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Thematic Issue
**International Entrepreneurship:
New Perspectives in IB Research**

edited by
Agnieszka Głodowska
Cracow University of Economics, Poland
Krzysztof Wach
Cracow University of Economics, Poland



CRACOW UNIVERSITY OF ECONOMICS
Department of International Trade
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Editorial

The concept of ‘international entrepreneurship’ (IE), as one can assume, was used for the first time in the doctoral dissertation of Tomas Otto Kohn in 1988 at Harvard. It is most probable that it was published for the first time in the work by John F. Morrow in the same year. A year later, this notion appeared in scientific publications by various authors, including Patricia P. McDougall (at present McDougall-Covin), who together with Benjamin M. Oviatt developed this theory in the following years. It can therefore be assumed that the current international entrepreneurship as an area of research is only 25-30 years old, although its intensive development occurred only in the first decade of the 21st century, that is, de facto, a few years ago. IE has been developing very intensively, however it must be admitted that, apart from some elements of this school, it is still quite a promising field of research.

Thematic articles in this issue include 7 texts from different parts of the world (Germany, Poland, Czech Republic, Mexico, Serbia) to explore entrepreneurial internationalisation of modern businesses.

Yonni Angel Cuero Acosta, Richard Adu-Gyamfi, Md. Noor Un Nabi, and Utz Dornberger in their article entitled *Analysing the Role of Framework Conditions Influencing International Entrepreneurial Opportunity Identification Process* analyse the framework conditions which affect the entrepreneurial opportunity while acting on the international market. The Authors help us to understand how context interacts with the entrepreneurial opportunity identification process on international markets.

Lidia Danik, Izabela Kowalik, Petr Král, and Hana Řezanková in their article entitled *Antecedents of Accelerated Internationalisation of the Polish and Czech Small and Medium-Sized Enterprises* focus on relations between accelerated internationalisation descriptors and antecedent firm– and entrepreneur–related factors in the SME sector. They empirically investigate the concept of a global vision among Polish and Czech born global companies in a cooperative perspective.

Based on primary data gathered in the course of interviews with founders and senior managers of British born globals, Paweł Capik, and Andreas Brockerhoff in their article entitled *Role of Strategic Partnerships in Internationalisation of British Small Born Global Firms* reveal that next to serendipitous opportunities, the motivation and opportunity recognition of the founder/manager play a vital role in firms’ early internationalisation.

Cezary Kochalski and Magdalena Łuczak-Trąpczyńska in their paper entitled *Determinants of Controlling in Foreign Subsidiaries of MNEs: On the Explanatory Potential of the Institutional Perspective* identify gaps in extant literature on controlling in MNEs, in particular factors affecting related managerial decisions. They try to investigate the relevance of the institutional perspective in the context of explaining the design of controlling in foreign subsidiaries.

Marta Gancarczyk, Jacek Gancarczyk, and Joanna Bohatkiewicz in their article entitled *SME Roles in Modular Value Chains: Perspectives for Growth and Innovativeness*

contribute to the current state-of-the-art by identifying the roles which SMEs can play in modular value chains and by identifying governance arrangements which SMEs apply to accomplish innovation and high growth.

Nikola Radovanović, Veljko Dmitrović, and Nevenka Žarkić Joksimović in their article entitled *From Knowledge to Innovation and Back: Empirical Testing of Knowledge-Intensive Industries in Serbia* suggest that implemented innovation correlates with the use of knowledge in organisations and that an increase in research and development activities, as well as in patented and non-patented products or services will likely lead to an increase in the volume of internal knowledge use by employees.

Martha Cantú Cavada, Vito Bobek, Anita Maček in their article entitled *Motivational Factors for Female Entrepreneurship in Mexico* on the basis of in-depth interviews try to identify key determinates which stimulate women in Mexico to start their own business. They prove that women are motivated by a combination of push and pull factors, and the majority of the factors are pull factors.

As usual, there are also 4 other papers in this issue, which are off-topic and which deal with various general issues in economics and management.

Christiane Naumann in her article entitled *Entrepreneurial Mindset: A synthetic Literature Review* presents a comprehensive overview of the state-of-the-art in research on entrepreneurial mindset. The paper identifies past, current and future research areas in the context of entrepreneurial mindset.

Witold Nowiński, and Miklós Kozma in their article entitled *How Can Blockchain Technology Disrupt Existing Business Models?* provide an overview of the key literature on business models and business model innovation, indicating, among others, that new technologies may be one of the drivers to business model innovation. Additionally, the paper focuses on blockchain technology and its influence on business model.

Angga Pandu Wijaya in the article entitled *Role of Experience in Customer Self Congruity to Maintaining Loyalty: A Study on Fashion Store* analyses interrelationship between three customers' features (experience, self-congruity and loyalty) in the fashion industry. The Author suggests that customer experience plays a significant role in moderating the effect of self-congruity on customer loyalty.

Babatunde Akanji in the article entitled *A Case Analysis on the Adequacy of Work Life Balance Practices in UK Small and Medium-Sized Enterprises* using a qualitative design states that the Informal nature of human resource management policies is one of the constraining forces impeding work-life agendas in SMEs and causing low staff retention in the UK.

Agnieszka Głodowska
Krzysztof Wach
Thematic Issue Editors



Analysing the Role of Framework Conditions Influencing International Entrepreneurial Opportunity Identification Process

Yonni Angel Cuero Acosta, Richard Adu-Gyamfi, Md. Noor Un Nabi, Utz Dornberger

ABSTRACT

Objective: The objective of this paper is to determine and analyse the framework conditions that influence the entrepreneurial opportunity identification and action in the international market context.

Research Design & Methods: Scholars from the International Business and International Entrepreneurship (IE) research fields agree that the process of internationalisation is triggered by opportunity identification. The extant literature is reviewed by assessing the framework conditions that domestic and international markets offer for entrepreneurial actions. An analytical juxtaposition of the influential factors is conducted in the light of various stages of the opportunity identification process by examining – at each stage – possible effects of domestic and international market context.

Findings: This paper brings into the IE discussion a conceptual matrix of various elements and factors – external conditions – which influence the creation of nexus by entrepreneurs to the markets.

Implications & Recommendations: The conceptual matrix offers new insights for theoretical development and arguments for designing empirical research in terms of external conditions. It is expected to provoke more theoretical and practical questions from scholars within the IE field.

Contribution & Value Added: The originality of this work lies in proposing a comprehensive framework to understand how context interacts with the entrepreneurial opportunity identification process.

Article type: conceptual paper

Keywords: international entrepreneurial opportunity process; market context

JEL codes: F23, M16

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INTRODUCTION

The theory and practice of international business (IB) and entrepreneurship recognise the critical role of the entrepreneur in the successful internationalisation of the firm (McMullen & Dimov, 2013; Oyson & Whittaker, 2015). These domains have been theoretically and methodologically integrated by forming the field of international entrepreneurship (IE) (Allen, 2016; McDougall & Oviatt, 2000). Authors in the IE field have widely researched the entrepreneur's pursuit of conducting cross-border activities and competing in markets (Schweizer, Vahlne, & Johanson, 2010). In this regard, entrepreneurial action fosters cross-border activities by combining individual as well as firm-level capabilities. IB and IE fields agree that the process of internationalisation is triggered by the entrepreneurial opportunity process, which is also the starting point and the core of the conceptualisation of entrepreneurship (Shane & Venkataraman, 2000).

The concept of opportunity identification in international entrepreneurship has generally focused on the sources of opportunities (Eckhardt & Shane, 2003), entrepreneurs' approach to opportunity exploitation (Sarasvathy, 2001), and the discovery of opportunity (Alvarez & Barney, 2007; Andersson & Evers, 2015; Busenitz, Plummer, Klotz, Shahzad, & Rhoads, 2014; Muzychenko & Liesch, 2015). These issues together constitute the individual-opportunity nexus in entrepreneurship (Davidsson, 2015; Shane & Venkataraman, 2000). Likewise, these topics have contributed greatly to strengthen the conceptualisation of opportunity as a process applied by entrepreneurs in the quest for initiating a venture (Davidsson, 2015). However, opportunities do not just come from entrepreneurs' impetus (Wood & McKinley, 2010). Entrepreneurs are constantly faced with challenges due to fast-paced changes in customer needs and preferences or production patterns (Hernández, Martínez Piva, & Mulder, 2014). These challenges come from financial volatility on markets, rapid technological innovation, changing customer preferences, the growth of new segments on the market, culture, demographic rates, institutional framework conditions, macroeconomic conditions, and the natural environment (Davidsson, 2015; OECD, 2016). Recently, Davidsson (2015) has combined these factors under the label external enablers. This reflects the ever-increasing level of dynamism in the market conditions. This implies that an opportunity does not only emerge from the individual mindset, but can also have its origin in the external environment in which the entrepreneur operates (Davidsson, 2015). If one takes the context of IE, this dimension necessitates a more detailed conceptual exploration to examine how entrepreneurs deal with these external enablers. Particularly, the connection between the individual level and the external enablers' level elicits two conceptual enquiries: Do entrepreneurs apply a different kind of approach to identify entrepreneurial opportunity in a different market context? Do the domestic or international market contexts play a differentiating role in the decision-making process of entrepreneurs?

To address these enquiries, this paper is devoted to a conceptualisation of the opportunity recognition by entrepreneurs in different market contexts i.e. domestic and international. The answers to these questions will contribute to the IE scholarship with new insights about the role played by certain external factors, which push entrepreneurial action through the process of opportunity recognition. Thus, this paper aims to determine the framework conditions that influence the process of entrepreneurial opportunity identification in the international market context and analyses how such framework conditions play their role in this process.

The paper is organised as follows. The introduction presents the concept of this paper. Then, the materials and methods section explains how the revision of the literature was conducted in order to theorise the entrepreneurial opportunity concept. Next, the literature review describes the logic of argumentation that we follow to build the conceptual framework of the entrepreneurial opportunity identification as a process. We further define what constitutes the domestic and international market contexts. The factors influencing the entrepreneurial opportunity identification process in the domestic and international market contexts are also discussed. We finalise this paper by concluding and giving some remarks for future research.

MATERIAL AND METHODS

This paper is predominantly based on the review of literature from the relevant areas of entrepreneurship research. Specifically, the IE domain provides a conceptual framework by emphasising the international entrepreneurial opportunity process. Hence, the major contribution of this paper is the creation of a conceptual framework in order to rationalise the role of external factors on the entrepreneurs' opportunity recognition process. In order to review the literature, the authors identified works about the entrepreneurial opportunity concept. Limiting the search to the concept of entrepreneurial opportunity allowed the researchers to have an overview of the conceptualisation of the role of the market context regarding the opportunity process. The search was limited to scientific literature focussed on articles from peer review journals. This search was conducted using major entrepreneurship research academic databases, such as Proquest, EBSCO Host, and JSTOR. Equally, important, academic browsers such as Science Direct, SpringerLink, and Google Scholar were used. The search was established without limiting the period of publication. This allowed the researchers to track the origin of the discussion about the opportunity concept in the areas of entrepreneurship and international business.

Secondly, once the most important stream was identified within the entrepreneurial opportunity concept, the following keywords were used, i) entrepreneurial opportunity (13 papers), ii) opportunity identification (12 papers), iii) opportunity recognition (14 papers), and iv) international entrepreneurial opportunity and opportunity development process (19 papers). These papers were identified within the domains of IE, international business, entrepreneurship and strategic management. Thirdly, the analysis of the extant literature focused on those papers, which discuss the issue of the external environment, external enabler, business environment, and framework conditions (11 papers). These papers are listed in the reference section. Finally, we narrow the discussion to those papers, which focus on the aim of the study.

As a result of this conceptual in-depth analysis, we propose a comprehensive matrix in order to analyse the decision phases through which entrepreneurs go when identifying a viable entrepreneurial opportunity.

LITERATURE REVIEW

IE is a well-established academic domain (Coviello, McDougall, & Oviatt, 2011; Dimitratos, Buck, Fletcher, & Li, 2016). It has been a flourishing field that has contributed to expanding the discussion on entrepreneurship. IE is the result of a cross-disciplinary research into

international business and entrepreneurship (Allen, 2016; Coviello *et al.*, 2011; McDougall & Oviatt, 2000; Ngo, Janssen, & Falize, 2016). Authors point out that the IE domain has particularly paid attention to topics such as entrepreneurial internationalisation of ventures, international comparisons of entrepreneurship, and comparisons across countries or cultures. Within these topics, various issues have been studied, such as venture type, internationalisation, networks and relationships, internationalisation patterns and process, and organisational issues, among others (Jones, Coviello, & Tang, 2011). IE does not only cover topics related to internal aspects of the firm but also how entrepreneurs interact with external factors, such as the dynamics of international markets. In this sphere of analysis, the study of networks has provided the backdrop to analyse opportunity recognition (Ardichvili, Cardozo, & Ray, 2003; Mainela, Puhakka, & Servais, 2014).

Researchers from different schools of thoughts agree on the relevance of opportunity to foster entrepreneurial action (Chandra, Styles, & Wilkinson, 2015; Greblikaite, Sroka, & Gerulaitiene, 2016; Grégoire & Shepherd, 2012). “Without an opportunity, there is no entrepreneurship” (Short, Ketchen, Shook, & Ireland, 2010, p. 40). While IE and entrepreneurship scholars agree with the statement, a consensus on the ontological foundations of the concept of opportunity is yet to come. Somehow, either the ontological discussion about the opportunity concept or related elements to exploit an opportunity have drawn attention in the academic community.

Opportunity is at the core of every entrepreneurial initiative (Short *et al.*, 2010). “Entrepreneurs develop business opportunities to create and deliver value for stakeholders in prospective ventures” (Ardichvili *et al.*, 2003, p. 113). In this sense, it is the exploitation of an opportunity, which allows the entrepreneur to fit their value propositions to an unsatisfied need on the market. Based on the seminal works of Schumpeter (1934), Kirzner (1973) and Casson (1982), Ardichvili *et al.* (2003) pointed out that opportunities help to meet market demand through the combination of resources by entrepreneurs. Hence, from the entrepreneurship perspective, an opportunity is the result of how entrepreneurs combine resources and capabilities that are at their disposal (Mary George, Parida, Lahti, & Wincent, 2016; Shane & Venkataraman, 2000; Wood & McKinley, 2010). What is also needed is to differentiate a daily-basis chance of doing business from one new product or new services to be delivered to the market, which can originate a new venture. Being more specific, the entrepreneurship theory explains an entrepreneurial opportunity as a concept which is defined as a set of circumstances “in which new goods, services, raw materials, markets and organising methods can be introduced into the formation of new means, ends, or means-ends relationships” (Eckhardt & Shane, 2003, p. 336). It is important to highlight that exploitation of an opportunity represents the offer of newness. Thus, entrepreneurial opportunity¹ is understood as “an entrepreneurially discovered or created situation in which new goods, services, raw materials, markets and organizing methods are conceived as having a potential for exploitation through entrepreneur-led action to form and transform them into new means, ends, or means-ends relationships” (Oyson & Whittaker, 2015, p. 309). The concept of opportunity itself has emerged as a pivotal entrepreneurial factor which covers the novelty of entrepreneurial ideas according to the classic perspective, such as the one posted by Schumpeter (1934). Given the argument, it is necessary to review this concept against the backdrop of the international market context.

¹ Hereafter, in our discussion we are going to interchangeably use the term opportunity and entrepreneurial opportunity.

Opportunity Identification in the International Context

It is highlighted that the entrepreneurial opportunity identification process adopts new elements when this process is developed to make full use of an international set of favourable circumstances (Alvarez, Barney, & Anderson, 2013; Chandra *et al.*, 2015). Authors have coined this process as international opportunity identification, defined as “the recognition and exploitation of entrepreneurial opportunity that leads to new international market entry” (Chandra, Styles, & Wilkinson, 2009, p. 31). Muzychenko and Liesch (2015) add more elements by defining an international opportunity as “the likelihood of conducting an exchange with new or existing partners, such as foreign intermediaries of foreign customers, in new international markets” (Muzychenko & Liesch, 2015, p. 705). This conceptualisation of an opportunity in the international market gives an idea that antecedents of entrepreneurial opportunity identification are likely to differ in their compositions and effects according to the market context. Such differences are expected to be more prominent when the entrepreneur’s opportunity identification efforts are compared between the international and domestic market context. From the individual level perspective, it is possible to note the significance of social capital as a crucial factor in order to facilitate the way to locate the context for business ideas. That is to say, entrepreneurs may use their social capital when deciding to target domestic or international markets. For instance, this is possible by identifying international opportunities through personal contacts (Oyson & Whittaker, 2015). Additionally, key issues related to the opportunity identification process in international markets are entrepreneurial cognition, prior knowledge, and industry context. However, from the conceptual point of view, the logic of the interplay among such factors should be clarified. These elements neither interact nor influence the opportunity identification process by a linear sequence. Therefore, it is necessary to understand the logic of their interplay as antecedent to the entrepreneurial opportunity identification process. Furthermore, factors such as culture and the impact of institutions should be part of the analysis to widely grasp the entrepreneur vision to select markets. In other words, external enablers are needed as part of the opportunity process. To have a better picture of which factors affect the process, it requires from us to observe the structure of the opportunity identification process itself.

Unbundling the Entrepreneurial Opportunity Identification Process

Understanding opportunity – as a vital factor within entrepreneurial activities – the conceptual discussion in the literature has turned into the debate as to whether entrepreneurs identify or recognise opportunities (Alvarez *et al.*, 2013; Andersson & Evers, 2015; Ardichvili *et al.*, 2003; Chandra *et al.*, 2009; Chandra *et al.*, 2015; Eckhardt & Shane, 2003; Heilbrunn, 2010; Mainela *et al.*, 2014; Mary George *et al.*, 2016; Oyson & Whittaker, 2015; Shane, 2000; Vaghely & Julien, 2010). This peculiar debate is quite important due to the need to capture the process itself. As a dominant paradigm, the entrepreneurial opportunity is seen as a construction of the entrepreneur (Shane & Venkataraman, 2000). As many scholars explain, entrepreneurs develop opportunities starting from a simple scratch of business ideas, evolving into a business model, and executing a business plan (Dornberger & Suvelza, 2012). Ardichvili *et al.* (2003) argued that the recognition of opportunities by entrepreneurs is part of the whole opportunity identification process and not an extra one. Given these facts, the authors

have agreed that the core of the opportunity identification process is made up of the following stages: *being alert* (which has been studied under the concept of entrepreneurial alertness), *search for information and evaluation*, and *construction of the opportunity* (Mary George *et al.*, 2016). These three main stages are conducted by entrepreneurs in order to develop/exploit an opportunity (Oyson & Whittaker, 2015).

Entrepreneurial alertness: This implies that there are persons who are more sensitive to the needs that a market can offer (Gaglio & Katz, 2001). Individuals sense the needs of the market and propose new ways to satisfy those needs by creating value (Mary George *et al.* 2016). Alertness is conceptualised as a mediator between the personal features of an entrepreneur and the birth of a new venture (Sambasivan, Abdul, & Yusop, 2009). Entrepreneurs combine their expertise with managerial abilities to not only identify but also develop an opportunity. Alertness as a major entrepreneurial characteristic interacts with other factors. Indeed, the interplay among other factors, such as cognition, prior knowledge, social network, and the abilities of entrepreneurs make it possible to clarify the opportunity and their scope (Webb, Ireland, Hitt, Kistruck, & Tihanyi, 2011). In identifying and exploiting an opportunity, an individual's capabilities, as well as personal characteristics, such as entrepreneurial alertness, make the difference between those alert and non-alert individuals.

Search: Once an individual observes and understands the opportunity and the chance that they possess to exploit it, they continue with the search of information. This is the search, which allows entrepreneurs to use all their sources of knowledge. However, to limit the information which can be found, entrepreneurs establish criteria to narrow the search (Fiet, 2007). In this regard, it is crucial for individuals to systematise their knowledge in a way which will facilitate the identification of opportunities (Muzychenko & Liesch, 2015). While looking for opportunities, entrepreneurs explore their surroundings to have a clear idea of what can match the needs that they observe. This is helpful to create value and configure new venture characteristics. This also means that the systematic search of information should be accompanied by the evaluation of the information and opportunity itself. Systematic search gives the occasion for individuals to assess the scope of the opportunity and the capacity of their proposed venture to fit that opportunity.

Evaluation: This is an important part of the opportunity identification process (Ardichvili *et al.*, 2003). This evaluation can be applied in a formal, systematic, or an informal way. It implies how the identified opportunity has been located into the business concept, how the value offered through the business model is going to be assessed by the customer, and how the new product or the new processes are conceived. It is important to understand how the value created to exploit a business opportunity is going to generate gains for the entrepreneur. Therefore, value creation has to be evaluated at each moment. Equally important is the evaluation of resources, which are needed to develop the opportunity on the international market. The evaluation within the stages is important in order to continue developing the business idea. In order to recognise an opportunity and develop it into a business concept, the evaluation of the feasibility of that opportunity-focused business model is required. This business model serves as a guide for the exploitation of entrepreneurial opportunity in the subsequent phases (Chandra *et al.*, 2015).

Construction: Scholars relate this stage to the recognition of an opportunity (Eckhardt & Shane, 2003). Ardichvili *et al.* (2003) pointed out that in this stage the entrepreneur first

senses the needs that exist within a market or identifies resources that have not been used yet. Secondly, the entrepreneur visualises the fit among market needs and resources deployed to satisfy those needs. Third, the entrepreneur converts that fit into a business concept. This stage is subdivided into smaller steps, which an entrepreneur can develop through his or her own capabilities and the configurations of resources and business. This match among the needs, resources, and the way in which the entrepreneur plans to solve those market needs is called the fit, which is also associated with the discovery of a business opportunity (Shepherd, Williams, & Patzelt, 2014). We argue that entrepreneurs mentally construct their business ideas. Once this mental construction is elaborated, they proceed to exploit the business opportunity identified.

Exploitation: This stage consists of various processes which entrepreneurs can develop to materialise business ideas. This can include – but not limited to – the development of new products, new processes, the proposal of a new business model, and the creation of a business organisation (Short *et al.*, 2010; Vaghely & Julien, 2010). This requires proactive, risk-taking, and innovative entrepreneur's characteristics which entrepreneurs can exert through their entrepreneurial orientation (Anderson, Kreiser, Kuratko, Hornsby, & Eshima, 2015). In this sense, developing an identified opportunity requires internal as well as external sources of resources. The exploitation – that we argue can be conceptualised at this stage – implies how the entrepreneurs are going to make the identified opportunity and its development profitable (Oyson & Whittaker, 2015) and how the business model created to fit market needs and resources is going to offer a value for customers. Value serves as an engine for the entrepreneurial spirit and it is the meeting point between customers and the entrepreneur's business ideas.

The stages mentioned above are the core of the identification process. Entrepreneurs implement these stages in order to be able to materialise the chance that they find among the imperfections of the markets. Conceptualising this process in this way, where entrepreneurial alertness is the starting point, requires an analysis of the antecedents of the process. Opportunity identification has to be understood as a sequence of stages, which are affected by a previous interaction of factors. It is not a linear process; it implies an association between the entrepreneur's cognitive process and how these cognitive skills benefit from the accumulation of prior knowledge and the particular knowledge, which come from the context.

Factors Influencing the Opportunity Identification Process

Drawing on the consistency of opportunity identification as a concept, the authors investigated the basis of entrepreneurial action (Shepherd *et al.*, 2014; Shepherd & DeTienne, 2005; Short *et al.*, 2010; Vaghely & Julien, 2010). By doing so, researchers established some specific factors which exert impulse on the opportunity identification process. In opportunity identification research, authors have greatly contributed to the insights on these specific factors which include; the regulatory environment, culture and norms, prior knowledge and contextual knowledge (Khanna, 2014; Mary George *et al.*, 2016), market incentives and networks. These factors are elaborated below. First, it is important to analyse how these factors influence the opportunity identification process and how it is possible to observe this influence.

Regulatory environment: Ma, Ding, and Yuan (2016) contend that the political capital – i.e., favourable conditions created by the host country government – influences the decision of entrepreneurs in their quest to operate in a market context. Griffiths, Gundry,

and Kickul (2013) complement that government mechanisms regulate individual actions. Vliamos and Tzeremes (2012) show that the institutional environment has an influential impact on the entrepreneurial opportunity identification process. Institutions are the rules of the game (North, 1990), therefore to succeed, the entrepreneur's actions should be aligned to the regulatory environment in which it is located.

Culture and norms: Culture plays a strong influencing role in the entrepreneurial process (Shane, 1993; Shapero, & Sokol, 1982; Thornton, Ribeiro-Soriano, & Urbano, 2011). Culture differentiates one society from the other by virtue of a sustained practice or pattern or value adopted to suit the society's environment (Hofstede, 1980; Thornton *et al.*, 2011). Nevertheless, culture is dynamic and forms the mind of the entrepreneur; therefore, its influential impact cannot be overemphasised. Hayton, George, and Zahra (2002) hypothesise a link between national culture – i.e., the aggregate adopted pattern or practice of sense making – and entrepreneurial characteristics.

Prior knowledge: This factor has been widely studied in the research in the field of opportunity identification. The authors highlight that some people can identify business opportunities due to their previously accumulated knowledge and information (Shane & Venkataraman, 2000). The logic is that an individual is able to access information through their social network. Those individuals that neither possess knowledge nor have access will find it hard to identify opportunities. In this regard, Shane and Venkataraman (2000) divided this factor into the prior knowledge of markets, ways to serve the market, and customer problems. Our assumption is that to accumulate knowledge and access it, social capital is needed. Social capital is the cornerstone to identify opportunities. Furthermore, entrepreneurs apply their prior knowledge to sense and seize the opportunity, create the correct combination of resources and capabilities to develop the fit that matches the opportunity on markets.

Contextual knowledge: Entrepreneurs possess the ability to understand knowledge, and later apply that knowledge in a different context than the one in which the knowledge was developed (Khanna, 2015). These characteristics are mixed with entrepreneurs' social economic status within their own society, education level, and exposition to international experience (Ardichvili *et al.*, 2003). In our perspective, the entrepreneur's ability to understand all the information collected from various sources, the sense to use that information for a particular task, and the ability to convert that information into knowledge to exploit an entrepreneurial opportunity highly depend on the entrepreneur's stock of contextual intelligence and its application (Khanna, 2015).

Incentives in the market: Keeping consistency with Schumpertian tradition (1934), Casson (1982) explains that entrepreneurial opportunity exists in the conditions of the market where a new product, service, raw material, and organising method can be introduced and sold at a price higher than the cost of their production. Shane and Venkataraman (2000) note that technological, political, social, regulatory and other changes constitute the conditions where entrepreneurs find an opportunity for enhancing their wealth by deploying the resources accessible to them in a newer way. Kirzner (1973) points out that entrepreneurial opportunity lies in the temporal and spatial inefficiencies in a given market setting. Shane and Venkataraman (2000) note that entrepreneurs will be convinced of a notion of opportunity when they believe that the expected value of entrepreneurial profit is large enough in comparison to the opportunity cost of any other alternative (Kirzner, 1973; Schumpeter, 1934). Incentives for entrepreneurs may not necessarily be economic but can

also be in a non-economic form (Benz, 2009; Vivarelli, 1991; 2004). Both forms of incentives stem from the market and are assessed by entrepreneurs through the subjective assessment of the opportunity cost relating to choice.

Network: The idea of social capital is a meta-level concept. By applying social capital the entrepreneur connects a number of people in various locations and with different technical backgrounds (Bernardez & Kaufman, 2013; Camps & Marques, 2014). This happens because of the social networks which individuals develop and in which they find opportunities (Borgatti, Everett, & Johnson, 2013). For the sake of harmony among the factors mentioned above, in our conceptual model we use the approach of the network. Networks open doors for entrepreneurs to obtain financial resources in the leveraging of their business ideas (Adler & Kwon, 2002). This last part is quite important in the construction stage of the entrepreneurial identification process. How entrepreneurs develop ties and which type of ties is one of the main insights from the network analysis to the opportunity identification process. In this sense, the structural, the cognitive, and the relational dimensions of social capital are sources of information, knowledge, capabilities, and resources for those entrepreneurs who are able to identify opportunities (Partanen, Möller, Westerlund, Rajala, & Rajala, 2008). How effectively entrepreneurs use their social capital is a fundamental issue in order to identify the market that they want to target. In this sense, social capital demonstrates the possibilities of the internationalisation of new ventures (Rodrigues & Child, 2012), as well as the consolidation of products of services for international markets (Pinho, 2011). For this reason, as networks are the tangible results of social capital, networks have a strong impact on developing business for domestic and international markets thanks to the embeddedness characteristic of this factor. Entrepreneurs who apply bonding strategy can easily identify opportunities within communities and develop projects to solve those needs. This has been a fundamental case for social entrepreneurship initiatives (Tregear & Cooper, 2016) and social enterprises (Ridley-Duff & Bull, 2015). However, it is believed that initiatives on a global scale require that the entrepreneur has the international background or the ability to be connected internationally.

In our understanding, there is no definitive agreement in the literature about how these factors operate to benefit from the opportunity identification process. There should be a breaking point in the entrepreneur's mindset in order to offer a new benefit either to the domestic or to the international market. This breaking point is represented by the way in which the above factors interact with the opportunity identification. When reviewing the literature, the prominent factor which starts supporting entrepreneurs' ability to identify opportunities is entrepreneurial alertness. However, alertness receives the outcome of the interaction with the regulatory environment, culture and norms, prior knowledge and contextual intelligence, market incentives, and networks. Davidsson (2015) postulates the need to understand the context around entrepreneurs in order to see how they are able to develop a business opportunity. Our conceptual discussion contributes to this gap in the literature by elaborating a comprehensive understanding of the opportunity identification from the contextual perspective. Particularly, this comprehensive conceptual framework is shown in Figure 1.

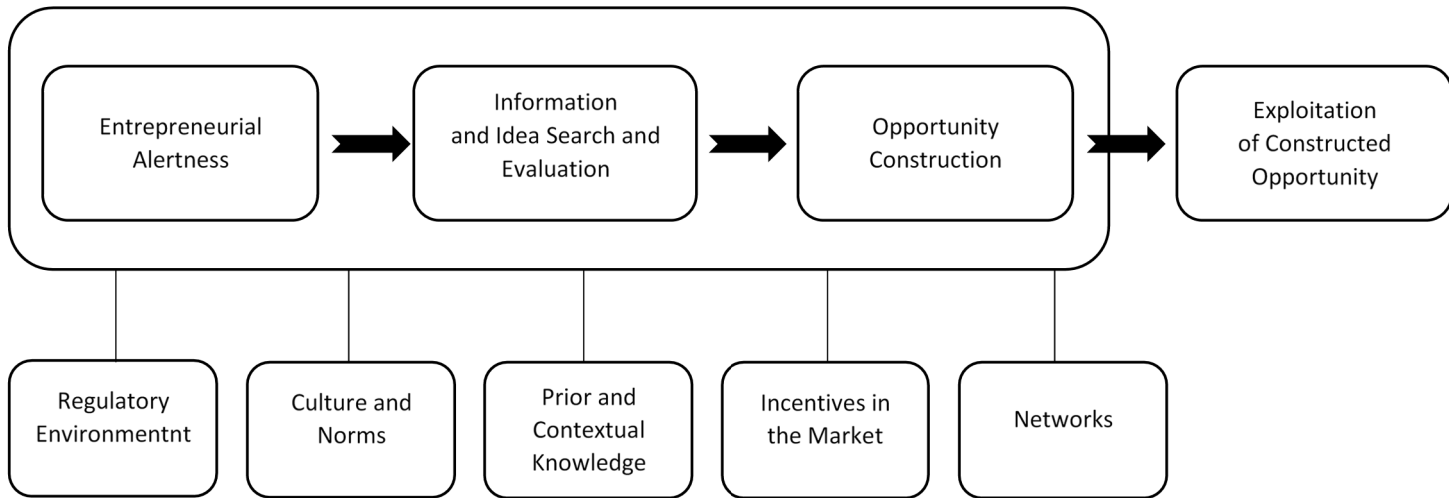


Figure 1. Conceptualisation of the entrepreneurial opportunity identification process
Source: own study.

Defining the Domestic and International Context

A business venture may target the domestic or international contexts. Context is defined in terms of the amount and types of resources, actors competing for resources, the activities, aims and requirements of firms and institutions (Håkansson & Snehota, 1997; Keating & McLoughlin, 2010; Schoonhoven, Eisenhardt, & Lyman, 1990). For a consistent thought, context is a composition of major factors, such as the regulatory environment, culture and norms, prior knowledge, market incentives and networks. In other words, the entrepreneurial process is influenced by the institutional, social and economic contexts (Hayton *et al.*, 2002; Leff, 1979). Seen in this way, the entrepreneurial process is embedded in a context which spans in both domestic and international contexts. By the domestic context, we mean the geographic location of entrepreneurs where they have accustomed themselves for long periods and have actively shaped that environment. By the international context, we refer to the new geographic location the entrepreneur intends to penetrate with his or her entrepreneurial ideas. We therefore argue that the entrepreneurial identification process is subject to similar and varying tendencies in both domestic and international contexts.

The Regulatory Environment in the Domestic and International Context

From the familiarity point of view, entrepreneurs in the domestic context are more equipped to adapt to bottlenecks and conflict. In other words, entrepreneurs are more flexible in the domestic context than in the international context. This is explained by the fact that in the domestic context they are deeply embedded and as such understand “dos and don’ts”. Entrepreneurs not embedded in the international context have a thin cushion for uncertainty, bottleneck, and conflict.

Culture and Norms in the Domestic and International Context

Entrepreneurs in the domestic context are spontaneous to making sense of the established practices, patterns or values. Additionally, they will demonstrate identical interpretations of accepted norms. In other words, another entrepreneur from the same domestic context can replicate similar interpretation and sense-making. On the other hand, entrepreneurs will culturally switch to fit in the international context. That is to say, that they will invest motivated efforts in interpretation and adaptation to understand the international context.

Prior and Contextual Knowledge in the Domestic and International Context

Entrepreneurs capture and develop knowledge through various sources and activities during their professional life. In the case of the domestic context, the formal education process is relevant in terms of technical knowledge. Specifically, entrepreneurs develop the abilities to process, classify and codify information, which they turn into knowledge. In the case of a domestic market, entrepreneurs possess a natural amount of contextual knowledge through their strong embeddedness to the domestic context. The difference in entrepreneurs’ ability to search and identify the opportunity in the domestic market is strongly explained by their accesses and ties to different formal and informal institutions and networks. By contrast, the international context demands a high level of awareness and recognition of opportunities for entrepreneurs. They need to combine various sources of information as well as knowledge. In this regard, involvement in international contexts, such as

cultural exchanges, study abroad, language skills, and work experience are crucial to exploit opportunities. Therefore, an international context represents a challenging as well as a valuable context where entrepreneurs constantly have to improve their abilities.

Incentives in the Domestic and International Context

In the domestic context, entrepreneurs have high predictability relating to interpretation and changes in the parameters. Knowing tendencies and current patterns in domestic markets, entrepreneurs are able to anticipate opportunities. This is reflected in the case of offering innovative products. Likewise, policies and social-economic conditions can play a role in the identification of opportunities. In the context of international markets, entrepreneurs have lower predictability and tolerance due to uncertainty relating to such parameters. Global economic crisis, new regulations, regional conflicts, or changes of governments reduce entrepreneurs' abilities to predict, act and operate on international markets.

Networks in the Domestic and International Market

The concept of networks here connotes both social and business networks. While entrepreneurs encapsulate their relationships with other individuals through using social networks (Guercini & Ranfagni, 2016), they use the business network to develop relationships with other firms (Guercini & Ranfagni, 2016; Håkansson, Ford, & Gadde, 2009). Entrepreneurs belong to both networks at any point in time because they are social beings and at the same time business-oriented. In the domestic context, entrepreneurs rely more on both social and business networks because they are embedded in these networks at close range. In the international context, the entrepreneurs rely more on business networks than social networks. This is argued from the perspective that the boundaries of business networks are not clearly defined (Snehota, 2004). Indeed, there are differences in domestic and international markets, but Forsgren (2016) argues that the difference should be seen from the firm's business context and not the country border *per se*. Therefore, entrepreneurs will draw on business networks as a buffer to mitigate uncertainties on the international market. Table 1 shows elements of domestic and international contexts.

Table 1. Juxtaposing the domestic and international context

Factors	Domestic context	International context
Regulatory environment	The entrepreneur is more equipped to adapt to bottlenecks and conflict	The entrepreneur has a thin cushion for uncertainty, bottleneck, and conflict
Culture and norms	More spontaneous and identical in the interpretations of meanings and conflicts. Trust is norm-based	Invest motivated efforts in interpretation and adaptation. Trust is highly institution-based
Prior and contextual knowledge	Significant part of such knowledge base builds up through institutional and social embeddedness	Entrepreneurs actively and persistently invest in the searching of information to achieve international markets
Incentives on the market	Higher predictability relating to interpretations and changes in the parameters	Lower predictability and lower tolerance relating to uncertainty in the parameters
Networks	The entrepreneur relies on both social and business networks	The entrepreneur relies largely on business networks to mitigate uncertainties

Source: own study.

Factors Influencing the Entrepreneurial Process in the Domestic and International Context

Table 2 demonstrates comparative intensity of the roles of the factors (regulatory environment, culture and norms, prior and contextual knowledge, incentives in the market and networks) in the process of entrepreneurial opportunity identification in domestic and international context.

Table 2. Intensity of the roles of the factors in the phases of entrepreneurial opportunity identification process in the domestic and international context

Factors	Domestic Context			International Context		
	Alertness	Search	Construction	Alertness	Search	Construction
Regulatory environment	Low	Medium	High	High	High	Low
Culture and norms	Low	Low	High	High	High	Low
Prior and contextual knowledge	Low	Medium	Low	High	Medium	High
Incentives in the market	Low	Medium	High	High	High	Low
Networks	Low	Low	High	High	High	High

Source: own study.

The Role of the Intensity of the Factors in the 'alertness phase'

The entrepreneurial active search leading to alertness is expected to be lower in the domestic context due to the entrepreneur's higher degree of embeddedness to the domestic regulations. The degree of alertness to international opportunities will be high, in that entrepreneurs are constantly scouting for international opportunities which are not available in the domestic context but in consonance with the host country regulatory environment.

Moreover, the culture and norms play a role in the pressure to conform. Entrepreneurs are aware of their domestic context and have a spontaneous response to the dictates of culture and norms. In this way, a natural tendency to conform reduces sharp alertness to sense an entrepreneurial opportunity. When entrepreneurs seek to operate in an international context, their limited knowledge of the new context leads them to build a response to the culture and norms of the host market. A created tendency to conform gives entrepreneurs the edge to increase their alertness to sense an entrepreneurial opportunity.

In the domestic context, entrepreneurs are endowed with a natural amount of knowledge because they are aware of the different sources from which this knowledge emerges. Given the argument, entrepreneurs' alertness will be low in the domestic context because prior and contextual knowledge are somewhat given. When entrepreneurs seek to operate in an international context, their unawareness of different sources of contextual knowledge in the host market leads them to proactively increase their alertness to fish out entrepreneurial opportunities available.

Similarly, incentives on the market are influenced by factors such as the regulatory environment, culture and norms, prior and contextual knowledge, as well as the available networks. Therefore, the pressure to conform in order to meet the criteria to acquire incentives is spread across both the domestic and international context. In relation to the degree of alertness to sense an opportunity, this will be low in the domestic context, because entrepreneurs are accustomed to these factors and can operate with or without

incentives in the market. Conversely, entrepreneurs will have a high sense of alertness when they operate in an international context because they are not habituated to various factors on the host market. Entrepreneurs will scan for such incentives, which will motivate them to pursue an opportunity in the international context.

Networks have the tendency to weaken the alertness of entrepreneurs in the domestic context because there is a greater likelihood that the network may not produce newness as far as bonding social capital is concerned. In the international context, entrepreneurs will be highly alert because they are not deeply embedded; therefore, they are capable of employing bridging and linking social capital, which will make them alert in their quest for an opportunity. In the nutshell, when entrepreneurs are familiar with the domestic context, their alertness will be low as compared to the international context.

The Role of the Intensity of Factors in the ‘search phase’

Opportunities can be searched through systematic and non-systematic means (Ardichvili *et al.*, 2003; Timmons, Muzyka, Stevenson, & Bygrave, 1987). In our understanding, a systematic search reflects careful planning. A non-systematic search reflects a loose approach to preparation. In the regulatory environment of the domestic context, entrepreneurs employ both systematic and non-systematic means of opportunity searching reflecting a medium level of intensity. This is because entrepreneurs can adapt to bottlenecks and conflicts, hence need less to undertake systematic means for opportunity searching. Nevertheless, the regulatory environment is not static; thus, entrepreneurs in the domestic context may employ systematic search when the regulatory environment brings about changes, which promote newness. Entrepreneurs seeking opportunities in an international context will employ a systematic search, reflecting a high level of intensity. This relates to the fact that entrepreneurs will carefully align their opportunity search to the regulatory environment to which they are not accustomed.

As far as culture and norms are concerned, entrepreneurs will employ non-systematic means to search of an opportunity in the domestic context, hence a low level of intensity for opportunity search. Our argument is based on the fact that entrepreneurs in the domestic context are not prone to bear liability for foreignness and outsidership (Forsgren, 2016; Johanson & Vahlne, 2009) because the need to invest motivated efforts in the search for an opportunity is low. When such entrepreneurs decide to expand operations to an international context, they employ systematic means of opportunity search, reflecting a high level of intensity for opportunity search. This is because they are liable for foreignness and are aware of their outsidership when faced with the culture and norms of the host market. Therefore, they put in motivated efforts to search for opportunities.

Entrepreneurs who have prior and contextual knowledge will employ both non-systematic and systematic means to search for an opportunity. Our argument here is that if entrepreneurs’ existing knowledge does not offer any clue as leading to a new opportunity, then non-systematic means to search for an opportunity will be employed. However, if entrepreneurs’ existing knowledge is continuously improved, it has the tendency to bring about newness. Since newness inherently breeds opportunities, entrepreneurs will scrutinise it through systematic means. The same is true for entrepreneurs seeking to operate in an international context. If they have prior and contextual knowledge about the host market, their search, in the beginning, will be non-systematic. However, their approach to opportunity search will be systematic when the existing knowledge is less useful during international entry.

Much the same as the factors of the regulatory environment and prior and contextual knowledge, incentives on the market affect the intensity of search whether in the domestic or international context. In the domestic context, entrepreneurs are aware of incentives, which facilitate or inhibit the intensity of opportunity search. Entrepreneurs in the domestic context know their market and will employ non-systematic means to search for an opportunity when the incentives on the market are at a close grasp. However, they will employ systematic means if the incentives are provided by the market exclusively. This, of course, will guide them to avoid searching for opportunities that will not be realisable. In the international context, entrepreneurs will employ systematic means to search for opportunities because incentives on the host market are available to them only when they proactively acquaint themselves, hence the systematic means to search for an opportunity.

Here again, networks may weaken the intensity to search for an entrepreneurial opportunity. In the domestic context, there is a tendency that entrepreneurs' social capital and business networks are intertwined and difficult to separate. Therefore, we argue that entrepreneurs' search for opportunity is low in the domestic context because bonding social capital and business networks may not produce newness that will engender the search for an opportunity based on systematic means. Entrepreneurs seeking to operate in the international context will rely on business networks, which spans across borders other than social capital, which is geographically bound to the entrepreneurs' domestic context. It suffices to say that business networks have formal structures devoid of personal conflict. In this way, the opportunity search will rely on systematic means.

The Role of the Intensity of the Factors in the 'construction phase'

We further argue that the speed at which entrepreneurs mentally construct an opportunity is higher in the domestic context than in the international context, given more informed and accustomed institutional conditions. Cognitive processes are created in consonance with the environment an entrepreneur identifies with. Entrepreneurs scan and pick appropriate information needed from the immediate environment and process them to produce a mental frame of the opportunity. Due to the fact, they are closer to the domestic context than in the international context, mental constructing the opportunity is much clearer. Both culture and norms, as well as the incentives on the market, shape the cognitive process of the entrepreneur in the domestic context because he picks information from the economic environment and mentally constructs the opportunity for exploitation. On the other hand, entrepreneurs seek to internationalise the possessed limited knowledge of culture and norms, and the incentives in the foreign context. Therefore, their mental construction of the image of the international opportunities is limited.

CONCLUSIONS

Studying the IE theoretical framework, we establish the main differences between the opportunity identification processes according to domestic or international markets. We propose a matrix in order to identify how entrepreneurs adapt their mindset to find an opportunity. Entrepreneurs' ability to search, identify and exploit business opportunities deal with framework conditions as well as with personality traits. However, some grey areas of the opportunity identification process need further research. For example, it is important

to examine the impact of culture and institutions in the configuration of the entrepreneur's cognition processes. Particularly, how culture and institutions can be enablers or constraints for knowledge management by entrepreneurs who are building new ventures. It is necessary to investigate the role of social networks. Specifically, how social networks facilitate the mobilisation of resources by entrepreneurs on international markets. As a relevant future research theme, it is important to understand which approach entrepreneurs follow in order to exploit an opportunity. From the practical point of view, it is relevant for entrepreneurs to identify the resources, which are involved in the entrepreneurial action in order to exploit an opportunity in the international context. Moreover, capabilities and resources perspective can be additional research trends in the entrepreneurial opportunity identification. Practitioners can ensure efforts to foster the interaction of entrepreneurs with governmental institutions and programmes. Particularly, the promotion of entrepreneurship through policies should include instruments for identifying opportunities on both domestic and international markets. The conceptual implication of this paper is summarised as an invitation for scholars to apply the conceptual matrix of factors influencing the entrepreneurial identification process according to the market context. It will be an interesting discussion to explore the changing mindset of entrepreneurs when they deal with various markets context at the same time.

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Antecedents of Accelerated Internationalisation of Polish and Czech Small and Medium-Sized Enterprises

Izabela Kowalik, Lidia Danik, Petr Král, Hana Řezanková

ABSTRACT

Objective: The study goal was the investigation of relationships between accelerated internationalisation descriptors and antecedent firm- and entrepreneur-related factors in Polish and Czech SMEs.

Research Design & Methods: In order to compare Polish and Czech companies, the data collected in two independent studies were used. The study of 233 Polish companies was conducted with the use of CATI method in 2014; 108 Czech companies were surveyed in 2013/2014 with the use of CAWI method. In both samples half of the surveyed SME-exporters were conforming to the accelerated internationalisation criteria.

Findings: In both samples the “global vision” elements and company internationalisation scale and speed were interrelated. In the Polish companies this relationship was moderated by company size. There was the lack of strong positive relationships between innovativeness and internationalisation speed and scale in both samples.

Implications & Recommendations: The managerial mindset has a decisive role for accelerated internationalisation in both Czech and Polish SMEs. The innovativeness of offering is not indispensable for fast foreign expansion. Larger companies may expand abroad faster if they have internationally oriented managers.

Contribution & Value Added: This work addresses a research gap concerning idiosyncrasies of internationalisation antecedents in Polish and Czech enterprises. As the results show, there is no common internationalisation pattern for Polish and Czech SMEs.

Article type: research paper

Keywords: internationalisation antecedents; born global model; two-country study; The Czech Republic; Poland; SME

JEL codes: F23, M13, M16

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INTRODUCTION

Both in Poland and in the Czech Republic there are reports on large numbers of small and medium enterprises (SMEs) entering foreign markets. Almost one-fourth of Polish small firms and over 40% of medium-sized ones are exporters (PARP, 2015). Czech SMEs seem to be less involved in export activities than their Polish counterparts. In the Czech Republic there are 16% of SMEs which are internationally oriented – i.e. those which have or plan to have at least one-fourth of clients from abroad (PARP, 2015), but the 2015 CzechTrade report stated that from 2011 to 2015 the number of exporters among Czech SMEs grew by 15% (CzechTrade, 2015).

In Poland the activity of SMEs constitutes a considerable proportion of foreign trade and the level of exports generated by them is dynamically increasing (jointly, Polish-based small and middle-sized firms are generating over 39% of the Polish exports – PARP, 2014)¹. Besides the traditional “stage models” of market entry, the accelerated expansion model has been applied by a considerable number of Polish SMEs (PARP, 2014). The Czech SMEs’ share in the total exports of the country reached about 31% in 2015 (MPO, 2016). Although in the Czech Republic the statistical reports suggest a high importance of SMEs for the country’s exports, the companies following accelerated internationalisation path have not been examined thoroughly yet.

The aim of this paper is the investigation of relationships between accelerated internationalisation descriptors and antecedent firm- and entrepreneur-related factors in Polish and Czech SMEs. The analysis will be conducted on the set of data collected using CATI (the Polish sample) and CAWI (the Czech sample) methods. The outcomes of Mann-Whitney test and correlation analysis lead to pointing out some differences in antecedents of early internationalisation between Polish and Czech SME exporters.

The first section of the paper provides an overview of the literature on the accelerated internationalisation antecedents and the conceptual model of the study. The next part comprises the description of the Polish and Czech samples and introduces variables used to test the hypotheses. The results section summarises findings of the correlation and moderation analysis and leads to identifying the characteristics of the accelerated internationalisation path followed by companies originating in Central and Eastern Europe in confrontation with findings of other authors. Finally, the conclusions present general results, together with the study limitations and recommendations for future research.

LITERATURE REVIEW AND CONCEPTUAL FRAMEWORK

The born global internationalisation path has been investigated for a few decades (e.g. Knight & Cavusgil, 1996; Rialp, Rialp, & Knight, 2015). Enterprises following this path have been defined as “International New Ventures” (INV), i.e. firms which from the beginning of existence seek to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries (Oviatt & McDougall, 1994, p. 49). So far Polish studies on accelerated internationalisation concerned specific traits

¹ After including micro-firms, this share increases to 82% of the Polish exports value (Sources: Polska Agencja Rozwoju Przedsiębiorczości, 2014, *Raport końcowy. Ewaluacja potencjału eksportowego przedsiębiorstw w Polsce*. Warsaw, p. 66 – a representative study of 659 exporters; Statistical Yearbook of the Foreign Trade, Central Statistical Office of Poland, 2014).

of INVs (Duliniec, 2011; Jarosiński, 2013), their expansion motives (Kowalik & Baranowska-Prokop, 2013), their success factors (Danik & Kowalik, 2015), their performance determinants (Baranowska-Prokop & Sikora, 2015) and their entrepreneurial traits (Wach, 2015). The determinants of early internationalisation have been studied by Zbierowski (2015) who compared the international orientation of Polish SMEs to other SMEs covered by Global Entrepreneurship Monitor. However, the presented study is an attempt to supplement the evident lack of knowledge on firm-specific determinants of accelerated internationalisation of Polish SMEs and to compare their internationalisation path with companies from another Central-European country.

