



RIGA TECHNICAL
UNIVERSITY

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**ADVANCEMENT OF THE ENTREPRENEURIAL
MINDSET AS A DRIVING FORCE FOR THE CREATION
OF A SUCCESSFUL BORN GLOBAL STRATEGY**

Doctoral Thesis



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Faculty of Engineering Economics and Management

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Doctoral Thesis

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ANNOTATION

The Doctoral Thesis is devoted to the field of entrepreneurial mindset, studying its close interaction with the process of the creation of a successful born global strategy. The 'born global' (BG) label reflects a new paradigm in the world economy; the emergence of such companies signals a more diverse global economy and contribute to national economic development by fostering innovation, creating stocks of skills and knowledge, supporting industrial growth and enabling and promoting high-value-added activities. An entrepreneur plays the central role in the formation of born global companies.

Entrepreneurial mindset is the research object of the Doctoral Thesis, it refers to a specific state of mind which orientates a human towards entrepreneurial activities and outcomes. Successful born global strategy is considered as the outcome of the dynamic process of entrepreneurial mindset.

The present Doctoral Thesis covers research on the role of the individual level characteristics of entrepreneurial mindset as basis of an actor-centric phenomenon, running internationalization process of born global companies.

Keywords: Born global company, definition of born global company, causation, competitive strategy, classical approach of strategy, effectuation, entrepreneurial mindset, market entry strategy, methodology, passion, risk perception, self-efficacy, systemic approach of strategy, training program.

LIST OF ACRONYMS

AkadTerm – database of academic terminology

BG – ‘born global’

B2B – business to business

EM – entrepreneurial mindset EN – English

EU – European Union

fsQCA – fuzzy-set qualitative comparative analysis

IB – international business

INV – international new venture

IT – Information Technologies

LFA – logical framework approach

LIAA – Investment and Development Agency of Latvia

LR – Republic of Latvia

MNE – multinational enterprises

QCA– qualitative comparative analysis

R&D – Research and Development

RIS 3 – Smart specialization strategy for research and innovation

SME – small and medium-sized enterprises

3D – three dimensions

UIIN – University Industry Innovation Network

USA– United States of America

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INTRODUCTION

Modern trend of the entrepreneurial society increasingly urging countries to embrace entrepreneurship as an important economic engine and the major source of innovation and job creation. Small and medium-sized enterprises (SMEs) are considered to be the engines of economic growth, they play a key role in generating employment opportunities, producing value-added products, and bringing innovations to national economies. Governments around the globe promote the sector of small and medium-sized enterprises to capitalize on the entrepreneurial potential of innovations and thus grow their economies. Policymakers have thus become interested in encouraging and accelerating startups' export activity in order to promote economic growth and boost job creation. These enterprises are increasingly entering international markets to exploit the potential of their innovative products and services in a larger marketplace, strive to adapt to transnational markets to compete, grow and survive. The startup founders have increasingly adopted a global vision; as a result, the phenomenon of born global (BG) companies has arisen and challenged traditional views on internationalization in which international business for a long time was dominated by large, well-resourced multinational enterprises (MNEs). A growing number of new companies consider themselves as born global. In contrast to the path traditionally taken towards the internalisation of business – where the main focus of activities is first placed on the domestic market – these new entrepreneurs compete in the global market right from the start. They serve clients worldwide, providing new, innovative products and services and very often act as game-changers in their respective fields of expertise. This phenomenon, the importance of which is increasing, has grown rapidly in recent years and is now gaining momentum. Very often born global enterprises create a completely new market. This occurs either by developing completely new ideas or by creating market niches through the integration of existing ideas into new solutions. This strategy usually implies the readiness to take additional risks, to aim at faster growth, to deploy necessary resources, to quickly adapt to new markets and to develop advanced managerial skills.

The new born global phenomenon places strong emphasis on the individual or entrepreneur, in clear contrast to the organization, strategies, and managerial decision-making processes that characterizes the well-established multinational enterprises. These entrepreneurs represent knowledge which is shaped by the individual's prior experiences and is instrumental in the discovery and pursuit of new business opportunities. The forces of globalization present a market opportunity and a competitive challenge for new companies. Networking is viewed as a partnered learning approach for born global companies and is accessed through structures as

strategic alliances or collaborative relationships between smaller firms and large foreign suppliers.

The following examples illustrate the growing importance of born globals in Europe.

- Sweden has drawn attention to born global enterprises at government level. In 2016 the Swedish government published an export strategy that specifically emphasized the importance of encouraging born global firms. Many of the most prominent examples coming from Sweden are found in computing, e.g. Skype, Spotify and Mojang (developer of Minecraft).
- Born global companies of Denmark are widely discussed and is a growing phenomenon in this country.
- One of the most striking examples in Europe is the born globals of Austria. The Austrian Federal Economic Chamber bestowed the ‘Born Global Champions’ award upon fledgling Austrian firms every year. ‘Born Global Champions’ awards to 30 recently founded Austrian firms have been presented in 2020. Austria's as small country's success in this area requires further research based on the information set out in the following brief description, thus finding a deeper understanding of the role of the entrepreneur in the process of creation and growth of born global company.

The prizes have gone to fledgling companies that have maintained a global footprint from the outset, providing innovative products and services and achieving rapid international growth. The award winners are courageous, think big and know that the whole world is their market – and this is the secret to their success. It also indicates a readiness to take on additional risk in order to achieve quicker growth, along with the application of the requisite resources and executive skills to be able to adapt speedily to the relevant markets. All the prize winners have one thing in common: they act as game changers in their respective fields and raise the profile of Austria as a business location with their exceptional achievements as innovators. *“Austria’s Born Global Champions succeed with truly innovative products and services, a strong focus on the demands of global customers and above all by seizing business opportunities at impressive speed,”* writes Christoph Leitl, President of the Austrian Federal Economic Chamber.

Despite the growing importance of born global companies, understanding of how and why these firms develop and implement their internationalization strategies, and what makes them successful, remains incomplete. Research works, conducted in different countries, are trying to explain both market-level (niche strategy) and firm-level (superior entrepreneurial

behavior) factors which affect the emergence of this phenomenon. Research works have demonstrated that emergence of born globals may be fostered in the locations characterized by concentrated industry clustering and knowledge spillovers that offers the new ventures easier access to resources that support the internationalization process. The question arises as to whether a basis for the emergence of these type of companies could be formed in Latvia, as the current indicators of the national economy include the following trends: according to the International Monetary Fund (IMF), the unemployment rate increased to 9 % in 2020 due to the negative economic impact of the COVID-19 pandemic, and should decrease to 8 % in 2021. Moreover, Latvia has to face a strong emigration of skilled youth. At the same time, the *Review on the Economic Development of Latvia, 2019*, of the Ministry of Economics of the Republic of Latvia, published in September 2020, states the following: *“Further economic development depends on the situation in the external environment and progress in reforms. Further development of Latvia’s economy will be still closely linked to export possibilities. Therefore, the highest risk to the growth of Latvia is linked to global economic development. Further development of the EU’s common economic space is particularly important.* (Ministry of Economics of the Republic of Latvia, 2020).

As born global companies is the still-young and little-known area for the economy of Latvia, the focus of this research is to raise interest in this phenomenon and foster policymakers to accelerate startups’ export activity in order to promote economic growth and boost job creation in Latvia.

Practical contribution and key benefits of the Doctoral Thesis:

- A methodology for advancement of the entrepreneurial mindset leading to BG has been developed.
- The newly developed methodology consists of two parts: (1) methodology for evaluation of nascent entrepreneur’s readiness for BG and (2) methodology for advancement of the entrepreneurial mindset leading to creation of successful BG strategy.

The main scientific contributions and novelty of the Doctoral Thesis:

1. Relationship between entrepreneurial mindset, born global phenomenon and born global strategy has been found by exploring the theoretical aspects of entrepreneurial mindset as a dynamic process.
2. A new version of common understanding of the BG definition has been developed including qualitative dimensions.
3. Results indicating the existence of necessary conditions and sufficient conditions of individual level characteristics of entrepreneurial mindset for the presence of

causation and effectuation are obtained using the fuzzy-set qualitative comparative analysis (fsQCA) method which was adapted as a tool of analysis in the field of the entrepreneurial mindset studies for the first time.

4. Results obtained by studying the presence of individual level characteristics of entrepreneurial mindset for nascent entrepreneurs by the fsQCA method, have served as a basis for the development of a scientifically based methodology for advancement of the entrepreneurial mindset leading to BG.

Structure and volume of the Doctoral Thesis

The Doctoral Thesis consists of introduction, three main chapters, conclusions, and recommendations. The volume of the Thesis is 150 pages, excluding appendices. The content of the Doctoral Thesis has been illustrated by 45 figures and 46 tables. The Doctoral Thesis has 8 appendices. The bibliography contains 284 reference sources. The content of the Thesis covers both theoretical and empirical study. The author has published 14 articles about the topic of the study and its results, all of them have been published either in scientific journals or peer-reviewed scientific proceedings, one of the articles is cited in the scientific journal. Results of the Doctoral Thesis have been presented at 14 international scientific conferences, approbated during research and study process.

The study consists of three (3) main chapters:

In Chapter 1, the author has created theoretical basis for the Doctoral Thesis in order to ensure the achievement of the research objective. A theoretical analysis of the interaction between entrepreneurial mindset and the successful born global strategy has been provided. An analysis of the entrepreneurial mindset, based on the individual-level characteristics, appropriate to the BG process and related to causation and effectuation theories, is presented. Causation and effectuation theories are chosen as the theoretical basis to show the way how entrepreneurs engage in planning activities and employ born global strategies.

Empirical research in the Chapter 2 includes the description of questionnaire, ways of processing the survey results, analysis of research results by fuzzy-set qualitative comparative analysis (fsQCA) method, justification of the survey results by expert concepts. The fsQCA analysis method is used to investigate the relationship between causal conditions (harmonious passion, obsessive passion, entrepreneurial self-efficacy, and risk perception) and the outcome decision-making logic (i.e. effectuation vs. causation). Justification of the survey results by expert concepts, based on Coyle's 'six characteristics' model of the entrepreneurial mindset, is provided.

Chapter 3 is dedicated to creation and implementation of the methodology for advancement of the entrepreneurial mindset leading to the creation of a successful born global strategy. The methodology consists of two stages: (1) methodology for evaluation of nascent entrepreneur's readiness for BG and (2) methodology for advancement of the entrepreneurial mindset leading to BG. The aim of the stage 2 is to facilitate the training of nascent entrepreneurs during the international market entry stage and to prepare to be competitive during the business growth and further maturity stages, in terms of readiness for the successful BG strategy. The methodology for advancement of the entrepreneurial mindset leading to creation of the successful born global strategy is based on existing and successfully tested experience of foreign business incubators. The validation of methodology is provided in cooperation with the LIAA business incubators, mainly in collaboration with the Sigulda business incubator.

According to the arguments presented in the Doctoral Thesis above, the following research questions were formulated:

- What is the role of entrepreneurial mindset in the process of creating the born global company and application of the successful born global strategy?
- What are the individual level characteristics of entrepreneurial mindset which drive entrepreneur's decision making process?
- What are the main tools and resources to determine the existence of the individual level characteristics of the EM for nascent entrepreneurs?
- What is needed to promote application of the EM to entrepreneurs in the process of formation of a successful BG company ?

The aim of the research

To study the theoretical aspects of entrepreneurial mindset as a dynamic process and its interaction with a born global phenomenon; to develop and validate a methodology for advancement of the entrepreneurial mindset as a driving force for the creation of a successful born global strategy.

The research *object* is entrepreneurial mindset.

The research *subject* is the development of a born global strategy.

The research hypothesis

Individual level characteristics of the entrepreneurial mindset are the main factors forming a specific state of mind which directs an entrepreneur towards entrepreneurial activities and outcomes.

In order to reach the formulated aim, the following research objectives are set:

1. To determine the role of the entrepreneurial mindset in the process of creating the born global company and application of the successful born global strategy. In order to achieve this objective, to apply generally accepted qualitative research method as monographic document analysis, based on an extensive review of the scientific literature.

2. To identify the individual level characteristics of the entrepreneurial mindset which drive entrepreneur's decision making process. An extensive review of the scientific literature should help to achieve this aim.

3. In order to reveal the link between the entrepreneurial mindset, the BG phenomenon, and the successful BG strategies to put forward a research hypothesis based on the review of the scientific literature.

4. To conduct the empirical research on presence of the individual level characteristics of entrepreneurial mindset driving towards entrepreneurial activities and outcomes. To base this part of the Doctoral Thesis on a survey as empirical research method in which information will be obtained from nascent entrepreneurs who will have to respond to questionnaire. To apply a statistical research method for data analysis choosing fuzzy-set qualitative comparative analysis (fsQCA) as configuration of the qualitative comparative analysis (QCA) method.

5. To develop a methodology for evaluation of nascent entrepreneur's orientation and readiness to be BG and a methodology based on training programs for advancement of the entrepreneurial mindset rooted approach to developing of the successful born global strategy.

6. To provide validation of newly created methodology in collaboration with business incubators, including the directors of business incubators as the experts of this process.

Limitations of the Research

As the use of networks through long-term relationships is fundamental to BG development, the current research explores the role of the individual level characteristics of entrepreneurial mindset as an influencing factor in their ability to build network relationships as a whole.

The five approaches to network strategies which can be broadly classified as network development and alliance-building capabilities, technology advantage, and multiple entry modes, which entrepreneurs implement simultaneously, are not studied in the current research.

The above mentioned 5 strategic approaches are: (1) personal network contacts; (2) strong relationships with large foreign customers and suppliers; (3) client followership; (4) use of advanced technology; and (5) multiple modes of entry. The study indirectly considers the identifiable differences in how culture affects interfirm network development, thus, firms require different strategies for developing and maintaining quality, long-term relationships in international market. Contextual variables such as economic conditions, culture, institutional environment and market-level variables likely influence the earliness, speed and degree with which firms can internationalize have not been separately studied.

The impact of the nature products or services of born global firms on their short- and long-term success is not studied in this work.

The research does not investigate the external environment perspective, nevertheless a country's institutional quality affects the local business environment, competition, and firm's profitability and further orientation towards international market. The environmental uncertainty is reportedly greater in the international environment due to its instability and the interrelation of markets; the international environment favours risk taking and opportunism. The aspects of business environment (for example, the legal system, tax system) that affect entrepreneurship in the country is not the subject of analysis of the current work. Economic freedom as a significant factor determining overall economic growth in general is considered indirectly.

Theoretical and methodological foundation of the Doctoral Thesis

The theoretical and methodological basis of the relevant scientific literature was used. Materials of scientific conferences and seminars, normative documents of the EU and the Republic of Latvia, statistic and methodological documents of Eurostat and other international economic institutions were taken as a foundation. These materials can be grouped into several thematic groups.

The first group involves a considerable number of works that investigate the features of the born global companies (Hymer, 1960; Hymer, 1976; McDougall *et al.*, 2003; Luostarinen, Gabrielsson, 2006; Acedo, Jones, 2007; Aspelund *et al.*, 2007; Laanti, *et al.*, 2007; Mathews, Zander, 2007; McGaughey, 2007; Mudambi, Zahra, 2007; Johanson, Vahlne, 2009; Sarasvathy, 2009; Keupp, Gassmann, 2009; Jones *et al.*, 2011; Buckley, 2011; Liesch *et al.*, 2012; Harms, Schiele, 2012; OECD, 2013; Laufs, Schwens, 2014; Nummela *et al.*, 2014; Knight, Liesch, 2016).

The second group includes research works that emphasise the the role of theories prevailing in periods of internationalization (Hymer, 1960; Johanson, Wiedersheim-Paul, 1975;

Johanson, Vahlne, 1977; Rugman, 1980; Stevens, 1990; Knight, Cavusgil, 1996; Madsen, Servais, 1997; Coviello, Munro, 1995, 1997; Welch *et al.*, 1998; Sarasvathy, 2009; Harms, Schiele, 2012; Mort *et al.*, 2012; Nummela *et al.*, 2014; Knight, Liesch, 2016).

The most recent theoretical basis of BG companies based on causal decision-making logic and effectual decision making logic is identified in the research works that can be regarded as *the third group* (Simon, 1957, 1991; Sarasvathy, 2001; Sarasvathy, 2001, 2008; Sarasvathy, Dew, 2005; Read, Sarasvathy, 2005; Wiltbank *et al.*, 2006; Schweizer *et al.*, 2010; Harms, Schiele, 2012; Brettel *et al.*, 2012; Nummela *et al.*, 2014; Reymen, 2017; Galkina, *et al.*, 2017; Cai *et al.*, 2017; Lundgren-Henriksson, 2017; Stroe *et al.*, 2018; Parida *et al.*, 2018; Cai *et al.*, 2017; Yua *et al.*, 2018; Villani *et al.*, 2018).

The fourth group is dedicated to information according to the individual-level characteristics of entrepreneurial mindset (Bandura, 1991; Krueger, Dickson, 1994; Chen *et al.*, 1998; Pham, Taylor, 1999; Ryan, Deci, 2000; Cardon *et al.*, 2005; Vallerand *et al.*, 2007; Sarasvathy, Dew, 2008; Sarasvathy, Venkataraman, 2011; Lafrenière *et al.*, 2011; Galkina, Lundgren-Henriksson, 2017; Stroe *et al.*, 2018).

The fifth group includes research works according to the attempts to define born global companies (Rennie, 1993; Knihgt, Cauvusgil, 1996; 2004; Zhou *et al.*, 2007; Sundqvist *et al.*, 2010; Mascherpa, 2012; Gabrielsson, Kirpalani, 2012; Bew, 2015).

The sixth group is related to the cognitive structure of BG strategy (Simon, 1959, 1991; Mintzberg *et al.*, 1998; Felin, Foss, 2005; Sarasvathy, 2008; Gavetti, 2012; Reitzig, Sorenson, 2013; Johnson *et al.*, 2014; Knight, Liesch, 2016; Jenkins *et al.*, 2016; Read *et al.*, 2016).

The following theses are brought forward for the defence:

1. Presentation of the theoretical findings obtained as a result of scientific literature analysis has resulted in the research hypotheses.
2. Presentation of the results of empirical research for presence of the individual level characteristics of entrepreneurial mindset leading conducting towards entrepreneurial activities and outcomes.
3. Presentation of the recommendations worked out for training activities to develop the individual level characteristics of entrepreneurial mindset and to improve the practical skills of entrepreneurs in terms of readiness for a successful BG strategy.

International scientific publications on the theme of the research

The results of the Doctoral Thesis have been reflected in 14 scientific publications.

Scientific articles indexed in the Web of Science and / or Scopus database:

1. Vaivode, I. (2018). Born Global Companies. Is this a Future for Economy of Latvia? A Preliminary Study. *Business: Theory and Practice*, Vol. 19, No. 1, pp. 288–299. ISSN 1648-0627. e-ISSN 1822-4202. Available: doi:10.3846/btp.2018.29.
2. Vaivode, I. (2015). Triple Helix Model of University–Industry–Government Cooperation in the Context of Uncertainties. *Procedia – Social and Behavioral Sciences*, Vol. 213, pp. 1063–1067. ISSN 1877-0428. Available: doi:10.1016/j.sbspro.2015.11.526

Anonymously peer-reviewed scientific articles published in international journals and available in other databases:

3. Vaivode, I., Ščeuļovs, D. (2019). The Relevance of "Born Global" Definition in the Research Process. *Trends Economics and Management*, Vol. 34, Iss. 2, pp. 113–124. ISSN 1802-8527. e-ISSN 2336-6508. Available: doi:10.13164/trends.2019.34.113
4. Vaivode, I., Jurēnoks, V. (2014). The Role of Innovations in Sustainable Development of State Economy. *Управление и устойчиво развитие = Management and Sustainable Development*, Vol. 45, No. 2, pp. 27.-34. ISSN 1311-4506.
5. Jansons, V., Jurēnoks, V., Didenko, K., Vaivode, I. (2013). Assesment of Dynamics of the Index of the Innovation (SII) and Its Influence on Gross Domestic Product of Latvia. *Управление и устойчиво развитие = Management and Sustainable Development*, Vol. 39, No. 1 pp. 4–10. ISSN 1311-4506.

Publications in conference proceedings indexed in Web of Science and / or SCOPUS:

6. Vaivode, I., Ščeuļovs, D. (2020). Identification and Creation of Business Opportunities as the Characteristic of the Entrepreneurial Mindset. *The 24th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2020): Proceedings*. Vol. 3. ISBN: 978-1-950492-45-9.
7. Vaivode, I., Gaile-Sarkane E. (2016). Evolution of “Design” Concept and Its Application to Innovation in Latvia. *Smart and Efficient Economy: Preparation for the Future Innovative Economy: 21st International Scientific Conference Economics and Management (ICEM 2016): Proceedings of Selected Papers*, Czech Republic, Brno: Brno University of Technology, Faculty of Business and Management, pp. 246–254. ISBN 978-80-214-5413-2.
8. Vaivode, I., Jurēnoks, V. (2014). Innovation Policy in the Context of Nowadays Globalisation. *Business and Management 2014: 8th International Scientific*

Conference: Selected Papers, Lithuania, Vilnius, pp. 460–468. ISBN 978-609-457-650-8. e-ISBN 978-609-457-649-2. ISSN 2029-4441. e-ISSN 2029-929X.

Other publications in conference (including local) proceedings:

9. Vaivode, I., Straujuma, A., Gaile-Sarkane, E. (2016). What Latvia Can Learn from Israel University-Industry Innovation Cooperation. *Challenges and Solutions for Fostering Entrepreneurial Universities and Collaborative Innovation: University-Industry Interaction Conference*, Netherlands, Amsterdam, pp. 13–28. ISBN 978-94-91901-21-8.

Publication on the conference website:

10. Vaivode, I. (2015). *Innovation Policy, Globalisation in Terms of Uncertainty* [online]. 2015. Available from: <http://2015.euramfullpaper.org/program/papers.asp>

Conference papers:

11. Vaivode, I. (2015). The Interaction of Exploitative, Explorative, Open, Closed Innovations and Different Innovation Strategies. *56th International Riga Technical University Conference "Scientific Conference on Economics and Entrepreneurship": Proceedings*, Latvia, Riga. ISBN 978-9934-8275-3-2. ISSN 2256-0866.
12. Vaivode, I. (2014). Benchmarking Analysis of Four Performance Groups Identified by EU Innovation Union Scoreboard. *55th International Riga Technical University Conference "Scientific Conference on Economics and Entrepreneurship" Proceedings*, Latvia, Riga, Technical University, pp. 1–2. ISBN 978-9934-8275-2-5.
13. Vaivode, I., Jurēnoks, V. (2014). The Assessment of Science, Technology and Innovation Policy of Latvia. *Proceedings of 12th Annual BMDA Conference "Successful 21st Century Organization"*, Latvia, Riga. ISBN 978-9934-10-559-3.
14. Vaivode, I., Jurēnoks, V. (2013). Using of Technology Audit and Modelling Methods for Innovation System Development in Latvia. *54th International Riga Technical University Conference "Scientific Conference on Economics and Entrepreneurship" [CD-ROM] : SCEE '2013 : Proceedings*, Latvia, Riga, Riga Technical University, ISBN 979-9934-10-294-3.

Presentation and approbation of research results at international scientific conferences abroad:

1. The 24th World Multi-Conference on Systemics, Cybernetics and Informatics (WMSCI 2020), 13–16 September 2020, Virtual Conference, US.
2. 17th International Scientific Conference “Perspectives of Business and Entrepreneurship Development in Digital Transformation of Corporate Business”, 30

April 2019, Brno University of Technology, Faculty of Business and Management, Czech Republic.

3. 10th International Scientific Conference “Business and Management” 2018, 3–4 May 2018, Vilnius Gediminas Technical University, Lithuania.
4. University-Industry Interaction Conference, Netherlands, Amsterdam, 1–3 June 2016.
5. 21st International Scientific Conference “Smart and Efficient Economy: Preparation for the Future Innovative Economy”, 19–20 May 2016, Brno University of Technology, Faculty of Business and Management, Czech Republic.
6. International Scientific Conference “Economics and Management – 2015” hosted by School of Economics and Business Kaunas University of Technology, held in Kaunas, Lithuania, 6–8 May 2015.
7. 8th International Scientific Conference “Business and Management’2014”, 15–16 May 2014, Vilnius Gediminas Technical University, Lithuania.
8. 16th International Scientific Conference on Management and Sustainable Development, Yundola 2014, Bulgaria.

Presentation and approbation of research results at international scientific conferences in Latvia:

1. 22nd International Scientific Conference Economics and Management, ICEM, 2017, 10–12 May 2017, Riga.
2. RTU 55th International Scientific Conference “Scientific Conference on Economics and Entrepreneurship (SCEE’2015)”, 15 October 2015.
3. RTU 55th International Scientific Conference “Scientific Conference on Economics and Entrepreneurship (SCEE’2014)”, 15 October 2014.
4. 12th Annual BMDA Conference “A Successful 21st Century Organization”, 7–9 May 2014, Riga, Latvia.
5. RTU 54th International Scientific Conference “Scientific Conference on Economics and Entrepreneurship (SCEE’2013)”, 15 October 2013.

Participation in research projects:

1. Participation in the EIT Climate-KIC Pioneers Programme with 5-week international placement (25 September – 27 October 2017) in Italy (worked out the project for one of the regions).
2. Researcher in the Horizon 2020 Euratom project “BRILLIANT – Baltic Region Initiative for Long Lasting Innovative Nuclear Technologies” – coordinated by

Lithuanian Energy Institute. Project information: grant agreement ID: 662167, start date 1 July 2015, end date 30 June 2018 (closed project).

Other activities:

1. Reviewer's Certificate of EURAM Annual Conference held 19–22 June 2018 at the University of Iceland, Reykjavik. Conference: Entrepreneurship; International Management; Strategic Management.
2. Reviewer's Certificate of EURAM Annual Conference, which was held 21–24 June 2017 at the University of Strathclyde, Glasgow, Scotland, UK. Conference: Innovation; International Management; Strategic Management.
3. Participation in workshop “An introduction to Research Data Management”, 13 April 2016, Digital Curation Centre.
4. KTU 1st International PhD Summer School in Palanga, 23–26 August 2016.
5. Participation in seminar “Take advantage of research data management”, 14 October 2015, within the framework of RTU 56th International Scientific Conference.
6. 9 ECTS EU Lifelong learning Program Erasmus Intensive Program “Conducting interdisciplinary research in cross-cultural environment” (2013-1-LV1-ERA10-05531), 29 March – 10 April 2014.
7. RTU Professional Development Seminar “Sources of Financing for Innovation and Business”, 13 March 2014, Riga, Certificate, series PNI Nr. 1217.
8. Participation in the practical seminar organized by RTU “Pedagogical work at the university” (10 hours), 2014, Certificate No. DS-14/0014.

1. RELATIONSHIP BETWEEN ENTREPRENEURIAL MINDSET, BORN GLOBAL PHENOMENON AND BORN GLOBAL STRATEGY

1.1. Entrepreneurial Mindset

The concept of entrepreneurial mindset (EM) was first mentioned in 1990, in the study conducted by Gollwitzer, which concludes that a key characteristic of the mindset is that it changes over time depending on the activity an individual is in. The mindset affects individuals' cognition for that activity (Gollwitzer, 1990).

The term *entrepreneurial mindset* has often been used since the 2000s to describe certain qualities of a person engaged in business. Thanks to these personal qualities, an entrepreneur can succeed in business. During the last two decades scientists have their research on the entrepreneurial mindset (EM) in search of answers to questions such as 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.

Analyzing the concept of the entrepreneurial mindset, the author of the Doctoral Thesis came to the conclusion that opinions among specialists about the essence of the concept are different and sometimes even contradictory.

In order to understand the concept of the entrepreneurial mindset and to form the opinion on the concept, the author has performed the monographic document analysis method which allowed to carry out a detailed study of the research object based on an extensive review of the scientific literature exploring interrelated concepts from different fields of science.

In order to ensure the quality of the research, the author has compiled expressions, opinions, designations and information available in the public space that are relevant to the concept under consideration. Various sources were collected that mention the concept of the entrepreneurial mindset or describe it, such as scientific literature and other sources of information.

The EM definitions (see Table 1.1) existing in the scientific and special literature are similar to each other. All the definitions characterize the abilities of individuals to think, reason, make decisions, plan and set goals to be dynamic, flexible and self-regulating in the cognition of the dynamic and uncertain task environment.

During the last two decades of the 21st century scientists have carried out their research on the entrepreneurial mindset (EM) searching for answers to questions such as why some

people identify opportunities and others do not, how they are able to leverage and combine the existing and new resources in an innovative way given dynamic and complex environments (Mathisen, Arnulf, 2013; Naumann, 2017). The EM definitions (Table 1.1) existing in the scientific and special literature are similar to each other.

Table 1.1
The Evolution of Definitions of the Entrepreneurial Mindset in Chronological Order of Their Creation (developed by author, based on scientific literature sources)

Author, year	Definition of entrepreneurial mindset
McGrath and MacMillian (2000)	Ability to sense, act, and mobilize under uncertain conditions
Ireland, Hitt, and Sirmon (2001)	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 and Shepherd (2007)	Ability to adapt thinking process to a changing context and task demands
Dhliwayo and Van Vuuren (2007)	Way of thinking and acting about business
Haynie <i>et al.</i> (2010)	The individual's ability to be dynamic, flexible and self-regulating in the cognition of the dynamic and uncertain task environment
Shepherd, Patzelt, and Haynie (2010)	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)	Think, reason, make decisions, plan and set goals in relatively unique way
Davis, Hall, and Mayer (2016)	Constellation of motives, skills, and thought processes that distinguish entrepreneurs from non-entrepreneurs
McMullen and Kier (2016)	Ability to identify and exploit opportunities without regard to the resources currently under their control; only working when entrepreneurs experience a promotion focus
Nabi <i>et al.</i> (2017)	A feeling or tendency to provide a critical and creative thinking ability
Lindberg <i>et al.</i> (2017)	Acquaintance with individual behaviour and entrepreneurial activities
Naumann (2017)	A way of adaptable thinking and decision-making in complex, uncertain and dynamic environments

The author of the Doctoral Thesis agrees with Naumann's opinion that following these definitions it can be argued that the EM concept is based on a cognitive perspective (Naumann, 2017).

The entrepreneurial mindset has the following common features:

- it indicates a way of thinking about business and its opportunities that capture the benefits of uncertainty (Dhliwayo, Vuuren, 2007);
- it portrays the innovative and energetic search for opportunities and facilitates actions aimed at exploiting opportunities (Senges, 2007);
- it refers to an individual having the ability to identify opportunities, develop new ideas and discover new ways of looking at opportunities and problems and creative ways of solving them (Benedict & Venter, 2010);

- a person's entrepreneurial mind is, therefore, associated with being both creative and innovative (Benedict & Venter, 2010);
- having an entrepreneurial mindset is both an individualistic and collective asset which is important to individual entrepreneurs as well as to managers and employees in their firms (Ireland *et al.*, 2003);
- the search for opportunities is, therefore, a critical task for an entrepreneur (Karlsson, Moberg, 2013);
- the mindset of entrepreneurship comprises individual behaviour and entrepreneurial activities (Naumann, 2017; Lindberg *et al.*, 2017).

Looking for a deeper theoretical basis for explanation this dynamic process led to an assumption that research literature on the general mindset issues can serve as a theoretical basis for analysis of the specific entrepreneurial mindset. This individuals' cognition is tuned towards the activity to ensure that the task at hand is done most effectively. Mindsets and cognitive processes are thus congruent (Gollwitzer *et al.*, 1990; Naumann, 2017). Mathisen and Arnulf in 2013, and McMullen and Kier in 2016 have gone deeper into researching this process, as a result, mindsets have been differentiated into a *deliberative* (elaborative) and *implemental* mindset.

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 regard to its feasibility and desirability. In this mindset goals are set.

In the *implemental mindset* individuals are striving towards goal achievement and process. The goal orientation of both mindsets thus differs between goal setting (deliberative) and goal striving (implemental) (Mathisen, Arnulf, 2013; McMullen, Kier, 2016).

In 2017 Christiane Naumann carried out a detailed analysis of the attributes affecting entrepreneurial mindset which contains elements of both the deliberative mindset and the implemental mindset. The overall seven attributes and associated qualities evolved. The different attributes, studied by different authors at different years, make up the building blocks of the entrepreneurial mindset concept. Associated qualities are the exhibited human behaviour of these attributes.

The author of the Doctoral Thesis has included in the Table 1.2 the seven attributes and associated qualities that Nauman (2017) defines in the following way:

- *An attribute* is defined as an internal characteristic which shapes EM.
- *Associated qualities* are the exhibited human behaviour of these attributes.

Table 1.2

Attributes and Associated Qualities Affecting the Entrepreneurial Mindset
(developed by author, based on scientific literature sources)

No.	Attribute	Author of research, year	Associated qualities
1	Cognitive tuning and goal orientation	Gollwitzer, Kinney, 1989; Mathisen, Arnulf, 2013; McMullen, Kier, 2016	<ul style="list-style-type: none"> - Thinking is tuned to the mindset at work; - ensuring high effectiveness to solve a task at hand; - differentiates between cautious and eager goal-setting and goal-striving
2	Heuristic-based decision logic	Busnitz, Barney, 1997; Baron, 1998; Alvarez, Busenitz, 2001; Kahnemann, 2013	<ul style="list-style-type: none"> - Fast decision-making based on heuristics and biases; - effective and efficient under high complexity and uncertainty
3	Alertness	Kirzner, 1973; Alvarez, Busenitz, 2001; Mitchell <i>et al.</i> , 2002; Ireland <i>et al.</i> , 2003; Baron, 2006	<ul style="list-style-type: none"> - Sudden insights of value; - attentiveness; - the capacity to recognize opportunities when they emerge
4	Prior knowledge	Shane, 2000; Busenitz, 2001; Baron, 2006	<ul style="list-style-type: none"> - Abstract knowledge to combine and use existing but disparate resources; - influenced by experience, education, knowledge
5	Social interaction or social capital	Venkataraman, 1997; Alvarez, Busenitz, 2001; Baron, 2006	<ul style="list-style-type: none"> - Access to disparate information across the own social network; - ability to leverage networks and make use of the resources
6	Meta-cognition	Flavell 1979, 1987; Haynie <i>et al.</i> , 2010	<ul style="list-style-type: none"> - Reflection about own thinking process; - flexibility to use different strategies to solve a task dependent on the situation
7	Cognitive adaptability	Haynie, Shepard, 2009; Haynie <i>et al.</i> , 2010	<ul style="list-style-type: none"> - 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

In the case of current research, the relationship of theories above with entrepreneurial mindset is the key thing. Larry A. Connatser in 2019 has concluded that the ‘growth’ mindset allows an entrepreneur to keep changing and trying new things to improve his/her processes in order to create the extra degree of effort which “turns hot water into steam that can power a train” (Connatser, 2019; Burnette *et al.*, 2019). Contemporary entrepreneurial mindset researchers have focused primarily on those cognitive processes that slow down adaptive cognitions in the face of dynamic, uncertain environments (Mitchell *et al.*, 2000).

In their work Spinelli and Timmons (2007) identify a set of core personal qualities that, they believe, are central to entrepreneurial behaviour: commitment and determination,

leadership, opportunity obsession, tolerance of risk, ambiguity and uncertainty, creativity, self-reliance and adaptability, motivation to excel, and courage.

