M>
- Moravcikova, K., & Balaz, V. (2020). Active labour market policies, the business cycle and labour force shortages. *Economic and Social Development: Book of Proceedings*, 14-27.
- Poór, J., Slavić, A., Katalin, T., Berber, N., Kerekes, K., & Karoliny, Z. (2020). Benchmarking in human resource management in focus of Central and Eastern Europe in the light of CRANET research. *Strategic Management*, 25(1), 21-28.
<https://doi.org/10.5937/StraMan2001021P>
- Popescu, G. H., Andrei, J. V., Nica, E., Mielă, M., & Panait, M. (2019). Analysis on the impact of investments, energy use and domestic material consumption in changing the Romanian economic paradigm. *Technological and Economic Development of Economy*, 25(1), 59-81.
<https://doi.org/10.3846/tede.2019.7454>
- Roman, M., & Strat, V. A. (2018). Romanian immigrants and the inflows of foreign direct investment towards Romania. *Management & Marketing. Challenges for the Knowledge Society*, 13(4), 1226-1241.
<https://doi.org/10.2478/mmcks-2018-0033>
- Surji, K.M. (2013). The Negative Effect and Consequences of Employee Turnover and Retention on the Organization and its Staff. *European Journal of Business and Management*, 5 (25), 52-65.
- Szabó-Bálint, B. (2019). Organizational career development versus employees' career needs in Hungary. *Strategic Management*, 24(4), 3-12.
<https://doi.org/10.5937/StraMan1904003S>
- Tradingeconomics (2020). Retrieved January 5, 2020, from www.tradingeconomics.com
- Zhang, Y.J. (2016). A Review of Employee Turnover Influence Factor and Countermeasure. *Journal of Human Resource and Sustainability Studies*, 4, 85-91.
<https://doi.org/10.4236/jhrss.2016.42010>

✉Correspondence

Agneš Slavić

University of Novi Sad, Faculty of Economics Subotica,
Serbia
24000 Subotica, Segedinski put 9-11., Serbia
E-mail: agnes.slavic@ef.uns.ac.rs

Research into unplanned purchases on the Serbian market

Suzana Đukić

Faculty of Economics, University of Niš, Niš, Serbia

Jelena Stanković

Faculty of Economics, University of Niš, Niš, Serbia

Abstract

Purchases of products and services are mainly the result of planned actions of consumers based on identified needs and desires. However, impulse purchases that consumers did not plan before entering the store are quite common as well. Such purchases are stimulated by the consumers' sudden needs, current mood, recommendations of the seller and/or other consumers, as well as in-store incentives such as: the atmosphere in the sales facility, discounted prices, gifts. Also, numerous innovations make impulse buying easier for consumers, like: flexible working hours of shops, affordable supply of products/services, online sales, offer of so-called "instant" loans, the existence of ATMs. Unplanned purchases are not exclusively a consequence of the impulse-driven reaction of consumers. In addition to pure impulsiveness, there are other types of unplanned purchases, such as: suggestion effect, planned impulsivity, reminder impulse buying effect, and planned purchase of a certain type, but not brand of product. The aim of this paper is to point out the importance and basic characteristics of unplanned purchases, as well as the factors that influence consumer behavior while making such purchases. Conducted empirical research enabled the identification of the most important motives of unplanned purchases made by consumers in the Republic of Serbia, their frequency in buying different product categories, the connection of different shopping situations with unplanned purchases, as well as the determination of differences between certain demographic and economic groups of consumers in making such purchases. The research results and their analysis enabled the formulation of guidelines for the development of marketing strategies of companies from the Republic of Serbia as a model of response to this type of consumer behavior.

Keywords

consumers, unplanned purchases, motives, shopping situations, the Republic of Serbia

Introduction

The study of consumer behavior represents the primary focus of marketing research. Information about consumer behavior in different shopping situations increases the rationality of marketing decisions and improves their effects. The dynamics of consumers' needs and desires, their selectivity, the combination of different motives, the impact of different purchasing factors and situations require that research of consumer behavior be a constant activity in the company. Generation of valuable information and knowledge about consumers significantly reduces the market risk that exists in marketing decision making.

Purchases of goods and services can be planned or unplanned. Authors agree that purchases are predominantly planned consumer actions since they are driven by defined needs and motives (Peter & Olson, 2010; Solomon, 2009; Hawkins & Mothersbaugh, 2010; Maričić, 2011). However, many purchasing decisions are not planned by consumers before entering the sales facility. According to some research, unplanned purchases make up 62% of all purchases, and this percentage is thought to be even higher in online purchases (Chamorro-Premuzic, 2015). Therefore, unplanned purchases represent a growing source of income for retailers (Bell, Corsten & Knox, 2011; Inman, Winer & Ferraro, 2009).

Impulse and unplanned purchases should not be equated. Impulsive behavior when purchasing reflects the tendency of consumers to buy spontaneously, non-reflectively, immediately, while unplanned behavior basically refers to the buying decision that was made without a deliberate plan before buying (Kacen, Hess & Walker, 2012). Unplanned purchases are characterized by a sudden desire to buy, lack of cognition in assessing product attributes, mental imbalance caused by comparing current satisfaction and long-term consequences of such purchases, lack of consideration of possible consequences of such behavior (Maričić, 2011).

Given the importance of unplanned purchases in formulating marketing strategies of the company, the authors of this paper focused their research on identifying such behavior in shopping by consumers in the Republic of Serbia. The research is concentrated on the analysis of the frequency of motives, i.e. incentives that encourage consumers to make such purchases, as well as on their share in certain product groups. Taking into consideration the growth of companies' investment in activities that encourage such purchases, the research also included the impact of demographic and economic characteristics of respondents on the propensity for unplanned purchases that are driven by various external factors (physical and social environment, time of purchase, specific situation). The aim is to obtain information on the characteristics and frequency of unplanned purchases in the Republic of Serbia, which is crucial for formulating recommendations to the marketing management.

The paper is structured as follows. The first part of the paper is dedicated to a review of the relevant literature on the characteristics and types of unplanned consumer purchases on the basis of which research hypotheses are defined. The second part explains the research methodology. The third part presents the results of the research and their discussion. In the conclusion of the paper, recommendations are given to managers in the Republic of Serbia and research limitations are explained.

1. Review of literature and research hypotheses

Impulsiveness as a characteristic of consumer behavior in shopping is often considered a qualifying determinant of unplanned purchases.

However, *pure impulsiveness* is only one type of unplanned purchases and implies a situation in which a specific purchase surpasses the usual consumer behavior and which is stimulated by the current emotional need. Such purchases are related to the purchase of products that are new to the consumer and/or products that meet consumer's desire for diversity in retail. These are "sudden and immediate" purchases with no pre-shopping intention to do so. "Impulse buying is initiated by a spontaneous feeling for the purchase without much thinking about its consequences" (Beatty & Ferrell, 1998). "Impulse buying is the result of a conflict between the consumer's desire and self-control" (Verplanken & Sato, 2011) or a conflict between the desire and willingness, where affective state exceeds reflection (Coley & Burgess, 2003; Herabadi, Verplanken & Van Knippenberg, 2009; Hoch & Loewenstein, 1991). Recent studies have shown that pure impulse buying makes up an increasingly significant percentage of the total purchase of consumers in modern conditions (Amos, Holmes & Keneson, 2014).

Impulsiveness in purchases results from the effects of internal factors (personality, self-regulation disorder and habits) and external stimuli (marketing stimuli of the company) (Dholakia, 2000; MacInnis & Patrick, 2006). Internal factors that affect impulse buying vary from individual to individual. Thus, for example, Sneath, Lacey and Kennett-Hensel (2009) have argued that impulse buying purchase can be realized due to the individual's depression and effort to improve mood. Verplanken and Herabadi (2001) obtained similar results and linked impulse shopping with individuals who want to escape from negative psychological perceptions such as low self-esteem, negative feelings or poor spirits. Marketing stimuli stand out as the most important external factors. Marketers design external stimuli to attract the attention of consumers. Managers spend a lot of time and effort designing a retail environment, and are focused on the interaction between sales staff and customers to increase the psychological motivation of customers to purchase (Berry, Seiders & Grewal, 2002). Therefore, unplanned purchasing can be triggered by various marketing incentives such as product position on the shelf, communication with sales staff, atmosphere in sales facilities, discounted prices, product demonstrations and the like (Mohan, Sivakumaran & Sharma, 2013).

In addition to pure impulsiveness, there are the following types of unplanned purchases: suggestion effect, planned impulsivity, reminder effect, and planned purchase of a certain category but not brand of a product (Stern, 1962, cited by Assael, 1998). The *suggestion effect* is a situation where a consumer has no prior knowledge about a particular product, but acquires it in the store based on its characteristics. If a consumer goes shopping without preconceived resoluteness to buy a specific brand of product, it is so-called *planned impulsiveness*. There are many situations when a consumer, in addition to planned purchases, also buys products that are not planned, and that are singled out by promotional activities in the store (products with special discounted prices, seller's recommendation, sound or lighting effects, etc.). This is the so-called *reminder impulse buying effect*. Also, there are situations when the consumer *plans to buy a category of products*, but not a *brand*. The specific brand in these situations becomes the consumer's choice only in the store.

According to the results of numerous studies, unplanned purchases have had a dominant share in the total sales of companies in recent decades (Ek Styvén, Foster & Wallström, 2017; Kacen et al., 2012). Such a situation is the result of intensive investments in marketing activities to which consumers are exposed and thus motivated to this type of purchase. Leading investments are in sales promotion activities including point-of-sale activities, but also different elements of the physical environment and personal selling activities. The growth of unplanned purchases is also connected with numerous innovations that have enabled simpler and faster consumer purchases, such as: online purchases, TV sales, telemarketing. Such purchases require significantly less time, effort, energy and expenditures, but are, on the other hand, subject to large impacts on consumers by companies. Mass media significantly support these company activities.

Unplanned consumer behavior is conditioned by the specific situation in which a purchase is carried out. Such situations are determined by various factors. The following are dominant: physical environment, social environment, time of purchase (season, morning, evening), sudden state of mind and specific situation (Assael, 1998).

It has been empirically proven that the physical environment influences a consumer's specific decision about the purchase. The physical

environment consists of the location of the sales facility, the degree of urbanization of the sales environment, crowd level, arrangement of the sales facility, air conditioning, etc. The social environment includes the influence of reference groups, but also the kindness and influence of sales staff on the choice of products and services.

The time of purchase is another factor that determines shopping behavior. Many products and services are designed to save time and efforts of consumers in shopping. Specific purchases may require different levels of consumer engagement depending on whether products are bought for personal use or as a gift.

Sudden state of mind (impulse) can be caused by consumers' mood, other socio-psychological factors, as well as sales promotion activities. Mood can be influenced by the physical environment (music, fragrance, decoration etc.), weather conditions or social environment (family, friends). According to Shapiro (1992), the main factors that initiate impulse purchases are: location, time of purchase, season and habits of consumers. In the case larger purchases are made, the possibility of making impulse purchases grows as well. Also, the more time spent in the store, the greater the opportunity to buy on impulse. The relationship between the store environment and the consumer's impulsive mood is moderated by a situational factor, such as time (Xu, 2007). The consumer's available time determines the stay in the store and the feelings, which may result in impulse purchasing decisions.

According to Lee and Ariely (2006), the impact of promotional activities on stimulating unplanned consumer purchases varies depending on the stage of the purchasing process and its objectives. If consumers have more explicit shopping goals, they are less susceptible to the influence of promotional activities. The impact of a company's promotional actions is, however, greater at the beginning of the purchase process, when consumer shopping goals are not yet fully defined. Research has shown that the savings that a consumer can make in purchases affect the gradual increase in unplanned purchases exceeding the so-called planned basket of goods (Stilley, Inman & Wakefield, 2010). The intensity of that increase gets higher with the increase in the consumer economic power.