In the Czech Republic the research on the born global internationalisation model has been rather limited so far (Simberova & Rekova 2016). Dasan (2013) identified Czech born-globals, compared them with Russian companies and found that their performance has improved thanks to internationalisation, the main motives of export being the access to markets and long-term business growth. Zapletalova (2013) surveyed 203 internationalising Czech enterprises and found only a few among them conforming to the born global model. An important determinant of accelerated internationalisation was their foreign markets knowledge. Glaister, Liu, Sahadev and Gomes (2014) have analysed HR practices of born globals in emerging markets, including 22 Czech companies. Ferencikova (2016) suggested that the born global internationalisation model could be relevant especially for companies originating in the ICT sector of the CEE countries, while SMEs from other industries tend to follow more traditional expansion paths. The Global Entrepreneurship Monitor presented data on the internationalisation potential of Czech SMEs, showing that their export orientation (start-ups that already have or plan to have at least 25% of their customers from abroad) reached 16.2% (Lukeš, Jakl, & Zouhar, 2014). Summing up, a detailed investigation of antecedents of Czech SME internationalisation is also needed, as there is a potential for choosing the accelerated expansion path by more of them.

Global Vision as an Accelerated Internationalisation Antecedent

Internationalisation antecedents include determinants of the chosen internationalisation pathway at the firm, managerial, and environmental level (Kuivalainen, Saarenketo, Sundqvist, & McNaughton, 2012). On this pathway the speed (timing), scale, and scope of internationalisation are the particular distinguishing characteristics, also referred to as degree of internationalisation (DOI) variables. Among the managerial antecedents the mentioned authors listed “mindset, experience, entrepreneurial orientation”; whereas at the firm level “resources, knowledge, strategic orientation, networks, capabilities, liabilities” were included (Kuivalainen *et al.*, 2012, p. 452). In this paper selected antecedents from these two levels will be analysed in detail.

So called “global vision” or “managerial urge” are mentioned by some authors as typical elements of the born global model (Knight & Cavusgil, 1996; Luostarinen & Gabrielsson, 2006). Others consider them as antecedents of accelerated internationalisation (Tabares, Alvarez, & Urbano, 2015; Karra & Philips, 2004; Rasmussen, Madsen, & Evangelista, 2001). Global vision is understood as a managerial “mindset” including the treatment of foreign markets as the primary target for company activity. In our study this trait was included in the term “international openness”. Other authors claim that it is connected with the subject-matter experience, appropriate for the type of activity which the company is undertaking (Luostarinen & Gabrielsson, 2006). Thus, in this study

this second antecedent is included as “experience” pertaining to earlier activities of managers on foreign markets. As for its role in early internationalisation, contrary to “international openness”, the results have been mixed. Some authors claim that international experience is not indispensable to start export quickly (Evers & O’Gorman, 2011), while others confirm that international experience is on a higher level in born globals than in traditional exporters (Zhang, Tansuhaj, & McCullough, 2009) and thus it is interesting to analyse it in the new context of the CEE markets.

Innovativeness as an Accelerated Internationalisation Antecedent

Innovativeness is one of the characteristics which, since Oviatt and McDougall’s (1994) seminal work, have been used to describe rapidly internationalising companies. According to Knight and Cavusgil (2004), innovation culture is one of the antecedents of internationalisation of young firms, as it brings about specific capabilities needed for success on foreign markets. Even more, innovativeness is perceived to be a critical element of the entrepreneurial process needed to support the opening of new markets and to provide unique offers in order to serve those markets (Mort, Weerawardena, & Liesh, 2012). If companies want to compete on international markets, they have to develop new internationally oriented routines and organisational processes and forget the previously applied routines rooted in domestic operations (Grant, 1996). On the other hand, the new entry into foreign markets is already an innovation, therefore internationalising firms can be perceived as more innovative compared to domestic entities (Knight & Cavusgil, 2004; Zijdemans & Tanev, 2014).

The two-way causality between the innovation process and the firm performance is also being discussed, as not only innovation leads to exporting, but also the internationalisation process increases innovativeness, being the source of new ideas, know-how and other important knowledge resources (Gkypali, Rafailidis, & Tsekouras, 2015; Zijdemans & Tanev, 2014). The evidence for such “learning by exporting” effects was given for example by Love and Ganotakis (2013).

A lot of recent research has confirmed the correlation between innovation intensity and internationalisation speed. Meliá, Perez and Dobón (2010) showed in their study on Spanish service SMEs that innovative orientation influences the early foreign market entry. Lamotte and Colovic (2013) demonstrated the same for firms from 64 countries and showed that product innovation has a stronger impact on internationalisation than process innovation. However, the relationship between innovation intensity and internationalisation speed is not obvious in all countries. The study of Lamotte and Colovic (2013) shows that innovativeness in low-income countries has less influence on the internationalisation of new ventures than in high-income countries. Moreover, according to their other study, knowledge-based firms are less likely to internationalise from inception than other firms from transition countries (Lamotte & Colovic, 2015).

Based on the literature review, we have proposed the following hypotheses concerning Polish and Czech SMEs:

- H1:** The stronger the managerial global vision, the faster the internationalisation.
- H2:** The stronger the managerial global vision, the higher the internationalisation scale.
- H3:** The stronger the managerial global vision, the broader the internationalisation scope.
- H4:** The higher the company innovativeness, the faster the internationalisation.

H5: The higher the company innovativeness, the higher the internationalisation scale.

H6: The higher the company innovativeness, the broader the internationalisation scope.

There has been little research so far concerning the role of INVs' age as a factor influencing their performance, and it is considered a topic worth studying (Rialp *et al.*, 2015). Some findings indicate that the development stage of INVs might have a considerable influence on their internationalisation strategies (Gabrielsson & Gabrielsson, 2013). One of the studies showed that only during later development (and at older age), INVs develop the knowledge of the foreign market, which helps them to evaluate opportunities more accurately (Hånell, Nordman, & Sharma, 2014). The Polish authors, Cieslik and Kaciak (2009), found that companies which internationalised at an older age were more likely to survive in foreign markets for a longer time. On the other hand, Almódovar (2012) has shown that age has a negative impact on the performance of internationalising firms. As these results are mixed, in order to explain the discussed relationships, the following hypotheses are analysed with regard to Polish and Czech companies:

H7: Company age strengthens the relationship between global vision and accelerated internationalisation.

H8: Company age strengthens the relationship between innovativeness and accelerated internationalisation.

As the internationalisation process is positively related to the availability of resources (e.g. Zapletalová, 2012; Gubik & Karajz, 2014) smaller companies, by their nature possessing limited tacit resources, can find it difficult to go international, despite the global vision of the entrepreneurs and the firm's innovativeness. Thus, in their case, the global vision and innovativeness might not be as strongly correlated with accelerated internationalisation, as in the case of larger companies. Therefore, the following hypotheses are proposed:

H9: Company size strengthens the relationship between global vision and accelerated internationalisation.

H10: Company size strengthens the relationship between innovativeness and accelerated internationalisation.

The conceptual model of the study is summarised in Figure 1.

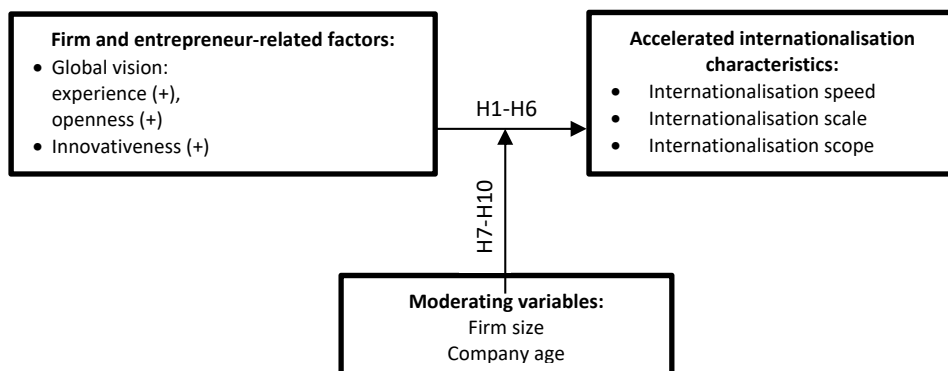


Figure 1. Conceptual model of the study

Source: own elaboration.

MATERIAL AND METHODS

In order to fulfil the study goal, which was to investigate the relationship between accelerated internationalisation descriptors and antecedent firm- and entrepreneur-related factors in Polish and Czech SMEs, the data concerning companies originating in these countries were collected and the variables described in the section below were analysed.

Sampling

In order to compare Polish and Czech companies, we used data collected in two independent studies. The data about Polish companies were gathered during a research project aimed at studying the processes of early internationalisation of Polish SMEs, carried out in autumn 2014 at the Warsaw School of Economics. The survey was conducted with the use of standardised questionnaire interview method with computer assistance (CATI). The Bisnode database updated at the end of 2013 and containing information about all companies registered in Poland, and being active at the time of the study served as a sampling frame. The firms were drawn out of the population of 19 594 Polish firms hiring 10-249 employees and belonging to the manufacturing section of the Polish Classification of Activity. A randomised algorithm in the software for telephone surveying was used to draw the respondents by a market-research agency. The interviews began with screening questions eliminating companies not fulfilling the criteria described below. Among the companies fulfilling the criteria, the response rate was 82.2%.

In total 233 Polish firms were selected for the study, of which 105 fulfilled the requirements formulated by Knight, Madsen and Servais (2004), concerning early internationalisation. Namely, they were Polish-based and owned SMEs, founded in 1990 or later, which had reached at least 25% share of export sales in the total turnover, internationalised within three years from founding and obtained a 25% share of exports in the total sales volume during three years (they are referred to in this text as international new ventures – INVs). The other 128 companies were gradually internationalised SMEs which did not fulfil the criterion of rapid internationalisation within three years, but they had reached at least 25% share of export within total sales. Following the selection of respondents, CATI interviews with export managers/sales directors of the companies were conducted.

The Czech survey was conducted in November 2013 – January 2014 with the use of on-line interview method (CAWI). A special commercial database MERK was used, providing contacts of 17 000 companies registered in the Czech Republic. They were sent emails requesting them to fill in the on-line survey. Altogether 590 valid responses to the questionnaire were received. The majority of the sample (429 firms) conducted international activities. In compliance with the research objectives just the internationally active firms were involved in further analysis.

In order to receive a sample comparable to the Polish one, micro and large companies, those with foreign equity stake, and export share in revenues under 20%, were eliminated². The final sample comprised 108 Czech companies founded after 1989, including

² In the Czech Republic there are 16% of SMEs which are internationally oriented, whereas in Poland this figure equals 24% (according to the Polish Agency for Enterprise Development, "internationally oriented" SMEs are those which have at least one-fourth of clients from abroad, see: PARP, 2015, p. 68). Due to this lower number

54 INV companies which had reached at least 25% share of export sales in the total turnover and internationalised within three years from inception, which gave a similar structure of the sample as in the case of the Polish companies.

Both the CATI and CAWI methods allowed the collection of data without any geographical constraints. The possibility to ask “sensitive” questions, high technical reliability, and short data collection time and low cost are the other advantages of these methods. The most important weakness of the data collection process was the application of different data gathering methods and different questionnaires for the Polish and Czech sample, as the interviews were conducted by research teams working independently on two different projects. Fortunately, the aims of both studies were similar, and therefore there were corresponding questions in both questionnaires, so it was possible to compare the answers.

There were similar numbers of small (56%) and medium – sized (44%) companies in the Polish sample, whereas in the Czech sample small companies constituted over 71%. In the Polish sample there were significantly more low-tech, whereas in the Czech sample there were significantly more high-tech companies. The Polish companies (mean age 14.6yrs, standard deviation 6.7 yrs) were younger than the Czech companies (mean age 18yrs, standard deviation 5.9yrs).

Variables

From both the Polish and Czech surveys the following variables were chosen for analysis.

1. Experience of the managers in dealing with foreign markets.

The experience of the Polish companies’ managers was measured on a 5-point semantic scale, with 1 meaning “our managers have considerable experience in doing business on foreign markets” and 5 – “our managers have no experience in doing business on foreign markets”. The Czech respondents were asked to evaluate the experience of the companies’ managers in dealing with international markets on a 5-point Likert type scale ranging from “extremely low” to “extremely high”. For the sake of the clarity of further analysis, the variable was then recoded into a 5-point scale, with 1 indicating low international experience and 5 indicating high international experience in both samples.

2. Openness of the managers to foreign markets.

In order to measure the openness of the Polish companies’ managers we applied a semantic scale with 1 meaning “foreign markets are definitely our priority” and 5 meaning “local market is definitely our priority”. The Czech managers were asked about their attitudes to internationalisation. “Cosmopolitanism and international openness”, measured on Likert type scale ranged from “extremely low” to “extremely high”. The variable was then recoded into the 5-point scale, with 1 indicating low international openness and 5 indicating high international openness in both samples.

3. Intensity of innovations.

We included three questions about innovativeness in the Polish questionnaire. First we asked the respondents, if they had introduced any product, production process or technological innovations, and then to give examples of these innovations. Next, the respondents were asked similar questions about the innovations in distribution and promotion (classified later as marketing innovations). The Czech respondents were asked to mark

in the Czech Rep., we accepted in the Czech sample also “gradually internationalised” exporters with at least 20% of revenues coming from export, as the level indicating their export focus.

the types of introduced innovations (product/process/organisational/marketing innovations)³. On the basis of these questions, we introduced a variable “intensity of innovations” related to the number of introduced innovation types, ranging from 0 meaning “no innovations introduced” to 3 meaning “three types of innovations introduced”.

4. Level of export sales (“Internationalisation scale”).

Both the Polish and Czech companies were asked to indicate the share of export in the revenues of the company. The revenues were then coded as 1: 20-24%, 2: 25-50%, 3: 51-75%, 4: 76-100%.

5. Speed of foreign market entry (“Internationalisation speed”).

The Polish respondents were asked to indicate when they had started exporting. Numbers of years from inception were coded respectively as “1” to “4”. The Czech respondents were asked about the year of founding and the year of foreign market expansion. The variable was then coded in the same way for both samples, using a 4-point scale, with 1 indicating low foreign market entry speed and 4 indicating high foreign market entry speed.

6. “Territorial scope of activity” (“Internationalisation scope”).

The Polish companies were asked about their most important foreign target markets and the share of sales to these markets in their total export (they could indicate several countries). The Czech respondents were asked about the territorial scope of their activity. Local, regional and national scope was coded as “1”, “only neighbouring countries/cross border countries” were coded as “2”, the EU markets were coded as “3”, the EU markets plus outside EU were coded as “4” and exports to markets “outside EU only” were coded as “5”. The answers of the Polish companies were recoded respectively.

Moreover, the moderating variables included in the study were: the size of the companies measured by the number of employees and the company age.

RESULTS AND DISCUSSION

The Kolmogorov-Smirnov test for one sample was used to investigate the data distribution. None of the variables was normally distributed, therefore, nonparametric tests were applied for further analysis.

As the Czech sample included both the manufacturing and service companies, the Mann-Whitney test was applied to investigate if there were any differences between them, regarding the studied variables’ distribution. No differences except for the variable “territorial scope of activity” were identified, so the service companies were included in the sample. As for the “scope of activity”, separate analyses were conducted regarding a) the whole sample, b) the manufacturing companies and c) the service companies.

The next step was to compare the studied variables’ distribution in the Polish and Czech samples with the use of the Mann-Whitney tests (in this test the hypothesis that the distribution of a certain variable is the same across the countries is tested). No significant differences were observed only for the variables “country market category”, “openness of the companies’ managers” and “intensity of innovations”. Therefore, we decided to test the hypotheses separately for the Polish and Czech samples. We applied the Spearman’s rank

³ Data on organisational innovations were not included in the subsequent analysis, as the Polish respondents were not asked about them.

correlation coefficient (Spearman's rho), which is a nonparametric measure of the dependence between two variables. In this case the hypothesis that rho is zero is tested (the monotonic relationship between paired data is analysed). The results are presented below.

Correlation Analysis

The correlation indicators of firm-related factors and accelerated internationalisation indicators are presented in Table 1 (the Polish sample) and **Błąd! Nie można odnaleźć źródła odwołania.2** (the Czech sample).

Table 1. Correlation matrix of firm- and entrepreneur-related factors, moderating variables and accelerated internationalisation characteristics (Spearman correlation) – Polish companies

Variable	1	2	3	4	5	6	7
1. Experience of the managers in dealing with foreign markets							
2. Openness of the managers to foreign markets	0.158**						
3. Intensity of innovations	0.009	-0.097					
4. Internationalisation scale	0.010	0.511***	-0.153**				
5. Internationalisation speed	0.105	0.311***	0.026	0.235***			
6. Internationalisation scope	0.006	-0.085	0.125	-0.094	-0.029		
7. Company size	0.004	-0.177***	0.084	-0.136**	-0.156**	0.101	
8. Company age	0.091	-0.147**	-0.034	-0.143**	-0.544***	0.060	0.243**

N=233. ***p<0.01, **p<0.05, *p<0.10.

Source: own study.

Table 2. Correlation matrix of firm- and entrepreneur-related factors, moderating variables and accelerated internationalisation characteristics (Spearman correlation) – Czech companies

Variable	1	2	3	4	5	6	7
1. Experience of the managers in dealing with foreign markets							
2. Openness of the managers to the foreign markets	0.441***						
3. Intensity of innovations	0.125	0.216**					
4. Internationalisation scale	0.183*	0.095	0.157				
5. Internationalisation speed	0.150	0.112	-0.116	0.009			
6. Internationalisation scope	Whole sample	0.214**	0.107	0.174	0.199**	-0.079	
	Man. (N=41)	0.245	0.05	0.069	0.071	0.143	
	Serv. (N=67)	0.212	0.173	0.250**	0.224	-0.212	
7. Company size	0.024	0.172*	0.133	0.11	0.182	0.083	
8. Company age	0.132	0.028	-0.117	0.010	-0.145	0.016	0.176*

N=108. ***p<0.01, **p<0.05, *p<0.10.

Source: own study.

As Table 1 shows, the openness of the managers to foreign markets was correlated with the speed of foreign market entry in the Polish sample. It means that earlier entry into foreign markets is associated with treating foreign market as priority. This relationship, however, was not observed for the Czech companies (Table 2). The second element of the global

vision, the experience of the companies' managers in dealing with foreign markets, was related to the speed of internationalisation neither for the Polish nor Czech companies. The lack of this relationship could be connected with high skewness of this variable in both samples (most of the managers declared high experience). Either way, H1 was only partially supported in the Polish sample and not supported in the Czech sample (Figures 2 and 3).

Also hypothesis 2 was only partially supported: the level of export sales was positively related to the openness of the companies' managers in the Polish sample (a moderate relationship with Spearman's $\rho = 0.511$, $p < 0.01$), and to the managers' international experience in the Czech sample (Spearman's $\rho = 0.183$ with significance at $p < 0.1$ level). Hypothesis 3, referring to the relationship between the global vision and the geographical internationalisation scope, was not supported in the Polish companies and partially supported in the Czech companies (only in the service companies).

Furthermore, the analysis did not reveal any significant relationships between innovativeness and the internationalisation speed of both the Polish and the Czech companies (H4 was not supported). When verifying H5, we observed a relationship between the intensity of innovations and the internationalisation scale only in the Polish sample. However, this relationship was negative, contrary to our expectations. Moreover, there was a significant relationship between innovativeness and internationalisation scope for the Czech service companies (indicating partial support for H6).

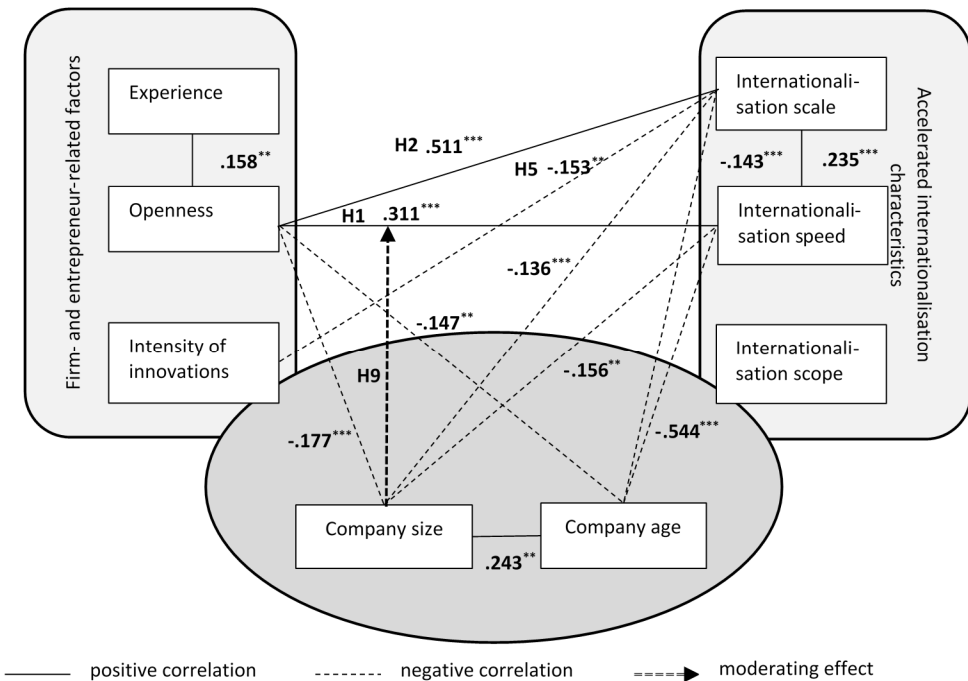


Figure 2. Values of the correlation coefficient for selected pairs of variables in the Polish companies

N=233. Note: $***p < 0.01$. $**p < 0.05$.

Source: own study.

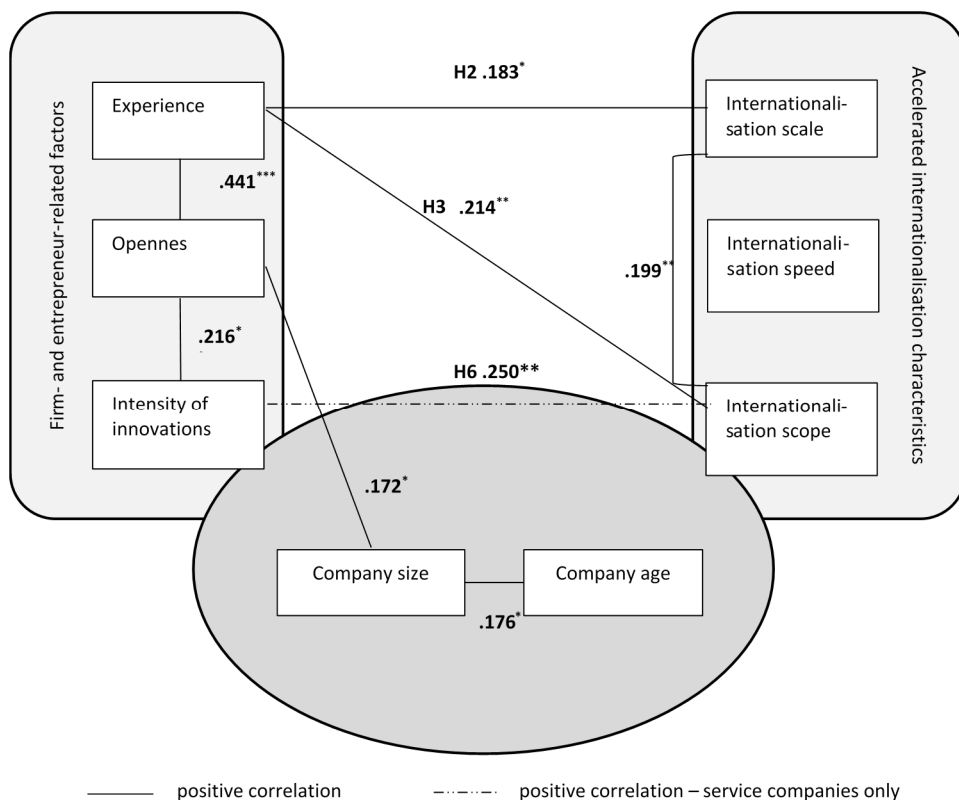


Figure 3. Values of the correlation coefficient for selected pairs of variables in the Czech companies
 N=108. Note:***p < 0.01. **p < 0.05. *p < 0.10.
 Source: own study.

The Analysis of Moderating Variables

In the Polish group, the direct relationships between the company size and age and the DOI variables were mostly weak. The only moderate correlation was found between the speed of foreign market entry and company age ($p = -0.544$, Figure 2). This finding, together with correlation between openness and company age, indicates that there is a need of further studies concerning the role of firm age as a factor influencing SME internationalisation.

The correlation of firm size and the speed of entry was very weak but significant, indicating that later foreign market entry is more likely for larger Polish firms. Moreover, a very weak negative correlation between firm size and internationalisation scale was found. The negative correlation of openness with company size and age indicates that older and larger Polish companies become more focused on local markets.

In the Czech group, the results concerning moderating variables were mostly insignificant. Only the correlation between firm size and openness was significant and positive, indicating that for larger Czech firms larger openness to foreign markets is more likely (Figure 3).

To check if there was any influence of the age of the company on the global vision – DOI relationship, the sample was divided into three sub-groups with different age means and the correlation analyses were conducted separately in these groups. The results did not provide any indication for a systematic moderating role of age in the relationship (H7 was rejected).

To check if there was any influence of the age on the innovativeness – DOI relationship, we conducted the correlation analyses once again in three age groups. The results did not provide any indication for a systematic moderating role of age in this relationship (H8 was rejected).

To check if there was any influence of the company size on the relationship between global vision and the DOI variables, as well as between innovativeness and DOI variables, the sample was divided into three sub-groups with different numbers of employees and separate correlation analyses were conducted in these groups. They did not provide any indication for a moderating role of the company size in the Czech sample. In the Polish sample only the correlation between the speed of internationalisation and openness of the companies' managers was moderated by the company size: no correlation was observed for the smallest companies (10-21 employees); the larger the company, the stronger the correlation under study was (Spearman's $\rho = 0.237$, $p < 0.05$ for the companies with 22-69 employees; Spearman's $\rho = 0.407$, $p < 0.01$ for the companies with 70-249 employees). Therefore, hypothesis H9 was supported in the Polish sample.

No systematic moderating effect of the company size on the relationship between innovativeness and DOI was found in any of the subsamples, therefore hypothesis H10 was rejected.

Discussion

The above results show that in both samples there were correlations between the global vision elements and the company internationalisation scale. Similar results had also been found in earlier studies of Polish born global companies (Kowalik, 2014) and studies of INVs coming from other markets (Karra & Philips, 2004; Luostarinen & Gabrielsson, 2006). In the Czech Republic there had been no studies before on the global vision of INV managers. However, a recent qualitative study from Slovakia reports on two cases of born-global companies, where the characteristic mindset of managers was described (Kokavcova, 2016).

Moreover, the correlation between managerial global vision and the foreign market entry speed has been confirmed in the Polish sample, which is similar to earlier studies. In Moen and Servais's (2002) study of French and Norwegian firms, the firms that began exporting shortly after their establishment, had the highest levels of global orientation dimensions (vision, proactiveness, and responsiveness). In the Czech sample no such relationship was found, but the reason may be the skewness of variable "time of first foreign market entry" (the Czech SMEs were much faster to enter foreign markets than the Polish ones). Another study of internationalising SMEs from Silesian-Moravian Region (N=67; Zapletalova, 2012) also confirmed that a considerable number of them (over 35%), were entering foreign markets within a year from establishment.

The next important finding is the lack of strong positive relationships between innovativeness and internationalisation speed and scale in both samples (a weak negative correlation with internationalisation scale in the Polish sample). It is consistent with the findings of Lamotte and Colovic (2013; 2015) who showed that innovation had less impact on the internationalisation of new ventures in low-income countries than in high-income countries. This might be due to the type or the quality of R&D conducted by firms from transition countries, which may not allow fast entry to foreign markets, as is

the case in mature economies. In their recent study, Lamotte and Colovic (2015) presented data on new ventures from 27 CEEC countries (incl. 1 773 firms from Poland). The results proved that a firm's knowledge intensity, measured by investment in R&D, is negatively related to the likelihood that it will internationalise from inception. The authors proposed that it might take longer to get a return on investment in R&D in transition countries and that the delayed foreign entry might be the consequence of this fact. These findings are also congruent with another Polish study where most of INV managers, operating in medium-tech branches, admitted that their products were less innovative than the competing ones (Danik & Kowalik, 2015). However, the study concerning Polish high-tech companies has proved that their innovativeness contributed to the intensification of the internationalisation process (Wach, 2016). The difference compared to the results of the current study may be due to different industries represented by the studied Polish SMEs (only 4% of them came from high-tech industries).

The characteristics of the companies in the presented Czech and Polish samples were differentiated. However, the firm size and age did not strongly determine the internationalisation path of neither Polish nor the Czech SMEs under study. Only in the Polish subgroup there was a moderate negative relationship between the firm age and internationalisation speed. A Serbian study by Radojevic, Marjanovic and Radovanov (2014) also showed that the perception of export barriers was lower in younger Serbian companies, meaning that younger companies were more willing to export. The finding that later entry into foreign markets is characteristic for older Polish firms is similar to the results obtained by Cieslik and Kaciak (2009) on a large sample of Polish internationalising companies. These authors explained that later entry, and being better prepared for foreign expansion, made these companies survive in export markets longer. Such an explanation might also hold for the presented study.

In a Czech study of internationalising SMEs (Zapletalova, 2012) the influence of company size on the speed of internationalisation was confirmed – i.e. with increasing company size, the number of years between the founding of the company and its first foreign entry increased. However, the same author found that the choice of geographical coverage and entry mode by Czech SMEs was not affected by their size. In another large study conducted by the Polish Agency on Enterprise Development no influence of size on the internationalisation scale was found in the Polish SMEs (PARP, 2014). Our finding concerning a systematic moderating role of company size in the Polish group seems to indicate that for the SMEs it is not enough to be open to internationalisation to go abroad quickly. The role of financial/physical resources, which are at disposal of larger companies might be crucial. However, the explanations of this moderating effect have a preliminary character, and should be verified in future research.

Additional findings concern the interrelations among DOI variables. The speed of foreign market entry is positively correlated with the scale of internationalisation of the Polish SMEs. The same finding was obtained by Moen and Servais (2002) regarding companies from Norway, France, and Denmark, where the time between company establishment and the first export was an important indicator of later export intensity. Moreover, the majority of companies in the current sample had a rather regional scope of activity. This finding is similar to other studies concerning the internationalising SMEs, especially those from emerging markets (Cerrato & Piva, 2015; Lopez, Kundu, & Ciravegna, 2009).

Such a regional focus may be one of the typical characteristics of the accelerated expansion path followed by companies originating in the CEE countries.

CONCLUSIONS

This paper contributes to the studies on early internationalising companies from the CEE region, by investigating the relationships between the expansion descriptors and antecedent variables at the managerial and firm levels. The results confirm that the Polish and Czech firms are similar to the foreign ones in terms of relationships between the global vision and internationalisation scale. In the Polish sample the relationships between managerial characteristics and the DOI are even more pronounced than in Czech companies.

Moreover, the lack of strong positive relationships between the studied company factors (including innovativeness) and early internationalisation, point to the need of further investigation of the role of innovativeness in the expansion of companies from low and medium-tech industries in these countries.

The study brings some important practical implications both for companies and policy makers. First of all, the identified idiosyncrasies of Polish and Czech SMEs do not allow to treat them in the same way. Despite similar past experiences, the characteristics and antecedents of their expansion processes differ, therefore the measures enhancing export activities should be tailored to each market. As the managers experience in dealing with foreign markets was of great importance for the internationalisation of Czech companies, some measures lowering the barrier connected with the lack of international experience should be introduced (i.e. trainings, foreign missions, organised to support companies by the government). For the Polish companies openness to the foreign markets was of greatest importance, which calls for working on their attitude towards internationalisation.

The most important limitations of the study are related to the sampling methodology. Only the Polish and Czech companies were investigated, therefore the results cannot be generalised to other countries. Other limitations are due to the relatively small sample size and using different data collection methods. Finally, the qualitative nature of the study did not provide an in depth view of the identified relationships. Therefore, future research should concentrate on studying other countries in the CEE region by using both qualitative and quantitative methods. Especially the characteristics of managers, such as entrepreneurial and marketing orientation should be given special attention, as the potential accelerated internationalisation antecedents. Moreover, the investigation of their learning capabilities as possible stimulants of fast growth would be an interesting future direction of research.

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The Role of Strategic Partnerships in the Internationalisation of Small Born Global Firms

Paweł Capik, Andreas Brockerhoff

ABSTRACT

Objective: The article discusses motives driving the internationalisation of small born global firms and explores the role strategic partnerships play in the process. It argues that born globals are forced into international markets soon after their foundation due to limited domestic market capacity. Furthermore, they attempt to prevent competition on international markets and secure first mover advantages.

Research Design & Methods: Based on primary data gathered in the course of interviews with founders and senior managers of British born globals operating in different industry sectors, the article offers new insights into the role of partnerships during early stages of internationalisation.

Findings: The article reveals that beside serendipitous opportunities, the motivation and opportunity recognition of the founder/manager play a vital role in firms' early internationalisation. Strategic partnerships appear to help born globals in overcoming resource constraints and their liability of newness and smallness. Also other factors, such as increasing brand recognition and the enhancement of the firm's credibility motivate born globals to engage in strategic partnerships from an early stage.

Implications & Recommendations: The research results lead to a conclusion that strategic partnerships are suitable only for a particular period of time, which begins shortly after the firm's inception and ends when the born global firm becomes more established.

Contribution & Value Added: The article provides novel understanding of the role of strategic partnerships play in the early internationalisation of born globals. Furthermore, it adds new insights into the evolution of such partnerships.

Article type: research paper

Keywords: born global firms; strategic partnership; internationalisation

JEL codes: F21, F23, M13, M16, L26

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INTRODUCTION

Traditionally, international operations and business activities were perceived to be the domain of large and well established multinational enterprises (MNEs) (Cavusgil & Knight, 2009; Coviello & Munro, 1995; McDougall & Oviatt, 1996). However, due to the globalisation of markets, the reduction of trading barriers and the enhancement of advanced information and communication technologies (Hashai & Almor, 2004; Kudina, Yip & Barkema, 2008), the international business environment has changed and enabled small and medium sized enterprises (SMEs) to become present on international markets.

How economically significant smaller firms are becomes apparent when looking at their national share of business and employment. At the beginning of 2016, the UK economy consisted of around 5.5 million private sector businesses and employed an estimated number of 26.2 million people. Over 99% of these businesses employed fewer than 50 employees, accounting for over 47% of the private sector employment, and 33% of its turnover (BIS, 2016). Such numbers demonstrate the importance of small firms to the economic wellbeing of the UK. Thus, as small firms play a vital role in today's business and wider economy, and as a larger firm size is no longer a prerequisite for engagement in businesses activities across borders, the focus of this article is on the internationalisation of such smaller enterprises.

In recent years, scholars have begun to explore the internationalisation process of well-established SMEs (Gabrielsson, Kirpalani, Dimitratos, Solberg & Zucchella, 2008; Olejnik & Swoboda, 2012). However, within the process of researching the internationalisation of established firms, several authors came across a new breed of small companies which they introduced as "*Born Globals*" (Knight & Cavusgil, 1996; Luostarinen & Gabrielsson, 2006; Oviatt & McDougall, 1994). These firms are described as companies which engage in international activities at or shortly after their inception and despite their limited resources they soon attain considerable international sales (Cavusgil & Knight, 2009). Such born global firms reveal that internationalisation is no longer a privilege solely attributed to larger-sized firms, and also that age by which a firm ventures into new international markets becomes less relevant (Gabrielsson *et al.*, 2008).

The research behind this article was driven by persistent gaps in knowledge and its rationale rests on three inter-related issues requiring further study. Firstly, while academic literature explained the internationalisation process of MNEs and established SMEs by such theories as the Uppsala Model (Johanson & Vahlne 2009; Forsgren, 2016) or the Innovation Model (Cavusgil, 1980), the internationalisation process and the motives for which a born global firm opts for early internationalisation so soon after its foundation cannot be explained with these existing internationalisation theories (Freeman, Edwards & Schroder, 2006). Several authors (e.g. Sharma & Blomstermo, 2003; Mort & Weerawardena, 2006; Weerawardena, Mort, Liesch & Knight, 2007) tried to explain the internationalisation motivations for this particular type of companies in various ways, yet there still remains a consensus that the topic continues to be under-researched and requires further investigations (Cavusgil & Knight, 2009; Gabrielsson *et al.*, 2008; Knight & Liesch, 2016; Nummela, Loane & Bell, 2006). Secondly, earlier studies (e.g. Freeman *et al.*, 2006; Preece, Miles & Baetz, 1999) established that a born global firm employs different strategies to internationalise its business and strategic partnerships are believed to increasingly foster a successful entry to

new international markets. However, as research has been focused on the partnership formation behaviour of established small firms, only little is known about the factors that enable a born global firm to engage in international strategic partnerships during or shortly after their foundation (Freeman *et al.*, 2006; Gannon & Rahman, 2011). Thirdly, it has been outlined that the founder and the top management of these particular firms are one major reason why a born global firm pursues early internationalisation (Chetty & Campbell-Hunt, 2004). While a recent study (Franco & Haase, 2016) sheds further light on the matter, the founder's prior international experience and network ties have not yet been linked to the partnership formation process (Gannon & Rahman, 2011). To address these gaps, this article provides further insights into born global firms by exploring their motivations for early internationalisation and the role strategic partnerships play in the process.

Additionally, along its theoretical rationale, the article also considers managerial implications. Founders and managers of small born global firms could gain insights as to why strategic partnerships may foster their firm's internationalisation and when it is most suitable for them to initiate such partnerships.

It is within such a context that the article addresses two key research questions: Why do small born global firms internationalise rapidly and soon after their foundation? What role do strategic partnerships play in this process?

In order to provide meaningful answers to these questions, the article presents an analysis of original primary data collected in the course of semi-structured interviews with the founders and top managers of small born global firms in the UK. The firms taking part in the study were selected based on 'born global' criteria identified as relevant to the research questions. The data were analysed using the cross-case thematic analysis technique. While the geographical focus and the interpretivist approach guiding this study limits the generalisability of its findings, it provides new insights into born globals' strategic partnerships and charts future research directions.

The rest of the discussion is structured in the following way. The next section sets the theoretical context and offers an in-depth review of the literature exploring the emergence of the born global firm, the origins of the concept and related terminology. It elaborates early internationalisation motives and reveals the risks and benefits of strategic partnerships in the process. The subsequent section explains the methodology underpinning the study. Next, the results of the research are presented and discussed, followed by conclusions.

LITERATURE REVIEW

Born Global Firms and Strategic Partnerships

Over the recent decades the term 'born global' has become widespread within business environment as well as in academic literature (Chetty & Campbell-Hunt, 2004; Gabrielsson *et al.*, 2008; Knight & Liesch, 2016; Madsen & Servais, 1997; Moen, 2002), thus it is apt to explore its meaning and define it.

Historically, the international business domain has been dominated by MNEs (McDougall & Oviatt, 2000), but in recent times became increasingly important to small firms (Cavusgil & Knight, 2009). Within the on-going academic discussion, different terms have evolved which refer to the very same phenomenon of early internationalisation of small firms (McDougall, Oviatt & Shrader, 2003; Moen, 2002). Oviatt and McDougall

(1994), for example, refer to ‘*International New Ventures*’, whereas other authors name them ‘*Instant Internationals*’ (Dana, 2001; Preece *et al.*, 1999), ‘*Global Start-ups*’ (Jolly, Alahuhta & Jeannet, 1992), or just ‘*International Ventures*’ (Kuemmerle, 2002).

However, the term ‘*born global*’ itself was initially introduced by Rennie (1993), principal of McKinsey Sydney. In his work, Rennie (1993, p. 45) highlighted the existence of a “*new breed of Australian firm [that] shows that it is possible to succeed in world markets without an established domestic base*”. His investigation focused on more than 300 young Australian SMEs which successfully competed against large and already well-established global enterprises by internationalising their business at or shortly after their inception rather than following a gradual internationalisation approach over a longer period of time. Rennie’s (1993) research discovered that Australian born global firms generate approximately 75% of their total profits from international sales when they started to export their products or services after an average of only two years after establishment. However, this early internationalisation has not just been observed in Australia. As Hedlund and Kverneland (1985) examined a change towards early internationalisation of Swedish firms when entering the Japanese market, Ganitsky (1989) identified Israeli small firms which expressly served foreign markets after their inception, which he called ‘*Innate Exporters*’.

In spite of diverse terminology but in unison with the majority of academic literature, in this study the term ‘*born global*’ is adopted to refer to all small firms which have early and accelerated internationalisation (Dib, Rocha & Silva, 2010). Internationalisation within this context is understood as a firm’s activity to adopt and deploy strategies, structures and resources across national borders (Calof & Beamish, 1995; Wright & Ricks, 1994).

Oviatt and McDougall (1994) identified the lack of academic attention to smaller firms which seek internationalisation soon after their inception, and thus provided the first fundamental explanation approach on the born global phenomenon in academic literature (Cavusgil & Knight, 2009; Moen, 2002). According to Oviatt and McDougall (1994, p. 49), a born global firm is “*a business organisation that, from inception, seeks to drive significant competitive advantage from the use of resources and the sale of outputs in multiple countries*”. Despite the popularity of this definition across academic literature (e.g. Cavusgil & Knight, 2009; Gabrielsson & Kirpalani, 2004; Jantunen, Nummela, Puumalainen & Saarenketo, 2008; Madsen & Servais, 1997; Rialp, Rialp & Knight, 2005), there is no clear consensus on a congruent set of criteria that a born global firm has to meet (Freeman *et al.*, 2006; Gabrielsson & Kirpalani, 2004; Knight & Liesch, 2016).

One of the most disputed criterion is related to time between firm inception and its internationalisation (Dib *et al.*, 2010; Franco & Haase, 2016). While Moen and Servais (2002) argue that early internationalisation needs to take place within the first two years, others postulate a broader time interval of three years (Knight & Cavusgil, 1996; Mort & Weerawardena, 2006; Rasmussen, Madsen & Evangelista, 2001), or up to 8 years (McDougall *et al.*, 1994). Further, Gabrielsson *et al.* (2008) argue that exporting, in particular for start-ups with limited international experience, is neither consistent nor straightforward. It therefore seems difficult to mark out born global firms by a strict numerical internationalisation requirement and instead they should be allowed a more flexible time period of their internationalisation process (Gabrielsson *et al.*, 2008). Bridging these perspectives, this study adopts the idea of McDougall, Shane & Oviatt (1994) as it allows more flexibility when a firm should seek early internationalisation, at the same time offering a clear time limit of 8 years.

Another contested criterion is the share of the firm's revenues generated by international activities (Dib *et al.*, 2010). For example, Rennie (1993) identifies Australian firms as born global when approximately 75% of their revenues come from export activities. In contrast, Knight and Cavusgil (1996) specified that born global firms need to have 25% of foreign sales. Luostarinen and Gabrielsson (2004) propose a middle-way export contribution, but add a geographic restriction – over 50% of the firm's sales need to be from outside the continent from which the firm formerly originated. According to Gabrielsson *et al.* (2008), such different views might have evolved due to the diverse geographical focus research on the born global phenomenon. As for US firms, a 25% portion of foreign sales is already relatively high, it seems not to be that challenging to achieve when seen from the European angle (Gabrielsson *et al.*, 2008; Knight, Madsen & Servais, 2004). This is because European firms have multiple neighbouring markets which they can access more easily (Gabrielsson, 2005; Kuivalainen, Sundqvist & Servais, 2007). Due to these circumstances, authors such as Rasmussen *et al.* (2001) and Crick (2009) would rather call these firms 'born Europeans' or 'born Internationals' and reserve the 'born global' term to firms that operate outside their regions (Gabrielsson, Sasi & Darling, 2004). Yet overall, academic literature mostly agrees the term "born global" is suitable for all firms, irrespective of the geographical extent of their operations (Dib *et al.*, 2010). This is the term used also in this article, where a born global is assumed to have at least 25% of its revenues coming from abroad.

It has been documented that a lot of born global firms are operating in knowledge-intensive and high technology industries where entrepreneurial founders possess advanced technological knowledge (Bell, 1995; Franco & Haase, 2016; Rialp *et al.*, 2005; Sharma & Blomstermo, 2003). However, some born global firms have also been known to be successful in other industries, such as the crafts sector (Fillis, 2002; McAuley, 1999), the seafood industry in New Zealand (Knight, Bell & McNaughton, 2001; Evers, 2010), and the manufacturing sector in Italy (Evers, 2011; Zucchella, 2002). Hagedoorn (1993) and Moen, Bakas, Bolstad & Pedersen (2010) observed that since the 1980s the high-tech sector has witnessed a significant increase in international strategic partnership formation, which would suggest focusing the study on this industry. However, as the major focus is to evaluate the significance of strategic partnerships for the small firms' internationalisation and not to classify industries where born global firms exist, and in line with Cavusgil and Knight (2009) who argue that research on born globals should be carried out across all sectors, there was no limitations on the industry within this study.

Since the literature tends to focus on the age of born global firms, their size has not been pointed out as a relevant criterion for a born global firm (Oviatt & McDougall, 1994). According to Cavusgil and Knight (2009), the born global firm is a subtype of SMEs, whereas these firms in the European Union are usually categorised as firms with fewer than 250 employees (OECD, 2000). Though, as in this article the predominant focus is particularly drawn on small firms, which according to the OECD (2000) are defined as enterprises that do not exceed a total of 50 employees, this criterion is also implemented within this research study in order to characterise a born global firm.

Consequently, based on Oviatt and McDougall (1994) and Knight and Cavusgil (1996), Andersson and Wictor (2003, p.54) propose the following definition "a *born global firm is a company with up to 50 employees and that has achieved a foreign sales volume of at least 25% within [eight] years of its inception and that seeks to derive*

significant competitive advantage from the use of resources and the sales of outputs in multiple countries." (Andersson & Wictor, 2003, p. 254). This definition appears inclusive enough to allow the consideration of different firm circumstances and controlling for industry specificity. As such, it was adopted for this study focusing on role of strategic partnerships in early internationalisation, and informed its methodological approach, and particularly identification of the relevant firms.

Facilitators of Early Internationalisation of Born Global Firms

Several scholars have attempted to explain why born globals seek early internationalisation (Bell *et al.*, 2003; Evers, 2011; Moen & Servais, 2002). However, as argued by Cavusgil and Knight (2009), the motives have not yet been investigated sufficiently to meaningfully complement (or indeed substitute) the existing theories.

Bell, McNaughton, Young & Crick (2003) explain how firm internationalisation has long been portrayed as an incremental and evolutionary process, often referred to as the Uppsala Model (Johanson & Vahlne, 1977; Johanson & Vahlne, 2009) or the Innovation Model (Bilkey & Tesar, 1977; Cavusgil, 1980), where firms pursue internationalisation gradually and in stages. These stages commence with initial irregular exports into physical and culturally proximate markets followed by more regular exports via agents, and finally by establishing foreign subsidiaries (Hashai & Almor, 2004; Ulubasoglu, Akdis & Kok, 2009). Such systematic international growth is conditioned by limited access to knowledge and resources. Firms only commit to enter the next stage of internationalisation once they have acquired relevant and sufficient experiences and knowledge through completing extended domestic business period (Luostarinen & Gabrielson, 2006).

Clearly then, this traditional internationalisation model does not account for the born global firm (Bell, 1995; Freeman *et al.*, 2006; Knight & Cavusgil, 1996; Knight & Liesch, 2016; Madsen & Servais, 1997) where firms possess a global vision from inception and often tend to outperform companies which rather follow a linear way of expansion to foreign markets (Moen & Servais, 2002). Kuivalainen, Sundqvist, Saarenketo and McNaughton (2012) emphasise that internationalisation is somewhat more complicated than just describing it as a gradually increasing process, while born global firms frequently employ multiple entry strategies to new markets, such as direct sales or international partnerships (Cavusgil & Knight, 2009, Knight & Liesch, 2016).

Consequently, the key motives behind the internationalisation of born global firms cannot be explained adequately by traditional internationalisation theories. In response, some scholars have tried to explain early internationalisation of born global firms by applying the resource-based view¹ (Cavusgil & Knight, 2009; Rialp & Rialp, 2006; Yeoh, 2000) or the dynamic capabilities view² (Weerawardena *et al.*, 2007), and identified human and organisational resources as critical parameters to the early internationalisation of born global firms (Cavusgil & Knight, 2009; Rialp & Rialp, 2006). In contrast, other scholars have used the network-based view to address the early internationalisation of born global firms.

¹ The resource-based view of a firm regards the organisation as a combination of heterogeneous resources that are flawed and mobile, which consequently makes the firm unable to generate all resources and functions internally in order to grow (Peng 2001).

² The dynamic capability view explains that the "*routines through which the firm learns from sources based in the market, the firm's network of relationships, and the learning that is harnessed internal to the firm itself*" (Cavusgil & Knight, 2009, p. 45).

For example, Sharma and Blomstermo (2003) discovered that born global firms possess international market knowledge, which they gained through their network ties before entering their first foreign market. Coviello (2006) also identified the importance of networks in order to gain access to new markets, distribution channels or contacts.

This makes it worthwhile to explore this area in more depth by predominately focusing on a network-based view as this approach appears suitable when trying to explain why born global firms might use strategic partnerships as an instrument for early internationalisation (Freeman *et al.*, 2006; Gannon & Rahman, 2011). This is also supported by Gulati (1998) who highlights that adequate network ties help smaller firms to identify trustworthy partners.