The author of the Doctoral Thesis considers that it would be important to mention the following findings of researchers in the context of the individual level characteristics of entrepreneurial mindset (see Table 1.3):

- there are differences in the ways entrepreneurs use networking and how effectuation might inform these behaviours (Read *et al.*, 2015; Sarasvathy, Dew, 2005; Engel *et al.*, 2017);
- an individual's abilities to make optimal or, at least, satisfactory decisions are limited by the cognitive limitations of their minds, environmental conditions of information isotropy, and the lack of resources (Simon 1959, 1991);
- the psychological antecedents of causation and effectuation logics consist of certain prominent individual-level variables; these variables are passion, entrepreneurial self-efficacy, and risk perception; they affect a variety of entrepreneurial outcomes (Chen *et al.*, 1998; Simon *et al.*, 2000; Baum, Locke, 2004; McMullen, Shepherd, 2006; Hmieleski, Baron, 2008; Cardon *et al.*, 2009; Sarasvathy, Dew, 2008; Bandura, 1997; Baron, 2008) how individuals orient to situations and decide how to pursue goals based on beliefs (Schoenfeld, 2011);
- individual-level variables are psychological constructs that are central to understanding of entrepreneurial drive and behaviour and, by extension, entrepreneurial decision-making (Boyd, Vozikis, 1994; Simon *et al.*, 2000; Mitchell *et al.*, 2002; Wiltbank *et al.*, 2006; Cardon *et al.*, 2009; Alvarez, Barney, 2007; Miller, 2007; Sarasvathy, 2008; Alvarez *et al.*, 2013; Kuechle *et al.*, 2016).

Table 1.3

Description of Individual-level Characteristics of Entrepreneurial Mindset¹

Characteristics of the EM	Description of characteristics
1	2
Passion	Intense, positive feeling toward venture activities, motivational force which derives from the evaluation of the future venture outcome as highly significant for the entrepreneur's well-being, supposed to guide the entrepreneur toward achieving the highly significant venture outcome; two types of passion are taken into account: harmonious and obsessive passion

¹ Based on Bandura, 1991; Sitkin, Weingart, 1995; Chen *et al.*, 1998; Pham, Taylor, 1999; Ryan, Deci, 2000; Hodgins, Knee, 2002 ; Vallerand *et al.*, 2003 ; Luszczynska *et al.*, 2005 ; Cardon *et al.*, 2005, 2009; Vallerand *et al.*, 2007; Sarasvathy, 2008; Sarasvathy, Dew, 2008; Read *et al.*, 2009; Lafrenière *et al.*, 2011; Stroe *et al.*, 2018

Table 1.3 Continued

1	2
Harmonious passion	Lets to derive pleasure from business activity; entrepreneurs are characterized by process-focused motivation; they have a sense of control over their venture activity; they are flexible in their goal pursuit, open to new experiences and experimentation, more likely to embrace the unexpected in their decision-making, work together with internal and external partners to develop the venture
Obsessive passion	Feature of interpersonal or intra-personal pressures such as boosting self-esteem or feeling socially accepted or superior; ability more likely to be goal driven and plan and envision desired entrepreneurial outcomes, rigidly to follow initial goals until they are achieved; ability to be competitor oriented and focus on beating rivals or try to prevent failure relative to others
Self-efficacy	Ability to successfully attain goals associated with the new venture; the appropriate level of confidence required for entrepreneurs to expect success in attaining the venture's goals; focus on the future and visualization of success scenarios that guide the actions; focus on opportunities in the environment and on the expected; setting of the clear, challenging goals, monitoring themselves, spending considerable effort in goal attainment
Risk perception	Use of a non-predictive decision-making logic where the focus is on managing the process rather than outcomes; perceiving the environment as risky push the venture forward in small steps while considering how the context will develop, and seek support and pre-commitments from partners to counter this risk

Dweck (2006) describes the fixed mindset as a state where you believe that your qualities are carved in stone, one that creates an urgency to prove yourself over and over (Dweck, 2006).

As the continuation of the study on attributes and associated qualities influencing entrepreneurial mindset is the finding of Carol Dweck (1999) stating that a mindset is important, since it affects a person's motivation (Dweck, 1999). Stanford University psychologist Carol Dweck, in decades of research on achievement and success, has discovered a truly groundbreaking idea – the power of our mindset. Research on implicit theories distinguishes between two main beliefs, what has now been termed mindsets: an incremental theory or growth mindset and an entity theory or fixed mindset (Dweck, Leggett, 1988). Dweck and Leggett (1988) proposed that *fixed* and *growth* mindsets create frameworks for interpreting and responding to the events that individuals experience (Dweck, Leggett, 1988). The main differences between the two mindsets are:

- The *fixed mindset* believes that your qualities are carved in stone, basically permanent – and this creates an urgency to prove yourself over and over, rather than changing and growing (Dweck, 2007).
- The *growth mindset* is based on the belief that your basic qualities are things you can cultivate through your efforts; the hard work and an individual's mindset impacts success more than natural talent (Dweck, 2007).

There are three main differences (see Table 1.4) between the two mindsets, described and analyzed by Dweck (2006; 2007).

Table 1.4

Main Differences Between the Two Mindsets (Dweck, 2006; 2007)

Terms of difference	Fixed mindset	Growth mindset
1. Talent Vs Effort	Talent and intelligence are everything; it is what defines you and what protects you from failure.	There is no honour in being gifted, but effort can be admired; it is only persistence, motivation, commitment and network of support that made us successful.
2. Failure	Individuals with a fixed mindset do not entertain the notion of being challenged or that of curiosity, they merely see their intelligence as something they need to prove to others rather than build on.	Failure is important because it highlights a problem that allows the individual to face, deal with and learn from.
3. How individuals view others in the learning environment	The fixed mindset creates an internal monologue that is focused on judging: "This means I'm a loser." "This means I'm a better person than they are."	Individuals with a growth mindset get smarter because they put in a lot of effort, have positive learning strategies, including good planning, they are committed to their work and work hard at it; they learn from people who help them improve by being honest and providing constructive criticism.

The growth mindset is based on the belief that your basic qualities are things you can cultivate through your efforts. Dweck (2006) states that "...a person's true potential is unknown (and unknowable); that it's impossible to foresee what can be accomplished with years of passion, toil, and training" (Dweck, 2006).

Information in Table 1.4 could be supplemented with the findings of the more recent research sources:

- A person who develops a growth mindset can thus benefit from that in a variety of situations, such positive effects are possible, since growth mindsets are positively related to self-concepts such as creative self-efficacy and creative personal identity which are critical components of a person's entrepreneurial mindset (Karwowski, 2014).
- Views such as "some people are winners – others are not", make people with fixed mindsets concerned about whether they have good traits or not (Murphy, Dweck, 2016).
- People with growth mindsets, on the other hand, believe that learning and experience make it possible for people to develop and that they can significantly change who they are and how they behave (Murphy, Dweck, 2016).

- People with growth mindset tend to respond to failure by focusing on actions and strategies for improvements, while people with a fixed mindset tend to lose persistence, blame themselves and show a decrease in performance (Nordin, Broeckelman-Post, 2019).

What makes Dweck's work different, however, is that it is rooted in rigorous research on how the mind – especially the developing mind – works, identifying not only the core drivers of those mindsets but also how they can be reprogrammed. Although people may differ in every which way – in their initial talents and aptitudes, interests, or temperaments – everyone can change and grow through application and experience. At the heart of what makes the 'growth mindset' so winsome, Dweck found, is that it creates a passion for learning rather than a hunger for approval (Dweck, 2006).

It is important to note that the growth mindset is based on the belief that your basic qualities are things you can cultivate through your efforts.

However, there are scientific studies that indicate the need for the combined approach of fixed mindset and growth mindset in the context of the entrepreneurial mindset. This 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 analyzed were the need for achievement (McClelland, 1961), assertiveness (McClelland, 1987) and risk-taking propensity (Brockhaus, 1980). Davis *et al.* (2015) analyzed the link between personality characteristics and entrepreneurial outcomes. 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 (Davis *et al.*, 2015; Nauman, 2017).

The growing body of literature believes that an entrepreneurial mindset can be boosted by providing entrepreneurship programs through educational perspectives (Cui *et al.*, 2019; Daniel, 2016; Handayati *et al.*, 2020). The fundamental rationale is that entrepreneurial education allows to have the capability, understanding, attitude, and motivation related to entrepreneurship (Handayati *et al.*, 2020). According to researchers, entrepreneurial education would be relevant for founders of new ventures, corporate businesses and students. Several studies by various authors lead to the conclusion that 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 underlined that the mindset of entrepreneurship is acquaintance with individual behaviour and entrepreneurial activities (Naumann, 2017; Lindberg *et al.*, 2017).

It was mentioned before that effort is one of the key principles of growth mindset that could serve the inclusion of Growth Mindset Strategies (Dweck, 2006), (see Table 1.5) of the current research, it is essential because the growth mindset allows individuals to change and grow through application, effort and experience.

Table 1.5

Growth Mindset Strategies (Dweck, 2006)

Strategy	Main characteristics, advice to teachers
1. Model effective learning	It is a teacher's mission and role to develop students' potential, and this can be achieved by using the lessons of the growth mindset because growth-orientated teaching can unleash students' minds (Dweck, 2006)
2. Effort is important	To encourage to try hard and put maximum effort into every task set because the experience of learning is as important as the end result (Dweck, 2006)
3. Encouragement and positivity	There are many ways for teachers to encourage others: being supportive and accepting, nurturing and positive, by giving appropriate praise, to create an atmosphere of trust, not judgement (Dweck, 2006)
4. Praise	It is a message that tells how to think about themselves. Dweck (2006) explains: "It can be a fixed mindset message that says: You have permanent traits and I'm judging them. Or it can be a growth-mindset message that says: You are a developing person and I am interested in your development."
5. Set high standards	Alongside setting challenging work in a nurturing environment, great teachers set high standards for all their students and it is not exclusively for the ones who are already achieving (Dweck, 2006)

As summary and a modern generalization of the above definitions, the dynamic approach of Dr. Alain Fayolle, published in the Financial Times in 2012 (Financial Times, March 1, 2012), is chosen; it provides definition of EM as a specific state of mind which orientates human conduct toward entrepreneurial activities and outcomes. Dr. Favole has also noted that exactly individuals with entrepreneurial mindsets are often drawn to opportunities, innovations and new value creation. One can agree with Dr. Alain Fayolle that the entrepreneurial mindset is a dynamic process with relevant activities and results.

This dynamic approach (see Fig. 1.1) will be used as a basis for further analysis of entrepreneurial activities and expected outcomes / outputs that is the result of EM.

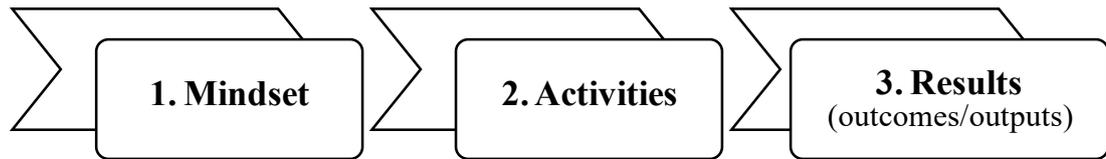


Fig 1.1. The dynamics of the entrepreneurial mindset
(developed by the author based on Dr. Alain Fayolle, 2012).

In order to test and confirm the reliability of the assumptions, statements and conclusions expressed by the author of the Doctoral Thesis as well as the validity / substantiation of methods, the author has chosen the focus group methodology (Carson *et al.* 2001). The author of the Doctoral Thesis believes that this qualitative method provides an accurate and concrete assessment thanks to the opinions of experts who are specialists in their specific fields and participate in the focus group. In addition, focus groups are well placed to test and receive targeted feedback and views on the developed proposals or new developments. The findings and results developed and summarized during the focus group discussion can be used for further research, including qualitative research.

The group should be as homogeneous as possible, as several experts, including Merton, believe that homogeneity is a stimulus for discussion and the more homogeneous and social a group is, the more productive it is (Axelrod, 1975; Merton, Fiske, 1991).

Based on the opinions of specialists on the number of focus group participants, the author of the Doctoral Thesis has chosen to include 8–12 people in each of the focus groups. This number of experts was selected according to the data validity methodology described by Griffin and Hauser (1993).

The focus group discussion on ways of understanding of the EM concept was attended by 8 people who are the experts in the field of entrepreneurship with a focus to SME. The age of focus group members is from 24 to 57, both genders. These experts were selected to make sure that we have a common understanding of the EM concept and its features. The focus group discussion took place on 10 December 2019.

The focus group members were offered 5 discussion questions on the EM concept and its features. The discussion lasted 1.5 hours. The discussion was divided into 2 stages. In the first stage, the participants were divided into 2 groups, and each group presented their views at the end of the discussion.

The views of the two expert groups on what is EM were different in the first phase. The first round of discussions resulted in two views: "issues related to innate talent to find

opportunities, built business" and "ability to reach success in business, based on motivation, effort, work capacity". In the second phase of discussions, the experts were given a task: one group had to set the features of fixed mindset and the other – of the growth mindset in their opinion. Experts from both groups identified the features of fixed mindset and growth mindset based on the available literature sources and supplemented them with their own views and then concluded that qualities of the individual, although it seems sometimes are carved in stone, cannot develop on their own without effort. As a result, all focus group members have concluded that EM, as a specific state of mind, by definition, which orientates human conduct toward entrepreneurial activities and outcomes, could be cultivated through positive learning strategies, working hard at it, learning from people who help them improve by being honest and providing constructive criticism. Thus, the author's assumption is that the ability of entrepreneur to conceive, recognize and exploit opportunities of the international markets is based on the entrepreneurial mindset which needs to be carefully developed.

Analyzing research on the success of various entrepreneurs in business, included in the works of Angel, Jenkins (2018) and Lee, Lee (2014), the author came to the conclusion that the majority of entrepreneurs have entrepreneurial mindset attributes. In addition, there are obvious signs of growth mindset.

1.2. The Born Global Phenomenon

During the past decades of the 20th century, since a new phenomenon categorized as a 'born global firm' has come to public attention (Rennie, 1993), it has become an object of scientific research, its justification has been sought in scientific theories, there have been attempts to develop new theories to substantiate it. The born global literature is positioned in relation to the most influential theories of firms' internationalization. Overwhelmingly the literature deals with two modes of internationalization: foreign direct investment (FDI) and exports.

Traditional theories of the internationalization of a firm define it as an incremental and gradual process (Johanson *et al*, 1975; Johanson, Vahlne, 1977; Luostarinen, 1979, 1994): firms have first done business within domestic markets, then started to internationalize by entering neighbouring international markets, and later expanded to other countries. Only starting from the Uppsala network model, there is a theoretical basis for the fact that firms increasingly become part of networks during their internationalization process (Johanson, Mattsson, 1988). This leads to the assumption that towards the later stages of internationalization, the amount of co-operation can be expected to increase with foreign firms.

The Uppsala internationalization model emphasizes how the enterprise gradually increases its international involvement. It distinguishes between psychic and physical distance where the former includes differences in languages, cultures, political systems, etc., while the latter refers to geographical distance. A new paradigm, the so-called ‘global approach’, was claimed to have emerged (Braunerhjelm, Halldin, 2019).

The development of internationalization theories towards the contemporary theoretical issues, characterizing the essence of modern BG is presented in Table 1.6. The internationalization of businesses has become a pervasive phenomenon which underscores the importance of the born-global concept and the need for researchers and practitioners to understand the factors that influence the success of born global firms. Foundational literature on BGs emerged in the 1990s.

Rennie (1993) introduced the term ‘born global’ upon publishing the findings of exporting firms in Australia, a large proportion of which had internationalized at or near founding (McKinsey *et al.*, 1993; Rennie, 1993).

In 1994, Oviatt and McDougall provided an explanatory framework of early internationalizing firms by integrating the accepted MNE and internationalization theories with developments in entrepreneurship research (Oviatt, McDougall, 1994). They highlighted the role of knowledge and other unique organizational resources in early internationalization (Oviatt, McDougall, 1994).

Table 1.6

Theories Prevailing in Periods of Internationalization ²

Period and authors	Name of theory	Description of theory
1	2	3
Stephen Hymer (1960)	Internalization theory of multinational enterprises – market internalization theory – a foundation of the field today.	The theory permits Foreign Direct Investment (FDI) to become a modality by which firms extend their territorial horizons abroad. Until Hymer articulated the process of FDI as an international extension of industrial organization theory, it was not possible to understand why the MNE transfers intermediate products such as knowledge or technology among its units across different nations while still retaining property rights over such assets.

² based on theoretical issues of Hymer, 1960; Johanson, Wiedersheim-Paul, 1975; Johanson, Vahlne, 1977; Rugman, 1980; Stevens, 1990; Knight, Cavusgil, 1996; Madsen, Servais, 1997; Coviello, Munro, 1995, 1997; Welch *et al.*, 1998; Sarasvathy, 2009; Harms, Schiele, 2012; Mort *et al.*, 2012; Nummela *et al.*, 2014; Knight, Liesch, 2016

Table 1.6 Continued

1	2	3
Johanson, Wiedersheim-Paul (1975); Johanson, Vahlne (1977)	Scandinavian research in the 1970s.	One of the most widely cited in the internationalization business field and the most enduring; the role of knowledge and other unique organizational resources in early internationalization is highlighted, the explanatory value of five theoretical perspectives – Monopolistic Advantage Theory (Hymer, 1976), Product Cycle Theory (Vernon, 1966), Stage Theory of Internationalization, Oligopolistic Reaction Theory (Knickerbocker, 1973), and Internalization Theory (Buckley, Casson, 1976) is examined.
Rugman (1980)	New theory of multinational enterprises.	New theory emphasizing the firm-specific advantages best exploited through internalization rather than “the assumption that a firm is producing and marketing abroad a standardized product”.
Stevens (1990)	Technoglobalism vs. technonationalism.	Report on the role of technology in the corporate push to globalization.
Knight, Cavusgil (1996); Madsen, Servais, (1997)	Born global.	Some scholars who observed the rise of BGs seemed to challenge some extant IB theories and models.
Coviello, Munro (1995, 1997); Welch, Wilkinson (1998)	Networks theory.	Role of networks and alliances in small firm internationalization.
Sarasvathy (2009); Harms, Schiele (2012)	Effectuation theory.	Explains an entrepreneurial processes in born global firms; emphasizes a relatively unplanned entrepreneurial approach to internationalization, while causation-oriented entrepreneurs tend to engage in planning activities and employ more formal, traditional entry strategies. Experienced entrepreneurs apply effectuation in their early internationalization efforts.
Mort, Weerawardena, and Liesch (2012)	Four key strategies of BG marketing – opportunity creation.	Comments on the role of effectuation logic in BG internationalization and performance. Four key strategies of BG marketing are identified – opportunity creation, customer intimacy-based innovative products, resource enhancement and legitimacy.
Nummela, Saarenketo, Paivi, and Loane (2014)	Causation and effectuation – the two logics.	The basis for decision-making in BGs may alternate between causation and effectuation. The two logics can operate together in the firm, but their salience varies with evolving market uncertainty and the nature of decision-makers.

The author divided the development of theoretical basis of BG into three stages which are presented in Fig. 1.2. In each new stage, as the theoretical base develops, more and more new factors that characterize BGs have been added, theories have evolved with the development of BG phenomenon.

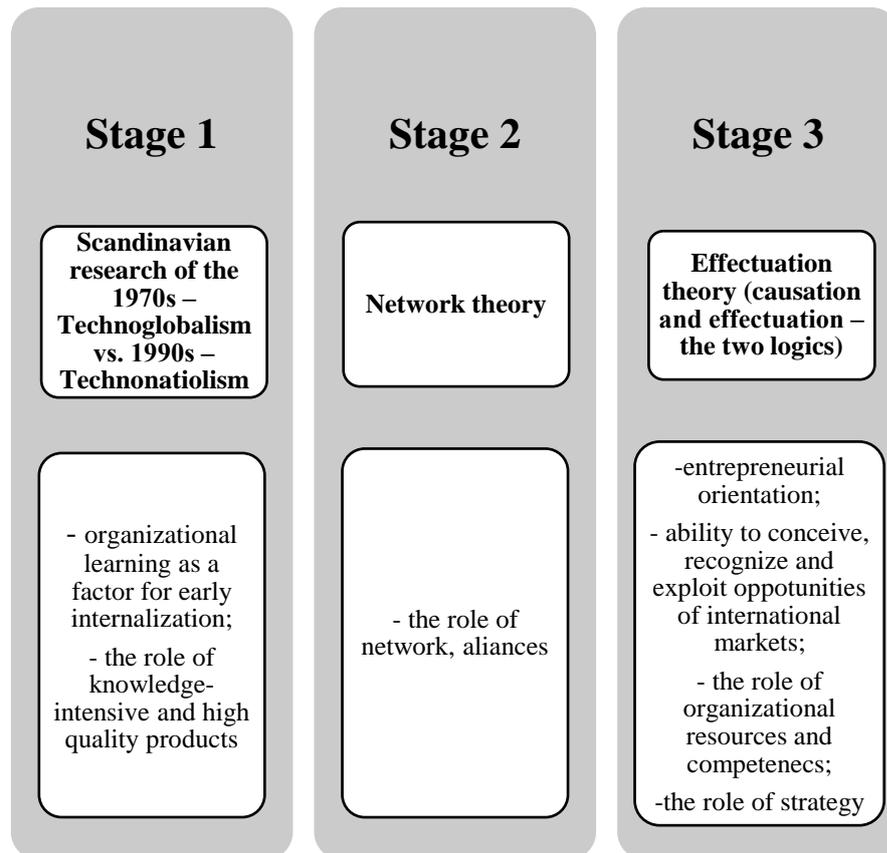


Fig. 1.2. The main BG theories, their formation through different research stages (developed by the author).

The explanation of components included in Fig. 1.2 is as follows:

Stage 1

Scandinavian research of the 1970s is the starting point for the BG investigation. Technoglobalism vs. technonationalism of the 1990s is a starting point of the opinion about the role of technology in the corporate push to globalization: it is emphasized that knowledge-intensive products, high-technology products, high-value products, and high-quality products foster early internationalization (Acedo, Jones, 2007; Bell, *et al.*, 2003; Efrat, Shoham, 2012; Fan, Phan, 2007; Gassmann, Keupp, 2007; McNaughton, 2003; Rialp *et al.*, 2005; Weerawardena *et al.*, 2007). During this period, an opinion emerged that organizational learning is an enhancing factor of early internationalization which influences superior international performance of BGs (Weerawardena *et al.*, 2007; Michailova, Wilson, 2008; Jantunen *et al.*, 2008; Zhou *et al.*, 2010).

Stage 2

This stage is mainly characterized by the arising of networks' theory of the 1990s, which emphasizes the role of networks and alliances in small firm internationalization, focuses on the role of network relationships, alliances, and other social capital in BG internationalization and international performance (Cavusgil, Knight, 2009; Chetty, Holm, 2000; Coviello, 2006; Coviello, Cox, 2006; Gassmann, Keupp, 2007; Gleason, Wiggenhorn, 2007; Mort, Weerawardena, 2006; Schwens, Kabst, 2009; Sharma, Blomstermo, 2003; Zhou *et al.*, 2007).

Stage 3

This stage of the contemporary causation and effectuation theories includes focus on the entrepreneurial orientation as a potential antecedent to early internationalization and founder's characteristics, which strongly affect internationalization of new firms from inception, explained in detail by the effectuation theory (McDougall *et al.*, 2003; Acedo, Jones, 2007; Zhou, 2007; Aspelund *et al.*, 2007; Luostarinen, Gabrielsson, 2006); managers' ability to conceive, recognize, and exploit opportunities in the international markets (Zahra *et al.*, 2005); dynamic capabilities as a key factor that supports early internationalization (Weerawardena *et al.*, 1996; Moen, Servais, 2002; Zahra *et al.*, 2003; Etemad, 2004; Rialp *et al.*, 2005; Oviatt, McDougall, 2005; Rialp, Rialp, 2006; Freeman *et al.*, 2006; Kuivalainen *et al.*, 2007; Acedo, Jones, 2007; McGaughey, 2007; Mudambi, Zahra, 2007; Jantunen *et al.*, 2008; Prange, Verdier, 2011; Baum *et al.*, 2013; Knight, Liesch, 2016).

Figures for BG companies, originating in Europe, related to the 3rd research stage developed as follows:

The European Commission has identified internationalisation as one of the main focuses of the EU's strategies. This has been reflected in the introduction of the Small Business Act for Europe (SBA) since 2008 and the Europe 2020 strategy to reinforce the economy based on smart, sustainable and inclusive growth. As a result, internationalisation support has been prioritised and developed in a variety of forms at both EU and national levels to motivate SMEs to internationalise not only within the EU but also in third countries. Furthermore, as shown in the annual report on European SMEs (European Commission, 2017; 2018), manufacturing SMEs are seen as some of the key contributors to the economy of the EU28, generating 58 % of employment and 42 % of total value added in 2018. SMEs account for 99.8 % of all enterprises and contribute 67 % of total private sector employment and almost 60 % of the total value added within the EU (European Commission, 2017). This contribution has also been growing. During 2011–2016, SMEs generated around 85 % of the new jobs and accounted for over two-thirds of total private sector employment in the EU (European Commission, 2017).

According to the Eurobarometer survey (European Commission, 2015), around half of SMEs (52 %) in the EU are involved in international business, either inside or outside the Single Market, ranging from the highest proportions in Cyprus (62 %), Latvia (52 %) and Austria (51 %) to the lowest ones in Bulgaria (16 %), Estonia (13 %) and Italy (12 %). These data have a certain coherence with the results of the EIM (2010) survey, where 44 % of SMEs were engaged in at least one type of international activity (among exports, imports, foreign investment, technological cooperation with enterprises abroad, subcontracting to a foreign main contractor, and having foreign subcontractors). SMEs' internationalisation behaviour differs tremendously according to the industry sectors. Sectors with the highest share of exporting SMEs are mining (58 %), manufacturing (56 %), wholesale trade (54 %), research (54 %), sales of motor vehicles (53 %), and transport and communication (39 %) (European Commission, 2018). The 625+ EEN organisations provide their services to more than 250,000 SMEs every year; this includes internationalisation services, providing specialised advisory services to 70,000 SMEs on access to finance, EU regulations and resource efficiency services. About 25,000 SMEs participate in matchmaking events resulting in about 2,500 international partnerships signed between SMEs every year. It explicitly recognised the needs for the EU and the Member States to provide assistance to SMEs and encouraged them to take advantage of the growth of markets outside the EU, for example through the provision of market-specific support and business training activities (European Commission, 2014; Dilger, 2016).

The internationalisation of SMEs, and particularly their export capability, has received increased attention and is considered as a key growth strategy in many economies. Based on the traditional internationalisation theories, the growth of 'born global' companies was identified. Despite the growing importance of the BG phenomenon, data on BG are not yet included in the regular statistical reports of the EUROSTAT, OECD. The BG characteristics in figures can be obtained from various research studies only. According to data from the Global Entrepreneurship Monitor (GEM), born globals represent 2.5 % of all SMEs and 12 % of young enterprises (Eurofound, 2018).

According to Eurofound data (2019), 45 % of European BGs state to have none or only few competitors, compared to around one-third of SMEs. 37 % of BGs consider that their products / services are new for their customers, compared to 26 % of SMEs. Moreover, around 30 % of both BG and other start-ups state that the technology required for their products has been available for a maximum of five years, compared to a proportion of 20 % among SMEs. Similar results are also confirmed by available national data (Eurofound, 2019) (see Table 1.7).

Table 1.7

Statements of the European BGs (Eurofound, 2019)

BG firms agreeing to the statement, %	Statement
45	State having none or only few competitors, compared to around 1/3 of SMEs
37	Consider that their products / services are new for their customers, compared to 26 % of SMEs
30	State that the technology required for their products has been available for a maximum of five years, compared to a proportion of 20 % of SMEs

The available examples show that the born globals have been thriving in recent years and enjoy positive prospects for the future. Examples of BG are provided further.

Blue Ocean Robotics (develop, produce and sell professional service robots primarily in healthcare, hospitality, construction and agriculture) annual turnover grew by approximately 120 % year on year. The contribution of exports to overall turnover range is 20 % in the case of Blue Ocean Robotics. The company is presented in approximately 40 countries through its joint ventures and local sales partners, but its main market in terms of turnover is still Denmark; 66.7 % of the company is owned by the three original founders, 28.3 % is owned by a group of external investors and the remaining 5 % is owned by employees (Eurofound, 2018).

Graphenea (a technology company founded in 2010, the world leading graphene producer) has also experienced a rapid growth since its creation, with its turnover increasing from approximately €130,000 in 2012 to €1,280,000 in 2016. The contribution of exports to overall turnover range is 98 % for Graphenea. The company engaged in international activities about two years after start-up (Eurofound, 2018).

Frog Bikes (produces lightweight and affordable kids' bikes) has grown fast from its inception, with average annual revenue growth of 85 % and profitability growing by four to five percentage points annually, generating an annual turnover of more than GBP 5 million (€5.69 million as of 9 October 2018) as of February 2017 and having a five-fold increase in the number of employees. Frog Bikes began to internationalise just three months after it was founded, and within a few months the company was already exporting to 12 countries, it has around 1,800 retailers worldwide and thriving partnerships (Eurofound, 2018).

High-tech and niche sectors have been identified as enablers for the BGs to test and improve the product quickly (Eurofound, 2016).

The described above has the most direct relationship to activities of *entrepreneur* that possesses a certain set of individual characteristics.

Many of researchers already in slightly earlier studies (Loane *et al.* 2008; Paweta, 2013) have found that a born global can emerge only with the help of an *entrepreneur* who possesses

a certain set of individual features. In turn, the BG *enterprise* has certain features which are specified in Rennie, 1993; Moen 2002; Persinger *et al.* 2007; Gabrielsson *et al.*, 2008; Paweta, 2013; Advantage Austria, 2019; Ferguson *et al.*, 2021) which indicate to the ‘born global’ phenomenon (see Table 1.8).

Table 1.8

Individual Characteristics of a Born Global Entrepreneur and Main Features of the Born Global Phenomenon (based on Loane *et al.* 2008; Paweta, 2013 and Rennie, 1993; Moen 2002; Persinger *et al.* 2007; Gabrielsson *et al.*, 2008; Paweta, 2013; Advantage Austria, 2019; Ferguson *et al.*, 2021)

Characteristics of the BG entrepreneur	Main features of the BG enterprise
Global entrepreneur: an individual with strong achievement motivation; strong internal focus of control, risk-taking propensity; less risk averse, adaptable and willing to change; proactive personality with a global orientation; sets targets and strives to meet these targets; experiences less psychic distance to foreign markets because he / she travels more; more educated and more proficient in foreign languages.	Companies with an international focus; international growth is the company’s main priority. These companies are highly active in the international markets from or near their foundation. They possess limited financial and tangible resources. The companies serve clients worldwide, providing new, innovative products and services; specialized and customized products are getting more popular and gives them a competitive advantage over large multinational firms. They often create completely new markets or create niches in the market by combining existing ideas with new solutions; niche markets bring more possibilities for born globals. Born globals represent different industries and act as game-changers in their respective fields of expertise. Exporting is the most popular way of early international expansion, as it allows to stay flexible, enter or withdraw a new international market relatively easy. Modern information and communication technologies help born globals in the process of early internationalization. They are usually ready to take additional risks. They develop advanced managerial skills, their managers have a strong international outlook and international entrepreneurial orientation.

There is an obvious connection between the features of an entrepreneur and of a BG company. For example, an entrepreneur with a strong internal focus of control, risk-taking propensity, proactive personality and global orientation would be able to establish a highly active company in the international markets from or near its foundation, to create completely new markets, introduce new ideas, and successfully create new niches in the market by combining existing ideas with new solutions. With reference to Subsection 1.1, it can be concluded that characteristics of the entrepreneur, included in the Table 1.8, are the the outcomes of the dynamic process of the entrepreneurial mindset.

If entrepreneurs have an entrepreneurial mindset, they are likely to have a high chance of becoming the owner / manager of a BG company.

The latest focus of BG characterization is presented by Ferguson *et al.* (2021). It is important to distinguish the following three groups of features:

- *in general* it is emphasized that the BGs are distinct from other exporters by their ability to overcome the initial barriers associated with entry into foreign markets without first establishing a strong home market presence; this capacity has attracted the interest of many governments, although employment growth will not increase in proportion to the growth of these companies (Cannone, Ughetto, 2014; Ferguson *et al.*, 2021);
- *necessity of knowledge and skills is highlighted*: young firms are particularly constrained with respect to management competencies and other resources, which can make rapid internationalization risky; BGs need knowledge and skills which are crucial in navigating foreign markets, and firms with an aggressive international expansion may face a disadvantage of foreignness and newness compared to foreign incumbents, which may adversely affect the performance of some firms (Andersson, Victor 2003; Oviatt, McDougall, 2005; Luostarinen, Gabrielsson, 2006; Sapienza *et al.*, 2006; Rugman, Verbeke, 2007; Carr *et al.*, 2010; Figueira-de-Lemos *et al.*, 2011; Casillas, Moreno-Menéndes, 2014; Ferguson *et al.*, 2021);
- *openness of the founders and the learning advantages of newness*: the long-term growth of born global firms and the openness of the founders as well as the early preparation for growth determine both the extent and speed of organizational learning, which in turn drives the long-run growth; the young firms can more easily adapt their processes and structure to new markets, which allows young firms to enjoy the learning advantages of newness (Autio *et al.*, 2000; Hagen, Zucchella, 2014; Sleuwaegen, Onkelinx, 2014; Ferguson *et al.*, 2021).

In order to confirm the reliability of the assumptions, statements and conclusions made by the author of the Doctoral Thesis about the born global phenomenon and its features, the focus group methodology was chosen (Carson *et al.*, 2001). The decision was to include 8–12 people in the focus group. This number of experts was selected according to the data validity methodology described by Griffin and Hauser (1993).

The focus group discussion on ways of understanding of the BG concept was attended by 9 people who are the experts in the field of entrepreneurship with focus at SME. The age of focus group members is from 26 to 58, both genders. These experts were selected to make sure we have a common understanding of BG concept and its features. The focus group discussion took place on 9 November 2019.

The focus group members were offered 6 discussion questions on BG concept and features of BG. The discussion lasted 1.5 hours. The discussion was divided into 2 stages. In

the first stage, the participants were divided into 2 groups and each group presented their views at the end of the discussion.

The views of the two expert groups on what is BG, were different in the first phase. The first round of discussions resulted in two views: "all of the export companies" and "not enough to be exporter, production operations can also be located in different countries". In the second phase of the discussion, the experts were given the task to pay attention only to opportunities of the small and medium-sized enterprises (SME) in the international market and to make conclusions. Experts from both groups came to the conclusion about the opportunities provided by modern information and communication technologies which could help SME in the process of early internationalization. Conclusion about advanced managerial skills, a strong international outlook and international entrepreneurial orientation followed, potential risks in the global market were discussed.

Based on the results of the focus group discussion it was concluded that BG companies operate internationally soon after their inception and are usually ready to take additional risks. During the discussion, there was a need to substantiate the issues related to BG with the scientific theories, as a result, the focus group experts also came to the conclusion that the author of the dissertation should study also the causation and effectuation theories, which are closely related to the features of the BG phenomenon. This is also confirmed by scientists in their research where there is a finding that the rapid growth of BG firms is considered to be challenging for their decision-making processes (Nummela *et al.*, 2014). According Sarasvathy (2009) and Harms, Schiele (2012), entrepreneurship of the period, which coincides with the time when the BG concept started, have conceptualized two main decision-making strategies: causation and effectuation. Within the entrepreneurship literature a seminal author on the effectuation theory, Sarasvathy (2001), distinguished between causation and effectuation decision-making modes, explaining that the main difference between them lies in the set of choices. Causation involves choosing between different means to achieve a particular goal, whereas effectuation relies on the means at hand to achieve a variety of goals in a process where the outcomes are not initially known (Sarasvathy, 2001; Wiltbank *et al.*, 2006).

Effectuation emphasizes a relatively unplanned, entrepreneurial approach to internationalization, while causation-oriented entrepreneurs tend to engage in planning activities and employ more formal, traditional entry strategies (Harms, Schiele, 2012). These differences are illustrated further by two approaches:

- four principles that differentiate causation and effectuation decision making logics, included in Chandler's *et al.* (2011) research;
- conceptualization of causation and effectuation as strategic decision-making logics, based on Galkina, Lundgren-Henriksson (2017); Villani *et al.* (2018) findings.

Table 1.9 illustrates four principles that differentiate causation and effectuation approaches, based on the research of Chandler *et al.* (2011).