In particular, sales promotion tools are of great importance for providing information to consumers at the point of sale, reminding, stimulating good mood and suggesting unplanned

purchases. According to research (Osman, Fah & Foon, 2011; Tinne, 2011; Banerjee & Saha, 2012; Rittipant, Kheawwilai, Suayngam, Promsoot & Vivatanaprasert, 2013; Nagadeepa, Selvi & Pushpa, 2015), price discounts represent the instrument of sales promotion that motivates consumers to unplanned buying behavior more than any other instruments. The results of research in the Republic of Serbia which agree with these studies showed that price discounts, bonus packs and premiums are the most efficient means for motivating impulse consumer behavior (Alimpić & Perić, 2019). Also, Heilman, Nakamoto and Rao (2002) confirm that consumers who receive unexpected coupons in the store realize more unplanned purchases, which are derived from "psychological income" or the effect of a better mood. These sales promotion tools are clear and consumers understand them easily. Accordingly, consumers can relatively easily assess the benefits they get by purchasing. One study has shown that special price discounts have a positive impact on unplanned expenditure (Aydinli, Bertine & Lambrecht, 2014) because they reduce reflection, shorten the time of purchase and increase the emotional response of consumers. In view of these research results, we started from the following hypothesis:

H1: Discounts are the most important motive for unplanned purchases.

Unplanned consumer behavior can be related to the purchase of different product groups. The question is: in which product group is such consumer behavior more pronounced? In answering this question, we started from the fact that unplanned purchases largely imply a lack of thinking, the influence of emotions and a sudden desire for certain products. In this, both the value of the product and the characteristics of the consumer are taken into account. According to some research, the consumption of soft drinks and fast food is higher among younger generations of consumers. On the other hand, the demand for sports and recreational services is higher in consumers aged 45 and over, while the demand for medical and telephone services, travel, food is higher in consumers over 65 (Evans & Berman, 1997; Jobber & Fahy, 2006; Littrel, Paige & Song, 2004). Stern (1962, cited by Assael, 1998) points out that different product benefits affect impulse buying. Functional benefits, for example, often motivate consumers to make impulse

purchases (Schiffman & Kanuk, 2007). The results of one study showed that confectionery products are the best-selling impulse products especially during travel (Crawford & Melewer, 2003). The situation is similar with the purchase of books, but also with exercise equipment (Yu & Bastin, 2010). This confirms the view that the concept of impulse buying is also applicable to durable consumer goods (Kumar, 2007). For example, colors and different designs of clothing and footwear evoke positive emotions in consumers and often influence the impulsive reaction in purchases (Park, Kim & Forney, 2006).

Proceeding from the above, empirical research is focused on testing frequency of unplanned purchases in the purchase of the following product groups: food products, books/magazines, footwear/clothing, cosmetics/personal hygiene and household devices/appliances. Respondents were given the opportunity to include another group of products that they buy unplanned, which is not in the offered list of answers. Starting from the key characteristics of unplanned purchases and perceived risk in the purchase of certain products, we are of the opinion that this type of shopping is more frequent in the purchase of food products. Accordingly, the following hypothesis was formulated:

H2: Food products are the most common group of products that are bought unplanned.

Consumers behave differently in different shopping circumstances and situations. Thus, for example, behavior differs when consumers buy alone or accompanied, when they have enough time and when they do not have it, when they buy products for personal needs or as a gift. Information obtained from sellers as well as from friends during a purchase can increase the chances for an impulse purchase (Yu & Bastin, 2010). Luo (2005) points out that impulsiveness in shopping increases if purchase is made in the presence of friends, but that this need decreases in the presence of family members. In this matter, one should keep in mind the connection between consumer loyalty and consumer inclination towards such purchases. There are studies that have shown that the kindness of sales staff directly affects impulse shopping (Mattila & Wirtz, 2008).

Gender is one of the important demographic characteristics that influences consumer behavior

in the shopping process. In this connection, the differences in the behavior of men and women should be considered, as well as the differences in their preferences and the ways of collecting and processing information (Mitchell & Walsh, 2004). Some studies indicate that women are more impulsive compared to men in shopping (Priyanka & Rooble, 2012; Jalees, 2009; Virvilaite, Saladiene & Bagdonaite, 2009). On the other hand, there are also attitudes that men are more impulsive in their purchases than women, because women carefully plan their purchases (Mai, Jung, Lantz, Loeb, 2003).

In addition to gender, the age structure of consumers also influences shopping behavior. Different age groups of consumers react differently to the interior design of sales facilities, sudden situations in which they can find themselves, recommendations and information they receive from sellers, etc. Research shows that, for example, impulsive behavior is more dominant in people between the ages of 18 and 39 (Wood, 2005). In this, it is also important to consider the employment status of consumers.

Based on these facts, the intention in the research was to identify differences in consumer behavior in different shopping situations with regard to the demographic characteristics of the respondents (gender, age, employment status). In this sense, the following hypothesis is defined:

H3: Demographic characteristics of the respondents determine their behavior in different shopping situations.

The study of economic factors is essential to explain the behavior of people in the process of purchasing. The size of income, inclination to spend or save, opportunity to obtain consumer loans, alongside with personal characteristics and lifestyle, including the broader context of economic environment, that is, general economic conditions and economic climate, largely determine the needs and requirements of consumers, priorities in meeting them, as well as criteria in the product/brand evaluation process. In particular, inclination to spend and save depends on the level of consumers' purchasing power. Although some studies argue that there is no link between income and unplanned purchases (Ghani et al., 2011; Yang et al., 2011), it is rational to examine whether the inclination toward planned/unplanned purchasing behavior is related to purchasing power of respondents, especially

when it comes to higher value products. However, customer retention is a major profit driver in today's saturated market environment. In view of this, the following hypothesis is defined:

H4: There is an impact of respondents' monthly income on the frequency of unplanned purchases.

2. Research methodology

Research method and instrument. Testing of research hypotheses is based on empirical research that was conducted using the method of testing. A questionnaire structured as follows was used to gather information. First questions that were asked referred to the assessment of the frequency of motives, that is, incentives for unplanned purchases, and then questions related to the frequency of such behavior in the purchase of different product categories. At the end of the questionnaire, statements are formulated to test the occurrence and frequency of unplanned shopping behavior in relation to external factors that determine different purchasing situations (physical environment, social environment, time, sudden state of mind and specific situation when buying products/services) (Overview 1). All questions in the questionnaire are of the closed type, and the degree of the respondents' agreement with the stated statements was expressed by using the 5-Point Likert Scale, where point 1 means "completely disagree" and point 5 "completely agree".

Overview 1 Overview of statements

	Statements
Physical environment	I like to shop when there is cheerful music in the store
	I like to shop when the store is crowded
	The fragrance in the store affects my purchase
Social environment	I rather shop in a company than when I am alone
	I often shop when I am with my family
Time	I go shopping when I have free time
	I prefer to go shopping in the afternoon
	I love shopping on weekends
Sudden state of mind	When I am in a good mood, I go shopping
	Discounts in the store affect my purchase
	If I like something at first sight, I buy it without thinking
Specific situation	I like to shop while travelling
	I enjoy buying gifts

Source: The authors

Research context. The survey was conducted on the territory of Serbia. The number of distributed online questionnaires was 200, and all were completed and processed.

Sample characteristics. In the sample structure, males participated with 41.5%, while there were more females and they made up 58.5% of respondents. In terms of age, the structure of respondents was as follows: 14% were respondents under the age of 20, 42.5% were respondents aged 21 to 35, 26.5% were respondents aged between 36 and 50 and 17% who were 51 and older. In terms of status, 34% of respondents were students, the largest number or 38.5% of respondents in the sample were employed, there were 15.5% unemployed respondents, while pensioners made 12% of the sample. The structure of respondents on the basis of monthly income was as follows: 26.5% of respondents earned up to 15,000 dinars, the largest percentage, that is 40.5% of respondents belong to the group with monthly income from 15001 to 35000 dinars, 24% of respondents had monthly income from 35001 to 55000 dinars and only 9% of respondents were with 55001 and more dinars of income.

Analyses and procedures. Statistical processing and analysis of data was performed using software packages Microsoft Excel and SPSS (Statistical Package for Social Science, 21.0). From statistical analyses, appropriate descriptive measures were used, multivariate analysis of variance (MANOVA) was used, as well as analysis of variance (ANOVA). The assumptions that need to be tested in order to use ANOVA and MANOVA have been confirmed.

3. Research results

In order to test the first hypothesis, descriptive statistics were applied to analyze the frequency of occurrence of motives, i.e. incentives for unplanned purchases. Using a five-point scale of importance, respondents rated the importance of the following incentives: *product quality*, *discounts* (special discounted prices, quantity discounts, cash discounts), *other sales promotion techniques* (bonus packs, coupons, premiums) and *brand image*. The results of the analysis revealed that discounts are the most important motive for unplanned purchases, with an average score of 4.16. *Other sales promotion techniques* were ranked second by respondents with an average score of 3.85, followed by product quality with an

average score of 3.82 and brand image with the lowest average score of 3.47.

Based on the previous results in Table 1, it can be concluded that the first hypothesis that discounts are the most important motive for unplanned purchases has been confirmed.

Table 1 Descriptive measures of unplanned purchase motives

Motives	N	Mean	Std. Deviation
Product quality	200	3.82	.882
Discounts	200	4.16	.831
Other sales promotion techniques (<i>bonus packs, coupons, premiums</i>)	200	3.85	1.263
Brand image	200	3.47	1.138
Valid N (listwise)	200		

Source: Calculation by authors

The same statistical analysis was applied to test the second hypothesis, and the results are shown in Table 2.

The obtained results represent the percentage share of particular product groups. Food products have the highest percentage of 48.5%. Cosmetics and personal care products are in the second place with the share of 26%. Other data on groups of products that are purchased unplanned are shown in the table.

Taking the results below into account, it can be concluded that the second hypothesis has been confirmed. The results are justified considering that food products are bought every day, unlike other product groups, so that the probability of their unplanned purchase is higher.

Table 2 Percentage share of product groups

Product groups	Frequency	Percent	Valid Percent	Cumulative Percent
Books/magazines	7	3.5	3.5	3.5
Footwear/Clothing	27	13.5	13.5	17.0
Cosmetics/personal hygiene	52	26.0	26.0	43.0
Appliances/household devices	17	8.5	8.5	51.5
Food products	97	48.5	48.5	100.0
Total	200	100.0	100.0	

Source: The authors

Multivariate analysis of variance (MANOVA) was used to test the third hypothesis. Before testing the hypothesis, we checked the

consistency of the statements, that is, the value of the Cronbach's alpha coefficient was calculated and the obtained values for all dimensions are higher than the recommended value of 0.7 (Nunnally, 1978). The obtained results are shown in Table 3 and they present the internal consistency.

Table 3 The value of the Cronbach's alpha reliability coefficient for the scale

Variables	Cronbach's alpha
Physical environment	.764
Social environment	.873
Time	.718
Sudden state of mind	.842
Specific situation	.772

Source: The authors

The value of alpha coefficient, which is closer to 1 than to 0 for all variables, means that the applied variables have an excellent level of reliability, i.e. they are suitable for measuring the attitudes and opinions of end consumers.

Table 4 The influence of demographic and economic characteristics on the behavior of respondents in different situations of unplanned purchases

MANOVA - Wilks' Lambda						
Effect	Value	F	Hypothesis df	Error df	Sig.	Partial Eta Squared
Gender	.958	1.057a	8.000	191.000	.395	.042
Age	.622	4.074	24.000	548.759	.000	.147
Employment status	.464	5.020	32.000	694.905	.000	.174
Monthly income	.628	3.985	24.000	548.759	.000	.144

Source: Calculation by authors

The results of multivariate analysis of variance in our study indicate statistical significance in age, social status and monthly income, while in the variable Gender the results are not statistically significant.

The value of Wilks' Lambda in the variable Gender (Sig. = 0.395) is not statistically significant, i.e. there is no significant influence of gender on different situations of unplanned purchase. On the other hand, the values of the Wilks' Lambda the variable Age (Sig. = 0.000), the variable Status (Sig. = 0.000) as well as the variable Monthly income (Sig. = 0.000) are statistically significant. The results obtained in this way indicate that there is a statistically significant influence between the researched demographic and economic characteristics and the

behavior of respondents in different shopping situations (Table 5).