Pull Forces in Early Internationalisation

When exploring the key factors motivating the early internationalisation of born global firms several authors (Etemad, 2004; Evers, 2011; Johnson, 2004) identify three key categories: 1) Pull Forces or External Factors; 2) Push Forces or Internal Factors; 3) and Mediating Forces.

Born global firms decide to internationalise early in response to external incentives which pull them to engage in international activities (Evers, 2011). The nature of the industry could be one of these pull forces as a high degree of internationalisation (Evers, 2010), short product life cycles (Coviello & Munro, 1995; Johnson, 2004), and the global integration (Etemad, 2004; Shrader, Oviatt & McDougall, 2000) may require the firm to participate through early internationalisation (Evers, 2011). Another industry-related pull driver is the shift of customers' requirement towards greater customisation which leads to the creation of global niche markets (Knight & Cavusgil, 1996). Within these markets, smaller firms could outperform larger MNEs due to their flexibility and adaptability (Knight *et al.*, 2001; Moen & Servais, 2002). Hence, the emergence of smaller global niche markets may encourage smaller firms to internationalise early (Evers, 2011; Rialp *et al.*, 2005). Other, more noticeable drivers for early internationalisation are reductions in trade barriers (Etemad, 2004), reactions to a competitor's global initiatives or the exploitation of exclusive technology in order to set global standards and to prevent competition (Etemad, 2004; Johnson, 2004).

Furthermore, the influence of small firms' network partners has been identified as another facilitator for early internationalisation (Johnson, 2004). Small firms are occasionally forced to become international simply because they are forced to follow their clients into new international markets (Evers, 2011). Bell (1995) identified this as '*client followership*' which Freeman *et al.* (2006) also acknowledged as a suitable internationalisation motive because such relationships might develop into strategic partnerships and therefore reduce financial and other resource constraints that born global firms are normally exposed to (Gabrielsson & Kirpalani, 2004). The exploitation of present and new networks is perceived as another key pull factor driving early internationalisation of born global firms, while Bell, *et al.* (2003) pointed out that partnership agreements shape more integrated relationships than just working together with agents or distributors (Freeman *et al.*, 2006).

In contrast to potential opportunities that can be gained by early internationalisation, Evers (2010) claims that particularly in low-technology sectors early internationalisation is more about the survival of the company than building a first mover advantage or exploiting superior knowledge. However, Deeds and Hill (1996) and Hashai and Almor (2004) attribute strategic partnership formations and networks to help overcome resource constraints and to secure firms' survival by profiting from the partner's strengths.

Push Forces in Early Internationalisation

The push drivers, i.e. the forces exerting pressure on small born global firms to internationalise early, emerge from within the firm (Etemad, 2004). Previous research has identified the size and a limited demand in the domestic market as a key facilitator for early internationalisation (Cavusgil & Knight, 2009; Kudina *et al.*, 2008; Madsen & Servais, 1997;). Kudina *et al.* (2008) noticed a weak home market for UK high-technology firms and Bell *et al.* (2003, p.344) argued that born global firms internationalise early due to the urge to supply the 'lead markets' for their product or services.

A further push force highlighted by Evers (2011) is the advancement in information and communication technologies and technical development in production (Hashai & Almor, 2004; Kudina *et al.*, 2008). New production technology enables the firm to produce smaller runs but remain economically profitable (Evers, 2011), which in turn is related to the emergence of global niche markets. However, according to Dana, Etemad and Wright (2004) small born global firms also lack in economies of scales which they attempt to overcome by internationalisation in order to reach a broader customer base. Having a superior product or even a worldwide monopoly position can also facilitate a firm to internationalise early when it is based on the strength of an innovative or high quality product (Cavusgil & Knight, 2009). Another motive for early internationalisation is the challenge of high research and development (R&D) start-up costs within the domestic market, which then push small firms to seek financial support abroad (Evers, 2011; Moen *et al.*, 2010). Crick and Spence (2005) and Luostarinen and Gabrielsson (2006) therefore suggest overcoming these inadequacies and resource constraints by engaging in multiple networks through establishing long-term relationships and strategic partnerships.

Mediating Forces for Early Internationalisation

Chetty and Campbell-Hunt (2004) revealed that motivation of the founder is often identified to be one of the major facilitators for early internationalisation, which was acknowledged by Evers (2011) as a mediating force. The importance of the founder's motivation was also supported by further studies of Oviatt and McDougall (1994), Bell *et al.* (2003) and Cavusgil and Knight (2009), whereas Moen and Servais (2002 p.65) insist that managers of born global firms need to have a strong '*global orientation in terms of vision, proactiveness and responsiveness*' when contrasting them with managers of small domestic-based firms. Particularly, prior international work experience, alertness to opportunities, a borderless worldview and an international mind-set of the entrepreneur and the top management team (TMT) seem to be important determinants for early internationalisation (Evers, 2011). Previous research identifies these entrepreneurs or TMTs as accelerators who use their social or business networks to disclose potential entry possibilities to foreign markets (Cavusgil & Knight, 2009; Zucchella, Palamara & Denicolai, 2007).

The Significance of Strategic Partnerships for Early Internationalisation

Strategic partnership can be defined as "*a bilateral relationship characterized by the commitment of two or more partner firms to reach a common goal, and which entails the pooling of specialized assets and capabilities.*" (Jorde & Teece, 1989, p. 29). And in the particular context of this study this type of partnership can further be defined as "*a cooperative*

relationship with a partner [...] aimed at the development, distribution and/or production of products in a foreign market.” (Gemser, Brand & Sorge, 2004, p. 6)

For small firms, strategic partnerships have been found to be an attractive method of entering new and foreign markets as they can provide the missing and necessary resources (Lu & Beamish, 2001; Preece *et al.*, 1999). Further, Gemser, Brand and Sorge (2012) support a collaborative approach of small firms to become international instead of using autonomous strategies, be it direct sales or establishing wholly owned subsidiaries. Varis, Kuivalainen and Saarenketo (2005) argue for the use of strategic partnerships particularly in knowledge-based and information-technology driven industries, which implies that strategic partnerships should be an adequate approach for small born global firms to internationalise early (Sharma & Blomstermo, 2003).

Benefits and Risks of International Strategic Partnerships

According to Van Gils and Zwart (2009) and Gannon and Rahman (2011), small firms pursue international partnerships to benefit from a quicker foreign market entry and to achieve economies of scales. Particularly the advantage of a faster market entry is of importance, as it reduces the risk and distributes it between the partners (Swoboda, Meierer, Foscht & Morschett, 2011). Furthermore, by forming a strategic partnership, small firms can profit from gaining access to social, technical, financial and commercial competitive resources which under normal circumstances would require years of operating experience to acquire (Baum, Calabrese & Silverman, 2000; Varis *et al.*, 2005). Especially this acceleration and flexibility in obtaining access to desired resources seem to be relevant for small born global firms as their main characteristic and specification is to pursue early internationalisation. Thus, strategic partnerships can help small born global firms to overcome their liability of newness and smallness and serve as a promoter of organisational learning and development (Comi & Eppler, 2009). Alongside the partner's assistance in overcoming the born global firm's shortage of capital and tangible assets, they might represent a vital source of host country knowledge on consumers and competitors (Lu & Beamish, 2001). Born global firms can therefore highly profit from these partnerships, as their international experience might be relatively low and the founder or manager might not possess own contacts in the foreign markets (Cavusgil & Knight, 2009, Franco & Haase, 2016). Moreover, small firms can gain knowledge and skills from their strategic partner which enables a smaller firm to increase its corporate strength, visibility and credibility (Kennedy & Kenney, 2009). In general, Moen *et al.* (2010) conclude that small firms tend to use strategic partnerships as an international entry mode because they strive for an entry mode which is described by relatively low resource commitment and direct commercialisation (Comi & Eppler, 2009; Moen *et al.*, 2010).

However, such partnerships are not free from risk to a born global firm (Van Gils & Zwart, 2009). In frequent cases, where strategic partnerships have incomplete contracts, where property and profit rights might be poorly defined, opportunistic behaviour and knowledge exploitation by the partner could arise (Baum *et al.*, 2000; Lu & Beamish, 2001). Particularly, when it is an international strategic partnership, forces such as cultural differences, trust and geographical distance or different perceptions of the cooperation could have negative effects on the internationalisation of the born global firm (Lu & Beamish, 2001). When a competitive intention within the partner's mind exists, the partnership is at risk of abating into a learning race where the partner tries to exploit as

much knowledge from the small firm as possible, while preventing access to its own knowledge and skills (Baum *et al.*, 2000; Tjemkes, Vos & Burgers, 2012).

Furthermore, due to the smallness of the firm, a size imbalance can lead to attempts made by the partner to acquire the small firm in order to gain full control over the operations and merge the firm into its own organisation (Preece *et al.*, 1999). Additionally, a failure of the partnership could amplify the survival risk of the small born global firm as a lack in financial resources slows down the recovery from economic losses and impedes the search for a new partner (Comi & Eppler, 2009). This is why, Preece *et al.* (1999) argue that these potential risks of international strategic partnerships might deter small technology-based firms from using strategic partnerships as a method to internationalise early. This is further supported by findings from Eisenhardt and Schoonhoven (1996) who identified that smaller firms with fewer resources tend to engage in fewer strategic partnership formations which is owed to the fact that they struggle to attract potential partners due to their resource limitations. Hence, according to Eisenhardt and Schoonhoven (1996 p.147), a “*co-operation requires resources to get resources,*” which would subsequently obstruct the engagement of born global firms in international strategic partnerships. However, more recent research studies have revealed the opposite, as for example in the high-technology industry an increase in international strategic partnership formations have been observed since the 1980s (Hagedoorn, 1993; Jorde & Teece, 1989; Moen *et al.*, 2010).

Consequently, the process of selecting a suitable partner for a firm’s strategic partnership is of great importance for the overall partnership success (Moen *et al.*, 2010; Supphellen, Haugland & Korneliussen, 2002). For born globals it is of particular significance to find an adequate partner as an unfavourable one could enhance the firm’s risk of survival because its resources might already be stretched to the limit (Lu & Beamish, 2001).

MATERIAL AND METHODS

The research underpinning this article has been guided by inductive interpretativism principles. It builds on similar approaches adopted in earlier studies by Gabriellsson and Kirpalani (2004), Hutchinson, Fleck and Lloyd-Reason (2009), Evers (2010) and particularly Franco & Haase (2016) and Cavusgil and Knight (2009 p.98) who claim that the use of an inductive research approach holds “*the ability to provide rich, context-specific description and explanation of born globals*”.

Semi-structured, face-to-face and Skype interviews were used as a data collection technique. The interviews lasted between 20 to 60 minutes and were conducted in March and April 2013 with representatives of eight pre-selected firms matching the earlier established criteria for ‘born globals’ and operating in diverse industry branches including software engineering, luxury lingerie production, manufacturing of cable systems and others. The sample selection was multi-staged and relied on three approaches – database search and analysis, snowballing and personal contacts. Initially, the firms were selected using the FAME³ databank. For a firm to be considered “born global” and included in the study, the following criteria had to be met:

³ FAME is a database containing financial accounts for UK and Irish companies. It includes public and private companies and provides profit and loss, balance sheet, cash flow and ownership data and allows filtering for particular characteristics.

- Time: the foundation date of the firm falls after 01/01/2005 in order to meet the time span of eight years from the foundation to internationalisation (McDougall *et al.*, 1994).
- Size: small companies only were considered (up to 50 employees) (OECD, 2000).
- International sales: the 25% threshold of international sales (Knight & Cavusgil, 1996).
- The firm should be engaged or about to engage in a strategic partnership to internationalise (confirmed with the firms once previous three criteria have been met).

A total of 32 UK based firms were identified that matched the first two criteria which were drawn from the databank. Further matching with the 'sales' criterion led to the elimination of half of the sample. Next, the companies that were spinoffs from larger and well-established firms were excluded, so that 12 remaining firms were contacted in order to receive information whether strategic partnerships are used for early internationalisation and if the founder agrees for an interview on that topic. From those 12 firms one firm responded positively and was willing to take part in the research. Next personal contacts led to the identification of additional five companies matching the born global criteria. The remaining two firms were identified using snowballing technique, i.e. were recommended by interviewees in the course of research. After confirming their suitability, the firms were included in the study.

The individuals who were interviewed are the founders or the top managers of the born global firms who hold expertise and are closely involved in the internationalisation process (for comparison see for example Coviello, 2006, Franco & Haase, 2016). Whenever possible, the founder of the firm was interviewed but when such person was not available, a member of the top management was interviewed who could also provide relevant and meaningful information on the internationalisation process of the firm.

In total, nine semi-structured interviews were conducted. The scope of the interviews, facilitated by a discussion guide, included the company profile, motivation and modes of early internationalisation, geographical scope of international activities, strategic partner selection process, motivation to engage in partnership and its influence on the scope and range of international activities of the firm.

The data were transcribed, and then subjected to a systematic process of data reduction and subsequently display. The subsequent analytical process was aided by coding. The data were coded with the use of pre-defined 3-level coding frame embedding the study in earlier literature and furthering its scope to include new insights derived during the data reduction process. Such procedures made the rich data more accessible, and subsequently informed cross-case thematic analysis (Bazeley, 2013; Miles & Huberman 1994; Saunders, Lewis & Thornhill, 2012).

RESULTS AND DISCUSSION

British Born Globals' Motivation to Internationalise – Pull Factors

As introduced by Evers (2010), there are several important factors for early internationalisation related to the nature of the industry. One such factor which pulls small firms into early internationalisation is the global niche market where they can outperform larger MNEs (Franco & Haase, 2016; Knight *et al.*, 2001; Rialp *et al.*, 2005). For example, Company B was strictly aiming at the inkjet market because "*for most of the bigger firms inkjet is just a small part of what they actually do.*" As two founders of Company B are aware that they cannot compete against larger firms within mainly dye-based market, they consequently focused on the global

niche market which is not excessively occupied by large MNEs. Additionally, they tend to manufacture products for small and exclusive customer base, which is reflected by Company E:

“Every product which we sell is unique. Nothing is standard. We don’t have a catalogue of standardised items. Everything we supply is a specialised design and is specifically manufactured for our customer.” (Company E)

While Company B also *“work into companies”*, meaning that they would adapt their product portfolio in order to meet the customer’s requirements. As discussed earlier (e.g. Knight & Cavusgil, 1996; Knight *et al.*, 2004), this customisation is highlighted as an additional pull factor for early internationalisation because small firms are more responsive and flexible compared to larger firms (Knight & Cavusgil, 1996). Arguably then, small born global firms might venture abroad in order to secure a broader customer base which demands more customised products than these customers could acquire from larger MNEs.

Another facilitator for early internationalisation identified in earlier studies (e.g. Freeman *et al.*, 2006) and confirmed here is client followership. This means that small born global firms become international just because they have to follow their clients in order to sustain their business links with them (Bell, 1995). For example, after a Portuguese client of Company D, queried: *“Why not setting up a European website? I really enjoy your online experience, why aren’t you doing it here?”* (Company D), the firm studied market potential in Europe through their client, which led to the customisation of their website towards internationalisation in terms of the language and payment types. Also Company E internationalised thanks to one of their clients:

“A. and myself worked for a motor manufacturer in the UK who was part of an American multinational company. Unfortunately in 2007 they decided that the motor business didn’t really fit within their organisation. They tried to sell the business but weren’t successful so they made a decision to close the manufacturing facility and to actively go out and move away from the motor manufacturing. So that gave A. and myself an opportunity to set a parallel company. There were a number of products which already came out of manufacturing facilities in China. The customers of that time had no experience with dealing with the Far East. So we were approached to see whether we could continue supplying that product for them. So we set up a parallel business and brought in the product in from the Far East, which at that time one of the customers who asked us to do that was based in Finland.” (Company E)

Freeman *et al.* (2006) suggests that in some cases client followership may develop into strategic partnerships in order to help the born global firm in overcoming resource constraints. This is not the case with any of the companies studied, as the role of the client was merely to unveil international market opportunity, and not provide any further support or guidance.

Another pull factor identified in the course of this research (Figure 1) is the exploitation of a first mover advantage in order to prevent competition.

“When we first started out, it was the old 80/20 rule. [...] We were ahead of the ball really. We were specialising in milling pigments whereas at that point 80% of the market was dye based. Only a very small percentage of 20% was focusing on inkjet. So we were a little ahead of the market.” (Company B)

“Starting to have a look at what the competition was in Europe, we found out that the competition was substandard. Their websites weren’t anywhere near the quality that ours was.” (Company D)



Figure 1. Pull factors in early internationalisation

Source: own study.

Drawing from the gathered evidence, small born global firms seem to be aware of their unique product characteristics and their competitive advantage. As a consequence, this indicates that they become international from an early stage, in order to defend their innovative products globally. Company C highlighted this quite clearly by saying: *“Why would you give the competitors the chance? Just go and try it yourself.”*

Furthermore, as highlighted earlier, in low-technology sectors early internationalisation is more about survival than exploiting a first mover advantage (Evers 2010). Partially, this was observed in Company G, a low-technology firm which manufactures luxurious lingerie for women: *“Overseas is probably more important than ever. I think that’s what sustained me over the last few years.”* However, even high-tech firms, such as Company B, argued *“when we began we had to go overseas to survive.”* Consequently, alongside exploiting a first mover advantage and to prevent competition, there also existed situations in which the firm’s urge to survive pulled them into international markets soon after their foundation, regardless of the sector the firm operates in.

Earlier studies (e.g. Hagedoorn, 1993; Moen *et al.*, 2010) highlighted that strategic partnerships are formed predominately in high-technology sectors. However, as demonstrated here, the formation of strategic partnerships occurs in diverse industries, including labour intensive ones, and consequently it cannot be maintained that a distinctive sector represents a differentiating factor for early internationalisation.

Push Factors For Early Internationalisation

A range of push factors predominantly related to market capacity and cost-efficiencies (Figure 2) were identified as increasingly relevant during the research. Nearly all of the studied firms claimed that the UK market was either not existing for their products, too small or not growing in the way that they could gain substantial revenues from it:

“For ourselves the UK market does not have a lot of potential of growth. So what we need to do now is to look outside of the UK [...]” (Company E)

“We recognised that if we want to grow the business, there was no growth potential in the UK.” (Company H)

This indicates that born global firms are facing constraints and limitations within their home market. As a consequence, they pursue early and rapid internationalisation in order to either secure their survival or to accelerate their growth. Next to limited demand within the UK market, Bell *et al.* (2003) also indicate that small born global firms venture abroad in order to supply the lead markets of their products. Company A reflects this by saying *“the opportunities that we are addressing with our company in biotechnology are global markets, so it would be crazy of us to ignore those markets.”* Similarly, Company F first targeted the healthcare industry in the UK before realising that most of the demand comes from the security sector in the US.

“We developed a new product. We took it to market, which was actually the healthcare sector. But we very quickly got demand in the security sector and therefore we focused our efforts there. [...] We found out that the security market in the United States is much more going than here in the United Kingdom.” (Company F)

Another push force identified by earlier studies (e.g. Evers, 2011; Moen *et al.*, 2010) are R&D and production costs which tend to be too high in the home market of the born global firm, i.e. born globals use internationalisation to secure more cost efficient locations. However, such motivation appears not to be supported by the findings of this research, as nearly all the firms develop and manufacture their products within the UK. Only Company E, a specialist motor manufacturer, assembles outside the UK, which is partially based on costs concerns, but also reflects volume and complexity requirements that the UK market does not supply. Given the firms studied are from both, high and low, technology sectors, and only one of them manufactures abroad, a definitive conclusion about the relationship between production costs and the significance of the industry sector in the formation of strategic partnerships cannot be reached.

Moreover, there also exist less strategic but more resource-based factors that push small born global firms into early internationalisation which, so far, have received only marginal attention in academic research (e.g. Sepulveda & Gabrielsson, 2013). One of the interviewees provides relevant insights into the importance of key decision-makers' knowledge and experience:

“Previously the reason why I wanted to go to international markets is because the previous companies I have worked for always seemed that their larger sales were coming from overseas.” (Company G)

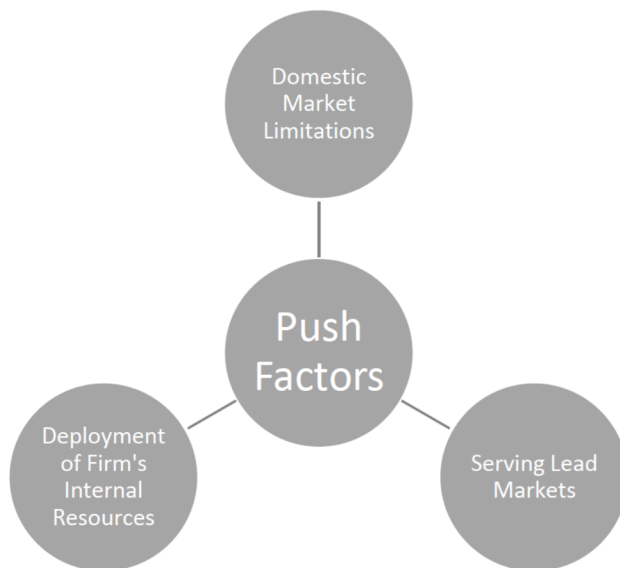


Figure 2. Push factors in early internationalisation

Source: own study.

Such an experience-motivated decision to enter foreign markets indicates that the founder has an important role in the persuasion of international businesses and therefore requires a more thorough analysis as provided in the latter parts of the article.

Mediating Factors

Earlier studies (e.g. Chetty & Campbell-Hunt, 2004; Nordman & Melen, 2008) identified the motivation of the founder in terms of retaining a global vision, as a relevant factor of early internationalisation. This has been confirmed by this research, as most of the firms either highlighted their global vision from the firm's inception or have indicated it through their actions in becoming internationally active.

"To be relevant you have to be global. So that's why we chose to go down that road." (Company C)

"I've always wanted the brand to be further in the field than in the UK." (Company G)

One example especially highlights the increasingly important role of the key personnel's international vision in becoming international. Company D has been established by the interviewee's father of who did not possess any initial ambitions for early internationalisation.

"The original business was run by my dad [...]. Then when I joined, it was really my vision to go into Europe. If I weren't there, my dad would never have done it. So it was because I was there and I had the time and the enthusiasm for it. So it (internationalisation) wasn't planned from the beginning." (Company D)

Consequently, without the global vision of the founder's son, Company D would not have become international at all, which is in line with some of the earlier studies (e.g. Moen & Servais, 2002; Evers, 2011).

Beside a global vision, the founder of a born global firm should also display proactive and responsive characteristics (Moen & Servais, 2002). These two features are often best observed during planned and unplanned situations that a born global firm faces. While some firms were growth-oriented and clearly planned to expand to overseas markets, others were influenced by unforeseen factors. Company G has been driven by such *"serendipitous events"* (Crick & Spence, 2005, p. 180). Originally, the firm was planning to become international by a planned, gradual approach. However, as they were approached by a distribution firm in the US which wanted to set up a strategic partnership, the founder responded positively to such an unforeseen circumstance and the firm entered the US only two years after its foundation.

"I didn't actually seek any distribution company. It was just pure luckiness [...]. I did want to go international. I probably just envisioned securing the UK first and then taking next steps rather than doing steps here and going further in field there. So it was planned to grow outwards [...] but not by being leapfrog." (Company G)

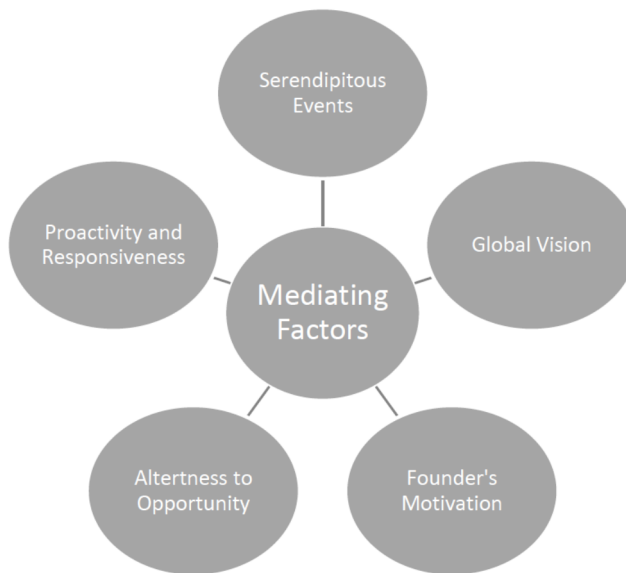


Figure 3. Mediating factors in early internationalisation

Source: own study.

Company A offers a similar example. The firm was purposely planning to become international by *"dominating one market and then move to other markets"*, and then was approached by an MNE to form a strategic partnership, which the founder described as a lucky circumstance.

"I think the relationship with P. is now clearly a part of our strategy and that was good luck that they found us." (Company A)

This incident subsequently accelerated their internationalisation process and their initially planned process of growing international more linearly became obsolete. Accordingly, such findings support earlier discussed views that traditional and more gradual internationalisation theories do not account for the born global phenomenon (Bell, 1995; Freeman *et al.*, 2006; Knight & Cavusgil, 1996; Madsen & Servais, 1997). This indicates that even though born global firms have a more gradual internationalisation intention in their mind, they embrace opportunities they recognise and consequently become international quicker and earlier than they have ever expected themselves. Subsequently, the alertness to opportunities (Evers, 2011) also seems to be important for early internationalisation as it is the way in which the founder of the firm exploits the opportunities through planned or unplanned strategies (Crick & Spence, 2005).

"[...] we identified that there was a good opportunity out there [...]" (Company C)

"Having the customer in Finland gave us the opportunity to form our own business." (Company E)

Role of Strategic Partnerships

Earlier studies have found that strategic partnerships might be established by the founder due to unplanned circumstances and by recognising potential opportunities (Crick & Spence, 2005). The results of the conducted research allow the identification of further motives associated with key benefits and risks of strategic partnerships.

Most of the companies studied engaged in strategic partnerships to access their partner's distribution channels in new foreign markets, as expressed by several interviewees:

"It was distribution, so it was a company who became our key distributor around the world." (Company H)

"So the motives behind a strategic partnership are to basically fill in the gaps we can't fulfil. Like distribution and local knowledge." (Company D)

Other firms (Company A and E) engaged in international partnerships which were initially based on manufacturing and production relationships. However, they are now developing more towards strategic distribution partnerships as well.

"The first part of the relationship was manufacturing. Next step is, and this is confidential, a relationship which is more into marketing and distribution. They are manufacturing the products for us, which makes a lot of sense [...] and then to actually ship the product for us through their channels to their markets." (Company A)

These findings confirm earlier studies where small born globals form strategic partnerships predominantly in order to distribute their products through an already existing distribution network, which is also perceived as being a quicker, easier and more cost efficient market entry approach (Gannon & Rahman, 2011; Van Gils & Zwart, 2009). Furthermore, as the firms venture abroad soon after their foundation, the strategic partnership is regarded as a highly important factor accelerating their internationalisation.

"It reduces your time to the market [...] and is far more cost effective." (Company C)

"The key advantages are the speed of product to market and the lowering in distribution costs." (Company F)

"I think it was an easy way to export. So it got us involved initially in overseas markets." (Company H)

However, small born global firms also ally with international companies in order to receive advice, information, local expertise and knowledge from their partner when they enter new international markets (Baum *et al.*, 2000; Varis *et al.* 2005).

"They have technical expertise. Very often a strategic alliance can bring you a lot of very useful information that would take you forever to find. [...] It's very resource and cost intensive to get that information." (Company B)

"In those kinds of markets we very heavily rely on strategic alliances to say look: You know what we have because you work with us in all these other regions. What do we need to change for being successful in Japan?" (Company C)

Explaining how these international partnerships emerge, current literature suggests that the founders of the firms access their existing networks and business contacts (Crick & Spence, 2005; Freeman *et al.*, 2006). The results of the conducted research confirm such propositions.

"It's the network that gets you there. The problem in forming strategic partnerships is the network. You have to be part of the network to get a chance." (Company B)

"Obviously it is easier if you are able to have existing ties [...]." (Company F)

However, while some firms possess the networks which eventually help them find a suitable partner, others did not own any relevant contacts prior to the formation of the strategic partnership. This is because most of the founders were new to the industry in which they set up their business and consequently were not aware of any relevant contacts and relationships.

"We were going into the ink industry, knowing nothing, knowing no one in the industry at all. We backed into it by mistake. We didn't start out doing this. We paid the price. We have had to build our contacts right from the ground level. As I was saying before about the networks, S. and I were looking at us and saying; where do we get this network from? How do we do it? So we had no contacts, no help. We carved it from the start." (Company B)

Prior to international working experiences is also highlighted by the literature as a potential reason why small born global firms engage in strategic partnerships to internationalise early (Gannon & Rahman, 2011). Conducted research provides diverging evidence. For example, the founder of Company A has extensive international working experiences which gives him the confidence to approach larger firms in order to try and form a strategic partnership.

"I've always worked in big and small international companies. I wasn't afraid of talking to big companies and doing deals with them. So it gave me the confidence to say if you have a small start-up company you can still do very good relationships with big companies as long as you make sure they are structured properly." (Company A)

In contrast, other founders were not equipped with any international working experiences. However, the manager of Company C argued that international work experience might be helpful, but is not a barrier to finding a suitable strategic partner. It is rather

recommended to be able to present the value that the small born global firm could provide to its partner than having prior international experiences or not.

“So, whomever you are going to, you can articulate the value that you are going to bring to them. Then that is far more important than whether you have international experience or not.” (Company C)

Therefore, the firms without an existing network and international experience managed to find strategic partners by developing it through visiting international exhibitions, conferences and trade shows of their industry. There they were able to make contacts with regional or large international companies from which then their international partnerships emerged.

“In January this year I exhibited the C. in Paris [...]. From that on I am currently talking to six French stockists, one in Poland, three from the US and two from Japan.” (Company G)

“We targeted a number of conferences and exhibitions in the United States to find a distribution partner.” (Company F)

Another way to facilitate network growth employed by some firms is to buy-in external expertise. While Moen *et al.* (2010) argue against such practice and indicate that finding a suitable partner is not that demanding, Company C motivated by shortages in their resource base, did just that.

“The problem with a small company is you don’t have the expertise on hand for everything. [...] So we decided as a policy decision to buy the expertise in. [...] It’s actually working and finding these connections is firing us back into the chain.” (Company C)

Furthermore, the support from governmental organisations, such as UK Trade & Investment (UKTI), is another reason why small born global firms engage in international strategic partnerships soon after their founding. UKTI provides contacts, market research and assists in how and what international markets should be approached.

“We had some market research undertaken by the UKTI. Responding to that they identified that the correct way of approaching the market was via exhibitions and conferences in order to find suitable partners.” (Company F)

Drawing on such findings, it can be assumed that the government helps to pave the way for rapid and early internationalisation and that close institutional networks between a small born global firm and UK government organisations supports the formation of strategic partnerships.

The results indicate that prior to international working experiences of the founder and his existing network might be the main reason for which born global firms engage in international strategic partnerships as their founders have the contact base and the knowledge about where and how to find these partners. However, the research also reveals that founders who did not possess any prior international experience or contacts in the industry managed to form strategic partnerships and not significantly later than the other firms. Furthermore, it is apparent that the existing network ties might have a bigger impact on finding strategic partners than prior international working experiences might have.

Small born global firms try to overcome their liability of newness and smallness by partnering with larger firms (Comi & Eppler, 2009). In that way the risks of newness and smallness are addressed, or rather substituted with other risks resulting from such partnerships. One such risk is a potential takeover by a larger partner (Preece *et al.* 1999). Yet, research results suggest that it is actually an opportunity, or what Evers (2011) terms founder's strategic orientation, as for some owners this would be indeed a favoured outcome:

"So it is a possible reason for this strategic partnership that eventually they will acquire this company and it will become a part of P. [...] I'm 67 years old and I would like to retire. So it's part of my strategy to actually sell the company to P." (Company A)

Besides that, small born global firms also prefer international strategic partnerships to stabilise their revenues in international markets and to gain continuity in their demand, which accordingly improves their overall cash flow as well.

"We try getting some kind of continuity and demand out of the people. So if somebody wants one ton of product every month and they want us to contractually enter into an agreement, [...] that would suite us, as this helps to plan production. So what we are looking for is long-term stability and long-term growth." (Company B)

The improvement of the firm's cash flow (e.g. Varis *et al.*, 2005) is perceived as particularly highly significant by the company's founders because some born globals engage in international partnerships due to financial resource constraints. Furthermore, the findings reveal that the more strategic the partnership becomes, the more the born global firm is able to benefit from their partner's resources. For example, Company E could improve its cash flow by changing from a Chinese to an Italian supplier with whom it formed a more strategic and closer relationship.

"There was no cost benefit for us to move and change the supplier. What cost benefit they did give us was, with our existing supplier we had to pay 50% with the order. [...] What we were able to negotiate with the Italian company was that we pay no deposit and we had a longer period in which to pay the goods. For a small company who just started, this benefited our cash flow." (Company E)

In addition to the financial resource support, Company E could also gain a broader product range and enter new industries by receiving access to the resources of their partner.

"Because we are now in a partnership with again another global company, the range of products that we are able to supply is wider than what we had, which allowed us now to look at markets for different types of motors we didn't have access to in the past." (Company E)

Larger firms do not just provide support in the area of financial resources but can also provide commercial support and human resources. This is best highlighted in the case of Company C which indicates the potential of a wider global reach by involving the partner's employees in the selling process when venturing abroad.

"If you are a small company you don't have a lot of resources and a lot of people. If you want to grow fast, the only way to do it is to leverage people who have for example a sales force already out there. If you train them, almost suddenly you have another

10, 20, 50 or 100 people selling your product [...] in a multiple of regions. So all of the sudden you do have a bigger market to address then before.” (Company C)

Even though strategic partnerships provide resources in different areas, which consequently helps a small firm to venture abroad and serve customers around the world, they still have to be aware of their own resources and know that extensive internationalisation through the support of a large strategic partnership can also become a challenge to the firm's own resources. As for example a born global firm can gain access to the partners' global network, their own resources might only be sufficient for initial internationalisation in a particular geographical region. Although the focus of a born global firm is to internationalise quickly and rapidly, realistic expectations have to be set in order to not overstretch the born global firms' own capabilities.

Particularly, because larger firms tend to move more slowly compared to a small born global firms, the partnership formation process can become time and resource consuming and eventually put pressure on the small born global firm.

“It takes a long time. It is nothing that happens quickly.” (Company F)

Consequently, a born global firm aiming to internationalise soon after its foundation could be confronted with serious time and resource constraints when forming a strategic partnership with an MNE which can reduce the speed of internationalisation.

Kennedy and Kenney (2009) argue that in addition to the resource potential, born global firms could receive an indirect value from their international strategic partnerships, which are corporate strength, visibility and credibility. These indirect benefits for a small born global firm have been observed as important motives for their engagement in a strategic partnership in order to foster their early internationalisation. For example, Company C indicated:

“If you are a small software company like us, nobody knows who you are. So we can then suddenly say: I'm partnering with M. or H, which gives you credibility and kind of validates your market.” (Company C)

While credibility is perceived as a major motive for engaging in international partnerships, the partner's brand recognition in international markets is also relevant to the interviewees, as a small born global firm can profit from its partner's already established reputation and brand image. Brand recognition therefore helps a small firm to overcome trust and risk issues in a new foreign market by validating its products through its international strategic partner.

“It's always risky to buy from a small company you have never heard of before. Particular when it is in a different country, maybe you have not traded with before. So again then you could say: Look, it is validated by this strategic alliance that you are already doing business with and that you trust. [...] So all of the sudden the risk of trading with me doesn't disappear but become a lot less.” (Company C)

While the majority of the interviewees recognised the significance of strategic partnerships and recommend it as a mode to become internationally active at or shortly after the firms' foundation, others appeared more hesitant in highlighting the most appropriate moment when strategic partnership is perceived as most suitable for a born global firm. Only one Company argued that a strategic partnership with a global firm

was not as promising as they had expected and eventually terminated it. However, they still recommend a strategic partnership as an early entry strategy to new markets when resources are limited, as it is an easy and low cost intensive strategy.

CONCLUSIONS

The twofold purpose of the article was to investigate the internationalisation motives and practices of born global firms, and particularly to explore the role strategic partnerships play in early internationalisation. To that extent, several key internationalisation motives and related functions of strategic partnerships have been identified providing new theoretical insights as well as managerial implications.

The main internal motive driving small born global firms' ventures abroad soon after their foundation, is to prevent their competition from gaining a share in international markets (Johnson, 2004; Knight & Liesch, 2016). Born globals are aware of their unique and distinctive product advantage and therefore want to utilise this advantage by receiving revenues from more than just their domestic market. Thus, a major motivation of a small born global firm is to become international in order to access a bigger market and to prevent competition in overseas markets.

Their existing ties to clients could also foster internationalisation as clients unveil potential opportunities in foreign markets (Freeman *et al.*, 2006). However, based on research results, clients' contribution does not extend to further support in setting up born global's international operations, hence the need for a strategic partnership.

In addition to internal motives, in line with previous studies (e.g. Kudina *et al.*, 2008), one of the most frequently mentioned external reasons for early internationalisation is the limitation of the UK market in terms of customer base and growth potential. It is important to recognise that the firms studied often operate in specialised, niche markets. To this extent, strategic partnerships are seen by some small born globals as a cost-efficient way of reaching foreign markets, simultaneously allowing to limit the risk of failure. Such findings add novel perspectives to previous studies and contribute to new theoretical understanding of the role strategic partnerships play in born globals' internationalisation.

Furthermore, the founder and the top management of a small born global firm have been identified as important factors why small born global firms internationalise early and rapidly after their inception (Cavusgil & Knight, 2009). Possessing a global vision and mind-set is perceived as equally relevant as being alert to opportunities, which can emerge from either planned or unplanned circumstances. One of such unforeseen events might be an approach by larger international enterprises soliciting a partnership with small born global firms. Such serendipitous events are an important motive of the early internationalisation of born globals, but also help to explain why strategic partnerships are used by them in the process. Subsequently, strategic partnerships do not only emerge as a result of proactive actions of small born global firms but also as a consequence of firms' abilities to embrace a wider set of unexpected opportunities.

Partially in line with earlier studies (e.g. Gannon & Rahman, 2011; Moen, 2002), international strategic partnerships have been observed to be formed thanks to the founder's and/or manager's prior international working experience and international network. However, as some firms were able to access an existing network in order to find a suitable partner, others needed to build up their relationships from the outset of

their business. Nonetheless, as both types of firms were able to form strategic partnerships soon after their establishment, further research is needed to establish to what degree prior network ties or prior international experience have a distinctive impact on the formation of strategic partnerships for born global firms.

Furthermore, the liability of newness and smallness persuades born global firms to use partnerships as a strategy to enter international markets (Comi & Eppler, 2009). The partner provides relevant financial, commercial and human resources facilitating the operations of a small born global firm. Beside the supply of significant resources, the cooperation partner can offer an already existing distribution network and provide information, expertise and local knowledge of the market, which would require more time and resources if the born global firm would do that autonomously.

By entering into a contractual agreement with an international partner, a born global firm gains stability and predictability in its international demand (Varis *et al.*, 2005), which particularly in the early stage of internationalisation helps it to maintain a continuous stream of revenue. Furthermore, the formation of strategic partnerships enhances the credibility and brand recognition of small born global firms in international markets (Kennedy & Kenney, 2009). As firms become validated through the partnerships, it consequently helps them to address new customers who already maintain business relationships with their partner.

While these advantages help a small firm in accelerating its speed to overseas markets, the process of the formation of these partnerships is often perceived as time and resource consuming (Tjemkes *et al.*, 2012). Clearly, this is not in the favour of small born global firms, which want to internationalise soon and quickly after their inception and therefore the formation needs to be managed carefully by a small born global firm. However, most of the firms argued that strategic partnerships are highly suitable to them when searching for a low-cost international entry strategy.

The research has revealed that several firms addressed the importance of the right moment in time when a strategic partnership should be considered. According to the findings, born globals should not seek international partners before they have set up. Particularly the firms which have been approached by MNEs and formed strategic partnerships with them immediately after their foundation mentioned that they would not have searched for an international partner earlier. These findings highlight that despite the endeavour and the characteristic of a small born global firm to internationalise quickly after its inception, they first should seek to establish own operations before searching for partners on international markets.

Additionally, the findings reveal that more established born global firms terminate their partnership with the company which initially helped them to venture into international marketplaces. The reasons for this were twofold. Firstly, the revenues stagnated and prices became less competitive on international markets and secondly, the bargaining power has shifted towards the born global firm as it matured over time. Even though a small born global firm tried to renegotiate the conditions of the contract, it eventually terminated the partnership and established its own network of agents. Thus, it is apparent that strategic partnerships do not have an unlimited durability and become less attractive to small born global firms once they are more established in international markets.

Finally, strategic partnerships are used by born global owners as a business exit strategy, a novel perspective so far not identified in previous research.

There are several practical and managerial implications of the study. Strategic partnerships appear to be a suitable approach for a small born global firm in enabling and facilitating its internationalisation process. However, too prompt formation of a partnership could cause problems for a small born global firm. Similarly, it might become detrimental and less attractive after the small born global firm becomes more established. However, this unfavourable process might be prevented by small born global firms if they can use their growing bargaining power to renegotiate a new equilibrium within the strategic partnership. If that might not be possible, the strategic partnership could fall apart over the long-term.

While the article offered a meaningful contribution to the debate on internationalisation of small born global firms, its key limitation need to be recognised. The study has been conducted in the UK context which limits generalisability of its findings, at least till proven otherwise. However, in line with the interpretivist approach guiding this research, its intention was not to generalise but to provide new insights into the born global phenomenon that could be followed up in the future. This limitation coupled with the new findings of the article, testify to the richness of future research opportunities and avenues. The timing of born globals' engagement with strategic partnership requires further attention. Future research should investigate whether strategic partnerships for born global firms are suitable for a specific period of time, starting shortly after their foundation and finishing when the firm becomes established on international markets. In order to explore this in more depth, after Nummela *et al.* (2006) and Cavusgil and Knight (2009), it is recommended to conduct longitudinal studies which could shed light on when small born global firms engage in and disengage from strategic partnerships. Additionally, the geographical scope of research should be widened to allow meaningful international comparisons. Such studies should preferably include large and small, developed, emerging and developing economies. Moreover, future research needs to broaden the theoretical scope of investigations, beyond traditional international business concepts, and include insights from other disciplines and theories, for example network theory.

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Determinants of Controlling in Foreign Subsidiaries of MNEs: On the Explanatory Potential of the Institutional Perspective

Cezary Kochalski, Magdalena Łuczak-Trąpczyńska

ABSTRACT

Objective: The main aim of this paper is to identify gaps in extant literature on controlling in MNEs, in particular factors affecting related managerial decisions. Secondly, the relevance of the institutional perspective will be examined for its potential to explain the design of controlling in foreign subsidiaries.

Research Design & Methods: The dimensions of international controlling are discussed. Further, the institutional approach is examined for its applicability to advance the understanding of the determinants of shaping controlling systems in foreign subsidiaries of MNEs.

Findings: Institutional aspects can have a significant impact on the functioning of MNEs in relation to their controlling systems. Informal institutions can influence the formation of the controlling system in the relations between the subsidiaries of the MNE, whereby also institutions within the MNE itself should be taken into account.

Implications & Recommendations: Conducting in-depth qualitative research will allow for a set of recommendations that are relevant to managers responsible for an effective implementation of management control systems.

Contribution & Value Added: The relevance of the controlling system in parent-subsidiary relationships has not received significant attention in existing studies in the discipline of international controlling.

Article type: conceptual/review paper

Keywords: multinational enterprises (MNEs); controlling system; headquarters-subsidiary relationship; coordination, firm performance

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INTRODUCTION

Establishing foreign subsidiaries and developing a multinational enterprise (MNE) outside of the country is one of the company's key business development strategies and has for years been a focal topic of interest in the disciplines of strategic management and international business (Verbeke, Li, & Goerzen, 2009; Canabal & White, 2008). The parent company's ownership and control over its subsidiaries located abroad is an immanent feature of MNEs (OECD, 2008; Vernon, Wells, & Rangan, 1996). Although in the context of the aforementioned disciplines, such decisions as choosing the form of entry into a foreign market (e.g. acquisition or greenfield), the choice of the level of capital involvement and the ownership structure of the foreign company, or the choice of location for foreign operations have received predominant attention, the effective management of an MNE, which involves the coordination of international activities, is not less important (Kutschker & Schmid, 2008).

From the perspective of strategic management of an international corporation, considerable attention has been paid to the implementation of a market strategy (with emphasis on marketing instruments), excluding issues related to control systems and factors significantly influencing their choice and, equally important, their effectiveness. The coordination of an MNE, by virtue of its complex organisational structure and its diverse business environments, is an additional challenge as compared to growth in the domestic market (Czinkota, Ronkainen, & Moffett, 2005; Daniels & Radebaugh, 2007; Holtbrügge & Welge, 2010). Thereby, under coordination one can understand the mutual adaptation of elements of the international system to optimise it (Kutschker & Schmid, 2008). Integration, harmonisation and unification of activities, tasks and decisions can be considered as the primary goal of this coordination process. In this context, the importance of controlling in MNEs is of particular importance (Brenner, 2009; Czycherski, 2007, 2009; Gigouline, 2001; Hanzlick, 2014; Roth & Nigh, 1992).

The main aim of this paper is to identify gaps in extant literature on controlling in MNEs, in particular factors affecting related managerial decisions. In the second step, the relevance of the institutional perspective will be examined for its potential to explain the design of the controlling system in foreign subsidiaries in order to create a model for the implementation of the controlling system in a subsidiary.

The paper is organised as follows. First of all, the concept and relevance of international controlling are explained. Subsequently, the dimensions of international controlling are discussed to enable a more detailed analysis of the concept and its determinants and to identify research gaps. Further, the institutional approach is introduced and discussed from the point of view of its applicability to bridge the stated research gaps and advance the understanding of the determinants of shaping controlling systems in foreign subsidiaries of MNEs. This discussion results in propositions for further research.

LITERATURE REVIEW

The Concept and Relevance of International Controlling

The essence of controlling is 'to build a logical system which, through structured combination of different structural elements of an enterprise, involved in economic, financial, organizational and technical activities, will help the managerial staff to make more relevant (credible)

operational and strategic decisions' (Marciniak, 2008, p. 13). However, the concept of controlling has no uniform definition in international literature. Different schools around the world have different views, and numerous management scholars point to helplessness in trying to sort out this notion. In support of this statement, it can be recalled that Preissler (1999, p. 12) states that 'everyone has their own image of what controlling should be, but everyone thinks something else'. One of the reasons for the various explanations can be the ambiguity of the English notion of 'control'. For example, Nilsson (2002) assigns to the 'management control system' such constituents as the strategic planning and budgeting system, the performance measurement system, including the information on deviations from the budget, and other financial and non-financial information, capital expenditure procedures, and transfer pricing systems. The similarity of this approach to the understanding of the controlling system mentioned above accentuates the need to clarify the concepts in extant research.

Placing the concept of controlling in the context of international business operations has caused arguments that the main goal of the so called international controlling is to support the effective implementation of company goals by providing information bases for planning and control (Hahn & Hungenberg, 2001; Horvath, 2009). The concept of controlling is often associated with a narrower concept of control (e.g. Nilsson, 2002; Granlund, 2003), which, according to Vollmuth (2000), is a simplistic approach, because controlling is in essence a management system. Control in MNEs involves planning, implementation, evaluation and revision of economic performance to ensure the achievement of goals by a complex and geographically dispersed whole (Daniels & Radebaugh, 2007). Thus, in research on MNEs a considerable amount of attention has been paid to the control of foreign subsidiaries expressed by the parent's share of capital of a foreign subsidiary (see e.g. Beamish & Lee, 2003; Gaur & Lu, 2007; Kim & Gray, 2008), corporate governance in the relationship between the parent and its subsidiaries (Filatotchev *et al.*, 2007; Hoskisson, Wright, Filatotchev, & Peng, 2013), or the effectiveness of parent control through staffing decisions related to management positions in the subsidiary (e.g. Estrin, Baghdasaryan, & Meyer, 2009; Fang, Jiang, Makino, & Beamish, 2010).

However, the aspects of capital control *per se* or staffing decisions are only selected aspects of controlling systems (Nowosielski, 1994), which are part of broader co-ordination strategies in MNEs, critical to ensure the strategic coherence of the functioning of these geographically dispersed entities (Kutschker & Schmid, 2008). Depending on the level of involvement of foreign capital and the organisation of the MNE, the importance of subsidiary control varies. In order to increase oversight of the subsidiary and to reduce asymmetries in the access to information, parent firms recur to controlling tools (Nilsson, 2002; Granlund, 2003; Moilanen, 2016; Bijlsma-Frankema, 2004). However, the relevance of the controlling system in parent-subsidiary relationships has not received significant attention in the existing studies, both in the disciplines of international controlling (Brenner, 2009; Czycherski, 2007, 2009; Gigouline, 2001; Hanzlick, 2014; Roth & Nigh, 1992), as well as broader discipline of international management (Kutschker & Schmid, 2008; Holtbrügge & Welge, 2010).

For the purpose of the present literature review, international controlling is defined as a multifunctional management instrument which aims at steering the MNE to optimise its performance, and which is implemented through planning, control, reporting and steering (also see Nowak, 1996). In this respect, accounting can be understood as an instrument providing different decision-makers at different levels with

multidimensional information required to manage the MNE (Dobija, 2002). In controlling, therefore, the emphasis is to a larger extent shifted to business management than in managerial accounting oriented towards providing managers with information (Brzezina, 1995; Dobija, 2002; Nowosielski, 1994).

Dimensions of International Controlling System

Assuming that controlling can be understood as a subsystem of business management, emphasis should be placed on aspects related to the management process. The process perspective in business management, as opposed to the static perspective which is geared towards explaining the causes and consequences of specific strategies (Fahey & Christensen, 1986; Ginsberg & Venkatraman, 1985; Rajagopalan, Rasheed, & Datta, 1993), focuses on organisational action that leads to the implementation of a given strategy (Bamberger & Capallo, 2003). Thus, this perspective focuses on the participants of the process, the methods they use, and the conditions influencing the overall process pattern. When applying the process logic of management to the controlling subsystem, Becker (1990) argues that it consists of instruments, actors, and their tasks.