Table 1.9

Four Principles that Differentiate Causation and Effectuation Approaches
(Chandler *et al.* 2011)

Principle	Characteristic of causation	Characteristic of effectuation
Principle 1	Prediction of an uncertain future by defining the final objective up front	A focus on short-term experiments to identify business opportunities in an unpredictable future
Principle 2	Maximization of expected returns	A focus on projects where the loss in a worst-case scenario is affordable
Principle 3	Business planning and competitive analyses to predict an uncertain future	Pre-commitments and strategic alliances to control an unpredictable future
Principle 4	Exploitation of pre-existing capabilities and resources	Exploitation of environmental contingencies by remaining flexible

Four principles that differentiate causation and effectuation approaches (see Table 1.8) allow to conclude that there is a need for close interaction of both logics in the business process: a relatively unplanned, entrepreneurial approach to internationalization should be combined with necessary planning activities.

Nummela *et al.* (2014) suggest that the basis for decision-making in BGs may alternate between causation and effectuation. Knight, Liesch (2016) claim that the two logics can operate together in a firm, but their salience varies with evolving market uncertainty and the nature of decision-makers. Table 1.10 reflects the approach of conceptualization of causation and effectuation as strategic decision-making logics.

The conceptualization of causation and effectuation as strategic decision-making logics is a continuation of the four principles that differentiate causation and effectuation approaches. Effects of the causal and effectual strategic decision-making logics are based on the corresponding characteristics of causation and effectuation.

Table 1.10

Conceptualization of Causation and Effectuation as Strategic Decision-making Logics³

Effects of the causal strategic decision-making logics	Effects of the effectual strategic decision-making logics
Defining goals (target effects)	Defining means
Focusing on expected returns	Focusing on affordable loss
Engaging in planning activities	Leveraging contingencies
Emphasizing competitive analysis	Seeking pre-commitments and strategic partnerships

Causation and effectuation as strategic decision-making logics carry out strategies of business companies (Sarasvathy, 2001; Zahiu, Nastase, 2005; Wiltbank *et al.*, 2006; Stoicescu,

³ based on theoretical issues of Galkina, Lundgren-Henriksson, 2017; Villani *et al.*, 2018.

2009; Nummela *et al.*, 2014; Reymen, 2017). Figure 1.3 offers the approach of Sarasvathy, Dew (2005) to the differences between causal and effectual decision-making logics for enterprises. Effects of the causal and effectual strategic decision-making logics are reflected in Fig. 1.3.

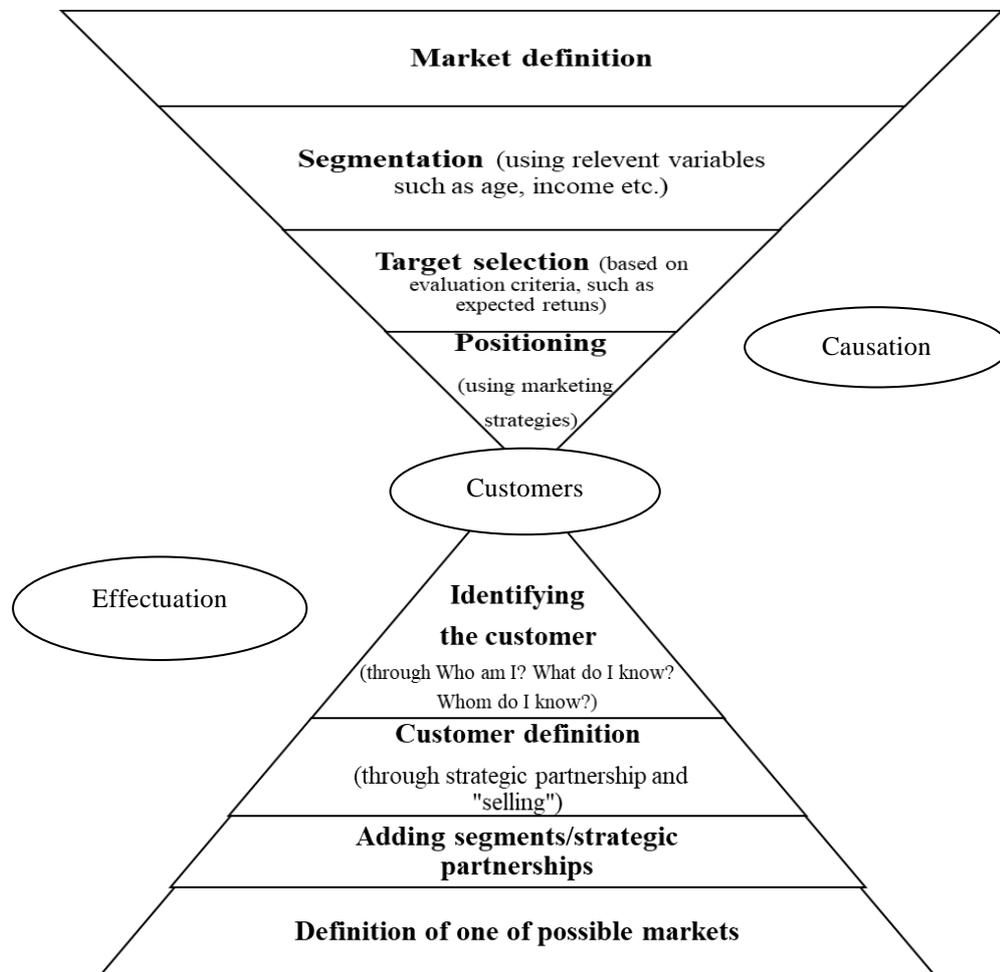


Fig. 1.3. Differences between causal and effectual decision-making logics for enterprises (Sarasvathy, Dew, 2005).

Nummela *et al.* (2014) suggest that the basis for decision-making in BGs may alternate between causation and effectuation. Knight and Liesch (2016) state that the two logics can operate together in a firm, but their salience varies with evolving market uncertainty and the nature of decision-makers.

The basic idea of causation, as the strategic decision-making logic, is the particular target effect (Nummela *et al.*, 2014; Cai *et al.*, 2017; Yua *et al.*, 2018) and effectuation, as positively affecting new venture performance, in four ways:

- formulation of the goals based on experimentation;
- application of affordable loss principle helps to control the risk and to make good use of limited resources;

- application of flexibility helps to leverage contingencies in uncertain environment and use existing resources in creative combinations;
- partnerships enable companies to control the future and eliminate uncertainties (Yua *et al.*, 2018).

Harms and Schiele (2012) found that experienced entrepreneurs apply effectuation rather than causation in their early internationalization efforts, based on the effectual *decision-making logic* which includes the following features that justify why entrepreneurs apply effectuation rather than causation in their early internationalization efforts:

- non-predictive logic which focuses on rearranging the problem space and restructuring current realities into new opportunities (Sarasvathy, 2001; Read, Sarasvathy, 2005; Sarasvathy, Dew, 2005; Wiltbank *et al.*, 2006, Stroe *et al.*, 2018);
- has been applied in different fields of entrepreneurship and has been studied by many authors (Augier, Sarasvathy 2004; Dew *et al.*, 2004; Coviello 2005; Wiltbank *et al.*, 2009; Read *et al.*, 2009; Jones, Schweizer *et al.*, 2010; Brettel *et al.*, 2012).
- is not positioned as a ‘better’ logic of reasoning but as being more applicable in situations of uncertainty and when dealing with spheres of human action (Sarasvathy, 2001; Perry *et al.*, 2012; Villani *et al.*, 2018; Sarasvathy, 2001, 2008; Arend *et al.*, 2015; Alsos *et al.*, 2016; Dew, Sarasvathy, 2009);
- effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means (Sarasvathy, 2001; Galkina, Chetty, 2015).

To approach it as effectuation, help in restructuring current realities into new opportunities in the process of creating BG, the decision was to analyze the principles of effectuation (see Table 1.10). The reason to focus on these principles, first of all, is included in the definition of the concept: “*Effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means*” (Sarasvathy, 2001). The first principle of effectuation is based on means, in this regard, the researchers conclude that entrepreneurs, when set out to build a new venture, start with the means: who I am, what I know, and whom I know; then, the entrepreneurs imagine possibilities that originate from their means (Burke, Reitzes, 1991; Sarasvathy, Venkataraman, (2011); Bengtsson, Kock (2014); Galkina, Lundgren-Henriksson (2017); Galkina, Lundgren-Henriksson (2017); Ekinci, 2020). Individuals use the answer to the questions *who I am, what I know, and whom I know* for navigation of the reflexive thought and to adapt their behaviour, so they can survive and develop in a changing environment (Burke, Reitzes, 1991; Ekinci, 2020). The dynamic approach to navigate reflexive thought *toward entrepreneurial activities and outcomes* is

included in the definition of the entrepreneurial mindset (see Chapter 1.1). This dynamic path integrates into the sequence of the effectuation principles, included in Table 1.11.

Table 1.11

Principles of Effectuation (Sarasvathy, Venkataraman, 2011; Bengtsson, Kock, 2014; Galkina, Lundgren-Henriksson, 2017)

Principle	Features of the principle	Description
Bird-in-the-hand (means)	When expert entrepreneurs set out to build a new venture, they start with the means: who I am, what I know, and whom I know. Then, the entrepreneurs imagine possibilities that originate from their means.	This means-driven logic does not imply the absence of goals and planning. Goals are organized in hierarchies where satisfying low-level goals (sub-goals) facilitate accomplishment of high-level goals (desired endstates).
Affordable loss	Expert entrepreneurs limit risk by understanding what they can afford to lose at each step, instead of seeking large all-or-nothing opportunities. They choose goals and actions where there is upside even if the downside ends up happening.	Instead of causally counting expected returns and risks, effectual entrepreneurs stake as much as they can afford to lose, because under conditions of high uncertainty they cannot predict the return on investments and success of the venture.
Crazy quilt (partnerships)	Expert entrepreneurs build partnerships with self-selecting stakeholders. By obtaining pre-commitments from these key partners early on in the venture, experts reduce uncertainty and co-create the new market with its interested participants.	Effectual entrepreneurs work jointly with any and all interested stakeholders, together they negotiate and re-negotiate roles and relations within the growing effectual network. Through this process, all the stakeholders obtain either financial or emotional ownership of the entrepreneurial resources. The effectuation logic supposes that the environment is endogenous.
Lemonade (leverage contingencies)	Expert entrepreneurs invite the surprise factor. Instead of making 'what-if' scenarios to deal with worst-case scenarios, experts interpret 'bad' news and surprises as potential clues to create new markets.	Effectual entrepreneurs exploit contingencies in order to control the emerging situation that relates to leveraging unexpected outcomes and surprising situations because uncertainty is treated as an opportunity and a resource rather than a disadvantage. Thus, having some preconceived goal in mind would discourage entrepreneurs from creating a more favourable environment for opportunities.
Pilot-in-the-plane (Worldview – control vs. predict)	Expert entrepreneurs know that their actions will result in the desired outcomes. An effectual worldview is rooted in the belief that the future is neither found nor predicted but rather made.	

Effectuation shows a strong relation with entrepreneurial mindset as well confirms the BG as phenomenon. The next illustrative example includes a combination of the dynamic path of the entrepreneurial mindset and sequence how to navigate the reflexive thought through the chain of principles of effectuation for the purpose to survive and develop in a changing environment. The mentioned illustrative example is the dynamic model of effectuation worked out by Sarasvathy in 2000.

The dynamic pathway (see Fig. 1.4) starts with the first principle of the effectuation, bird-in-the-hand (means) because entrepreneurs set out to build a new venture and start with the means: who I am, what I know, and whom I know. The first step is taken when the entrepreneurs imagine possibilities that originate from their means (Ashforth *et al.*, 2000;

2008), the entrepreneurial mindset helps to navigate reflexive thought and to adapt behaviour so entrepreneurs can survive and develop in a changing environment (Burke, Reitzes, 1991; Ekinci, 2020).

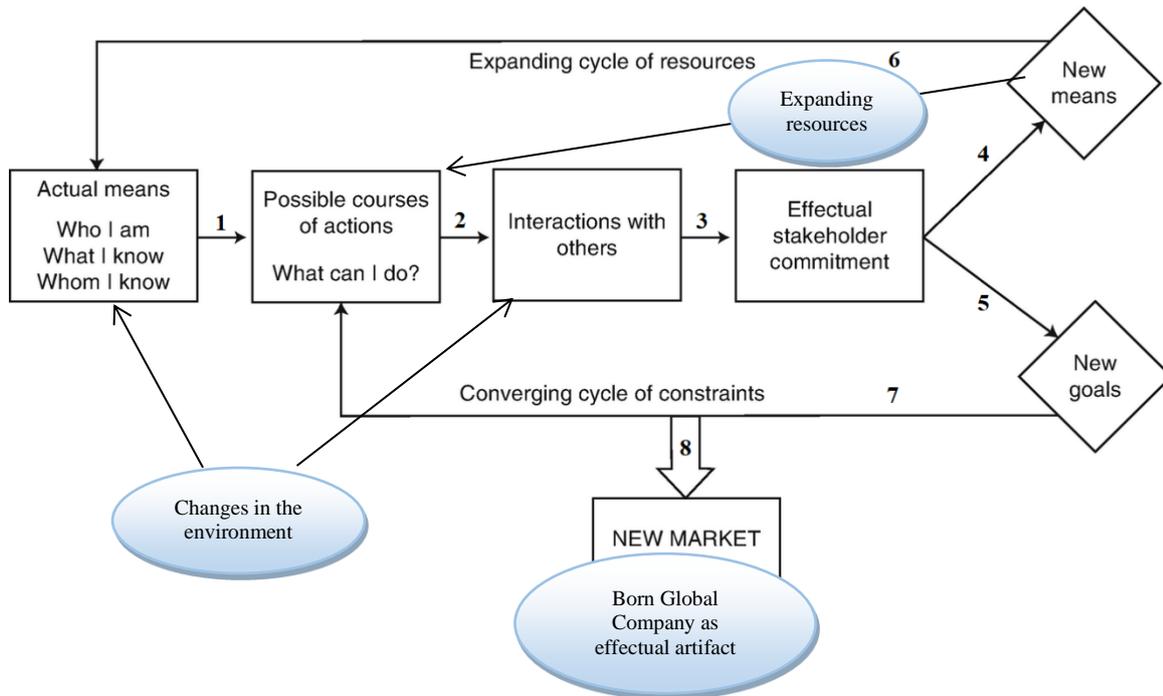


Fig. 1.4. Framework for the dynamic model of effectuation with additional explanation (based on Sarasvathy, 2008).

In the context of the current study, the dynamic model of effectuation could help to better understand how entrepreneurs should follow the effectuation process to gain early customers and committed partners who then create new means and new goals as resources and viewpoints (Nymoer, 2004; Sarasvathy, 2008; Keen, 2010, 2011; Ouali *et al.*, 2016; Zacarias *et al.*, 2017).

A brief description of Fig. 1.4 is as follows.

Link 1 corresponds to the connection between the principle of actual means, including identity meaning of entrepreneur (who I am, as well as what I know, whom I know), activities then follow and result in possible courses of actions (What can I do?). This means-driven logic does not imply the absence of goals and planning. Goals are organized in hierarchies where satisfying low-level goals (sub-goals) facilitates the accomplishment of high-level goals (see Table 1.10) (Sarasvathy, Venkataraman, 2011; Bengtsson, Kock, 2014; Galkina, Lundgren-Henriksson, 2017).

Links 2, 3, 4, and 5 are the connection to results of possible courses of actions (What can I do?). The meanings of effectuation such as affordable loss, partnerships, leverage

contingencies, worldview-control vs. predict, reflected in Table 1.10, are applied, these meanings are the basis for the explanation of further entrepreneurial activities and understanding of their essence and the way how actions will result in the desired outcomes (Sarasvathy, Venkataraman, 2011; Bengtsson, Kock, 2014; Galkina, Lundgren-Henriksson, 2017).

Links 6 and 7 indicate feedback from the new means and the new objectives set during the working process jointly with any and all interested stakeholders. Changes in actual means, following this feedback, resulting in advanced possible courses of actions are the basis for further business development and growth. The expanding resources as the result of acquisition of new means affect actual means of entrepreneur and stimulate the following course of actions. Link 8 indicates the result of this dynamic process: it is usually the formation of new markets, in the case of the current study, we can also refer to the formation of born global companies. The indication to the influence of external environmental factors is included as an integral part of the dynamic process (Sarasvathy, 2008).

The opportunity to get acquainted with the study of Freeman *et al.* (2010) led to the conclusion that encouragements of building network ties are intrinsically linked with behavioral characteristics of BGs, which reflects their proactive mentality to create new network relationships, an inclination for risk taking along with an innovative atmosphere (Freeman *et al.*, 2010). Whereas, based on the features of BG, network ties refer to the resulting outcomes of the entrepreneurial activities which are promoted by the entrepreneurial mindset, this is the reason to believe that the individual level characteristics of entrepreneurial mindset are possible factors forming the specific state of the entrepreneurial mindset. The author considers that it would be important to mention the following findings of researchers in the context of the individual level characteristics of entrepreneurial mindset:

- there are differences in the ways entrepreneurs use networking and how effectuation might inform these behaviours (Read *et al.*, 2015; Sarasvathy, Dew, 2005; Engel *et al.*, 2017);
- an individual's abilities to make optimal or, at least, satisfactory decisions are limited by the cognitive limitations of individual's mind, environmental conditions of information isotropy, and the lack of resources (Simon 1959, 1991);
- the psychological antecedents of causation and effectuation logics consist of certain prominent individual-level variables; these variables are passion, entrepreneurial self-efficacy, and risk perceptions, they affect a variety of entrepreneurial outcomes (Chen *et al.*, 1998; Simon *et al.*, 2000; Baum, Locke, 2004; McMullen, Shepherd, 2006; Hmieleski, Baron, 2008; Cardon

et al., 2009; Sarasvathy, Dew, 2008; Bandura, 1997; Baron, 2008) how individuals orient to situations and decide how to pursue goals based on beliefs (Schoenfeld, 2011);

- individual-level variables are psychological constructs that are central to understanding of entrepreneurial drive and behaviour and, by extension, entrepreneurial decision-making (Boyd, Vozikis, 1994; Simon *et al.*, 2000; Mitchell *et al.*, 2002; Wiltbank *et al.*, 2006; Cardon *et al.*, 2009; Alvarez, Barney, 2007; Miller, 2007; Sarasvathy, 2008; Alvarez *et al.*, 2013; Kuechle *et al.*, 2016).

A conclusion from the above could be the author's assumption that the dynamic model of effectuation is the general framework which points out how to navigate reflexive thought and to adapt behaviour so that entrepreneurs can survive and develop in a changing environment. Each entrepreneur has a different approach to this path, therefore it is important to study factors that influence this different approach. For this purpose, it would be important to study the individual-level characteristics of entrepreneurial mindset as possible factors affecting the specific state of entrepreneurial mindset, conducting human's orientation towards entrepreneurial activities, in the case of the current research, to successful strategies for the born global companies.

1.3. Clarifying of the Born Global Definition

As found in the scientific literature, there have been attempts to combine different qualities, principles, and features in definitions of BG firms. About 28 definitions were created during the period from 1993 to 2012 (reflected in Table 1.12). Some of the definitions, for example, Knight and Cavusgil (2004) emphasize young companies, the firm as the unit of analysis, and primarily outward internationalization. Many scholars use criteria of three years, and 25 percent of them use criteria of operationalization of early internationalization. There are some critical views that, in reality, these definitions are relatively arbitrary.

Table 1.12

Definitions of Born Global Companies (based on theoretical issues of Gabrielsson, Kirpalani, 2012; Bew, 2015)

Period when the definition was created	Number of created definitions	Common features of definitions	Different features of definitions	Authors of definitions
1993–2012	28	A business organization that from inception seeks to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries	Inception is not clearly defined in any of the literature sources, the meaning of inception has to be looked up in dictionary	Rennie, 1993; Kihgt, Cavusgil, 1996; 2004; Zhou <i>et al.</i> , 2007; Sundqvist <i>et al.</i> , 2010; Mascherpa, 2012
		Other essential characteristics: <ul style="list-style-type: none"> • multiple entry modes in different combinations and different markets; • innovative products with global market potential; • global mindset of management; • competitive advantage from the international use of resources or international sale; • young enterprises, not older than 6 years 	Period until internationalization (possible options): not specified; 2 years; 3 years; 4 years; 5 years; 6 years; 10 years.....	
		Small size enterprises (less than 500 employees and annual sales of less than \$100 million), reliance on cutting edge technology in the development of a 'relatively' unique product or process or product innovations	Minimum share of foreign sales as a % of total sales (possible options): 20 %; 25 %; over 50 %; 65 %; 75 %; 80 %	
		The firm must operate in at least one foreign country, it should sell at least one product or service, should have started exporting early in its lifecycle	There is no requirement for specific levels of sales volumes	

At an early stage of BG research, the definition of BG aims to capture a unique type of export firm with an accelerated export process in contrast to the traditional internationalization process whereby firms build up a customer base in the domestic market and then gradually expand internationally (Bilkey, Tesar 1977; Johanson, Vahlne, 1977; Cavusgil, 1980). The literature of that time has reached the point of specifying that “international entrepreneurship is

a combination of innovative, proactive, and risk-seeking behaviour that crosses national boundaries and is intended to create value in organisations” (McDougall, Oviatt, 2000).

The definitions of BG are mainly quantitative and usually defined along two dimensions:

- the degree of export intensity (exports as a share of total sales must exceed a certain value);
- the age of the firm at which this export intensity criterion is met (Gabrielsson *et al.* 2008).

In literature, numerous quantitative definitions have been applied (Braunerhjelm, Halldin, 2019; Gabrielsson, Kirpalani, 2004; Oviatt, McDougall, 1994; Rennie, 1993), such as export activity within 2–10 years and a minimum export share of total sales ranging between 20 to 80 %. In literature review by Bader and Mazzarol (2009), they present 12 different definitions across 126 studies, where Oviatt and McDougall’s (1994) definition was the most referenced one. In the works originated in the US, which is a large country with a basically low export ratio, the original definition specified that BGs must export 25 % of their sales within 3 years of inception (Knight, Cavusgil, 1996). However, from a European perspective this definition was not very demanding (Kuivalainen *et al.*, 2007).

Ferguson *et al.* in a very recent study, published in 2021, emphasize that there is a lack of a harmonized definition of BG in the literature even now, although many efforts have been made to define them both qualitatively and quantitatively. For their own research purpose Ferguson *et al.* (2021) used the definition of BG as startups with at least 25 % of their sales in exports within 3 years of founding, since it is the most commonly used definition in the studies of Moen, Servais (2002) and Knight, Cavusgil (2004).

Even today business professionals claim that there is a lack of a harmonized definition of BGs in the literature, although many efforts have been made to define them both qualitatively and quantitatively. The quantitative definitions of BG are more common, they are usually defined along two dimensions: the degree of export intensity (exports as a share of total sales must exceed a certain value) and the age of the firm. In this chapter, it has been decided to examine the extent to which what has been discussed in the previous chapters is consistent with the BG definition.

As the author made sure from literature, the BG definition, created by Knight and Cavusgil (2004), that has been considered relatively acceptable in literature for many years is the following: “*Entrepreneurial start-ups that, from or near their founding, seek to derive a substantial proportion of their revenue from the sale of products in international markets.*”

International new ventures which also include BGs (Oviatt, McDougall, 1994; McDougall, Oviatt, 2000) are widely defined. Oviatt and McDougall (1994) defined international new ventures (INVs) as *business organizations that, from inception, seek to derive significant competitive advantage from the use of resources and the sale of outputs in multiple countries*. Due to Shapiro et al. (2007), the definitions do not adequately account for context, which is particularly relevant in international research.

It was decided to organize a focus group discussion to clarify the understanding of the BG definition among domestic experts and ensure a common approach and understanding of the BG concept which can help to find out the views of local business professionals on the type of BG definition. Focus group discussion is one of the ways to engage participants interested in a particular topic as well as enable them to really talk and debate, unlocking new insights that would otherwise remain undiscovered.

Validation of Born Global definition in focus group discussion

The focus group discussion was organized, a task of special importance to find out in person the experts' views on the nature and role of BG was realized. In this regard, the discussion of the BG definition was realized for the purpose to determine the essential qualities and meaning of (in this case) born global. To answer the question which of the mentioned above definitions provide information that meets the needs of nowadays global market, author tried, first of all, to search for the principles of definition in Merriam-Webster (2021) which states that the definition is the act of defining or of making something definite, distinct, or clear; the formal statement of the meaning or significance of a word, phrase, idiom; the condition of being definite, distinct, or clearly outlined. According Merriam-Webster, a definition may be:

- a statement of the exact meaning of a word, an exact statement or description of the nature, scope, or meaning of something;
- the action or process of defining something, the degree of distinctness in outline of an object, image, or sound, the capacity of a device to make images distinct in outline;
- a statement that explains the meaning of a word or phrase, a description of the features and limits of something because of its own features.

Based on the above-mentioned 'definitions of definitions', the author decided to propose the following approach to the BG definition for experts' discussion, based on the ideas of Oviatt and McDougall (1994), McDougall and Oviatt (2000), and Knight and Cavusgil (2004):

Born global company is *a business organization that at least three years after inception into the international market has derived some sort of competitive advantage and become competitive from the use of resources and the sale of outputs in multiple countries.*

Two (2) focus group discussions of experts were organized: a discussion on 6 December 2018, and a discussion on 18 January 2019. The discussions were moderated by the author of the Doctoral Thesis. On 6 December 2018, the discussion group consisted of six (6) experts; on 18 January 2019, the group consisted of six (6) experts as well. The groups of experts were gathered together to discuss the dimensions which need to be included in the BG definition. All the participants had an in-depth understanding of entrepreneurship issues. The focus group discussion uncovered personal attitudes, beliefs and knowledge of participants about the way how to define BG company.

Main findings of the focus group discussions

Participants of discussions came up with a new version of the common understanding of the BG definition including three qualitative dimensions:

- 1) a company oriented to revenues from international market;
- 2) a company capable of the market offering that meets the needs of the international market customers;
- 3) a company uses modern technologies.

Combining the mentioned above qualitative dimensions, the following understanding of the BG definition was found for further use in this research, provided within development of the Doctoral Thesis (see Table 1.13).

The author's and the domestic expert's understanding of BG definition includes the following:

Born Global Company is a company oriented to revenues from international market, capable of the market offering that meets the needs of the international market customers; the company uses modern technologies.

There is a lack of a harmonized definition of born globals in the literature, although many efforts have been made to define them, both qualitatively and quantitatively (Ferguson et al. 2021). The two quantitative dimensions usually highlighted in the BG definition are: the degree of export intensity (exports as a share of total sales) and the age of the firm at which this export intensity criterion is met, it is not enough to capture a unique type of export firm with an accelerated export process.

Author's aim was to find an understanding of the presence of qualitative dimensions in the definition of BG as seen in the Table 1.13.

Table 1.13

Born Global Definition and its Trajectories, Dimensions (developed by author) and Measurement / Characteristics (based on Cambridge and Oxford Dictionaries, 2020)

Born Global definition	Trajectories	Feature of qualitative dimensions	Measurement / characteristics
Born Global Company is a company oriented to revenues from international market, capable of the market offering that meets the needs of the international market customers; the company uses modern technologies.	Revenue	International market	The income generated from the sale of goods or services, or any other use of capital or assets, associated with the main operations of an organization before any costs or expenses are deducted. Revenue is shown usually as the top item in an income (profit and loss) statement from which all charges, costs, and expenses are subtracted to arrive at net income.
	International		Involving more than one country.
	Market		An actual or nominal place where forces of demand and supply operate, and where buyers and sellers interact (directly or through intermediaries) to trade goods, services, or contracts or instruments, for money or barter. Markets include mechanisms or means for (1) determining the price of the traded item, (2) communicating the price information, (3) facilitating deals and transactions, (4) effecting distribution. The market for a particular item is made up of existing and potential customers who need it and have the ability and willingness to pay for it.
	Offering		Something that you give or offer to someone.
	Needs		To have something, or to want something very much, require (something) because it is essential or very important rather than just desirable.

Entrepreneurial mindset (Chapter 1.1) is defined as a specific state of mind which orientates human conduct towards entrepreneurial activities and outcomes, Fig. 1.6 could serve as a basis to explain the following:

Orientation to revenues from international market is the result of the entrepreneur's specific state of mind, further it results in ability to be *capable of the market offering that meets the needs of the international market customers and in necessity to use modern technologies*. The market offering that meets the needs of the international market customers, is the basis for earning revenues (a kind of feedback has formed). Arrows in Fig. 1.5 show this relationship.

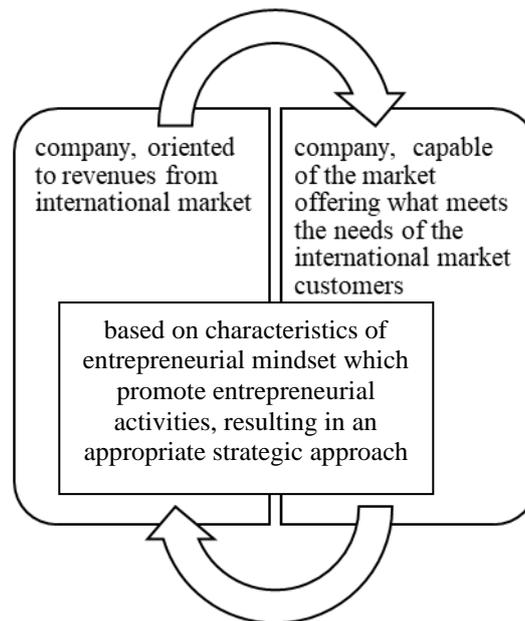


Fig. 1.5. The pattern of inclusion of the specific features in the definition of BG (developed by author).

Profitability is the result of the *orientation to revenues from international market*. To achieve profitability, successful strategy which consists of strategic objectives and is based on commercial strategy containing the elements as commercial objectives, market analysis, market positioning, is necessary (Zahiu, Nastase, 2005; Stoicescu, 2009). Successful by definition, included in the Cambridge Dictionary, means achieving the results wanted or hoped for. According to Zahiu, Nastase (2005), Stoicescu (2009), the focus on the need for a successful strategy includes a competing position of the enterprise. What factors affect the path towards the successful BG strategy and what is needed to achieve it, will be explored in the next chapter.

1.4. Interaction of the Entrepreneurial Mindset and Born Global Strategy

As analyzed in previous chapters, BGs do not follow the traditional stage model of internationalization, their way of doing business is rarely “characterized by a steady, logical, controlled sequential progression” (McAuley, 1999). The entrepreneurship literature distinguishes between causation and effectuation decision-making approaches, explaining that the main difference between them lies in the set of the following choices:

1. Causation logic is used to find the best solution if BG entrepreneurs carefully look for new trends, perform frequent environmental analyses, evaluate a large number of alternatives prior to making a decision (Andersson, 2011).

2. The danger is that under the uncertain conditions of internationalization (Kalinic *et al.*, 2014) and goal ambiguity (Galkina, Chetty, 2015) this decision-making process can become slow, and as a result foreign market opportunity could be missed.
3. Inclusion of the effectuation logic allows decision-makers to quickly change their goals over time, as a result, decision-makers in BGs can initially focus on the resources available at hand (e.g., personal abilities, knowledge, social networks) and then try to achieve a variety of goals related to international expansion (Andersson, 2011) to construct new alternatives, create new and surprising outcomes (Sarasvathy *et al.*, 2014).
4. It is suggested in literature that effectuation logic is particularly relevant for developing agility within BG firms, as they most often operate in new niche markets and have to make decisions in the absence of clear preexisting goals (Nemkova, 2017).

A niche can be seen as a ‘specific market segment’ and “*firms can choose to produce a single market offering targeted to a specific market segment (i.e. a niche strategy)*” (Hunt, Arnett, 2004). Kotler (2003) notes that customers within a niche have a distinct set of needs and are willing to pay a premium to the firm that best satisfies those needs. Niches are, therefore, not static but can constantly be developed by identifying new needs of potential customers, needs that are currently not being satisfied by other market offerings (Kotler, 2003).

Niche strategy which allows the small player to avoid head-to-head competition with larger, broadly-based firms that tend to target mass markets, has been studied in the works of Solberg, 1997; Moen, 2000; Knight *et al.*, 2002; Karlsen, 2007. Success of specialized areas called ‘niches’ is based first of all on the path of introduction of novelties (Kemp *et al.*, 1998; Caniels, Romijn, 2008; Scot, Geels, 2008; Huijben, Verbong, 2011; Geels, 2011; Seyfang *et al.*, 2014; Elmustapha, 2018; Mirzania *et al.*, 2020). The theoretical framework for strategic niche management was developed by Kemp *et al.* (1998) to analyze the way that technological change and its social acceptance evolve together (Mirzania *et al.*, 2020).

Networks play the key role in supporting the niche strategy (Geels, Raven, 2006; Schot, Geels, 2008; Kemp *et al.*, 2007; Laan *et al.*, 2007; Cavusgil, Knight, 2009; Elmustapha, 2018; Stiles, 2020). Chetty and Hunt in 2004, have come to a conclusion according to the networks as a device that internationalizing firms use (Chetty, Hunt, 2004).

Figure 1.7 reflects the networking as the driving force for the niche strategy, which brings new knowledge and operates as an integral part of the internationalization process

(Johansson, Mattsson 1987; McAuley, 1993; Liesch, Knight, 1999; Ellis, 2000; Olkonnen *et al.*, 2000; Gilmore *et al.*, 2001; Liesch *et al.*, 2002; Nikkanen, 2003; Gabrielsson, Kirpalani, 2014).

Two key network elements (networking which brings knowledge and network relationships as an integral part of the internationalization process), reflected in Fig. 1.6, are described in more detail further:

1. *Network relationships as an integral part of the internationalization process*

The objective of networks in general: to achieve access to complementary resources such as R&D, technology, production, marketing and distribution (Dunning, 1995; Porter, 1998); networks are necessary for globalizing companies to enter world markets in a fast and profitable way without taking excessive risks (Ohmae, 1989).

BG can benefit from the social, technical, and commercial resources of their networks, resources that would take individual companies years to accumulate on their own (Baum *et al.*, 2000; Laanti *et al.*, 2007), BG can globalize their activities by use of their activity links, resource ties, and actor bonds (Håkansson, Snehota, 1995 ; Laanti *et al.*, 2007). Networks play a key role in supporting the niche strategy, especially in the process of opportunity creation as a factor, enhancing performance in internationally entrepreneurial firms (Mort *et al.*, 2012; McDougall, Oviatt, 2000; Zahra *et al.* 2005).

1. *Networking which brings knowledge*

Sepulveda, Gabrielsson (2013) show that networks (Knight, Cavusgil, 2004) contribute greatly to the success of BG by helping to identify new opportunities abroad and by improving market knowledge (Loufrani-Fedida *et al.* 2019). The fundamental rationale is that knowledge (also the knowledge brought by networking) allows to have the capability, understanding, attitude, and motivation related to entrepreneurship (Handayati *et al.*, 2020). Companies with founders and managers who possess international experience, good foreign language skills, international networks, and excellent technological competence can rapidly enter more distant markets and do so with operation modes requiring more commitment (Johanson, Vahlne, 1990; Oviatt, McDougall, 1997; Luostarinen, Gabrielsson, 2004; Laanti *et al.* 2007). Di Gregorio *et al.* (2008) argue that the search not only for foreign market opportunities but also for tangible and intangible resources and combining them in novel, innovative ways, requires knowledge. Managers leverage networks to acquire requisite knowledge on foreign markets and early internationalization (Baum *et al.*, 2013; Michailova, Wilson, 2008; Weerawardena *et al.*, 2007; Yeoh, 2004). Learning orientation is positively associated with superior international performance in BGs (Jantunen *et al.*, 2008; Zhou *et al.*, 2010).