Table 5 MANOVA results - the influence of the age of respondents on the behavior in different situations of unplanned shopping

Source	Dependent Variable	F	Sig.	Partial Eta Sq.
Age	<i>I like to shop when the store is crowded</i>	8.079	.000	.110
	<i>When I am in a good mood, I go shopping</i>	4.255	.006	.061
	<i>If I like something at first sight, I buy it without thinking</i>	12.379	.000	.159
	<i>Discounts in the store affect my purchase</i>	8.868	.000	.120

Source: Calculation by authors

In view of the results shown in Table 5, we can conclude that there are significant age-related differences between respondents in terms of behavior in different unplanned shopping situations. The physical environment, i.e. the statement: "I like to shop when the store is crowded" mostly affects the respondents in the age group of 21 to 35 with an average score of 3.81. The remaining statements belong to sudden states of mind that lead to impulsiveness in consumer behavior. The results of our research indicate that the strongest impulsive reaction is shown by respondents aged 21 to 35 when it comes to the statements "Discounts in the store affect my purchase" with an average score of 4.33 and "If I like something at first sight, I buy without thinking" with an average score of 3.89, while the statement "When I'm in a good mood, I go shopping" mostly affects the group of respondents who are over 51 years old with an average score of 4.62.

Table 6 MANOVA results - the influence of the employment status of the respondents on the behavior in different situations of unplanned purchases

Source	Dependent Variable	F	Sig.	Partial Eta Sq.
Employment status	<i>Discounts in the store affect my purchase</i>	10.741	.000	.181
	<i>I like to shop when there is cheerful music in the store</i>	10.044	.000	.171
	<i>I go shopping when I have free time</i>	8.590	.000	.150
	<i>When I am in a good mood, I go shopping</i>	4.208	.003	.079
	<i>If I like something at first sight, I buy it without thinking</i>	13.920	.000	.222

I like to shop while travelling	5.049	.001	.094
I like to shop when the store is crowded	5.748	.000	.105

Source: Calculation by authors

Having in mind the results from Table 6, we can conclude that there is a statistically significant influence between the respondents of different employment status and their behavior in different unplanned purchasing situations. The variable: employment status is most affected by the following situations: characteristics of the physical environment, time and sudden state of mind. In particular, the physical environment: "I like to shop when there is cheerful music in the store" has the greatest impact on pensioners with an average score of 4.50, while time with the statement: "I go shopping when I have free time" most affects the group of employees with an average score of 4.17, which is a rational answer. This is consistent with the studies which proved that the frequency of unplanned purchases is higher if consumers spend more time shopping (Park et al., 2006). The specific situation, i.e. the statement "I like to shop while traveling", mostly affects the group of employees with an average score of 4.1. The remaining statements apply to sudden purchasing situations. According to the results of our research, employees react unplanned in purchases when it comes to discounts with an average score of 4.47, when they are in a good mood with an average score of 4.62 and when they buy at first sight with an average score of 3.94. The remaining groups of respondents have a lower average score according to all statements concerning unplanned reactions in case of sudden purchasing situations.

The impact of monthly income on different situations of unplanned purchases differs according to all statements, as well as with the variable: employment status. The only difference is that with this variable the statement "I like to shop when the store is crowded" has no statistically significant impact. It should be noted that the statement "I like to shop while traveling" has the greatest impact on respondents with a monthly income of 55,000 dinars and more, with an average score of 4.44. The results are justified given that respondents with higher purchasing power travel more, which increases the possibility of unplanned reactions to shopping on trips.

By analyzing the results, we can conclude that the third hypothesis is partially confirmed, since we have not proved that the variable Gender

affects behavior in different situations of unplanned purchases, while the results for the remaining variables are confirmed.

To test the fourth hypothesis, analysis of variance (ANOVA) was used. The value of Levene's test for homogeneity of variance was greater than 0.05, which means that we did not violate the assumption of variance homogeneity so we can proceed with further analysis of variance.

Table 7 ANOVA results - the impact of monthly income of the respondents to the frequency of unplanned purchases

	Sum of Squares	df	Mean Square	F	Sig.
Between Groups	41.350	3	13.783	16.370	.000
Within Groups	165.030	196	.842		
Total	206.380	199			

Source: Calculation by authors

Based on the results from Table 7, we conclude that there is a statistically significant impact of monthly income on frequency of unplanned purchases, because the obtained *p* value is less than 0.05. Further, based on the results from the ANOVA table, we can calculate the eta squared, i.e. the strength of the effect, which ranges from 0 to 1. Eta squared is calculated as the ratio between the sum of squares of the deviations of different groups (41,350) and the total sum of squares (206,380). In our case, the obtained strength of the effect is 0.2, which indicates that the effect is significant. In order to clearly determine between which groups based of monthly income there is a statistically significant difference, the Post Hoc test, that is, Tukey's HSD test was analyzed. It was found that there is a statistically significant difference between the first group of respondents (up to 15,000 RSD), and other groups related to the frequency of unplanned purchases. The results are justified considering that respondents with a monthly income amounting up to 15,000 RSD are less likely to make unplanned purchases compared to other groups of respondents with higher levels of income.

Based on the analysis of the results, we can conclude that the fourth hypothesis has been confirmed, or in other words, that monthly income has an impact on the frequency of unplanned purchases.

4. Discussion

Empirical research in this paper is aimed at identifying key determinants of unplanned purchases in the Republic of Serbia. According to the research results, discounts are the most important motive for making unplanned purchases, which confirmed the first hypothesis. Discounts are a consequence of the company's operation through various promotional activities, and sales promotion activities are one of the initiators of unplanned consumer reactions, especially of pure impulse reactions. Such results were confirmed by numerous studies (Osman et al., 2011; Tinne, 2011; Banerjee & Saha, 2012; Rittipant et al., 2013; Nagadeepa, Selvi & Pushpa 2015).

Empirical research has shown that food products are the most common group of products that are purchased unplanned. The obtained results are expected, due to both the value of these products and the characteristics of the process of their purchase. By virtue of the results obtained in this way, we confirmed the second hypothesis as well. In accordance with the above, food safety represents a current topic, with significant implications and diverse approaches within the specialized literature. In the context of globalization and integration of agricultural markets, the necessity of guaranteeing food safety is imperative for the functionality of contemporary agricultural systems

The third hypothesis was partially confirmed, considering that it has not been proven that the studied demographic characteristics of the respondents determine their behavior in different shopping situations. Differences in the gender of respondents did not show such variances. It should be pointed out that in all other researched variables of the respondents (age, employment status) a positive connection was established with the statements related to sudden situations, which means that there is an impact on unplanned consumer behavior.

Testing of the fourth hypothesis showed that monthly income influences the frequency of unplanned purchases, i.e. that the frequency of unplanned purchases increases proportionally with the growth of monthly income. It is worth noting that companies should not expect that increase in the purchasing power of consumers will be enough to achieve the desired effects. In order to succeed in this, companies must conform

their marketing strategies to different phases of the product life cycle.

Conclusion

Successful marketing strategies are based on understanding the needs, desires and behaviors of consumers. Purchases of products and services are mainly determined by planned consumer actions. However, apart from the planned purchases, there are also so-called unplanned purchases. These are the purchases that consumers do not plan before going shopping, i.e. in advance, but make them directly in the store, under the influence of certain factors. Starting from the fact that consumer behavior can be planned and unplanned, this paper is focused on the characteristics, types and frequency of unplanned purchases, as well as on their relationship with the characteristics of consumers.

Proceeding from the results of the research, the strategy of stimulating unplanned purchases should be based on the use of discounts, as well as on their combination with other means of sales promotion, especially those at the point of sale. The aim is to take advantage of the point of sale due to the potential consumer's contact with the product on the one hand and the potential consumer's personal contact with the sales staff on the other. In this respect, merchandising and organizing product demonstrations together with a number of other means in the store (shelves, printed materials, so-called wobblers, posters, demonstration cards, illuminated banners and displays) may give the desired effects. These means are aimed at drawing the attention of consumers, creating favorable conditions for attracting consumers and inducing them to purchase. The combination of product exposition, decorative elements and physical appearance, i.e. color, light, sound and video effects, should create an attractive ambience, confidence in product quality and a positive overall atmosphere in the store.

Online sales are, in the modern business environment, a significant form of stimulating unplanned purchases. Creating personalized and interactive business website and advertising sales on social networks are just some of the possibilities to stimulate purchases. E-manuals must focus on creating a hedonistic experience of consumers (Park, Kim, Funches & Foxx, 2011). Strategies that have already been intensively applied by companies to stimulate online

shopping are based on attractive prices (lower than in offline sales), cross-selling, giving away gifts with the purchased product in order to tie the consumer to the brand and to increase sales.

According to the results of research which showed that food products are most often bought unplanned, the strategy of developing their online purchase should focus on spreading sensory experiences and positive recommendations and on developing a positive atmosphere during their consumption. An interactive presentation based on the use of tools that provide this option, such as chatbots or virtual assistants, can produce the desired effects.

In our study, we did not prove that gender as a demographic variable affects unplanned purchases. However, as we have already pointed out that there are different results regarding the unplanned reaction in purchases in relation to gender, our proposal is that companies should, accordingly, adapt to the differences in the behavior of men and women by applying content personalization. This strategy also proves rational when it comes to different age groups of consumers and their economic strength.

Coverage and size of the sample are the most important limitations of empirical research. Moreover, the paper discussed product groups, but not individual products and brands. In other words, it will depend on the price category to which a certain product/brand belongs, i.e. on its value, whether it will be purchased unplanned. Despite all the above limitations of this preliminary research, it is important because certain conclusions that can be drawn in conformity with it may represent a starting point in considering new market challenges. **SM**

References

- Amos, C., Holmes, G.R., & Keneson, W.C. (2014). A meta-analysis of consumer impulse buying. *Journal of Retailing and Consumer Services*, 21 (2), 86-97. <https://doi.org/10.1016/j.jretconser.2013.11.004>
- Assael, H. (1998). *Consumer Behaviour and Marketing Action*, Cincinnati, Ohio: Western Publishing College.
- Aydinli, A., Bertine, M., & Lambrecht, A. (2014). Price promotion for emotional impact. *Journal of Marketing*, 78(4), 80–96. <https://doi.org/10.1509/jm.12.0338>
- Alimpić, S. Perić, N. (2019). Različiti oblici impulsivnog ponašanja potrošača. *Anali Ekonomskog fakulteta u Subotici*, 55(42), 049-063 <https://doi.org/10.5937/AnEkSub1942049A>
- Banerjee, S., & Saha, S. (2012). Impulse buying behaviour in retail stores - triggering the senses. *Asia Pacific Journal of Marketing & Management Review*, 1(2), 1-21.
- Beatty, S. E., & Ferrell, M. E. (1998). Impulse buying: Modeling its precursors. *Journal of Retailing*, 74(2), 169-191. [https://doi.org/10.1016/S0022-4359\(99\)80092-X](https://doi.org/10.1016/S0022-4359(99)80092-X)
- Bell, D., Corsten, D., & Knox, J. (2011). From point of purchase to path to purchase: How preshopping factors drive unplanned buying. *Journal of Marketing*, 75(1), 31–45. <https://doi.org/10.1509/jm.75.1.31>
- Berry, L. L., Seiders, K., & Grewal, D. (2002). Understanding service convenience. *Journal of Marketing*, 66(3), 1–17. <https://doi.org/10.1509/jmkq.66.3.1.18505>
- Chamorro-Premuzic, T. (2015). The Psychology of Impulsive Shopping. *The Guardian*, November 26
- Coley, A., & Burgess, B. (2003). Gender differences in cognitive and affective impulse buying. *Journal of Fashion Marketing and Management: An International Journal*, 7(3), 282-295. <https://doi.org/10.1108/13612020310484834>
- Crawford, G., & Melewar, T. C. (2003). The importance of impulse purchasing behavior in the international airport environment. *Journal of Consumer Behavior*, 3(1), 85-98. <https://doi.org/10.1002/cb.124>
- Dholakia, U. M. (2000). Temptation and resistance: an integrated model of consumption impulse formation and enactment. *Psychology & Marketing*, 17(11), 955-982. [https://doi.org/10.1002/1520-6793\(200011\)17:11<955::AID-MAR3>3.0.CO;2-J](https://doi.org/10.1002/1520-6793(200011)17:11<955::AID-MAR3>3.0.CO;2-J)
- Ek Styvén, M., Foster, T., & Wallström, Å. (2017). Impulse buying tendencies among online shoppers in Sweden. *Journal of Research in Interactive Marketing*, 11(4), 416-431. <https://doi.org/10.1108/JRIM-05-2016-0054>
- Evans, J. R., & Berman, B. (1997). *Marketing*, 7th edition, New York: Macmillan Publishing Company.
- Ghani, U., Imran, M., & Jan, F. A. (2011). The impact of demographic characteristics on impulse Buying behavior of urban consumers in Peshawar. *International Journal of Academic Research*, 3(5), 286-289.
- Hawkins, I. D., & Mothersbaugh, L. D. (2010). *Consumer Behavior Building Marketing Strategy*, New Jersey: Prentice-Hall, Inc.
- Heilman, C. M., Nakamoto, K., & Rao, A. G. (2002). Pleasant Surprises: Consumer Response to Unexpected In-Store Coupons. *Journal of Marketing Research*, 39(2), 242–252. <https://doi.org/10.1509/jmkr.39.2.242.19081>
- Herabadi, A. G., Verplanken, B., & Van Knippenberg, A. (2009). Consumption experience of impulse buying in Indonesia: Emotional arousal and hedonistic considerations. *Asian Journal of Social Psychology*, 12(1), 20-31. <https://doi.org/10.1111/j.1467-839X.2008.01266.x>
- Hoch, S. J., & Loewenstein, G. F. (1991). Time-inconsistent preferences and consumer self-control. *Journal of Consumer Research*, 17(4), 492-507. <https://doi.org/10.1086/208573>
- Inman, J. J., Winer, R. S., & Ferraro, R. (2009). The interplay among category characteristics, customer characteristics, and customer activities on in-store decision making. *Journal of Marketing*, 73(5), 19–29. <https://doi.org/10.1509/jmkq.73.5.19>