In a similar vein to Becker (1990), in the context of international controlling Holtbrügge and Welge (2010) draw attention to the important fact that the assessment of the degree of the achievement of objectives should not only take place at the level of the whole company, but also of foreign affiliates. Thus, the goal of controlling in MNEs is not only to ensure the achievement of targets defined at group level, but also at the level of subsidiaries (Hoffjan, 2009). As part of the performance of the evaluation function of international controlling, foreign affiliates can be seen as the area of action of controlling system participants (Pausenberger, 2002). The actions of these participants are related to the coordination function of controlling, which evaluates subsidiary performance *ex-post* (feedback control), as well as *ex-ante* (feedforward control). These actions are based on the assumption that acquiring, developing and delivering information related to a subsidiary's operations not only aims to evaluate its performance, but also to influence key managerial decisions of its subsidiaries (Holtbrügge & Welge, 2010).

Thus, the behavioural function of information delivery through the controlling system is an important control instrument within the MNE. Finally, as a consequence of the existence of the significant environmental and internal complexity of the MNE, there are no clear organisational recommendations that universally respond to the need for coordination in an international context. Thus, a crucial function of the international controlling system pertains to the elaboration of dedicated methods and instruments of planning and control of foreign subsidiaries (Holtbrügge & Welge, 2010).

To sum up the above considerations, one can notice the acknowledgment of the role of international controlling as a management subsystem of an MNE in extant literature. At the same time, however, there is a notable lack of normative indications regarding the design and implementation of an international controlling system depending on given boundary conditions. While there is evidence in literature on the properties of the controlling system depending on the international strategic orientation of the MNE (Holtbrügge & Welge, 2010), the type of international holding (Gigouline, 2001), the impact of regulations and accounting standards, as well as the influence of national culture on the approach to accounting (Bednarczyk, 2001), there is a striking lack of theoretically grounded models of the implementation of the controlling system in MNEs. The issue is all the more important that in the area

of international controlling there is a different understanding of the essence and importance of controlling between different countries, which can have a significant influence on the adoption of controlling solutions in parent-subsidiary relationships.

Figure 1 summarises the basic dimensions of the international controlling system.

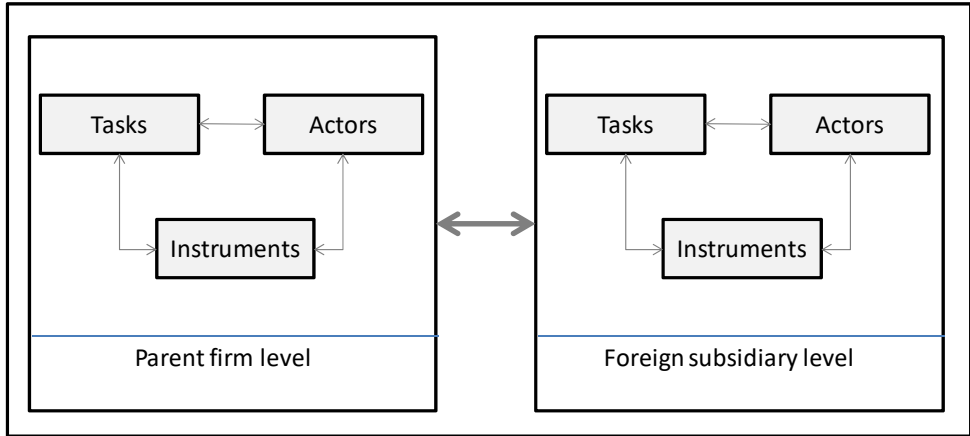


Figure 1. Dimensions of the international controlling system

Source: own study.

Gaps in Extant Research

In extant research on international controlling it is possible to identify research on the formation of a controlling system following mergers and acquisitions (Nilsson, 2002; Bijlsma-Frankema, 2004; Chang, Chang, & Wang, 2014; Granlund, 2003; Molainen, 2016). When focusing on corporate strategy as a key determinant of controlling systems, attention was paid to the consistency of the strategy of the acquiring and acquired firm (Nilsson, 2002), to a lesser extent focusing on issues such as the cognitive mapping of managers (Bijlsma-Frankema, 2004) or emotions of people involved in shaping the accounting and control systems (Molainen, 2016). This seems to be surprising given that attention was drawn to the importance of the so-called soft factors in the integration of acquired companies (Teerikangas, 2006). In fact, formal controlling systems and the related rules raise emotions of their users and recipients, thereby exerting an influence on their behaviour (Boedker & Chua, 2013).

And yet, the existing research focused on selected formal elements of management control systems, such as the performance measurement tools and budgeting systems (Granlund, 2003; Nilsson, 2002), ignoring the importance of other significant elements of the controlling system, such as a business management subsystem (Molainen, 2016). Secondly, in most cases these studies were not rooted in the context of MNEs. According to Czycherski (2002), controlling in a foreign subsidiary should be tailored to the specific conditions of its operation, as well as its needs and tasks. In the context of MNE controlling, some authors point to the importance of the type of international holding company to the characteristics of the controlling organisation. The type of holding (financial, strategic or operational) that reflects the level of integration of a subsidiary within the MNE translates into the budgeting and performance measurement system, incentive and remuneration

system (Gigouline, 2001). In addition, it influences the power of direct involvement of the controlling unit in the affairs of the subsidiary and the areas that it is specifically interested in. However, the structure of an international capital group is but one of many variables influencing the controlling system of a subsidiary. Thus, Merchant and Van Der Stede (2007) distinguish further important variables:

- factors related to the company itself (such as organisation, strategy, financial resources, organisational culture of the company);
- the country of the investment country (such as local business environment, political risk, economic risk);
- other holding related factors (such as budgeting system, performance measurement system, type and intensity of control used, organisational culture, etc.).

Moreover, Holtbrügge and Welge (2010), do draw attention to the fact that the international strategy pursued by the company, which includes, *inter alia*, the role and importance of foreign subsidiaries in the operations of the MNE, has an influence on the objectives of controlling and locating key decision makers in the field of controlling, the standardisation of controlling instruments, criteria for assessing performance, or the direction and scope of information flows within the controlling system.

However, while in the existing literature on international controlling there may be some limited awareness of the existence of multi-level determinants shaping the controlling system of a foreign subsidiary, there is virtually no systematic and normative approach to describing interdependencies between these determinants (Czyczerski, 2009; Holtbrügge & Welge, 2010).

INSTITUTIONAL DETERMINANTS OF FOREIGN SUBSIDIARY CONTROLLING

Applications of Institutional Theory in International Business Research

Due to the strong dependence of the activity of MNEs (especially in international accounting aspects) on regulatory conditions and differences in business environments across countries, the institutional theory seems to be a promising analytical approach. *'Institutions are the rules of the game in a society or, more formally, are the humanly devised constraints that shape human interaction'* (North, 2011, p. 3). In other words, institutions provide a framework that limits uncertainty by setting the limits of choices made by individuals. According to Scott (1995, p. 33), institutions provide *'regulative, normative, and cognitive structures and activities that provide stability and meaning to social behaviour'*. Peng *et al.* (2009) emphasise that management teams exercise their interests in a rational manner and make choices within a specific institutional framework. On the other hand, Oliver (1997) discusses the concept of normative rationality advocated by institutional theorists. Unlike economic rationality, where managers make rational choices limited by uncertainty, information deficiency, or imperfections of cognition, normative rationality implies that managers behave in an irrational manner, limited by social judgment, normative context of decisions, and inertia resulting from habits. While economic rationality, albeit subject to constraints, aims at maximising productivity and profitability, normative rationality refers to decisions taken in the context of norms, values and traditions in the firm and its environment, which maximise legitimacy, thus leading to a suboptimal resource allocation.

Institutional frameworks can be broadly divided into formal and informal (North, 1991, p. 97). Formal restrictions include rules set in the policy area (e.g. laws, resolutions, ordinances, etc.), legal decisions (e.g. court decisions) or contracts concluded between business entities. Informal institutions include socially sanctioned behavioural standards rooted in culture, ethics, and ideology. North (2011, p. 4) suggests that in situations where formal institutions fail, informal institutions help to reduce uncertainty and set a benchmark for organisations to shape their behaviour.

The analysis of formal and informal institutions in the functioning of MNEs has become of particular importance in recent years, given the growing awareness of their impact on business operations and their economic performance (Dunning & Lundan, 2008). Researchers in the area of new institutional economics have focused on the impact of institutional environment on decisions such as FDI modes (Estrin, Baghdasaryan & Meyer, 2009; Yiu & Makino, 2002), decisions on FDI location (Globerman & Shapiro, 2008), or the impact on firm performance (Brouthers, Brouthers, & Werner, 2008).

On the other hand, another strand of management research based on the sociological part of institutional theory is devoted to the demonstration of legitimacy by companies. This manifests itself in the adaptation of organisational structures, processes and strategies that allow them to cope with expectations raised by both the external and internal environment (Walgenbach, 1995). The process of institutionalisation leads to the elimination of behaviour that does not conform to the norms considered to be legitimate, resulting in the uniformity of corporate strategy within the same institutional environment (Oliver, 1991). Di Maggio and Powell (1983) state that this isomorphism is related to political, formal and informal pressures (*coercive isomorphism*), the adoption of standards that limit uncertainty (*mimetic isomorphism*), and the professionalism of management in organisations (*normative isomorphism*).

The application of this line of reasoning to MNE operations has highlighted the process by which subsidiaries gain legitimacy from the perspective of both the host country and the parent company (Kostova & Zaheer, 1999), entry modes (e.g. Xu & Shenkar, 2002), or staffing expatriates vs. local managers (Xu, Pan, & Beamish, 2004). The overarching premise of this logic is to reduce the costs of doing business by gaining legitimacy in the formal and informal institutional environment of the foreign country (Zaheer & Mosakowski, 1997).

Institutions Affecting International Controlling

Based on the above review, it can be stated that the impact of institutional pressures on the controlling system in MNEs has remained poorly understood. This is surprising since controlling in MNEs is one of the areas where the broadly defined institutions can exert a significant influence. In fact, future research should take into account to a larger extent the various formal institutions that can influence the shape of the controlling system in an MNE, such as:

- structure of the MNE in general;
- applicable accounting standards, including both international (e.g. International Accounting Standards and International Financial Reporting Standards), as well as local legal acts (e.g. accounting laws, national accounting standards);
- corporate governance;
- tax regulations (including laws on tax regulations in Poland, as well as international agreements and conventions ratified by Poland);

- transfer pricing – relying on the domestic legal regulations, mainly in the Corporate Income Tax Act, as well as in the Tax Code and the Ordinance of the Minister of Finance, international guidelines and reports, OECD guidelines and reports.

Informal institutions shaping different dimensions of the controlling system in a foreign subsidiary include:

- organisational culture (parent and subsidiary level);
- the culture of the country of origin of managers shaping and implementing the control system, as well as being the subject of controlling;
- awareness of the concept of controlling and the need for its implementation;
- values and rules in companies.

Despite the fact that the influence of this former category of institutions on the design of the controlling system seems to be intuitive and straightforward, the less obvious fact is the interdependence of the formal institutions of the parent firm, the country of the subsidiary and the MNE itself, on the final shape of the controlling system in the foreign subsidiary.

In addition, the role of informal institutions as a determinant of the controlling system also remains an area of scarce research, requiring further qualitative research to better understand the interdependencies between the different categories of institutions. Third, mutual interactions between formal and informal institutional forces, especially when weak formal institutions are present, are also important issues from the point of view of both the institutional theory itself and the practice of MNE controlling.

The analysis of these issues is also relevant in a broader sense than controlling in MNEs *sensu stricto*, because it actually coincides with a number of limitations of the existing research on international corporations. From the research perspective on mergers and acquisitions (M&A), one can observe the concentration of research on the process of integration of entities (especially with regard to the challenges of cultural differences at the level of countries and corporations), the impact of the incorporation of new subsidiaries into the group firm value and performance. On the other hand, less attention has been paid to the changes taking place in controlling and management efficiency, particularly at the level of a foreign subsidiary. While controlling in MNEs is a thoroughly practical issue that requires an orientation towards its managerial implications, this goal can only be achieved by adopting a solid theoretical foundation to provide a logical analytical framework, whereby the institutional approach discussed above appears to be a promising path.

Towards a Conceptual Framework

The analytical framework (Figure 3) developed based on the discussion presented in the preceding sections, future research could focus on empirical analysis of subsidiaries operating within international capital groups in order not only to empirically develop concepts developed in the literature review, but particularly to deepen the understanding of interactions between internal and external, formal and informal institutions in shaping the controlling system of the foreign subsidiary. The formalisation of some initial expectations related to these interdependencies can constitute the first step towards the formulation of a unique model of implementation of the controlling system in a subsidiary within the MNE. According to the aforesaid understanding of the controlling system, future analyses should particularly cover the following aspects:

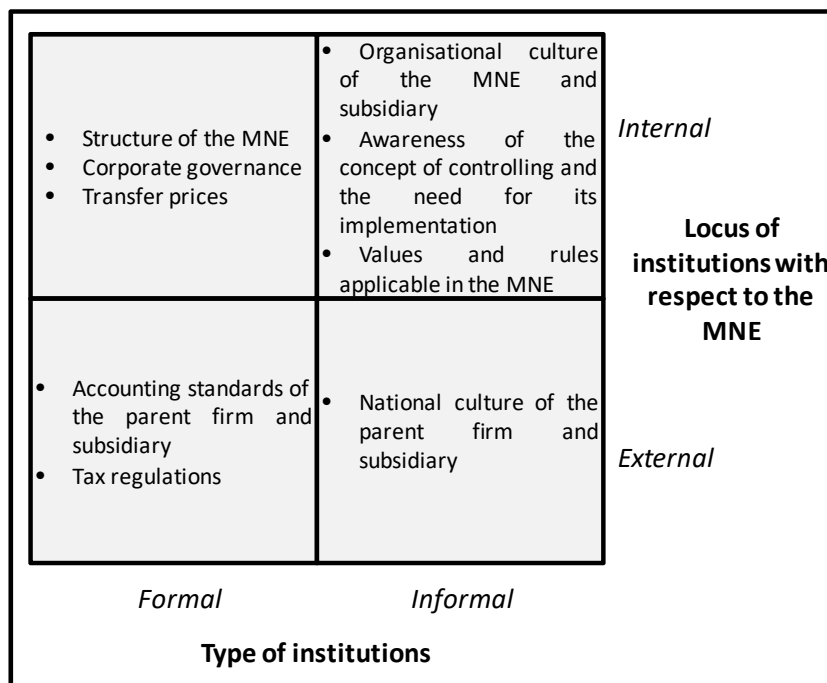


Figure 2. Typology of institutions determining the implementation of the controlling system in an MNE

Source: own study.

- tasks (particularly controlling intensity, division of tasks and roles between the headquarters and the subsidiary and its evolution, the scope of the formalisation of tasks by the parent company);
- actors (particularly the formal and informal setting up of employees responsible for controlling, their scope of autonomy, the intensity of the cooperation with the parent firm);
- instruments (particularly the selection and adaptation of horizontal control tools, e.g. central and decentralised transfer pricing, the scope of supporting control tools such as standards, profiles, frameworks, global and local projects, selection and adaptation, as well as the evolution of the performance measurement system as a vertical control tool).

The understanding of external and internal institutional pressures affecting the controlling system within the parent-subsidiary relationship, as well as their changes over time can lead to the development of an implementation model with relevance for both theorists and practitioners of international management. In fact, it will suggest which types of solutions related to the controlling system are acceptable and most efficient given the presence of given boundary conditions. As a preliminary effort in the construction of such a model, a group of working propositions has been formulated to inspire further research in this area:

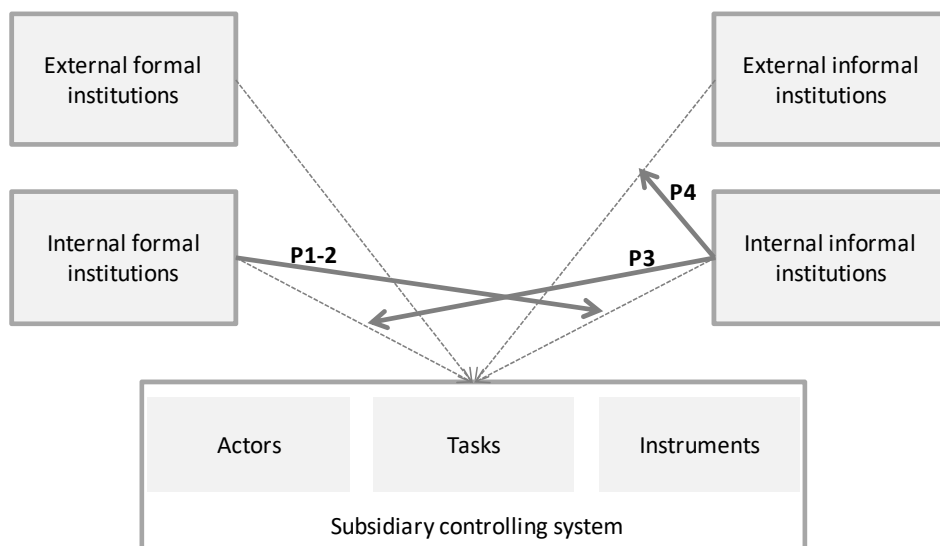


Figure 3. Analytical framework of the influence of institutions on the implementation of the controlling system of a subsidiary in an MNE

Source: own study.

Proposition 1: The definition of tasks in the controlling system of a subsidiary is to the largest extent influenced by informal internal institutions, whereby the importance of institutions at the level of the parent firm as compared to those at the level of the subsidiary is dependent on formal internal institutions.

Proposition 2: The definition of the type and role of actors in the controlling system of a subsidiary is to the largest extent influenced by informal internal institutions, whereby the importance of institutions at the level of the parent firm as compared to those at the level of the subsidiary is dependent on formal internal institutions.

Proposition 3: The definition of instruments in the controlling system of a subsidiary is to the largest extent influenced by formal internal institutions, whereby the importance of institutions at the level of the parent firm as compared to those at the level of the subsidiary is dependent on informal internal institutions.

Proposition 4: In the case of contradictory pressures from external informal institutions of the country of the parent firm and of the subsidiary, their impact on the subsidiary's controlling system depends on informal internal institutions.

CONCLUSIONS

Despite the growing importance of controlling in economic sciences and in business reality, there are still controversies as to what should be understood under this concept (Kochalski, 2012). Empirical research also shows that companies in countries with shorter market traditions, such as the CEE region including Poland, still do not fully utilise the control tools, and new solutions are being implemented slowly (Dobroszek, 2011). In each country, controlling developed in a different way and had a different meaning in practice. Little attention has

been paid to the in-depth investigation of the specific conditions of the control systems apart from commonly known considerations of specific legal requirements or the structure of the capital group itself, as well as their interrelationships, and the implications of these choices in view of the effectiveness of the controlling system. Moreover, predominant attention in research on management control has been devoted to the structural and formal aspects of controlling systems, while neglecting the process-related and personal aspects of controlling, which the present conceptual paper is accentuating.

The controlling system provides a spectrum of tools to effectively support the business objectives of a given organisational unit (Foremna-Pilarska, 2007). These tools are very diverse, ranging from liquidity indicators, to very elaborate measures, covering almost the entire organisation, such as the balanced scorecard (Chomuszko, 2015). Based on the literature of the subject, it can be seen that the selection of tools used by the controlling system depends on several factors, including the objectives and tasks of the controlling system, the type of controlling, internal and external conditions (Marciniak, 2004). These considerations, however, have mostly focused on the national context, without taking into account the challenges posed by designing controlling systems in MNEs operating in different types of institutional environments, therefore exposed to greater institutional complexity. Moreover, the analysis of controlling systems has often been treated as an autonomous subject of interest and thus explored in isolation, while ignoring the broader context of corporate strategy, in particular in the context of firms operating internationally.

As stated above, institutional aspects can have a significant impact on the functioning of MNEs in relation to shaping their controlling systems. Informal institutions (including cultural factors) can influence the formation of the controlling system in the relations between the subsidiaries of the MNE, whereby not only institutions within the environment of the country of the parent and the country of the subsidiary (which is the most common understanding of the institutional environment) should be taken into account, but also those within the MNE itself. This same distinction pertains to formal institutions, whereby internal institutions are related to the MNE structure and corporate governance. An important research deficit in this area is the interrelation between the aforementioned institutional pressures, which may be complementary or substitutive, and, on the other hand, either operate in a similar way in affecting the controlling system of a subsidiary, or create contradictions. Based on the general indications of institutional theory and their novel application to controlling in MNEs, a useful reference point for future empirical research is provided herewith. Conducting in-depth qualitative research will allow for a set of recommendations that are relevant to managers responsible for the effective implementation of management control systems, both at the level of headquarters and that of the subsidiary with an MNE. The conceptual framework proposed in this paper can be regarded as a possible first step towards further empirical investigations.

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SME Roles in Modular Value Chains: Perspectives for Growth and Innovativeness

Marta Gancarczyk, Jacek Gancarczyk, Joanna Bohatkiewicz

ABSTRACT

Objective: The aim of the paper is to present modular value chains (MVCs) as a technological and organisational phenomenon that affects industrial organisation and innovation, and to identify the characteristics and types of SME positions (roles) in modular value chains that are associated with innovation development and growth.

Research Design & Methods: The study employs two methods, which are literature review and a multiple-case study approach based on two SMEs in the IT industry of which one acts as an independent innovator generating proprietary solutions and the other one is a supplier of production capacity in the area of lower to medium value-adding solutions.

Findings: SME roles in modular value chains range from lowest-tire subcontractors in captive or market-based governance to major roles typical of large players in modular governance, e.g., quasi-lead firms and quasi-contract manufacturers. The latter two roles are associated with innovation and high growth.

Implications & Recommendations: The recommendations as to the role of public policy and geographical context are provided regarding how to facilitate SMEs' integration into MVCs with a focus on innovativeness and expansion. The question for further research is whether the roles identified in the case studies can be treated as SME-specific models of participation in modular value chains, or are they only development stages of growth SMEs towards the roles of large firms – leader firms and contract manufacturers (system integrators).

Contribution & Value Added: The paper contributes by identifying the roles that SMEs can play in modular value chains and by identifying governance arrangements that SMEs apply to accomplish innovation and high growth.

Article type: research paper

Keywords: modularisation; growth; innovativeness; SMEs; global value chains

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INTRODUCTION

Technological developments have been one of the major determinants of the efficient scale of company operations and growth, as well as factors influencing the importance of SME sector in the economy. The increasingly important trend of modular product development, design and engineering strongly impacted SME participation in global production networks and global value chains (GVCS) (Baldwin & Clark, 2000; Sanchez & Mahoney, 1996; Lau, 2011; Langlois, 2002; Sturgeon, 2002; 2003). The positions (roles) of SMEs in modular value chains (MVCs) as well as their prospects for innovativeness and growth are under-researched, since the literature on modularity in the organisation of industries and networks focuses on large enterprises as major players in the global governance (Sturgeon, 2002; 2003; Ivarsson & Alvstam, 2011; Lee & Saxenian, 2008; Kodama & Shibata, 2013; Simms & Trott, 2014; Yan, Chiang, & Chien, 2014; Pietrobelli & Rabellotti, 2006). Moreover, there is a controversy in two important literature streams as to development prospects for SMEs in global networks. In the global value chains (GVCs) literature, SMEs are predominantly seen as lowest-tier providers that occupy lower-value positions and struggle for survival due to cost competition, low margins, and high transaction costs (Humphrey & Schmitz, 2002; 2004a; Belaya & Hanf, 2014; Lungwitz, Lee, & Campagna, 2006; Gancarczyk, 2016). On the other hand, the literature in international entrepreneurship presents SMEs as proactive global players that accomplish expansion through innovation (McDougall & Oviatt, 2000; Oviatt & McDougall, 2005; Coviello & Munro, 1997; Coviello, 2006; Gancarczyk & Gancarczyk, 2011; 2017).

In response to the above literature gap and unresolved issues, the aim of this paper is to present modular value chains as a technological and organisational phenomenon that affects industrial organisation and innovation, and to identify the characteristics and types of SME positions (roles) in modular value chains that are associated with innovation development and growth. This aim is addressed with two methods, namely, literature review and a multiple-case study approach based on two SMEs in the IT industry of which one acts as an independent innovator generating proprietary solutions and the other one is a supplier of production capacity in the area of lower to medium value-adding solutions.

The results of our investigations point to a variety of roles that small and medium-sized enterprises may adopt in MVCs, as they are not only in lowest-tier subcontracting relations, but may also assume major roles, attributed predominantly to large enterprises, such as lead firms and contract manufacturers or contract producers.

The paper contributes by identifying the roles that SMEs can play in modular value chains and by describing the governance arrangements that SMEs apply to accomplish innovation and high growth. Moreover, recommendations as to the role of public policy and geographical context are provided regarding how to facilitate SMEs' integration into MVCs with a focus on innovativeness and expansion.

The second section presents theoretical framework of modularity as a technological and organisational phenomenon and describes SME positions in global value chains according to the GVC and international entrepreneurship perspectives. As a result of this literature review, three research questions were formulated to guide the empirical investigations. After explaining the methodology of empirical research

in the third section, we implement it and present results of two case studies in section four. Discussion and conclusions follow in the fifth section.

LITERATURE REVIEW

Modularity as a Technological and Organisational Phenomenon

Modularisation originated from technological changes in product development, design and engineering that affected the organisation of production in firms and industries, and the overall industrial organisation (Sanchez & Mahoney, 1996; Langlois, 2002; Garud, Kumaraswamy, & Langlois, 2009). The impact of technological changes on economic organisation, so called “mirroring effect”, was supported by the empirical research as one of the major determinants of economic organisation (Frenken & Mendritzki, 2012; Hoetker, 2006; Sanchez & Mahoney, 2013). It is also suggested that the advantages of modularisation, i.e. specialisation and flexibility, can be fully exploited only when firms and industries adopt the modular approach both to technology and organisation (Frenken & Mendritzki, 2012; Hoetker, 2006; Sanchez & Mahoney, 2013).

Modularisation as a technological and organisational phenomenon was developing since the 80. through the 90., primarily in the USA electronics and IT industries. Standardisation and flexible technologies enabled customized and short-series supplies, leading to the fragmentation of product engineering, design, and manufacturing (Sturgeon, 2002; 2003). Modularisation in technology includes dividing a complex product or service into separate functional elements (modules, subsystems) that can be developed, designed, engineered, and manufactured separately, due to limited functional interdependencies (Baldwin & Clark, 2000; Sanchez & Mahoney, 1996; Lau, 2011; Gancarczyk & Gancarczyk, 2013). In order to enable these elements to act as a whole, the interfaces and functions of separate modules are specified and highly codified, which is enhanced by *de facto* standards and computer-aided tools, such as CAM, CAE, CAD, SCM (Ulrich & Eppinger, 2000; Funk, 2009). This technological pattern accelerates product improvements by disintegration of the innovation process into separate organisations that are responsible for specific modules. The modular development and design allow for a huge number of product advancements within product functional elements and for the configurations of different types of modules that affect the overall product features, however, with little impact on its overall architecture.

The fragmentation of product technological development and manufacturing stimulated a new organisation of production and value chain governance (Sanchez & Mahoney, 2013; 1996; Henderson & Clark, 1990; Colfer, 2007; Colfer & Baldwin, 2010; Battisti, Colombo, & Rabbiosi, 2014). The modular pattern of product development and engineering enabled dividing the value chain into separate functional elements for which individual companies could be responsible (Langlois, 2002; Sturgeon, 2002; 2003). Other determinants of this new organisation of production included the needs to coordinate the dispersed global production chains and to avoid the risks associated with manufacturing due to the rapid changes in demand and technology. One response to these needs was deverticalization (vertical disintegration) and outsourcing by branded original equipment manufacturers (OEMs) to focus on higher value adding activities. The result was a rise of lead firms dealing with product innovations, design

and marketing. Another response was the emergence of contract manufacturers (or contract producers)¹ dealing with engineering, process innovations, and logistics, and their horizontal integration to accomplish economies of scale (Baldwin, 2008; Gangnes & Assche, 2004; Lau, 2011). Contract manufacturers coordinate the global value chain of their own subsidiaries and those of other suppliers (Sturgeon, 2003).

To sum up, modular value chain is a system of the organisation of production that consists of the specialisation of companies in particular value chain activities (modules) of a complex product and in their horizontal integration within this specialisation (Gancarczyk & Gancarczyk, 2013; Gancarczyk, 2015). The modular pattern is not restricted to complex products in high-technology industries, such as electronics, ICT, and pharmaceuticals, but it can also be found in more mature and lower-technology industries, including automobiles, plastic products, and food, among others (Gangnes & Assche, 2004; Lau, 2011). Therefore, the modular mode of governance is treated as the latest and dominant form of the global value chain governance and even synonymous with the GVC governance (Lee & Saxenian, 2008; Sturgeon, Biesebroeck, & Gereffi, 2008; Gereffi, Humphrey, & Sturgeon, 2005).

SMEs in Modular Value Chains

The GVC governance is understood as the coordination of all functional activities that create product value, while these activities involve more than one country (Humphrey & Schmitz, 2002; 2004a; Humphrey & Schmitz, 2002; Gereffi *et al.*, 2005; Pietrobelli & Rabellotti, 2011). The global value chain literature focuses on how different types of governance modes impact the possibilities for learning, innovative outcome, upgrading, and ultimately, for growth of contracting partners, specifically suppliers from less developed economies that occupy lower value adding functions (Gereffi, 1996; Humphrey & Schmitz, 2002; Humphrey & Schmitz, 2004a; Humphrey & Schmitz, 2004b; Gereffi *et al.*, 2005; Sturgeon *et al.*, 2008).

Upgrading denotes the improvement of relative competitive position due to the development of capabilities in the area of products, processes, functions and value chain governance to advance into more sophisticated, higher value-adding activities (Gereffi, 1996; Humphrey & Schmitz, 2002; Humphrey & Schmitz, 2004a; Humphrey & Schmitz, 2004b; Gancarczyk & Gancarczyk, 2016). There is a direct relationship between upgrading and innovation development. The latter can be treated as a condition leading to the ultimate effect of upgrading. In this vein, product, process, and organisational innovations and configurations of these generic forms of innovation may result in adequate types of upgrading (Kaplinsky & Morris, 2001; Kaplinsky, Morris, & Readman, 2002; OECD, 2005).

The analytical framework of GVC comprises of three components that explain the position and growth prospects of firms and industries, namely: inter-firm chain governance, power relations, and institutions (Sturgeon *et al.*, 2008). In the view of the global value chain approach, inter-firm governance is a source of competitive advantage (Kaplinsky & Morris, 2001; Kaplinsky *et al.*, 2002; Gereffi *et al.*, 2005; Williamson, 1999; 2002; 2005). Therefore, supplier development and upgrading depend on the governance solutions applied. The governance, in turn, implies power relations among contracting parties in the value chain. These relations are strongly affected by asset specificity, which means that

¹Modularity governs both manufacturing and service industries. Therefore, we will use the expression “contract manufacturers” for manufacturing industries and the expression “contract producers” for service industries to denote suppliers of manufacturing or service activities, accordingly.

firm resources are adjusted to the requirements of an individual transaction and they cannot be redeployed in a new exchange without losing their productive value (Williamson, 1975; 1999; 2002). Specific assets raise dependence and contractual hazards for the partner who incurs a larger specific investment (Williamson, 1975; 1991; 1999; 2002; Humphrey & Schmitz, 2002; Huggins & Johnston, 2010). Institutions are norms and rules which regulate behaviours and activities of individuals, firms and industries. The institutions, such as labour unions, industry associations, legal and cultural norms industry-specific standards, and contracting arrangements form a framework affecting how the specific inter-firm governance and power relations function (Lee & Saxenian, 2008).

According to the GVC approach, three major variables, namely transaction complexity, codification of transaction and supplier capabilities, determine the emergence of four structures of inter-firm governance, including market, captive, relational and modular value chains (Gereffi *et al.*, 2005; Sturgeon *et al.*, 2008). Transaction complexity is the amount of information that needs to be exchanged between partners, while formalisation represents the degree to which this information is codified in a specific exchange (Gereffi *et al.*, 2005). Capabilities denote supplier's resources and competences in relation to the requirements of collaborating with a given customer (Gereffi *et al.*, 2005; Sturgeon *et al.*, 2008).

Various configurations of these three variables affect the emergence of specific types of value chain governance and power relations that may lead to the innovative output and upgrading or impede these results.

Market, price-based value chains emerge when transaction complexity is low and its formalisation is high, while a supplier demonstrates high capabilities. Power relations, due to low asset specificity, remain balanced and do not cause any dependence of the parties. This governance does not involve deeper interaction and knowledge exchange to stimulate innovative outcome in the area of product, but it may result in process innovations directed at cost reduction and efficiency of deliveries.

Captive value chains are featured by high transaction complexity and codification and low supplier capabilities and they provide a limited opportunity to upgrade (Gereffi *et al.*, 2005). The lead company provides a technology and specifies the standards of production and supplies, which stimulates process innovations. Such a relationship implies the threat of idiosyncratic investment and locking the subcontractor in the standardised, lower value-adding activity in global value chains (Rugraf, 2010; Pavlínek, 2012; Gancarczyk, 2015; Gancarczyk & Gancarczyk, 2013). Due to asset specificity, power relations are uneven, leaving the supplier at a disadvantaged position.

In modular value chains (high transaction complexity and technology codification, and high subcontractor capabilities) and relational chains (high transaction complexity but low codification) a lead company formulates requirements as to product characteristics and a supplier offers its own engineering and design to meet these expectations and to benefit from upgrading (Humphrey & Schmitz, 2004b; Winter, 2010; Gereffi *et al.*, 2005).

Relational value chains involve close interaction and tacit knowledge exchange due to low formalisation, leading to incremental product and process innovations and related upgrading types. Specific assets required from the supplier threaten the balance of power. However, the balanced relations still can be accomplished based on a similar level of competence between partners and adequate institutions (norms, rules, contractual arrangements) that prevent opportunism.

Modular value chains differentiate from the relational pattern by high formalisation of transaction that involves little direct interaction between two major players. These are lead firms and their major first-tier suppliers, i.e. contract manufacturers/producers (system integrators, maestros, orchestrators) that offer a comprehensive (“turn-key”) coordination of production. These relationships feature balanced power and intense flow of codified knowledge, which enables process innovations and functional upgrading of contract manufacturers based on backward and forward integration.

In modular value chains, much less attention is given to lower-tier suppliers providing standardised components and services to contract manufacturers. In the industry structure dominated by lead companies and contract manufacturers, the weakest bargaining power is possessed by small and medium-sized companies² from the lower-cost locations (Belaya & Hanf, 2014; Lungwitz *et al.*, 2006; Gancarczyk, 2016). Such companies experience cost and margin pressures from contract manufacturers who globally coordinate suppliers competing for business. Moreover, there are minor opportunities for those suppliers to absorb knowledge and technology from their buyers, as they implement standardised and reduced activities, giving merely the opportunities for incremental process innovations. SMEs may bear excessive transaction costs from idiosyncratic investments. Moreover, they encounter dependence that causes the opportunistic behaviours of larger customer, including unfavourable terms of contracts as well as externalizing risks and costs (Humphrey & Schmitz, 2002; 2004a). Being a part of modular value chains dominated by two large players: lead firms and contract manufacturers, SMEs are considered as exposed to different governance arrangements. Namely, their relationships are perceived as locked in market-based or captive governance linked to the lowest tiers of modular chains (Belaya & Hanf, 2014; Lungwitz *et al.*, 2006; Pisoni, Fratocchi, & Onetti, 2013).

However, the GVC approach is not deterministic in its assumptions about the impact of the extant governance mode on the supplier firm and industry positions and development prospects (Mudambi, 2008; Malecki, 2010). It points to the dynamics and evolution of the position of firms and industries in global value chains due to the changes in one or more determinants of governance, such as supplier capability, level of complexity, or formalisation (Sturgeon *et al.*, 2008; Hätönen, 2010). Recent advances in technology and the opportunity of networking to access lacking and complementary resources act in favour of smaller-scale operations (Agostino, Giunta, Nugent, Scalera, & Trivieri, 2015; Aslesen & Harirchi, 2015; Massini, Perm-Ajchariyawong, & Lewin, 2010; Cusmano, Mancusi, & Morrison, 2011). As a consequence, SMEs may operate as network leaders, coordinating at least parts of the value chain of a good in the form of modules, such as sub-systems of the IT architecture (Hätönen, 2010; Alberti, Sciascia, Tripodi, & Visconti, 2008). They are also capable of breakthrough product innovations, assuming the role attributed to lead firms. In the view of international entrepreneurship, SMEs increasingly pursue global expansion and proactively exploit opportunities in global value chains with a focus on growth (McDougall & Oviatt, 2000; Oviatt & McDougall, 2005; Coviello & Munro, 1997; Coviello, 2006). These advancements enable small and medium-sized

² We apply the definition of SMEs included in the EU Commission Recommendation 2003/361/E. This definition is based on the criteria of employment (fewer than 250 persons), annual turnover not exceeding EUR 50 million, and/or an annual balance sheet total not exceeding EUR 43 million.

enterprises to escape from either exclusively market or captive relations in the lowest tiers of modular production chains (Gancarczyk & Gancarczyk, 2017).

Despite the increasingly global reach of SME operations, there is limited research evidence on the processes and ways of SME successful growth and innovation development within modular value chains (Hätönen, 2010; Pietrobelli & Rabellotti, 2006; Ahlin, Drnovšek, & Hisrich, 2014). Majority of studies focus on large corporations and on the cases of upgrading of the entire industries (Ivarsson & Alvstam, 2011; Lee & Saxenian, 2008; Kodama & Shibata, 2013; Simms & Trott, 2014; Yan *et al.*, 2014). Also, the extant research on SME growth is inconclusive about the impact of networks in this process and it does not comprehensively highlight how they accomplish expansion when operating in networks and global value chains. High-growers are reported to adopt a niche market position and benefit from customers undertaking international expansion (Storey, 1994; Barringer & Neubaum, 2005; Gilbert *et al.*, 2006; Dobbs & Hamilton, 2007). This reflects the traditional Penrosian view of firm growth, which is still a relevant approach to SMEs in local or regional markets, but it is less efficient in explaining global expansion and networked economy (Penrose, 1959). Little is known about roles, inter-firm governance, power structures, and institutions that are associated with innovative growth of SMEs in global and, specifically, modular value chains (Hätönen, 2010). The global scope of modular value chains challenges the view of SMEs operating in the niches left by large firms. SMEs inserted in the networks of large global enterprises can be either passive players at the captive, disadvantaged position, or they may use networks of large firms as global pipelines to implement own innovation-upgrading and growth strategies (Munari, Sobrero, & Malipiero, 2011; Gancarczyk & Gancarczyk, 2017).

The current state of the research on the emerging roles of innovative and high-growth³ SMEs justifies formulating three explorative research questions:

1. What characteristics of inter-firm governance, power relations, and institutional arrangements are associated with SME innovations and growth in modular value chains?
2. What types of inter-firm governance, power relations, innovation and upgrading are implemented by growth SMEs in modular value chains?
3. What types of growth SME roles (positions) in modular value chains can be identified based on the pattern-matching approach?

MATERIAL AND METHODS

The above research questions feature exploratory nature and complexity due to a large number of factors they involve and the importance of context to describe the position of growth SMEs in modular value chains. The multitude of factors need to be considered and translated into empirical variables to comprehensively define this position. Namely, the factors that determine inter-firm governance and the value chain mode are transaction complexity and formalisation, and SME capability, while power relations are determined by asset specificity. Innovative activities and their potential outcome in the form of upgrading need to be considered according to different types (product, process, organisation innovation; product, process, functional, and value chain upgrading). Moreo-

³ We use the terms of “growth firm” or “high-growth firms” interchangeably.

ver, the institutional context reflected in the external rules and norms at the macro, industrial- and inter-firm levels should to be taken into account. This requires the investigation of country-level regulations, industrial standards and norms, private, bilateral contractual arrangements, and safeguards to contracts, among others.

Considering the properties of the study object, we adopt a multiple-case method to describe and identify the positions of two SMEs in modular value chains based on the GVC approach (Yin, 2003; Silverman, 2005; Eisenhardt & Graebner, 2007). Following a pattern-matching approach, we compare and match the characteristics of the GVC factors in the case study with the theoretical assumptions (Langley, 1999; Lee, 1989; Campbell 1966; Yin, 2003). This enables the identification of the types of the value chain governance and the types of roles (lead firms, contract manufacturers, and lower-tier suppliers). The outcome of our analysis will be an analytical generalisation about the characteristics of the GVC governance pattern for high-growth SMEs involved in modular value chains (Eisenhardt, 1989). A case study approach can only result in analytical generalisation as a weak form of generalisation relative to the statistical one. This represents a natural limitation of the methodology applied. On the other hand, our investigation is guided by three exploratory research questions formulated based on the literature review in the second section of the paper. It is intended that responding to these questions will establish a basis for research hypotheses in further, quantitative research directed at statistical generalisation.

A purposeful and theory-driven selection of case study companies was performed (Yin, 2003; Silverman, 2005; Eisenhardt & Graebner, 2007). We chose firms with characteristics of high-growers according to sales and employment increase (at least doubling sales and employment within three years (2010-2012)). Moreover, the companies needed to act in modular value chains, therefore firms were picked up from one of the core industries with modular design by technology and organisation, namely, the IT industry in the area of services and software development. The major sources of data included the primary sources from direct and structured interviews with entrepreneurs, each lasting around two hours. The secondary sources were webpages and press releases that enabled the triangulation of the data obtained.

RESULTS AND DISCUSSION

The Case of SoftCo

SoftCo is a Polish medium-sized firm that employs around 70 people including more than 50 engineers in the area of information technology and electronics. It was established in 2007 as a venture of an IT engineer and scientist from Warsaw University of Technology. The venture originated from the former research and development laboratory established by another corporation, a mid-size technology firm. The commercial potential of the laboratory was identified by its former leader and current entrepreneur and CEO at the same time.

In the years 2010-2012, the compound revenue growth of the company exceeded 262% and employment grew by more than 100%. SoftCo applied both organic and external growth through acquisitions of two micro-size technology firms in the related software technology. The expansion was associated with introducing new products to new groups of customers and building the portfolio around the core competence in the area of original software development. SoftCo is a supplier to Polish

leading media and energy corporations of international reach, expanding to countries of Central and Eastern Europe. Moreover, it has developed a collaboration with a number of global American semiconductor companies in Silicon Valley.

The first phase of development, in the years 2007-2010, was an Internet content distribution system for media, including the Internet TV, which dominated Polish market. The next development phase, since 2011, has focused on smart grid technology for energy distribution purposes. As a supplier to a leading Polish energy distributor, SoftCo has developed a software for smart meters (energy measurement). Their application enables reducing the number of hardware components in electricity meters and other components used in smart grids. Another emerging area of the company expansion in the form of new products is the Internet safety systems.

The Inter-firm Governance

Transaction Complexity

Transaction complexity, understood as the amount of information needed to implement a given contract, is high in the activities of SoftCo. This is associated with the complexity of technology used as the company provides software solutions to high-technology products and services, such as energy meters or media content delivery. The company provides complementary software solutions to complex, high technology products and services, which requires following adequate standards and interfaces to ensure the required functionality and compatibility with the overall architectures of these systems.

Transaction Formalisation

High complexity of implementing a contract is associated with high formalisation of the information exchanged with partners in the IT industry. The formalised information relates to standards and interfaces, which are general purpose and widespread technologies. More tacit knowledge and less formalised information needs to be exchanged with corporate customers in the industries to which the firm provides solutions. These solutions are often new and uncertain and require negotiating and establishing rules of cooperation, expected efficiencies and technological functions, as well as benefits for both contracting partners. In the latter case, SoftCo needs to maintain an intense and direct communication to establish the cooperation at the outset. However, the rules are formalised alike technological solutions generated as project results. Consequently, a high to medium level of transaction formalisation can be observed.

Capability

The company demonstrates high capability to develop proprietary software products and to fulfil the standards required by customers on a global scale. The geographical scope and originality of innovations ranges from Polish to the world market, the level of newness typical of firms operating in high-technology industries.

Relationships in Value Chain and the Scope of Activities

SoftCo is directed at growth as a technological firm commercialising the intellectual property in the form of licensing and it is not going to be involved in manufacturing activities. The necessary manufacturing activities are outsourced from contract manu-

facturers (e.g., in Czech Republic). The company focuses on product development and commercialising with a goal to provide original product innovations in Polish, Central European, and global markets. The activities for Polish customers of international reach provide the firm with an opportunity to experiment with proprietary solutions and learn how these new and uncertain technologies will act. The entrepreneur and the firm leader clearly declares not to act as a subcontractor adopting the external technology, but as a technology developer that competes in the area of breakthrough innovations on a global scale with a focus on own brand building and growth.

Power Relations – Asset Specificity

The firm purposefully selects open standards for developing its applications to avoid the expensive licensing policy, constraints to technological modifications, and legal protection problems that may arise in the case of using proprietary, de facto standards of other firms. Another strong argument in favour of this policy is a comparable quality and functionality of the existing standards together with the ease of adaptability to their parameters. Therefore, the freedom and low cost of use, as well as accessibility play a major role rather than the identity and brand of the provider. Considering the above characteristics, SoftCo does not employ specific assets to adapt to its suppliers, since their technologies are general purpose and standard. The firm applies these standards as channels, global pipelines to distribute its complementary applications and thus, benefit from network effects due to the increased number of users. Another group of customers are corporations which use products and services adopting SoftCo applications (incidents of medium asset specificity). The firm responds to the required functionalities of the customers, however, the solutions demonstrate adaptability to other customers with minor changes. To sum up, we can describe SoftCo's power relations with business partners as free from high asset specificity and balanced. Therefore, these relations do not raise dependence or a threat of opportunistic behaviour from the partners.

Institutional Framework

In business relations with non-IT long-term customers, the company predominantly adopts formal and long-term contracts. The specifications and detailed terms of contracts are to protect the customer who is less knowledgeable in the area of technology and experiences information asymmetry. The collaboration with other IT firms is of a networking and relational nature, based on repetitive transactions. Mutuality, trust, and partnership govern the relations and are seen as the major rules of cooperation rather than hard incentives in formal contracts. SoftCo seeks to maintain technological and organisational independence from foreign collaborators and competitors.

Industrial institutional environment is featured by density of open standards with regard to technology and its legal protection. The firm actively involves in setting up technological standards, however, this complex process is by no means limited to technological rules and formalisations. In order to establish technological standards, such as in the case of energy smart meters, the SoftCo CEO builds a larger coalition of interests and tries to gather all the major actors, starting from regulatory bodies and industrial leaders, to suppliers of complementary technologies, economists, and technical advisors.

Despite high formalisation of standards in the industry, technical excellence and credibility are signalled by the institutional embeddedness in high quality, recognised business envi-

ronment. This is why SoftCo launched the operations in the business incubator in the UK to start a collaboration with large global players, semiconductor companies from Silicon Valley.

The important institutions at the macro-level of the country and the EU are policies and regulations for supporting technological innovations in SMEs. The company benefits from the public support, including R&D grants and locations in the technology parks of Poland and abroad, specifically in the developed economies of the EU.

Innovations and Upgrading

Innovations refer to the product and service, which are new at least to the firm's market. SoftCo accomplished a dominating competitive position in the markets it occupies. Therefore, we can state that it features upgrading. This is a product, functional (new services and product provided to the existing customers), as well as value chain upgrading (the competitive advantage in new value chains introduced through product innovations to the firm's portfolio).

The Role (Position) of SoftCo in Modular Value Chains

Based on the characteristics of the inter-firm governance, power relations, institutional framework and types of innovation and upgrading we can assert that SoftCo acts within modular governance design with some level of relational value chains with respect to long-term customers from the key industries, i.e., media and energy. The scope of its activities and relationships with buyers and suppliers as well as the types of innovation and upgrading match with a position of a leader firm, according to the GVC typology. Although SoftCo does not meet the market power and size of the major leader firms in the industry, it is growing with a goal to accomplish a similar position.

It remains inconclusive, however, whether the company position is a stage of the development toward the role of a regional or global leader firm in the industry or it is a quite new, emergent pattern of innovative SME functioning in modular value chains. In the first case, the firm will either accomplish the global or regional position as a leader firm or it will fail to achieve it and maybe downgrade to the position of the subcontractor using external technologies. In the second case, SoftCo can establish a new pattern of innovative SME functioning as a medium-sized technology enterprise that might be called a quasi-leader. This would be a position of the firm that grows with the use of global pipelines of large corporations serving as channels of distribution for SoftCo's products in millions of units on a global scale.

Table 1 presents a pattern-matching between the properties of a model lead firm, as described in the GVC, and the properties of SoftCo.

SoftCo demonstrates considerable similarities with the characteristics of a model lead firm in modular value chains. This finding challenges the GVC literature, in which the lead role is predominantly attributed to large companies (Sturgeon, 2002; 2003; Ivarsson & Alvstam, 2011; Kodama & Shibata, 2013; Yan *et al.*, 2014). Minor inconsistencies stem from less formalised transactions due to the need to exchange an intense and partially not codified information with customers for whom the firm develops more risky innovations. This is also associated with the incidence of some moderate level of asset adjustments to long-term buyers, which still does not harm the balance of power between the partners. Finally, we observe modular value chain governance with some component of relational governance that is typical of SMEs, as described in the international entrepreneurship literature (Oviatt & McDougall, 2005; Coviello &

Munro, 1997; Coviello, 2006). Another difference is the scope and intensity of standard-setting, more regionally than globally oriented in relation to a model lead firm.

Table 1. Pattern-matching between the properties of a model leader firm and the properties of SoftCo

Lead firm properties	SoftCo's properties
Inter-firm governance (modular value chain)	(+; -) (modular with some component of relational chains)
Transaction complexity high	(+)
Transaction formalisation high	(+; -) (high to medium)
Capability high	(+)
Power relations balanced	(+)
Asset specificity low	(+; -) (low with some incidents of medium)
Product innovation dominating and standard setting	(+; -) (standard setting predominantly with a regional and not the world scope)
Product, functional, and value chain upgrading	(+)

(+) - the firm's characteristic consistent with the model characteristic; (-) - the firm's characteristic inconsistent with the model characteristic

Source: own elaboration.