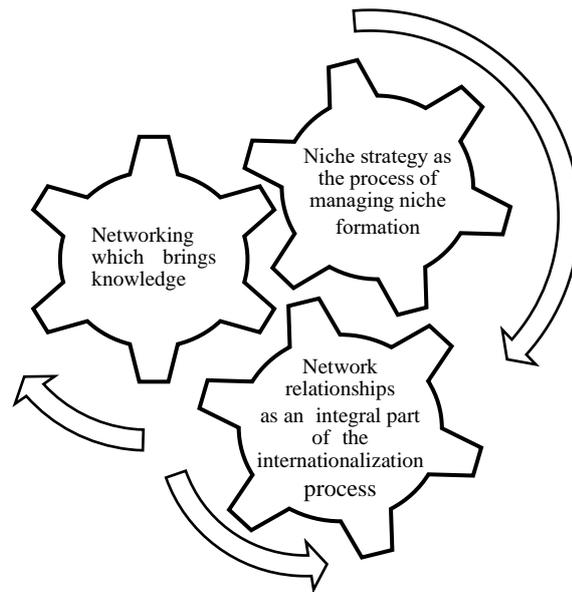


Fig. 1.6. The key role of networks in supporting the niche strategy (developed by the author).

Figure 1.7 shows the relationship between two key network elements: network relationships as an integral part of the internationalization process and networking which brings knowledge, it also highlights the main features that characterize each of these two key network elements.

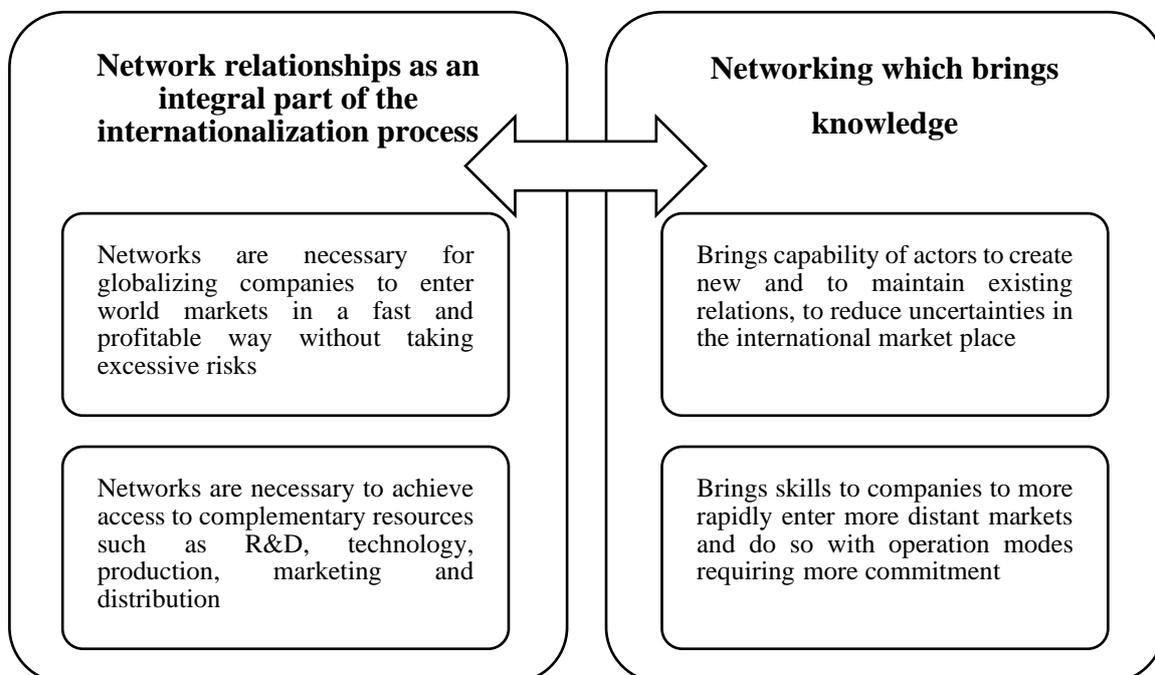


Fig. 1.7. The relationship between the two key network elements (developed by the author).

Entrepreneurial mindset plays a vital role in the process of building business networks and is very closely related to the promotion of opportunity creation in the following way:

- entrepreneurial mindset indicates a way of thinking about business and its opportunities that capture the benefits of uncertainty (Dhliwayo, Vuuren, 2007);
- it portrays the innovative and energetic search for opportunities and facilitates actions aimed at exploiting opportunities (Senges, 2007);
- refers to an individual having the ability to identify opportunities, develop new ideas and discover new ways of looking at opportunities and problems and creative ways of solving them (Benedict & Venter, 2010).

The search for opportunities is essential in the process of building networks and a critical task for an entrepreneur (Karlsson, Moberg, 2013; Naumann, 2017; Lindberg *et al.*, 2017; Weerawardena *et al.*, 2015; Mort, Liesch, 2019). Opportunities refer to cross-national combinations of resources and markets in the case of BG (Gregorio *et al.*, 2008; Mathews, Zander, 2007). Di Gregorio *et al.* (2008) argue that internationalizing entrepreneurs should search not only for foreign market opportunities but also for tangible and intangible resources and combine them in novel, innovative ways. The resource-based theory (RBT) substantiates the necessity of opportunity creation in such way that companies analyze 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 differs among companies, rare resources are a source for developing a competitive advantage (Ireland *et al.*, 2003). Alvarez and Busenitz (2001) argue that the entrepreneurial recognition of opportunities is a resource in itself because if entrepreneurs possess a ‘unique mindset’ with specific cognitive processes this would form a source for competitive advantage, as the cognitive abilities of entrepreneurs help them to identify opportunities and plan resources for the firm (Ireland *et al.*, 2003; Nauman, 2017; Mort, Liesch, 2019). There are differences in the ways entrepreneurs identify opportunities and plan resources for the firm (Read *et al.*, 2015; Sarasvathy, Dew, 2005; Engel *et al.*, 2017). The author’s assumption that the psychological antecedents of causation and effectuation logics consisting of certain prominent individual-level variables are the factors forming the ways how entrepreneurs identify opportunities and plan resources for the firm. The individual level variables, as shown in Chapter 1.2, are passion, entrepreneurial self-efficacy, and risk perceptions, they affect a variety of entrepreneurial outcomes (Chen *et al.*, 1998; Simon *et al.*, 2000; Baum, Locke, 2004; McMullen, Shepherd, 2006; Hmieleski, Baron, 2008; Cardon *et al.*, 2009; Sarasvathy, Dew, 2008; Bandura, 1997; Baron, 2008).

The review of scientific literature-based research conducted in the Part 1 of the Doctoral Thesis, resulted in the proposed research hypothesis.

The novelties presented in Part 1 are as follows:

- the new version of the common understanding of the BG definition which includes three qualitative dimensions, has been established;
- interaction between the need to promote entrepreneurial mindset and a born global strategy development process have been found.

2. IMPLEMENTATION AND METHODOLOGICAL SUBSTITUTION OF EMPIRICAL RESEARCH OF THE FACTORS FORMING THE ENTREPRENEURIAL MINDSET

To prove the research hypothesis put forward in relation to individual level characteristics of the entrepreneurial mindset as the main factors forming the entrepreneurial mindset, the survey was chosen as a data collection tool. The survey method is mainly concerned with the analysis of qualitative evidence in a reliable manner and enables the reviewer to note the various views and experiences of respondents. The sample included three groups of respondents: the start-up companies from Baltic states as a potential early orientation to international born global (Fernhaber *et al.*, 2007, 2008; Bibua *et al.*, 2016; Zimmermann, 2017); the gazelle – Latvia's fast-growing companies. In addition, the author of the Doctoral Thesis decided to seek the views of the group of Austrian entrepreneurs – owners of companies – born global champions. Online survey was chosen as a medium to complete the survey.

The questionnaire was designed to test the research hypothesis; it contains the set of 9 (nine) blocks of questions and concluding questions (see Fig. 2.1).

The data have been gathered according to the recommendations of Interreg Baltic Sea Region project “Smart-up accelerator”; LIAA Magnetic Latvia Startup database has been used as well as Start-up databases of Lithuania and Estonia. The research period included years 2018 and 2019. Entrepreneurs from approximately 800 ventures in total were contacted through e-mail and invited to complete the online survey. The response rate was 20 %. Data were collected via an on-line survey of founders of companies who had been closely involved in their business development trajectory. The open-ended and mixed type questions were used, so that the answers can be applied for further analysis.

The methodology for data analysis included Likert scale as the data analysis tool (answers to the questions were scored at 5 levels), and fuzzy-set qualitative comparative analysis (fsQCA) (Ragin, 2000, 2008; Roing-Tiepoint scale that ranged from 1 (completely disagree) to 5 (completely agree) (Sullivan, Artinrmo *et al.*, 2017). Qualitative Comparative Analysis (QCA), developed by Charles Ragin (1987), is a method of comparative nature geared toward multiple case studies in a small- or medium-N research design. QCA bridge the divide between quantitative and qualitative methods (Ragin, 1987). Necessary conditions (individual characteristics of the entrepreneurial mindset) for the presence of causation and effectuation is the dependent variable which was tested during the current research. Presence of causation and effectuation is the independent variable.

2.1. Research Data Collection

2.1.1. Creating the Questionnaire

Nine blocks of questions covered general information about the company and the explored entrepreneurs' attitude towards internationalization as well as the sample items of causation and effectuation relevant individual characteristics of the entrepreneurial mindset (see Table 2.1).

Table 2.1

Justification of Questionnaire (developed by author)

The block of questions	Description of the block	Justification / theoretical background
Block 1 – three questions	General questions about the company	Eurostat, 2018; Paragon, 2019; OECD, 2019
Block 2 – three questions	Exploration of entrepreneurs' attitude towards international experience and internationalization	Erramilli, 1991; Williams, 2008; Moberg, Stenberg, 2012; Nasiri, Hamelin, 2018; Asli, 2018
Block 3 – two questions	Sample items of causation research	Sarasvathy, 2001; Read, Sarasvathy, 2005; Sarasvathy, Dew, 2005; Wiltbank <i>et al.</i> , 2006; Stroe <i>et al.</i> 2018
Block 4 – two questions	Sample items for flexibility and experimentation	Jones, Coviello 2005; Schweizer <i>et al.</i> 2010; Chandler <i>et al.</i> 2011; Galkina, <i>et al.</i> 2017; Stroe <i>et al.</i> 2018
Block 5 – two questions	Sample items for harmonious passion	Pham, Taylor, 1999; Ryan, Deci, 2000; Hodgins, Knee, 2002; Cardon <i>et al.</i> , 2005; Vallerand <i>et al.</i> , 2010; Lafrenière <i>et al.</i> 2011; Stroe <i>et al.</i> 2018
Block 6 – two questions	Sample items measuring obsessive passion	Vallerand <i>et al.</i> , 2003; Cardon <i>et al.</i> , 2009; Lafrenière <i>et al.</i> , 2011; Stroe <i>et al.</i> 2018
Block 7 – one question	Sample items for entrepreneurial self-efficacy indication	Bandura, 1991; Boyd, Vozikis, 1994; Chen <i>et al.</i> , 1998; Luszczynska <i>et al.</i> 2005; Sarasvathy, Dew, 2008; Stroe <i>et al.</i> 2018
Block 8 – one question	Sample items for risk perception	Ghosh, Ray, 1992; Krueger, Dickson, 1994; Sarasvathy, 2008; Read <i>et al.</i> , 2009; Stroe <i>et al.</i> 2018
Block 9 – four questions	Sample items related to the necessity and existence of practical skills for expansion in international markets	Zahra <i>et al.</i> , 2003; Rialp, Rialp, 2006; Zhou <i>et al.</i> 2007; Berends <i>et al.</i> , 2014; Reymen <i>et al.</i> , 2015; Galkina, Lundgren-Henriksson, 2017
Two concluding questions	The period of operation on the domestic market until internationalization and listing of the main barriers for entering international markets	McKinsey <i>et al.</i> , Company, 1993; Rennie, 1993; Karakaya, 1993; McDougall <i>et al.</i> , 2003; Berends <i>et al.</i> , 2014; Reymen <i>et al.</i> , 2015; Advantage Austria, 2018

Before sending the questionnaire to the respondents, it was tested in an expert group of 9 people in the period from 12 to 15 February 2019. The focus group discussion on ways of understanding of the BG concept was attended by 9 people who are the experts in the field of entrepreneurship with focus on SME. The age of focus group members is from 26 to 58, of both genders. In order to confirm the reliability of the issues included in the survey questions, the focus group methodology was chosen (Glimore, Gronhaugh, 2001). The focus group members were offered 6 discussion questions on the BG concept and features of BG . The discussion

lasted 1.5 hours. The expert discussion was prompted by the question of why sample items of causation research are highlighted in relation with sample items of individual level characteristics of entrepreneurial mindset. The participants of the discussion were introduced to the essence of the fuzzy-set qualitative comparative analysis (fsQCA) method that will be used for data analysis as a result of the discussion; the decision of the expert group about the questionnaire was affirmative. After the focus group discussion and before sending the questionnaire to the sample of respondents, it was tested in a test group of 20 people over a period of time from 25 March to 12 April of 2019.

To be able to build the questionnaire as well as to substantiate each of the questions, the author of the research has performed a systematic analysis of the literature, as a result the questionnaire was created (see Fig. 2.1).

The questionnaire is designed to test the hypothesis and contains the following set of questions (Q):

Block 1 – general questions Q1, Q2, Q3 (number of employees in the company represented by the respondent; business sector; market where the company operates (domestic or international))
Block 2 – exploration of entrepreneurs' attitude towards international experience and internationalization, Q4, Q5, Q6 (origins of the idea to build the current business; competencies derived from international knowledge; international <i>experience</i> of the company's managerial staff)
Block 3 – sample items of causation research, Q7, Q8 (implementation of control processes to make sure the company meets objectives; research and selection of target markets)
Block 4 – sample items for flexibility and experimentation as the most essential effectuation subscales, Q9, Q10
Block 5 – sample items for harmonious passion, Q11, Q12 (the role of entrepreneur should be in harmony with the other activities of life; being an entrepreneur should be in harmony with other things that are part of the entrepreneur)
Block 6 – sample items measuring obsessive passion, Q13, Q14 (being an entrepreneur is so exciting that sometimes it is possible to lose control over it; presence of the impression that the role as an entrepreneur sometimes controls the person)
Block 7 – Q15, sample items for entrepreneurial self-efficacy indication based on the degree of certainty entrepreneur has in his / her ability to perform the tasks as established and achieve goals and objectives, make decisions under risk and uncertainty
Block 8 – sample items for risk perception, Q16 (e.g., threats from new competitors, volatile markets and technologies, rapidly changing customer preferences) – opportunities or threats that entrepreneur encounters
Block 9 – sample items related to the necessity and existence of practical skills for expansion in international markets, Q17, Q18, Q19, Q20 (use of information and communication technologies; knowledge of foreign languages; skills of building network relationships)
Concluding questions Q21, Q22 based on the entrepreneur's opinion about the period of operation on the domestic market until internationalization of the company; and listing the main barriers which arise entering international markets

Fig. 2.1 The structure of questionnaire designed to test the research hypothesis (developed by author).

The following is a more detailed description of the questions included in the survey.

2.1.2. Theoretical Background of the Survey Questions

The survey was started with general questions based on the theoretical explanation of each question.

General questions about the company

Q1: Number of employees in your company at present.

To formulate the question, the staff headcount principle was considered. *Staff headcount* is defined in the Cambridge Business English Dictionary as the number of employees in an organization. According to definition of enterprises by business size, provided by OECD, enterprises can be classified in categories according to their size. For this purpose, different criteria may be used but the most common is the number of people employed. Small and medium-sized enterprises (SMEs) employ fewer than 250 people. SMEs are subdivided into micro enterprises (fewer than 10 employees), small enterprises (10 to 49 employees), and medium-sized enterprises (50 to 249 employees). Large enterprises employ 250 or more people (OECD, 2019). It is important to take this aspect into account, as BG companies are small by definition and target small niche markets.

Q2: Your company operates in the following sector.

It is important to know because the sector's attractiveness as well as profitability are key elements focusing on the need for a successful strategy (Zahiu, Nastase, 2005; Stoicescu, 2009).

Table 2.2
Sectors of the Highest-growth in the European Union (source, EUROSTAT, 2018)

Explanation	Sector
Business sectors, according to the EUROSTAT, 2018, data reflecting the highest-growth in the European Union	Information and communication
	Administrative and support service activities
	Transport and storage
	Scientific and technical activities
	Water supply, sewerage, waste management
	Manufacturing
	Construction
	Wholesale and retail trade
	Real estate

The choice of sectors included in the questionnaire (question **Q2**) is provided according to the EUROSTAT (2018) data reflecting the sectors of the highest-growth in the European Union. High-growth enterprises and start-up companies are considered as basis for born global enterprises (see Table 2.2) (Eurostat, 2018).

Q3: Your company operates:

- ***in the domestic market;***

- *in the international market;*
- *in the domestic and international market.*

Questions *Q3* and *Q4* include information about the company's background and international experience. Experience of less psychic distance to foreign markets is one of entrepreneur's individual characteristics included in the set of contributing factors to become BG (Loane *et al.* 2008; Paweta, 2013). Categories of company's background information have been studied by the Paragon Recruiting (2019) highlighting the necessity to know a company's divisional or departmental details, basic structure and vital signs (Paragon, 2019).

Exploration of entrepreneurs' attitude towards an international experience

Q 4: Does this unique idea to build your business come from current work activity; from previous work activity; from your hobby or from research (academic, scientific or applied)?

Question *Q4* includes an option to choose between categories (work activity, previous work activity, hobby, research (academic, scientific or applied)) the one which characterizes entrepreneur's opportunity to start a new business.

The choice to highlight the entrepreneur's opportunity to start a new business is justified by Williams (2008); Nasiri, Hamelin (2018); they analyse two groups of entrepreneurs – necessity and opportunity entrepreneurs, characterized by “push versus pull” motivation for starting a venture:

- Opportunity entrepreneurs exploit business opportunities and contribute to economic development. This kind of entrepreneurship is thought to create value, be more innovative and growth oriented. The group is in line with the definition of entrepreneurship: *Entrepreneurship is when you act upon opportunities and ideas and transform them into value for others. The value that is created can be financial, cultural, or social* (Moberg, Stenberg, 2012). However, several researchers have questioned the separateness of opportunity and necessity drivers and argued that they co-exist in entrepreneurs' motives. They find that although most entrepreneurs are opportunity-driven, it is rather overly simplistic to adopt an either / or approach, because in developing economies, well educated people can be presented with limited opportunities for satisfying and sufficiently rewarding employment, meaning that both opportunity and necessity co-exist among reasons for starting up business ventures (Williams, 2008; Nasiri, Hamelin, 2018).
- For comparison: the necessity-driven are the individuals who did not have better choices for work, whereas opportunity-driven individuals would take advantage of business

opportunities. Necessity entrepreneurs differ in socioeconomic characteristics, human capital endowment, job satisfaction, venture success, economic development and market entry strategy, because necessity entrepreneurs often start a business when they are unemployed.

It is important to note that existence of the entrepreneurial mindset is very closely related to the promotion of opportunity creation, EM refers to an individual having the ability to identify opportunities, develop new ideas and discover new ways of looking at opportunities and problems and creative ways of solving them (Benedict, Venter, 2010).

Further, the items of the entrepreneurs' attitude towards an international experience are included in the following questions:

Q 5: Please, evaluate your unique competencies derived from international knowledge:

- ***ability to conceive, recognize, and exploit opportunities in international markets;***
- ***search for tangible and intangible resources and combine them in novel, innovative ways;***
- ***key orientations and strategies as market orientation, product differentiation, and customer focus in the global markets.***

Ability to aim at faster growth, quickly adapt to new markets; to base on limited financial and tangible resources; to be ready for service of clients worldwide providing new, innovative products and services are considered important features of BG; it justifies the choice of this question (Rennie, 1993; Moen, 2002; Persinger *et al.*, 2007; Gabrielsson *et al.*, 2008; Paweta, 2013; Advantage Austria, 2019).

Necessity in answers to the **Q5** question is based on the theoretical approach included in the study of Diaz *et al.*, 2020. The main idea of the study is that the unique competencies means something that a company does very well and that makes it better than other companies; the essential unique competencies required for professionals to develop and push forward their business (Diaz *et al.*, 2020), knowledge allows to have the capability, understanding, attitude, and motivation related to entrepreneurship (Handayati *et al.*, 2020).

Q 6: Please, evaluate the experience of your company's managerial staff on the international market:

- ***domestic managerial staff with local business experience;***
- ***domestic managerial staff with international business experience;***
- ***foreign managerial staff with international business experience.***

The choice of this question can be justified by the features of the born global phenomenon as rapidly growing in recent years and becoming increasingly important, which includes the necessity to develop advanced managerial skills; BG managers need a strong international outlook and international entrepreneurial orientation (Rennie, 1993; Moen, 2002; Persinger *et al.*, 2007; Gabrielsson *et al.*, 2008; Paweta, 2013; Advantage Austria, 2019). According to Erramilli (1991), with increasing experience, firms acquire greater confidence in their ability to gauge customer needs, to estimate costs and returns, and to assess the true economic worth of foreign markets (Erramilli, 1991).

The set of following questions is based on issues related to the entrepreneurial mindset as a certain way of thinking – the way in which a person approaches challenges and mistakes (Asli, 2018). The entrepreneurial mindset is what entrepreneur needs to propel himself / herself forward (Asli, 2018). The individual level characteristics of the entrepreneurial mindset such as entrepreneurial passion, self-efficacy, and risk perception are the main characteristics of causal and effectual decision-making logic.

Sample items of causation research

For causation, sample items include the following:

Q7: We organized and implemented control processes to make sure we met objectives.

Q8: We researched and selected target markets and did meaningful competitive analysis.

Business planning and competitive analysis in order to predict an uncertain future are the characteristics of causation (Chandler's *et al.*, 2011). Effects of the causal strategic decision-making logic include defining goals (target effects), engaging in planning activities, providing competitive analysis (Galkina, Lundgren-Henriksson, 2017; Villani *et al.*, 2018). Approach helps in prediction of an uncertain future by defining the final objective up front in business planning and competitive analyses to predict an uncertain future, in exploitation of pre-existing capabilities and resources and in maximization of expected returns (Chandler *et al.*, 2011).

Sample items for flexibility as the most essential effectuation subscale

The BG features such as their ability to aim at faster growth, quickly adapt to new markets; to be ready to take additional risks although they possess limited financial and tangible resources (Rennie, 1993; Moen, 2002; Persinger *et al.*, 2007; Gabrielsson *et al.*, 2008; Paweta, 2013; Advantage Austria, 2019) suggest the need for flexibility. Effectuation is a formative construct with the subscales such as flexibility, affordable loss, experimentation, and pre-commitment (Stroe *et al.*, 2018). According to the affordable loss principle, effectuators tend

to make decisions that, if they fail, would not put the existence of the venture at stake: under this principle, investments are made incrementally, in the alternative of flexible approach.

Items for flexibility and experimentation as the most essential effectuation subscales are included in:

Q9: We were flexible and took advantage of opportunities as they arose.

Q10: The product / service that we now provide is substantially different from how we first imagined it.

Sample items for harmonious passion are included in the questions:

Q11: My role as an entrepreneur is in harmony with the other activities in my life.

Q12: Being an entrepreneur is in harmony with other things that are part of me.

Existence of process-focused motivation, sense of control over their venture activity, flexibility in their goal pursuit, openness to new experiences and experimentations and building of network relationships (Sarasvathy, Dew, 2008; Read *et al.*, 2009; Lafrenière *et al.*, 2011; Stroe *et al.*, 2018) is based on the existence of harmonious passion to entrepreneur.

Items measuring obsessive passion are included in the following questions:

Q13: Being an entrepreneur is so exciting that I sometimes lose control over it.

Q14: I have the impression that my role as an entrepreneur controls me.

Entrepreneurs' ability more likely to be goal driven and plan and envision desired entrepreneurial outcomes, rigidly follow initial goals until achieve these goals, ability to be competitor oriented (Sarasvathy, Dew, 2008; Read *et al.*, 2009; Lafrenière *et al.*, 2011; Stroe *et al.*, 2018) is based on the existence of obsessive passion as the feature of causation more than effectuation.

The question on **entrepreneurial self-efficacy** was formulated as follows:

Q15: Please, indicate the degree of certainty you have in your ability to perform the following tasks:

- *establish and achieve goals and objectives;*
- *make decisions under risk and uncertainty.*

Entrepreneurs' appropriate level of confidence required to expect success in attaining the venture's goals, to focus on the future and to visualize the success scenarios that guide the actions, to focus on opportunities in the environment, monitoring themselves (Sarasvathy, Dew, 2008; Read *et al.*, 2009; Lafrenière *et al.*, 2011; Stroe *et al.*, 2018) is based on the existence of the self-efficacy feature.

The question about **risk perception** was the following:

Q16: How would you characterize the challenges (e.g., threats from new competitors, volatile markets and technologies, and rapidly changing customer preferences) that you encounter in your new venture:

- *as opportunities;*
- *as threats.*

Entrepreneurs' ability to use the non-predictive decision-making logic where the focus is on managing the process rather than outcomes, perceiving the environment as risky, ability to push the venture forward in small steps while considering how the context will develop, and seek support and pre-commitments from partners to counter this risk (Sarasvathy, Dew, 2008; Read *et al.*, 2009; Lafrenière *et al.*, 2011; Stroe *et al.*, 2018) is based on the existence of risk perception.

Sample items related to the necessity and existence of practical skills for expansion in international markets

Networks play a key role in supporting the niche strategy development process, performing the creation of the new knowledge (Geels, Raven, 2006; Schot, Geels, 2008; Kemp *et al.*, 2007; Stiles, 2020). As effectuation is a dominant decision-making logic in early phases of development (Berends *et al.*, 2014; Reymen *et al.*, 2015), networking activities are crucial for internationalization, the whole process of foreign expansion is driven by network relations. At the same time, knowledge of foreign languages and market as well as information technologies is essential within the internationalization process (Galkina, Lundgren-Henriksson, 2017). For the abovementioned the following sample items are included:

Q17: Use of information and communication technologies has the key role as enabler of global markets research and learning.

Q18: Knowledge of foreign languages has the key role as an enabler of global markets research and learning.

Q19: Rapid development of global reach requires comprehensive network of the following partners:

- *business enterprises;*
- *business incubators;*
- *governmental organizations;*
- *non-governmental organizations.*

The finding from the theoretical part of the current research that can also serve as a confirmation for the inclusion of ***Q17***, ***Q18*** and ***Q19***, according to the companies with founders

and managers who possess international experience, is that good foreign language skills, international networks, and excellent technological competence can help rapidly enter more distant markets and do so with operation modes requiring more commitment (Johanson, Vahlne, 1990; Oviatt, McDougall, 1997; Luostarinen, Gabrielsson, 2004; Laanti *et al.* 2007).

The concluding questions are necessary to find out the opinion of a potential or existing entrepreneur about which of the BG features he / she considers more important, to then analyse why he / she focuses directly on the specific feature.

The concluding questions of the survey are as follows:

Q20: The essential success sources – chances for expansion in international markets are:

- *operating in a niche market;*
- *quality of the product / service for a good price;*
- *following the customer suggestions.*

Q21: Period of operation on the domestic market until internationalization of the company in your opinion should be

- *up to 3 years;*
- *3–5 years;*
- *6–10 years;*
- *the length of the period is irrelevant.*

Question **Q21** is used to find out the attitude of the respondents towards such an important feature of BG as the following: BG companies are highly active in international markets from or near their founding (Rennie, 1993; Moen, 2002; Persinger *et al.*, 2007; Gabrielsson *et al.*, 2008; Paweta, 2013; Advantage Austria, 2019).

The survey is concluding with an open question:

Q22: What are the main barriers for entering international markets in your own opinion?

Answers to question **Q22** are intended to be studied based on the analysis of cultural barriers (i.e. social system and language), access to distribution channels, government policy (i.e. taxes and political risk), product adaption, and political uncertainties. The mentioned groups of barriers are studied widely and substantiated in the scientific literature (Karakaya, 1993). Table 2.1 provides the list of theoretical issues used for the justification of the questionnaire which is reflected in Fig. 2.1.

2.2. Survey and Processing of the Results

2.2.1. Aggregation of the Results

The study was conducted in the period from 2 to 30 May 2019. The questionnaire was sent to 800 respondents, 200 responses were received, resulting in 25 % which indicates a good response rate. According to the theory related to qualitative comparative analysis (QCA) method as bridge between quantitative and qualitative methods, the indicated number is sufficient to make qualitative and quantitative conclusions.

The sample included three groups of respondents: the start-up companies from the Baltic States as a potential early orientation to international born; the gazelle – Latvia's fast-growing companies; the survey questions were also sent to a group of Austrian entrepreneurs – owners of companies – born global champions. Data were collected via an on-line survey with founders of companies who had been closely involved with their business development trajectory. As research on the entrepreneurial mindset should not be separated from the perception of the business environment as endogenous to the actions of entrepreneurs, and they cannot be viewed separately from their networks, this fact was taken into account in the course of the study.

Additional comment: Terms as ‘LV’, ‘EN’, ‘Latvia’, ‘Baltic States’, included in the tables for data analysis, refer only to the fact that there were two types of questionnaires (in Latvian and in English), so that respondents were free to choose. Theoretical rationale for the choice can be found in the fuzzy-set qualitative comparative analysis (fsQCA) as a method of comparative nature geared toward multiple case studies in a small- or medium-N research design, that is why this division was used throughout the study.

Methodology for data analysis includes the Likert scale as the data analysis tool and the fuzzy-set qualitative comparative analysis (fsQCA).

The Likert scale is used as the data analysis tool (see description in APPENDIX 1). Although the Likert Scale method has more weaknesses than strengths (see Table 2.3), it is widely used as a summative scale.

Table 2.3

Strengths and Weaknesses of the Likert Scale (developed by author)

Strengths of the Likert scale	Weaknesses of the Likert scale
1	2
Simple to construct	Central tendency bias (participants may avoid extreme response categories)
Likely to produce a highly reliable scale	Acquiescence bias (participants may agree with statements as presented in order to “please” the experimenter)

Table 2.3 Continued

1	2
Easy to read and complete for participants	Social desirability bias (portray themselves in a more socially favourable light rather than being honest)
	Lack of reproducibility
	Validity may be difficult to demonstrate (are you measuring what you set out to measure these concepts)
	Difficult to demonstrate (are you measuring what you set out to measure these concepts)

The Likert scale method is applicable for the Cronbach alpha or Kappa test or factor analysis technique to provide evidence that the components of the scale are sufficiently intercorrelated and that the grouped items measure the underlying variable (Sullivan, Artino, 2013). This statement is mentioned in the context that the fuzzy-set qualitative comparative analysis (fsQCA), a set-theoretic analysis method which provides evidence how the causal conditions as the components of the scale contribute to a specific outcome, is used as the survey data analysis method for the current research.

As the fsQCA analysis can be done later, first of all, the responses to the survey questions are summarized as follows.

The General information about the companies

Figure 2.2 represents the number of employees in surveyed companies.

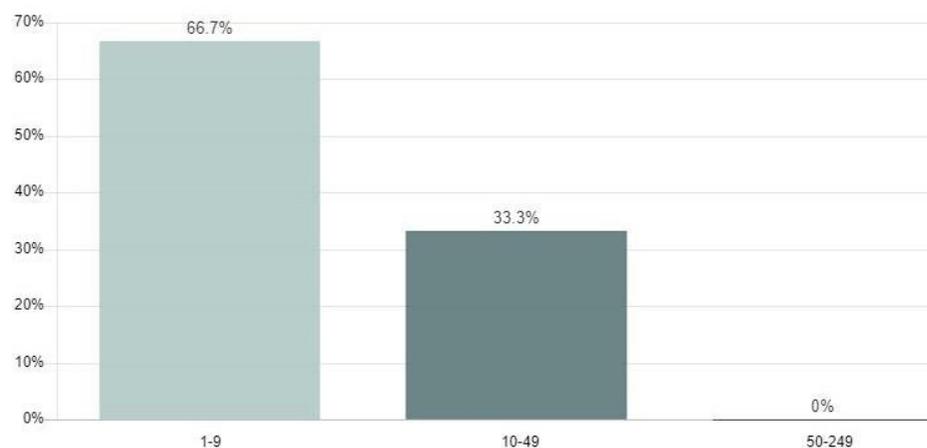


Fig. 2.2. Number of employees in the company at present (answers to survey question *Q1*).

According to OECD (2019), an enterprise is a micro enterprise with 1–9 employees, small enterprise with 10–49 employees or medium-sized large enterprise with (50–249) employees. The vast majority of surveyed companies are micro enterprises.

Figure 2.3 provides the choice of sectors according to the EUROSTAT (2018) data which reflect sectors of the highest-growth in the European Union.

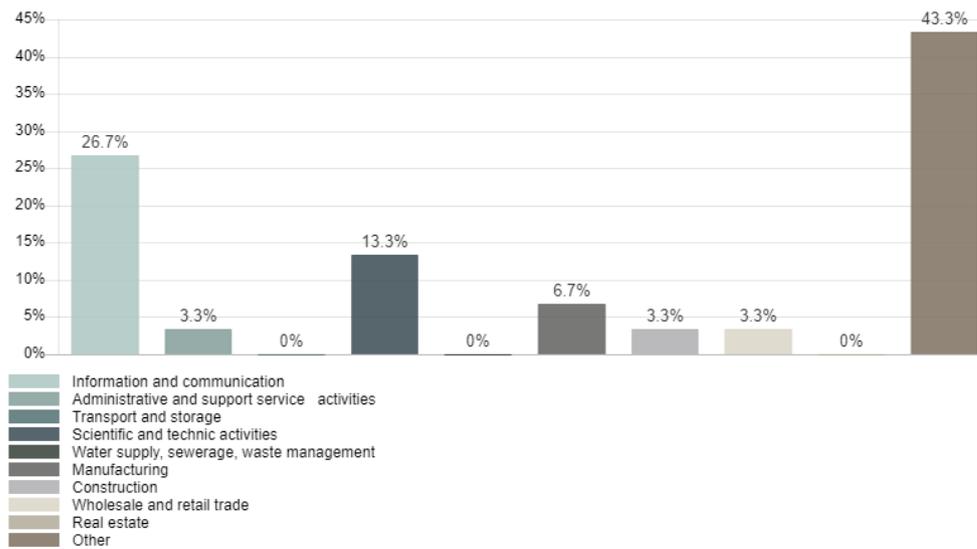


Fig. 2.3. List of sectors in which the surveyed companies operate (answers to survey question *Q2*).

43.3 % of all surveyed companies are operating in other sectors that are not included in the data basis of EU high growth business sectors such as financial services, agribusiness, forestry, entertainment, events and tourism, cybersecurity, education, fintech, health/fitness/wellness, computer graphics, digital art, insurance, biotech, accounting, tourism, textile industry, natural gas, electricity. 26.7 % of the surveyed companies are operating in information and communication sector.

Figure 2.4 represents shares of operating companies by market sectors (domestic, international, domestic and international).

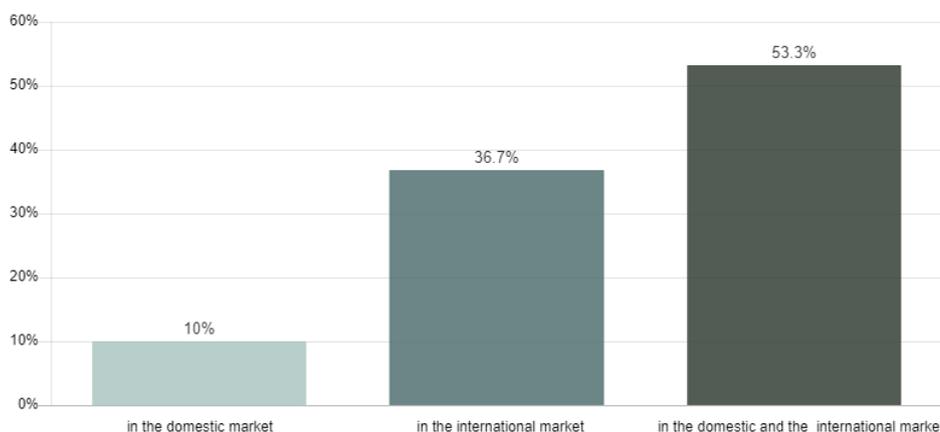


Fig. 2.4. Operation scale and market orientation of companies (answers to survey question *Q3*).