- Jalees, T. (2009). *An Empirical Analysis of Impulsive Buying Behavior in Pakistan*. *International Review of Business Research Papers*, 5(6), 298-308.
- Jobber, D., & Fahy, J. (2006). *Osnovi marketinga (drugo izdanje)*, Beograd: Data Status.
- Kacen, J. J., Hess, J. D., & Walker, D. (2012). Spontaneous selection: The influence of product and retailing factors on consumer impulse purchases. *Journal of Retailing and Consumer Services*, 19(6), 578-588. <https://doi.org/10.1016/j.jretconser.2012.07.003>
- Kumar, R. (2007). *Marketing and Branding: Indian Scenario*. Pearson Education, 325-326.
- Lee, L., & Ariely, D. (2006). Shopping Goals, Goal Concreteness, and Conditional Promotions. *Journal of Consumer Research*, 33(1), 60-70. <https://doi.org/10.1086/504136>
- Littrel, M., Paige, R., & Song, K. (2004). Senior Travelers: Tourism Activities and Shopping Behaviours. *Journal of Vacation Marketing*, 10(4), 348-62. <https://doi.org/10.1177/135676670401000406>
- Luo, X. (2005). How does shopping with others influence impulsive purchasing. *Journal of Consumer Psychology*, 15(4), 288-294. https://doi.org/10.1207/s15327663jcp1504_3
- MacInnis, D. J., & Patrick, V. M. (2006). Spotlight on affect: Affect and affective forecasting in impulse control. *Journal of Consumer Psychology*, 16(3), 224-231. https://doi.org/10.1207/s15327663jcp1603_4
- Mai, N.T.T., Jung, K., Lantz, G., & Loeb, S. G. (2003). An Exploratory Investigation into Impulse Buying Behavior in a Transitional Economy: A Study of Urban Consumers in Vietnam. *Journal of International Marketing*, 11(2), 13-35. <https://doi.org/10.1509/jimk.11.2.13.20162>
- Maričić, B. (2010). *Ponašanje potrošača* (deveto izdanje), Beograd: Ekonomski fakultet.
- Mattila, A. S., & Wirtz, J. (2008). The role of store environmental stimulation and social factors on impulse purchasing. *Journal of Services Marketing*, 22(7), 562-567. <https://doi.org/10.1108/08876040810909686>
- Mitchell V. W., & Walsh, G. (2004). Gender Differences in German Consumer Decision-making Styles. *Journal of Consumer Behaviour*, 3(4), 331-46. <https://doi.org/10.1002/cb.146>
- Mohan, G., Sivakumaran, B., & Sharma, P. (2013). Impact of store environment on impulse buying behavior. *European Journal of Marketing*, 47(10), 1711-1732. <https://doi.org/10.1108/EJM-03-2011-0110>
- Nagadeepa, C., Selvi, T. J., & Pushpa, A. (2015). Impact of Sales Promotion Techniques on Consumers' Impulse Buying Behaviour towards Apparels at Bangalore. *Asian Journal of Management Sciences & Education*, 4(1), pp. 116-124.
- Nunnally, J.C. (1978) *Psychometric theory*. 2nd Edition, New York: McGraw-Hill
- Osman, S., Fah, B. C. Y., & Foon, Y. S. (2011). Simulation of Sales Promotions towards Buying Behavior among University Students. *International Journal of Marketing Studies*, 3(3), 78-88. <https://doi.org/10.5539/ijms.v3n3p78>
- Park, E. J., Kim, E. Y., & Forney, J. C. (2006). A structural model of fashion-oriented impulse buying behavior. *Journal of Fashion Marketing and Management*, 10(4), 433-446. <https://doi.org/10.1108/13612020610701965>
- Park, E. J., Kim, E. Y., Funches, V. M., & Foxx, W. (2011). Apparel product attributes, web browsing, and e-impulse buying on shopping websites. *Journal of Business Research*, 65(11), 1583-1589. <https://doi.org/10.1016/j.jbusres.2011.02.043>
- Peter, J. C., & Olson, C. J. (2010). *Consumer Behavior and Marketing Strategy*. New York: McGraw-Hill/Irwin.
- Priyanka, V., & Rooble, V. (2012). An on-field-survey of the impulse buying behavior of consumers in consumer non-durable sectors in the retail outlets in the city of Indore, India. *Research Journal of Management Sciences*, 1(4), 1-5.
- Rittipant, N., Kheawwilai, D., Suayngam, N., Promsoot, S., & Vivatanaprasert, T. (2013). *Thai Consumers Response to Sales Promotions for Personal Care Products*. Proceedings of the 4th International Conference on Engineering, Project and Production Management, 700-709. <https://doi.org/10.32738/CEPPM.201310.0063>
- Schiffman, L.G., & Kanuk, L.L. (2007). *Consumer Behavior 9th edn.*, New Jersey: Prentice Hall.
- Shapiro, J. M. (1992). Impulse buying: A new framework. *Developments in Marketing Science*, 15, 76-80. https://doi.org/10.1007/978-3-319-13248-8_16
- Sneath, J. Z., Lacey, R., & Kennett-Hensel, P. A. (2009). Coping with a natural disaster: Losses, emotions, and impulsive and compulsive buying. *Marketing Letters*, 20(1), 45-60. <https://doi.org/10.1007/s11002-008-9049-y>
- Solomon, R. M. (2009). *Consumer Behaviour: Buying, Having, and Being* (8th ed.). New Jersey: Pearson Education.
- Stilley, K. M., Inman, J. J., & Wakefield, K. L. (2010). Spending on the Fly: Mental Budgets, Promotions, and Spending Behavior. *Journal of Marketing*, 74(3), 34-47. <https://doi.org/10.1509/jmkg.74.3.34>
- Tinne, S. W. (2011). Factors Affecting Impulse Buying Behavior of Consumers at Superstores in Bangladesh. *ASA University Review*, 5(1), 209-20.
- Verplanken, B., & Herabadi, A. (2001). Individual differences in impulse buying tendency: feeling and no thinking. *European Journal of Personality*, 15(S1), S71-S83. <https://doi.org/10.1002/per.423>
- Verplanken, B., & Sato, A. (2011). The psychology of impulse buying: An integrative self-regulation approach. *Journal of Consumer Policy*, 34(2), 197-210. <https://doi.org/10.1007/s10603-011-9158-5>
- Virvilaite, R., Saladiene, V., & Bagdonaite, R. (2009). Peculiarities of impulsive purchasing in the market of consumer goods. *Commerce of Engineering Decisions*, 2, 101-108.
- Wood, M. (2005). Discretionary Unplanned Buying in Consumer Society. *Journal of Consumer Behavior*, 4(4), 268-81. <https://doi.org/10.1002/cb.14>

Xu, Y. (2007). Impact of Store Environment on Adult Generation Y Consumers' Impulse Buying. *Journal of Shopping Center Research*, 14(1), 39-56.

Yu, C., & Bastin, M. (2010). Hedonic shopping value and impulse buying behavior in transitional economies: Asymbiosis in the Mainland China marketplace. *Journal of Brand Management*, 18(2), 105-114. <https://doi.org/10.1057/bm.2010.32>

✉ Correspondence

Suzana Đukić

Faculty of Economy, University of Niš
Trg kralja Aleksandra Ujedinitelja 11, 18105, Niš, Serbia
E-mail: suzana.djukic@m.ekonomski.rs

The impact of prospecting strategy on small business performance in Vietnam: the role of broad-scope management accounting system

Quang-Huy Ngo

Industrial Management Faculty, Cantho University of Technology, Cantho, Vietnam

Abstract

The purpose of this study is to uncover the role of broad-scope management accounting system (MAS) on the link between prospecting strategy and the performance of small businesses. In particular, this paper hypothesizes that a high degree of prospecting strategy is positively associated with a high degree of broad-scope MAS, and a high degree of broad-scope MAS is correlated with a high degree of performance of small businesses. Also, it is hypothesized that prospecting strategy increases the performance of small businesses. The last hypothesis proposes that broad-scope MAS mediates the link between prospecting strategy and the performance of small businesses. Data was collected from 131 small businesses located in Cantho city to assess the proposed hypothesis. A PLS-SEM was analyzed with the collected data. The results reveal that all hypotheses are supported by the data except the hypothesis describing the relationship between prospecting strategy and the performance of small businesses. It implies that broad-scope MAS fully mediates the link between these two variables.

Keywords

broad-scope MAS, performance, prospector, strategy, Vietnam, small business

Introduction

Since the introduction of "Doi Moi" (Renovation), the Vietnamese economy has transformed dramatically. This policy's central theme is to transform the economy from a central planning economy to a socialist-oriented market economy (Irvin, 1995). Such an approach has a substantial impact on the Vietnamese social-economy. The private sector, particularly small businesses, is one of the fastest-growing sections in the Vietnamese economy because of some benefits gained from this policy (see Freeman, 1996; Hansen et al., 2009).

Although the fast-growing small business sector plays a more crucial role in the economy, their management practices are not well understood. In the strategic literature on small business, it is proposed that strategy has an impact

on performance (Blackburn et al., 2013). Although most of Vietnamese research focuses on large businesses, a lack of attention has been paid to small businesses. As such, this limits our knowledge of how strategic choice influences the performance of small businesses. Besides, Chong and Chong (1997) found that the positive impact of strategy on performance is indirect through a management accounting system (MAS) when they examined the role of MAS in strategic business units. Gul et al. (1993) found that MAS allows business owners to improve performance. In summary, it is expected that MAS may impact the relationship between strategy and performance.

Thus, this study's purpose is to address the role of MAS on the relationship between strategy and performance of small businesses in Vietnam. More specifically, this study proposes that businesses following this prospecting strategy are

more likely to demand more broad-scope MAS and, as such, achieve a high degree of performance. Besides, this study proposes that the positive effects of strategy on performance are indirect through broad-scope MAS. Specifically, this indirect effect is mediated by broad-scope MAS on the link between prospecting strategy and performance.

The structure of this paper is outlined as follows. The next section is the provision of the literature review and developments of the hypothesis. After that, the methodology is introduced. In the next section, results and discussion are described. The last section concludes and indicates limitations as well as suggestions for future studies.

1. Literature review and hypothesis development

1.1. Literature review

1.1.1. Strategic types

Miles and Snow (1978) argue that there are four types of strategies, including prospectors, defenders, analyzers, and reactors. Four strategic types are usually examined along the continuum of defender and prospector because it is assumed that the analyzers are the results of a hybrid strategy, which is the combination of analyzers and defenders. The reactors are believed to have no strategy due to their reactions based on market environments (Kald et al., 2000). On the one hand, prospectors provide products or services to meet customers' demands by enhancing customers' experiences of the products and services' features, functionality, uniqueness, and responsiveness. Thus, the biggest concern of the organization following such a strategy is to collect data regarding customers' demands and market trends (Govindarajan, 1986). In contrast, defenders focus on the provision of products and services with high quality and low cost. In this way, this strategy allows organizations to maintain their market shares through the improvement of operational efficiency. Thus, this strategy requires more information for efficiency improvement, such as costs (Govindarajan, 1986).