The Case of ITServCo

ITServCo is a company specialised in IT outsourcing services predominantly for larger IT firms that offer proprietary applications and comprehensive information technologies. In the years 2010-2012 it has accomplished a compound growth in revenue and employment of more than 122%, expanding from small to medium-sized company. Established in 2004 with 5 employees, ITServCo increased its employment to 80 people in 2012. In 2014, the number of engineers cooperating directly with the company as subcontractors reached 500, while the pool of available specialists in the firm's network of 20 IT service firms counted around 950.

ITServCo focuses on the implementation of product innovations and projects of other large firms. In the beginning of its operations, it was offering a simple "body leasing" service with a "time and material" type of cooperation. This kind of cooperation involved the outsourcing of individual professionals or teams to implement standardised tasks and projects for large IT firms or for IT departments of other corporate clients. By 2015, as a mid-sized firm, ITServCo was able to offer a full range of production functions, such as IT outsourcing, software development, application testing, implementing the solutions of leading IT suppliers, application integration and others. A variety of cooperation types were offered, such as fixed-price projects, when a specific task needs to be implemented for a given payment and according to the specified agenda, time and material, based on the amount of working hours provided by the outsourced team, participation in consortium, consulting, and others.

Up to 2015, the company was developing organically by increasing the number of customers and cooperating engineers, and by networking with around 20 other IT service firms that offered complementary resources. In 2015, ITServCo formed a capital group by acquiring minority shares in a number of its collaborators and reached the size of a large enterprise. It enabled a comprehensive range of production services offered to large firms focused on product innovations. The expansion of ownership and value added was accompanied by establishing own subsidiaries or joint ventures in the USA and Germany, among others, which made the company operations global.

The Inter-firm Governance

Transaction Complexity

In the beginning of the outsourcing activity, the company dealt with low complexity of transactions. The contracts did not require a large amount of information to be exchanged, as the tasks and projects were standardised and limited merely to “body leasing”, i.e., subcontracting the work of engineers for a specific period of time, without taking responsibility for the project or a task. However, introducing new services and forms of cooperation with customers and accomplishing the capacity to implement a full range of production activities (functions) including product development, testing, agile management of projects, consulting, and technical maintenance launched complex transactions with the need to intensely exchange large amounts of information. The complexity is predominantly featured by long-term customers that require a comprehensive range of activities in terms of development, production, and maintenance services. The standard “time and material” services comprise low complexity.

Transaction Formalisation

High formalisation is associated with both simple contracts and with complex undertakings regarding strictly technological issues. The IT industry features open standards and purposeful provision of access to interfaces and the information on functionalities of specific modules. Therefore, from purely technological point of view, the transactions of ITServCo feature high formalisation. On the other hand, in the case of long-term contracts, we observe the necessity to establish intense exchange of not only codified but also informal and tacit information to better understand the needs of the customer and its business system. To sum up in the long-term contracts we observe a medium (moderate) level of formalisation.

Capability

At the outset of its activity, ITServCo did not demonstrate high technological capability, being just an outsourcing platform for engineers who predominantly worked in projects supervised by the firm’s customers. At that time, the firm demonstrated high governance capabilities, being able to gather a considerable and varied pool of talents and match them with customers needing support in rather standardised activities and tasks. With regard to technological capabilities, the engineers with standard levels of technological skills used to work for subcontracting companies as individuals rather than the ITServCo firm. Therefore, the company did not internalise these individual capabilities as its proprietary pool of resources. The same rules applied to intellectual property resulting from specific contract, namely, the agreements regulated the transfer of intellectual property to subcontracting firms (ITSerCo’s customers).

However, recently, the firm has appropriated technological capabilities of the staff by acquiring minority shares in a number of companies cooperating earlier as a network of independent firms. This horizontal quasi-integration with to-date competitors-collaborators was also associated with acquiring intellectual property to products developed for customers and with the extension of services offered to become a “turn-key” supplier with high capability.

Relationships in the Value Chain and the Scope of Activities

The company is directed at growth as a provider of production capacity in the area of IT services with some attempts to develop proprietary software, as well. However, it signals the focus on production capacity not to get into a conflict of interest with its customers. These are predominantly other IT large companies that develop proprietary solutions and non-IT firms for whom ITServCo implements larger projects with the use of a comprehensive set of functions. The operations are held both in Poland and abroad, including the USA and Canada, which makes the company an international venture. Its ownership structure differentiates by a large number of minority shares and some majority shares in other IT businesses with complementary human skills. This governance ensures both adequate control and access to resources. Moreover, in the face of the changing demand, it is more flexible in comparison with full ownership.

Power Relations – Asset Specificity

The IT industry is governed by the rule of open architecture and open standards, however, different levels of freedom in developing and applying standards have evolved. ITServCo works on standards licensed by major IT companies, e.g. Microsoft, Oracle, IBM, and HP, and acquires adequate certificates to apply their solutions. This a medium-level of asset specificity, since standards are widespread and feature network effects from a large number of users. On the other hand, they require the adaptation to terms of licensing about the scope of creative use not to harm legal protection of intellectual property.

By cooperating with branded technology providers, the firm gains credibility among customers and exploits network effects from a global community of users of these branded, lead firms. However, such a cooperation might also be perceived like giving up own brand building and purposefully limiting the development of proprietary product innovations not get into a litigation about the use of standards. Moreover, to avoid the conflict of interests with its powerful customers, the firm develops proprietary software only in product niches neglected by its customers.

Institutional Framework

The institutional environment of the firm is formed by industry technological standards and rules of cooperation. Moreover, it is affected by legal employment conditions, since its business model remains largely based on hiring external employees to process orders from large customers. These two types of institutions form opportunities, however, they also put burdens on company growth. In the case of industrial standards and rules, these are opportunities for network effects by using standards of high-brand customers and limitations to creative activity and proprietary software. In the case of employment regulations, exploiting the opportunities to subcontracting other businesses was a basis for accomplishing growth.

However, unpredicted changes to these arrangements may be harmful for the entire value chain of ITServCo and its governance capabilities. Reorganizing rules of contracting can have an effect not only on production costs, but also on transaction costs with respect to drafting, negotiating, and renegotiating contracts with suppliers and customers.

As a technology firm, ITServCo has also benefitted from institutional framework of SME support policy in the area of business incubation (establishing start-ups in a technology park) and technology development.

Innovations and Upgrading

ITServCo achieved its growth due to a combination and sequence of organisational, process, and product innovations, predominantly new to the firm and not to the market or world. The company was established as an organisational innovation in the area of inter-organisational management and it had formed a virtual organisation of engineers. Further organisational innovation consisted in capital engagement in a number of small suppliers to establish a stronger capability base and contracting capacity. In IT services, where tangible assets are not high, even a minority engagement strengthens cooperation and establishes a sense of unity among the network of formerly independent collaborators. This engagement ensured the access to the information on collaborators and provided tools of influence on the employees hired for ITServCo's projects. Moreover, it improved credibility in the perception of customers, who became more confident about the firm's capacity to process complex commissions that required a wide range of skills and infrastructural capacity.

The organisational innovations enabled technological innovations in the area of products/services and processes to launch new functions in the company operations. These were new products/services in the existing value chain that increased value by a comprehensive range of production functions (vertical quasi-integration, from product development, testing, consulting to maintenance). Moreover, process innovations with respect to services provision accompanied the sequence of product innovations, such as agile product development. These predominantly new to the firm (and not to the industry or world) innovations cumulated in a short period of around three to four years. As their joint effect, ITServCo featured product, process, and functional upgrading.

The Role (Position) of ITServCo in Modular Value Chains

When analysing ITServCo's inter-firm governance, power relations, institutional framework and types of innovation and upgrading, an evolution from market-based and captive value chains to the modular value chain governance with some component of relational governance can be observed. The latter type of governance pertains to long-term customers for whom the firms develops a full range of functions within value chain. The firm activities focus on production capacity delivered to customers who want to implement their projects. The full range of functions it accomplished enables acting as a "turn-key" capacity supplier. To sum up, the inter-firm governance, power relationships with buyers and suppliers, as well as the types of innovation and upgrading match with a position of a contract manufacturer, in the view of the GVC approach.

Alike in the case of SoftCo, this company does not meet the market power and size of the major contract manufacturers. However, due to growth, including international expansion, it has evolved from medium-sized and lowest-tier supplier to a large, quasi-contract manufacturer/producer (we will refer to it as a *contract producer* or *system integrator*, considering the service rather than manufacturing activity of ITServCo). This development path will probably lead the firm to the position of a contract producer filling market niches that were left free by largest system integrators and lead firms in the industry.

Table 2 describes a pattern-matching between the properties of a model contract manufacturer (producer), as described in the GVC, and the properties of ITServCo as a mid-size firm (before the 2015 ownership expansion).

Table 2. Pattern-matching between the properties of a model contract manufacturer (producer) and the properties of ITServCo as a mid-size firm (before the 2015 ownership expansion)

Contract manufacturer's properties	ITServCo's properties as a medium-sized company, before 2015)
Inter-firm governance (modular value chain) Transaction complexity high Transaction formalisation high Capability high	(+; -) (modular with some component of relational chains) (+; -) (low to high) (+; -) (high to medium) (+)
Power relations balanced Asset specificity low	(+) (+; -) (low to medium)
Process innovation dominating	(+)
Process, product, and functional upgrading	(+)

(+) - the firm's characteristic consistent with the model characteristic; (-) - the firm's characteristic inconsistent with the model characteristic

Source: own elaboration.

ITServCo's governance position well matches the characteristics of a model contract producer firm in modular value chains with some component of relational governance. Alike in the SoftCo's case, this observation gives a new insight relative to the GVC literature that describes contract producers as predominantly large enterprises (Sturgeon, 2002; 2003; Ivarsson & Alvstam, 2011; Kodama & Shibata, 2013; Yan *et al.*, 2014). Some discrepancies exist as the elements of the former focus of the company who was a third-tier supplier in the captive governance, e.g., low transaction complexity still present in "time and material" method of outsourcing. Other differences stem from the service- and not product-intensive business model. ITServCo's model requires less formalised (the presence of high to medium formalisation) and more adaptive (low to medium asset specificity) way of implementing projects. This approach is typical of SME networking that involves interaction and mutual dependence of tangible and intangible resources among partners (Agostino *et al.*, 2015; Aslesen & Harirchi, 2015; Massini *et al.*, 2010; Alberti *et al.*, 2008; Oviatt & McDougall, 2005).

CONCLUSIONS

The paper presented modular value chains as a technological and organisational phenomenon that affects industrial organisation and innovation, and it identified the characteristics and types of SME positions in modular value chains that are associated with innovation development and growth.

The extant literature on global value chains (GVCs) has focused on large firms as major players and sources of product and process innovation in modular value chains (Sturgeon, 2002; 2003; Ivarsson & Alvstam, 2011; Lee & Saxenian, 2008; Kodama & Shibata, 2013; Simms & Trott, 2014; Yan *et al.*, 2014; Pietrobelli & Rabellotti, 2006). The impact of the value chain modularisation on the positions as well as pro-

spects for growth and innovation of SMEs has been unexplored. SMEs are predominantly perceived as third-tier suppliers that occupy lower-value positions (Humphrey & Schmitz, 2002; 2004a; Belaya & Hanf, 2014; Lungwitz *et al.*, 2006; Gancarczyk, 2016). However, the international entrepreneurship literature provides an optimistic evidence of innovativeness and growth of small firms (Oviatt & McDougall, 2005; Coviello & Munro, 1997; Coviello, 2006; Gancarczyk & Gancarczyk, 2017).

Our exploratory study of two growth SMEs operating within modular global governance has contributed by identifying a variety of roles that small and medium-sized enterprises may adopt in MVCs and by describing the governance solutions they apply to accomplish innovation and growth.

SME roles in modular value chains range from lowest-tire subcontractors in captive or market-based governance to major roles typical of large players in modular governance, e.g., quasi-lead firms and quasi-contract manufacturers. These two positions feature innovativeness, upgrading and growth, therefore, we propose an analytical generalisation about their governance arrangements. The analytical generalisation describes the inter-firm governance, power relations, and institutional arrangements of a quasi-leader and quasi-contract producer as conducive to innovativeness and expansion.

The quasi-lead company's role is based on inter-firm governance with high transaction complexity, high formalisation that decreases to medium level in the case of long-term customers that require risky innovations, and high technological capability. Power relations are balanced and ensure independence of specific assets, except for long-term customers that need some adjustments to their needs. A quasi-lead firm generates product innovations that are new at least to its national market and represent its proprietary solutions. These innovations provide for a range of upgrading opportunities, from product and process to functional and value chain upgrading. The work of a quasi-leader is more directed at delivering a proprietary product than on service delivery (more product- and less service-intensive).

The quasi-contract manufacturer (system integrator) features high to medium transaction complexity and formalisation. Power relations stem from tailoring the service-intensive activities to the needs of specific customers. This type of role is less directed at developing proprietary standard products since power relations require some level of asset specificity and adjustments to the technology and licensing policy of branded providers of standards and interfaces. A quasi-system integrator delivers process and product innovations that are new to itself rather than to the market or world. However, it explores some niches where proprietary solutions might be developed that are new to the market. The opportunities for upgrading include process and product, as well as functional upgrading to provide a full range of production activities, i.e., to be a "turn-key" supplier of production capacity. Finally, the quasi-contract producer's operations are more service- than product-intensive, therefore, its work needs to be more customer-specific than the work of a quasi-leader.

The above characteristics raise also a question for further research. This is the question whether the roles identified in the case studies can be treated as SME-specific models of participation in modular value chains, or they are only development stages of growth SMEs towards the roles of large firms – major players in modular chains, i.e. 'full' leader firms and 'full' contract manufacturers (system integrators). The current findings do not allow for determining the nature of these roles and this can be treated a limitation of our study. This limitation is also closely linked to qualitative and analytical gener-

alisation instead of statistical one, as acknowledged earlier in the methodological section. However, we propose that our study establishes a basis for research hypotheses in further, quantitative research. The quantitative research directed at statistical generalization should ultimately resolve the interpretation problem we faced. At this stage, we can propose that both possibilities are feasible. Considering growth aspirations of the entrepreneurs interviewed, they seek to pursue growth and strengthen their positions towards these of market leaders globally or regionally at least. On the other hand, it is also possible that they continue as national market leaders, filling the niches where more adjustments of products and processes to customer needs are relevant. In this vein, they would be providers of products and services that rely on external standards and represent their adjustments to the business systems of customers.

Finally, the paper enables some recommendations as to the role of public policy and spatial, geographic context regarding how to facilitate SME integration into MVCs with a focus on innovativeness and growth. Both firms benefitted from public support in the area of grants and lowering risks by establishing new ventures in business incubators and technology parks. Acting in the global competitive environment provides both opportunities to exploit creativity and cost advantages internationally. On the other hand, it also demands building credibility and recognition through networking and embedding in high-quality business relationships. Such a requirement was especially evident for SoftCo, which acquired recognition and collaboration opportunities by establishing a subsidiary in a technology incubator in the UK. This evidence proves that public policy for technology firms and their international expansion is well targeted and gives prospects for the return from public investment in the form of firm growth and international competitiveness. Specifically, promoting the international networking among local and international institutions, such as science and technology parks, business incubators and innovation relay centres, needs to be emphasised.

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From Knowledge to Innovation and Back: Empirical Testing of Knowledge-Intensive Industries in Serbia

Nikola Radovanović, Veljko Dmitrović, Nevenka Žarkić Joksimović

ABSTRACT

Objective: In the technology and knowledge intensive industries, innovation and knowledge use are key elements for competitiveness. Organisations are oriented towards increasing their potential for exploiting innovation and developing knowledge base internally through various techniques employed. This research aims at analysing the relationship between the dynamics of knowledge use and innovation efforts of organisations.

Research Design & Methods: The methodology included quantitative and qualitative research method based on a survey, while the data of this research were analysed with the application of descriptive statistical method (variance).

Findings: The results of the study suggest that realised innovation correlates with the use of knowledge in organisations and that an increase in research and development activities, as well as in patented and non-patented products or services will likely lead to an increase in the volume of internal knowledge use by employees.

Implications & Recommendations: The results of this research can be useful for researchers and practitioners in technology and knowledge intensive industries. The findings can be used as a basis for adjusting organisational policies towards developing competitiveness based on the enhancement of the use of existing knowledge and by developing innovation strength.

Contribution & Value Added: This paper is a valuable contribution to research fields of organisational management, innovation management, knowledge management, absorptive capacity, and especially innovation management.

Article type: research paper

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INTRODUCTION

The modern era of competition sees innovation as a powerful tool. Organisations from a variety of industries need to be well prepared for this kind of environment, as getting a grip to a sustainable market positioning does not rely on maintaining a product or services line even when they have started market superiority. The ever-increasing trend of innovation is the reason why companies are having even more difficulties in finding the appropriate balance between implementing growth strategies and initiating risky innovative activities.

Modern business is more focused on investing in knowledge and intangible rather than in tangible assets. Knowledge is the driving base for the development of business and successfulness over the long term. In modern conditions, learning organisations have better chance for survival, as it has become obvious that without knowledge there is no innovation. High quality knowledge leads to innovation, but there is a complex set of relationships between the two.

The research was conducted with the aim of identifying and exploring the relationships between innovation drivers and the use of existing knowledge in organisations from knowledge-intensive industries in the Republic of Serbia. Producing an innovation puts an organisation in the innovator category, but it is not easy to maintain innovativeness as the organisation's main orientation. Many organisations cease to innovate for different reasons: lack of material resources, lack of relevant knowledge, lack of strategy, etc. Having in mind that the knowledge base is one of the crucial drivers for innovation, we explore the two-way relationship between knowledge and innovation. The hypothesis of this paper is that the volume of the use of knowledge in organisations from knowledge-intensive industries in Serbia is influenced by different innovation capability drivers. In this research we will provide the analysis of the abovementioned relationships by applying statistical method.

Being defined by the World Bank as the developing country, Serbia was selected as a case which could be applied to other developing countries worldwide. Also, one of the main goals within the national strategy for the sustainable development of Serbia is to re-organise Serbian economy as the knowledge-based economy, which is why knowledge-intensive industries are increasingly vital to Serbian economy.

This paper is structured as follows: the state of the art relevant for the research is followed by the methodology used for the research and the presentation of the empirical analysis of the data. The last chapters include the results of the statistical analysis based on the descriptive statistical method and conclusions based on the research results, complemented by the suggestions for future research.

LITERATURE REVIEW

The importance of the internal knowledge base has been debated by many. By its definition, knowledge base contains knowledge which is embedded in products, methods, practices, experiences, skills, ideas, etc., and which can come from internal and external sources. Relevant knowledge represents understanding of job skills, products, technologies, markets and other business relevant factors, possessed by the workers and managers in the organisation (Brown, 1997). It consists of facts and ideas that individuals in the organisation have and which can influence the process of implementing innovation. Internal

knowledge sources primarily include scientific research, new product development, new processes, skills development, experiences and organisational structure, while external sources include external scientific research, other firms' products and processes, lead-users, inter-organisational networks and others (Argote, McEvily, & Reagans, 2003; Vega-Jurado, Gutierrez-Garcia, Fernandez-de-Lucio, & Manjarres-Henriquez, 2008). By establishing a wide knowledge base, the organisation also becomes more sensitive to outside information and knowledge which resides outside its boundaries, and this can result in making new knowledge from the environment more attractable.

The ability to use or share knowledge within an organisation should naturally enhance innovation capabilities. Specifically, a firm practicing inbound activities to strengthen radical innovation is more likely to benefit from knowledge sharing capabilities than from knowledge acquisition capabilities (Cheng, Yang, & Sheu, 2016). Knowledge-sharing culture within organisation has a positive impact on the knowledge flow and innovation (Levi-Jakšić, 1995; Van den Bosch, Volberda, & de Boer, 1999; Tu, Vonderembse, Ragu-Nathan, & Sharkey, 2006). Sharing and dissemination of knowledge are identified as one of the main knowledge management processes (Probst, Raub, & Romhardt, 2002). Some authors suggest that the process of acquiring external knowledge for innovation purposes depends on the degree of similarity of cognitive structures, knowledge base, skills and shared languages between an organisation and the environment (Escribano, Fosfuri, & Tribo, 2006). Prior-related knowledge is one of the suggested components of the organisational absorptive capacity (Cohen & Levinthal, 1990; Brown, 1997; Zahra & George, 2002; Tu *et al.*, 2006). It is also the most influential determinant of absorptive capacity of organisations from knowledge-intensive industries (Levi Jakšić, Radovanović, & Radojičić, 2013).

Firms need an improved communication network among their employees in order to improve the internal knowledge flows which foster learning and innovation (Campo, Gomez, Dimovski, & Škerlavaj, 2008). Interaction between employees who share knowledge is found to be a crucial element of organisational learning by Wellman (2009). In a pursuit for institutionalisation of learning within an organisation, communication with as few barriers as possible needs to be facilitated (Crossan, Lane, & White, 1999). Meško Štok, Markič, Bertonecelj and Meško (2010) added that an appropriate communication structure, interpersonal relationships, motivation, stimulation and values as part of organisational culture positively affect business excellence in enterprises. Knowledge sharing relies significantly on the type of organisational structure, which may influence processes of knowledge assimilation, sharing and exploitation in a positive or negative way (Van den Bosch *et al.*, 1999; Chen & Huang, 2007).

Considering the dynamics of innovative processes and organisational knowledge flow, the change in the level of innovation and existing knowledge in organisations should be causal. Nowacki and Bachnik (2016) emphasised the relationship between innovation and knowledge and pointed out that innovative capacity influences knowledge possessed by organisations. Many studies have dealt with the direct influence of knowledge management on innovation performance. There are suggestions from various authors that firms which operate in highly dynamic industries should strive to re-configure their resource portfolio to leverage their knowledge management skills for innovation performance (Garg, Walters, & Priem, 2003; Sirmon, Hitt, & Ireland, 2007; Sirmon, Hitt, Ireland, & Gilbert, 2011). Kamasak, Yavuz, Karagulle and Agca (2016) added

that strategic flexibility is a key enabler of innovation performance through knowledge management. Cohen and Levinthal (1990) stressed the importance of R&D collaborations for the generation of new knowledge which often emerges as a by-product. However, empirical studies which analyse the effect of contextual variable on the causal relationship between knowledge management and innovation performance are still rare (Sirmon *et al.*, 2011; Anderson, Potočnik, & Zhou, 2014; Kamasak *et al.*, 2016).

Having in mind the highly dynamic environment where organisations from knowledge-intensive industries operate, these industries have been selected as a target group for this research. The importance of the sectoral analysis in terms of knowledge diffusion and technological innovation has been stressed by Stephan, Schmidt, Bening and Hoffmann (2017). In the area of innovation management and entrepreneurship in knowledge-intensive industries there is wide agreement on the need for the adoption of best innovation management practices (Paredes-Frigolett, 2015). Peltoniemi (2007) suggested that knowledge-intensive industries differ from other industries based on the continuous search for new knowledge. Tödting, Lehner and Trippel (2004) pointed out high rate of radical innovations in such industries, stating that research and development efforts are focused on generating radical innovations.

An increasing share of industries is becoming more technology and knowledge-intensive. When having importance of technology and knowledge under the spotlight, it has been advised by the OECD (2005) to focus on the leading producers of high-technology goods and on the activities (including services) that are intensive users of high technology and/or have the relatively highly skilled workforce necessary to benefit fully from technological innovations. In developed economies, knowledge-intensive industries have sprung up quickly since the 1990s. In fact, the knowledge-intensive share of developed economies grew from 29% to 32% between 1997 and 2012; the United States has the largest knowledge-intensive share, reaching 40% in 2012. A similar situation exists in developing economies (Ching, Pang, Hung, & Cheng, 2016).

So far, no studies have been undertaken with the aim of exploring the causal relationship between innovation and knowledge flow in organisations from knowledge-intensive industries in Serbia. Knowledge-intensive industries sectors have been classified and analysed according to the 2005 Classification of the Organization for Economic Cooperation and Development (OECD) and grouped into four main industry groups: 1) high-tech industries, 2) knowledge and innovation based services, 3) research firms, and 4) traditional medium-tech manufacturing (OECD, 2005). For the purpose of this research, 256 organisations from knowledge-intensive industries in Serbia were identified.

MATERIAL AND METHODS

For the purpose of analysing the knowledge use trends based on the efficiency of innovation in organisations from knowledge-intensive industries in Serbia, we constructed one independent, three dependent and one aggregate variable. Independent variable is *knowledge use*, dependent variables are *innovation motivation*, *innovation strategy* and *innovation realised*, while aggregate variable is *innovation total*. The purpose of a thus constructed model was to determine the relationships between the use of knowledge base in organisations and their innovation strength shown as the total score and also divided into separate variables, each representing different aspects of the innovation strength.

Three dependent innovation variables are *innovation motivation*, *innovation strategy* and *innovation realised*. The innovation motivation variable was constructed as an indicator of the motivation of employees to create innovations. This variable included the frequency of employees' participation at trainings, the existence of incentives and rewards for innovation efforts, the existence of communities of practice and the use of internal trainings led by experienced employees in organisations. Participation in educational events and the frequency of holding internal trainings which are led by organisation seniors are identified as drivers for continuous innovation efforts (Wellman, 2009). Wellman (2009) and Al-Ali (2003) discussed that the most important knowledge sources in organisations include groups of employees, i.e. communities of practice, which gather with the aim of spreading and further developing knowledge. To prove the enormous effect of incentives and rewards for employees' innovativeness efforts, Southwood (1999) emphasised the cases of Dana Corporation and General Motors, where this alignment brought both an increase in profitability and productivity.

The *innovation strategy* variable was determined by the existence of a department or a group of employees whose tasks include a review of patent documentation, patent portfolios of other organisations and relevant scientific publications in the organisation, the implementation of knowledge management strategy, the implementation of technology management strategy and the use of technology forecasting methodologies. Bader (2007) stressed the significance of patent portfolio management in designing corporate strategies. Patent intelligence is crucial for competitiveness in knowledge intensive industries, which emphasises the importance of organisational capacity to monitor relevant patent documentation and scientific publications. Regarding knowledge and technology management, many studies stressed their importance to organisational performance (Nonaka, 1995; Levi-Jakšić, 2001; Betts, 2003; Dmitrović, Radovanović, & Žarkić-Joksimović, 2016; Radovanović & Matović, 2016). The strategic approach to technology management also leads to an increase in licensing activities and collaboration in research and development efforts (Fosfuri & Tribo, 2008).

The elements of the *innovation realised* variable are: the number of new products or services introduced to the market, the number of patent applications and the number of initiated research and development projects, all in the time span of two years. Since not all realised innovations are patentable or there is no desire to seek patent protection, this variable also includes the number of new products or services. Also, it is fair to assume that research and development projects could lead to one or more innovations. In-house research and development activities are essential as they generate new knowledge and promote the use of external sources of scientific knowledge (Vega-Jurado *et al.*, 2008). Vega-Jurado *et al.* (2008) also marked the research and development intensity and technological competences derived from the in-house research and development as key determinants of product innovation.

For the purpose of the research and following the recommendations of Yakhlef (2002), Wellman (2009), Kumar and Ganesh (2009) and Senapathi (2011), we used internal knowledge systems, as internal IT knowledge networks of organisations (e.g. intranets), in the role of the knowledge base. Internal IT systems or network offer diverse ways of communicating knowledge (Kim, 2003) and act as hubs where knowledge can be added, retrieved, modified, used or deleted. Mphidi and Snyman (2004) emphasised

the existence of strong awareness of the value of the intranet as a knowledge management tool. By presenting findings from Siemens' IT system ShareNet, Ciabuschi (2003) proposed that there is a positive relation between deploying an IT system for knowledge sharing and the direct interaction between corporate units. The effect of the existence of knowledge on the internal IT network to achieve organisational goals is largely influenced by the possibility to retrieve and share such knowledge (Wellman, 2009). Wellman also suggested that an organisation needs to deploy a set of metrics to periodically assess the performance of the internal knowledge base, and these should address the utilisation of the stored knowledge material and the availability of the system to employees of the organisation. The scope of use of the internal knowledge base by employees in organisations is represented in the model by the knowledge use variable. This was evaluated by the percentage of employees with the access to the knowledge base, the percentage of employees with the possibility to enter or modify the data in the knowledge base and the percentage of employees who used the knowledge base in the last two-year period. However, there is an issue in the methods of storing important knowledge, as not all information and especially knowledge can be stored and retrieved in its original way (Yakhlef, 2002; Wellman, 2009). The more tacit the knowledge, the greater the likelihood that it may be distorted in the storage and retrieval process. Therefore, an organisation should lower the tendency of the knowledge distortion process by employing various ways of knowledge recording, retrieving and understanding processes (e.g. by codification or conceptualisation). Therefore,, organisations often use a variety of multimedia applications (such as an audio or video demonstration) to preserve the tacit characteristics as much as possible (Wellman, 2009).

Finally, the variable *innovation total* included all three dependent innovation variables on equal basis, following the notion that innovation strength of an organisation is determined not only by the realised innovation, but also by its potential and organisational strategic orientation. A questionnaire was developed for the purpose of the research. The questionnaire included questions on the existence of all the elements explained above.

For the purpose of the research, the following step was to determine the level of all variables in the scale from 0 to 1. The score for each variable was equally dependent on all the elements of the variable. For example, if an organisation responded that all of their employees have the access to the knowledge base, it received the maximum score, which equals 1. If only 40% of the employees had the access to the knowledge, it would receive 0.4. For every "Yes" answer in the questionnaire the organisation received a score of 1, while for "No" it received 0. Then, the sum of all the scores within the variable would be divided by the number of elements within the variable. Finally, the normalisation of scores was carried out for the purpose of the statistical analysis.

As the final step, we evaluated the variables related to innovation in comparison to the independent variable of the knowledge use, in order to determine which of the variables is significantly affecting the volume of the knowledge use in organisations, but also to assess the relationships between the variables. In this paper, we aimed at testing the hypothesis stating that the innovation capability of organisations influences the use of the knowledge base by employees in organisations from knowledge-intensive industries in Serbia.

The survey for the needs of this research was conducted in March 2013. In total, 256 organisations from knowledge-intensive industries in Serbia were randomly selected and

the relevant questionnaire was sent to them. Filled-in questionnaires were returned by 53 organisations, setting the response rate to 20.7%. The total of 21 organisations which acknowledged the existence of only textual knowledge forms in their knowledge bases were excluded from the analysis, as the study included the analysis of only those organisations which also possess other forms of knowledge stored, such as visual and audio simulations, based on the research methodology explained in the previous chapter. This left the total number of the analysed organisations at 32.

The results of the frequencies within the descriptive statistics analysis showed that the mean values of most variables are very near each other. The exception is the innovation realised variable, with the mean of 0.8. The mean and standard deviation values of the researched variables are given in the following table:

Table 1. Descriptive statistics of the indicators used in the analysis

Variable	Mean	Std. Deviation
Knowledge use	0.687	0.218
Inno strategy	0.625	0.328
Inno motivation	0.631	0.231
Inno realised	0.803	0.252
Inno total	0.686	0.192

Source: authors' calculation.

The table shows that the interviewed organisations had at least some level of the knowledge use by employees. However, at least one organisation had also zero score in one or more categories of innovation capability (shown here as Inno total).

RESULTS AND DISCUSSION

The relationships between the knowledge use variable and other variables were statistically analysed by the analysis of variance (ANOVA), as shown in Table 2.

Table 2. Results of the ANOVA analysis for the knowledge use variable

Variable	Sum of Squares	df	Mean Square	F	Sig.	
Inno strategy	Between Groups	0.088	4	0.022	0.182	0.946
	Within Groups	3.252	27	0.120		
	Total	3.340	31			
Inno motiva- tion	Between Groups	0.158	4	0.039	0.854	0.504
	Within Groups	1.245	27	0.046		
	Total	1.402	31			
Inno realised	Between Groups	1.373	4	0.343	8.721	0.000
	Within Groups	1.062	27	0.039		
	Total	2.435	31			
Inno total	Between Groups	0.039	4	0.010	0.247	0.909
	Within Groups	1.069	27	0.040		
	Total	1.108	31			

Source: authors' calculation.

The results of the ANOVA analysis show that there is no statistically significant difference between most of the group means, with the significance level standing above the usual cut-off point of 0.05. Thus, we do not have enough evidence of interdependence between the variables representing the innovation strategy level, the innovation motivation level and the total innovation strength, and the variable representing the use of knowledge in organisations. However, the significance value for the mean of the realised innovation is $p < 0.0001$; therefore, we can state that the statistically significant difference between the means of the knowledge use and the innovation realisation variables suggest that interdependence between these two variables exists.

Table 3. Post-hoc analysis by Tukey HSD for the knowledge use variable

Dependent Variable	(I) Knowledge use	(J) Knowledge use	Mean Difference (I-J)	Std. Error	Sig.	95% Confidence Interval	
						Lower Bound	Upper Bound
Inno realised	0.20	0.40	-0.150	0.172	0.904	-0.652	0.352
		0.60	-0.467	0.152	0.035	-0.909	-0.024
		0.80	-0.486	0.159	0.037	-0.950	-0.021
		1.00	-0.743	0.159	0.001	-1.207	-0.278
	0.40	0.20	0.150	0.172	0.904	-0.352	0.652
		0.60	-0.317	0.115	0.070	-0.651	0.018
		0.80	-0.336	0.124	0.080	-0.699	0.027
		1.00	-0.593	0.124	0.001	-0.956	-0.230
	0.60	0.20	0.467	0.152	0.035	0.024	0.909
		0.40	0.317	0.115	0.070	-0.018	0.651
		0.80	-0.019	0.094	1.000	-0.295	0.257
		1.00	-0.276	0.094	0.049	-0.551	-0.001
	0.80	0.20	0.486	0.159	0.037	0.021	0.950
		0.40	0.336	0.124	0.080	-0.027	0.699
		0.60	0.019	0.094	1.000	-0.257	0.295
		1.00	-0.257	0.106	0.139	-0.567	0.053
	1.00	0.20	0.743	0.159	0.001	0.278	1.207
		0.40	0.593	0.124	0.001	0.230	0.956
		0.60	0.276	0.094	0.049	0.001	0.552
		0.80	0.257	0.106	0.139	-0.053	0.567

Source: authors' calculation.

The post-hoc test by multiple comparison presented in the above table shows interdependence between the levels of knowledge use and the levels of innovation realisation in detail. Significance level values at Tukey HSD are the lowest for respondents with the highest knowledge use and the highest innovation realised level. However, the results of the Tukey HSD do not significantly differ at other levels of both variables, implying that as the level of knowledge use increases, it is followed by the growth of innovation realisation variable with only slight and insignificant deviations. This finding is also supported by the means plot in Figure 1.

As shown in Figure 1, there is a strong correlation between trends of both variables, with the exception of the slight distortion around the middle values.

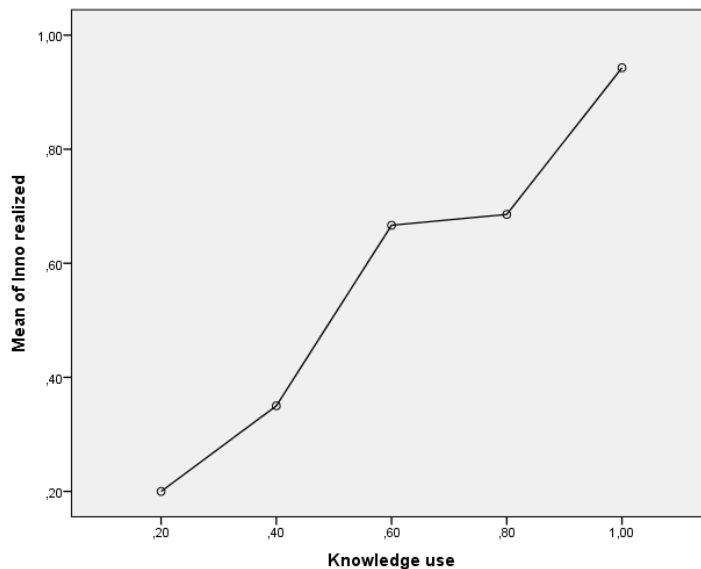


Figure 1. Means plot – the relationship between Innovation realised and Knowledge use variables

Source: authors' calculation.

CONCLUSIONS

The results suggest that the innovation capability indicators in organisations from knowledge-intensive industries in Serbia reflect diverse impact on the level of the existing knowledge use by employees. It is also shown that there is interdependence between the volume of knowledge use and an increase in innovativeness in terms of realised innovation, which is in line with previous research in this area (Levi Jakšić, Barjaktarović Rakočević, & Martić, 2014). In other words, more patented and non-patented products and services, as well as more research and development activity should lead to the enhanced use of the knowledge base by employees. On the other hand, the results suggest that the use of knowledge base would not be directly increased by an increase in motivation of employees by the introduction of reward policies and trainings or by a stronger focus on the strategic orientation for innovation through knowledge and technology management strategies, communities of practice, and dealing with patent intelligence. It may be therefore concluded that, if increasing the frequency and scope of the internally available knowledge repositories is their goal, organisations should be more focused on the realisation of innovations.

The results of this research partially support the hypothesis, as they indicate that part of the innovation capability of organisations (which is defined by realised innovations) affects the use of the knowledge base by employees in organisations from knowledge-intensive industries in Serbia. The results obtained in this paper contribute to the organisational theory. The results of this research will contribute to better understanding of the relationship between innovation and the use of knowledge in organisations. The constructed innovation variables can be used for other research studies related to similar

subjects. This paper provides a contribution for the practitioners, as managers and other practitioners can have a clearer view on the innovation drivers which influence the potential for a better use of the existing knowledge in organisations.

This research has its limitations. Although the interdependence between the realised innovation and the knowledge use scope is suggested by the statistical analysis, we cannot exclude the existence of other external factors which may influence the scope of the knowledge use in organisations. Therefore, future research in this area should be directed towards analysing diverse internal factors which may influence this relationship while discovering how it affects the abovementioned established interdependence. Another limitation could be in the representativeness of the sample, which may be considered as debatable. Also, the aspect of knowledge relevance was not included in the research, while it may affect the relationship between innovation and knowledge use. Regarding the geographical scope, this research can be broadened by including other similar developing economies for comparison, especially having in mind that national factors (legislative, availability of resources, etc.) may strongly influence the performance within targeted industries geographically. In relation to the conclusions in this paper, future research in this area may also be directed towards identifying and analysing the factors which distort the relationship between elements of motivation for innovation and innovation strategy on the one hand, and the use of available knowledge in organisations on the other hand.

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Motivation Factors for Female Entrepreneurship in Mexico

Martha Cantú Cavada, Vito Bobek, Anita Maček

ABSTRACT

Objective: The objective of this paper is to analyse motivation factors for female entrepreneurship in Mexico. In the proposed article, the authors discuss the factors which compelled women to start their enterprises in Mexico.

Research Design & Methods: Based on in-depth interviews with female entrepreneurs and entrepreneurship experts, the authors show which factors motivated women to start their own business in Mexico.

Findings: The study proves that women in Mexico are motivated by a combination of push and pull factors, where the majority of the factors are pull factors. The findings of the study help to conclude that female entrepreneurship development is influenced by different factors including the entrepreneurs' personal traits, social and economic factors. Due to their conservative traditional attitude, risk adverse tendency, and non-cooperation of family members, etc. women entrepreneurs are sometimes deterred to start a business in Mexico.

Implications & Recommendations: It is necessary to raise the awareness of different factors that promote female entrepreneurship in Mexico. Governmental programmes which support female entrepreneurship, business incubators, and networking could be very helpful for women when starting their own business.

Contribution & Value Added: The originality of this work lies in studying motivational factors for female entrepreneurship in Mexico. The Mexican society faces a big revolution towards female entrepreneurship. Based on the change of family structure and traditions, women nowadays are having more opportunities to develop as entrepreneurs.

Article type: research paper

Keywords: female entrepreneurship; Mexico; push factors; pull factors; promoting female entrepreneurship

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INTRODUCTION

The number of women who own businesses around the world has been increasing over time (Allen, Langowitz, & Minniti, 2006). Therefore, female entrepreneurship gains special attention in the literature in recent years. Papers focus mainly on the women entrepreneurship development, differences between entrepreneurship of men and women, factors affecting growth of women entrepreneurship, entrepreneurship career aspirations of educated women, etc. For example, in their research, Zapalska (1997), and Birley (1989) proved that there exist more similarities than differences between female and male entrepreneurs' psychological and demographic characteristics. Goduscheit (2011) on the other side suggested that there are more differences than similarities between the genders. Croson and Gneezy (2009) proved that women may be more risk averse than men. Furthermore, many studies conclude that women are both more risk-averse and less competitive than men (e.g. Croson & Gneezy, 2009; Bönte & Piegeler, 2012; Wagner, 2007; Verheul, Thurik, Grilo, & van der Zwan, 2012). According to Kelley, Singer and Herrington (2016), women would commonly engage in the topic of entrepreneurship less frequently than men, nevertheless when women do so, they normally do it out of a necessity rather than an opportunity.

The objective of this paper is to analyse motivation factors for female entrepreneurship in Mexico. Our guiding research questions are: which factors are the most important for women to start a business in Mexico; and which factors promote female entrepreneurship in Mexico?

After the literature review which it is composed of secondary data, the authors made the empirical part of the study which was developed by obtaining primary data. Attaining primary data consisted of qualitative exploratory research, based on 13 in-depth interviews with female entrepreneurs and entrepreneurship experts in Mexico. Section 2 provides literature review. After presenting the methodology and sample, Section 4 discusses the results of an empirical analysis of factors that motivated women entrepreneurs to start their own business in Mexico. Section 5 draws conclusions.

LITERATURE REVIEW

Motivational Factors for Female Entrepreneurship

Motivation is defined as inner and outer factors which encourage aspiration and dynamism in people to be continually interested and dedicated to a job, a role or a topic, or to make an effort to reach a goal (Ingle, 2014, p. 1). Motivations denote the needs, wants, desires or aspirations that impact, control or clarify the behaviour of individuals (Kumar, Poornima, Abraham, & Jayashree, 2003, p. 119).

A psychologist, Abraham Maslow (1943), developed a theory which suggests that humans are motivated to satisfy five basic needs. These needs are arranged in a hierarchy and according to Maslow, humans seek first to satisfy the lowest level of needs. Once this is done, they seek to satisfy each higher level of needs until all five needs are satisfied. His theory can be explained also from the point of an entrepreneur. Physiological needs are of the lowest order and most basic needs of human beings. An entrepreneur has to meet his/her physiological needs to survive. Hence, he/she is motivated to work in an enterprise to have economic rewards to meet his/her basic needs. The second level of

needs in Maslow's hierarchy involves safety and security needs. Meeting these needs requires more money and, hence, an entrepreneur is prompted to work more in his/her entrepreneurial pursuit. The third level includes social needs that refer to belongingness or affiliation. Just as individuals want to be recognised and accepted by others, also an entrepreneur is motivated to interact with fellow entrepreneurs, his/her employees, and others. The next level refers to self-esteem and self-respect. These include such needs which indicate self-confidence, achievement, competence, knowledge, and independence. In case of entrepreneurs, the ownership and self-control over the enterprise satisfies their esteem needs by providing them with respect, status, reputation, and independence. The last level involves self-actualization. An entrepreneur may achieve self-actualization in being a successful entrepreneur (Maslow, 1943).

Carsrud and Branänback (2001) mentioned there exist three important and main reasons for an entrepreneur to create a new venture; these are economic, social and psychological or personal reasons (p. 12). Hopp and Stephan (2012, p. 921) suggested that there is a compound collaboration between the individual, community and environmental aspects that influence entrepreneurial behaviour in the process of undertaking. According to Tominc and Rebernik (2004), processes which affect female entrepreneurship are different than those affecting male entrepreneurship. Tominc and Rebernik (2007) also proved that women are, on average, less likely to start new firms than men. Warnecke (2014) proved that different policies and programmes in China strongly support female entrepreneurship. Della Peruta, Maggioni and Schiavone (2014) proved that close connection between informal social networks and female entrepreneurship may represent a fundamental element to straighten female entrepreneurship attitude. Bobrowska and Conrad (2017) confirmed the male-gendered nature of entrepreneurship in the Japanese case. Nevertheless, Shane, Locke and Collins (2003) proved that entrepreneurial motivations differ between individuals and across countries.

Jones-Evans (1995) mentioned that a combination of factors determines the individual motivation to choose the path of entrepreneurship (p. 28). Some of these include the desire of independence (Shane, Locke, & Collins, 2003), the need for accomplishment, and an inclination toward threats or risks (Minniti & Nardone, 2007). Many researchers classified the motivations with categories of push and pull factors (e.g. Kirkwood, 2009; McClelland, Swail, Bell, & Ibbotson, 2005; Gray & Finley-Hervey, 2005; Orhan & Scott, 2001). Gilad and Levine (1986) proposed two closely related explanations of entrepreneurial motivation, 'Push' theory and 'Pull' theory. The Push theory argues that individuals are pushed into entrepreneurship by negative external factors like job dissatisfaction, dismissal from a job, etc. On the other hand, the Pull theory suggests that individuals are attracted to entrepreneurial activities in order to seek independence, to use their skills and experience in the optimal way, etc.

In general, it can be said that push factors are related to a necessity, as it is mentioned by McClelland *et al.* (2005) in the article "Following the pathway of female entrepreneurs: A six-country investigation". These types of factors are the ones which force individuals to be entrepreneurs (p. 89). Thus, they normally include negative characteristics of possible entrepreneurship regarding employment and the economic status, for example (Gray & Finley-Hervey, 2005; Kirkwood, 2009). These factors can include unemployment, the lack of a job or poor career prospects, unacceptable job conditions, professional frustration, the lack of childcare facilities or the economic necessity.

On the other hand, pull factors are related to opportunities. Pull factors are related to ambitions and the choice of improvement (McClelland, Swail, Bell, & Ibbotson, 2005). They are often based on collaboration with other people, individual experiences or market opportunities. Orhan and Scott (2001) mention that these factors can include the desire for independence, autonomy, self-fulfilment, self-achievement, job satisfaction, aspiration, social objectives, entrepreneurial drive and desire for wealth (Orhan & Scott, 2001). Table 1 below shows the most frequent factors for entrepreneurship stated in the literature.

Table 1. Motivation factors for entrepreneurship in Mexico in 2016

PUSH FACTORS (necessity based)	PULL FACTORS (opportunity based)
Unemployment Lack of job Unacceptable job conditions Professional frustration Lack of childcare facilities Economic necessity	Independence Autonomy Self-fulfilment Self-achievement Aspiration Job satisfaction Social objectives Entrepreneurial drive Desire for wealth

Source: Orhan & Scott, 2001; Gray & Finley-Hervey 2005; McClelland, Swail, Bell, & Ibbotson, 2005; Kirkwood, 2009.

Studies which focus only on female entrepreneurship prove that female entrepreneurs working in developed countries are determined by pull factors, while women working in developing countries are rather determined by a combination of both push and pull factors (Orhan & Scott, 2001). In the following section we are presenting the main characteristics on female entrepreneurship in Mexico.

Female Entrepreneurship in Mexico

The creation of new companies has historically been a job done by men in Mexico, this being based on tradition and culture of the country. However, family structure and traditions have been changing over time. Nowadays, Mexican women are much more independent, often being responsible for providing their families with what is needed to survive (Guerrero Ramos, Armenteros Acosta, Chavarría López, Canibe Cruz & Reyna García, 2012). Today, men and women share similar educational opportunities and they graduate from secondary school and university at approximately the same rates. The number of women working outside home has more than doubled since 1985. According to the World Economic Forum Global Gender Gap Report, which compares conditions faced by men and women in over 140 economies, Mexico has improved its scores and rankings since 2006. The narrowing of gender gaps in the economy is significantly attributable to an increase in female professional and technical workers, as well as increased representation of women in Congress. Based on this reality, many female entrepreneurs are being motivated to start a new venture. The Global Entrepreneurship Research Association mentions in its 2014 report that female entrepreneurship in Mexico is becoming more powerful and frequent nowadays (GEM, 2014).

On the other hand, in 2014 still just 45 % of women over the age of 15 were in the workforce, compared with 80% of men. Men's salaries remain significantly higher than women's. It can be seen that in Mexico traditional gender roles and cultural norms still pose challenges to

women's economic participation. The national culture in Mexico is based on the Indian culture which, during the Spanish conquest, was subjected to oppression from their own conquerors (Lomnitz-Adler, 1992). Based on this fact, some communal values are still palpable in daily life. The Mexican culture highly values personal relationships, family, collaboration, courtesy, and signs of respect (Martinez, 1998). There is pronounced emotional sensitivity that characterises Mexicans (Martinez, 1998). In favour of staying at home to raise their children full-time, women often face pressure to abandon their education or professional development. In addition to looking after children, women assume the vast majority of housework and elderly care. According to the 2010 World Bank Enterprise Survey, women occupy just over 15% of top management positions of nearly 1500 formally established businesses. According to the data from the World Bank, just one out of four firms in Mexico has female participation in ownership. Also, women's enterprises tend to be smaller and grow more slowly than those founded by men as for financial institutions women are often viewed as unreliable borrowers. Notwithstanding the obstacles to women, it is evident that Mexico offers some best practices for the development of women entrepreneurs. There is a range of local business networks and associations, as well as expansive and innovative government programmes and a set of private-sector initiatives that help women to start their own business.

For example, INADEM provides financial support to entrepreneurs through contests managed by the National Fund for Entrepreneurs or Fondo Nacional Del Emprededor (FNE) for its original name in Spanish. This contest supports entrepreneurs who wish to start, grow or improve a business; all this with the objective of generating the economic growth and increase productivity in the country. In total, FNE provides 19 national contests which are grouped into 5 main categories. The first one involves programmes for strategic sectors and regional development, the second one denotes special programmes for business development, whereas category three involves programmes for entrepreneurs and financing, next are the programmes for micro, small and medium-sized enterprises, and the last category focuses on the incorporation of information technologies and communications.