The greatest share of surveyed companies (53.3 %) operate in both domestic and international market.

Figure 2.5 reflects the roots of the unique idea of an entrepreneur to build his / her business.

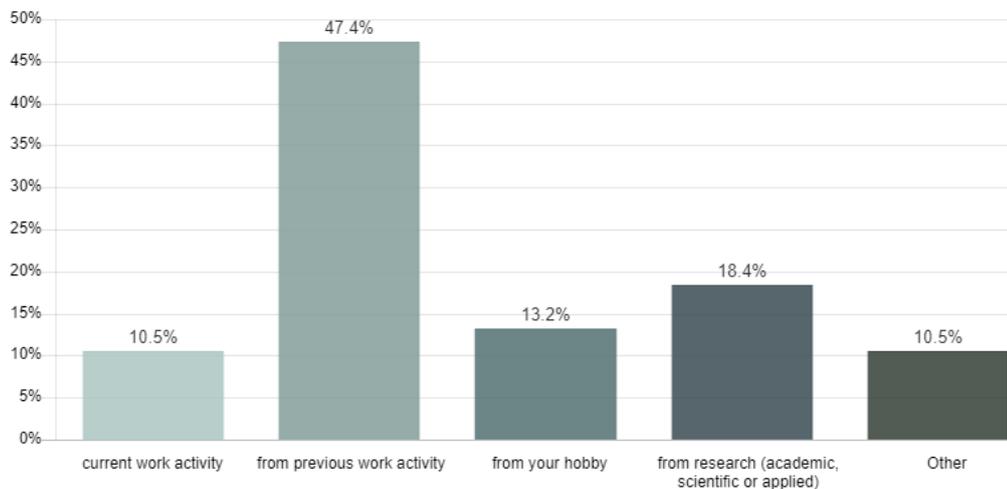


Fig. 2.5. Sources of business ideas (answers to survey question *Q4*).

The prevailing higher value is for the previous work activity as the source of an idea to build a new business (47.4%) (Fig. 2.5). The result indicates belonging of the majority of surveyed entrepreneurs to the group of the opportunity entrepreneurs identifying business opportunities and being able to exploit them and contribute to economic development.

Figures 2.6, 2.7 and 2.8 reflect answers to the question about evaluation of entrepreneur's unique competencies derived from international knowledge. The necessity to investigate this item is derived from the conclusion stated in the theoretical part of the current research, according to the entrepreneurial processes of BGs, consisting of entrepreneurial perspective, strategic perspective and organizational perspective – the set of the top factors affecting the emergence and internationalization of BGs. Entrepreneurial perspective includes such factors as international vision, international experience, international knowledge, educational background, entrepreneurial cognition, ability to create personal networks. According to the first principle of effectuation, entrepreneurs should start a new venture with the three types of intangible resources – entrepreneurial identity and abilities, knowledge, and networks.

The fourth principle of effectuation points out that entrepreneurs need to exploit contingencies in order to control the emerging situation.

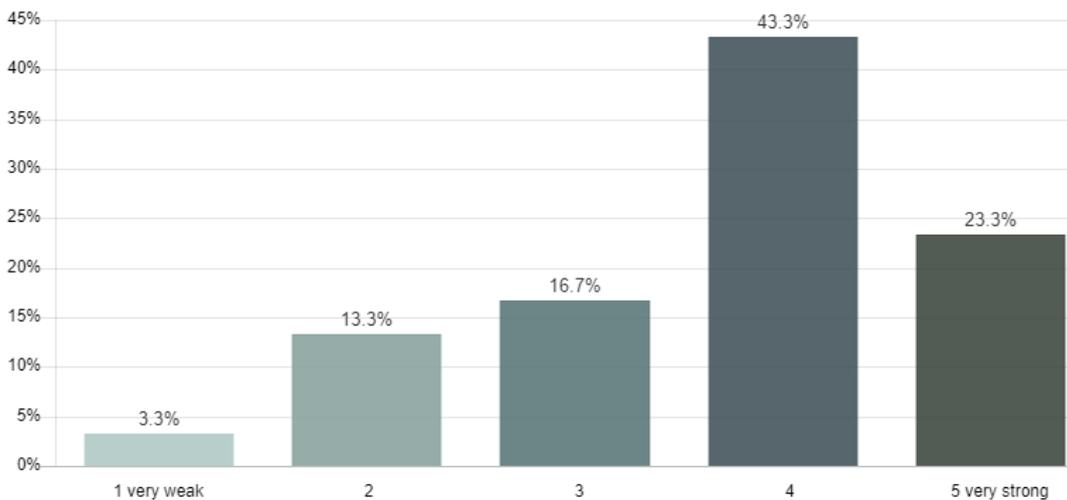


Fig. 2.6. Evaluation of unique competencies derived from international knowledge (ability to conceive, recognize, and exploit opportunities in international markets) (answers to survey question Q5).

Prevailing value is 43.3 % of entrepreneurs evaluating the necessity of ability to conceive, recognize, and exploit opportunities in international markets as strong (see Fig. 2.6).

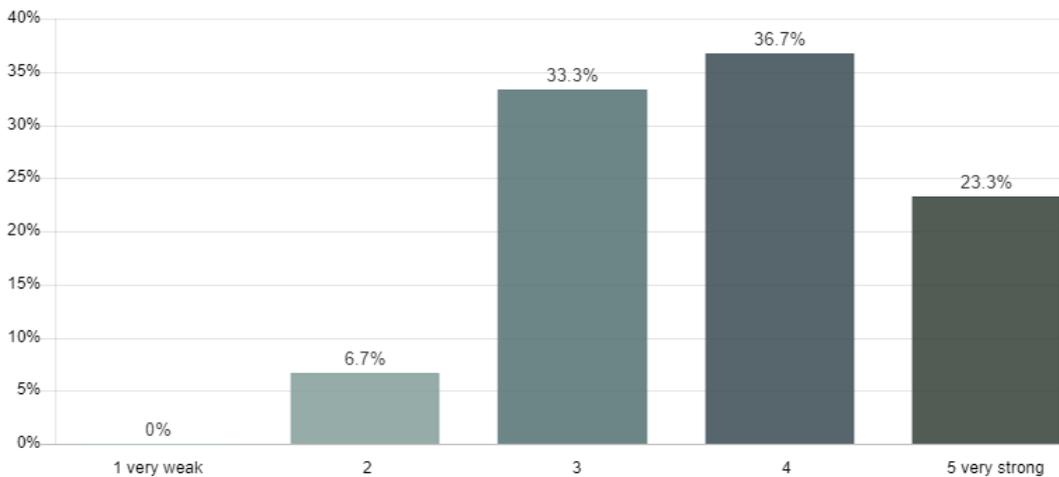


Fig. 2.7. Evaluation of unique competencies derived from international knowledge (search for tangible and intangible resources and combine them in novel, innovative ways) (answers to survey question Q5).

Prevailing value – 36.7 % of entrepreneurs evaluate the necessity of ability to search for tangible and intangible resources and combine them in novel, innovative ways as strong (see Fig. 2.7).

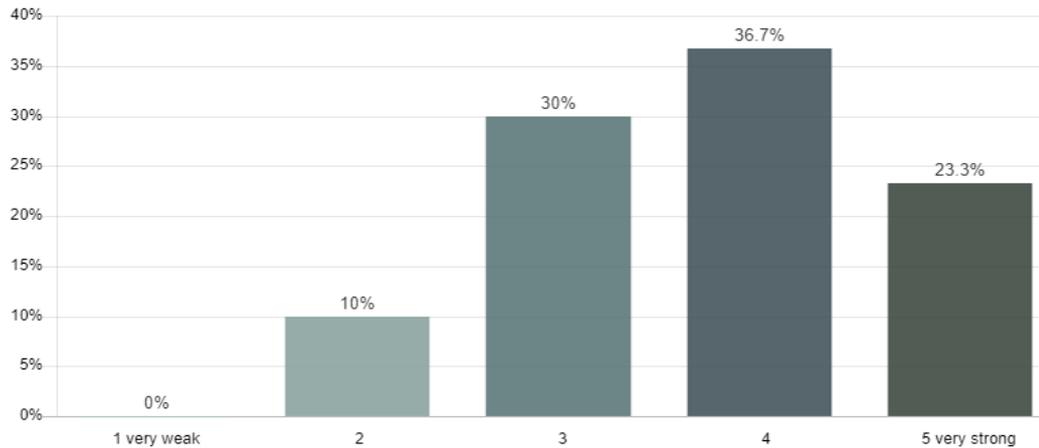


Fig. 2.8. Evaluation of unique competencies derived from international knowledge (key orientations and strategies as market orientation, product differentiation, and customer focus in the global markets) (answers to survey question Q5).

Prevailing value – 36.7 % of entrepreneurs evaluate the necessity of competencies of key orientations and strategies such as market orientation, product differentiation, and customer focus as strong (see Fig. 2.8).

The next question asked entrepreneurs to evaluate the experience of their company’s managerial staff in international market. Figures 2.9, 2.10, and 2.11 reflect answers to the questions relating to this item. This issue also is closely linked to the first effectuation principle.

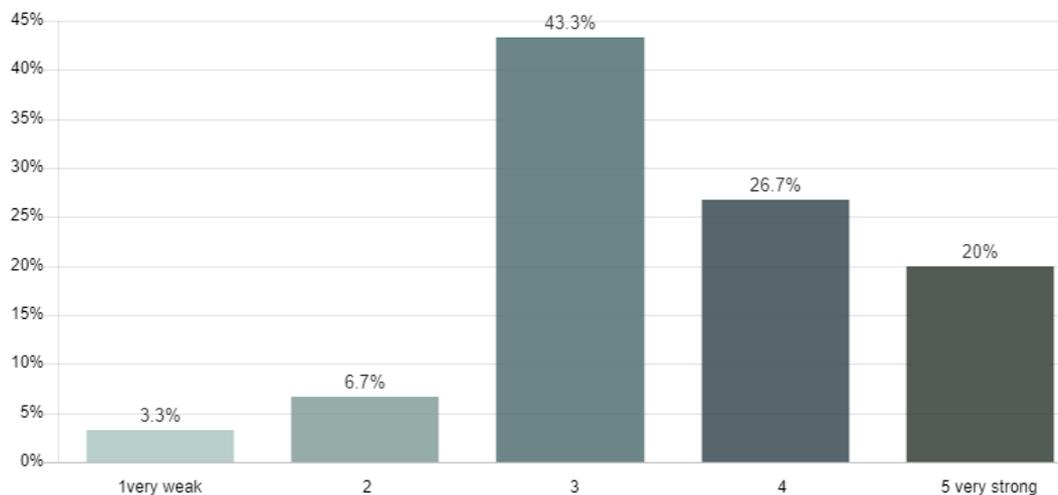


Fig. 2.9. Evaluation of the experience of company’s managerial staff in international market (domestic managerial staff with local business experience) (answers to survey question Q6).

Prevailing value matches 43.3 % of entrepreneurs who evaluate the necessity of domestic managerial staff with local business experience as average (see Fig. 2.9).

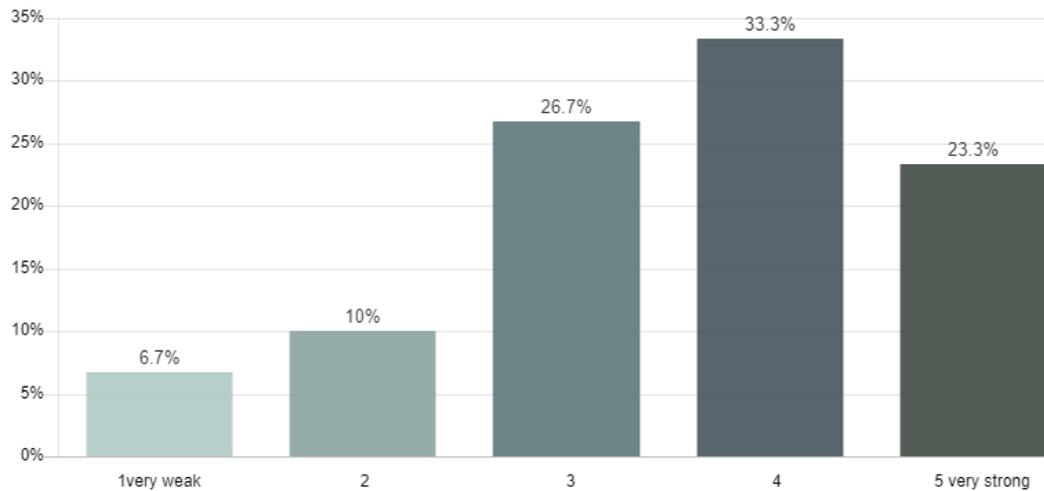


Fig. 2.10. Evaluation of the experience of company's managerial staff in international market (domestic managerial staff with international business experience) (answers to survey question Q6).

Prevailing value is 33.3 % of entrepreneurs who evaluate the necessity of domestic managerial staff with international business experience as a strong factor (see Fig. 2.10).

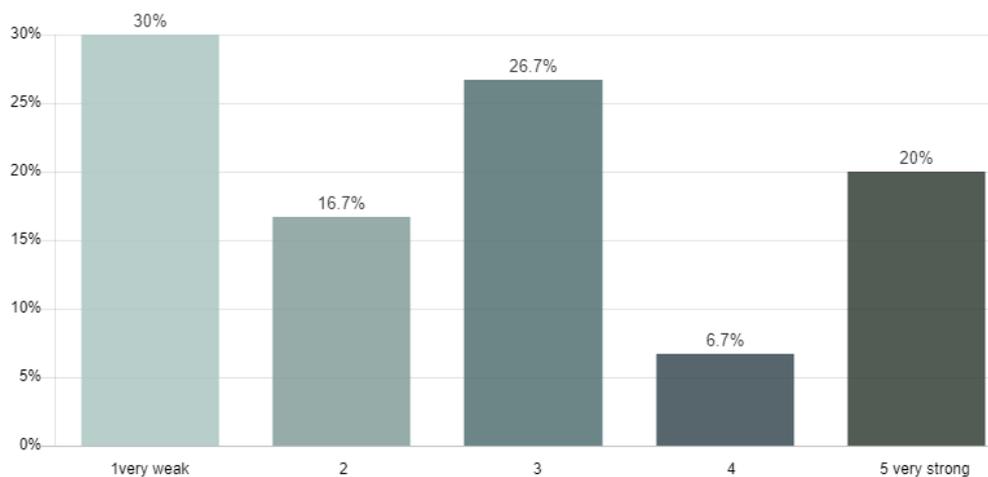


Fig. 2.11. Evaluation of the experience of company's managerial staff in the international market (foreign managerial staff with international business experience) (answers to survey question Q6).

Prevailing value matches that of 26.7 % of entrepreneurs who evaluate the necessity of foreign managerial staff with international business as an average factor (see Fig. 2.11).

Analysis of items related to the entrepreneurial mindset

The following questions are based on the assumption that the way entrepreneurs think and behave relates more to their affective preferences and cognitive evaluations of the self and the environment. Entrepreneurs' ratio to causal decision-making which consists of predictions based on existing information, discovering and exploiting current opportunities in the well-known business environment, providing research of preselected markets, was measured by the answers to next questions.

Causation

For causation, sample items are included in the following questions:

- *To what extent do you agree with the statement: We organized and implemented control processes to make sure we met objectives.*

Results: Majority (36.7 %) of the surveyed entrepreneurs neither agree nor disagree with the statement (see Fig. 2.12).

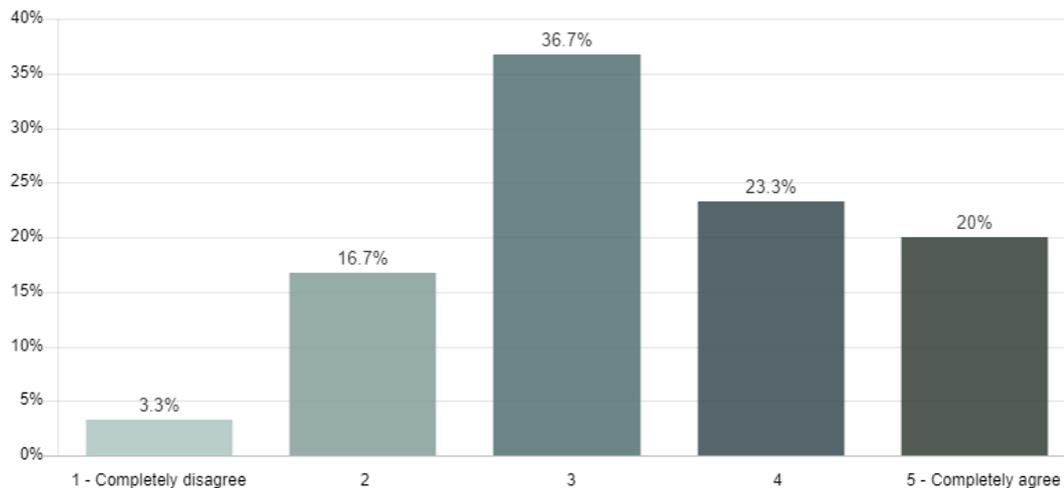


Fig. 2.12. Extent to which respondents agree with the statement: We organized and implemented control processes to make sure we met objectives (answers to the survey question Q7).

- *To what extent do you agree with the statement: We researched and selected target markets and did meaningful competitive analysis.*

Results: Majority of the surveyed entrepreneurs (33.3%) completely agree with the statement (see Fig. 2.13).

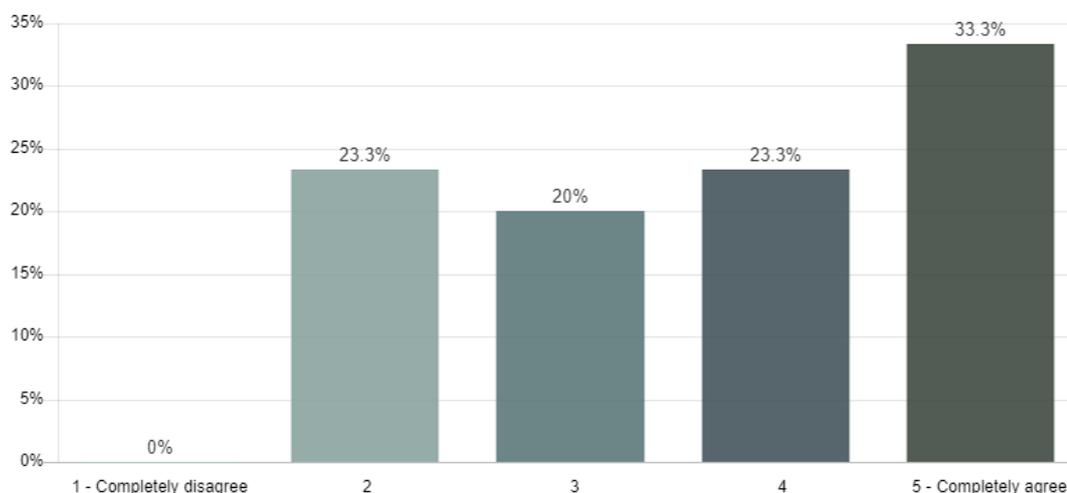


Fig. 2.13 Extent to which respondents agree with the statement: We researched and selected target markets and did meaningful competitive analysis (answers to survey question Q8).

As indicated in the theoretical part of the current study, causal strategic decision-making logics requires defining goals, focusing on expected returns, engaging in planning activities, emphasizing competitors' analysis. Due to this, the need for the empirical research is confirmed by the fact that causation in combination with effectuation at firm level, as strategic decision-making logics, are carry out strategies of firms. Effective non-predictive logic focuses on rearranging the problem space and restructuring realities into new opportunities. Level of flexibility (included in the next question of the survey), as one of the more effectuation than causation factors, shows the ability of entrepreneurs more likely to embrace the unexpected in their decision making and work together with internal and external partners.

Flexibility

Items for measuring flexibility include the following questions:

- *To what extent do you agree with the statement: We were flexible and took advantage of opportunities as they arose.*

Results: Majority of the surveyed entrepreneurs (40 %) agree with the statement (see Fig. 2.14).

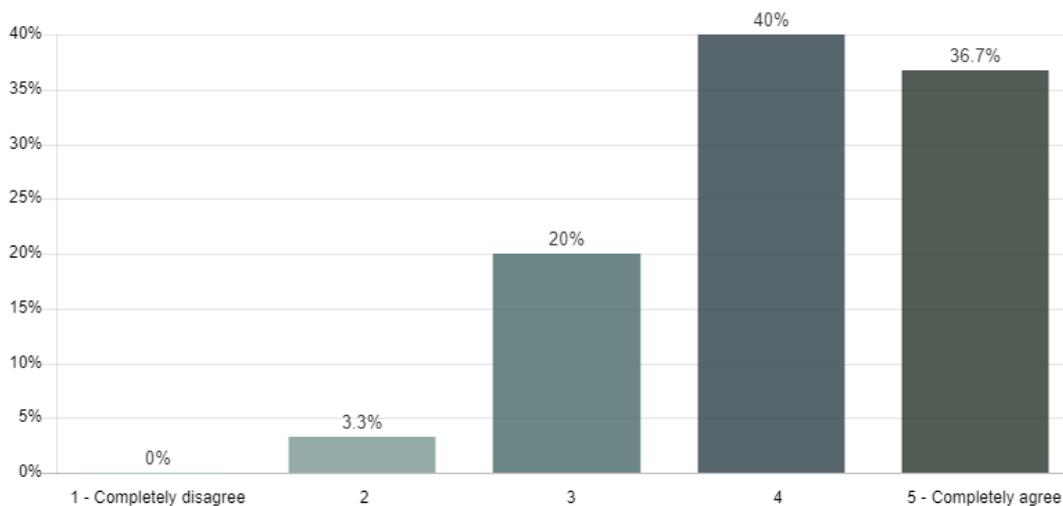


Fig. 2.14. Extent to which respondents agree with the statement: We were flexible and took advantage of opportunities as they arose (answers to survey question Q9).

- *To what extent do you agree with the statement: The product / service that we now provide is substantially different from how we first imagined it.*

Results: Majority of the surveyed entrepreneurs (33.3 %) agree with the statement (see Fig. 2.15).

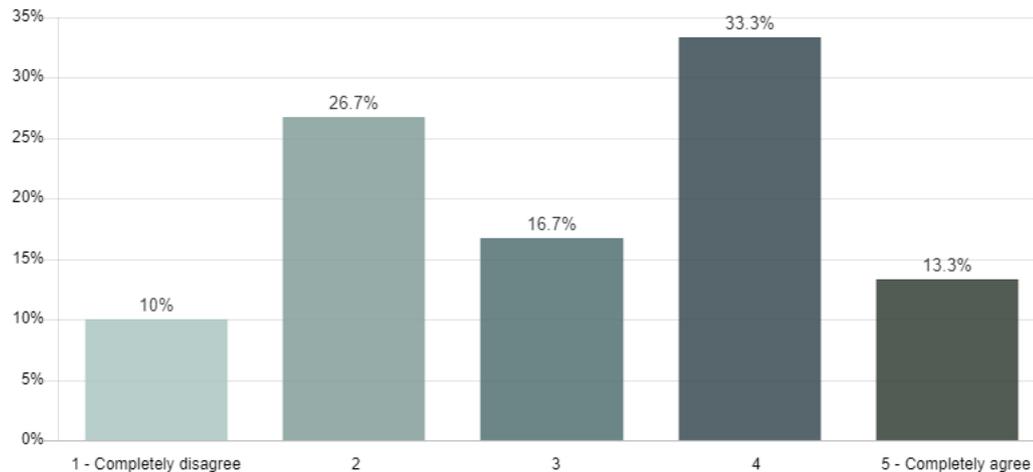


Fig. 2.15. Extent to which respondents agree with the statement: The product / service that we now provide is substantially different from how we first imagined it (answers to survey question Q10).

The necessity of this research concludes in the statement that flexibility allows effectual decision-makers to use unforeseen events to the emerging firm's advantage.

Passion as cognitive item of causation and effectuation

The next cognitive item of effectuation is passion that likely influences the choice of decision-making logic supposed to guide the entrepreneur toward achieving the highly significant venture outcomes.

Harmoniously passionate entrepreneurs engage in entrepreneurial activity because they derive pleasure from this activity and not because of external or internal pressure; they are characterized by process-focused motivation, they have a sense of control over their venture activity, they are flexible.

Sample items for harmonious passion are included in the following questions:

- *To what extent do you agree with the statement: My role as an entrepreneur is in harmony with the other activities in my life.*

Results: Majority of the surveyed entrepreneurs (30 %) completely agree with the statement (see Fig. 2.16).

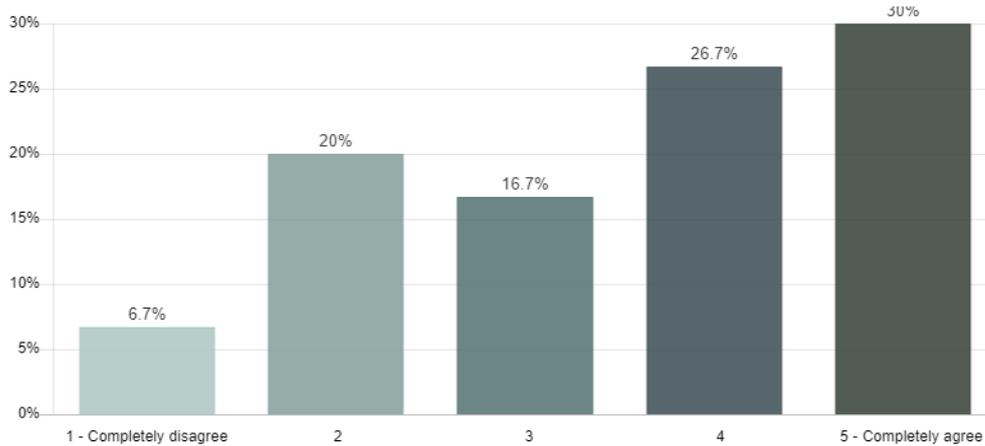


Fig. 2.16. Extent to which respondents agree with the statement: My role as an entrepreneur is in harmony with the other activities in my life (answers to survey question Q11).

- *To what extent do you agree with the statement: Being an entrepreneur is in harmony with other things that are part of me.*

Results: Majority of the surveyed entrepreneurs (40 %) agree with the statement (see Fig. 2.17).

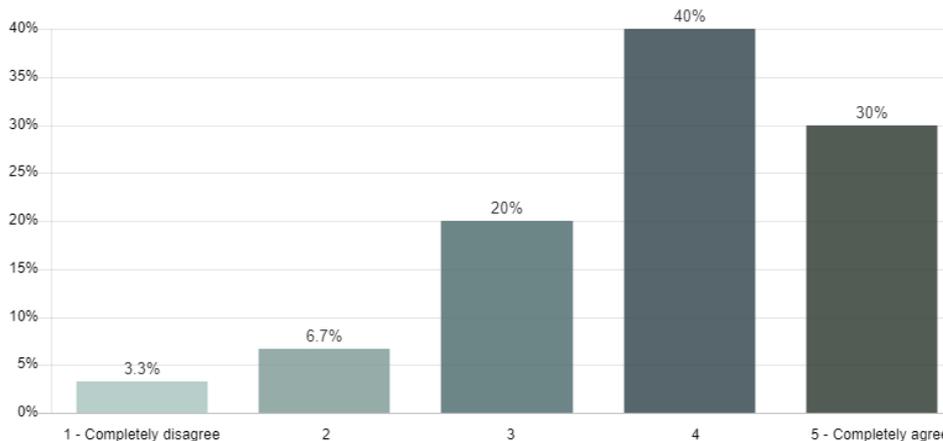


Fig. 2.17. Extent to which respondents agree with the statement: Being an entrepreneur is in harmony with other things that are part of me (answers to survey question Q12).

If an entrepreneur engages in entrepreneurship because of interpersonal or intra-personal pressures such as boosting self-esteem or feeling socially accepted or superior, it means that he / she is an obsessively passionate entrepreneur. One of the main characteristics of this entrepreneur is the focus on outcomes; likely to be goal driven, they plan desired entrepreneurial outcomes, they follow initial goals, plan and persist until they achieve these goals.

Items measuring obsessive passion are included in the following questions:

- *To what extent do you agree with the statement: Being an entrepreneur is so exciting that I sometimes lose control over it.*

Results: Majority of the surveyed entrepreneurs (36.7 %) neither agree nor disagree with the statement (see Fig. 2.18).

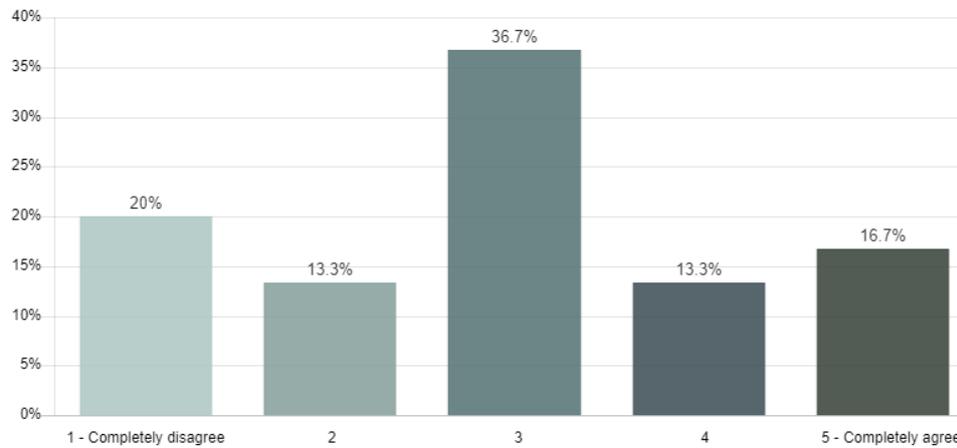


Fig. 2.18. Extent to which respondents agree with the statement: Being an entrepreneur is so exciting that I sometimes lose control over it (answers to survey question Q13).

- *To what extent do you agree with the statement: I have the impression that my role as an entrepreneur controls me.*

Results: Majority of the surveyed entrepreneurs (33.3 %) neither agree nor disagree with the statement (see Fig. 2.19).

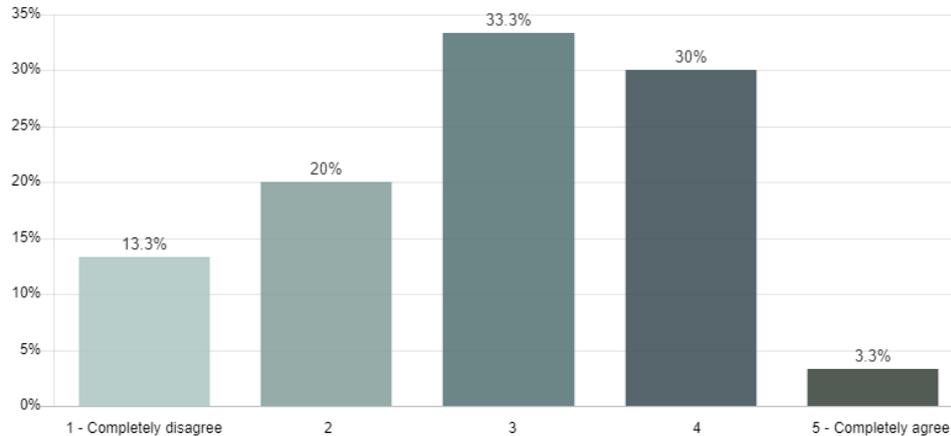


Fig. 2.19. Extent to which respondents agree with the statement: I have the impression that my role as an entrepreneur controls me (answers to survey question Q14).

Indicators of self-efficacy

Self-efficacy as cognitive determinant of causation and effectuation reflects the level of confidence required for entrepreneurs to expect success in attaining the venture's goals. Self-efficacious entrepreneurs are more likely to focus on the future and construct or visualize success scenarios that guide their actions. They focus on opportunities in the environment and are expected to be more committed to planning than entrepreneurs with lower self-efficacy. They set clear, challenging goals, monitor themselves, spend considerable effort in goal attainment, and commit more strongly to these goals than entrepreneurs with low self-efficacy.

Items measuring entrepreneurial self- efficacy are included in the following:

Figures 2.20 and 2.21 reflect the results derived from answers to the question about how entrepreneurs indicate the degree of certainty they have in their ability to perform the following tasks: establish and achieve goals and objectives and make decisions under risk and uncertainty.

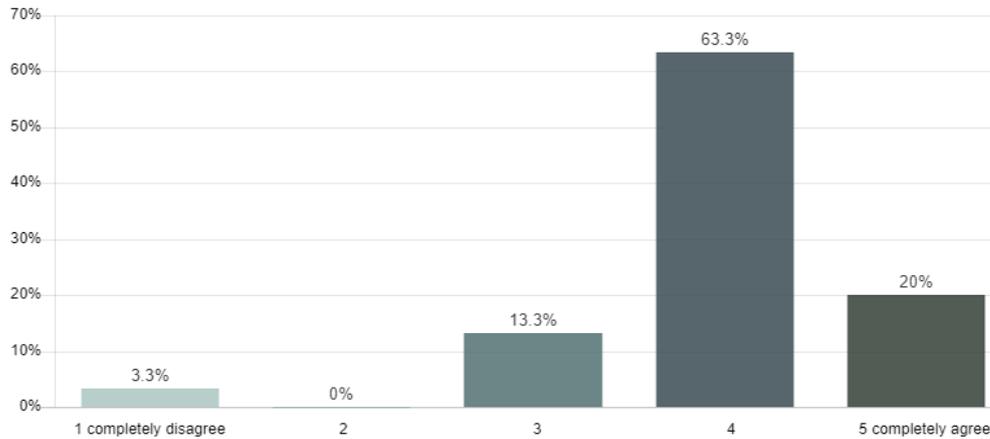


Fig. 2.20. Assessment of the ability to establish and achieve goals and objectives (answers to survey question Q15).

Prevailing value is 63.3 % of entrepreneurs who agree with regard to the ability to establish and achieve goals and objectives (see Fig. 2.20).

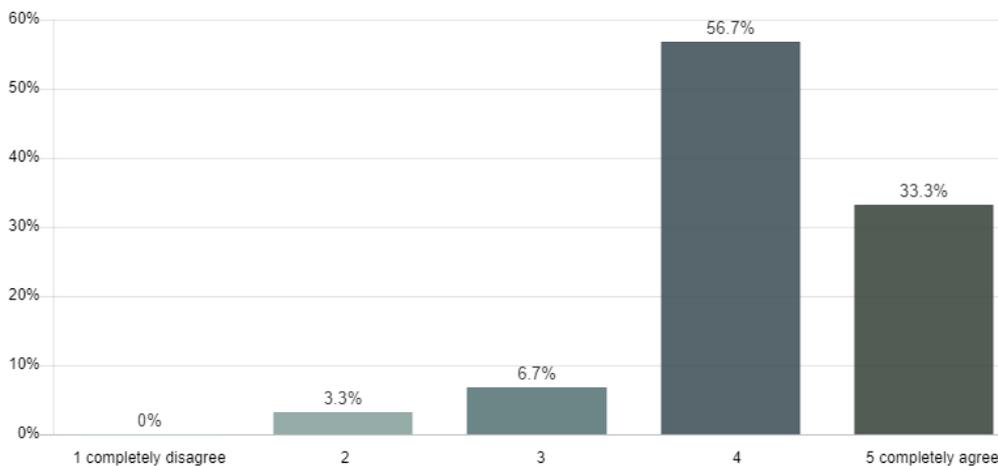


Fig. 2.21. Assessment of the ability to make decisions under risk and uncertainty (answers to survey question Q15).

Prevailing value is 65.7 % of entrepreneurs who agree with regard to the ability to make decisions under risk and uncertainty (see Fig. 2.21).