1.1.2. MAS and its effectiveness

MAS is commonly referred to as the system providing information for decision-making. In academic terminology, this system refers to the systematic use of management accounting

practices, which are designed to enhance the effectiveness of the decision-making process. Thus, this use allows the achievement of organizational goals (Chenhall, 2003). Studies on MAS focus only on financial and internal-oriented data (Rasid et al., 2014). However, the modern theme in management accounting indicates this system provides not only financial data but also non-financial data as well as data related to external environments (Soobaroyen & Poorundersing, 2008).

One of MAS's crucial characteristics is broad-scope MAS, which has received much attention from researchers in the management accounting fields. Broad-scope MAS provides information covering external, non-financial, and future-oriented data (Chenhall, 2003; Soobaroyen & Poorundersing, 2008). In contrast, narrow-scope MAS provides information relating only to financial, historical, and internal-oriented data (Tillema, 2005). It is suggested that modern MAS is associated with broad-scope characteristics, while traditional MAS is correlated with narrow-scope characteristics (Chong & Eggleton, 2003).

The dominant research theme on MAS is to examine how MAS enhances performance (Henri, 2004; Hoque, 2004). Previous studies reveal that broad-scope MAS has a positive association with performance (Chong & Chong, 1997; Ghasemi et al., 2016; Ghasemi et al., 2019; Hammad et al., 2013; Soobaroyen & Poorundersing, 2008). On the same lines with previous studies, this paper expects the same effects, which broad-scope MAS induces small business performance.

1.1.3. Contingency theory in management accounting

Emmanuel et al. (1990) argue that one crucial notion of contingency-based research is to examine the fit between contextual factors and MAS because this fit allows a high degree of effectiveness. Contingency-based theorists suggest that strategy is an essential contextual, which should be considered when examining how MAS fosters performance (Chenhall, 2003; Gerdin & Greve, 2004; Hayes, 1977; Otley, 2016; Waterhouse & Tiessen, 1978). In line with this suggestion, this study proposed the following hypotheses.

1.2. Hypothesis developments

1.2.1. The link between prospecting strategy and broad-scope MAS

Managers in prospecting organizations are more likely to require more information regarding external environments. Organizations following this strategy to attempt to become pioneers in the market through research and development (Hambrick, 1982). Prospectors continually focus on developing new techniques and shaping their products/services domain in line with customers' demands (Govindarajan, 1988; Miles & Snow, 1978). As a result, it is suggested that information focusing on external environments is critical for them to deliver their products/services to customers (Ewusi-Mensah, 1981). Thus, information as non-financial and future-orientated data is useful to these prospectors (Abernethy & Guthrie, 1994; Chong & Chong, 1997).

Management accounting literature provides more insight into why prospectors require broad-scope MAS. When an organization follows a prospecting strategy, managers are more likely to work under high uncertainty (Andrews, 2008; Hoque, 2004). Management accounting theorists strongly suggest that when uncertainty is high, managers find a sophisticated design of MAS to be useful, because it allows them to reduce the degree of uncertainty, and, as such, improves their performance (Agbejule, 2005; Gul, 1991; Gul & Chia, 1994; Hammad et al., 2013). Chong and Chong (1997) found that when a strategic business unit follows a prospecting strategy, the managers use more broad-scope MAS. Thus, in the same vein, this paper expects the prospecting strategy managers working at Vietnamese public hospitals to use more broad-scope MAS. The first hypothesis is proposed as follows.

H1: A high degree of prospecting strategy is positively associated with a high degree of broad-scope MAS.

1.2.2. The link between broad-scope MAS and small business performance

MAS allows organizations to improve their performance by information provision. In a specific way, it is argued that organizations need to scan and monitor the external environments regarding the thread of potentials as well as current competitions, powers of suppliers, and demands of customers to gain competitive advantage, and as such allows the organizations to survive in a competitive market (Porter, 1985). As

broad-scope MAS provides information relating to dimension focus, future orientation, and non-financial data (Chenhall & Morris, 1986), this type of information may allow these businesses to improve performance. For example, organizations can gain competitive advantages by using the information to scan and monitor competitors' actions, gain insights into customers' needs, and reduce suppliers' bargaining power (Johnston & Vitale, 1988; Porter & Millar, 1985). As a consequence, the enhancement of competitive advantages leads to an increase in market shares. Because it is argued that the enhancement of market share is the key indicator of long-term profitability (Pogue, 1990), it is expected that broad-scope MAS induces organizational performance.

In the same vein, this paper expects the same effects on small businesses. Mainly, broad-scope MAS allows for the improvement of organizational performance as small business performance. It is suggested that management accounting information enhances performance through feedback improvements (see Otley, 1999; Sprinkle, 2000). Feedback is proposed in assisting owners in improving performance in the extent to which it allows the high use of relevant information to identify and correct errors as well as reduction of task uncertainty (see Vroom, 1964). Similarly, it is argued that the use of broad-scope MAS induces high identifications and corrections of errors and reduction of task uncertainty, and in turn, leads to improvement of performance (see Mia & Clarke, 1999). Hence, the second hypothesis is proposed as followed.

H2: A high degree of broad-scope MAS is positively associated with a high degree of small business performance.

1.2.3. The link between strategy and small business performance

The choice of a prospecting strategy may allow high organizational performance. Characteristics found in prospecting strategy drive small businesses to continuously reshape the market, adapt, and apply new technology and management practices to gain competitive advantages. As a result, Miles and Snow (1978) propose that prospecting strategy allows high performance. Moore (2005) and Naranjo-Gil (2004) found a significant positive relationship between these two variables. Similarly, this paper expects a similar effect, in which prospecting strategy increases

small business performance. Thus, the third hypothesis is proposed as followed.

H3: A high degree of prospecting strategy is positively associated with a high degree of small business' performance.

1.2.4. Broad-scope MAS is the mediator between prospecting strategy and small business performance

Contingency-based theorists suggest that broad-scope MAS is a mediator between contextual factors and performance. Notably, a MAS should be designed according to the organizations' contexts to enhance performance (Bruns & Waterhouse, 1975). Instead, its design should be design to be "fit" with contextual factors as a strategy (Gordon & Miller, 1976; Otley, 1980; Waterhouse & Tiessen, 1978). The term "fit" is the most concerned in the contingency-based studies. It is suggested that the form of fits can be investigated by considering MAS as a mediator (Gerdin & Greve, 2004). More specifically, they argue that when contextual variables correlate with one of MAS, and it correlates with the dependent variable as performance, cartesian-contingency mediation represents the form of fits. Following this suggestion, this paper proposes the fourth hypothesis as followed.

H4: Broad-scope MAS is the mediator between prospecting strategy and small business performance.

2. Method

2.1. Data collection

A convenience sampling technique was used to collect data. Data was collected by sending a survey to target respondents having their own business in Cantho city. This study takes into account four criteria for selections. First, these small businesses operate in manufacturing areas because the high demands of information for decision-making drives these businesses to adopt MAS. Second, this business's labor is between 10 and 100 employees, which is sufficient for small businesses. Third, these businesses have operated for more than three years to guarantee that MAS is available in these businesses. Fourth, the respondents are the owners of the business to ensure that they can use MAS for decision-making to find performance improvement.

The process of sending consists of two phrases. First of all, the list of email addresses of business was obtained from the small business

associations of Cantho city. This list contains 1,000 email addresses. Second, an email, which consists of an invitation letter and the link to access the online survey, was sent to the target emails. After four weeks, 143 respondents agreed to participate in the research by filling the survey. Among these, 131 observation was used to analyze, and the rest was removed, because the majority of empty values exists in the survey, and the respondents, who filled the survey, are not the owners. In total, the respondents' rate of this study is 13.1%.

2.2. Measures

2.2.1. Prospecting strategy (PROS)

The prospecting strategy is measured by adopting an instrument from Moore (2005). This instrument consists of 6 items. Some modifications were made before sending out to the respondents due to the original instruments used in the retailing context. This instrument asks respondents to indicate their agreement regarding the statements which best describe their business' behavior. A 5-point Likert scale, ranging from (1) highly disagree to (5) highly agree, was used to measure the degree to which respondents agree with the statements.

2.2.2. Broad-scope MAS (MAS)

An instrument from the study of Chenhall and Morris (1986) was measured in this variable. This instrument consists of 5 items. This instrument was used in several contexts, including hospitals (Hammad et al., 2013), financial institutes (Ghasemi et al., 2016), and manufacturing companies (Soobaroyen & Poorundersing, 2008), and as a result, it poses high reliability. A 5-point Likert scale, ranging from (1) highly disagree to (5) highly agree, was used to measure the degree to which respondents use the information for decision-making.

2.2.3. Small business performance (PER)

Commonly, some financial indicators such as ROA and ROS are used to measure small business performance. However, such use creates a bias in measuring small business performance due to short reflections of actual performance. It is shown that the owners of this business consider non-financial indicators as well as financial indicators as a part of small business performance because the owners emphasize not only profitability but also other targets relating to

business goals (Jarvis et al., 2000). As a result, measuring this kind of performance should be appropriate by asking the owners to rate their performance base on their target attainments.

An instrument was adopted from Cadez and Guilding (2008) with minor modifications made to measure small business performance. In this instrument, respondents are asked to indicate their agreement in the extent to which their business attain some targets related to return on investment, the margin on sales, capacity utilization, customer satisfaction, product/service quality, the introduction of new products/services, and market share. A 5-point Likert scale, ranging from (1) – well below average – to (5) – well above average, was used to measure this instrument.

3. Results

3.1. Hypothesis testing

This study uses SmartPLS version 3.2.7, a PLS-SEM tool, to test the proposed model. The psychometric properties of the measurement model were examined first, and the structural model's estimation was assessed later.

3.1.1. Measurement models

Examining the measurement model consists of two steps. In the first step, the unidimensionality of all of the constructs was assessed by the conduction of principal axis factoring with Oblimin rotation (see Fabrigar et al., 1999). The result reveals that the number of intended items having loading higher than 0.5 correspond to three factors, which its eigenvalue is more than 1.

The second step is to examine the convergent validity, discriminant validity, and internal consistency of items as well as the multicollinearity among these items. Table 1 suggests a sufficient degree of convergent validity due to three conditions (Fornell & Larcker, 1981). First, the average variance extracted (AVE) value higher than 0.5. Second, each item's outer loadings on its respective construct are higher than other cross-loadings on other constructs. Third, items' outer-loading on its respective constructs is higher than 0.5 (Fornell & Larcker, 1981) (Fornell & Larcker, 1981) (Fornell & Larcker, 1981) (Fornell & Larcker, 1981) (Fornell & Larcker, 1981). Besides, internal consistency is well established because The CR scores and Cronbach's Alpha are necessarily higher than the 0.70 threshold value (Hair et al., 2011). Also, the VIFs of each item is less than the threshold value of 5, which indicates an absence of multicollinearity (Hair et al., 2011).

Table 1 Validity of measurement models

	Cronbach's Alpha	CR	AVE		1	2	3
MAS	0.808	0.874	0.635	0.797	0.797		
PERF	0.841	0.879	0.519	0.720	0.314	0.720	
PROS	0.840	0.882	0.557	0.762	0.412	0.245	0.762

Source: Outputs from the SmartPLS analysis

3.1.2. Structural model

Hair et al. (2011) suggested that assessing the statistical significance of the parameter estimates examines through a bootstrapping procedure with 5,000 replacements. It is also required that the assessment of multicollinearity between latent variables, the predictive validity of the parameter estimates as well as predictive power before assessing the significance of the hypothesized paths must be made. The results reveal the absence of multicollinearity between the latent variable due to the VIF of each latent less threshold value of 5 (Hair et al., 2011). The parameter estimates' predictive validity is valid because the Stone-Geisser Q^2 value (Geisser, 1974; Stone, 1974) is larger than zero (Chin,

1998; Hair et al., 2011). Besides, the predictive power of the path is also assessed by examining the R^2 value. Thus, it is safe to examine the significance of the hypothesized paths.

The results indicate there is a positive association between prospecting strategy and broad-scope MAS ($\beta=0.412$, $p<0.001$). Thus, it supports the hypothesis H1. Besides, the results show that broad-scope MAS is significantly and positively associated with small business performance ($\beta=0.257$, $p=0.011$), and therefore hypothesis H2 is supported. Finally, the relationship between prospecting strategy and performance is insignificant ($\beta=0.139$, $p=0.207$), and as such, it rejects hypothesis H3.