It is important to mention that these contests are graded with points based on the level of importance of the business projects. Entrepreneurship projects which are led by women receive extra points in order to promote female entrepreneurship in the country. Furthermore, if the applicant's project supports sectors defined by the secretariat of industry and commerce, the entrepreneur can also receive extra points for it. The defined sectors include: furniture, trade, automotive, technology, steel, agriculture, metallurgical, toy, chemical, textile, rubber, electrical, medical devices, construction, heavy vehicles, services or footwear (FNE, 2016). The project called "Mujeres moviendo a Mexico", which is a result of a public-private partnership between INADEM and Crea Comunidades de Emprendedores Sociales, A.C., some states in Mexico and the bank Banorte offer training in business skills, technical assistance, counselling and services to women entrepreneurs (Crea Comunidades de Emprendedores Sociales, 2015). Another important programme developed by the National Institution for Women is the one called Mujeres PYME, whose aim is to develop and consolidate SMEs run by women, as well as to provide preferential access to financing and business development tools (Instituto Nacional del Emprededor, 2016).

Moreover, an increasing number of non-governmental institutions are generating great opportunities for women during the conception phase of the entrepreneurship process. Business incubators from universities like the one from ITESM, or organisations like

Victoria 147, *Mujer Emprende* or 1000 por Mexico; provide assistance and motivational support to women. In the following chapter, the methodology and results of the research done with female entrepreneurs in Mexico are presented.

MATERIAL AND METHODS

Methodology and Sample

Our research was divided into two main stages. The first stage referred to the literature review which it is composed by secondary data, being the base of this study. It consists of the examination of mainly academic research, books, reports, journal articles and relevant published resources related to entrepreneurship, culture, and the Mexican society. Following this first stage, the empirical part was developed by obtaining primary data. Attaining primary data consisted of qualitative exploratory research based on 13 in-depth interviews; 11 were applied to female entrepreneurs who had already completed the conception phase of the GEM entrepreneurship process and 2 of them were applied to entrepreneurial experts. The qualitative exploratory research permitted the authors to define the problem of the study in a more precisely way; based on the gaps observed during the literature review process, moreover, it allowed to identify alternative courses of action and develop assumptions, moreover, to gain insights for developing an approach to the problem, establish priorities for the research and eliminate impractical ideas and clarify ideas (Malhotra & Peterson, 2006).

Guest, Namey and Mitchell (2013) mentioned that the qualitative research methods are normally used to understand the why and how of human behaviour in general, including the experiences, and opinions. A qualitative research design is particularly appropriate for research questions which explore an entrepreneur's points of view, experiences and preferences. As an unstructured, exploratory research method, qualitative research provides better understanding and insight into the problem stated (Malhotra, 2010). There is no right or wrong way of conducting a qualitative research study. Nevertheless, some approaches and methods are more conducive to certain types of qualitative inquiry than others.

Compared to quantitative research, qualitative research usually implies a rather small sample which is interviewed one-on-one (McNeil, 2005). In order to discover the ideas and insights about the main challenges and opportunities of female entrepreneurship in Mexico and, consequently, describe them in detail, the authors selected interviews as the key method of this exploratory research, as it has been mentioned before.

Due to the nature of the study, the participants had to have specific features and traits in order to participate, thereby; the sampling selection method used was non-random sampling, meaning that the researcher selected the individuals based on the study requirements (Malhotra & Peterson, 2006).

For the study, the quota sampling was selected. The first stage consisted of developing control categories, or quotas of the population elements. To develop these quotas, the authors listed relevant control characteristics and determined the distribution of these characteristics in the target population. The relevant control characteristics included only gender as the basis of judgment. Afterwards, as the second stage of this non-probability sampling, the sample elements were selected based on convenience and judgment of the researcher; this meaning the availability of the participants, as well as the important characteristics of completing the conception phase of the GEM entrepreneurial process.

For this purpose, a key informant was used in this study. "A key informant is someone with whom researchers have an especially good rapport and is particularly helpful, insightful and in a position to assist with locating participants" (Biklen & Bogdan, 2007). In this case, the main informants were the team responsible for the business incubators network from the University Tecnológico de Monterrey and the director of the organisation, Victoria 147. In order to carry out the study, the researcher got in contact in the first place with the network of business incubators from the university in order to obtain connections with female entrepreneurs who had participated in some of the programmes provided by the university in 25 Mexican campuses, and who would like to participate in the investigation. Later, in order to obtain more contacts, the researcher contacted Forbes Magazine Mexico and Victoria 147, an institution which provides entrepreneurial support to women in Mexico.

The target population was Mexican female entrepreneurs who own a business in Mexico and had already completed the conception phase of the GEM entrepreneurial process. This means that the participants would have to own the business for more than 3 months. Based on personal preferences of the researcher the sampling criterion was simple, there was no need to develop a more specific criterion due to the fact that the author's objective is to analyse how culture impacts women in order to describe the challenges and opportunities in general manners, therefore, there was no need to set any demographic or geographic segmentation, nor a specific business industry.

As for the sample size, the theoretical sampling approach was selected. It indicates that each interview contributes to the overall picture with an individual piece of information. Once the findings are considered comprehensive enough in order to understand the central problem, the process of choosing new interview partners can be concluded (Ragin & Amorosa, 2011). In this study thirteen in-depth interviews were obtained, eleven of them from female entrepreneurs and two of them from entrepreneurship experts. Based on sources regarding research sampling size on qualitative, in order to have enough validity, a number of interviews should vary between 10 and 15 (Malhotra & Peterson, 2006).

Based on the fact that in-depth interviews are a direct and personal type of interview in which the interviewer can uncover underlying motivations, beliefs, attitudes and feelings on the topic of entrepreneurship, this method was the one selected for our research (Malhotra, 2010).

In order to collect data for our research, 13 interviews were completed with eleven female entrepreneurs and with two entrepreneurial experts. These were semi-structured interviews including 13 questions for the entrepreneurs and 9 questions for the experts. All of them included the same questions and structure for entrepreneurs and the same questions and structure for the experts. The participants had the opportunity to express themselves freely due to the fact that those were open questions.

The participants were contacted by the authors with the assistance of the main key informants, first by email and later by phone. All the interviews were completed by Skype phone calls and done completely in the Spanish language, due to the fact that one of the authors of this article and the participants have the same native language, different geographical location and time zone. Furthermore, the interviews lasted an average of 30 to 50 minutes each depending on the availability, personality, and openness of the participant.

In order to analyse the results of the interviews, the outcomes of the interviews were compared to the literature review.

The interview structure was the base for obtaining the main objective of the research, which was to analyse how culture impacts women in order to describe the challenges and opportunities in entrepreneurship. The organisation of the interviews applied to the female entrepreneurs was divided into four main general sections:

- introduction of the company and participant;
- motivations;
- challenges;
- opportunities.

In order to classify the information gathered during the interviews and interpret the data, later on the approach of the content analysis was undertaken for this purpose. After conducting the interviews, they were transcribed word by word with the assistance of the free online application called oTranscribe in order to analyse the information obtained.

In this article the authors present the results on the questions related to women's motivations to undertake entrepreneurship. The objective of this paper is to present the analysis of motivation factors for female entrepreneurship in Mexico. Our guiding research questions were: which factors are the most important for women to start a business in Mexico; and which factors promote female entrepreneurship in Mexico? We tested the following hypothesis in the paper: Female entrepreneurship in Mexico is determined by a combination of push and pull factors. Below we are presenting the limitations to this research.

Limitations to the Research

In the first place, the lack of prior research studies on the topic of female entrepreneurship in Mexico in general and in relation to the Mexican culture was certainly a restraint for the creation of the literature review and support the assumptions. This generated a vague idea of the topic itself, creating a misperception but at the same time enforcing the aim of the research. Another important point that can be mentioned as a limitation is the measure used to collect the data, the in-depth interviews created somewhat broad interpretation of the information.

Referring to Malhotra, "The lack of structure makes the results susceptible to the interviewer's influence, and the quality and completeness of the results depend heavily on the interviewer's skills." (Malhotra, 2010). In the case of this research, the data obtained from the interviews were difficult to analyse and interpret due to the fact that questions regarding the process of entrepreneurship were applied and psychological expressions were present; for example, experiences and motivations for opening a new venture. Thus, it can be implied that the services from skilled psychologists were typically required for this purpose (Malhotra, 2010).

Another important limitation of this study was the fact that the research had a general focus by concentrating only on women owning a business for more than three months. Meaning that there was no other demographic, geographical or industrial restriction or segmentation. On the one hand, the demographic segmentation, i.e. educational level, income or marital status could have been important variables to take into account during the research in order to analyse the possible impact on the challenges and opportunities of female entrepreneurs. In this case, this means that the results could have varied depending on these variables, due to the fact that maybe women with a lower educational level or income would have faced more challenges, for example.

On the other hand, geographical or industrial segmentation could have been an important variable to take into account, too, this also based on the fact that there might exist more or fewer challenges and/or opportunities in one region/industry than in another one.

RESULTS AND DISCUSSION

As it has been mentioned, each type of the interview was designed specifically for each of the two types of participants. In the case of the motivations section for the entrepreneurs, 5 main questions were applied, where three of them had sub-questions depending on the scenario for each entrepreneur. This was related to the main objective of opening a new venture, as well as interrogations about the main motivations to do so. Also, a specific question to know who the principal mentors or collaborators were during the conception phase was used in order to know if the relations are either more with relatives or with institutions. The results for this section are shown in Table 2.

Table 2. Entrepreneur's motivations in Mexico in 2016

No	Main objectives	Main motivation	Mentors or collaborators
1	Never had the intention to own a business. It was an opportunity	- Lack of economic prospects - Unemployment	- Business incubator ITESM - COPARMEX - INADEM - Friends
2	To help the society and to optimize public transport	- Achievement desire - Entrepreneurial drive - Help society	- Family - Business incubator ITESM - SEDECO
3	Do what I like to do and assist other entrepreneurs	- Independence-autonomy desire - Achievement desire	- Victoria 147
4	Help society by providing biotechnical and medical studies in order to avoid cancer	- Independence-autonomy desire - Being one's own boss - Flexible work patterns - Achievement desire - Help society	- Family - University professors from ITESM - Business incubator ITESM
5	Have fun and play	- Lack of other economic prospects - Unemployment - Flexible work patterns - Self-fulfilment need	- PROEMPLEO
6	Doing what I love: design	- Unacceptable working conditions - Independence-autonomy desire - Achievement desire - Self-fulfilment need - Life planning	- Victoria 147 - Boyfriend
7	Being my own boss	- Independence-autonomy desire - Being one's own boss - Achievement need - Self-fulfilment need - Unacceptable working conditions	- Victoria 147 - Friends
8	Fulfil and take advantage of the market niche	- Life planning	- Friends - Husband - Victoria 147

No	Main objectives	Main motivation	Mentors or collaborators
9	Being my own boss	- Lack of other economic prospects - Independence-autonomy desire - Help society	- Business incubator from the municipality of San Pedro Garza García - Business incubator ITESM - Victoria 147 - Secretary of labour and social security
10	Specialize in digital marketing. Have a specific lifestyle and create awareness about animal experimentation in the beauty industry	- Self-fulfilment need - Achievement desire - Life planning - Being one's own boss	- Business incubator ITESM - Victoria 147
11	Feel good about myself and make use of my free time	- Achievement desire	- Friends - Family

Source: own data based on the results on in-depth interviews.

After analysing the previous information, the authors ordered the results based on frequency and classified the obtained outcomes based on the literature review. Specifically, they are related to what Carsrud and Branänback (2001) mention as the three main or most important reasons for an entrepreneur to create a new venture. Thus, Table 3 shows the results of the participants, organised into three categories; psychological or personal, social and economic.

Table 3. Classification of entrepreneurial motivations in Mexico in 2016

Psychological or Personal	Social	Economic
Independence-autonomy desire	Help society	Unemployment
Self-fulfilment need	Work-family balance desire	Lack of other economic prospects
Achievement desire	Flexible work patterns	–
Being one's own boss	Unacceptable working conditions	–
Entrepreneurial drive	–	–
Life planning	–	–

Source: own data based on the results on in-depth interviews.

As a general finding for this section, it is also important to mention that more than half of the participants received help or had their own relatives, either friends or family, as mentors and collaborators.

During the interviews done to the experts, one question about the most common women's motivations to undertake was done to the specialists. The following table shows the most common motivations based on expert opinion.

In the experts' opinion, independence, the desire for achievements, the desire for work-family balance and self-fulfilment were most common women's motivations to undertake business.

To understand the results better, the authors compared them with the primary data gathered in the literature review.

As it can be seen from Table 3 and Table 4, women entrepreneurs' psychological characteristics and social conditions played a motivational role to undertake their own enterprises.

Table 4. Women’s motivations based on experts’ opinion in Mexico, 2016

Expert	3 most common women’s motivations
1	<ol style="list-style-type: none"> 1. Independence and autonomy desire 2. Achievement desire 3. Work-family balance desire
2	<ol style="list-style-type: none"> 1. Economic improvement 2. Independence and autonomy desire 3. Self-fulfilment

Source: own data based on the results on in-depth interviews.

The desire for independence, the need for self-fulfilment, the desire for achievements, the desire to be one’s own boss, entrepreneurial drive, and life planning are psychological or personal factors that motivated women to start their business in Mexico. Brush (1992), Shabbir and Gregorio (1994), Moore and Buttner (1997) proved very similar results in their studies.

Within social motivation factors, helping society, the desire for work-family balance, flexible work patterns and an ambition to improve the quality of working conditions prevailed. In their studies Kumar, Poornima, Abraham & Jayashree (2003) found similar results.

On the other hand, within economic factors that pushed women in Mexico to current enterprises were the curse of unemployment and the lack of other economic prospects. Begum (1993) and Begum (2001) also identified the curse of unemployment as the main push factor towards entrepreneurship. Although it is very difficult to distinguish between pull and push factors, it can, however, be concluded that the majority of the mentioned motivation factors are opportunity based, so called pull factors. Reasons which emphasise entrepreneurship as a positive and desirable alternative that pull women entrepreneurs to their choice prevailed in comparison with the factors which forced women to start business enterprises. These results are logical as in Mexico a large number of governmental programmes, business incubators, and female entrepreneurship organisations are helping women who want to open a new business. Also, special financial programmes and lending bank terms specifically for women are becoming a great opportunity for an increase in female entrepreneurship. Governmental institutions like SE and INADEM have developed special programmes in the last few years to do so. With the results we can accept the hypothesis, that female entrepreneurship in Mexico is determined by a combination of push and pull factors.

Further, we were interested in factors which promote female entrepreneurship in Mexico (Table 5).

Table 5. Main factors promoting female entrepreneurship in Mexico, 2016

Main factors promoting female entrepreneurship
Participate in motivational programs in order to improve self-esteem and avoid fears
Promoting commercial, managerial and financial knowledge
Society awareness and acceptance
Diffusion of opportunities offered by governmental and non-governmental institutions
Networking

Source: own data based on the results on in-depth interviews.

Surprisingly, many of the participants of our research mentioned the awareness of a special bonus for women during the application for financial support, either from banks like Banorte and Banregio, or from governmental institutions like INADEM during financial contests. This was also confirmed by the answers which relate to the factors that promote female entrepreneurship in Mexico. Here, especially different governmental programmes, business incubators, networking, and improving self-esteem were stated as the most important.

As it can be seen from Table 5, women entrepreneurs exposed that especially different motivational programmes, the promotion of commercial, managerial and financial knowledge, social awareness, different government and non-government opportunities and networking are factors that promote most female entrepreneurship in Mexico.

In Table 6, the experts' opinion on main factors which promote female entrepreneurship in Mexico are presented.

Table 6. Women's opportunities based on experts' opinion in Mexico, 2016

Main opportunities for women	Main 3 factors that promote female entrepreneurship
<ul style="list-style-type: none"> - Good bank credits and loans especially for female entrepreneurs - Many governmental programs to support female entrepreneurship 	<ul style="list-style-type: none"> - Financial knowledge - Learn from a corporative and business atmosphere - Create networking - Improve self-esteem and confidence, don't underestimate you
<ul style="list-style-type: none"> - Governmental programs supporting female entrepreneurship - Possibility of networking - Business incubators 	<ul style="list-style-type: none"> - Entrepreneurial knowledge - Develop entrepreneurial competencies - Improve self-esteem and confidence - Opportunities awareness

Source: own data based on the results on in-depth interviews.

For experts, factors which promote female entrepreneurship are similar. Especially different governmental programmes that support female entrepreneurship, business incubators, financial knowledge, networking, and improving self-esteem are factors which promote female entrepreneurship in Mexico.

CONCLUSIONS

The Mexican society faces a big revolution towards female entrepreneurship. Based on the change of family structure and traditions, women nowadays are having more opportunities to develop as entrepreneurs.

The paper presents factors that motivated women entrepreneurs to establish their own enterprises in Mexico. The findings of the study help to conclude that female entrepreneurship development is influenced by different factors including the entrepreneurs' personal traits, social and economic factors. Due to their conservative traditional attitude, risk adverse tendency, and non-cooperation of family members, etc., women entrepreneurs are sometimes deterred from starting business in Mexico. However, our research proved that the lack of other economic prospects and unemployment pushed the women entrepreneurs from our sample to start their business. Though it is very difficult to distinguish between pull and push factors, it can, however, be concluded from the analysis that

women entrepreneurs' psychological characteristics and social factors played a motivational role to undertake their own business. Not only because of the changing tradition and the role of women in Mexico, but also because of an increasing number of non-governmental institutions which are generating great opportunities for women during the conception phase of the entrepreneurship process, pull factors for starting female entrepreneurship in our analysis prevailed. The results of the study could help economic policy when trying to improve the situation of female entrepreneurship in Mexico.

Within the limitations of the research, the lack of prior research studies on the topic of female entrepreneurship in Mexico in general and in relation to the Mexican culture was certainly a restraint for the creation of the literature review and to support the assumptions. Another important point that can be mentioned as a limitation is the measure used to collect the data, in-depth interviews created somewhat broad interpretation of the information. Another important limitation of this study was the fact that the research had a general focus by concentrating only on women owning a business for more than three months, meaning that there was no other demographic, geographical or industrial restriction or segmentation.

Based on the fact that there are few, almost no research papers that deal with female entrepreneurship in Mexico, there is a great opportunity for future research regarding this topic. One very interesting fact which was frequently mentioned during the interviews, and very surprising for the authors, was the lack of self-esteem and the risk avoidance by women regarding the entrepreneurial process. Future research can definitely involve a psychological perspective of women in order to analyse how the psychological implications can affect female entrepreneurs regarding the act of competence in contrast to men. In general, concerning better understanding of women's behaviour towards entrepreneurship.

Moreover, interesting studies can be made involving other cultural dimensions like masculinity, the avoidance of uncertainty or future orientation and psychological elements or concepts in order to analyse women's entrepreneurial perspectives towards society. Furthermore, while including demographic characteristics like age, marital status or educational level, as well as the type of industry where the company develops, useful and beneficial research can be made.

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Entrepreneurial Mindset: A Synthetic Literature Review

Christiane Naumann

ABSTRACT

Objective: The objective of this paper is to provide an overview of the state-of-the-art in research on entrepreneurial mindset (EM). The paper identifies research areas which have contributed to the current status of the EM concept, outlines areas which remain under-addressed and suggests areas for future research.

Research Design & Methods: A comprehensive method of a synthetic literature review was employed. In a four-step process, relevant papers were identified and classified. Research methods and sampling were analysed and put into a perspective of the EM concept development. Based on that, recommendations for future research are presented.

Findings: No commonly shared EM concept was found. Instead, scholars have contributed largely by depicting particular attributes of EM. These attributes can be divided into core attributes of EM and meta-cognitive attributes of EM. While core attributes are easier to recognize and exhibited through behaviour, meta-cognitive attributes are more hidden within an individual. Mainly the Anglo-American perspective influences the research on EM. The dominating research design methods remain quantitative. Only one longitudinal and one qualitative study using in-depth interviews were identified in the pool. Links to other research areas are provided.

Implications & Recommendations: The EM concept might be investigated further with the inclusion of more other cultures or with people from other cultural backgrounds to test the validity of the existing assumptions.

Contribution & Value Added: This literature review contributes to the current body of knowledge by giving an overview of the EM concept and its attributes and associated qualities. It identifies current gaps in research and provides recommendations on how to close them.

Article type: literature review

Keywords: entrepreneurial mindset; entrepreneurial cognition; cognitive adaptability; cognitive tuning of mindsets; literature review

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INTRODUCTION

Ever since researchers in the area of entrepreneurship started to explore the field of entrepreneurial mindset, they were intrigued by the questions why some people identify opportunities and others do not. And doing so, how they are able to leverage and combine existing and new resources in an innovative way given dynamic and complex environments. The approach to answer these questions shifted considerably over time, coming from two very different viewpoints. The first approach was based on personal characteristics of the entrepreneur, assuming there must be special “traits” which explain the ability to identify and explore new opportunities. However, research on these traits lead to unconvincing and weak results (Busenitz & Barney, 1997; Gartner, 1989; Mitchell, 2007; Shaver & Scott, 1991) and scholars argued that the research problem must be addressed from another angle, one which is based on cognition and stipulates entrepreneurship as a way of thinking (Gartner, 1989; Palich & Bagby, 1995; Shaver & Scott, 1991). Thus, entrepreneurs are not “born” with specific traits. It is their entrepreneurial mindset (EM) that makes them different. Yet mindsets are not given, they evolve over time and are influenced by an individual’s interaction with the environment (Mathisen & Arnulf, 2013).

Vast and growing body of knowledge regarding EM addresses the challenges of coping with and adapting to complexity and dynamic and uncertain environments. This concept is not only relevant in the context of entrepreneurship, but also in the overall business environment. Complexity and uncertainty are not an exception, but the standard in today’s business world. If an entrepreneurial mindset can be learned and developed, it could positively impact companies’ survival.

During the last two decades scholars have unpacked pieces of EM and provided valuable insights into its working, its attributes and associated qualities. However, they did not put the pieces together to provide a full picture. Moreover, different perspectives on EM itself have led to a different focus. While the meta-perspective argues that EM is meta-cognitive in nature (Haynie, Shepherd, Mosakowski, & Earley, 2010; Haynie & Shepherd, 2007), other authors explore single attributes of EM which influence how entrepreneurs think, adapt and act (Baron, 1998, 2006; Busenitz & Barney, 1997; Shane & Venkataraman, 2000; Venkataraman, 1997).

Given the different perspectives and dimensions of EM, a meta-analysis of the concept is important to provide an overview of the state-of-the-art in research and an overall picture of factors influencing EM.

This study aims to identify the contributing research areas and perspectives of EM, suggest bridges in between to provide the state-of-the-art in the EM concept and outline those areas that remain under-addressed.

The method employed for this study was a synthetic literature review which followed a multi-step process to come up with the final list of papers for the review. The databases used were (i) ScienceDirect, (ii) Emerald Insight and (iii) Scopus, as they contain the ‘mainstream’ of research papers in English.

This study contributes to current body of knowledge by providing an overview of the contemporary understanding of the EM concept, its attributes and associated qualities. It outlines implications for practice and how this concept can be linked to

other concepts in entrepreneurial research, points to areas which need further research and gives recommendations on how to close them.

The paper starts with a description and reasoning of the review process used for this research. It classifies the reviewed papers first into research streams and second, into the types of papers to provide an overview. It explains their geographical context, the methods and samples used and gives an overview of the research design used. Next, the dominating components of EM are described and the EM theory development presented. Finally, the review will sum up with conclusions, limitations of recent development and recommendation for future research.

MATERIAL AND METHODS

The method applied to this research was a critical and comparative analysis of the existing published research results. The selection of the pool of papers which were included in the analysis was a multi-step process.

A comprehensive screening of the term “entrepreneurial mindset” was done in the databases of (i) ScienceDirect, (ii) Emerald Insight and (iii) Scopus. The screening applied four steps and resulted in four lists A-D (Figure 1).

The first screening led to List “A” which contained 712 papers. Limiting the search of the exact term to the abstract then reduced this list “B” to 233 articles. In further reduction, the search for the exact term was narrowed down to headlines and the key words “entrepreneurial mindset” outlined by authors for their articles as this assumes that the term is the central concept of their paper. List “B” then consisted of 38 papers only. In the next step, an initial review of the papers was done including the abstract and conclusions, the definitions provided and the area of interest. The area of interest evolved to be either in the conceptualisation of EM or in practical application in the field of education. While conceptualisation seeks to understand the concept *per se*, education is applying it to enhance the teaching of entrepreneurship. As the focus of this paper is the review of current literature on the concept of EM, its definition and related attributes, articles related to education were eliminated from the list as well as those which doubled across the databases. List “C” then consisted of 8 only articles. When reviewing these 8 papers, it emerged that the conceptualisation of EM seemed to have a cognitive-based perspective (Haynie, Shepherd, Mosakowski, & Earley, 2010; Mathisen & Arnulf, 2013; McGrath & MacMillan, 2000; McMullen & Kier, 2016; Shepherd, Patzelt, & Haynie, 2010), although some authors linked this cognitive view also to personal traits (Ashourizadeh, Chavoushi, & Schøtt, 2014; Davis, Hall, & Mayer, 2015; Dhliwayo & Van Vuuren, 2007; Ngek, 2012). However, no common overall understanding of the EM concept emerged across the initial articles and no overview of its attributes and associated qualities was given. Thus, further research was necessary. The 8 articles were then analysed for three criteria: (a) the key theory referenced for their conceptualisation, (b) references to other papers for EM attributes and (c) references to EM definitions. This approach led to additional 16 papers which were included into “D” list. Again, these 16 papers were analysed for the same 3 criteria leading to 3 more articles which were added. Additionally, the databases were scanned for those authors who seemed to be central in that research stream and their papers reviewed for the relevance to this

literature review. Through this, 3 more articles were added. In total, 22 papers were added to the initial 8.

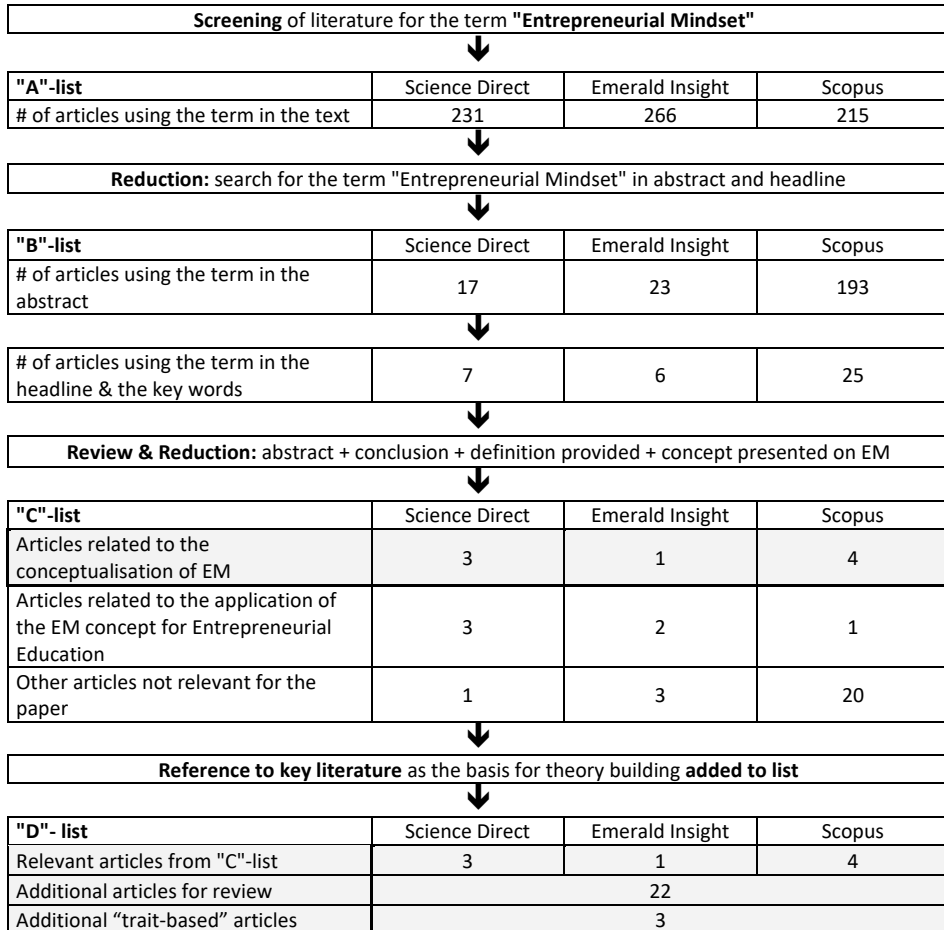


Figure 1. The process applied for literature review

Source: own study.

To provide a more comprehensive picture of the state-of-the-art, also 3 articles related to the entrepreneurial trait theory were included which were referenced by Palich and Bagby (1995) and Shaver and Scott (1991). The final list "D" consisted of 33 articles (Table 1).

The final list of 33 papers contained 3 articles not focusing on the entrepreneurial mindset but on the mindset per se (Gollwitzer, 1990; Gollwitzer, Heckhausen, & Steller, 1990; Gollwitzer & Kinney, 1989). As these papers formed a relevant basis for the conceptualisation of the entrepreneurial mindset later on by McMullen and Kier (2016) and Mathisen and Arnulf (2013), they were seen as important for the analysis of where we are today in the understanding of the EM concept.

Table 1. List “D” constituting the final pool of papers for review

Initial articles List “C” (8)	Criteria for additional articles for review for List “D”		
	Reference to key theory for own conceptualisation	Reference to EM attributes	Reference to EM definition
McMullen & Kier (2016)	Gollwitzer & Kinney (1989) Gollwitzer (1990) Gollwitzer <i>et al.</i> , (1990)	Baron (1998), Kirzner (1973), Haynie <i>et al.</i> , (2012)	Ireland <i>et al.</i> (2003)
Haynie <i>et al.</i> , (2010)	Shane & Venkataram (2000)	Shane (2000), Alvarez & Busenitz (2001), Busenitz & Barney (1997), Mitchell & Busenitz (2002)	McGrath & MacMillan (2000)
Mathisen & Arnulf (2013)	Gollwitzer (1990)	–	–
McGrath & MacMillan (2000)		–	–
Shepherd <i>et al.</i> , (2010)	Haynie & Shepherd (2007)	–	Haynie & Shepherd (2007)
Ashourizadeh (2014)		–	Ireland <i>et al.</i> , (2003)
Ngek (2012)	Dhliwayo & Van Vuuren (2007)	Simon <i>et al.</i> , (2000)	Dhliwayo & Van Vuuren (2007), McGrath & MacMillan (2000)
Davis <i>et al.</i> , (2016)	Gartner (1988)	–	–



Additional articles for review	7	8	1
Haynie <i>et al.</i> , (2010)		Haynie <i>et al.</i> , (2009)	–
Simon <i>et al.</i> , (2000)	Shaver & Scott (1991) Palich & Bagby (1995)	–	–
Authors added by further research	Mitchell <i>et al.</i> , (2007)	Baron (2006)	Baron (2014)
Additional articles for review	3	2	1
Sum additional articles for review added to initial 8	10	10	2
Shaver & Scott (1991) Palich & Bagby (1995)	Brockhaus (1980) McClelland (1961; 1987)	–	–
Additional articles “trait-based”	3	–	–

Source: own study.

FINDINGS AND DISCUSSION

Types of Papers

The review revealed several categories of papers. These papers were classified twofold to provide a precise overview of the state-of-the-art (Table 2). The first classification was the research stream. The review revealed two major sub-streams in EM research: the cognitive- and the trait-based approach. However, some scholars were also combining the two approaches, which will be referred to as “Combined”. The second classification was the types of papers in four different categories, depending on the overall goal of the study. Category one is the systematic review. These authors reviewed previous research papers, worked out the gaps in research and recommended areas for future research. Category two is conceptual. In these papers authors reviewed existing papers and built a new theory or framework onto it to close an existing gap in the literature. These papers were entirely theoretical and the concept was not tested therein. Category three is explanatory. The authors of these papers used surveys to explain the existing phenomena in the EM field empirically. They conducted quantitative research using self-reported questionnaires which measured opinions of participants with Likert scales. Category four is exploratory and also empirical. It is divided into experimental research design (E) and in-depth interviews (IDI). Scholars used experiments to explore behaviour of participants in a laboratory setting. Tasks conducted by the participants were observed and their behaviour interpreted. Based on the results, a model was developed. The in-depth interviews were conducted to get insights of the mindset of the participants and the results were also used for modelling.

In total, 17 of the papers were theoretical and 16 empirical. Among the empirical papers, 10 were explanatory and 6 were exploratory. 95% of the empirical papers engaged with participants a single point in time (SP). Only once there was explanatory research done with a longitudinal design (L) engaging with the same individuals (students) with a week of interval.

Samples Used in Empirical Research

An overview of the samples used helps to put the results of the publications into perspective. Table 3 presents the three target groups addressed in the three research areas. In the EM field of research, the main group focused on was students, followed by entrepreneurs, managers and adults. Managers were taken for comparison: Busenitz and Barney (1997) compared managers with 124 entrepreneurs with a business experience of 1.7 years on average to test differences in the use of heuristics and biases in their decision logic. Davis *et al.*, (2016) created an Entrepreneurial Mindset Profile measure in a three-step development process with different questionnaires comparing managers and entrepreneurs. McClelland (1961) investigated the traits that differentiate entrepreneurs from managers. Brockhaus (1980) compared entrepreneurs who founded a business with managers who changed between or within an organisation in the last 3 months.

Adults were chosen by Ashourizadeh *et al.*, (2014) in a survey in the Global Entrepreneurship Monitor to test whether confidence in innovation is positively influencing the intention to become an entrepreneur.

Table 2. Classification of papers

Approach	Systematic review	Conceptual	Explanatory	Exploratory
Cognitive-based (EM)	Gartner (1989) Mitchell <i>et al.</i> , (2007)	Kirzner (1973) Shaver & Scott (1991) Venkataram (1997) Baron (1998) Shane & Venkataram (2000) McGrath & MacMillan (2000) Alvarez & Busenitz (2001) Mitchell & Busenitz (2002) Ireland <i>et al.</i> , (2003) Baron (2006) Haynie <i>et al.</i> , (2010) Shepherd <i>et al.</i> , (2010) Baron (2014) McMullen & Kier (2016)	SP: Palich & Bagby (1995) Busenitz & Barney (1997) Haynie <i>et al.</i> , (2009) Mathisen & Arnulf (2009) L: Simon <i>et al.</i> , (2000)	E: Gollwitzer & Kinney (1989) Gollwitzer (1990) Gollwitzer <i>et al.</i> , (1990) Haynie & Shepherd (2007) Haynie <i>et al.</i> , (2012) IDI: Shane (2000)
Combined	–	Dhliwayo & Van Vuuren (2007)	Ashourizadeh (2014) Ngek (2015) Davis <i>et al.</i> , (2016)	–
Trait based	–	–	McClelland (1961; 1987) Brockhaus (1980)	–

Notes: SP: Single point in time, L: Longitudinal, E: Experimental research design, IDI: In-depth interviews.

Source: own study.

Table 3. Overview of target groups for explanatory and exploratory research

Approach	Students	Entrepreneurs	Managers	Adults
Cognitive-based (EM)	8	3	1	0
Explanatory	5	2	1	0
Exploratory	3	1	0	0
Combined	0	2	1	1
Explanatory	0	2	1	1
Exploratory	0	0	0	0
Traits	0	3	2	0
Explanatory	0	3	2	0
Exploratory	0	0	0	0

Source: own study.

Geographical Context of Empirical Studies

Looking at the geographical origin of the papers analysed in this review, 85% are published by American scholars. That means that EM ‘mainstream’ research takes mainly an Anglo-American perspective.

50% of the exploratory research papers are from the US, whereof only one scholar made use of interviews with entrepreneurs from start-ups (Shane, 2000) and the others relied on experiments with students. The only experiments carried out outside the US were carried out in Germany by Gollwitzer and Kinney (1898), Gollwitzer (1990) and

Table 4. Explanatory and exploratory studies on entrepreneurial mindset

Author	Focus of study	1. Sample, 2. Method, 3. Geographics	Conclusion(s)
E x p l a n a t o r y			
C o g n i t i v e - b a s e d E M			
Palich & Bagby (1995)	Deliberate whether the process of cognitive categorisation for disputable data is special for entrepreneurs.	1. 148 members of a business organisation 2. Quantitative, e-mail questionnaire 3. Not mentioned (assumed US)	Confirm cognitive categorisation of entrepreneurs: they access categories which propose more favourable attributes and thus present opportunities instead of risk.
Busenitz & Barney (1997)	Find out how entrepreneurs and managers of large organisations differ in their decision-making processes.	1. 124 entrepreneurs average time since founding 1.7 years, managers 2. Quantitative, questionnaire 3. Not mentioned (assumed US)	Entrepreneurs are not risk-takers per se, they might perceive the risk in a situation differently based on the heuristics they use.
Simon, Houghton & Aquino (2000)	Understand the influences on risk perception. Relationship between risk perception and decision to start a new venture. Determine the influence of cognitive biases on the perceived risk level.	1. 191 Master students 2. Longitudinal with 2 tests with a week in between using a survey with 10 questions 3. US	It could not be proved that overconfidence influences risk perception but statistical significance was shown for illusion of control and law of small numbers - both lowered risk perception. However the mediator role of risk perception in the decision to start a venture only partially proven.
Haynie & Shepherd (2009)	Development of a measure of cognitive adaptability to be used in entrepreneurial context.	1. 432 undergraduate business students 2. Survey with 54 questions on a 11-point scale 3. US	Cognitive adaptability important in entrepreneurial context Developed a 36-item Measure of Adaptive Cognition.
Mathisen & Arnulf (2013)	Make contribution to individual level capability theory.	1. 242 undergraduate students with average work experience of 4.6 years 2. Quantitative: 16-item scale to measure 2 entrepreneurial mindsets 3. Norway	Entrepreneurial mindsets differ depending on the state the individual is in: elaborative and implemental. Two mindsets lead to differing decision-making capabilities.
C o m b i n e d			
Ashourizadeh, Chavoushi	Proof that confidence in innovation (CI) is a major component of EM which positively influences the	1. 384,444 adults 2. Quantitative: Survey in the Global Entrepreneurship Monitor 3. 71 societies included in the GEM	CI is part of EM. It is linked to other factors, here traits like risk-propensity and self-efficacy. Culture influences the CI, which affects the intention to become an entrepreneur.

Ngek (2012)	Assessing the level of EM in the Bloemfontain area in South Africa through measuring EM with the 5 characteristic stipulated by McGrath and MacMillan (2000).	<ol style="list-style-type: none"> 86 entrepreneurs in the SME sector Quantitative: self-administered questionnaire South Africa 	Supports the link between traits as creativity, motivation and risk-propensity to the characteristics of EM as proposed by McGrath and MacMillan (2000). EM can be increased through entrepreneurial education to lower the failure rate of new ventures.
Davis, Hall & Mayer (2014)	Develop a measure of EM (EM Profile) and provide implications for practitioners.	<ol style="list-style-type: none"> Managers (300) and entrepreneurs (725) plus 1,872 unspecified Quantitative, online: Version A 118 items on 14-scales, Version B 115 items on 14-scales, Version C 72 items on 14-scale Tampa- St. Petersburg 	EMP measure that makes up 7 dimensions each on traits and skills, whereas traits have a stronger effect on entrepreneurial status. Men and women scored differently on the dimensions. In relation to Big Five traits, Openness to Experience had the strongest association with the EMP scales, Extraversion the weakest.
T r a i t s			
McClelland (1961)	What differentiates entrepreneurs from non-entrepreneurs in their need for achievement.	<ol style="list-style-type: none"> Middle level managers US, Turkey, Italy, Poland, India 	Need for achievement is related to moderate risk taking - people who have a high need prefer working on challenges with moderate risk. Need for achievement also related to preference of responsibility. Points at causal relationship between the need for achievement and entrepreneurial success.
McClelland (1967)	Characteristics of successful entrepreneurs.	<ol style="list-style-type: none"> 24 owners of small business people (12 successful, 12 average) India, Malawi, Ecuador 	No specialty identified for successful entrepreneurs characteristics like self-confidence, expertise, persuasion, persistence.
Brockhaus (1980)	Comparison of risk taking propensity between entrepreneurs and managers.	<p>S: 3 groups: 1. Started own business in the last 3 months; 2. Managers who changed organisation within last 3 months; 3. Managers who changed within organisation within the last 3 months</p> <p>M: quantitative, questionnaire</p> <p>G: US</p>	It could not be sufficiently proved that this characteristic is special for entrepreneurs.

Author	Focus of study	1. Sample, 2. Method, 3. Geographics	Conclusion(s)
Exploratory			
Cognitive-based EM			
Gollwitzer & Kinney (1989)	Effects on illusion of control by different mindsets.	1. A. 64 male students, B. 61 female students 2. Experiment 3. Munich, Germany	Mindsets affect cognitive functioning, the more determined individuals are in implementation (thus being in implemental mindset), the more illusionary judgement of control.
Gollwitzer, Heckhausen, & Steller (1990)	Explore whether mindsets are cognitively tuned to the task at hand.	1. A. 97 male students, B. 69 male students 2. Experiment 3. A. Bochum, B. Munich, both Germany	Congruence between mindset and thought production (cognitive process) to solve a task at hand efficiently.
Gollwitzer (1990)	Explore the characteristics of mindsets in each of the action phases.	Refers to experiments in previous works, e.g. Gollwitzer & Kinney 1989.	Goal oriented behaviour is not the same in each of the phases and thus mindsets. Every phase has own principles. There is a clear distinction between mindsets in goal setting and goal striving.
Haynie, Shepherd, & Patzelt (2012)	Contributing to entrepreneurial decision-making literature; understanding the role of feedback on decision-making.	1. A. 217 undergraduate business students B. 73 experienced entrepreneurs 2. Laboratory experiment, 11-point-Likert scale 3. US	Inexperienced individuals who use meta-cognitive resources (knowledge and experience) process feedback more effectively. Meta-cognitive abilities represent an important factor for performance.
Haynie & Shepherd (2007)	Proof whether meta-cognitive awareness is a mean to process cognitive feedback more effectively.	1. 217 undergraduate business students 2. Laboratory experiment, 11-point-Likert scale two points in time, giving feedback in between 3. US	Cognitive ability is a vital component in the entrepreneurial context. It is positively influenced by metacognition. Higher cognitive ability leads to better performance. Metacognition can be improved through learning, thus having an effect on entrepreneurial performance.
Shane (2000)	Conceptual model that is based on the assumption that opportunities are related to knowledge available for individuals.	1. 8 entrepreneurs using the same technology base 2. Interviews 3. US	Prior knowledge is a mean to make sense of the world and support discovery and exploitation of opportunities. Individuals retrieve knowledge from their memory and apply it to the specific situation.

Source: own study.

Gollwitzer *et al.*, (1990). Even though these experiments were done with students to explore working of the mindset *per se*, they delivered a valuable basis for later research on the EM concept.

The details of the empirical studies included in this study have been provided in Table 4.

Definitions of Entrepreneurial Mindset

EM definitions existing in the literature are more or less similar to each other (Table 5). EM is seen as a way of adaptable thinking and decision-making in complex, uncertain and dynamic environments. McGrath and MacMillan (2000, p. 15) defined the entrepreneurial mindset as the “ability to rapidly sense, act, and mobilize, even under highly uncertain conditions”. According to them, entrepreneurs stay alert to new opportunities, but do not pursue all of them at the same time. Instead, they are aware of their scarce resources and strictly focus them on those projects which are aligned with their strategy and promise the highest return. Implementing these projects requires them to be adaptive to the evolving reality to ensure the best exploitation of opportunities. For this, they leverage their existing internal and external social networks (McGrath & MacMillan, 2000).

Ireland *et al.*, (2001, p. 968) explained EM as a “way of thinking” which creates (competitive) advantage out of the positive aspects of uncertainty. Meaning is created even in complex and equivocal situations through cognitive abilities. Ireland *et al.* did not limit EM to entrepreneurs, but extend it to managers and employees of established companies. Haynie and Shepherd (2007, p. 9) argued that EM is an outcome of meta-cognitive awareness as it is the “ability to adapt thinking process to a changing context and task demands”. In 2010 Shepherd *et al.*, (p. 62) further refined their definition and suggested that the “ability to rapidly sense, act, and mobilize” is a response to a decision made under uncertainty to exploit an opportunity.

Baron (2014) stressed the uniqueness that entrepreneurs create by the way they “think, reason, make decisions, plan and set goals”. They are able to connect apparently unrelated patterns through the use of their internal frameworks, which are shaped by experience, knowledge, heuristics and networks. The environments they are in make a different way of thinking necessary. When they translate their ideas into reality they do not use usual cause-and effect logics, but connect information in a different way (Baron, 2014).

McMullen and Kier (2016, p. 664) agree by stating that the EM is the “ability to identify and exploit opportunities without regard to the resources currently under their control”. However, they make an important distinction by arguing that EM is only working when entrepreneurs experience promotion focus. Promotion focus means that people strive for pleasure. In the area of entrepreneurs this could be the return of maximisation or achievements. Entrepreneurial actions and motives are focused on achieving that. Distinguished from that is prevention focus. Here, people focus on safety in order to avoid pain, or, in terms of entrepreneurs, financial losses (Higgins, 1997).

Davis *et al.*, (2016) stated that EM is a “constellation of motives, skills, and thought processes that distinguish entrepreneurs from nonentrepreneurs” (p. 2).

All definitions presented by the various authors emphasise that EM is strongly associated with thinking. Some extend it by acting and the uniqueness in which entrepreneurs leverage and link resources to exploit opportunities. Following these definitions it can be said that the current EM concept is based on a cognitive perspective.

Table 5. Definitions of entrepreneurial mindset (EM) in the literature

Author	Definition
McGrath & MacMillian (2000, p. 15)	“ability to sense, act, and mobilize under uncertain conditions”
Ireland, Hitt, & Sirmon (2001, p. 968)	“way of thinking about business that focuses on and captures benefits of uncertainty” “growth-oriented perspective through which individuals promote flexibility, creativity, continuous innovation, and renewal”
Haynie & Shepherd (2007, p. 9)	“ability to adapt thinking process to a changing context and task demands”
Dhliwayo & Van Vuuren (2007, p. 124)	“way of thinking and acting about business”
Shepherd, Patzelt, & Haynie (2010, p. 62)	“ability and willingness of individuals to rapidly sense, act, and mobilize in response to a judgmental decision under uncertainty about a possible opportunity for gain”
Baron (2014, p. 55)	“think, reason, make decisions, plan and set goals in relatively unique way”
Davis, Hall, & Mayer (2016, p. 2)	“constellation of motives, skills, and thought processes that distinguish entrepreneurs from nonentrepreneurs”
McMullen & Kier (2016, p. 664)	“ability to identify and exploit opportunities without regard to the resources currently under their control”, only working when entrepreneurs experience promotion focus

Source: own study.

Attributes Influencing Entrepreneurial Mindset

In a textual analysis of the cognitive-based papers a list of EM attributes and their associated qualities emerged. An attribute is herein defined as an internal characteristic which shapes EM. The different attributes make up the building blocks of the overall EM concept. Associated qualities are the exhibited human behaviour of these attributes.

Overall, seven attributes and associated qualities evolved (Table 6).

Five attributes refer to cognitive processes which have a direct effect on the exhibited human behaviour and can be observed from the outside. These five will be referred to as core attributes of EM. The other two require higher levels of self-awareness and are more hidden. They are less exhibited in behaviour and therefore harder to recognize from the outside. These two will be referred to as meta-cognitive attributes of EM.

The first attribute of EM is the **cognitive tuning and goal orientation** of the mindset. A key characteristic of the mindset is that it changes over time depending on the activity an individual is in. The mindset influences individuals' cognition for that activity (Gollwitzer, 1990). This individuals' cognition is tuned towards that activity to ensure that the task at hand is done most effectively. Mindsets and cognitive processes are thus congruent (Gollwitzer *et al.*, 1990). Entrepreneurial mindsets have been differentiated into a deliberative (elaborative) and implemental mindset (Mathisen & Arnulf, 2013; McMullen & Kier, 2016). The deliberative mindset is impartial and open-minded. Individuals in this mindset evaluate the positive and negative effects of a decision to be taken and the desired goal in regards to its feasibility and desirability. In this mindset goals are set. In the implemental mindset individuals are striving towards goal achievement and process

Table 6. Attributes and associated qualities influencing EM

No.	Attribute	Associated qualities
1	Cognitive tuning and goal orientation	- Thinking is tuned to the mindset at work - Ensure high effectiveness to solve a task at hand - Differentiates between cautious and eager goal-setting and goal-striving
2	Heuristic-based decision logic	- Fast decision-making based on heuristics and biases - Effective and efficient under high complexity and uncertainty
3	Alertness	- Sudden insights of value - Attentiveness
4	Prior knowledge	- Abstract knowledge to combine and use existing but disparate resources - Influenced by experience, education, knowledge
5	Social interaction	- Access to disparate information across the own social network
6	Meta-cognition	- Reflection about own thinking process - Flexibility to use different strategies to solve a task dependent on the situation
7	Cognitive adaptability	- Depends on meta-cognitive experience and knowledge and can be improved by developing meta-cognition - Facilitates efficiency - Being flexible and self-regulating in uncertain situations

Source: own study.

information related to where, how and when the goal is implemented. The decision is made and they act on it. This leads to a more partial and closed mindset (Mathisen & Arnulf, 2013). The more determined individuals are in this implemental mindset, the more illusionary their judgment of control is (Gollwitzer & Kinney, 1989). The goal orientation of both mindsets thus differs between goal setting (deliberative) and goal striving (implemental). McMullen and Kier (2016) broke down the goal orientation of both mindsets even more, into eager and cautious goal setting (deliberative) and striving (implemental). A cautious deliberative mindset avoids risk, whereas an eager deliberative mindset sets goals to maximise returns. A cautious implemental mindset is trying to minimise threats during implementation by doing contingency planning and net wealth framing in a cost-benefit analysis. An eager implemental mindset is strongly related to entrepreneurial activities. In this mindset entrepreneurs are particularly alert to opportunities. However, they also risk being locked in the situation and escalate their commitment due to their cognitive tuning to implementation, their illusion of control and too optimistic evaluation of the situation. They look for opportunities to maximise their goals and use gain-loss framing in a cost-benefit analysis. Their focus on promotion (for example profit maximisation) postpones a decision to stop pursuing the implementation even though it may lead to a dead-end. The adaptability of an entrepreneurial mindset is thus reduced when escalation of commitment occurs (McMullen & Kier, 2016).