Risk perception

The next determinant of effectuation is risk perception – a critical factor in the choice between predictive or non-predictive decision-making logics because the way entrepreneurs respond in a decision context depends on how they interpret signals from the environment. The perception of a risky environment lowers the entrepreneur's perceived ability to control the

outcomes of behaviour. Risk encourages entrepreneurs to use a non-predictive decision-making logic, where the focus is on managing the process rather than outcomes. Perceiving the environment as risky makes entrepreneurs carefully weigh up their next moves, push the venture forward in small steps while considering how the context will develop and seek support and pre-commitments from partners to counter this risk.

Risk perception was measured using the following items: Question: *How would you characterize the challenges (e.g., threats from new competitors, volatile markets and technologies, and rapidly changing customer preferences) facing the international markets?*

Prevailing value is 43.3 % of entrepreneurs who agree that challenges in international markets are opportunities (see Fig. 2.22).

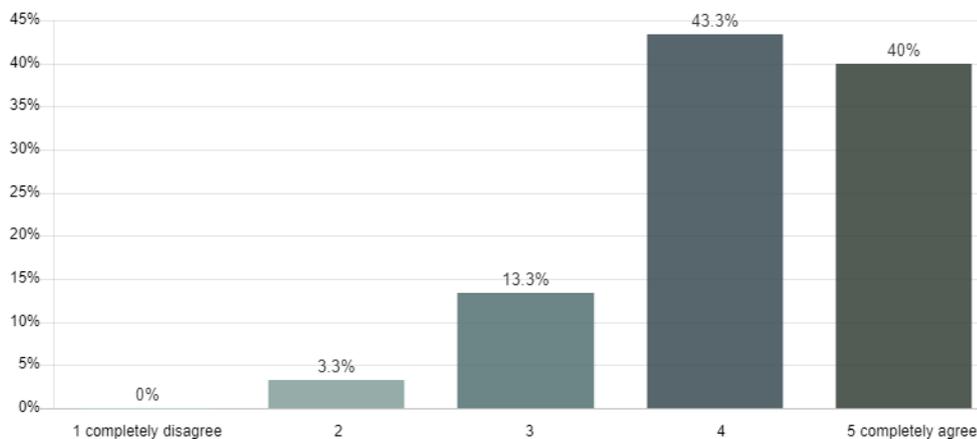


Fig. 2.22. Characteristics of challenges as opportunities (answers to survey question Q16).

Prevailing value is 40 % of entrepreneurs who disagree that challenges in the international markets are threats (see Fig. 2.23).

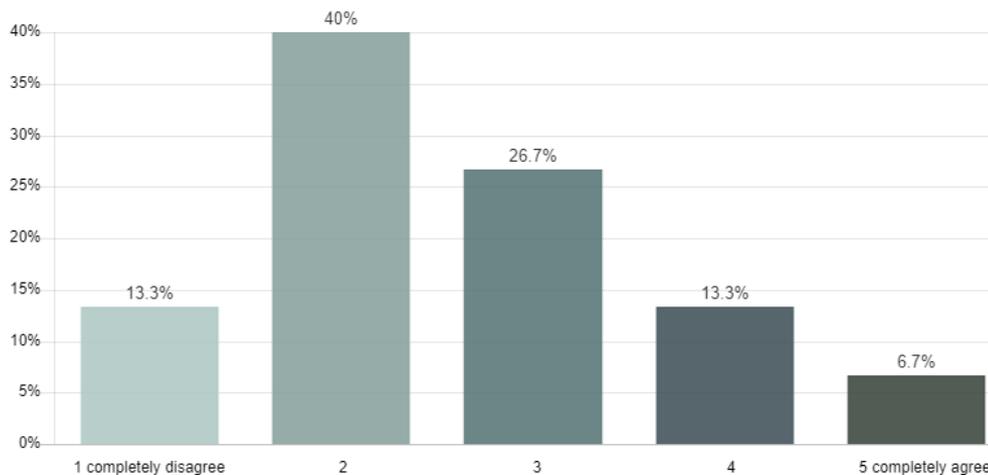


Fig. 2.23. Characteristics of challenges as threats (answer to survey question Q16).

Affordable loss is the factor that controls the risk for firms and helps them to make good use of limited resources, which enables firms to capture the upsides of uncertainty at low costs.

Whereas causal models focus on maximizing returns by selecting optimal strategies; effectuation begins with a determination of how much one is willing to lose and leveraging limited means in creative ways to generate new ends as well as new means. At each stage of the process, entrepreneur chooses options that create more options in the future. Estimating what is affordable does not depend on the venture but varies from entrepreneur to entrepreneur and even across his or her life stages and circumstances. By allowing estimates of affordable loss to drive their decisions about which venture to start, entrepreneurs who use effectuation decision making logics do not need to depend on any predictions.

To meet the needs of the international market customers

As mentioned above, the effectual entrepreneurs work jointly with any and all interested stakeholders.

- Answers to the question – *To what extent do you agree with the statement: Use of the information and communication technologies has the key role as enabler of global markets research and learning.*

Results: Majority of the surveyed entrepreneurs (53.3 %) completely agree with the statement (see Fig. 2.24).

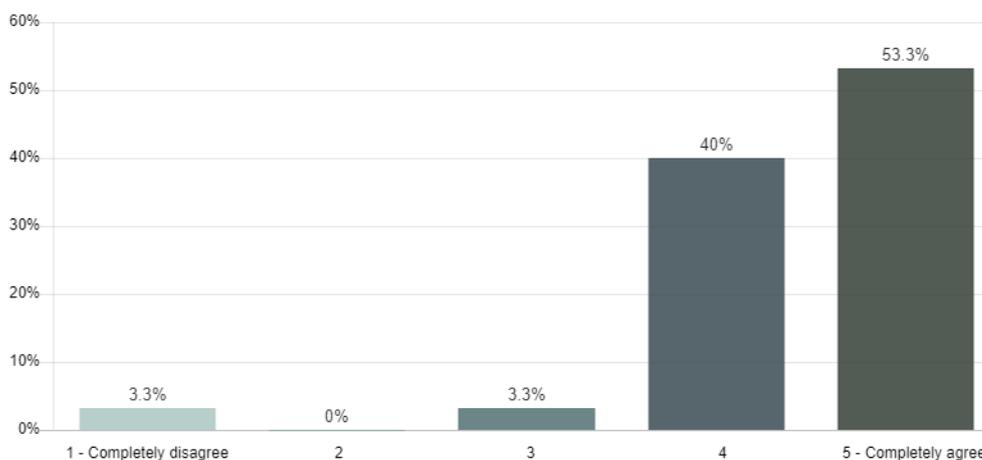


Fig. 2.24. Extent to which respondents agree with the statement: Use of information and communication technologies has the key role as enabler of global markets research and learning (answers to survey question Q17).

- Answers to the question – *To what extent do you agree with the statement: Knowledge of foreign languages has the key role as enabler of global markets research and learning.*

Results: Majority of the surveyed entrepreneurs (70 %) completely agree with the statement (see Fig. 2. 25).

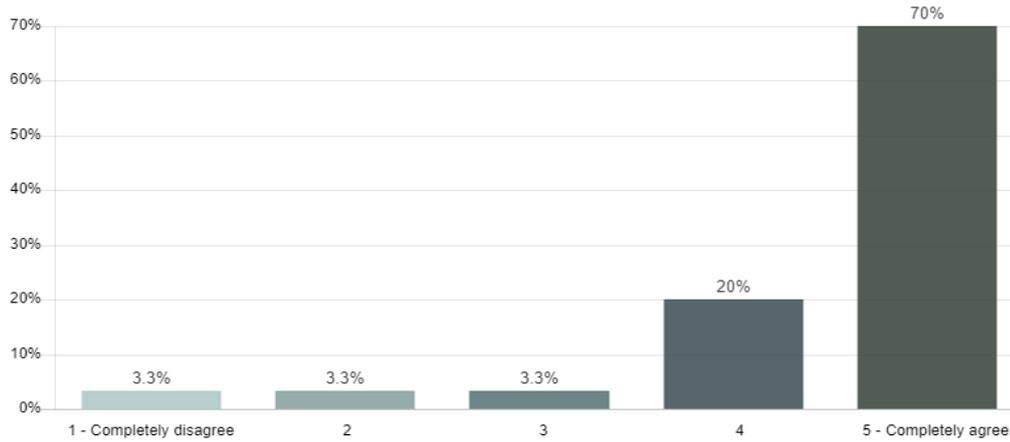


Fig. 2. 25. Extent to which respondents agree the statement: Knowledge of foreign languages has the key role as enabler of global markets research and learning (answers to survey question Q18).

Figures 2.26–2.29 include the analysis of different partners in comprehensive network. The question is – *To what extent do you agree with the statement: Rapid development of global reach requires comprehensive network of the following partners:*

- *business enterprises* (see Fig. 2.26);
- *business incubators* (see Fig. 2.27);
- *governmental organizations* (see Fig. 2.28);
- *non-governmental organizations* (see Fig. 2.29).

Prevailing value is 43.3 % which corresponds to the statement – agree (see Fig. 2.26).

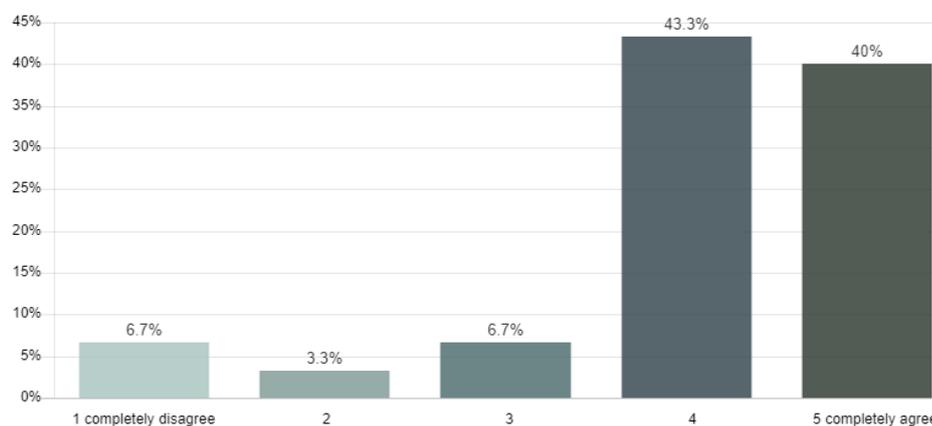


Fig. 2.26. Extent to which respondents agree with the statement: Rapid development of global reach requires comprehensive collaboration with the business enterprises (answers to survey question Q19).

Prevailing value is 36.7 % which corresponds to the statement – neither agree nor disagree (see Fig. 2.27).

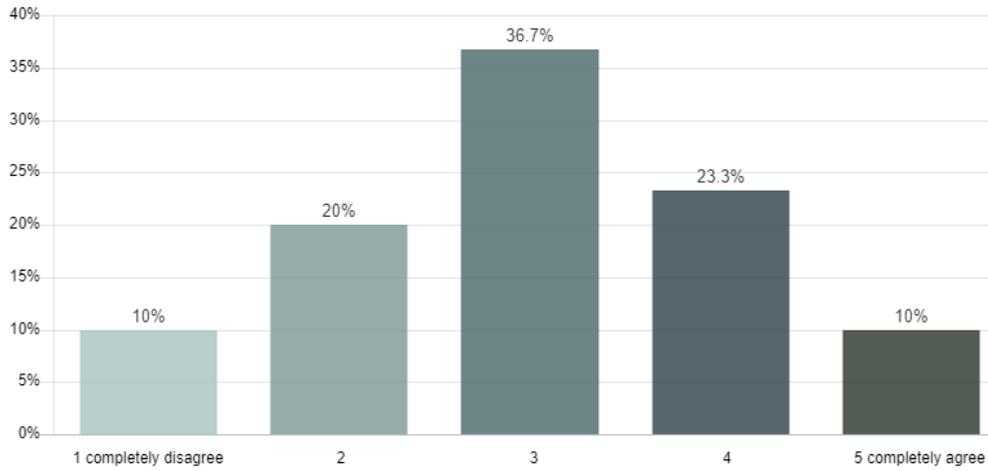


Fig. 2.27. Extent to which respondents agree with the statement: Rapid development of global reach requires comprehensive collaboration with the business incubators (answers to survey question Q19).

Majority of surveyed entrepreneurs (36.7 %) neither agree nor disagree with the statement (see Fig. 2. 28).

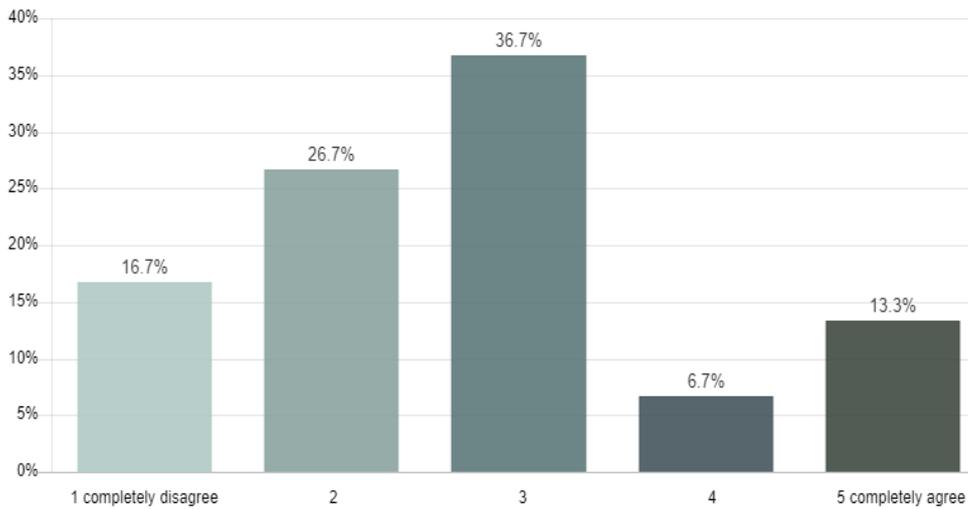


Fig. 2.28. Extent to which respondents agree with the statement: Rapid development of global reach requires comprehensive collaboration with the governmental organizations (answers to survey question Q19).

Majority of surveyed entrepreneurs (33.3 %) neither agree nor disagree with the statement (see Fig. 2. 29).

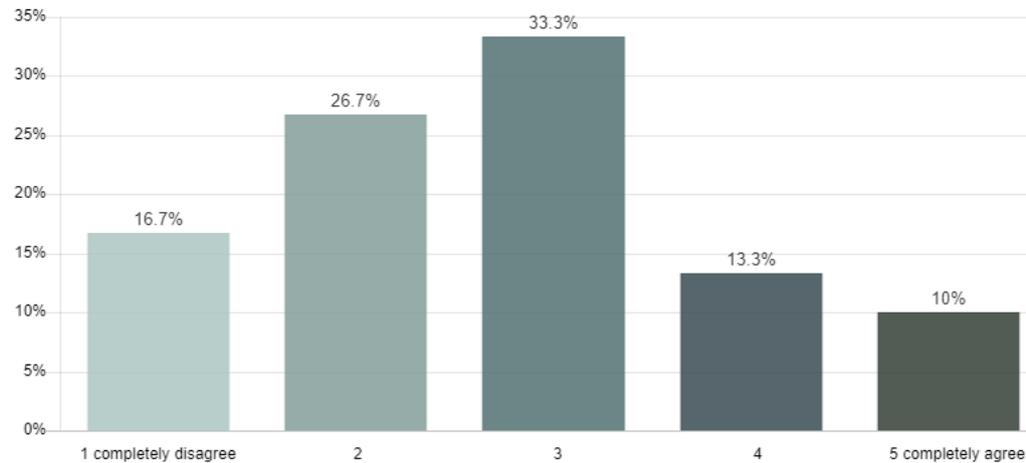


Fig. 2.29. Extent to which respondents agree with the statement: Rapid development of global reach requires comprehensive collaboration with the non-governmental organizations (answers to survey question Q19).

The rapid development of global reach requires comprehensive network of partners rooted in the principle of effectuation, including openness to the participation of committed stakeholders. Due to this, entrepreneurs must be contingent on stakeholders' contribution, stakeholders supply, and offer their own resources, co-creating the firm's development and emerging goals; they are open about their product development efforts, they reveal their products to potential customers in the hope of receiving helpful feedback. These findings are based on the second principle of effectuation due to collaborations of the effectual entrepreneurs with all of interested stakeholders. It should also be mentioned that clear goals do not drive the stakeholder selection process, i.e., the goals of the new venture or the predicted features of the opportunity do not drive 'who comes on board, instead, who comes on board drives what the goals of the enterprise will be' (Sarasvathy, Dew, 2008).

Figures 2.30 and 2.31 reflect answers to what extent entrepreneurs agree that the essential success sources are chances for expansion in international markets.

Majority of the surveyed entrepreneurs – 33.3 % completely agree with the statement, but other 33.3 % neither agree nor disagree with the statement (see Fig. 2. 30).

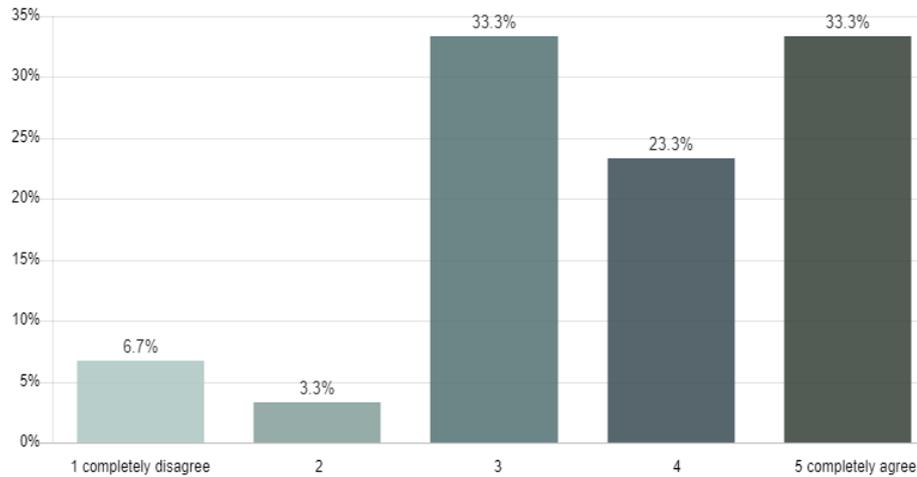


Fig. 2.30. Extent to which respondents agree with the statement: Operating in a niche market is the essential success source – chance for expansion in international markets (answers to survey question Q20).

Majority of the surveyed entrepreneurs – 60 % completely agree with the statement (see Fig. 2. 31).

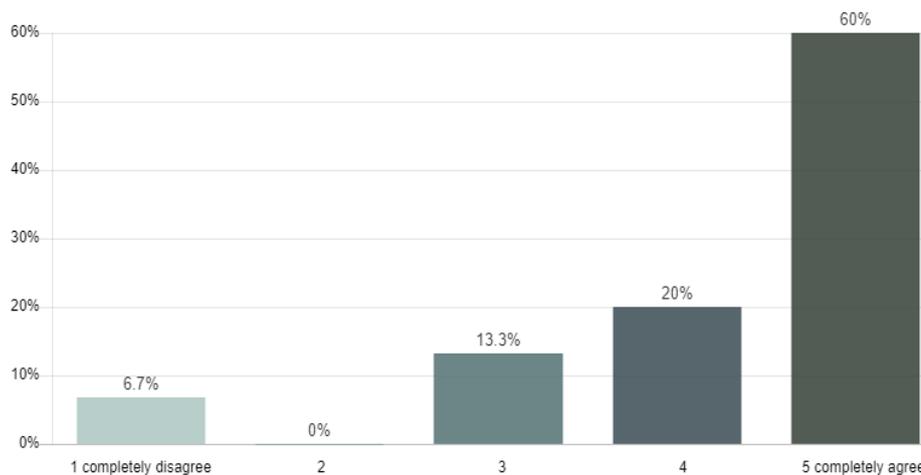


Fig. 2.31. Extent to which respondents agree with the statement: Quality of the product / service for a good price is the essential success source – chance for expansion in international markets (answers to survey question Q20).

Majority of the surveyed entrepreneurs – 33.3 % completely agree with the statement, but other 33.3 % neither agree nor disagree with the statement (see Fig. 2. 32).

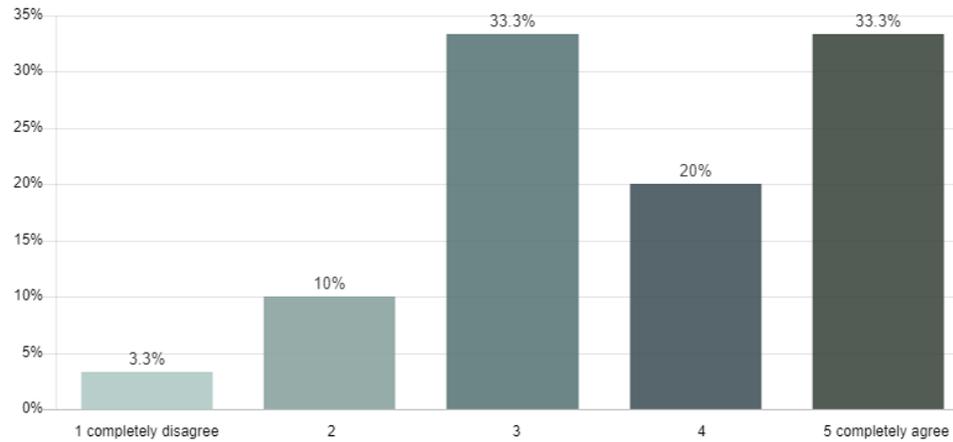


Fig. 2.32. Extent to which respondents agree with the statement: Following the customer suggestions is an essential success source – chance for expansion in international markets (answers to survey question Q20).

The BG experience stories often indicate that the BG companies succeed with truly innovative products and services; BG has a strong focus on the demands of global customers, serve clients worldwide, providing new, innovative products and services and often act as game-changers in their respective fields of expertise. Figure 2.33 reflects the entrepreneurs' answer to the question about the period of operation on the domestic market until internationalization of the company.

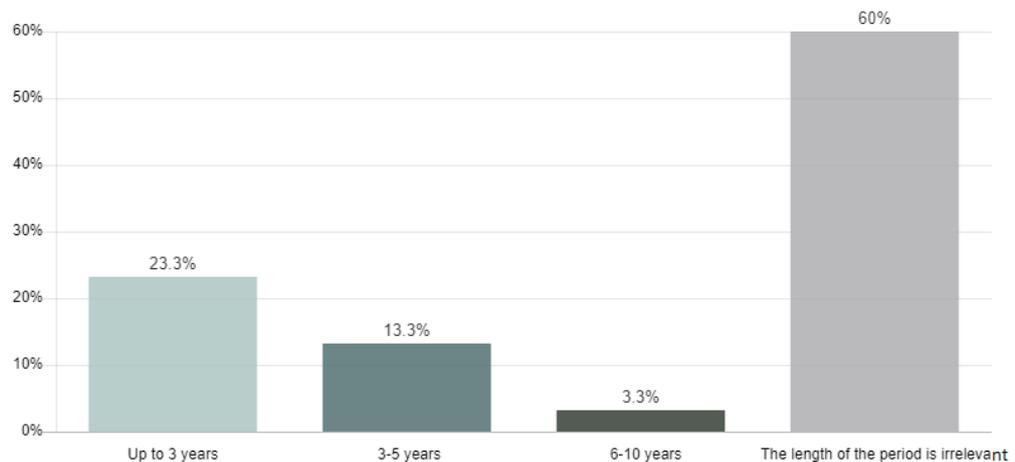


Fig. 2.33. Opinion of the respondents about the period of operating on the domestic market until internationalization (answers to the survey question Q21).

Majority of the surveyed entrepreneurs (60 %) considers that the length of period is irrelevant (see Fig. 2. 33).

The importance of analysis of the current issue is rooted in the opinion stories of successful born global companies where so-called “born globals” are characterized as companies “incorporating globalisation into their business strategies from the very beginning”.

The main barriers to entering international markets in the opinion of entrepreneurs

One of the final issues, included in the survey, is about the main barriers to entering international markets in the opinion of surveyed entrepreneurs. The comments are included in Tables 2.4, 2.5 and 2.6.

Table 2.4 reflects the main barriers to entering international markets, which could be formulated as based on individual-level characteristics of entrepreneur.

Table 2.4

The main barriers to entering international markets in the opinion of entrepreneurs, based on individual-level characteristics of entrepreneurs (developed by the author)

The mentioned barriers (grouped in order of importance from the responder's point of view)	Explanation, comments
1 – lack of courage; lack of experience, initiative and ambition; fear; lack of entrepreneurial mindset; lack of awareness 2 – lack of knowledge of foreign languages, international marketing expertise, foreign cultures; limited research capabilities	The listed barriers call for training programmes for entrepreneurs to encourage individual characteristics of entrepreneurial mindset and serious programmes for improvement of knowledge related to foreign language, international business and international culture, international business networks

Table 2.5 reflects the main barriers to entering international markets, which could be formulated as based on the firm-level characteristics.

Table 2.5

The main barriers to entering international markets in the opinion of entrepreneurs, based on firm-level characteristics (developed by the author)

The mentioned barrier (grouped in order of importance from the responder's point of view)	Explanation, comments
1 – lack of novel services or goods; lack of information; lack of business partners; lack of analysis and research 2 – lack of current assets, lack of finances 3 – lack of EU special support	The listed barriers call for the training programmes, mentioned in Table 2.4; governmental programs for financial and advisory assistance are needed

Table 2.5 indicates to the existence of groups of barriers, studied by Karakaya (1993), such as access to distribution channels (lack of information; lack of business partners) and government policy (lack of current assets, lack of finances, lack of EU special support).

Table 2.6 reflects the main obstacles to entering international markets, which could be formulated as barriers of external global business environment.

Table 2.6

The main barriers entering international markets in the opinion of entrepreneurs:
barriers due to global business environment (developed by the author)

The mentioned barrier (grouped in order of importance from the responder's point of view)	Explanation, comments
(1) shipping/representation costs; (2) legislation, competition; (3) licencing requirements; (4) trade barriers; (5) partnerships - need to be found that open doors into new segments; trust; dumped prices of services due to the low wage countries	The listed barriers call for the training programs for nascent entrepreneurs in an international law, in the building of international business networks; governmental programs for financial and advisory assistance are needed to launch BG business.

Table 2.6 indicates to the existence of groups of barriers, studied by Karakaya (1993), such as government policy (i.e., taxes and political risk); product adaptation; political uncertainties; access to distribution channels.

According to the respondents, the survey results indicate that a greater focus should be put on the following activities:

- necessity of better key orientations and strategies such as market orientation, product differentiation, and customer focus in the global markets;
- necessity of foreign experience of entrepreneurs and staff;
- necessity in higher obsessive passion (flexible outcomes planning, to follow initial goals).

After completing the survey, the author had an opportunity to ask the same questions to a group of entrepreneurs-owners of Austrian 'BG champion' companies. It has been accepted as expert opinion. Table 2.7 includes features that are dominating in expert' answers.

Table 2.7

Experts' opinion: the most essential features (developed by the author)

Experts' opinion (highly evaluated features, grouped in order of importance from the experts' point of view)	Explanation based on the theoretical approach, comments
1	2
(1) Quality of the product has a high level of importance.	Causal exploitation of pre-existing knowledge (e.g., particular product or technology; source of competitive advantage) in combination with contingencies in order to control the emerging situation.
(2) Flexibility; to make decisions under risk and uncertainty; establish and achieve goals and objectives; challenges facing the international markets are opportunities.	According with the fourth principle of effectuation, there is a necessity to exploit contingencies in order to control the emerging situation. This relates to leveraging unexpected outcomes and surprising situations, because uncertainty should be an opportunity.

Table 2.7 Continued

1	2
(3) Unique competencies derived from international knowledge	Intangible resource, included in the first principle of effectuation: effectual entrepreneurs should start with ‘What I know’ (knowledge).
(4) Organization and implementation of control processes to make sure they meet objectives; research and selection of target markets and meaningful competitive analysis.	Causally conducting extensive research of preselected markets
(5) Use of information and communication technologies and knowledge of foreign languages	According with the second principle of effectuation, to work jointly with all interested stakeholders, use of information technology, and knowledge of foreign languages are the basic factors.
(6) Business enterprises are the most important partner for rapid development of global reach	Based on the second principle of effectuation, effectual entrepreneurs work jointly with all interested stakeholders. It takes time to learn about ‘who you know’.

Table 2.7 combines features essential for the process of creation and growth of a BG company that are based on the experts’ opinion. All of the mentioned features are closely related to the existence of individual-level characteristics of entrepreneurial mindset such as passion, entrepreneurial self-efficacy, and risk perception as psychological constructs that are central to understanding of entrepreneurial behaviour.

The author would like to conclude the chapter with the suggestion expressed by an entrepreneur-owner of the surveyed Austrian ‘BG champion’ company:

“I started the company by buying 2 ha of land in 2003 – today we export to more than 60 countries, have 3 companies with turnover for more than 25 mill euro. My main idea is still – keep believing in your business plan, show your employees and your customers that you believe in it and be always positive!”

2.2.2. Analysis of the Research Results by Fuzzy-set Qualitative Comparative Analysis (fsQCA) Method

As the Likert scale measurements, reflected in the Chapter 2.2, are not sufficient to draw valid conclusions about the results of the research, more accurate data analysis method was used.

Fuzzy-set qualitative comparative analysis (fsQCA) was selected. It is a set-theoretic analysis method which allows to closely examine configurations of causal conditions, contributing to a specific outcome (see description in APPENDIX 2). Using this method, it is possible to investigate the relationship between cognitive conditions (harmonious passion, obsessive passion, entrepreneurial self-efficacy, and risk perception) and the outcome of

decision-making logic (i.e. effectuation vs. causation). The appropriate software for this analysis is fsQCA 3.0. The analysis was provided, the results are presented below.

To better understand how the results are obtained, the decision was to start with a brief description of the fsQCA method based on the theory developed by Ragin (2000, 2008) and Roig-Tierno et al. (2017).

Table 2.8 presents advantages and disadvantages of the qualitative comparative analysis (QCA) method. The advantage of the method is that it addresses the complexity of issues (each causal condition has an independent association with the case outcome).

Table 2.8
Advantages and disadvantages of QCA methodology (based on Rihoux, Marx, 2013)

Advantages of QCA	Disadvantages of QCA
Addresses challenges of small-n studies (QCA maximizes the number of comparisons within/across cases)	Small-n study (QCA does not seek to identify central tendencies but to identify causal pathways linked to individual cases)
QCA seeks to identify causal recipes, not net effects	Emphasis on dichotomizing variables (crisp set) <i>à</i> loss of information (approach allows measurement at set intervals between 0 and 1)
Addresses complexity of issues found in business studies (each causal condition has an independent association with the case outcome)	More flexibility, but can be subjective and not standardized appropriately
No assumption of linearity	Coding rules must be transparent
Case-oriented approach that facilitates a logical analysis	Variable selection bias and the amount of variables (relevant variable selection is not particular to QCA, but to all analytic approaches)
	Does not allow for time dimension, does not address process (could be incorporated in case selection)

The analysis of *necessary conditions* for the presence of causation and effectuation using fsQCA method (measures, key findings) is the first step of analysis. Tables 2.9 and 2.10 present the results of analysis of necessary conditions, based on the fuzzy-set qualitative comparative analysis (fsQCA), a set-theoretic analysis method which closely examines how configurations of causal conditions contribute to a specific outcome in the context of the current study. An initial round of analysis was conducted to evaluate whether the causal conditions were necessary for the outcome to occur (analysis of necessity). A necessary condition implies that the outcome is not present unless the condition is also present. When the outcome is observed, the condition will always be observed. But if the condition is observed, the outcome may or may not be observed. In set-theoretic terms, a condition is necessary if for all observations the membership values of the condition exceed the membership value of the outcome. As is customary in fsQCA analysis, the assessment of causal necessity was based on a consistency threshold of 1 (Schneider *et al.*, 2010). No causal condition was necessary for either causation or effectuation because the consistency score did not exceed the threshold of 1

for any condition. Therefore, the results of the analysis of necessity do not support any of the propositions.

Consistency (the study variable) refers to the percentage of causal configurations of similar composition which result in the same outcome value (if the consistency of a configuration is low, it is not supported by empirical evidence, therefore, it should be considered less relevant than other configurations with higher consistency); coverage (the next study variable) refers to the number of cases for which a configuration is valid, unlike consistency, the fact that a configuration coverage is low does not imply less relevance.

Every row in the table represents a configuration of the conditions that produce a particular outcome with the following value:

1.00 = fully in

0.80 = mostly in

0.60 = more in than out

0.40 = more out than in

0.20 = mostly out

0.00 = fully out

As is customary in fsQCA analyses, the assessment of causal necessity was based on a consistency threshold of 1 which did not exceed for any condition as a result of this research (Ragin, 2000, 2008; Roig-Tierno *et al.*, 2017).

Table 2.9

Analysis of necessary conditions for the presence of causation and effectuation
(developed by the author) (LV)

Conditions	Outcome			
	Causation		Effectuation	
	Consistency	Coverage	Consistency	Coverage
Harmonious passion	1	0.476821	1	0.5
~Harmonious passion	1	0.5	0.902778	0.656566
Obsessive passion	1	0.476821	1	0.5
~Obsessive passion	0.986111	0.493056	0.888889	0.646465
Self-efficacy	0.987179	0.509934	1	0.541667
~ Self-efficacy	0.987179	0.534722	0.897436	0.707071
Risk perception	0.986301	0.476821	1	0.506944
~ Risk perception	0.986301	0.5	0.90411	0.666667

Tables 2.9 and 2.10 present the results of necessary conditions analysis for the causation and effectuation. Designations (LV) and (EN) in Tables 2.9 and 2.10 mean the use of respondents' survey responses in one of these languages. This type of grouping has been kept due to fsQCA concept as analysis for small-n studies.

Table 2.10

Analysis of necessary conditions for the presence of causation and effectuation
(developed by the author) (EN)

Conditions	Outcome			
	Causation		Effectuation	
	Consistency	Coverage	Consistency	Coverage
Harmonious passion	0.982759	0.558824	1	0.471545
~Harmonious passion	1	0.527273	0.982759	0.606383
Obsessive passion	0.981132	0.509804	1	0.430894
~ Obsessive passion	1	0.481818	1	0.56383
Self-efficacy	0.983051	0.568627	1	0.479675
~ Self-efficacy	1	0.536364	0.966102	0.606383
Risk perception	0.982143	0.539216	1	0.455285
~ Risk perception	1	0.509091	1	0.595745

A sufficient condition implies that the outcome will be present whenever the condition is present. When the condition is absent, the outcome may still be present. *Technically, a condition is sufficient if for all observations the membership value of the condition is lower than the membership value of the outcome* (Schneider *et al.*, 2010).

Analysis of sufficiency

The next step, following the necessity analysis, is to identify the combinations (configurations) of conditions that are causally sufficient for the outcomes. Research sample items included answers to the questions, approved in the research of Stroe *et al.*, (2018). The sufficiency analysis is performed with the help of the truth table. The assessment of causal sufficiency was based on a frequency threshold of 1 and a consistency threshold of 0.75. The frequency threshold indicates that only configurations with at least one case are empirically pertinent (Fiss, 2007). The consistency threshold indicates the extent to which membership in the outcome set is systematically higher than or equal to membership in a particular causal configuration set. Tables 2.11 and 2.12 display results of the sufficiency analysis and show the degree of association between configurations and the presence of causation or effectuation. These solutions include all logical remainders that are theoretically consistent with the presence of the outcomes (Ragin, 2008; Roig-Tierno *et al.*, 2017). Results of the analysis revealed two causal configurations for the presence of causation and three causal configurations for the presence of effectuation. Measures of consistency and coverage are displayed for the overall solutions and for each individual configuration in Tables 2.10 and 2.11.