The hypothesis H4 requires the assessment of mediation. This study follows the suggestions

described by Zhao et al. (2010) to assess the mediating hypothesis. A bootstrapping procedure with 5,000 replacement was used to assess the mediating hypothesis (Hair et al., 2017). The estimation of indirect effects requires the assessment of their significances and examination of their confidence intervals (Preacher & Hayes, 2008).

Table 2 R2, R2 adjusted, and Q2

	R ²	R ² adjusted	Q ²
MAS	0.170	0.163	0.096
PERF	0.115	0.101	0.046
PROS			

Source: Outputs from the SmartPLS analysis

4. Discussion

This paper is consistent with previous studies fourfold. First, regarding the path between prospecting strategy and broad-scope MAS, the results reveal a significant positive relationship between these two variables. It is in line with Chong and Chong (1997). They found that strategic business units following prospecting strategy require broad-scope MAS to improve managerial decision-making effectiveness. Similarly, Naranjo-Gil (2004) found that public hospital in Spain, which have an orientation to prospecting strategy, design their MAS sophisticatedly in the extent to which this system provides broad-scope MAS information.

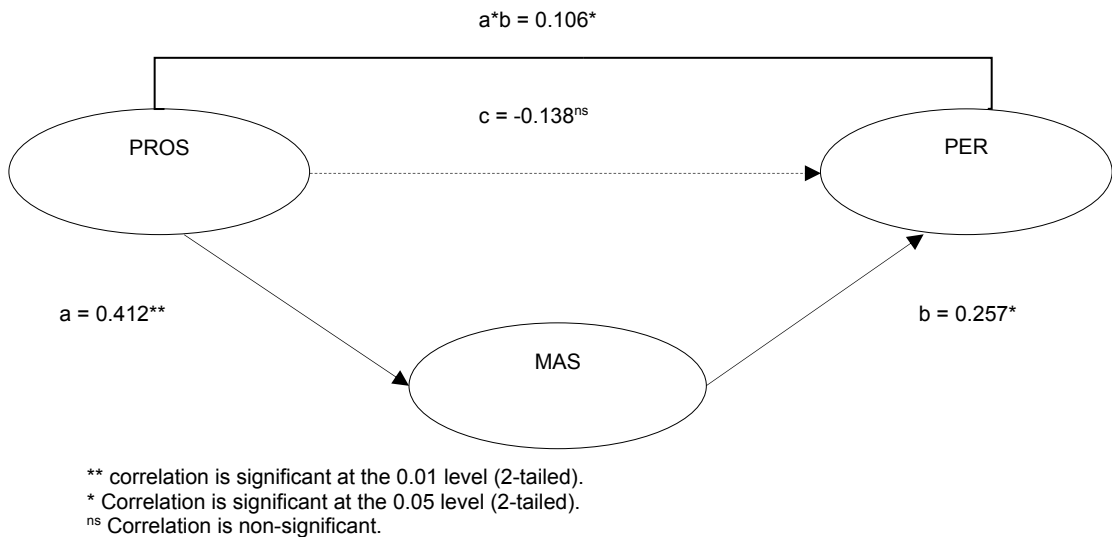


Figure 1 Results of structural model
Source: Author's source

The results reveal a significant correlation between prospecting strategy and broad-scope MAS ($a=0.412, p<0.001$) as well as broad-scope MAS and performance ($b=0.257, p=0.011$). Besides, the results show that the indirect effect (PROS -> MAS -> PER) is significant ($a*b=0.106, p=0.025$), and its confidence interval is from a lower bound of 0.023 to an upper bound of 0.210, indicating the exclusion of zero. Hence, this confirms that broad-scope MAS is the mediator between prospecting strategy and the performance of small businesses. Moreover, the results also reveal that the insignificant direct effects between prospector strategy and performance ($c=-0.138, p=0.232$) when two other paths are in the model. Hence, it supports the full mediating effects of MAS.

Second, with respect to the path between broad-scope MAS and performance, the results are in line with previous studies. At an individual level, Ghasemi et al. (2016), Ghasemi et al. (2019), and Hammad et al. (2013) established that broad-scope MAS allows managers to improve their performance effectively. Chong and Chong (1997) found a positive relationship between broad-scope MAS and strategic business performance at the business unit level. In the same vein, this study shows that broad-scope MAS positively correlated with small business performance.

Third, relating to the insignificant path between prospecting strategy and small business performance, this study is in line with Chong and Chong (1997). More specifically, they found an insignificant relationship between prospecting

strategy and strategic business units' performance when controlling for the path between prospecting strategy and broad-scope MAS and the path between broad-scope MAS and the performance of these units. They argued that the effects of prospecting strategy on performance are indirect rather than direct because broad-scope MAS fosters intervening (or mediating) effects on the relationship between strategic choices of prospector and the performance of strategic business units. Thus, the results of this study support this argument.

Fourth, the results are also in line with previous studies, which examines whether or not MAS is the mediator between contextual factors and performance. Ghasemi et al. (2016) found the mediating effects of broad-scope MAS on the relationship between market competition and managerial performance. Similarly, Ghasemi et al. (2019) found that broad-scope MAS mediates the link between technology and managerial performance. In the same way, this study shows a mediating impact of broad-scope MAS on the link between prospecting strategy and small business performance.

Conclusion

This study aims to uncover the role of broad-scope MAS on the link between prospecting strategy and performance of small businesses in Vietnam. This paper proposes that prospecting strategy is positively associated with broad-scope MAS and the performance of small businesses in Vietnam. Also, it is proposed that high broad-scope MAS is positively correlated with a high performance of small businesses. Besides, this paper proposes that broad-scope MAS is the mediators between prospecting strategy and performance. The results provide empirical evidence supporting these hypotheses except the link between prospecting strategy and performance. Hence, this paper is in line with Chong and Chong (1997), who revealed that only the fit between strategy and MAS fosters organizational performance.

Similar to any research, the results of this study should be interpreted with some little concerns. First, it is necessary to generalize the results with care due to only small businesses located in Cantho city. Second, this paper also subjects to the limitations of small sample sizes and low response rates.

Despite some limitations, this study provides a enrich avenue for future studies. First, future

studies should replicate this study by collecting the data in other areas of Vietnam. Second, future studies should take into account other characteristics of MAS, such as timely, integration, and aggregation, because this study only examines broad-scope MAS. By doing so, the future study can investigate the fit between strategy and these characteristics and gain insight into how and why this fit induces performance. Third, it is suggested that the development of regions may impact small businesses (see Chivu, 2019). Therefore, the differentiation in the development influences the strategic choice. Future studies may replicate this study in the underdeveloped area of Vietnam to examine the validity of this model. Fourth, it is revealed that dynamic capability is crucial to organizations (Kareem & Alameer, 2019). Thus, future studies should include this variable in this model to gain more insight into the role of capabilities on strategic choices' effectiveness. Last but not least, it is also shown that open innovation is critical to small and medium businesses (Janković & Golubović, 2019). Therefore, future studies can extend this model by examining whether or not the fit between open innovation and prospecting strategy leads to higher performance of small businesses because prospecting strategy emphasizes innovation to find performance implication.

References

- Abernethy, M. A., & Guthrie, C. H. (1994). An empirical assessment of the "fit" between strategy and management information system design. *Accounting & Finance*, 34(2), 49-66. <https://doi.org/10.1111/j.1467-629X.1994.tb00269.x>
- Agejule, A. (2005). The relationship between management accounting systems and perceived environmental uncertainty on managerial performance: a research note. *Accounting and Business Research*, 35(4), 295-305. <https://doi.org/10.1080/00014788.2005.9729996>
- Andrews, R. (2008). Perceived environmental uncertainty in public organizations: An empirical exploration. *Public Performance & Management Review*, 32(1), 25-50. <http://dx.doi.org/10.2753/PMR1530-9576320102>
- Blackburn, R. A., Hart, M., & Wainwright, T. (2013). Small business performance: business, strategy and owner-manager characteristics. *Journal of small business and enterprise development*, 20(1), <https://doi.org/10.1108/14626001311298394>
- Bruns, W. J., & Waterhouse, J. H. (1975). Budgetary control and organization structure. *Journal of Accounting Research*, 13(2), 177-203. <https://doi.org/10.2307/2490360>

- Cadez, S., & Guilding, C. (2008). An exploratory investigation of an integrated contingency model of strategic management accounting. *Accounting, organizations and society*, 33(7-8), 836-863. doi:<https://doi.org/10.1016/j.aos.2008.01.003>
- Chenhall, R. H. (2003). Management control systems design within its organizational context: findings from contingency-based research and directions for the future. *Accounting, organizations and society*, 28(2-3), 127-168. [https://doi.org/10.1016/S0361-3682\(01\)00027-7](https://doi.org/10.1016/S0361-3682(01)00027-7)
- Chenhall, R. H., & Morris, D. (1986). The impact of structure, environment, and interdependence on the perceived usefulness of management accounting systems. *Accounting Review*, 61(1), 16-35.
- Chin, W. W. (1998). The partial least squares approach to structural equation modeling. *Modern methods for business research*, 295(2), 295-336.
- Chivu, L. (2019). Local entrepreneurship and social services in Romania. Territorial analysis. *European Research on Management and Business Economics*, 25(2), 79-86. <https://doi.org/10.1016/j.iedeen.2019.04.001>
- Chong, V. K., & Chong, K. M. (1997). Strategic choices, environmental uncertainty and SBU performance: a note on the intervening role of management accounting systems. *Accounting and Business Research*, 27(4), 268-276. <https://doi.org/10.1080/00014788.1997.9729553>
- Chong, V. K., & Eggleton, I. R. (2003). The decision-facilitating role of management accounting systems on managerial performance: the influence of locus of control and task uncertainty. *Advances in Accounting*, 20, 165-197. [https://doi.org/10.1016/S0882-6110\(03\)20008-0](https://doi.org/10.1016/S0882-6110(03)20008-0)
- Emmanuel C., Otley D., Merchant K. (1990) *Accounting for Management Control*. Springer. https://doi.org/10.1007/978-1-4899-6952-1_13
- Ewusi-Mensah, K. (1981). The external organizational environment and its impact on management information systems. *Accounting, organizations and society*, 6(4), 301-316. [https://doi.org/10.1016/0361-3682\(81\)90010-6](https://doi.org/10.1016/0361-3682(81)90010-6)
- Fabrigar, L. R., Wegener, D. T., MacCallum, R. C., & Strahan, E. J. (1999). Evaluating the use of exploratory factor analysis in psychological research. *Psychological methods*, 4(3), 272. <https://doi.org/10.1037/1082-989X.4.3.272>
- Fornell, C., & Larcker, D. F. (1981). Evaluating structural equation models with unobservable variables and measurement error. *Journal of marketing research*, 18(1), 39-50. <https://doi.org/10.2307/3151312>
- Freeman, D. B. (1996). Doi Moi policy and the small-enterprise boom in Ho Chi Minh City, Vietnam. *Geographical review*, 86(2), 178-197. <https://doi.org/10.2307/215955>
- Geisser, S. (1974). A predictive approach to the random effect model. *Biometrika*, 61(1), 101-107. <https://doi.org/10.1093/biomet/61.1.101>
- Gerdin, J., & Greve, J. (2004). Forms of contingency fit in management accounting research—a critical review. *Accounting, organizations and society*, 29(3-4), 303-326. [https://doi.org/10.1016/S0361-3682\(02\)00096-X](https://doi.org/10.1016/S0361-3682(02)00096-X)
- Ghasemi, R., Azmi Mohamad, N., Karami, M., Hafiz Bajuri, N., & Asgharizade, E. (2016). The mediating effect of management accounting system on the relationship between competition and managerial performance. *International Journal of Accounting and Information Management*, 24(3), 272-295. <https://doi.org/10.1108/IJAIM-05-2015-0030>
- Ghasemi, R., Habibi, H. R., Ghasemlo, M., & Karami, M. (2019). The effectiveness of management accounting systems: evidence from financial organizations in Iran. *Journal of Accounting in Emerging Economies*, 9(2), 182-207. <https://doi.org/10.1108/JAEE-02-2017-0013>
- Gordon L. A., Miller D. (1976) A contingency framework for the design of accounting information systems. In Emmanuel C., Otley D., Merchant K. (eds) *Readings in Accounting for Management Control* (pp. 569-585). Springer, Boston, MA. https://doi.org/10.1007/978-1-4899-7138-8_26
- Govindarajan, V. (1986). Impact of participation in the budgetary process on managerial attitudes and performance: Universalistic and contingency perspectives. *Decision Sciences*, 17(4), 496-516. <https://doi.org/10.1111/j.1540-5915.1986.tb00240.x>
- Govindarajan, V. (1988). A contingency approach to strategy implementation at the business-unit level: integrating administrative mechanisms with strategy. *Academy of management journal*, 31(4), 828-853. <https://doi.org/10.2307/256341>
- Gul, F. A. (1991). The effects of management accounting systems and environmental uncertainty on small business managers' performance. *Accounting and Business Research*, 22(85), 57-61. <https://doi.org/10.1080/00014788.1991.9729418>
- Gul, F. A., & Chia, Y. M. (1994). The effects of management accounting systems, perceived environmental uncertainty and decentralization on managerial performance: a test of three-way interaction. *Accounting, organizations and society*, 19(4-5), 413-426. [https://doi.org/10.1016/0361-3682\(94\)90005-1](https://doi.org/10.1016/0361-3682(94)90005-1)
- Gul, F. A., Glen, W., & Huang, A. R. (1993). The Effects of Environmental Uncertainty, Computer Usage, and Management Accounting Systems on Small Business. *Journal of Small Business Finance*, 2(3), 251-271. <http://hdl.handle.net/10419/114660>
- Hair, J. F., Hult, G. T. M., Ringle, C. M., Sarstedt, M., & Thiele, K. O. (2017). Mirror, mirror on the wall: a comparative evaluation of composite-based structural equation modeling methods. *Journal of the Academy of Marketing Science*, 45(5), 616-632. <https://doi.org/10.1007/s11747-017-0517-x>
- Hair, J. F., Ringle, C. M., & Sarstedt, M. (2011). PLS-SEM: Indeed a silver bullet. *Journal of Marketing theory and Practice*, 19(2), 139-152. <https://doi.org/10.2753/MTP1069-6679190202>
- Hambrick, D. C. (1982). Environmental scanning and organizational strategy. *Strategic management journal*, 3(2), 159-174. <https://doi.org/10.1002/smj.4250030207>
- Hammad, A. S., Jusoh, R., & Ghazali, I. (2013). Decentralization, perceived environmental uncertainty, managerial performance and management accounting system information in Egyptian hospitals. *International Journal of Accounting and Information Management*, 21(4), 314-330. <https://doi.org/10.1108/IJAIM-02-2012-0005>