The second attribute is the **heuristic-based decision-logic**. The use of heuristics and biases is particularly effective and efficient in situations with high complexity and uncertainty. Entrepreneurs are facing both when making a decision. They need to make decisions quickly to use their window of opportunity and to encourage their stakeholders to trust them (Busenitz & Barney, 1997). Beside complexity and uncertainty comes strong emotion and also time pressure, leading them more often to reach their cognitive limits. Due to that, entrepreneurs are prone to make use of heuristics and biases which are based

on their beliefs and experiences to cope with complexity and to ensure fast decision-making (Baron, 1998). A heuristic often used by entrepreneurs is representativeness (Busenitz & Barney, 1997). Representativeness is the willingness to generalise from small samples. Individuals tend to draw conclusions from few observations about people or of a situation and infer that this represents the reality (Kahnemann, 2013, p. 114).

As individuals experience situations differently, they make different decisions. The heuristic-based decision-logic of entrepreneurs is hard to imitate and thus often a source for competitive advantage (Alvarez & Busenitz, 2001). Due to cognitive limitations of information processing, individuals are no rational decision-makers. This is even more relevant for entrepreneurs when faced with novel and uncertain situations without having the full information. Beside heuristics, entrepreneurs make use of biases to cope with complexity and to make decisions (Baron, 1998, 2014). Baron (1998, 2014) gave examples of typical biases used by entrepreneurs: entrepreneurs tend to pay the highest attention to information which confirms their own beliefs and experiences and avoid accepting information which challenges their belief (confirmation bias). They often accredit positive outcome to their talents and strengths and negative outcomes to external developments or facts (self-serving bias). Entrepreneurs often expect more positive results which would be rationally reasonable (optimistic bias). Their fast thinking enhances their risk-taking even though they might not perceive it as a risk (fast thinking effect). And, they are prone to get trapped in a situation when a decision is made (sunk cost). Another bias often used is overconfidence, which is the exaggerated opinion that one has fully understood a situation or behaviour of a person and starts acting on it without having all the information available. The principles are understood and a decision can be made. The inclusion of new information is delayed (Busenitz & Barney, 1997).

The third attribute is **alertness**. It can be traced back to Kirzner (1973) who discussed that it is not the possession of knowledge that leads to the identification of opportunities, but the alertness to the information. Alvarez and Busenitz (2001) conceptualise alertness as sudden insights or recognition of value of a product or service, and Ireland *et al.* (2003) as the ability to identify value unexpectedly. It is the “attentiveness to new opportunities” (Mitchell *et al.*, 2002, p. 7). Alertness was also an important component in the pattern recognition model developed by Baron (2006). He defined alertness as the capacity to recognize opportunities when they emerge. Due to Baron (2006), this alertness is partly a cognitive ability, influenced by personal capabilities like intelligence and creativity. Beside alertness there is active, systematic search for information. Baron argued that active search is less necessary when alertness is very high. He theorised whether alertness would be higher for habitual entrepreneurs than for those creating a company for the first time. The growth of alertness capacity was also signalled by Žur (2015), as with time, experience and entrepreneurial learning processes the entrepreneur moves to higher levels of awareness and accuracy in opportunity identification (Wach, 2015).

The fourth attribute is **prior knowledge**. Prior knowledge is the combination of work experience, personal events and education (Shane, 2000), as well as social networks (Baron, 2006). As a result of these different sources, knowledge is created. All individuals possess different knowledge as they have access to different information and have different experiences in their life. They have accumulated that knowledge in a particular knowledge corridor which is specific to their circumstances (Shane & Venkataraman,

2000; Venkataraman, 1997). Baron (2014) specifies further that the long-term memory is factual or personal (explicit) knowledge and that it differs from the procedural memory, which is expertise. The rapid access to this procedural memory is outside individuals' conscious awareness and makes them often unable to explain the source of this information. It is therefore also called intuition or tacit knowledge. Alvarez and Busenitz (2001) state that this explicit and tacit knowledge is an abstract knowledge about how to combine and use existing but disparate resources.

The fifth attribute of EM is **social interaction** or social capital. Social capital is created through cooperative trustful relationships with stakeholders and experience. Developing trustful relationships must also be seen as an investment as it requires time, energy and financial means. Particularly in uncertain and complex situations social capital is a differentiating factor for entrepreneurs (Venkataraman, 1997). It is also through these social interactions that entrepreneurs can access disparate information, make connections and see patterns evolve (Baron, 2006). They are able to leverage their networks and make use of the resources involved in unique and hard-to-imitate ways (Alvarez & Busenitz, 2001).

The above explained five core attributes of EM. They all share a common characteristic: the effect of their respective cognitive processes translates into recognizable and observable behaviour. The following two meta-cognitive attributes of EM are more hidden. They need a higher level of self-awareness and eventually, development over time through feedback and learning cycles. The strength of these two attributes then impacts the other five as well.

The first meta-cognitive attribute is the **metacognition** itself. Metacognition is the "thinking about thinking" (Flavell 1979, 1987; Haynie *et al.*, 2010) and applying different strategies depending on the context and task. According to Haynie *et al.*, (2012), entrepreneurs differ in their thinking and acting from non-entrepreneurs through their different meta-cognitive abilities and interpretation of the environment. As the environment and internal motivation of every individual is different, everyone develops different strategies in different situations. By reflecting on their own thinking process prior to decision-making, entrepreneurs can adapt their cognition and consequently their actions.

The second meta-cognitive attribute is **cognitive adaptability**, which is a result of the meta-cognitive thinking process (Haynie & Shepherd, 2009). Cognitive adaptability is the "ability to be dynamic, flexible, and self-regulating in one's cognitions given dynamic and uncertain task environment" (Haynie, Shepherd, Mosakowski, & Earley, 2010, p. 218). It depends first on the individuals' meta-cognitive awareness (awareness about own thought process) and second on meta-cognitive resources consisting of meta-cognitive knowledge (about people, task and cognitive strategies) and meta-cognitive experience (memories, emotions about former, similar tasks). The higher the uncertainty in a situation is, the higher the awareness is, and the more strategies will be applied in the thought process (e.g. scenario planning, brainstorming). The higher the meta-cognitive awareness, the more it is necessary to use meta-cognitive resources. Individuals who use meta-cognitive resources process environmental feedback more effectively and can adapt their decision-making accordingly. Particularly for inexperienced entrepreneurs meta-cognitive abilities are important for their performance as they can counter-balance the lack of experience in the field.

The discussed definitions, attributes and their associated qualities reveal that state-of-the-art research of the EM concept is based on a cognitive perspective. For

that reason, this research stream is referred to as cognitive-based in this paper. Looking at the list of attributes and qualities, the authors of this stream seek to explain **why** entrepreneurs decide and act in a specific way.

Based on the literature review, Figure 2 provides an overview of how the seven attributes of EM link together.

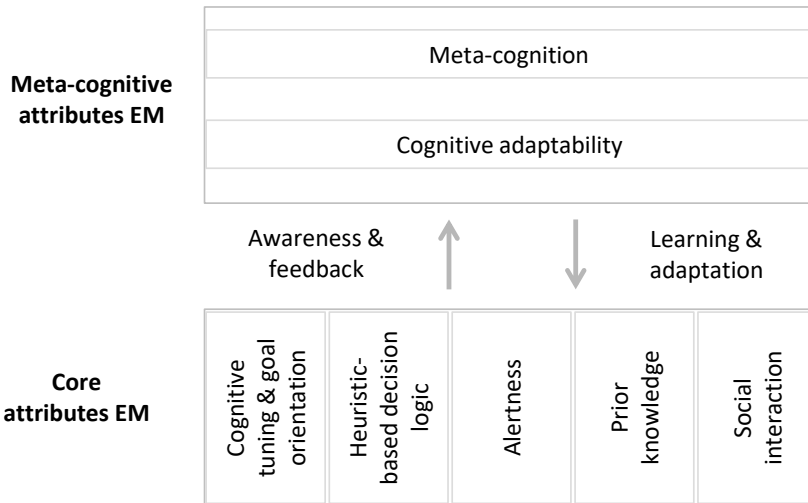


Figure 2. Linkage of the EM attributes based on the Literature Review

Source: own study.

The meta-cognitive attributes of EM relate to thinking-about-thinking. They determine how an individual approaches a task. Depending on the level of the individuals’ meta-cognitive awareness, the awareness of own cognitive processes exists and feedback can be processed effectively. Depending on the level of the individuals’ cognitive adaptability, influenced by the mindset which is in it, learning is applied and cognitive processes and thus exhibited behaviour adapted.

The EM Concept Development and Limitations

The approach to answer the question of why entrepreneurs are able to detect and exploit opportunities better than others started by the end of the 1980s when scholars coming from the behavioural science background entered the field of entrepreneurship. According to Gartner (1989), entrepreneurs seemed to be very heterogeneous. And Shaver and Scott (1991) stipulated it is the psychological process of a person in a specific situation and the choices involved which determine who becomes a successful entrepreneur.

Based on the literature review, Figure 3 provides an overview of the development of the cognitive-based approach since then and puts the research done on particular EM attributes in the perspective with the classification of the papers (see also Table 2).

Figure 3 shows that the research field of the EM concept is widely spread over the last decades. Scholars investigated especially the particular attributes, but did not put the pieces together to a commonly shared concept of EM.

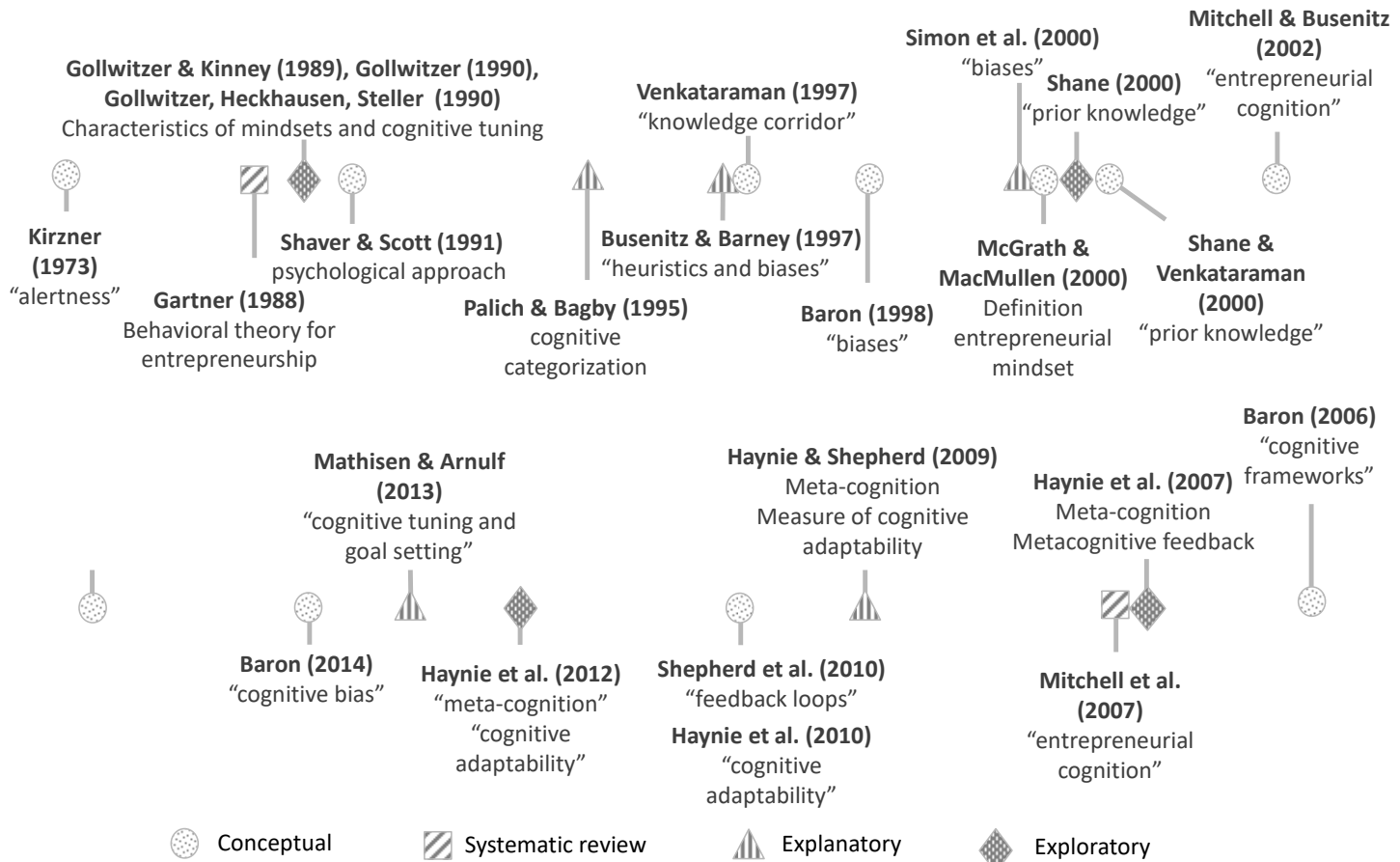


Figure 3. Development of the cognitive research stream

Source: own study.

Despite the research done, there are still areas which remain under-addressed. First, the research design and samples chosen by authors pursuing explanatory and exploratory research only once made use of in-depth interviews with eight entrepreneurs (Shane, 2000). Taking into account the “law of small numbers” (Kahnemann, 2013), this is not a representative sample. More qualitative research could provide an in-depth understanding of the EM attributes and the interactions between the EM attributes and their associated qualities. Qualitative studies can better explore the circumstances out of which these attributes arise and specifically how the core and meta-cognitive attributes influence each other. Qualitative interviews could help to put entrepreneurs’ behaviour in the perspective of their environment. For example, it would be interesting to see whether the attributes are differently exhibited for novice or habitual entrepreneurs, for entrepreneurs in different industries or in different phases of the business lifecycle. This would also address the limitation of the samples used in previous papers where for two out of three times students were taken to explain entrepreneurial behaviour. Although more qualitative research could deliver more in-depth insights into the EM concept, this research design also has its drawbacks in this context. The concept of EM is cognitive-based and the specifics of an EM depend largely on the personal situation of an entrepreneur. Along with the fact that due to the intensity of the in-depth interviews only small samples can be used, the results are hardly generalisable. Furthermore, interviewees might be biased. They might want to prove that they are special. Hence, the interviewer must be well trained and the aim of the interview not transparently communicated. These limitations to in-depth interviews might be as well the cause why it was done only once in the past. However, this should not be the reason to shy away from qualitative research. Future research can also use in-depth interviews to develop theories and then test them in a quantitative research design.

The second limitation of previous papers is the limited timeframe used by scholars. Only once was a longitudinal design used. Considering the definition by McGrath and MacMillan (2000) about the adaptability of the mindset, it is surprising how under-studied this adaptability actually is. Additionally, having only one week in between two experiments is not enough to observe a shift in the mindset. It would be interesting to see whether EM changes over the course of three months to three years with the same sample of entrepreneurs. Three months are a long time in the start-up environment, but it would be interesting to see how the mindset of founders changes over even a longer period of time. Alternatively, this exploration can be done with entrepreneurs who are in different stages of the business lifecycle. Future research might investigate more how EM evolves to understand the dynamics of it. It is important to understand if EM changes over time and whether this development is homogenous across different groups of entrepreneurs. In this regard, it would be interesting to understand the antecedents which shape the rise of EM. This knowledge would also be of importance for the entrepreneurial education.

The third area which remains under-addressed by past papers also represents the main limitation to this study. The databases used are mainly for English texts leading to a strong Anglo-American perspective on the state-of-art in the EM research. National databases which include native language texts, for example in the national libraries of Poland, China or Germany may include other and different research performed on the topic. The papers reviewed had also a strong focus on the US. Future

research could therefore investigate EM in other cultures or with people from other cultural backgrounds to validate the existing findings.

The Linkage of the EM Concept to Other Research Areas

Based on the literature review, it appears that the EM concept is also linked to mainly four other areas of research (Figure 4).

The combined approach which links the entrepreneurial trait theory and the EM concept. Scholars in this field base their research on the assumption that personal traits indirectly affect entrepreneurial outcomes through mediators. In the past, typical traits analysed was the need for achievement (McClelland, 1961), assertiveness (McClelland, 1987) and risk taking propensity (Brockhaus, 1980). Davis *et al.*, (2015) used the Five-Factor-Model (FFM) which describes the five personality dimensions as the basis, and specific traits in each of the dimensions to analyse the link between personality characteristics and entrepreneurial outcomes. They proposed the 'Entrepreneurial Mindset Profile' (EMP) in which traits and skills are measured. They distinguish between the two as they argue that entrepreneurial intention is coming from personality but individuals are good entrepreneurs because of their skills. While skills can be improved through training, traits are part of personality. The authors' explanatory research concluded that traits have a stronger effect on entrepreneurial status. In relation to the five personality dimensions, Openness to Experience had the strongest association with the EMP scales and Extraversion had the weakest. Also Ashourizadeh *et al.*, (2014) provided a similar perspective, stating that the intention to become an entrepreneur is promoted by EM. They studied the effect of confidence in innovation (CI), perceived as a component of EM, on the intention to become an entrepreneur, but also included traits (like risk taking propensity) into their model. They concluded that CI is influenced by culture and gender and ultimately affects intention.

The use of mediators in the combined approach provides an interesting avenue as it could explain why previous research in the trait-based approach, where only direct links were tested, provided so unconvincing results (Busenitz & Barney, 1997; Gartner, 1989; Shaver & Scott, 1991). However, more empirical studies would be required to identify the relevant mediators.

Second, EM was linked to the resource-based theory (RBT). The resource-based theory assumes that companies analyse and focus their core competencies and capabilities (resources) to the exploitation of identified market opportunities in order to achieve competitive advantage (Thompson & Martin, 2005). The combination of resources is different among companies. They can be tangible or intangible. Rare resources are a source for developing a competitive advantage (Ireland, Hitt, & Sirmon, 2003). Alvarez and Busenitz (2001) investigated the relationship between entrepreneurship and the RBT and argued that the entrepreneurial recognition of opportunities is a resource in itself. They stated that if entrepreneurs possess a "unique mindset" with specific cognitive processes this would form a source for competitive advantage. The cognitive abilities of entrepreneurs help them to identify opportunities and organise resources for the firm. Understanding the antecedents of EM and further investigation of the link to the RBT could strengthen that strategic resource for a company.

Third, EM was included as an important aspect of strategic entrepreneurship. Ireland *et al.*, (2003) explain strategic entrepreneurship as a construct which seeks to support small and medium-sized companies and large firms to build competitive advantage and thus wealth. Their model combines the overlapping elements of entrepreneurship and strategic management and includes the aspects of the RBT beside organisational learning, EM and entrepreneurial leadership to develop a competitive advantage for the firm. Again,

understanding how the attributes of EM arise and can be shaped would be an important element in this research area as EM is a critical element of the model.

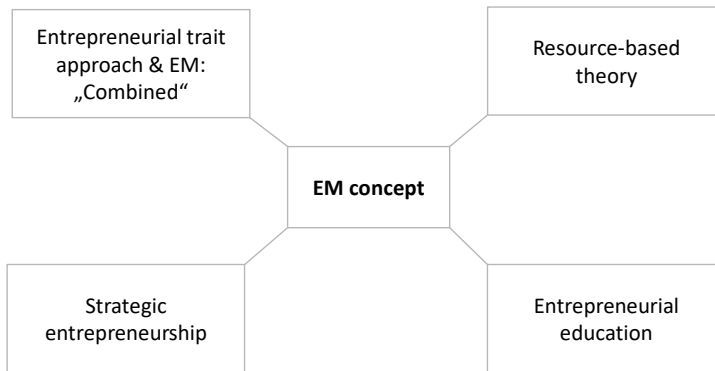


Figure 4. Linkages of the EM concept to other streams of research

Source: own study.

Fourth, EM has been related to entrepreneurial education. Wach and Wojciechowski (2016) emphasised that EM is influencing entrepreneurial intentions. Thus, crafting EM already in the education system is of utmost importance. Ngek (2012) assessed the relationship between entrepreneurial education and the factors shaping EM. He argued that factors like creativity, motivation and risk-propensity, when properly supported by education, could shape EM. Entrepreneurial education would be relevant for founders of new ventures, corporate businesses and students. Given the dynamics and complexities, as well as the speed in which disruptions of industries happen in today's business environment, an understanding of the overall EM concept and its driving factors can enable more effective entrepreneurial education. The link to this research stream seems to offer one of the best avenues for future research as it can contribute to the other research areas given here as well. Developing an EM through effective entrepreneurial education already in school could enhance the adaptability of individuals' mindset in a fast-changing world later on. Strengthening it before and during the foundation of a new business can reduce the high failure rates of start-ups. Shaping EM in a corporate environment can improve adaptability and the building of strategic resources in the sense of the RBT in order to exploit new opportunities and cope with the high dynamics of the business world.

CONCLUSIONS

The aim of this paper was to provide an overview of the state-of-the-art of the EM concept. The synthetic literature review identified several types of papers based on two driving criteria: sub-stream of EM research and the main goal of the study. The review led to identifying a list of attributes and associated qualities of EM, which are described in detail in this study. It highlighted the differentiation between the core attributes of EM and the meta-cognitive attributes of EM. While core attributes are easier to recognize through exhibited behaviour, meta-cognitive attributes are more hidden and require a higher level of self-awareness. The literature review provided an overview of the development of the EM concept and worked

out that currently no commonly shared concept of EM exists. Instead, scholars have investigated especially on the particular attributes. By connecting them and outlining the development of the EM concept until this date, the paper presents where we are today.

An important step in the research of EM would be to focus next on the antecedents and the dynamics of EM. The understanding of what creates and shapes EM would then contribute largely to the entrepreneurial education. An effective education would then positively impact other areas like strategic entrepreneurship or the RBT.

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How Can Blockchain Technology Disrupt the Existing Business Models?

Witold Nowiński, Miklós Kozma

ABSTRACT

Objective: The main purpose of the paper is to show that blockchain technology may disrupt the existing business models and to explore how this may occur.

Research Design & Methods: This is a theory development paper which relies on a literature review and desk re-search. The discussion of the reviewed sources leads to the formulation of three re-search propositions.

Findings: The paper provides a short overview of key literature on business models and business model innovation, indicating, among others, that new technologies may be one of the drivers of business model innovation. This study also provides an overview of blockchain technology and a range of its business applications showing how it can disrupt business models. It is shown that blockchain technology may affect many dimensions of business models. We propose that there are three crucial ways in which blockchain technology can affect and disrupt business models: by authenticating traded goods, via disintermediation and via lowering transaction costs.

Implications & Recommendations: This study shows that blockchain technology may affect diverse dimensions of business models in diverse industries. It is recommended that managers should follow developments in this field in order to prepare for possible disruptions in their industries.

Contribution & Value Added: This study provides an analysis of the possible impact of blockchain technology on business model innovation. Blockchain technology is gaining momentum with more and more diverse applications, as well as increasing numbers of actors involved in its applications. This paper contributes to our understanding of the possible applications of blockchain technology to businesses, and in particular to its impact on business models.

Article type: research paper

Keywords: blockchain; business models; innovation; technology; sharing economy

JEL codes: L10, L11, L14, L86, O33

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INTRODUCTION

Blockchain is a novel technology rooted in cryptography which has been popularised by the seminal work of Nakamoto (2008) who showed how this technology can be applied to develop a cryptocurrency (bitcoin). Generally speaking, blockchain makes up a distributed ledger, the control of which may be dispersed among different computers in the network, thus eliminating the need for trust towards a single administrator of such a ledger. In other words, blockchain is “a distributed database comprising records of transactions that are shared among participating parties” (Zhao, Fan, & Yan, 2016) or “just another type of database for recording transactions – one that is copied to all computers in a participating network” (Deloitte, 2016). One of its possible applications is a cryptocurrency which is “a chain of digital signatures” (Nakamoto, 2008, p. 2). Each transaction conducted with blockchain technology (for example with bitcoin) is registered, time stamped, and consecutively widely published with a unique symbol. Transactions are blocked, and described by a unique hash (alphanumeric string resulting from coding data with a cryptographic, so called hash function), a nonce (a number which is unique to the block) and by a hash from a previous block (see Figure 1 for a simplified scheme of a blockchain transaction). Therefore, an attempt to forge a block involves the need to forge preceding blocks. This makes the mechanism safe from attempts to change a transaction.

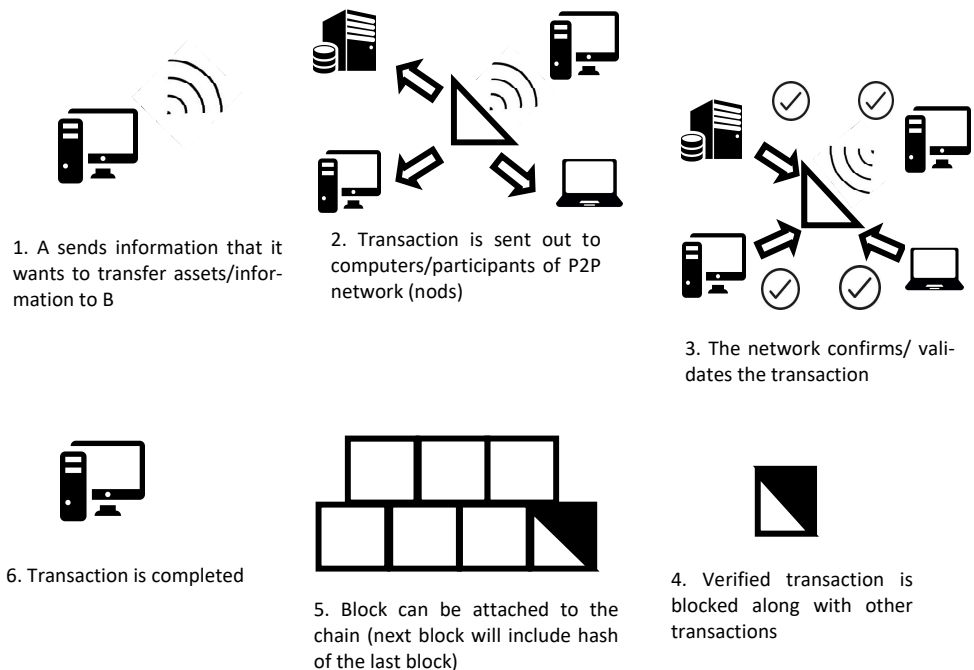


Figure 1. Simplified scheme of a blockchain transaction

Source: adapted model based on PWC (n.d.).

All in all, blockchain technology provides an alternative mechanism for authenticating assets used in the transaction, and thus can be regarded as an alternative to any centralised exchange system relying on a single institution, such as, for example, a central bank, a stock exchange or a clearing house. Blockchain technology substitutes for the trust which under the central exchange system stems from the role of these institutions. As a database which offers “data security, transparency and integrity, anti-tampering and anti-forgery, high efficiency, low cost” (Zhu & Zhou, 2016), it can be potentially applied in numerous business activities which involve data exchange and require security. Certain prominent authors, like Iansiti and Lakhani (2017) liken blockchain technology to TCP/IP protocol which allowed the development of the Internet as we know it. While this analogy also implies that it may still take many years for the technology to exercise its full impact on business, we can already observe this technology being implemented in diverse industries from finance to supply chains and the music industry.

The key purpose of this paper is to discuss how blockchain technology may contribute to disruption and innovation in business models. The interdisciplinary topic of business models has been taken up by researchers only relatively recently (Teece, 2010), although it has been frequently used by practitioners and consultants (DaSilva & Trkman, 2016) since the Internet Bubble. Googling this phrase yields over 30 million results, while googling “Strategic management” yields just over 15 million. The popularity of the term might stem from the fact that, as Casedusus-Masanell and Ricart (2010) argue, every company has a business model even if not every company has a strategy. Business models are inherently exposed to changes. These may stem partly from factors internal to the company and partly from external ones, such as changes in technology. The ability to use new technologies to create new innovative business models may be an important source of competitive advantage (Chesbrough, 2010; Baden-Fuller & Haefliger, 2013). Thus, it is important to understand how new technologies, such as blockchain, can affect business models.

The paper proceeds in the following way. After presenting our methodological approach, extant research on business models is reviewed with particular attention paid to business model innovation. Applications of blockchain technology are then analysed, mostly by means of reviewing extant professional reports and papers. Next, the impact of blockchain technology is discussed and some initial theoretical propositions are offered. Finally we summarise our findings, indicating their implications for theory and practice, as well as their limitations and avenues for future research.

MATERIAL AND METHODS

This is a conceptual paper which derives research propositions from literature review and desk research of current business press papers, professional reports, company web pages and blog commentaries concerning blockchain technology. We screened these secondary sources using a combination of two screening terms “blockchain” and “business”. This resulted in almost 7000 hits in Google Scholar, 348 in EBSCO, of which 19 were research papers, and 7 in Web of Science. As the primary purpose of the paper is to provide some tentative propositions explaining how blockchain technology can affect the existing business models and not to provide a comprehensive review of extant publications on blockchain technology in business, we cite these secondary sources selectively. Overall, we refer in this paper to 8 research papers, 4 industry reports by consulting companies, 2 company web

pages, 12 business press articles and 2 blog posts, although the actual number of sources which we have examined in the desk research was substantially higher than the number of the cited ones. Many of these sources, however, present similar perspectives and for this reason we cite only the most relevant for the case we are making in this paper.

Blockchain technology is quite recent and its business applications, other than bitcoin, even more recent. Therefore, we decided to use not only research papers but also reports prepared by professional consulting companies, blog entries and specialised magazines available online. All these sources were used in order to identify the business applications of blockchain technology and to identify the potential of this technology to disrupt the existing business models. The earliest source to which we refer is Nakamoto's paper from 2008. The sources which concern blockchain applications are from 2016 or 2017 as earlier papers on the topic are quite rare. It is important to keep in mind that as we intended to explore the consequences of blockchain for business models, we did not delve into technical details of blockchain technology as this is a matter of interest for cryptography and computer science, nor did we focus on sector specific details, for example those surrounding the financial and legal aspects of cryptocurrencies. Many of the research papers published so far on blockchain originate from computer science or banking and being highly technical were not regarded as relevant for the analysed relationship between blockchain and business models.

To conclude, the paper should be considered as a conceptual paper where literature review and desk research leads to the development of theoretical propositions.

LITERATURE REVIEW – BUSINESS MODELS

The review of the literature concerned with business model innovation must start with defining the concept of business models. The number of definitions of the term is quite large but so is their diversity (Zott, Amit, & Massa, 2011). One of the early definitions was provided by Osterwalder, Pigneur and Tucci (2005, p. 17) who defined it as:

“a conceptual tool that contains a set of elements and their relationships and allows expressing business logic of a specified firm... a description of the value company offers to one or several segments of customers and of the architecture of the firm and its network of partners for creating, marketing, and delivering this value and relationship capital, to generate profitable and sustainable revenue streams”.

The efforts to define a business model are progressing, although one could question whether a definite conclusion has been reached. A recent paper from Wirtz, Pistoia, Ullrich and Göttel (2016, p. 41) aimed to define the concept in an integrated manner as “a simplified and aggregated representation of the relevant activities of a company”. They distinguish three dimensions: strategic components, customer and market components and value creation components, each of which consists of partial models. The strategic components encompass: a strategic model, a resources model and a network model. Wirtz *et al.* (2016) define customer and market components as comprising three partial models: the customer model (defining target customers and distribution channels), the market offer model encompassing i.a. the value offering and last but not least, the revenue model. Lastly, value creation components involve a manufacturing model, a procurement model and a financial model which describes the approach to financing the venture as well as its cost structures. This is a very broad approach to the

concept of a business model, despite the fact that its authors indicate a tendency towards narrowing of the way in which the concept has been used over time.

While the description of the business model by Wirtz *et al.* (2016) is certainly complete and comprehensive, the inclusion of a strategic model as part of business models is disputable as strategy and business models, according to some scholars (DaSilva & Trkman, 2016), should not be mixed. In fact, DaSilva and Trkman (2016), instead of defining the business model concept, differentiate it from certain other terms, in particular strategy, with which it is at times confused. They indicate that a business model differs in important terms from strategy as, contrary to strategy, it is oriented towards short term consequences, while strategy is oriented towards long-term ones. The business model is therefore not an answer to strategic dilemmas but rather a description of “how the various elements of the business work together at a certain point in time” (DaSilva & Trkman, 2016, p. 386). It is a “reflection of the realized strategy” (Casadesus-Masanell & Ricart, 2010, p. 204), not a strategy itself. However, one cannot effectively use a business model concept for achieving competitive advantage unless a more dynamic approach is being used. For this reason, business practitioners are demanding and business consultants are offering solutions on business model innovation.

According to Gambardella and MacGahan (2010), “business model innovation occurs when a firm adopts a novel approach to commercializing its underlying assets”. Thus, business model innovation is linked to the resources, often intangible, which a company controls or at least which are available, whether internally or externally, to the company. Bucherer, Eisert and Gassmann (2012, p. 184) define business model innovation as “a process that deliberately changes the core elements of a firm and its business logic.” Analytical applications of the business model innovation concept involve analysis of the extent to which different constituents of business models are affected by the introduction of new technologies. Instances of such analysis involve 3D printing (Rayna & Striukova, 2016), bioscience innovations (Brink & Holmén, 2009) or cloud technologies (DaSilva, Trkman, Desouza, & Lindič, 2013). Overall, the literature indicates endogenous and exogenous sources of business model innovation. As for endogenous sources of business model innovation, they are related to the learning capabilities of the organisation (Sosna, Treviño-Rodríguez, & Velamuri, 2010), its strategic agility (Doz & Kosonen, 2010) and its organisational culture (Hock, Clauss, & Schulz, 2015).

Internal Drivers of Business Model Innovation

Sosna *et al.* (2010) describe the case of Naturhouse to argue that business model innovation is an outcome of organisational learning processes, where trial and error are indispensable parts of business model innovation. This case shows that if experimentation may be carried out on a relatively small scale then failures can be used as a source of learning for further changes in the business model, until a consensus on the version of the business model to be scaled up can be reached. It illustrates also the critical role of company leadership which, if committed to business model experimentation, may facilitate innovation processes.

Business model innovation was expected to result from certain dynamic capabilities, such as strategic sensitivity, leadership unity and resource fluidity (Doz & Kosonen, 2010). Empirical research has confirmed that two of these, strategic sensitivity and resource fluidity, indeed increase the propensity for business model innovation (Hock *et al.*, 2015).

Strategic sensitivity according to Doz and Kosonen (2010) encompasses the ability to forecast how future products might be used, the ability to experiment with new business models, top management's ability to distance itself from daily operations and use networks to get an outsider perspective on business, the ability to distinguish between generalisable and contextual aspects of their business model, and finally the ability to imagine new business models. In turn, resource fluidity encompasses: flexibility which can be achieved through increased autonomy accompanied by coordination, the modularisation of underlying business processes and IT systems, structural flexibility accomplished by dissociating business processes from business group structures, the simultaneous operation of alternative business models and finally, grafting new ideas from acquired businesses (Doz & Kosonen, 2010).

As mentioned above, according to a recent study by Hock *et al.* (2015) based on a sample of over 300 companies, strategic sensitivity and resource fluidity increase the propensity to innovate business models. The same study indicates that they are positively affected by novelty-oriented cultural values, such as innovativeness and flexibility, openness of internal communication and inter-functional communication but not by efficiency-oriented cultural values such as quality, success and speed.

External Drivers of Business Model Innovation

Teece (2010) explains that technology changes often lead to changes in business model. He provides examples of such changes both in traditional industries, such as 19th century meat packing, and in contemporary times where the introduction of the Internet has led to major changes in how the newspaper and music industries, among many others, operate. Teece (2010) indicates that technology changes affect both the value delivery aspects of business models, with the Internet being here a major driver, and the supply, and consequently the cost aspects of business models, the Cloud being an example of such a technological driver.

Baden-Fuller and Haefliger (2013) explore the link between business model innovation and technical innovation along four dimensions: customer identification, customer engagement, value delivery, and monetisation. They indicate that technological innovations have facilitated the development of two-sided platforms where the user of value can be distinguished from the customer who pays for delivering this value (such as an advertiser). The development of new technologies, such as the Internet, has allowed companies to offer the same product in various ways and also to monetise the delivered value in different ways, either through outright sales, advertising or a freemium model¹. Online technology may allow companies to apply different levels of customer and business partner engagement which in turn lead to business model choices. Baden-Fuller and Haefliger (2013) mention in this context an example of a t-shirt manufacturer who capitalised on the new stitching technologies and the Internet in order to offer individually designed t-shirts. This manufacturer engaged customers, allowed them to design t-shirts and developed a model under which they would receive royalties from their designs being sold to other customers.

An important conclusion stemming from their analysis is that in the link between new technology development and business success, business models can be regarded as crucial moderators which explain why an innovative technology may lead to either success or failure.

¹ This is a model under which a combination of two products or services is offered, where one is offered for free while the complementary one is sold (Pujol, 2010).

However, innovative technologies may also be the primary driver of changes in business models. As Rayna and Striukova (2016) argue, 3D printing may facilitate downstream and upstream changes in vertical value chains where design companies may move into manufacturing, while typical manufacturing companies may transfer the manufacturing function to customers and focus on design. 3D printing also allows companies to experiment with new business models, something found to be crucial for business model innovation in previous studies (Sosna *et al.*, 2010; Doz & Kosonen, 2010). Rayna and Striukova (2013) provide an example of Hasbro which enabled grown-up fans of the 'My Little Pony' show to design and obtain colour figurines through the Shapeways platform. Their initial model involved customers in designing and even pricing the figurines. It was also highly adaptive as it could be easily closed down in case of failure, but also scaled-up and extended, should Hasbro decide that it wants to extend it to mass production.

Blockchain Technology and its Potential to Change Business Models

While the primary use of this technology has hitherto been in the creation of virtual currencies, such as bitcoin, blockchain technology offers broader opportunities, including any transactions requiring authentication. Such opportunities appear in public administration and supply chains, particularly those involving valuable and forging-sensitive products (pharmaceuticals, luxury products). Zhao *et al.* (2016) speak of three generations of blockchains, where blockchain 1.0 refers to digital currency, Blockchain 2.0 to digital finance, and Blockchain 3.0 to digital society.

The original application of blockchain technology is in cryptocurrencies. The best known type, though not the only one, is bitcoin. It was introduced in 2009, trading initially for pennies, to reach 1 USD by early 2011, jumped to 30 USD in mid-2011, going down to around 8 USD in the second half of 2011 and rising sharply to 290 USD in 2015 (Luther, 2016a) and in the range of 800-1070 USD in the first month of 2017 (Coinbase, Inc., 2017). Luther (2016a) argues that the future of blockchain technology in digital payments is bright. On the one hand, we can observe a rise in the share of electronic transactions, and on the other hand, blockchain technology is less costly. However, while he argues that blockchain technology will be used by more and more players from the financial industry, bitcoin and other cryptocurrencies will remain "niche monies". The only possibility to replace the existing currencies exists, according to Luther (2016a), in countries with very weak and poorly managed currencies. In other cases, network effects exist, in the sense that the value of using a particular currency depends on the number of other users who are ready to transact in that currency (Luther, 2016b). Cryptocurrencies may have, however, other uses which do not necessarily require their widespread adoption. A recent trend among companies involved in blockchain development is to use Initial Coin Offerings (Miles, 2017), which serve these companies to acquire capital. On the negative side, one needs to note that virtual currencies might become speculative investments, especially that their value is not supported by any government or central bank (Comment on SR-BatsBZX-2016-30, 2017). In fact cryptocurrencies' price rally throughout the first months of 2017 and their subsequent drop in value confirm earlier warnings in this respect.

Irrespective of the uncertain future of cryptocurrencies, applications of blockchain technology in the developed markets are abundant. Cases of financial institutions working towards the application of blockchain technology in payments include 10 major world stock exchanges, among which are the London Stock Exchange, CME, Deutsche Borse,

NYSE and Nasdaq (Rizzo, 2016). In October 2015, Nasdaq introduced Linq, “a solution enabling private companies to digitally represent share ownership using blockchain-based technology” (Nasdaq, 2016). Linq is just a starting point as Nasdaq already has indicated new applications of distributed ledger technology in improving proxy voting, company registration and public pension registration. Interestingly, Nasdaq wants to apply these technologies in Estonia, where it owns the Tallinn Stock Exchange, because Estonia, due to its small size, is a good location for this type of experiment. This is in line with arguments concerning the experimentation component of business model innovation (Sosna *et al.*, 2010; Doz & Kosonen, 2010). Financial and public services industries make up a specific setting for radical innovations, such as blockchain, due to their vulnerability to possible failures. Therefore the identification of the right setting for experimentation should be quite important for its implementation.

While in the case of cryptocurrencies blockchain’s key contribution is in terms of building systemic trust in transaction security, trust might not be an issue when the technology is used by large players, such as leading exchange markets which have developed their own instruments for ensuring trust, e.g. clearing houses. It remains an issue, however, in other types of transactions. Zhu and Zhou (2016) indicate that crowd-funded companies are such an example. They lack the support of a centralised, trustworthy clearing and settling house. For this reason, on the one hand, they could benefit from mechanisms that would increase trust in the crowd-funding transactions, and on the other hand from mechanisms that would increase their efficiency. The issue of trust is related to the registration of shares, the management of funds collected by crowd-sourcing, and facilitating a mechanism of corporate governance that would enable small, distributed shareholders to exercise control over a funded company (Zhu & Zhou, 2016).

Blockchain technologies in most of these areas could additionally improve the efficiency of operations and facilitate compliance with regulations. One of the areas where blockchain is already offering benefits are cross-border payments. Recently, Ripple developed an application to provide interbank payments using blockchain technology, involving several important banks, such as Santander, UBS, UniCredit, ReiseBank, CIBC, National Bank of Abu Dhabi (NBAD), and ATB Financial, and working with some 90 more banks to introduce this solution. The technology will basically replace the current system of SWIFT and correspondent banking by real time payments between the involved parties (Holotiuk, Pisani, & Moorman, 2017). In October 2016, the first trial involved Ripple and R3, a financial innovation consortium backed by some leading banks, when a cross-border payment using Ripple’s XRP digital currency was carried out (Roberts, 2016). The progress is fast, as reflected by recent news on making cross-border payments using blockchain technology operational by National Bank of Abu Dhabi on 1st February 2017 (Reuters, 2017). Trials have also been underway using blockchain technology in international securities clearance (Fujitsu, 2016).

Another important way in which blockchain can affect business is via the implementation of so called smart contracts, which are programmable contracts that could enforce themselves upon the occurrence of predefined conditions (Capgemini Consulting, 2016). According to Capgemini’s report (2016) the potential of these contracts can be particularly high in those fields of financial activity that lag behind in terms of processes, speed of settlement, risk of fraud, back-office costs or operational risks. Therefore, their benefits

could be the highest for syndicated loans (where processes are not automated and settlement is very slow), insurance, which is often subject to fraud, or the aforementioned equity markets and payment systems. Unquestionably, smart contracts also face challenges, particularly in legal area, such as the issue of contract immutability, secrecy and enforceability by the judicial system (Capgemini Consulting, 2016).

Applications of blockchain technology extend far beyond financial services. Blockchain technology can be used in sharing services such as computing, offered for example by MIT's Enigma, or the direct renting of apartments, office space or wi-fi routers, as declared by the German startup Slock.it (Sun *et al.*, 2016). Other sharing economy applications include car-pooling, where platforms such as Lazooz and Arcade City are operating, decentralised trading platforms, exemplified by OpenBazaar or distributed social networks like Akasha (De Filippi, 2017). Blockchain thus eliminates the need for intermediaries providing tools for a secure contact between the provider and the user of services. The range of industries and activities where this solution could be operational is huge, including the music industry (Tapscott & Kirkland, 2016). Another opportunity related to the cost efficiency effects of blockchain involves decreasing the scale of transactions in which large retailers are involved. As Gupta (2017) suggests, large retailers might be inclined to increase their supplier networks and source from much smaller ones, if the costs of carrying additional products go down.

Blockchain technology is not a stand-alone technology, but rather works alongside other modern technologies, such as smart contracts or encrypted chips through which smart tagging can be used to authenticate luxury products (Vermees, 2017), including arts (Lopez, 2016), as well as food and medicine. The reasons for this authentication may vary from safety concerns in the case of pharmaceuticals or food to social responsibility in the case of sourcing diamonds (Rogers, 2017). While in some cases authentication may seem redundant, when goods are purchased from trusted parties, for example high-street boutiques, in other cases, such as making purchases from less trusted parties, this technology could make a huge difference. Authentication may also facilitate the trade in these products, even if in some cases for the sake of tradition or the social factor customers will continue to purchase from trusted parties.

While authentication offers huge benefits, it also has certain limitations. As Kaminska (2016) explains, using a tuna supply chain as an example, the key challenge may lie in developing means and rules for authentication so that certain products fulfil predefined conditions, and blockchain technology is not going to substitute these authentication processes. What it can do, however, is to decrease the probability that frauds occur between the production point, where authentication occurs, and the final consumer.

Interestingly, blockchain technology may not only provide disruption in well-established business models, but it can offer solutions to industries with structural problems. One example of this is real estate where illiquidity proves a structural bottleneck in the smooth operation of the market. Illiquidity is one of the consequences of two major factors: lack of trust and long closing time². The current business model of real estate broker firms involves a number of players with different roles in the deal process: lawyers, banks, insurers, regulators, tax agencies, inspectors etc. Each of these has their own records and verification systems to ensure the validity of transactions from all aspects. Due to the large number of players involved, the transparency of the process is compromised, discouraging

² Closing time: the time needed to execute a real estate transaction once the offer is formally accepted.

casual buyers or sellers who are not fully familiar with what they can expect. All the more, in time sensitive cases, the high number of players along with the substantial administrative burden involved slow down the process to an extent that raises viability issues. The decentralised ledger at the heart of the blockchain system cuts the costs of record keeping and verification, hence the increased transparency and shorter closing time of the deal process. Protagonists of blockchain also add another element to their argumentation: through tokenisation³, the ownership of properties can be more accessible and liquid to a wide range of potential customers (King, 2017).

Another industry where blockchain may bring a long-awaited solution to pressing structural problems is the music and media industry. Forgery and the spread of fake news hurt the industry and limit its growth potential while the rights holders of content are poised to find a sustainable business model for monetising their creative talent. Blockchain offers the prospect of bypassing content aggregators and platform providers, hence resulting in direct and efficient delivery of products (Deloitte, 2017). Not only will the new process validate the originality of the content, but a new business model of commercialisation will emerge as an opportunity. Confirmed subscribers of the envisioned blockchain community would be more willing to pay for content with the pleasing knowledge of their fees being channelled to the rightful owners. All the more, fee payment may be more customised and economical as micro-transactions will be the basis of the new business model: each consumer will pay content owners directly for individual product items (e.g. songs or news articles) and they will no longer be forced to purchase bundles including content they do not need. As for the supply side of the industry, marketers will also achieve greater efficiency through more concentrated access to the subscriber community (Parker, 2017).

THEORY DEVELOPMENT AND DISCUSSION

We will now conclude on how different elements of a business model, such as: value proposition, value creation, value delivery, value capture, and value communication can be affected by blockchain technology.

Referring to the integrated business model by Wirtz *et al.* (2016), blockchain seems to affect several of its constituent elements. For one, this is a network model, where blockchain eliminates certain partners or changes their roles. While correspondent banking, for example, may see its end due to blockchain, the cooperation between banks at technology level can be expected to rise in importance. A number of interbank consortia, also involving technology and consulting companies, are already working on projects related to blockchain. Additionally, we could expect blockchain to affect certain key resources, such as reputation. However, we are unlikely to see reputation to disappear generally, but rather to be eliminated as a guarantee for certain transactions. As a result, the range of partners with which companies could be involved should increase and become more fluid. This is also the case for customer relationships, at least in certain products or services. As discussed previously, blockchain can affect the revenue model of certain companies, for example auditing firms. While the demand for classic documentary audit should decrease, this could be com-

³ Tokenisation: the process of replacing sensitive data with unique identification symbols that retain all the essential information about the data without compromising its security.

compensated by audits in the field of software and by regular software testing. Further, blockchain is likely to affect value creation and will affect manufacturing processes by shortening them and eliminating parts of the processes. It will also have a decisive influence on the procurement model by providing additional reliable information that can decrease the risks of falsifying the product. Last but not least, it is going to change the financing model by facilitating access to small shareholders for whom crowd-funding will become safer and thus a more attractive way of financing new ventures.

Our findings concerning the implications of blockchain technology for business models are summarised in Figure 2.

Strategic components	<p>Strategy model</p> <p>unidentified potential</p>	<p>Resources model</p> <p>change in the role of reputation</p>	<p>Network model</p> <p>extension of the network through transaction security</p>
Customer and market components	<p>Customer model</p> <p>eliminate intermediaries; smart contracts</p>	<p>Market offer model</p> <p>support personalised offers</p>	<p>Revenue model</p> <p>support micropayments</p>
Value creation components	<p>Manufacturing model</p> <p>simplify delivery of value</p>	<p>Procurement model</p> <p>increase supply safety, eliminate forgery</p>	<p>Financial model</p> <p>support crowd-sourcing and financing of SMEs</p>

Figure 2. Potential impact of blockchain on business models

Source: adapted model based on the Wirtz *et al.* (2016) model of integrated business model.

While these are not the only ways in which blockchain technology can contribute to changes in business models, they show that the technology has a high potential. Simultaneously, there is much uncertainty as to how it can evolve. We hope that by providing this overview on the business models, blockchain and the linkages between the two, we can contribute to a discussion on how the technology will affect the way in which business will be done in the 21st century.

To conclude, while blockchain has the potential to disrupt numerous industries, CBI Insights mentions 27 of them (CB Insights Blog 2017), an important question is not only how often but also in what ways it can disrupt businesses. On the basis of the preceding review, we propose three ways in which business models can be affected by blockchain technology.