Coverage refers to the extent to which the solutions explain all cases of presence of effectuation and causation. The coverage score ranges from 0 to 1. The coverage of the overall solution was 0.50 for the presence of causation and 0.60 for the presence of effectuation. These

coverage scores demonstrate the coverage of a considerable share of the sample. 0.60 means more in than out; 0.50 – crossover point.

The *consistency* scores ranging from 0.90 to 1 imply their sufficiency for the presence of the outcome. A *higher coverage score* reflects a better empirical explanation of the outcome (Ragin, 2008). Therefore, Tables 2.10 and 2.11 rank the configurations by raw coverage. The current study is based on in advance validated research work. In order to facilitate the analysis of the results, the author would like to draw an explanation of results, included in the research of Stroe *et al.* (2018), from which the general idea of the study is taken: “*To explain the configurations, the character “*” denotes the logical operator AND, and the character “~” denotes the condition's absence (e.g., low level of self-efficacy). For the presence of causation, configuration IA (ese) implies that entrepreneurial self-efficacy (i.e., the belief that one is capable of achieving the venture's goals) is a sufficient (though not necessary) condition for the entrepreneur to choose a predictive, goal-focused causal decision-making logic. Second, configuration IIA (op * ~rp) implies that a high level of obsessive passion leads entrepreneurs to adopt a causal decision-making logic when the lack of perceived risks justifies this choice. For the presence of effectuation, harmonious passion alone is not a sufficient condition, but it does play an important role. Configuration IB (hp * ese) implies that entrepreneurs who experience harmonious passion and are self-efficacious eschew causal decision-making logic in favor of effectual logic. Configuration IIB (hp * rp) implies that when entrepreneurs perceive risk in the environment, harmonious passion is needed to justify the choice of an effectual, non-predictive decision process.*”

Results of the current study lead to the existence of all conditions, although the assigned degree to each case included in the range from 0.40 = *more out than in* to 0.60 = *more in than out*.

Table 2.11

Analysis of sufficient conditions for the presence of causation and effectuation
(developed by the author) (LV)

Conditions	Outcome			
	Causation		Effectuation	
	IA	IIA	IB	IIB
Harmonious passion	●	●	●	●
Consistency	1	1	1	0.9
Raw coverage	0.48	0.5	0.5	0.66
Unique coverage	0.48	0.5	0.5	0.66
Overall solution consistency	1	1	1	0.9
Overall solution coverage	0.48	0.5	0.5	0.66
Obsessive passion	●	●	●	●
Consistency	1	0.99	1	0.89
Raw coverage	0.48	0.49	0.5	0.65
Unique coverage	0.48	0.49	0.5	0.65
Overall solution consistency	1	0.99	1	0.89
Overall solution coverage	0.48	0.5	0.5	0.65
Self-efficacy	●	●	●	●
Consistency	0.99	0.99	1	0.9
Raw coverage	0.51	0.53	0.54	0.71
Unique coverage	0.51	0.53	0.54	0.71
Overall solution consistency	0.99	0.99	1	0.9
Overall solution coverage	0.51	0.53	0.54	0.71
Risk perception	●	●	●	●
Consistency	0.99	0.99	1	0.9
Raw coverage	0.48	0.5	0.51	0.67
Unique coverage	0.48	0.5	0.51	0.67
Overall solution consistency	0.99	0.99	1	0.9
Overall solution coverage	0.48	0.5	0.51	0.67

Tables 2.11 and 2.12 present the scores of the sufficient condition for the presence of causation and effectuation. Designations (LV) and (EN) in Tables 2.10 and 2.11 mean the use of respondents' answers that belong to one particular group. This type of grouping has been kept due to fsQCA concept of analysis for small-n studies. Results of the research reflected in Tables 2.10 and 2.11, indicate a sufficient level of features to use causal and effectual decision-making logic to entrepreneurs. Mediocre results of coverage scores for all of the cases reflect the necessity in better empirical explanation of the outcomes and necessity of better understanding of causal and effectual decision-making logic to entrepreneurs.

Table 2.12

Analysis of sufficient conditions for the presence of causation and effectuation
(developed by the author) (EN)

Conditions	Outcome			
	Causation		Effectuation	
	IA	IIA	IB	IIB
Harmonious passion	●/○	●/○	●	●
Consistency	0.98	1	1	0.98
Raw coverage	0.56	0.53	0.47	0.61
Unique coverage	0.56	0.53	0.47	0.61
Overall solution consistency	0.56	0.53	0.47	0.61
Overall solution coverage	0.98	1	1	0.98
Obsessive passion	●	●	●	●
Consistency	0.98	1	1	0.98
Raw coverage	0.51	0.48	0.43	0.57
Unique coverage	0.51	0.48	0.43	0.57
Overall solution consistency	0.98	1	1	0.98
Overall solution coverage	0.51	0.48	0.43	0.57
Self-efficacy	●	●	●	●
Consistency	0.98	1	1	0.97
Raw coverage	0.57	0.54	0.48	0.61
Unique coverage	0.57	0.54	0.48	0.61
Overall solution consistency	0.57	1	1	0.97
Overall solution coverage	0.57	0.54	0.48	0.61
Risk perception	●	●	●	●
Consistency	0.98	1	1	1
Raw coverage	0.54	0.51	0.46	0.6
Unique coverage	0.54	0.51	0.46	0.6
Overall solution consistency	0.98	1	1	1
Overall solution coverage	0.54	0.51	0.46	0.6

Black circles (●) indicate the presence of a condition, and unfilled circles (○) indicate the absence of a condition in Tables 2.11 and 2.12.

The results of the research obtained with fsQCA method, indicate the presence of causation, based on relationship with entrepreneurial self-efficacy as individual level characteristic of the entrepreneurial mindset. Obsessive passion leads entrepreneurs to adopt a causal decision-making logic when the lack of perceived risks justifies this choice. For the presence of effectuation, harmonious passion in combination with self-efficacy play an important role; risk perception in the environment in combination with harmonious passion is needed to justify the choice of an effectual, non-predictive decision process. The research hypothesis is hereby confirmed.

Hypothesis: Individual level characteristics of the entrepreneurial mindset are the main factors forming a specific state of mind which directs an entrepreneur towards entrepreneurial activities and outcomes.

Results of the current research, reflected in Tables 2.11 and 2.12, indicate a sufficient level of features to use causal and effectual decision-making logic of the surveyed entrepreneurs. Mediocre results of coverage scores for all of the cases reflect the necessity in

better empirical explanation of the outcomes, necessity of better understanding of causal and effectual decision-making logic to the surveyed entrepreneurs. Tables 2.9 and 2.10 emphasize the necessity in conditions of the entrepreneurial mindset for the presence of causation and effectuation.

The sufficient level of features to use causal and effectual decision making logic indicates the existence of qualities related fixed mindset. As shown in the theoretical part of the research, entrepreneurial intention is coming from a personality, but individuals are good entrepreneurs because of their skills. Traits are part of personality, while skills can be improved through training.

There is a necessity in better empirical explanation of the outcomes, necessity of better understanding of causal and effectual decision making logic to surveyed entrepreneurs because whereas this study concerns the BG firms, effectuation logic is particularly relevant for developing agility within BG firms, as they most often operate in new niche markets and have to make decisions in the absence of clear preexisting goals. This fact also points to the necessity in the ‘growth’ mindset which, in turn, is based on the belief that your basic qualities are things you can cultivate through your efforts; the hard work and an individual’s mindset impacts success more than natural talent (Dweck, 2007).

Relating to the successful BG strategy, niche strategy meant here, in turn, but it’s ‘engine’ and driving force is the networks that contribute greatly to the success of BG by helping to identify new opportunities abroad and by improving market knowledge. Companies with founders and managers who possess international experience, good foreign language skills, international networks, and excellent technological competence can rapidly enter more distant markets and do so with operation modes requiring more commitment. The search not only for foreign market opportunities but also for tangible and intangible resources and combine them in novel, innovative ways requires knowledge.

Training programs are needed to improve the understanding of causal and effectual decision making logic, they should be based on the individual level characteristics of the entrepreneurial mindset which in turn is the basis for entrepreneurial mindset and related to the growth mindset. The successful BG strategy is the result of the dynamics of the entrepreneurial mindset hence based on the individual level characteristics of the entrepreneurial mindset.

Before starting to work out the training programs, which is intended to be carried out in Chapter 3 of the Doctoral Thesis, the author's decision is to check the matching of the individual level characteristics of the entrepreneurial mindset to the items included in the Coyle’s ‘six characteristics’ model (Chapter 2.4). The ‘six characteristics’ model of what defines the

entrepreneurial mindset of individuals is a significant expert's contribution formed as a result of long lasting research and observation.

2.2.3. Consistency of the Survey Results with the P. Coyle's 'Six Characteristics' Model

The Coyle's 'six characteristics' model, built on his experience as a university leader, includes six features of the entrepreneurial mindset determined by the author of the model. Professor Paul Coyle, the Director of Executive Education at UIIN (University Industry Innovation Network) and an expert on the entrepreneurial mindset concept, developed the 'six characteristics' model of what defines the entrepreneurial mindset of individuals. Coyle accepts entrepreneur with his / her inherent entrepreneurial mindset as an integral part of the business ecosystem. Coyle enables others to become more entrepreneurial in their daily work and change the environment around them in the following way:

- seeing and creating opportunities;
- reading the way;
- managing risk;
- turning ideas into action;
- using resources smartly;
- collaboration for shared value (Coyle, 2017).

Author of the Doctoral Thesis is looking for the connection between individual level characteristics of the entrepreneurial mindset with the 'six characteristics' of Coyle's model.

Seeing and creating opportunities

This is the first characteristic in the list of Coyle's 'six characteristics'. The justification of meaning of 'opportunity' is clarified in the Business Dictionary in the form of definition: "... *an exploitable set of circumstances with uncertain outcome, requiring commitment of resources and involving exposure to risk.*" The definition suggests that in order to be effective in seeing and creating opportunities, the entrepreneurial mindset must be a strong way of thinking and acting to create value in the world. This statement is consistent with the meaning of the entrepreneurship at the very foundation of which entrepreneur can create economic, social and cultural value.

Table 2.13

Seeing and creating opportunities as characteristic of Coyle's 'six characteristics' model

Appropriate features of individual-level characteristic of the entrepreneurial mindset	Affected feature of the 'Coyle's characteristic' <i>seeing and creating opportunities</i>
Harmonious passion <u>Features:</u> flexibility in goal pursuit; openness to new experiences and experimentation; ability to more likely embrace the unexpected in decision-making	Associated with a set of uncertain results
Self-efficacy <u>Features:</u> the appropriate level of confidence required for entrepreneurs to expect success in attaining the venture's goals; focus on opportunities in the environment, expected to be more committed to planning than entrepreneurs with lower self-efficacy	Related to required commitment of resources
Risk-perception <u>Features:</u> ability to use of a non-predictive decision making logic where the focus is on managing the process rather than outcomes; ability to perceive the environment as risky	Related to involvement of exposure to risk

The seeing and creating opportunities characteristic, as reflected in Table 2.13, requires harmonious passionate entrepreneur open to new experiences and experimentation; self-efficacy is necessary to offer the level of confidence required for entrepreneur in attaining the venture's goals, to achieve requiring commitment of resources; risk perception is a critical factor in the choice between predictive and non-predictive decision-making.

Reading the way

Author of the Doctoral Thesis has found the justification of this characteristic in Coffeen's (2016) statement of reading the way of things (e.g., how to run business) as complex and not simply a matter of succumbing but as a matter of negotiating, kind of expenditure – personal, financial, spiritual (Coffeen, 2016).

Table 2.14

Reading the way as characteristic of Coyle's 'six characteristics' model

Appropriate features of individual-level characteristic of the entrepreneurial mindset	Affected feature of the 'Coyle's characteristic' <i>reading the way</i>
Harmonious passion <u>Features:</u> openness to new experiences and experimentation; ability to work together with internal and external partners to develop the venture	A matter of negotiating, networking
Self-efficacy <u>Features:</u> ability to successfully attain goals associated with the new venture; the appropriate level of confidence required for entrepreneurs to expect success in attaining the venture's goals	Kind of business expenditure (personal, financial, spiritual)
Obsessive passion <u>Features:</u> ability to be goal driven and plan desired entrepreneurial outcomes, rigidly follow initial goals; ability to be competitor oriented and try to prevent failure	Kind of business expenditure (personal, financial, spiritual)

Table 2.14 reflects the features of *reading the way* characteristic as a matter of negotiating, networking and kind of business expenditure (personal, financial, spiritual) in conjunction with

the individual level characteristic of the entrepreneurial mindset as harmonious passion, self-efficacy, obsessive passion.

Managing risk

Marketbusinessnews.com website explains risk management as referring to the forecasting and evaluation of financial and business risks as well as the identification of procedures and measures to avoid or minimize their potential impact. Business dictionary defines risk management as the identification, analysis, assessment, control, avoidance, minimization, or elimination of unacceptable risks.

Table 2.15

Managing risk as characteristic of Coyle's 'six characteristics' model

Appropriate features of individual-level characteristic of the entrepreneurial mindset	Affected feature of the 'Coyle's characteristic' <i>managing risk</i>
Obsessive passion <u>Features:</u> ability to be goal driven and plan and envision desired entrepreneurial outcome	Forecasting and evaluation of financial and business risks
Self-efficacy <u>Features:</u> ability to focus on the future and construct or visualize success scenarios, ability to set clear, challenging goals, monitor themselves, spend considerable effort in goal attainment	Capability to use any of strategies in proper management of future events under risk and uncertainty
Risk perception <u>Features:</u> ability to use the non-predictive decision-making logic where the focus is on managing the process rather than outcomes, ability to perceive the environment as risky	Identification, analysis, assessment, control, avoidance, minimization, or elimination of unacceptable risks

Managing risk characteristic is reflected in Table 2.15 in conjunction with the self-efficacy as individual level characteristic of the entrepreneurial mindset. This characteristic helps to focus on future and construct or visualize success scenarios guiding all of the actions, focusing on opportunities in the environment. Referring to the theory, risk perception is a critical factor in choosing between predictive and non-predictive decision-making logic and depends on how entrepreneurs interpret signals from the environment.

Turning ideas into action

Turning ideas into action characteristic is explained in the practical advice of Mochari (2019). There are seven steps how to put ideas into action that were defined by opinion leader Ilan Mochari in 2019:

- define the problem and solution space (the aim is to create boundaries in the idea-generation process, the result is typically a much broader range of ideas that are on target and have real potential to move forward toward impact); break the problem down (necessity to use a visual technique, like diagramming);

- make the problem personal (observing the individuals who are affected by the problem; the goal is to make it as real as possible to the people who will be generating ideas);
- seek the perspectives of outsiders (do not solve the problem in a vacuum, contact the networks where similar problems have been solved);
- diverge before you converge (having lots of ideas on paper before the discussion with your partners, any specific solution you can get too soon);
- create ‘idea resumes’ (the benefit of idea resumes is that they allow all involved parties to scan and share ideas, in a way that invites ‘apples-to-apples’ comparisons and "ensures that ideas are evaluated on their merits rather than on how well they are pitched"); create a plan to learn (this is where the real work begins) (Mochari, 2019).

Table 2.16

Turning ideas into action as characteristic of Coyle’s ‘six characteristics’ model

Appropriate features of individual-level characteristic of the entrepreneurial mindset	Affected feature of the ‘Coyle's characteristic’ <i>turning ideas into action</i>
Harmonious passion <u>Features:</u> flexibility in the goal pursuit; openness to new experiences and experimentation; ability to more likely embrace the unexpected in decision-making; working together with internal and external partners	Seeking for the perspectives of outsiders, contacting the networks where similar problems have been solved
Obsessive passion <u>Features:</u> ability more likely to be goal driven and plan desired entrepreneurial outcomes; to rigidly follow initial goals and to plan and persist until achieve these goals	Gaining from idea resumes, create a plan for the real work beginning
Self-efficacy <u>Features:</u> focus on the future and construction or visualization of success scenarios that guide the actions, focus on opportunities in the environment, commitment to planning; ability to set clear, challenging goals, monitor themselves	Definition of the problem and solution space, creation of boundaries in the idea-generation process, creation of the plan

Table 2.16 reflects the determinants which are necessary for turning of the ideas into action through the seven-step model of Mochari, 2019. Author of the Doctoral Thesis has chosen the model of Mochari, 2019 as an aid to better understand the *turning ideas into action* characteristic. For the given ‘Coyle's characteristic’, the individual level characteristics of the entrepreneurial mindset function as follows: The causal decision making logic helps to work out predictions based on existing information obtained from market research. Harmoniously passionate entrepreneurs are characterized by process-focused motivation, they are open to new experiences and experimentation. Obsessive passion is a basis to follow rigidly initial goals and plans and achieve these goals. Entrepreneurial self-efficacy offers the level of confidence required for entrepreneurs to expect success in attaining the venture’s goals. The focus on future and opportunities in the environment is the characteristic of self-efficacy. Flexibility is an essential determinant for turning ideas into action.

Using resources smartly

Explanation of the *using resources smartly* characteristic is based on an opinion of practitioners. *Leankor* which is used as an aid to understanding the *using resources smartly* characteristic, is a Customer-Centric Enterprise Work Management Solutions Salesforce Platform which expresses the views of opinion leaders. According to the *Leankor*, primary purpose of entrepreneur is bringing people, processes, and tools together to accomplish a common objective. One of the most important elements of resource management is managing resources that do the actual work in the following way:

- people are also resources (people are ultimately responsible for the success of the business; leadership, communicative, and emotional intelligence are necessary soft skills when it comes to inspiring and motivating team members);
- integrate technology (using technology to automate any aspect of the business, it comes to improving results of the business performance as saving time and improving accuracy, capability of extracting the required information);
- resource plan (a resource plan should contain every aspect that pertains to every resource necessary for the business from beginning to end);
- collaboration increases productivity (collaboration among employees and business partners works to increase productivity);
- visibility is critical (being able to strike an ideal balance between knowing what the company is working on and what motivates them is vital for the success of any business);
- transparency (business resources can become an unstoppable force if everyone involved is open, honest, and works together in transparency);
- prepare for the worst (anticipating potential disasters and having procedures in place to mend them should they occur is, therefore, important to the success of any business);
- keep the entire team happy (having the knowledge about the type of work the employees love doing and what motivates them);
- know future requirements (it allows to give the recruitment division sufficient lead time to identify appropriate resources);
- capability database (knowing the skills of the resources helps to assign each resource to a task efficiently) (Leankor, 2019).

Table 2.17

Using resources smartly as characteristic of Coyle's 'six characteristics' model

Appropriate features of individual-level characteristic of the entrepreneurial mindset	Affected feature of the 'Coyle's characteristic' <i>using resources smartly</i>
Harmonious passion <u>Features:</u> openness to new experiences and experimentation; ability to embrace the unexpected in the decision-making; work together with internal and external partners	Necessity in communicative and emotional intelligence, ability to collaborate among employees and business partners
Self-efficacy <u>Features:</u> the appropriate level of confidence to expect success in attaining the venture's goals; commitment to planning; ability to set clear, challenging goals, monitor themselves, spend considerable effort in goal attainment	Ability to plan resources and business in the most efficient way; ability to use technology to automate any aspect of the business

Table 2.17 reflects the characteristics of *using resources smartly*. Harmonious passion helps to be flexible in goals pursuit, to be open to new experiences and experimentation, to work together with internal and external partners to develop the venture; self-efficacy offers the level of confidence required for entrepreneurs to attain the venture's goals.

Collaboration for shared value

Author of the Doctoral Thesis has found the in-depth explanation of the *collaboration for shared value* characteristic in the form of the three key ways that share value, described by Porter and Cramer (2011):

- reconceiving products and markets (creating new products and services for existing or new markets which better serve societal needs);
- redefining productivity in the value chain (accessing and using resources, energy, suppliers, logistics and employees differently, and more productively);
- enabling local cluster development (improving the local operating environment by supporting skill-development and capacity-building) (Porter, Kramer, 2011).

According to Porter and Cramer (2011), the economic benefits afforded by shared value are also numerous, and include, but are not limited to:

- self-sustaining purpose and profitability;
- stronger brand equity and marketability;
- increased customer preference and loyalty;
- higher advocacy, retention and productivity among employees;
- resilience against external business threats;
- regained credibility among a disillusioned public;
- enhanced or sustained interest from like-minded shareholders and investors (Porter, Kramer, 2011).

Table 2.18

Collaboration for shared value as characteristic of Coyle's 'six characteristics' model

Appropriate features of individual-level characteristic of the entrepreneurial mindset	Affected feature of the 'Coyle's characteristic' collaboration for shared value
<p>Obsessive passion</p> <p><u>Features:</u> ability more likely to be goal driven and plan and envision desired entrepreneurial outcomes; ability to rigidly follow initial goals and to plan until achieve these goals</p>	Ability to be focused, goal driven; ability to access and use resources
<p>Harmonious passion</p> <p><u>Features:</u> flexibility in the goal pursuit; openness to new experiences and experimentation; ability to more likely embrace the unexpected in the decision-making; ability to work together with internal and external partners</p>	Ability to work together with internal and external partners, to embrace unexpected into decision-making
<p>Self-efficacy</p> <p><u>Features:</u> focus on the future and construction or visualization of success scenarios, focus on opportunities in the environment, ability to be committed to planning, to set clear, challenging goals, monitor themselves, spend considerable effort in goal attainment</p>	Commitment to planning to create new products and services or new markets, to improve the local operating environment

Table 2.18 reflects conjunction between *collaboration for shared value* as the Coyle's 'sixth characteristic' and individual characteristics of the entrepreneurial mindset. Harmonious passionate entrepreneurs are open to new experiences and experimentations, they work together with internal and external partners to develop venture, obsessively passionate entrepreneurs are outcome-focussed, they are goal-driven, plan and envision desired entrepreneurial outcomes. Self-efficacy helps to focus on opportunities in the environment, on future, visualize success scenarios that guide their actions.

Chapter 2.4 confirms the compatibility of the individual-level characteristics of the entrepreneurial mindset with the Coyle's 'six characteristics' model, created as a result of the well-known expert's practical experience.

Based on the research results, it is possible to develop a methodology that could focus on the development of individual-level characteristics of the entrepreneurial mindset of nascent entrepreneurs.

The research results confirm the hypothesis of individual level characteristics of the entrepreneurial mindset as drivers of entrepreneurial activities, such as the ability to improve competencies and access to external resources, focus on negotiation, risk mitigation, networking and adapting one's strategies to price, quality and location as the basis for the creation of BG.

The next challenge is to find ways to develop entrepreneurial mindset based on individual level characteristics, aiming for the following results that young entrepreneurs can achieve in a shorter period of time:

- behave and act as entrepreneurs every day;

- be ready for challenging situations;
- focus on continuous growth;
- approach problems from different sides;
- be ready to put the ideas into practice.

3. METHODOLOGY FOR ADVANCEMENT OF THE ENTREPRENEURIAL MINDSET LEADING TO BG

The aim of the research is to study the theoretical aspects of entrepreneurial mindset as a dynamic process and its interaction with a born global phenomenon; to develop and validate a methodology for advancement of the entrepreneurial mindset as a driving force for the creation of a successful born global strategy. The methodology is intended to be research-based into the EM individual level characteristics as factors guiding entrepreneurs towards creation of a successful BG strategy. Theoretical issues are analyzed in the Chapter 1 of the Doctoral Thesis, empirical research is provided in the Chapter 2, research results are developed using qualitative comparative analysis which closely examines how configurations of factors contribute to a specific outcome. Research hypothesis on individual level characteristics of entrepreneurial mindset as the main factors forming a specific state of mind, which orientates entrepreneurs towards entrepreneurial activities and outcomes, has been confirmed. Research results indicate a sufficient level of features to use causal and effectual decision making logic to surveyed entrepreneurs, at the same time research results reflect the necessity for better empirical explanation of the outcomes and necessity to better understand the causal and effectual decision making logic. A methodology to help assess/determine readiness of entrepreneurs to become BG and move their business forward in the global market is required.

To implement the program, the assistance of an organization designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services is necessary. These organizations, of course, are business incubators. In this regard, the author decided to present research results, first of all, to the management of LIAA business incubators, establishing for this purpose a presentation of research results and guidelines for the training methodology. The next planned step was to find a way to validate this methodology in one of the business incubators.

To demonstrate the way in which the research results were obtained and present the research-based methodology, the 'project approach' was chosen. It was used based on the idea that projects are usually broken down into elements that turn the 'big picture' into actionable components that can be planned and constructed. As the process of breaking a project down into manageable components is considered as the most basic element of project management, thereby the path to the methodology development and creation is based on the logical framework approach (LFA) (see Fig. 3.1). The logical framework approach was chosen to determine the way in which, using the results obtained during the research, it could be possible

to develop a methodology for business incubators to help them evaluate/determine the readiness of an entrepreneur to move his/her business forward. The logical framework approach, developed by Leon J. Rosenberg in the U.S. (1969), has been a key tool for professionals for decades for planning, monitoring and evaluating projects in social sciences and humanitarian projects. The author of the Doctoral Thesis has used the idea (direction) of the approach, adapting it according to the aim of the dissertation. The version of LFA, updated by Neil Kendrick (2018), was used as a basis (see Fig. 3.1).

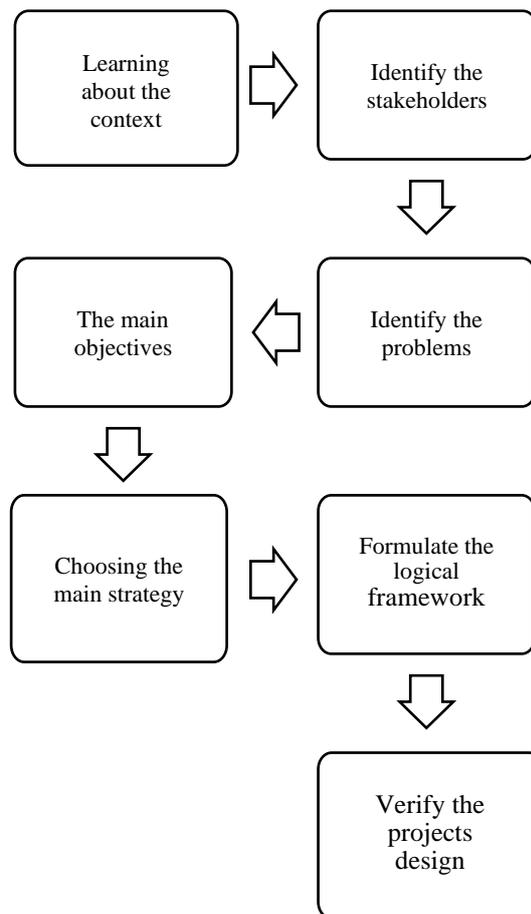


Fig. 3.1. The logical framework approach (based on Kendrick, 2018).

The main stages of the logical framework approach presented in the context of the current research are as follows:

- **Getting to know the context** (Chapter 1. Theoretical approach)

Monographic document analysis method has helped to carry out a detailed study of the research object, an extensive review of the scientific literature has been used. As a result, findings based on previous scientific research helped to understand the core of the entrepreneurial mindset and its role in business. The entrepreneurial mindset, the born global

phenomenon, the born global definition as a tool for business development, and elements of entrepreneurial mindset and born global strategy were analyzed. The analysis resulted in the research hypothesis.

- **Identifying the stakeholders** (Chapter 2. To prove the research hypothesis, the sample of respondents was chosen)

To test the research hypothesis and explore for this purpose the various views and experiences of respondents, samples were chosen from three respondent groups: startup companies from the Baltic states as a potential early orientation to international born global; the Latvian gazelle companies – fast-growing companies; the group of Austrian entrepreneurs – the owners of companies that are born global champions. Collaboration with the management of business incubators was planned for the approval and implementation of the methodology.

- **Identify the problems**

The results, obtained by the fsQCA method indicate a sufficient level of individual level characteristics of the entrepreneurial mindset for surveyed entrepreneurs, at the same time these results lead to the necessity for better empirical explanation of the outcomes, necessity for better understanding of causal and effectual decision making logic of surveyed entrepreneurs.

- **Formulating the main objectives**

Based on the research results there is necessity to set a goal which could be aimed at development of the individual level characteristics of entrepreneurial mindset for nascent entrepreneurs with the aim of helping them to be ready to enter the BG markets.

- **Choosing further strategy**

Following up the objective to search for paths to develop the individual level characteristics of entrepreneurial mindset for the nascent entrepreneurs as potential BG, it was decided to study the best business incubators' experience worldwide and based on it to choose learning and training strategies.

- **Formulating the logical framework**

Business incubators (by definition) are organizations that help startup companies and individual entrepreneurs to develop their businesses by providing a full scale range of services starting with management training and office space and ending with venture capital financing. The idea of collaboration with business incubators was put forward as a logical choice for the implementation of the strategy.

• **Verifying the project's design**

To verify the design for the final phase of dissertation – implementation of research results in practice, a decision was taken to conduct expert interviews with the directors of two LIAA business incubators in order to ascertain their views on the most appropriate methodology for the development of individual level characteristics for nascent entrepreneurs for the purpose to promote entrepreneurs' interest and knowledge of BG. The expert interviews were held in January 2021. The discussion lasted 1.5 hours. As a result of the discussion, the experts came to the following conclusions:

1. Experts had given their consent to participate in the discussion because LIAA business incubators prefer export-oriented ideas and companies.

2. The results of the research are convincing, usable for the development of evidence based methodology.

3. Inclusion of the proposed guidelines of the methodology in the curricula of LIAA business incubators could be discussed in the future.

4. It is currently relevant for LIAA business incubators that a methodology has been developed in the form of a questionnaire (test) for business incubator candidates or potential entrants. The methodology should include questions to ascertain the interest and potential of nascent entrepreneurs to be ready for BG.

The subsection 'Verifying the project's design' resulted in the following decisions:

(1) To develop an evidence based methodology for evaluation of nascent entrepreneur's orientation and readiness to be BG. The purpose of methodology should be helping business incubators in tackling some of their crucial challenges of participants engagement. To use the qualitative trajectories, included in the BG definition, as a theoretical basis to determine the test criteria. (2) To develop training programs based on the methodology to promote an entrepreneurial mindset rooted approach to developing a successful born global strategy. The task of the methodology is to enhance the abilities and skills of nascent entrepreneurs, the need of which will be specified after evaluation of the test results of the nascent entrepreneur's readiness to be BG. After mastering the programs based on this methodology, nascent entrepreneurs will be supported to create their own pathway to implementation of the successful BG strategy and identify potential methods how to reach it.

3.1. Methodology for Evaluation of Nascent Entrepreneur's Readiness for BG

It was decided to base the development of the methodology for evaluation of nascent entrepreneur's readiness to be BG on the presence of qualitative dimensions included in the BG definition.

Hence, the clarified understanding of the BG definition which was reached as a result of the discussion of the domestic experts' focus group on the definition of BG:

Born Global Company is a company oriented to revenues from international market, capable of the market offering that meets the needs of the international market customers; the company uses modern technologies.

It was scheduled to start the 'entrance' process to business incubator with a detailed analysis of the current state and desired future state of the potential participant's business. The entrepreneur was given the task to create a presentation of his/her business, including answers to the following questions:

1. Current state: Where are you now?

Including:

- ✓ the development stage of product/service;
- ✓ level of product's innovativeness;
- ✓ product's topicality in export markets;
- ✓ presentation of the current business models;
- ✓ financial flow analysis; understanding of the tax system; availability of funds;
- ✓ current and planned export opportunities (number of export markets);
- ✓ competencies of staff of the company; is there a necessity to attract external knowledge;
- ✓ justification of company formation with legislation knowledge.

2. Desired future state: Where would you like to go?

Including:

- ✓ competitive advantage, provision of the competitors' analysis;
- ✓ target market, customer identification, planned activities to retain target customers;
- ✓ annual forecast of profit, planned increase;
- ✓ analysis of future financial flows.

It was decided to evaluate the presentations of nascent entrepreneurs as follows.

Orientation to revenues from international market, presented in the BG definition, is included in the first test criterion:

Criterion 1. The startup company is already making a profit in at least one foreign market or has a realistic plan to make a profit in the nearest future; a faster international growth is the company's main priority.

Capability of the market offering that meets the needs of the international market customers, presented in the definition, is included in the second and the third test criterions.

Criterion 2. The product/service offered by the company is new, innovative; the company has new ideas and is ready to create completely new markets.

Criterion 3. The company has ambition, interest and potential to serve clients worldwide, not just the market of one foreign country.

The evaluation of the criteria was provided in a three-point system. The compliance with trajectories and dimensions, reflected in the Table 1.13, have been taken as a basis for evaluation.

Table 3.1 includes questions about current activities, strengths and capabilities of nascent entrepreneurs. The purpose of questions is to ascertain which of the nascent entrepreneurs are potential participants in business incubator and what help they would need in the future.

Table 3.1

Evaluation of the Readiness of Nascent Entrepreneurs to be BG

Criterion for evaluation	Level to which the business corresponds	Score
1	2	3
Trajectory on which to base the assessment of the criterion: orientation to revenues from international market		
Criterion 1. The startup company is already making a profit in at least one foreign market or has a realistic plan to make a profit in the nearest future; a faster international growth is the company's main priority	There is a rather accidental opportunity to trade a product/service abroad; no deeper analysis is offered; no explanation	1
	The opportunity to enter the market of foreign country has created an interest in operating globally; a desire to operate and gain knowledge to do so; slightly sketched profit and loss analysis	2
	Orientation to revenues from international market is clearly explained as the top item in an income (profit and loss) statement from which all charges, costs, and expenses are subtracted to arrive at net income; the main operations of an organization before any costs or expenses are deducted and clearly analysed	3
Trajectory on which to base the assessment of the criteria: capability of the market offering that meets the needs of the international market customers		
Criterion 2. The product/service offered by the company is new, innovative; the company has new ideas and is ready to create completely new markets	The product/service is new for the company; there is no clear research on the degree of customer needs in the product/service	1
	The product/service is new, innovative; the company has new ideas; there is a demand for the product in some of the foreign countries; the company is ready to create completely new markets; there is a lack of knowledge to achieve it	2

Table 3.1 Continued

1	2	3
Trajectory on which to base the assessment of the criteria: capability of the market offering that meets the needs of the international market customers		
	The product/service offered by the company is new, innovative and topical for the market; the company has new ideas and is ready to create completely new markets; the price of the traded item has been determined and communicated; deals and transactions are determined; potential customers need the product/service and they have the ability and willingness to pay for it	3
Criterion 3. The company has ambition, interest and potential to serve clients worldwide, not just the market of one foreign country	One foreign market has been found; it is accepted as sufficient to continue to operate	1
	The entrepreneur considers it necessary to be involved in more than one foreign market; he/she has great interest and a potential to serve clients worldwide and a commitment to gain	2
	Ambitions and potential to serve clients worldwide; plans are realistic and based on the results of business analysis	3

The lowest participation threshold after analyzing the results of the “entrance” test could be a total of 5 points, however, the main conclusions (see Table 3.2) are usually drawn after careful consideration of all factors by experts and are rooted in careful qualitative analysis. The Table 3.2 serves as a worksheet summarizing the results of each participant's assessment.

Table 3.2

Worksheet for the Evaluator to Draw Conclusions

Criterion	Scores			Total	Conclusions
Criterion 1	1	2	3		
Criterion 2	1	2	3		
Criterion 3	1	2	3		

A certain amount of abilities and skills is needed by entrepreneur for implementation of a successful BG strategy which takes the form of operating in market niches, performing network relationships and being competitive in the global markets. Development of necessary abilities and skills is the outcome of entrepreneurial mindset as the dynamic process based on the individual characteristics forming a specific state of mind. All of trajectories, included in the BG definition and in the evaluation system of readiness for nascent entrepreneurs to be BG, is a set of entrepreneurial abilities and skills. International market dimension is used as an aspect of a situation, as shown in Table 1.13. The relationship between the trajectories of international market dimension and abilities and skills, related to the trajectory's characteristics, needed by entrepreneur for the implementation of a successful BG strategy, is summarized in the Table 3.3. The author would like to confirm the inclusion of BG definition's trajectories in the

evaluation system to assess the readiness of nascent entrepreneurs to become BG, explaining it as follows:

Explanation of the ‘*Orientation to revenues from international market*’ as a qualitative trajectory on which to base the assessment of Criterion 1 (see Table 3.1).