- Hansen, H., Rand, J., & Tarp, F. (2009). Enterprise growth and survival in Vietnam: Does government support matter? *The Journal of Development Studies*, 45(7), 1048-1069.
<https://doi.org/10.1080/00220380902811025>
- Hayes, D. C. (1977). The contingency theory of managerial accounting. *Accounting Review*, 22-39." should be changed to "Hayes, D. (1977). The Contingency Theory of Managerial Accounting. *The Accounting Review*, 52(1), 22-39. Retrieved June 10, 2021, from: <http://www.jstor.org/stable/246029>
- Henri, J.-F. (2004). Performance measurement and organizational effectiveness: Bridging the gap. *Managerial Finance*, 30(6), 93-123.
<https://doi.org/10.1108/03074350410769137>
- Hoque, Z. (2004). A contingency model of the association between strategy, environmental uncertainty and performance measurement: impact on organizational performance. *International business review*, 13(4), 485-502.
<https://doi.org/10.1016/j.ibusrev.2004.04.003>
- Irvin, G. (1995). Vietnam: assessing the achievements of Doi Moi. *The Journal of Development Studies*, 31(5), 725-750.
<https://doi.org/10.1080/00220389508422387>
- Janković, G., & Golubović, M. (2019). Open innovation in small and medium-sized enterprises. *Ekonomika*, 65(3), 89-101.
<https://doi.org/10.5937/ekonomika1903089J>
- Jarvis, R., Curran, J., Kitching, J., & Lightfoot, G. (2000). The use of quantitative and qualitative criteria in the measurement of performance in small firms. *Journal of small business and enterprise development*, 7(2), 123-134.
<https://doi.org/10.1108/EUM00000000006834>
- Johnston, H. R., & Vitale, M. R. (1988). Creating competitive advantage with interorganizational information systems. *MIS quarterly*, 12(2), 153-165.
<https://doi.org/10.2307/248839>
- Kald, M., Nilsson, F., & Rapp, B. (2000). On strategy and management control: the importance of classifying the strategy of the business. *British Journal of Management*, 11(3), 197-212.
<https://doi.org/10.1111/1467-8551.00161>
- Kareem, M. A., & Alameer, A. A. A. (2019). The Impact of Dynamic Capabilities on Organizational Effectiveness. Management & Marketing. *Challenges for the Knowledge Society*, 14(4), 402-418.
<https://doi.org/10.2478/mmcks-2019-0028>
- Mia, L., & Clarke, B. (1999). Market competition, management accounting systems and business unit performance. *Management Accounting Research*, 10(2), 137-158.
<https://doi.org/10.1006/mare.1998.0097>
- Miles, R. and C. Snow. (1978). *Organizational Strategy, Structure and Process*. London: McGraw Hill
- Moore, M. (2005). Towards a confirmatory model of retail strategy types: an empirical test of Miles and Snow. *Journal of Business Research*, 58(5), 696-704.
<https://doi.org/10.1016/j.jbusres.2003.09.004>
- Naranjo-Gil, D. (2004). The role of sophisticated accounting system in strategy management. *International Journal of Digital Accounting Research*, 4(8), 125-144.
https://doi.org/10.4192/1577-8517-v4_5
- Otley, D. (1980). The contingency theory of management accounting: achievement and prognosis. *Accounting, organizations and society*, 5(4), 413-428.
[https://doi.org/10.1016/0361-3682\(80\)90040-9](https://doi.org/10.1016/0361-3682(80)90040-9)
- Otley, D. (1999). Performance management: a framework for management control systems research. *Management Accounting Research*, 10(4), 363-382.
<https://doi.org/10.1006/mare.1999.0115>
- Otley, D. (2016). The contingency theory of management accounting and control: 1980–2014. *Management Accounting Research*, 31, 45-62.
<https://doi.org/10.1016/j.mar.2016.02.001>
- Pogue, G. (1990). Strategic management accounting and marketing strategy. *Management Accounting*, 68(1), 46-48.
<https://doi.org/10.1108/18325911011048772>
- Porter, M. E. (1985) *Competitive Advantage. Creating and Sustaining Superior Performance*. New York: Free Press.
- Porter, M. E., & Millar, V. E. (1985). How information gives you competitive advantage. *Harvard Business Review*, 63(4), 149–160.
- Preacher, K. J., & Hayes, A. F. (2008). Asymptotic and resampling strategies for assessing and comparing indirect effects in multiple mediator models. *Behavior research methods*, 40(3), 879-891.
<https://doi.org/10.3758/BRM.40.3.879>
- Rasid, S. Z. A., Isa, C. R., & Ismail, W. K. W. (2014). Management accounting systems, enterprise risk management and organizational performance in financial institutions. *Asian Review of Accounting*, 22(2), 128-144.
<https://doi.org/10.1108/ARA-03-2013-0022>
- Soobaroyen, T., & Poorundersing, B. (2008). The effectiveness of management accounting systems: evidence from functional managers in a developing country. *Managerial Auditing Journal*, 23(2), 187-219.
<https://doi.org/10.1108/02686900810839866>
- Sprinkle, G. B. (2000). The effect of incentive contracts on learning and performance. *The Accounting Review*, 75(3), 299-326.
<https://doi.org/10.2308/accr.2000.75.3.299>
- Stone, M. (1974). Cross-validators choice and assessment of statistical predictions. *Journal of the Royal Statistical Society: Series B (Methodological)*, 36(2), 111-133.
<https://doi.org/10.1111/j.2517-6161.1974.tb00994.x>
- Tillema, S. (2005). Towards an integrated contingency framework for MAS sophistication: Case studies on the scope of accounting instruments in Dutch power and gas companies. *Management Accounting Research*, 16(1), 101-129.
<https://doi.org/10.1016/j.mar.2004.12.001>
- Vroom, V. H. (1964). *Work and motivation*. New Jersey: Wiley.
- Waterhouse, J. H., & Tiessen, P. (1978). A contingency framework for management accounting systems research. *Accounting, organizations and society*, 3(1), 65-76.
[https://doi.org/10.1016/0361-3682\(78\)90007-7](https://doi.org/10.1016/0361-3682(78)90007-7)
- Zhao, X., Lynch Jr, J. G., & Chen, Q. (2010). Reconsidering Baron and Kenny: Myths and truths about mediation analysis. *Journal of consumer research*, 37(2), 197-206.
<https://doi.org/10.1086/651257>

✉ Correspondence

Quang-Huy Ngo

Industrial Management Faculty, Cantho University of
Technology

256 Nguyen Van Cu street, Ninh Kieu district, Cantho City,
920000, Vietnam

Email: nqhuy@ctuet.edu.vn

MANUSCRIPT REQUIREMENTS

The paper must be written in the template which can be found on the Submission of Papers page of the Strategic Management journal web site (<http://www.smjournal.rs/submission.php>) and to be sent, together with the Copyright and Use Agreement.

Headings must be short, clearly defined and numbered, except for Introduction and Conclusions. Apply at most three levels of headings.

All tables, graphs and diagrams are expected to back your research findings. They should be clearly referred to and numbered consecutively in Arabic numerals. They should be placed in the text at the appropriate paragraph (just after its reference).

Tables should be centered. All tables must have captions. The title of your table should follow the table number. Tables should not be wider than the margins of the paper.

Figures should be centered. All figures must have captions. The title of figures should appear immediately below the figure. The title of the figure should follow the figure number. Figures should not be wider than the margins of the paper. Figures will not be redrawn by the publisher. Figures should be high-quality gray-scale graphics (please, do not use colors): vector drawings (with text converted to curves) or 300 dpi bitmaps. Please do not supply any graphics copied from a website, as the resolution will be too low. In all figures taken or adapted from other sources, a brief note to that effect is obligatory, below the figure. One sentence at least referring to the illustration is obligatory.

Mathematical expressions should be numbered on the right side, while all variables and parameters must be defined.

PROOF

Authors are responsible for ensuring that all manuscripts (whether original or revised) are accurately typed before final submission. One set of proof will be sent to authors, if requested, before the final publication, which must be returned promptly.

REFERENCING GUIDE

The references should specify the source (such as book, journal article or a web page) in sufficient detail to enable the readers to identify and consult it. The references are placed at the end of the work, with sources listed alphabetically (a) by authors' surnames or (b) by the titles of the sources (if the author is unknown). Multiple entries by the same author(s) must be sequenced chronologically, starting from the earliest, e.g.:

- Ljubojević, T.K. (1998).
- Ljubojević, T.K. (2000a).
- Ljubojević, T.K. (2000b).
- Ljubojević, T.K., & Dimitrijević, N.N. (1994).

Here is a list of the most common reference types:

A. PERIODICALS

Authors must be listed by their last names, followed by initials. Publication year must be written in parentheses, followed by a full stop. Title of the article must be in sentences case: only the first word and proper nouns in the title are capitalized. The periodical title must be in title case, followed by the volume number, which is also italicized:

Author, A. A., Author, B. B., & Author, C. C. (Year). Title of article. *Title of Periodical*, volume number(issue number), pages.

➔ Journal article, one author, paginated by issue

Journals paginated by issue begin with page 1 in every issue, so that the issue number is indicated in parentheses after the volume. The parentheses and issue numbers are not italicized, e.g.

Tanasijević, V. (2007). A PHP project test-driven end to end. *Management Information Systems*, 5 (1), 26-35.

➔ Journal article, one author, paginated by volume

Journals paginated by volume begin with page 1 in issue 1, and continue page numbering in issue 2 where issue 1 ended, e.g.

Perić, O. (2006). Bridging the gap: Complex adaptive knowledge management. *Strategic Management*, 14, 654-668.

➔ Journal article, two authors, paginated by issue

Strakić, F., & Mirković, D. (2006). The role of the user in the software development life cycle. *Management Information Systems*, 4 (2), 60-72.

➔ Journal article, two authors, paginated by volume

Ljubojević, K., & Dimitrijević, M. (2007). Choosing your CRM strategy. *Strategic Management*, 15, 333-349.