Proposition 1: Blockchain technology affects business models by authenticating traded goods.

In our understanding, traded goods can be interpreted in a wider sense, including any tangible or intangible goods or services that are subject to a business transaction. If these goods are complex or their authenticity cannot be immediately validated, if consumption involves profound perceptual elements, or related brand values are

high, the need for authentication is strong, hence there is a business case for disruptive business models using blockchain technology.

Proposition 2: Blockchain technology affects business models by facilitating disintermediation.

The presence of intermediaries introduces inefficiencies when industries are complex, customer needs diverse and suppliers numerous. In such instances, especially when the transaction size is relatively small, blockchain technology can generate business which would be unfeasible in the presence of intermediaries and the costs which they generate. Through the democratic nature of the blockchain technology, providing wide and direct access to service providers to a large number of potential users, the business case for disruptive blockchain applications is strong. Our earlier examples concerning new businesses in the sharing economy (Slock.it, Lazooz, Akasha) illustrate our point.

Proposition 3: Blockchain technology affects business models by improving operational efficiency.

As argued in the preceding section blockchain solutions increase operational efficiency in various ways and in various industries. One of the outcomes is shortening time for transaction execution as exemplified by cases from financial and real estate industries. Another outcome is the decline in operational costs which facilitates small size transactions.

CONCLUSIONS

Blockchain technology is gaining momentum with more and more diverse applications, as well as increasing numbers of actors involved in its applications. This paper contributes to our understanding of the possible applications of blockchain technology to businesses, and in particular to its impact on business models.

It also has theoretical implications. The analysis of extant research and professional papers indicates that value creation through blockchain technology occurs in several ways. First, it is via building transaction-related trust through authenticating assets which are subjects of the transaction. Secondly, by means of decreasing costs via eliminating previously necessary intermediaries and operations. Thirdly, via improving operational efficiency, for example by means of shortening settlement times, which can boost the demand for products, decrease processing costs and generate savings which can be shared with customers (Capgemini Consulting, 2016).

Our findings also have management implications. Blockchain technology may be most beneficial when the trust in the authenticity of products is an important element of value for customers. Furthermore, benefits accruing from its application will be comparably greater if transaction costs are relatively large as compared to transaction margins. It is important to note that blockchain is going to affect not only the companies which apply this technology but also those companies which have to restructure their business as blockchain undermines their offering. The latter case is exemplified by auditing companies for which the market may actually diminish or at least significantly change once the documentation of the processes alters or virtually becomes redundant (Maclver, 2016).

This paper explores a very recent phenomenon and for this reason it relies on desk research of mostly professional sources. This methodological approach constitutes a limitation of the paper. As research on the topic expands, alternative methods, such as literature review, qualitative study based on direct feedback from companies using and developing blockchain technology or possibly also quantitative research verifying the propositions offered by this study may become more appropriate. Future research could also explore the extent, nature and depth of the impact of blockchain applications across a number of industries. The theoretical propositions developed in this paper can be regarded as starting points for future studies on the implications of blockchain technology for business. This is not, however the only research direction that can be pursued as the consequences of blockchain technology are numerous. Blockchain technology, according to the Vice President of Blockchain Innovation at Nasdaq, Fredrik Voss "...only works at its full potential in a network. You need to have a complete ecosystem on the blockchain for it to offer maximum value to all its participants." (Nasdaq, 2016). This suggests that further understanding of possible blockchain applications and how they can be implemented would benefit from applying findings on entrepreneurial ecosystems and open innovation. This we consider an interesting area for future research.

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Role of Experience in Customer Self-Congruity to Maintaining Loyalty: A Study on Fashion Store

Angga Pandu Wijaya

ABSTRACT

Objective: This study aims to understand the interrelationship between customer experience, self-congruity, and customer loyalty in the fashion industry. Previous studies have examined the direct effect of self-congruity on loyalty without taking into account the factor of customers' shopping experience, which may moderate customers' impression of a fashion.

Research Design & Methods: This study employed questionnaires distributed to 100 respondents. Collected data was processed using PLS-SEM. The target respondents were between 18-30 years old. Individuals in that age band have dynamic dressing styles, so interesting to study. In the present study, the data from the respondents was processed in order to determine the inner model, the outer model, and hypothesis testing.

Findings: The results of this study suggest that customer experience plays a significant role in moderating the effect of self-congruity on customer loyalty. This means that even though customers feel comfortable with a store's image, however if they have bad experience, such experience may cause these customers not to be loyal.

Implications & Recommendations: Research reveals that consumers are very concerned towards their experience when shopping. Stores should provide service that can make their customers feel comfortable and pleased.

Contribution & Value Added: This study provides new insights into attempts to maintain customer loyalty. Several research was studied on self-congruity and loyalty, yet this is the first study that depict how experience moderating self-congruity towards loyalty.

Article type: research paper

Keywords: (customer) congruity; (customer) experience; (customer) loyalty; fashion store; consumer behaviour

JEL codes: M21, M30, M31

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INTRODUCTION

Indonesian economic development encourages the continued growth in the various business sectors, one of which is fashion. The number of people from the middle-up level continues to grow in Indonesia. These people care very much about fashion as a reflection of a lifestyle, which functions as the symbol of prosperity (Li, Li & Kambele, 2012). The fashion business will continue to grow because fashion styles change over time. The growth of the fashion business is supported by customers who want to look different from others. This is an everlasting business because everyone wants to look attractive. One's appearance denotes who they are (Mazali & Rodrigues-Neto, 2013). The competition among fashion stores is very tight to seize market share. Maintaining customers is important, especially the loyal ones, because they do not only always buy but also help out promoting and maintaining the image of a fashion store if one day there is a stigma associated with the store (Cass & Carlson, 2012).

One of the most important issues in fashion customer experience is how to make customers feel comfortable in order that they will not move to other stores. Sirgy (1982) states that in 1979, Rosenberg proposed the term self-concept, defined as an individual perceives themselves. According to this concept, a store can win its customer loyalty if it can meet or be suitable with its self-concept (Joseph, 2007). The match between the self-concept and the brand image of a product will form the so-called self-congruity (Aguirre-Rodriguez, Bosnjak, & Sirgy, 2012). This study will examine how self-congruity influences customer loyalty moderated by shop experience. Previous studies discuss how self-congruity influences loyalty (Das, 2014; Sirgy, Lee, Johar, & Tidwell, 2008) and the application of the congruity theory in relation to online customer experience (Ally & Jeong, 2014). Loyalty is not created by itself, there must be the moderating variable and that is why the present study includes customer experience. What customers perceive when shopping and the relation between such perceptions and loyalty may be potentially explained by customer experience. Self-reported data was collected using a survey questionnaire. This paper consist of three parts, namely literature review, material and methods and results and discussion.

LITERATURE REVIEW

Self-Congruity

Before discussing self-congruity, let's consider the brand image and the self-concept first. A brand image is defined as customers' perception of a brand (Zhang, 2015). A product's image depends on individuals' perception and everyone has a different perception of a brand. This study will conduct an investigation into fashion stores. Basically, each store also has its own image built in its customers' mind whether as a good or cheap store or a store with outstanding service quality. Building a decent brand image for a fashion store is vital because it is a milestone for achieving success (Nyadzayo & Khajehzadeh, 2016). Moreover, the study conducted by Anggraeni (2015) reveals that customers who love a particular brand will promote it through the word of mouth. In addition to this brand image, customers also have a self-concept, i.e. their viewpoint about themselves (Sirgy, 1982). There is a relationship between the brand image and the self-concept, namely the brand purchased

by customers will function as a symbol which shows who they are. The study undertaken by Pilarska (2016) discovers that this self-concept can be used as a reference to recognize one’s personality. Self-congruity is defined as the match between the image perceived by customers and their self-concept (Sirgy, Grewal, & Mangleburg, 2000). It has positive influences on one’s intention to buy, meaning that once customers find a product that suits their personality, they will have a strong intention to buy the product (Badrinarayanan, Becerra, & Madhavaram, 2014). Besides affecting the purchase intention, the study conducted by Yusof and Ariffin (2016) suggests that self-congruity has significant influences on loyalty. Das (2014) and Kumar (2016) also corroborate the significant effects of self-congruity on loyalty. Based on the foregoing, the following hypothesis is formulated:

H1: Self-congruity has positive influence on customer loyalty.

Customer Experience

Before discussing customer experience, it is important to understand the definition of customer value. Value is created by the seller in delivering service to customer when purchasing a product (Lusch, Vargo, & O’Brien, 2007). Customers will regard whether the value provided by the seller is lower, equivalent, or higher than the amount of money that has been paid. The term “customer experience” is defined as customers’ perception of the values received before, during and after the purchase (Csikszentmihalyi, 2000; Johnston & Kong, 2011; Kamaladevi, 2009). Customers’ positive shopping experience will bring satisfaction (Yoshida & James, 2010). In addition to the satisfaction, in the long-term a positive shopping experience will manage to gain loyalty of these satisfied customers to buy the seller’s products again (Fatma, 2014). Customer experience accompanied by the innovations made by the store will give a deep impression on customers, so they do not move to another brand (Foroudi, Jin, Gupta, Melewar, & Mahdi, 2016). The study undertaken by Bhatt (2015) reinforces the suggestion that customer loyalty is influenced by customer experience. Based on the previous explanation, the following hypotheses are formulated:

H2: Customer experience has positive influence on customer loyalty.

H3: Customer experience moderates the relationship between self-congruity and loyalty.

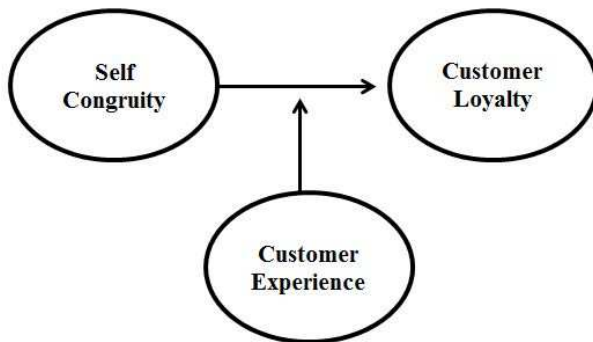


Figure 1. Hypothesized model of research
 Source: summarized from hypotheses.

MATERIAL AND METHODS

This research objective is to examine relationship of self-congruity to customer loyalty through shopping experience as moderating variable. To obtain valid and reliable data, this study employed a sample of 100 respondents and a research instrument in the form of questionnaires to be filled out by those respondents. The target respondents were between 18-30 years old. Individuals in that age band have dynamic dressing styles, so interesting to study (Bertrandias & Goldsmith, 2006; Pookulangara & Shephard, 2013). Yogyakarta develops into a modern city center as well as a cultural tourism destination in Indonesia and therefore it can serve as a benchmark for research.

This study introduces three variables, namely self-congruity, customer experience, and customer loyalty. Self-congruity consists of actual, ideal, social and ideal-social indicators (Abdallat, 2012; Haj-salem, Charles, Michon, & Oliveira, 2016; Koo, Cho, & Kim, 2014; Sirgy & Su, 2000). Customer experience in this study was measured using four indicators: feeling, relating, sensing, and thinking (Klaus & Maklan, 2013; Srivastava & Kaul, 2016). Customer loyalty in this study incorporated attitudinal and behavioural loyalty in one variable and was adapted from previous studies (Bilgihan, Madanoglu, & Ricci, 2016; Bilgihan, 2016). A 5-point Likert scale was employed to measure the indicators of each variable obtained in this study. The respondents were visitors of fashion stores. Questionnaire is used in this study to obtain numerous respondent and closed answer as it is necessary for statistical analysis. Unlike qualitative, quantitative methods is deficient to understanding consumer behaviour completely.

The collected data was processed using PLS-SEM. A great number of behavioural studies, such as information systems and management and marketing use a PLS-SEM analysis (Lowry & Gaskin, 2014). Data is examined using SmartPLS which is adequate to compute small number of respondent (Wong, 2013). In the present study, the data from the respondents was processed in order to determine the inner model, the outer model, and hypothesis testing. The inner model analysis is aimed at ensuring that the developed model is robust and accurate by evaluating the coefficient of determination (R^2), predictive relevance (Q^2) and Goodness of Fit (GoF). The outer model analysis is aimed at determining the validity and reliability by measuring the convergent validity, discriminant validity, composite reliability, and Cronbach's alpha AVE. The hypotheses in the present study were examined using an alpha value at a 5% level of significance, where the hypotheses would be accepted if the t-statistic value was greater than 1.96.

RESULTS AND DISCUSSION

Descriptive Statistic

The researchers used established criteria to select the respondents to fill out the questionnaires. After the questionnaires had been completed by the respondents, they were processed to obtain descriptive statistics related to the background of the respondents. The respondents' descriptive statistics is presented in Table 1.

Table 1 shows fashion store visitors are mostly women which suggest that women are more concerned about their appearance than men. The respondents' age as shown in the Table 1 is relatively young, which indicates that customers of those fashion retail stores com-

prise of young people, although older people may also visit these stores. Most respondents were either employees or students. Employees have high purchasing power because they already have a source of income. However, students also have purchasing power which is equally strong because they want to indicate existence. Salaries affect the trading activities of retail fashion stores. Customers with a great salary can tolerate price increases and remain loyal. High price is still affordable especially for hedonistic customers.

Table 1. Respondents characteristic in Yogyakarta

Sex		Age		Occupation		Salary	
Male	45	18-22	36	Student	34	< Rp 2 000 000	9
		23-26	38	Worker	55	Rp 2 000 001-Rp 4 000 000	39
Female	55	27-30	26	Self-Employment	8	Rp 4 000 001-Rp 6 000 000	41
		–	–	Other	3	> Rp 6 000 000	11
Total	100	–	100	–	100	–	100

Source: own study based on survey result ($n = 100$).

Outer Models

Outer model testing must be done to determine the validity and reliability of the study. First, the validity of the study was viewed from the loading factor of each item. The value of the loading factor is accepted if it is higher than 0.70. According to Table 2, the value of the loading factor is greater than 0.70, meaning that the data in this study can be said to be valid. In addition to examining the loading factor, the validity of the study can also be seen from the cross-loading. In this study, the cross-loading value of each variable is greater than the constructs of other variables. Fornell-Larcker can also be used as a reference to view the validity of this study. To meet the validity, the construct value of all variables must be greater than the others, both vertical and horizontal ones (Fornell & Larcker, 1981). As in the Table 3, each variable has a larger construct.

Table 2. Variables result of Loading Factor, CR, Cronbach Alpha and AVE

Variable	Item	Loading Factor	CR	Cronbach Alpha	AVE
Self-Congruity	X1.1	0.880	0.906	0.862	0.707
	X1.2	0.865			
	X1.3	0.790			
	X1.4	0.826			
Customer Experience	M1.1	0.754	0.866	0.795	0.619
	M1.2	0.707			
	M1.3	0.871			
	M1.4	0.805			
Customer Loyalty	Y1.1	0.783	0.84	0.716	0.636
	Y1.2	0.798			
	Y1.3	0.812			

Source: result of SmartPLS calculation ($n = 100$).

The reliability of the study can be examined using Cronbach's alpha, if the value is greater than 0.70, which means that the obtained data is reliable. The AVE and CR values can also be used as the indicator to determine the reliability of the study. The data are predicted reliable

if the Cronbach's alpha is greater than 0.70, the composite reliability is greater than 0.70 and AVE is greater than 0.50. As shown in the Table 2, all the variables in this study already meet the criteria required for the Cronbach's alpha, composite reliability and AVE.

Table 3. Result of discriminant validity by using Fornell-Larcker criterion

Category	Customer Loyalty	Customer Experience	Moderating Effect	Self-Congruity
Customer Loyalty	0.798	–	–	–
Customer Experience	0.421	0.787	–	–
Moderating Effect	0.086	-0.054	1000	–
Self-Congruity	0.581	0.319	-0.178	0.841

Source: result of SmartPLS calculation ($n = 100$).

Inner Model

The inner model was tested using R^2 , Q^2 and Goodness of Fit (GoF). Referring to the result of the R^2 calculation, 43.6% of the customer loyalty was influenced by self-congruity and customer experience, meaning that the effect of both variables was quite significant on customer loyalty. The Q^2 value by 0.436 was obtained using the formula $Q^2 = 1 - (1-R1^2) (1-R2^2) \dots (1-Rp^2)$. The GoF value obtained was equal to 0.533. According to Tenenhaus, Amato and Vinzi (2004) the GoF value by 0.38 is considered quite high, and confirm the proposed model.

Hypotheses Testing

The hypothesis testing was carried out by bootstrapping with a total of 2000 samples, the results are presented in the Table 4.

Table 4. Result of hypotheses testing

Category	Original Sample	Sample Mean	Standard Deviation	T Statistic
Customer Experience -> Consumer Loyalty	0.262	0.54	0.087	6.105
Moderating Effect -> Consumer Loyalty	0.155	0.262	0.093	2.800
Self-Congruity -> Consumer Loyalty	0.532	0.151	0.067	2.320

Source: result of SmartPLS calculation ($n = 100$).

Table 4 reveals self-congruity had a positive sample and the original value and the T-Statistic value were greater than 1.96, meaning that self-congruity had a significantly positive effect on customer loyalty. Similarly, customer experience generated a significantly positive value. The moderating variable in this study was customer experience. For this small sample the customer experience had a significantly positive influence in moderating the effect of self-congruity on customer loyalty.

CONCLUSIONS

Due to the increasingly competition between fashion stores, a strategy is necessary needed to retain loyal customers. It is absolutely necessary for fashion stores to understand their customers' personality to conceive their customers' fashion tastes. Customers have their own personality and continuously learn from the environment about the

latest fashion apparel and clothes stores need to understand these. Fashion stores also need to offer products from brands according to their customers' wishes, by considering the segment, targets and positioning of the store. If the target customers of a store come from the middle-up segment, the store should continue cooperating with well-known brands. The presence of well-known brands in the store develops customer interest in buying and maintains loyalty. However, in this study prove joyful experience moderating customer self-congruity towards loyalty. This study reveals that the atmosphere, service, and comfort of a store significantly affect its customers' loyalty.

Statistical result indicates self-congruity could directly influence customer loyalty, however this research also involved experience as a moderating variable and as shown in the Table 4, the loyalty of customers increased. Experience could influence to customer loyalty stronger than self-congruity and moderating effect of experience itself. Store manager should pay attention to it. The study conducted by Ipek, Aşkin and Ilter (2016) confirms that shopping experience is crucial for customers to assess the extent of the service provided by the store, it is of course related to customer loyalty. What is perceived by customers and attributed to the store prove to affect loyalty (Rajab, Kumar, & Singh, 2016).

Nowadays, fashion stores should be able to serve customers well, as customers do not only view fashion stores as a place which sells fashion items, but they also assess the service these places provide. In addition, stores can retain their customers through the so-called loyalty programs, such as collecting points that can be redeemed for gifts or other programs according to customers' taste. The study conducted by Stathopoulou and Balabanis (2016) suggests that their loyalty programs can strengthen customer loyalty, both utilitarian and hedonist. In addition to retaining customers, these programs also could be used to maintain costumers as well as to gain new potential customers. The study conducted by Nisar and Whitehead (2016) indicates that their program of managing relationships with customers has a significantly positive effect on loyalty. Manager should strengthen service to increase level of positive customer experience.

This study examines the effect of self-congruity on customer loyalty moderated by customers' shopping experience in a fashion store. Future studies can replicate or add other variables to test different products because customer behaviour in buying outfits may not be the same when buying another product. Future studies may expand their investigation to a wider age range.

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A Case Analysis on the Adequacy of Work-Life Balance Practices in UK Small- and Medium-Sized Enterprises

Babatunde Akanji

ABSTRACT

Objective: The purpose of this study is to examine whether work-life balance (WLB) practices are satisfactorily provided in UK small and medium-sized enterprises (SMEs) and the impact of the availability of these work-life policies on turnover intentions. A review of extant literature reveals scarce knowledge in this area of research and this study presents a rudimentary effort to fill this gap.

Research Design & Methods: Using qualitative design, the data set comprised of in-depth interviews with thirty-six employees working in small and medium-sized UK convenience stores and supermarkets with less than ninety employees.

Findings: Informal nature of human resource management policies emerged from the findings as one of the constraining forces impeding work-life agendas in SMEs and causing low staff retention in UK. Although other themes were found to contribute to retention challenges, however, these additional reasons were not independent, but all considered integrated.

Implications & Recommendations: Consequently, the practical implication of devising ways to overcome WLB and retention deficiencies in this context were also explored.

Contribution & Value Added: The originality of this work lies in studying the importance of WLB practices to some of these grass root businesses that make up a large proportion of the economy in the UK. As the limitation of this study is that it is wholly qualitative in nature, it is suggested that future research should rely on quantitative designs that provides more internally valid tests via computational techniques.

Article type: research paper

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INTRODUCTION

The delineation of work-life balance (WLB) initiatives has long been a topical issue in organisational studies with extensive research on practices and policies in either multinationals or globalised companies. There remains a paucity of similar studies within small and medium-sized enterprises (SMEs). Focussing on the continent of Europe, comprising of the European Union (EU) countries, SMEs amount to 99% of all enterprises, with claims that almost 42% of working class people in any EU member country were employed in this private sector businesses as far back as the 1960s (Mihail, 2004). One can only imagine the extremely huge number of owners and employees now involved in SMEs spread across the continent of Europe. In the United Kingdom for instance, (comprising of England, Scotland, Wales and Northern Ireland), there are about 4.5 million private small businesses of which 58.8% of the working population are in private sector employment, but with high records of 48.8% employee turnover rates (Barrett & Burgess, 2008).

In London alone there are approximately 876 000 SMEs and these small businesses have branches spread across the UK and contributing 67% to the nation's gross domestic product (Mihail, 2004). Reports on the astronomical growth of these family and non-family owned businesses also revealed that about 4.5 million UK private sector SMEs employed an estimated 23.8 million people as at 2011, and produced an estimated combined annual profit turnover of 15 billion GBP (Statistical release on the Department for Business Innovation and Skills, 2011). Given the large entrepreneurial involvement of small businesses in the UK from the foregoing data, it is evident that the benefit of adopting of WLB practices in these small and medium-sized organisations will contribute to developing and strengthening their capability to attract, motivate and retain skilled, flexible and adaptive workforce (De Cieri, Holmes, Abbott, & Pettit, 2005).

There are a plethora of studies affirming ample research interest in WLB affairs of employees working in large corporations. This is because these big organisations are more visible and as a result, draw more attention of regulatory bodies, the media, academics and general public (De Kok, Uhlaner & Thurik, 2006). Similar studies remain scarce at the level of personal or family-owned enterprises. Lavoie (2004) argued that this may be the reason for the under achievement of UK SMEs.

SMEs are defined as employing fewer than 250 people. They are termed 'micro businesses' and can constitute less than 10 people employed, or small ventures less than 50 workers and/or medium scale employing less than 250 people (Cassell, Nadin, Gray, & Clegg, 2002). One of the primary themes in scholarly work-life research is employees' efforts in finding the right balance between their work and non-work roles. Organisations (whether big or small) are often scrutinised on how or why the implementation of a variety of WLB practices and policies are necessary for purposes of reducing negative work behaviours such as absenteeism, low job commitment, occupational stress and labour turnover (Gregory & Milner, 2009). Labour turnover for instance, has to do with the ratio of the number of workers that had to be replaced in a given period to the average number of workers in an employment. It is common knowledge that employee turnover has a significant impact on any business productivity and profits (Lynch & Tuckey, 2008). Potentially an organisation experiencing high turnover rates often incur overhead losses in areas of cost in replacing and training new staff. This implies the imperative for business owners

and corporate entities to implement essential retention strategies. Sensibly, organisations that invest in creating supportive, comfortable and appealing working environment and work-life strategies can be said to tick the right boxes favourably in ensuring high levels of employee commitment and performance.

In light of the above, the research questions of this study are:

1. How do employees working in UK SMEs define and contextualise WLB?
2. What are the views of employees about the available of WLB policies in UK SMEs?
3. How do the (in) adequacy of work-life policies impact turnover intentions?

The research objectives of this paper run almost parallel to the questions stated above. Thus, the first objective is an attempt to enrich our understanding on the challenges of creating WLB benefits and programmes in UK small firms. Second, is to assess the level of employee withdrawal behaviours in reaction to work-life practices while the third relates to analysing work-life reforms that may impact retention strategies in small UK employments. Subsequently, the study is organised as follows. The next section is a literature review on WLB and SMEs. Following, is the section presenting the methodology used which is a qualitative approach for data collection and analysis preceded by a presentation of study findings. Thereafter, the next part covers a detailed discussion on the research contributions derived from the findings. The last section highlights the conclusions.

LITERATURE REVIEW

In its broadest sense, WLB is a social concept conceived to suggest that paid work and personal life of a working adult should be seen less as competing priorities and rather as complementary elements of a full life (Manfredi & Holliday, 2004). According to the general WLB framework diagrammatised in Figure 1, work-life integration underscores the extent to which an employee is equally engaged in and satisfied with his or her economic pursuits and active coordination of other domains of their life (Figure 1). In other words, it simply means an individual's capability to find a 'life rhythm' that enables them to combine their work with other domains of life (Felstead, Jewson, Phizacklea, & Walters, 2002). This includes a state of 'satisfaction and good functioning at work and at home, with a minimum of role conflict' (Clark, 2000, p. 751). Therefore, from the perspective of SMEs, some of the advantages of adopting WLB policies is to accentuate positive outcomes for these small businesses in terms of employees' work commitment, satisfaction, performance and reduced withdrawal behaviours.

In view of the above, WLB policies in small scale businesses should be aimed at enabling employees to achieve life's aspirations through the accomplishment of greater management and control of all personal areas of life that are important to them. Despite these prospects open to SMEs to take advantage of designing and developing work-life policies that are crucial for employment and sustainable growth, Cegarra-Leiva, Sanchez-Vidal and Cegarra-Navarro (2012) found that managers of small enterprises in Europe are still slow to embrace WLB practices due to 'lack of resources, lack of skilled labour, and the lack of easy-to-use and affordable WLB solutions' that are readily adaptable to the business context of these organisations. Moreover, past but still reliable data provided by the European Foundation's survey on employment relations in UK micro and small enterprises suggests

that employees of SMEs work more unsocial working hours, receive less training, less consultation and participation in decision making processes and more vulnerable to occupational stress. While it is known that in the United Kingdom, small firms make up the bulk of the business population (Barrett & Burgess, 2008), the degree of imbalance between work and private lives of workers in this sector is of great concern. The antecedent of these challenges emanates from demographic changes in the nature and structure of working systems and family life arising from the active participation of women in the contemporary workforce which is blurring traditional gender role perspective that subject the women to domestication and family care responsibilities only (Brotheridge & Lee, 2005).

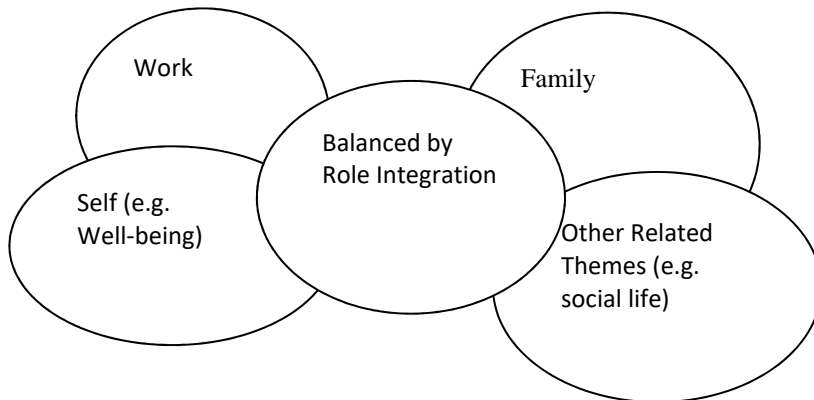


Figure 1. General WLB framework

Source: own study.

However, there is increasing clamour by British workers for a higher quality of life, welfare support that points towards addressing WLB solutions despite media and public knowledge of the ongoing UK budget cuts by the present government. Records provide that each year, job stress costs UK businesses an estimated 3.7 billion GBP and the loss of around 80 million working days (McVicar, Munn-Giddings, & Seebom, 2013). Such stress related issues have been attributed to both work and family related factors because many employees experience difficulties balancing their work obligations with home responsibilities (Özbilgin, Beauregard, Tatli, & Bell, 2010). Within the EU, the UK is known to have one of the longest working hours while Britons toil longer every week than other industrialised nations (Roberts, 2007). This invariably causes role pressures on employees working longer hours while some engage in 'inflexible work schedules' (Kossek, Kalliath, & Kalliath, 2012). Focusing on SMEs in the UK, literature further reveals the lack of training and qualifications of managers' places limits on the adoption, development and functional operation of WLB practices in conformity with the 'EU/UK statutory minimum good practice guidelines' (Malik, McKie, Beatrice, & Hogg, 2010). More evidence from literature suggests that most UK SME managers may economically adopt WLB practices based on overarching demands from their workers but decisions to offer them may be based on reciprocal expectations of extreme commitment and loyalty to employment (Dex & Scheibl, 2001). Consequently, the rigid working conditions in SMEs across the UK breeds an environment

where role pressures and conflict are possibly inevitable. This inter-role conflict outcomes will definitely have significant impact on UK small businesses. Most times, such employees are typically dissatisfied resulting in considerations of alternative employment (Ford, Heinen, & Langkamer, 2007). Therefore, competing demands of work and domestic life degenerates into a tug-of-war situation in the lives of SME workers creating the notion that work-family conflict and intentions to leave are positively related with actual withdrawal from employment. Hence, the present study intends to provide further insights into the associated WLB challenges facing SMEs and explore retention solutions for this important sector to the UK economy.

MATERIAL AND METHODS

Semi-structured interviews were conducted and interpretative phenomenological analysis (IPA) used to gain ideographic insights of participants' lived experiences (Smith & Osborn, 2003). The IPA like any other naturalistic research methodologies is designed to provide intricate and detailed understanding of how people construct meanings of social realities (Smith, 1996). This is a particularly useful interpretive design especially where there is little or no prior research enquiry on such topic (Cohen, Manion, & Morrison, 2011). In essence, the underlying philosophical assumption of following a social constructivist paradigm is the belief that peoples' expressed thoughts are more vivid from verbal accounts as they try and make sense of their world (Gonzales, Brown, & Slate, 2008). The advantage of this design is that it provides depths of understanding of the social reality being studied while a known weakness is the subjective nature of qualitative method.

A purposive sampling method was used to recruit all study participants. This method of non-probabilistic sampling is applied where qualitative data is collected using semi or unstructured interview protocols within a business case context (Saunders, Lewis, & Thornhill, 2012). Thus, all key informants were selected based on their marital status, length of time at work (employed for a minimum of one year), age (20-49 years old) and educational status. The National Vocational Qualifications (NVQs) was the basic form of education that most participants had. Generally, NVQs is achieved through assessment and training based on the National Occupational Training Standards operational in the UK. The participants interviewed were all together (10 males and 26 females) of which 9 were unmarried, 5 were single parents, 8 were married with children and the rest divorced. Table 1 summaries the demographic data collected.

Table 1. Demographic characteristics of participants

Description	Range	Mean	(SD)
Age	20-49 years	36	2.7
Work experience	1-2 years	4	1.2
Age of children	6-15 years	9	22.2
Level of education	primary school (<i>n</i> = 10) high school (<i>n</i> = 8) NVQs (<i>n</i> = 18)	-	-

Source: own study.

Before the research, formal permission was sought for site visits and granted by the management personnel and other important 'gate-keepers' that were of valuable contacts. Once access was formalized, the approval of time, place and frequency of visits was granted with full support from some member of staff designated to help facilitate the logistics needed to recruit subjects based on their availability and business convenience. Written consent, anonymity and confidentiality were strictly observed while each semi-structured interview lasted for 45-60 minutes with all participants in their respective workplaces. The interviews were tape-recorded using predetermined but flexible interview protocol. Interview questions included: what do you understand as work-life balance within the context of your job? Are there formal policies protecting your work-life affairs? What do your employers think about your life outside work? Are there any constraining factors to work-life provisions? What causes people to change jobs in UK small businesses? What more do you think can be done to improve the quality of life of employees in SMEs? The interviews continued until saturation point was reached. Thereafter all the recorded interviews were transcribed and afterwards read repeatedly for purposes of identifying the personal and situational themes that reflected points of interest from key descriptive words, comments and phrases from the interviews. In effect coding was pursued; emerging themes and subthemes that best captures the essential qualities of the transcribed interviews were identified. The final stage was translating the themes into a narrative account that then informed the main findings that emerged from the study.

RESULTS AND DISCUSSION

Initial inquiry were made on what the study participants understood by WLB and the following interpretations emerged.

Scheduling Time Sensibly

From the interview records, approximately 50% of the participants defined WLB as the ability to pay attention to family commitments as well as also succeeding at work. In other words, balancing work-life matters was viewed as having proportionate time for both life roles. Most of these participants here referred to the degree to which they can experience positive relationships between their work and family roles. This was said to arise from measuring the daily shifting weights of time allocated to work-life interjectory. The following quotations exemplify some shared views of the participants.

'Achieving balanced life between working and personal life is spending time with your family [...] and doing your own thing without compromising work. That's the best way I can describe WLB'. (Tony, convenience store attendant).

Another 40 year old shop keeper also iterated: 'it means you are working, but at the same time you're not just at work every day from the moment you get up until it's time for you to sleep at night, but you still have time to spend with your family and other loved ones'.

The preceding sample statements indicate that time management ranked significantly important in achieving a good work-life fit for these sets of employees. Some of the participants further acknowledged that although they work in small business firms where the economies of scale is comparably smaller to larger companies that generally have more capabilities of offering generous work-life policies, some of the participants argued that these family-friendly policies will definitely decrease negative spill-overs from workers'

lives, leading to productivity and labour efficiency. In addition, there was a common perception that life presents numerous demands; hence, individuals have to prioritise and make choices through a judicious use of their limited resource such as – time.

Staying Healthy

About 30% of the participant defined WLB in terms of having to deal with health-related issues. To these sets of interviewees, WLB was defined in relation to the state of health and wellbeing that should not be compromised during the involvement with multiples roles of life. There was a general belief that a good work-life balance can provide a range of mental health benefits, including greater satisfaction with the quality of life, lower levels of work stress and physical improvements, derived from improved energy levels and longer life expectancy. For example, one of the female cashiers who works in a supermarket express said that: 'Although I work in a smaller supermarket when compared to the bigger ones such as Tescos, ASDA or Sainsbury's which I believe will have better practices in enhancing employees work-life integration, but I also think WLB means not compromising the quality of one's health and psychological wellness in a bid to create a leverage in both work-life activities...this is why I make sure my health is not compromised irrespective of the work-life policies provided by my employers'.

A few of the participants were of the view that when talking about a balanced work-life situation, discussions should not only centre on doing everything possible to produce completion and achievement of multiple role tasks successfully, but also have to include acknowledging self-care so that the employee's mind, soul and body are being refreshed in the process of engaging in daily work-life routines. One of the interviewees pointed out the possibility of trying to maintain a good work-life at the expense of staying healthy. In a particular interview, concerns were expressed about the pressures of an increasingly demanding work culture in the UK which was considered to be one of the biggest and most perhaps pressing challenge to mental health in the country. A supermarket attendant interviewed mentioned how the cumulative effect of increased working hours is impacting on the lifestyle of a huge number of British employees especially those working in small and medium scale businesses. Some of these key informants expressed their concerns of how they work overtime in order to meet financial obligations such as their mortgages and loans, but all these efforts also proves to damage their mental well-being. So these sets of participants conceptualized WLB as creating and maintaining supportive and healthy conditions.

Leisure and Social Life Involvement

Some of the participants expanded their definition of WLB beyond restrictions to work-family affairs only. These sets of views emerged from other household categories such as single-earner parents, co-habiting partners without children and singles. They acknowledged the importance of defining WLB from the perspective of active involvement in leisure pursuits and other social relaxation activities. This is why one of the unmarried participant commented that: 'At the moment, my perception of this thing called – WLB is about been able to participate in life's activities such as keeping my body fit through exercises in the same way I am here earning an income. But now, I don't have a balance anymore as work now tends to be a seven-day job because this is about the only medium-sized food store in this locality'.

In addition, some other participants spoke about WLB as having 'fun time' in life such as travelling abroad on holidays, meeting with friends at the pub for few drinks, going to concerts, cinemas, voluntary work participation and even personal development activities. These various meanings ascribed to WLB presented insightful interpretations of the social concept regardless of individual demographics. Further enquiries on the extent to which WLB practices are available in SMEs revealed key barriers associated with satisfactory support for work-life integration in these UK SMEs. The main theme emerging from the findings centred on the informal nature of HRM policies influencing the range of WLB initiatives available to employees. It was revealed in some of the interviews that private or family enterprise owners prioritize business profits over the provision of well-documented work-life offers. The limited availability of WLB policies was ascribed to the small size of business, the hierarchy of management structure and the low skilled nature of the workforce employed in these small businesses. For example, one of the participants who works as a till cashier said that: 'We don't enjoy elaborate WLB policies which I think it is just one of the small food supermarkets established by the owners of which you can see we have a very small workforce [...] all I know is that I have 18 days holiday and work morning or night shifts based on business demands'.

Similar versions from other participants, especially from a few working in convenience stores, affirmed that their recruitment and working scheduling are marked by the absence of formalities. Most of the sales attendants at the counter narrated how staff retention is very low because of the feeling that they are often treated as a means to organizational ends because of the casual nature of their work. Further, some of these low-income workers especially the working parents expressed concerns of having little control over the way they manage to keep a balance between their jobs and family lives. A few participants felt most of them leave these small businesses once an opportunity is sighted to work in some of the biggest UK supermarkets such as Tesco, ASDA, Sainsbury's etc. as these mega supermarkets were perceived to offer more robust WLB packages. This findings resonates with earlier studies (e.g. Dex & Scheibl, 2001; Cassell, Nadin, Gray, & Clegg, 2002; Lavoie, 2004) whose findings reveal that firm size is an important predictor of the presence of work-life balance practices. For instance, Dex and Scheibl (2001) found that larger companies tend to adopt more work-family policies than smaller ones and organizations with perceived superior human resource management record may certainly provide more flexible labour opportunities. One of the male participants working in an Asian food store specifically mentioned the level of managerial favouritism as a major issue especially when worker's try to adjust their shift patterns to suit their work-life needs. He said among other things that: 'Sometimes my working shift is really a bottleneck because our manager prepare our job schedules on a weekly basis [...] a times the store manager sentimentally approves day shifts to some at the detriment of those of us with caring needs'.

In all, about 65% of all the interviewees were of the opinion that the inadequacy of WLB policies in their workplaces do not allow them to devote enough time to their family, personal health fitness and other social domains of life. On the whole, enquiries directed at exploring the range and scope of WLB initiatives available in these UK SMEs selected for the study, showed a level of doubt in the organizational culture supporting the WLB of employees. In sum, table 1 shows the overall responses of participants to questions asked about major types of WLB protocols under flexible work options, specialized leave policies

and dependent care benefits perceived to be available, and if not available, the preferences of participants towards policies that are non-existent in these SMEs.

Table 2. WLB agendas

WLB policies & practices	Available	Not available	Will be interested if available
<i>Flexible work options</i>			
Part-time	Yes	–	–
Flexitime	–	No	Yes
Compressed hours	–	No	Yes
Job sharing	–	No	Yes
Home commuting	–	No	–
<i>Specialised leave policies</i>			
Study leave	–	No	Yes
Maternity leave	Yes but minimal	–	–
Paternity leave	–	No	Yes
Casual leave	Yes	–	–
<i>Dependent care benefits</i>			
On site care facility (crèche)	–	No	Yes
Care for sick dependent	–	No	Yes
Professional counselling	–	No	Yes

Source: own study.

From the results above, many participants expressed concerns about the limited range of different organizational WLB policies available under the three broad categories tabulated. The participants exposed a high rate of interest for these small-medium businesses to make available more interventions aimed at facilitating flexibility, making available various specialized leave options, supporting employees with childcare responsibilities and rendering professional counselling to enhance workers' work-life nexus. Consequently, almost all the participants felt that providing only part-time, minimal maternity and casual leave options (Table 1) were some of the resultant causes of high turnover in the UK SMEs. Almost 90% of the interviewees at some point voiced out how turnover is a major issue for their employers having to bear unplanned costs of hiring and training new personnel, as well as the costs of not having departed employees working toward organizational sales performance. For instance, one of the female sales attendant working in one of the supermarkets with 60 employees said that: 'Since I have been working here for a year and a half now, some of the younger recruits hardly stay for six months before quitting [...] I can just imagine the turnover cost for exit and replacement that business needs to deal with in order to stay in business'.

Another theme that emerged from the study in relation to WLB shortages focused on the costs and benefits comparison associated with introducing a variety of these practices scheduled in Table 1. A female participant who works day shifts in a convenience store of only five employees observed that WLB costs could be most burdensome for small scale entrepreneurs. She made mention of how holding a job open for a woman on maternity leave could be problematic where she worked. There were also corroborated claims that implementing these WLB practices such as the provision of childcare subsidies or granting specialized leave policies will require administrative and procedural costs. This situation was perceived as been further exacerbated by the limited supply of financial resources available to

these small business owners. While the benefits of adopting work-life practices were said to be needful to increase employee morale, productivity, customer engagement and reduced staff turnover, the overburdening cost of implementing new family-friendly policy systems was perceived difficult if the net impact will be negative on the overall business.

In a similar vein, another theme identified as low levels of qualifications and training of managers in SMEs emerged from some interviews. Three of the participants working in a supermarket of 30 employees in their separate interviews were persuaded that these characteristics of managers in SMEs restrict the development of WLB practices in their firms. Some of these entrepreneurs are viewed as having the mentality that work-force problems such as absenteeism or performance levels can be closely monitored because of the greater proximity and visibility of employees in small businesses. Hence, there is a general notion that small business owners don't see the need to implement the various WLB policies earlier highlighted (Table 1). Some of the participants gave evidence portraying some of these entrepreneurs as workaholics and adjudged to believe that working hard and long hours is the route to success. However, one of the male participant working in a grocery store felt business owners who engage in extreme business involvement to the detriment of their personal WLB needs is not only dangerous, but unhealthy. In addition, it was perceived as an inefficient way to run a business because it stifles creativity, kills motivation and increases withdrawal behaviours. Overall, all the participants perceived that viable ways of addressing these problems of WLB shortages in UK SMEs is for entrepreneurs to create a supportive work culture.

While the interviews with participants revealed some nagging problems confronting the sample of UK SMEs selected for this study, further enquires seeking responses on how best work-life practices can enhance employee retention were made. Most of the participants believed that there a number of staff retention strategies that SMEs can draw from and adapt to suit small business needs. It was established from the interviews that the existence of a WLB supportive culture for employees is a key factor for decreasing attrition rate in UK small businesses. The first theme that emerged from the aggregate data (i.e. interviews) as a solution to this turnover problem is the need for strong leadership that appreciates the value of WLB. A handful of participants felt that a relational approach to leadership should be embraced by UK business owners. Participants were of the opinion that this will go a long way to affect perceptions that allow employees to integrate their work with leisure, family time, travel, study and careers successfully. Some of the younger participants acknowledged the competitive pressures facing their employers, but at the same time think that UK entrepreneurs should exhibit patterns of affiliative leadership behaviours that puts people and their needs first. A few of the participants shared the belief that employees (whether skilled or unskilled labour) are more productive when allowed them to work flexible schedules.

For example, a female supermarket attendant feels that good business leaders should allow employees to job share with one person working the first half of a shift and another working the second half. There were also suggestions for small business owners to provide workers with a duty or a deadline and allow them work out their schedules to meet business objectives. In essence, almost all the participants were of the firm belief that there are many cost savings available to small business firms through the implementation of work-life bal-

ance policies. The general assumption from the interviews was that work-life balance policies will improve staff retention in SMEs. Most interviewees believed that reducing staff turnover will lead to lower costs, as recruiting new staff is a costly process. However, the key informants of the study firmly confirmed supporting employees' work-life balance will improve performance, job satisfaction, and create positive employer branding.

This study mainly provided insights into an understanding of some challenges of WLB availability in UK SMEs. Evidence from the interviews revealed that the implementation of acceptable WLB practices are of major concern to study participants working in these small businesses. From the study, all the key informants defined work-life balance as a concept ranging from scheduling time appropriately for both work and family affairs, paying attention to healthy living as well as participation in social and leisure activities. This multiple meanings given to WLB broadens the interpretation of the concept that as for so long been restricted to focusing on the traditional family life and matrimonial household structures only. Emphases on WLB issues in literature are often placed on women with childcare responsibilities. This study findings debunks the sentimental assumption that women are primary targets of work-life balance debates (Gregory & Milner, 2009). Therefore, the study findings is consistent with the views of Özbilgin *et al.*, (2010, p. 5), who argued that knowledge enlargement in work-life research has become imperative because the concept is by no means a working mother's issue only. So irrespective of gender, WLB in its broadest sense, should mean an individual's satisfactory ability to juggle work and non-work activities that covers a wider spectrum of life's domain such as leisure activities, community participation, social life activities, religious and spiritual engagements and so on (Guest, 2002).

This study unveiled perceptions of inadequate provisions of WLB policies in UK SMEs. The results showed that there are a variety of work-life interventions ranging from atypical working arrangements, specialized leave options and dependent care benefits described in table 1 that the interviewees would like UK small business to adopt. The assumption is that employees will avail themselves of arrangements that are most suitable to them if a variety of these policies are available. The findings revealed the provision of only part-time work, casual leave policies and very minimal maternity leave opportunities (Table 1) in the sampled UK businesses of this study. In sum, the study findings revealed that the reasons for work-life policy shortages in UK small businesses includes low level of training and qualifications of small business owners on WLB agendas, the costs associated with introducing a wide range of WLB policies and lack of formalization of work-life practices.

Consequently, the informal nature of HR practices in SMEs as well as reports of UK entrepreneurs being perceived as extreme workaholics who do not see the need to embark on implementing a variety of family-friendly policies. These arises from their sentimental belief that employee 'presenteeism' which is the practice of being present at one's place of work at all cost is required for measuring high performance. However, Holt and Powell (2015) argued that a ubiquitous culture of 'presenteeism' is damaging productivity in UK workplaces at the moment. Thus, it is further contested that the value of prioritizing workers' health and well-being in UK SMEs should be a concept that is understood as a "fundamental business case for a productive, happy and healthy workforce" (Holt & Powell, 2015). However, the study findings exposed the prevalence of WLB practices in UK small firms as scarce. Nevertheless, the phrase 'WLB' itself is part of popular discourse in the UK with the British Government making all efforts in developing a number of policies to promote a better integration

between people's paid work and the rest of their lives through the introduction of various forms of statutory leave options, large investments in childcare agendas and addressing working hours by ensuring that statutory rights for any worker to request flexible working patterns is not compromised (www.gov.uk/work+life+balance+in+SMEs). But it is clear from the study that the inadequacy of WLB in UK SMEs is the main cause for the high turnover which can potentially harm the productivity of these grass root businesses especially in the area of employee work commitment. According to Robbins (1998), turnover is one of the organizational variables most closely related to job dissatisfaction. Thus, employee job satisfaction is crucial for business success and often linked to performance, organizational productivity and other issues, including turnover. Dissatisfied employees are prone to indulge in absenteeism and thereby increasing negative turnover (Toker, 2011, p. 156). In addition, Hughes and Bozionelos (2007) contested that current human resource practices most relevant to increasing work satisfaction have been found to be WLB practices, as they can help to foster the employees' quality of life and, as a consequence, workers will be more motivated and committed to the organization.

When employees cannot find balance between their job and non-working life, they can experience role conflict. This conflict is defined in WLB literature as "an interference of work and family roles that creates tension or problems for the individuals or as the direct result of incompatible pressures from an individual's work and family roles" (Moen, Kelly, & Huang, 2008). Subsequently, work-life conflict can lead to stress and negative spill-overs from the home and a consequence of this is a decrease in productivity at work. Therefore, the variable significantly related to employee retention is the existence of a WLB supportive culture in UK SMEs. This result is consistent with previous literature that highlights the importance of organizational support for WLB in order to achieve high level of organizational and employee performance (Batt & Valcour, 2003). Thus, an interesting dynamic in the case study is that almost all the participants were of the view that they were not sufficiently rewarded with WLB practices. Hence, it is essential for UK small business owners to take WLB policies and practices seriously and make every effort to implement them in their businesses.

CONCLUSIONS

This research presented various meaning of WLB and also highlighted employees' accounts on the limited range of WLB initiatives in UK SMEs. This was found to be the root cause of withdrawal behaviours from these small businesses when opportunities become available in larger UK mega-supermarkets such as Tesco's, Sainsbury's and ASDA where it is believed that WLB policies are more formalized and pronounced. The study further identified some of the reasons for the lack of WLB opportunities in UK SMEs which emerged as the reason for high turnover problems. Hence, the issue of employee turnover raised a number of concerns in this study. It is a known fact that employees are important stakeholders in SMEs, but unfortunately after limited resources have been used in recruiting, training and developing the employees, they leave for greener pastures why their WLB needs will be met. Therefore, the study suggests an urgent need for small firms to engage in strategic planning and approaches to minimize turnover rates. The study also recommends that small business owners should provide training for all their workers irrespective of the fact that they are a low skilled workforce. It is important that SME managers and

workers come together to find common WLB policies and practices for the common good of all. Ideally, this process should also be supported by the UK Government. Guidelines should be developed to ensure that employees working in SMEs are given duties that have realistic deadlines. The study also recommends that proper guidelines be developed for these low skilled workers to be incentivized for the extra number of hours or long working hours spent in such employments (Walker, Wang, & Redmond, 2008). There may also be a need to consider the demand for flexibility within working patterns such as flexible hours, compressed hours, job share and so on (Table 1). On the whole, there is a need to ensure fairness and consistency in the implementation of WLB policies as a part of human resource management that can affect performance and retention of employees in this important sector of the UK economy. As the limitation of this study is that it is wholly qualitative in nature, it is suggested that future research should rely on quantitative designs that provides more internally valid tests via computational techniques.

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