➔ Journal article, three to six authors, paginated by issue

Jovanov, N., Boškov, T., & Strakić, F. (2007). Data warehouse architecture. *Management Information Systems*, 5 (2), 41-49.

➔ Journal article, three to six authors, paginated by volume

Boškov, T., Ljubojević, K., & Tanasijević, V. (2005). A new approach to CRM. *Strategic Management*, 13, 300-310.

➔ Journal article, more than six authors, paginated by issue

Ljubojević, K., Dimitrijević, M., Mirković, D., Tanasijević, V., Perić, O., Jovanov, N., et al. (2005). Putting the user at the center of software testing activity. *Management Information Systems*, 3 (1), 99-106.

➔ Journal article, more than six authors, paginated by volume

Strakić, F., Mirković, D., Boškov, T., Ljubojević, K., Tanasijević, V., Dimitrijević, M., et al. (2003). Metadata in data warehouse. *Strategic Management*, 11, 122-132.

➔ Magazine article

Strakić, F. (2005, October 15). Remembering users with cookies. *IT Review*, 130, 20-21.

➔ Newsletter article with author

Dimitrijević, M. (2009, September). MySQL server, writing library files. *Computing News*, 57, 10-12.

➔ Newsletter article without author

VBScript with active server pages. (2009, September). *Computing News*, 57, 21-22.

B. BOOKS, BROCHURES, BOOK CHAPTERS, ENCYCLOPEDIA ENTRIES, AND BOOK REVIEWS

➔ Basic format for books

Author, A. A. (Year of publication). *Title of work: Capital letter also for subtitle*. Location: Publisher.

Note: "Location" always refers to the town/city, but you should also include the state/country if the town/city could be mistaken for one in another country.

➔ Book, one author

Ljubojević, K. (2005). *Prototyping the interface design*. Subotica: Faculty of Economics.

➔ Book, one author, new edition

Dimitrijević, M. (2007). *Customer relationship management* (6th ed.). Subotica: Faculty of Economics.

➔ Book, two authors

Ljubojević, K., Dimitrijević, M. (2007). *The enterprise knowledge portal and its architecture*. Subotica: Faculty of Economics.

➔ Book, three to six authors

Ljubojević, K., Dimitrijević, M., Mirković, D., Tanasijević, V., & Perić, O. (2006). *Importance of software testing*. Subotica: Faculty of Economics.

➔ Book, more than six authors

Mirković, D., Tanasijević, V., Perić, O., Jovanov, N., Boškov, T., Strakić, F., et al. (2007). *Supply chain management*. Subotica: Faculty of Economics.

➔ Book, no author or editor

Web user interface (10th ed.). (2003). Subotica: Faculty of Economics.

➔ Group, corporate, or government author

Statistical office of the Republic of Serbia. (1978). *Statistical abstract of the Republic of Serbia*. Belgrade: Ministry of community and social services.

➔ Edited book

Dimitrijević, M., & Tanasijević, V. (Eds.). (2004). *Data warehouse architecture*. Subotica: Faculty of Economics.

➔ Chapter in an edited book

Bošković, T., & Strakić, F. (2008). Bridging the gap: Complex adaptive knowledge management. In T. Bošković & V. Tanasijević (Eds.), *The enterprise knowledge portal and its architecture* (pp. 55-89). Subotica: Faculty of Economics.

➔ Encyclopedia entry

Mirković, D. (2006). History and the world of mathematicians. In *The new mathematics encyclopedia* (Vol. 56, pp. 23-45). Subotica: Faculty of Economics.

C. UNPUBLISHED WORKS

➔ Paper presented at a meeting or a conference

Ljubojević, K., Tanasijević, V., Dimitrijević, M. (2003). *Designing a web form without tables*. Paper presented at the annual meeting of the Serbian computer alliance, Beograd.

➔ Paper or manuscript

Bošković, T., Strakić, F., Ljubojević, K., Dimitrijević, M., & Perić, O. (2007, May). *First steps in visual basic for applications*. Unpublished paper, Faculty of Economics Subotica, Subotica.

➔ Doctoral dissertation

Strakić, F. (2000). *Managing network services: Managing DNS servers*. Unpublished doctoral dissertation, Faculty of Economics Subotica, Subotica.

➔ Master's thesis

Dimitrijević, M. (2003). *Structural modeling: Class and object diagrams*. Unpublished master's thesis, Faculty of Economics Subotica, Subotica.

D. ELECTRONIC MEDIA

The same guidelines apply for online articles as for printed articles. All the information that the online host makes available must be listed, including an issue number in parentheses:

Author, A. A., & Author, B. B. (Publication date). Title of article. *Title of Online Periodical, volume number*(issue number if available). Retrieved from <http://www.anyaddress.com/full/url/>

➔ Article in an internet-only journal

Tanasijević, V. (2003, March). Putting the user at the center of software testing activity. *Strategic Management, 8* (4). Retrieved October 7, 2004, from www.ef.uns.ac.rs/sm2003

➔ Document from an organization

Faculty of Economics. (2008, March 5). *A new approach to CRM*. Retrieved July 25, 2008, from <http://www.ef.uns.ac.rs/papers/acrm.html>

➔ Article from an online periodical with DOI assigned

Jovanov, N., & Boškov, T. A PHP project test-driven end to end. *Management Information Systems*, 2 (2), 45-54. doi: 10.1108/06070565717821898.

➔ Article from an online periodical without DOI assigned

Online journal articles without a DOI require a URL.

Author, A. A., & Author, B. B. (Publication date). Title of article. *Title of Journal, volume number*. Retrieved from <http://www.anyaddress.com/full/url/>

Jovanov, N., & Boškov, T. A PHP project test-driven end to end. *Management Information Systems*, 2 (2), 45-54. Retrieved from <http://www.ef.uns.ac.rs/mis/TestDriven.html>.

REFERENCE QUOTATIONS IN THE TEXT

➔ Quotations

If a work is directly quoted from, then the author, year of publication and the page reference (preceded by “p.”) must be included. The quotation is introduced with an introductory phrase including the author’s last name followed by publication date in parentheses.

According to Mirković (2001), “The use of data warehouses may be limited, especially if they contain confidential data” (p. 201).

Mirković (2001), found that “the use of data warehouses may be limited” (p. 201). What unexpected impact does this have on the range of availability?

If the author is not named in the introductory phrase, the author's last name, publication year, and the page number in parentheses must be placed at the end of the quotation, e.g.

He stated, “The use of data warehouses may be limited,” but he did not fully explain the possible impact (Mirković, 2001, p. 201).

➔ Summary or paraphrase

According to Mirković (1991), limitations on the use of databases can be external and software-based, or temporary and even discretion-based. (p.201)

Limitations on the use of databases can be external and software-based, or temporary and even discretion-based (Mirković, 1991, p. 201).

➔ One author

Boškov (2005) compared the access range...

In an early study of access range (Boškov, 2005), it was found...

➔ When there are **two authors**, both names are always cited:

Another study (Mirković & Boškov, 2006) concluded that...

➔ If there are **three to five authors**, all authors must be cited the first time. For subsequent references, the first author's name will cited, followed by “et al.”.

(Jovanov, Boškov, Perić, Boškov, & Strakić, 2004).

In subsequent citations, only the first author's name is used, followed by "et al." in the introductory phrase or in parentheses:

According to Jovanov et al. (2004), further occurrences of the phenomenon tend to receive a much wider media coverage.

Further occurrences of the phenomenon tend to receive a much wider media coverage (Jovanov et al., 2004).

In "et al.", "et" is not followed by a full stop.

➤ Six or more authors

The first author's last name followed by "et al." is used in the introductory phrase or in parentheses:

Yossarian et al. (2004) argued that...

... not relevant (Yossarian et al., 2001).

➤ Unknown author

If the work does not have an author, the source is cited by its title in the introductory phrase, or the first 1-2 words are placed in the parentheses. Book and report titles must be italicized or underlined, while titles of articles and chapters are placed in quotation marks:

A similar survey was conducted on a number of organizations employing database managers ("*Limiting database access*", 2005).

If work (such as a newspaper editorial) has no author, the first few words of the title are cited, followed by the year:

("The Objectives of Access Delegation," 2007)

Note: In the rare cases when the word "Anonymous" is used for the author, it is treated as the author's name (Anonymous, 2008). The name Anonymous must then be used as the author in the reference list.

➤ Organization as an Author

If the author is an organization or a government agency, the organization must be mentioned in the introductory phrase or in the parenthetical citation the first time the source is cited:

According to the Statistical Office of the Republic of Serbia (1978), ...

Also, the full name of corporate authors must be listed in the first reference, with an abbreviation in brackets. The abbreviated name will then be used for subsequent references:

The overview is limited to towns with 10,000 inhabitants and up (Statistical Office of the Republic of Serbia [SORS], 1978).

The list does not include schools that were listed as closed down in the previous statistical overview (SORS, 1978).

➔ When citing **more than one reference from the same author**:

(Bezjak, 1999, 2002)

➔ When several **used works by the same author were published in the same year**, they must be cited adding a, b, c, and so on, to the publication date:

(Griffith, 2002a, 2002b, 2004)

➔ **Two or more works in the same parentheses**

When two or more works are cited parenthetically, they must be cited in the same order as they appear in the reference list, separated by a semicolon.

(Bezjak, 1999; Griffith, 2004)

➔ **Two or more works by the same author in the same year**

If two or more sources used in the submission were published by the same author in the same year, the entries in the reference list must be ordered using lower-case letters (a, b, c...) with the year. Lower-case letters will also be used with the year in the in-text citation as well:

Survey results published in Theissen (2004a) show that...

➔ To **credit an author for discovering a work**, when you have not read the original:

Bergson's research (as cited in Mirković & Boškov, 2006)...

Here, Mirković & Boškov (2006) will appear in the reference list, while Bergson will not.

➔ When **citing more than one author**, the authors must be listed alphabetically:

(Britten, 2001; Sturlasson, 2002; Wasserwandt, 1997)

➔ When there is **no publication date**:

(Hessenberg, n.d.)

➔ **Page numbers must always be given for quotations**:

(Mirković & Boškov, 2006, p.12)

Mirković & Boškov (2006, p. 12) propose the approach by which "the initial viewpoint..."

➔ **Referring to a specific part of a work**:

(Theissen, 2004a, chap. 3)

(Keaton, 1997, pp. 85-94)

➔ **Personal communications, including interviews, letters, memos, e-mails, and telephone conversations**, are cited as below. (These are *not* included in the reference list.)

(K. Ljubojević, personal communication, May 5, 2008).

FOOTNOTES AND ENDNOTES

A few footnotes may be necessary when elaborating on an issue raised in the text, adding something that is in indirect connection, or providing supplementary technical information. Footnotes and endnotes are numbered with superscript Arabic numerals at the end of the sentence, like this.¹ Endnotes begin on a separate page, after the end of the text. However, Strategic Management journal **does not recommend the use of footnotes or endnotes.**

COPYRIGHT AND USE AGREEMENT

Articles submitted to the Journal should be authentic and original contributions and should have never been published before in full text, nor be under consideration for any other publication at the same time. Authors submitting articles for publication warrant that the work is not an infringement of any existing copyright and will indemnify the publisher against any breach of such warranty. Authors retain copyright of the published papers and grant to the publisher the non-exclusive right to publish the article, to be cited as its original publisher in case of reuse, and to distribute it in all forms and media.

CIP - Каталогизacija u publikaciji
Библиотека Матице српске, Нови Сад

005.21

STRATEGIC management : international journal of strategic management and decision support systems in strategic management / editor-in-chief Aleksandar Grubor. - Vol. 14, no. 1 (2009) - . - Subotica: University of Novi Sad, Faculty of Economics, 2009-. - 30 cm

Tromesečno. - Nastavak publikacije: Strategijski menadžment = ISSN 0354-8414
ISSN 1821-3448

COBISS.SR-ID 244849927

Rešenjem Ministarstva za informisanje Republike Srbije, časopis "Strategijski menadžment" upisan je u registar javnog informisanja pod brojem 2213, od 7. avgusta 1996. Rešenjem Ministarstva za nauku i tehnologiju Republike Srbije br. 413-00-435/1/96-01 časopis je oslobođen opšteg poreza na promet proizvoda kao publikacija od posebnog interesa za nauku.

ISSN 1821-3448



9 771821 344000