Revenue means the income generated from the sale of goods or services, or any other use of capital or assets, associated with the main operations of an organization before any costs or expenses are deducted. Revenue is shown usually as the top item in an income (profit and loss) statement from which all charges, costs, and expenses are subtracted to arrive at net income. Table 3.3 highlights characteristics included in the revenue trajectory as well as the selected corresponding entrepreneurial abilities and skills.

Table 3.3

Inclusion of Entrepreneurial Abilities and Skills in the Revenue Trajectory

Highligthing of characteristics included in the revenue trajectory	Abilities and skills resulting from the trajectory’s characteristics needed by entrepreneur for the implementation of thea successful BG strategy
The sale of goods or services	<ul style="list-style-type: none"> ✓ Ability of managers to retain customers (the cost of attracting a new customer is much higher than the cost of maintaining a partnership with a current customer) ✓ Ability to focus on the most important predictors of performance and establish an integrated marketing communications strategy, as niche market is based on the profile of the particular group of consumers with their specific wants and desires
Use of capital or assets associated with the main operations of an organization and reliance on proven truth that the flow of capital assets is positively associated with the value of intangible assets	<ul style="list-style-type: none"> ✓ Ability of the complex combination of tangible capital assets within the firm and in the supply with intangible resources, activities, and stakeholders to indirectly increase the intangible asset value of the firm; intangible assets are increasingly forming the basis of competitive advantage; the market value of a firm is attributed to both the value of intangible assets and the value of tangible assets ✓ Ability to contribute the learning and knowledge exchange between operations functions and other functional areas, which is crucial for providing a successful born global strategy
Increasingly predominant basis of competitive advantage	<ul style="list-style-type: none"> ✓ Ability to notice and act on opportunities in the global business environments ✓ Ablity to flexibly interact with others that are themselves embedded in different social, political and institutional contexts ✓ Relevance of the dynamic capabilities driven by managers in global business environment
The top item in an income (profit and loss) statement from which all charges, costs, and expenses are subtracted to arrive at net income	<ul style="list-style-type: none"> ✓ Ability to set the right decision-making objective of maximizing the expected profit ✓ Ability to maximize shareholder value, which in turn is achieved when the firm maximizes its expected profit

Explanation of ‘*Capability of the market offering that meets the needs of the international market customers*’ as a qualitative trajectory on which to base the assessment of Criteria 2 and 3 (see Table 3.1).

Market means an actual or nominal place where forces of demand and supply operate and where buyers and sellers interact (directly or through intermediaries) to trade goods, services, or contracts or instruments, for money or barter. The market for a particular item is made up of existing and potential customers who need it and have the ability and willingness to pay for it. Table 3.4 highlights characteristics included in the market trajectory as well as the selected corresponding entrepreneurial abilities and skills.

Table 3.4

Inclusion of Entrepreneurial Abilities and Skills in the Market Trajectory

Highligthing of characteristics included in the market trajectory	Abilities and skills resulting from the trajectory's characteristics needed by entrepreneur for the implementation of a successful BG strategy
Communicating the price information	<ul style="list-style-type: none"> ✓ Ability to provide simple, clear and reliable sustainable information to support consumers' decision making (remembering that consumer decision making is influenced by a myriad of factors which can be grouped into three main types of individual decision making: cognitive, habitual and emotional) ✓ Ability to accept as the most important the assumption of a positive association between the price and intrinsic qualities of a product is central to consumer behavior
Facilitating deals and transactions	<ul style="list-style-type: none"> ✓ Skills of greater information processing and knowledge of international markets ✓ Ability of skillful use of resources which could help BGs to reduce their transaction costs, respond to environmental uncertainties, enforce optimal contracts, and enhance efficiency through deeper knowledge of related parties ✓ Ability to provide superior service quality in terms of sales and long-term customer loyalty and retention
Effecting distribution	<ul style="list-style-type: none"> ✓ Managers' ability of scanning business opportunities, based on understanding how different industry sectors and contexts give rise to different relationships between tactical activities, as service quality management, and overall performance outcomes through the application of modern technologies ✓ Ability to achieve superior firm performance, both distribution channel dynamism and information processing capacity must be increased simultaneously

Offering leads to the cognition that to make the offering successful, firms should increase their information processing capacities. Abilities and skills, resulting from the offering trajectory, needed by entrepreneurs for the implementation of a successful BG strategy are as follows:

- ✓ abilities and skills to increase information processing capacity and supply chain dynamism simultaneously for the purpose of achieving superior performance and resolve uncertainty;
- ✓ abilities, skills and knowledge to define the customer requirements, customize and integrate goods and services to form solutions and include customer participation and feedback in the process of offering as important factor to new product success (customer

involvement can be harnessed to promote ‘major innovations’ as well as customized product offerings);

- ✓ ability to effectively integrate customer resources and processes for the business-to-business (B2B) providers, seeking differentiation, offering solutions in response to increased customer demand and increasing competition in globalized markets.

Needs is about having something, or wanting something very much, require (something) because it is essential or very important rather than just desirable. Abilities and skills, resulting from the needs trajectory, necessary for an entrepreneur for the implementation of a successful BG strategy, are as follows:

- ✓ ability to frequently and interactively involve the customers which leads to a superior understanding of future customer needs;
- ✓ ability to form a proactive market-oriented organization that helps customers anticipate developments in their markets, to shape the market structures and behaviors of players including customer preferences;
- ✓ ability to understand the psychological needs of customers that is an essential element to develop marketing strategies.

This in-depth look into the matter of effects between qualitative trajectories included in the BG definition and abilities and skills, needed by entrepreneur for the implementation of a successful BG strategy, has been made for the following reasons:

- 1) the criteria for evaluation of methodology for evaluation of nascent entrepreneur’s readiness to be BG are designed closely related to the trajectories of BG definition;
- 2) each of the BG definition trajectories has its own characteristics;
- 3) the set of abilities and skills, resulting from the trajectory’s characteristics, is needed by entrepreneur for the implementation of a successful BG strategy;
- 4) only by knowing these qualities (abilities and skills of entrepreneur for the implementation of successful BG strategy) it is possible to develop the framework for methodology to promote an entrepreneurial mindset rooted approach to developing a successful born global strategy.

Interviews with the beginners – nascent participants of business incubators and entrepreneurs with successfully started business in the international market, were used as an additional tool before developing the framework for training programs.

Table 3.5 reflects their challenges and expectations regarding the necessary training activities.

Table 3.5

Main Challenges and Expectations of Entrepreneurs Regarding the Training Activities

Main challenges and expectations regarding the training activities	The number of respondents who needs training
The need for knowledge about export markets	Nascent entrepreneurs – 79 % Entrepreneurs with experience in the international market – 63 %
Desire to be encouraged to start or continue an international business, dare and confidence is needed	Nascent entrepreneurs – 81 % Entrepreneurs with experience in the international market – 13 %
Knowledge of receiving grants	Nascent entrepreneurs – 79 % Entrepreneurs with experience in the international market – 63 %
Necessity of knowledge and skills to get business contacts in the global market environment	Nascent entrepreneurs – 93 % Entrepreneurs with experience in the international market – 36 %
Deeper knowledge about digital marketing	Nascent entrepreneurs – 30 % Entrepreneurs with experience in the international market – 71 %

The list of main challenges and expectations regarding the training activities (see Table 3.5) is largely consistent with the research results analysed in the Chapter 2. The research results make it necessary to better empirically explain the outcomes, to better understand causal and effectual decision-making logic of entrepreneurs in order to build a successful BG strategy. Since the research hypothesis has been proven, the design of further training methodology should be based on the assumption that the individual level characteristics of the entrepreneurial mindset are the main factors forming a specific state of mind which orientate an entrepreneur towards entrepreneurial activities and outcomes. Training programs which are intended to enhance quality of abilities and skills for entrepreneur and his/her readiness to implement the successful BG strategy should follow from the features of the individual level characteristics of the entrepreneurial mindset, as the main factors forming a specific state of mind.

The training methodology, which follows further, should help to enhance an understanding of business plans, strengths and capabilities to design a partnership approach aligned with successful born global strategy, achieving this through inclusion of the training activities. At the same time this program should be an opportunity to evaluate and improve practical approach to strengthening of the business outcomes.

3.2. Methodology for Advancement of the Entrepreneurial Mindset Leading to Creation of Successful BG Strategy

Working alongside other participants of business incubator, the entrepreneurs will be guided to enhance their entrepreneurial approach and mindset. The evaluation results of the readiness of nascent entrepreneurs to be BG, as seen in Table 3.1, clarify the following:

- ✓ Current state: Where are you now?
- ✓ Desired future state: Where would you like to go?

Using the training methodology, nascent entrepreneurs will be supported to create their own pathway to implementation of successful BG strategy and identify potential methods to reach it. The purpose of the training methodology should include gaining clarity about the future state of business growth: How do you get there? Figure 3.2 includes program elements of the training methodology.

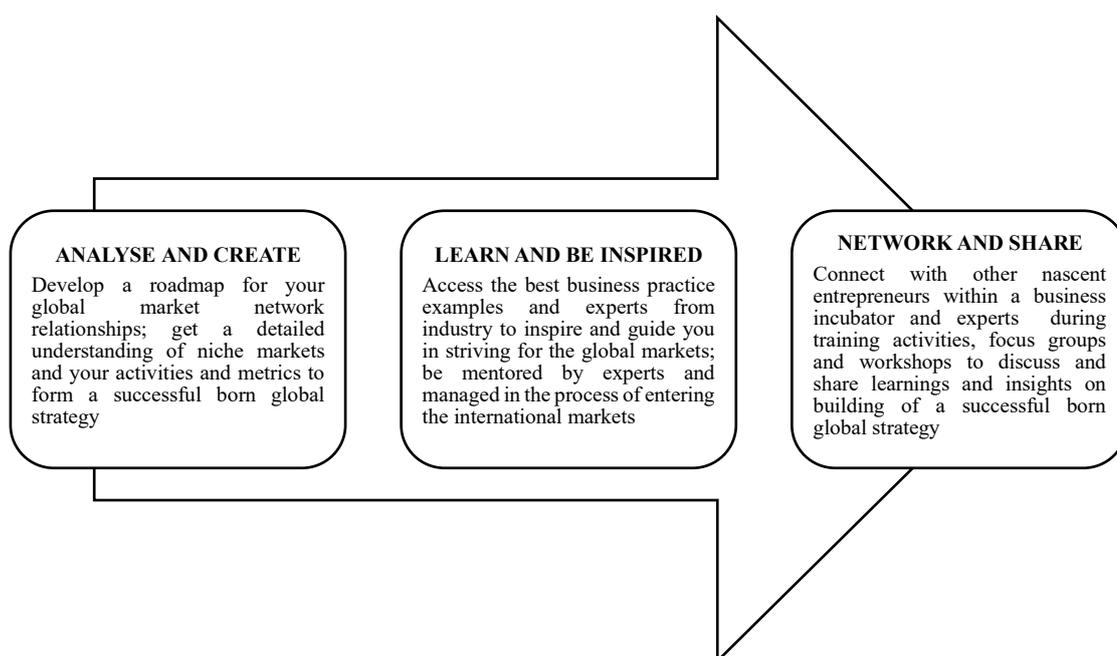


Fig. 3.2. Program elements of the training methodology (developed by author).

Inclusion of the successfully applied worldwide experience patterns in the training program will help make the program more relevant (see Table 3.6). Access to experts who will work closely with entrepreneurs – participants of business incubators, and provide advice to them could be a great support.

Table 3.6

Successfully Applied Experience in Business Incubators (developed by author)

Business incubator	The aim of training activities	The type of training program used to achieve the aim
The Accelerator Centre of the University of Waterloo, Canada	Assistance to define a market clearly; assistance to focus on the factors that are most important for the success of the business	The programs of workshops, seminars; one-to-one coaching and advice guidance from mentors
TEC of the Edmonton University of Alberta, Canada	A module, offering an overview of the early stage small business needs: bringing a product or service to market, expanding the business into new markets and/or to new customers	A program of workshops, seminars, one-to-one coaching based on the advice to entrepreneurs about opportunities to look at a variety of complex activities
Startup Aggieland of the Texas A&M University, United States	To learn how to identify potential customers, understand customer needs, and define the value a product or service must provide in order to be a viable business	A combination of curriculum, mentoring, one-to-one coaching
e-Centre Ltd. of the Massey University, Albany, Auckland, New Zealand	To give the participants the courage, skills, and resources they need to transform their ideas into a successful business	Programs of workshops, seminars, and individual coaching
Chalmers Ventures of the Chalmers University of Technology, Sweden	To give inspiration to startups, to focus on the factors that are most important for the success of the business	Individual coaching and feedback: validation of the customer/user need for individual coaching and feedback
INiTS Vienna Business Agency of University of Vienna and Technical University of Vienna, Austria	To teach how to build network relationships, to revise business models, practice pitches and presentations	The focus is on one-to-one coaching and advice, training on issues such as prototyping, market access, growth, strategic partnerships, and internationalization
Imperial White City Incubator of the Imperial College London	To provide peace of mind, allowing entrepreneurs to focus energy on their business	A program of workshops, seminars; one-to-one coaching and advice
NDRC of the Trinity College Dublin, University College Dublin, Dublin City University, Ireland	To provide knowledge on digital enterprises, deep industry or research-based knowledge or technology	The team provides strategic business development advice and intensive mentoring by experts
Innovation Incubation Center of the Chaoyang University of Technology, Taiwan	Linking of the academic sphere and business practice to promote competency and success	Expert teams are aimed at exploiting results of university research
Dublin Business Innovation Centre of Dublin City University, Ireland	Involvement of the entrepreneurial ecosystem and real-world experience; specific knowledge of, and strong links to EU markets and funding instruments	A program of deep involvement in entrepreneurial ecosystem and significant real-world experience

Proving the research hypothesis put forward in Chapter 2, it is concluded that the individual level characteristics of entrepreneurial mindset are the main factors forming a specific state of mind which orientate an entrepreneur towards entrepreneurial activities and outcomes. In order to develop guidelines for training methodology, development of the individual level characteristics of entrepreneurial mindset is taken as a basis for conceptual

framework (see Fig. 3.3). Abilities and skills, analysed above and needed by entrepreneur for the implementation of successful BG strategy, are intended to be further associated with the individual level characteristics of entrepreneurial mindset.

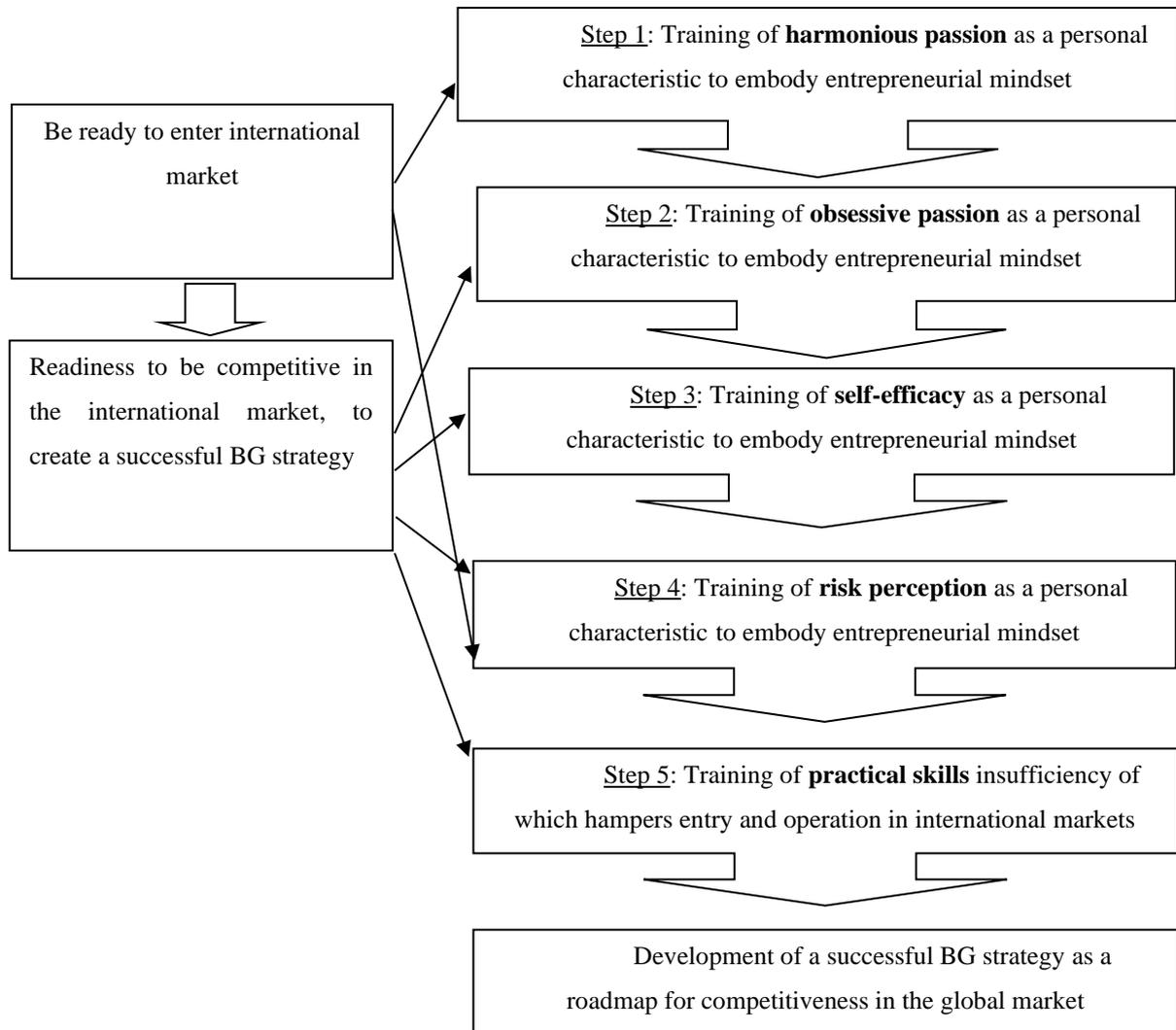


Fig. 3.3. Conceptual framework of the training methodology (developed by author).

Figure 3.4 reflects the training program activities and timeline of the implementation. The program elements of the training methodology (see Fig. 3.2) are scheduled to be introduced and implemented in the program following the conceptual framework of the training methodology (see Fig. 3.3). As a result, it would provide a basis for understanding the causal and effective decision-making logic and providing entrepreneurs with practical action to move forward.

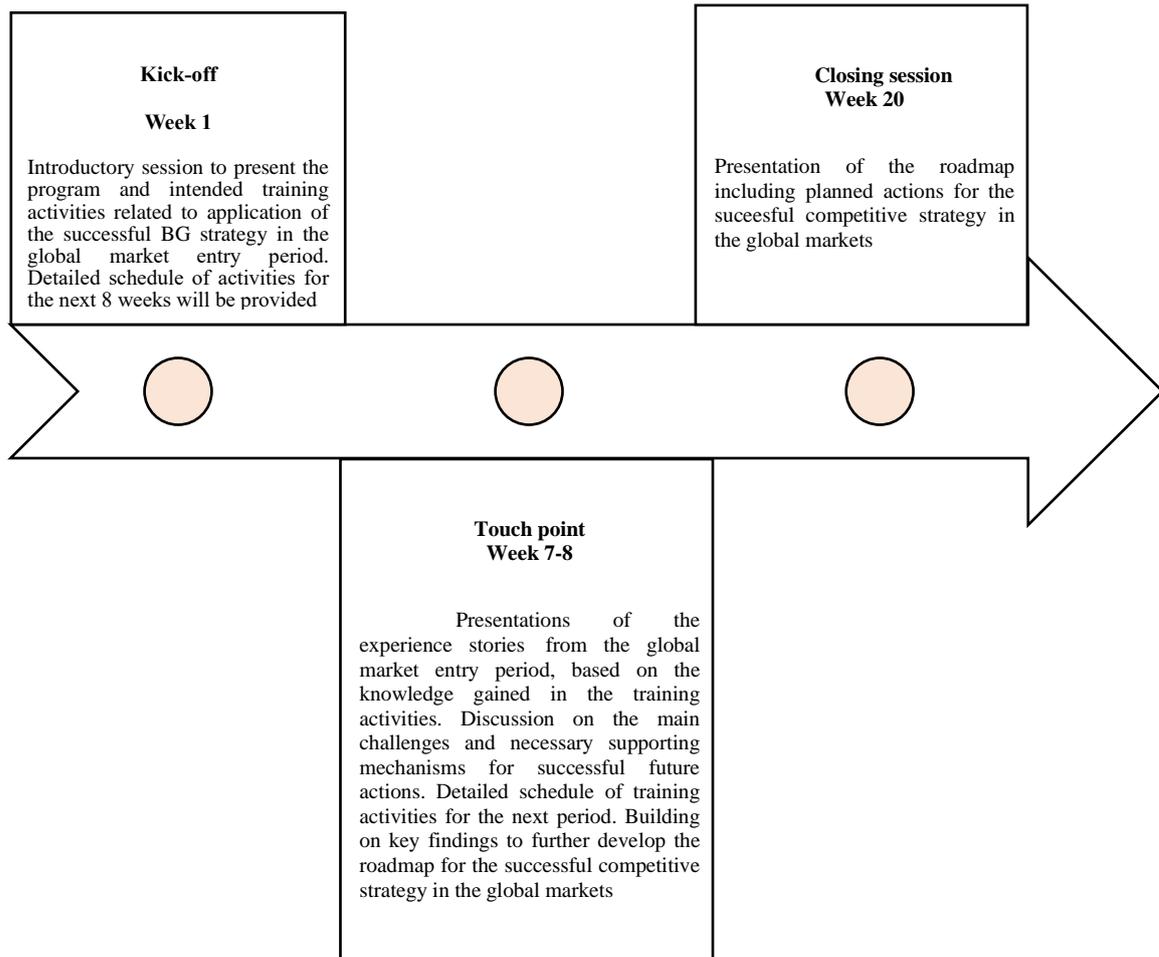


Fig. 3.4. Training program activities and timeline (developed by author).

Step 1 (related to the development of harmonious passion) and Step 2 (related to the development of obsessive passion) (see Fig. 3.3) are intended to be performed during the period from kick-off (starting point) to touch point (mid-term), as seen in the training program timeline (see Fig. 3.4). Table 3.5 reflects the main challenges and expectations of entrepreneurs regarding the training activities. The desire to be encouraged to enter global markets and necessity to develop dare and confidence are highlighted as some of the expectations. Training programs based on features of the harmonious passion in combination with abilities and skills, needed by entrepreneurs, are appropriate for Step 1 of the training. Development activities of harmonious passion as a personal characteristic to embody entrepreneurial mindset, are shown in Table 3.7.

Table 3.7

Harmonious Passion as a Personal Characteristic to Embody Entrepreneurial Mindset
(developed by author)

Features of the harmonious passion	Abilities and skills needed by entrepreneurs for the implementation of successful BG strategy, based on the features of harmonious passion	Programs for training of the personal characteristics
Basis for flexibility in goal pursuit, openness to new experiences, ability to embrace the unexpected in decision making, and working together with internal and external partners; basis for the process-focused motivation	<ul style="list-style-type: none"> ✓ Ability to focus on the most important predictors of performance and establish an integrated marketing communications strategy, as niche market is based on the profile of the particular group of consumers with their specific wants, desires (necessary in the sale of goods or services process) ✓ Ability to notice and act on opportunities in the global business environments ✓ Ability to flexibly interact with others that are themselves embedded in different social, political and institutional contexts; relevance of the dynamic capabilities driven by managers in the global business environment (predominant basis of competitive advantage) 	Program of workshops and seminars, based on activities to recognize opportunities in the global market, to encourage entrepreneurs think differently and approach problems from a range of different angles, to build network relationships

Development activities of the obsessive passion as personal characteristic to embody entrepreneurial mindset are shown in Table 3.8. Training programs based on the features of obsessive passion in combination with abilities and skills, needed by entrepreneur, are appropriate for the next step of the training. The task of Step 2 (see Fig. 3.3) is to go ahead and promote ability to be goal driven and rigidly follow initial goals, ability to be competitor oriented and ready for business planning.

Table 3.8

Obsessive Passion as a Personal Characteristic to Embody Entrepreneurial Mindset
(developed by author)

Features of the obsessive passion	Abilities and skills, needed by entrepreneurs for the implementation of successful BG strategy, based on the features of obsessive passion	Programs for training of the personal characteristics
Basis for planning the desired entrepreneurial outcomes, for the ability to be goal driven and rigidly follow initial goals, ability to be competitor oriented, focus on beating rivals	<ul style="list-style-type: none"> ✓ Ability to set the right decision-making objective of maximizing the expected profit ✓ Ability to retain customers (the cost of attracting a new customer is much higher than the cost of maintaining a partnership with a current customer) ✓ Ability of scanning business opportunities based on understanding how different industry sectors and contexts give rise to different relationships between tactical activities ✓ Ability to understand the psychological needs of customers and develop marketing strategies 	Program of educational workshops based on activities encouraging an entrepreneur to learn how to revise business models, how to practice pitches and presentations Programs of individual mentoring and coaching should be focused upon vision and goals – to bring vision to the forefront to provide value

Step 3 (related to the development of self-efficacy), Step 4 (related to the development of risk perception), and Step 5 (related to the training of the tactical skills) (see Fig. 3.3) are intended to be performed during the period from touch point to closing session, as seen in the training program timeline (see Fig. 3.4). As Table 3.5 reflects the main challenges and expectations of entrepreneurs regarding the training activities, the emphasis of this period should be on the improvement of knowledge and skills to get business contacts in the global business environment, be competitive in the global market, to deepen knowledge of customer-centric business, to work out business models, to be ready to work out a strategy for successful BG business. The development activities of self-efficacy as a personal characteristic to embody entrepreneurial mindset are shown in Table 3.9. The features of self-efficacy embody the basis for the appropriate level of confidence required by entrepreneurs to expect success in attaining the venture's goals, for commitment to planning. The program for training of self-efficacy as personal characteristic (see Table 3.9) should be worked out taking into account the close link between self-efficacy and the corresponding abilities and skills needed by entrepreneur.

Table 3.9

Self-efficacy as a Personal Characteristic to Embody Entrepreneurial Mindset
(developed by author)

Features of self-efficacy	Abilities and skills needed by entrepreneurs for the implementation of successful BG strategy, based on the features of self-efficacy	Programs for training of the personal characteristic
Basis for the appropriate level of confidence required by entrepreneurs to expect success in attaining the venture's goals, focus on future, on ability to visualize success scenarios that guide entrepreneur's actions, to focus on opportunities in the environment for commitment to planning.	<p>To facilitate deals and transactions in global markets, it is necessary to have:</p> <ul style="list-style-type: none"> ✓ skills of greater information processing and knowledge of international markets; ✓ ability to make efficient use of resources that could help BG reduce transaction costs, respond to environmental uncertainty, execute optimal contracts and improve efficiency by deepening knowledge of related parties; ✓ the ability to scan business opportunities, understanding how different industry sectors and contexts create different relationships between tactical activities, such as service quality management and overall performance using modern technology; ✓ ability to provide superior service quality in terms of sales and long-term customer loyalty; ✓ ability to set the right decision-making objective of maximizing the expected profit; ✓ ability of managers to retain customers; ✓ ability of the complex combination of tangible capital assets within the firm and in the supply with intangible resources, activities, and stakeholders to indirectly increase the intangible asset value of the firm; ✓ ability to contribute to the learning and knowledge exchange between operations functions and other functional areas, which is crucial for providing successful born global strategy. 	<p>The program of workshops, seminars and networking with acknowledged leaders should provide the tools that every entrepreneur needs to rapidly define and validate business ideas, to push forward, to develop executive leadership skills, establish accounting and finance procedures and managing human resourcing needs and develop a positive internal culture and define business strategies.</p> <p>Supporting activities for individual coaching and feedback should offer the opportunity to look at a variety of complex activities that are required when a small business is growing.</p>

Development activities of risk perception as a personal characteristic to embody entrepreneurial mindset are shown in Table 3.10. The features of risk perception embody the basis for ability to use a non-predictive decision-making logic where the focus is on managing the process rather than outcomes, the basis for ability to perceive the environment as risky. The program for training of risk perception as a personal characteristic (see Table 3.10) must take into account the close link between the risk perception and the relevant abilities and skills required by the entrepreneur.

Table 3.10

Risk Perception as a Personal Characteristic to Embody Entrepreneurial Mindset
(developed by author)

Features of risk perception	Abilities and skills, needed by entrepreneur for the implementation of successful BG strategy, based on the features of risk perception	Programs for training of the personal characteristic
Basis for the ability to use a non-predictive decision-making logic where the focus is on managing the process rather than outcomes; basis for the ability to perceive the environment as risky.	<ul style="list-style-type: none"> ✓ Ability to frequently and interactively involve the customers, which leads to a superior understanding of future customer needs. ✓ Ability to form a proactive market-oriented organization that helps customers anticipate developments in their markets, to shape the market structures and behaviors of players, including customer preferences. ✓ To achieve superior firm performance, both distribution channels' dynamism and information processing capacity must be increased simultaneously. 	<p>Group programs of introduction to thinking differently and approaching problems from a range of different angles.</p> <p>Individual guidance from mentors to master how to focus on the factors that are most important for the success of the business, giving inspiration, individual coaching and feedback to use a non-predictive decision-making logic with the focus on managing the process rather than outcomes; ability to perceive the environment as risky.</p>

Table 3.11 is about the need for practical skills training, the lack of which makes it difficult to enter and operate in international markets. One of the expectations of entrepreneurs mentioned in Table 3.5, there is an opportunity to learn more about digital marketing issues. This indicates the need of inclusion in the training program acquisition of knowledge related to contemporary customer centric business, as well as the need to improve knowledge of foreign languages.

Table 3.11

Practical Skills Insufficiency of which Hampers Entry and Operation in the
International Markets (developed by author)

Necessity of training practical skills	Practical skills needed by entrepreneurs for BG business	Programs for training
The result of training process should be based on the core capabilities of a customer-centric business and necessary knowledge and skills for entering international markets.	<ul style="list-style-type: none"> ✓ Skills related to customer-centric business: information technologies, readiness to work with large amounts of data. ✓ Knowledge of foreign languages. ✓ Knowledge of legislation. ✓ Building of business models. 	Teaching of information technologies requires programs of the advice and intensive mentoring by experts in the digital sphere, in deep industry or research-based knowledge on new technologies; programmes with inclusion of expert teams that use the results of university research and linking the academic sphere for teaching of key technologies; foreign language courses.

For further management of training programs, measurement system of the results should be introduced as a tool of high significance. As born global company is designed to enable entrepreneurs to operate in small niche markets worldwide, the training programs should focus on achieving the appropriate level of knowledge and skills so that entrepreneurs can develop a successful BG strategy. Assessment of knowledge, abilities and skills included in the trajectories of BG definition, analysed above, will be provided. These trajectories, hence, are revenue trajectory, market trajectory, offering and needs trajectories which are all related to international market dimension. With all this in mind, it would be essential to foresee planned actions to evaluate the results of the training process. The expected results should include the following:

- (1) Assessment of the 'Touch point' (mid-term) presentations, prepared by entrepreneurs after 7–8 weeks of training.

Although the final purpose of the training program is to help entrepreneurs be ready to develop a successful BG strategy as a roadmap for the competitiveness in the global market, the task of the initial stage program is to develop an understanding of current, everyday activities, strengths and capabilities before designing of a whole strategic approach with inclusion of vision and goals. One of the initial goals could be to encourage non-traditional, entrepreneurial behaviour and entrepreneurial mindset. Table 3.12 presents a mid-term (touch-point) evaluation of the training program acquisition, including reference to the form of evaluation and evaluation criteria.

Table 3.12

Mid-term (touch-point) Evaluation of the Training Program Acquisition (developed by author)

Evaluation form	Evaluation criteria of 'touch point' presentation
<p>Presentations of experience stories about the global market entrance period, including references to the issues learned in the first part of the training process. Inclusion of main challenges encountered and expectations from the next stage of training is recommended.</p> <p>Additional task: outline of the situation given by mentors to be solved by a presenter using three different approaches.</p>	<ul style="list-style-type: none"> ✓ Daring to act and confidence in the viability of his/her business idea. ✓ Ability to notice and act on opportunities in the global business environments and be flexible and ready to see and solve a problem from different points of view. ✓ Ability to set the right decision-making objective of maximizing the expected profit. ✓ Ability to retain customers by understanding their needs could serve as a starting point for learning of customer centric business issues.

(2) Assessment of the roadmap presentation, including planned actions which would result in a successful BG strategy.

Table 3.13 includes the form and evaluation criteria of the final presentation. The training program must lead to the achievement of the objective to help entrepreneurs be ready to develop a successful BG strategy as a roadmap for the competitiveness in the global market.

Table 3.13

Final Evaluation of the Training Program Acquisition (developed by author)

Evaluation form	Evaluation criteria of the final presentation
<p>Presentation of the roadmap including planned actions for the successful competitive strategy in the global markets.</p>	<p>Niche strategy is developed for the successful operation in particular, specialized 'niche' business area in the global market.</p> <p>Emphasis in the evaluation process to:</p> <ul style="list-style-type: none"> ✓ the business model all elements of which are tailored to the relevant niche market (inclusion of key partners, customer segments, channels, customer relationship, revenue structure, key resources, key activities, cost structure); ✓ particular emphasis on profit and loss analysis, competitive advantage of business, contemporary approach of customer-centric business.

The next stage should be testing of the viability of the methodology in practice.

During the second experts discussion with participation of the directors of LIAA business incubators the training methodology was presented, both methodologies were accepted. One of the main findings of the discussion was that the training program could be integrated into the training process of business incubators as a second part of the methodology described above.

3.3. Validation of the Methodology for Advancement of Entrepreneurial Mindset Leading to BG

The two methodologies were offered to the LIAA Sigulda business incubator for validation. Whereas directors of the LIAA business incubators were selected as experts in this process, they noted the importance and necessity of the methodology for assessment of the potential entrants to business incubators as well as the necessity of methodology which includes guidelines of the training programs. The methodology for assessment of business incubators entrants, based on the questionnaire for candidates – potential participants of business incubators, was selected for validation first of all.

Validation of the methodology for evaluation of nascent entrepreneur's readiness to be BG.

The management of the Sigulda business incubator (administered by LIAA) acknowledged that the methodology, set up for assessment of business incubators entrants, helped them to choose the more advanced companies for inclusion in the business incubator. It was in April 2021, when the applicants were admitted and evaluated. Twenty nine (29) companies applied. As a result of the selection (the 'entrance' methodology was used in the selection process as one of the tools) seven companies were admitted (see Table 3.14). For all candidates, the score was well above average, indicating a high BG potential. Four out of seven companies had a maximum score indicating export capacity, and two out of seven companies had both the maximum score obtained and the eco-innovation in the offer.

Table 3.14
Companies Admitted for Inclusion in the LIAA Sigulda Business Incubator (developed by author)

No.	Characteristics	Market
1	2	3
1	Eco-innovation and products related to Smart Specialization Strategy for Research and Innovation (RIS 3) with great export potential (conifer grass – foamplast substitute material).	100 % export
2	Eco-innovation and RIS 3 product with high export potential. Disposable dishes from wheat and rye, able to store the product for up to 3 hours.	~60 % domestic market ~40 % export
3	Special high-priced children's mattresses for children's activity centres for high intensity use.	~90 % export to U.S.
4	Production of alcoholic and non-alcoholic top quality ready-made cocktails. Non-alcoholic cocktails are produced using typical Latvian tastes, alcoholic cocktails are produced using classic raw materials of higher quality. Target market – luxury restaurants, cruise ships. There is no need for bartender service, the cocktail is already prepared and elegant bottles are served. These cocktails belong to luxury food category.	~80 % export

Table 3.14 Continued

1	2	3
5	Metal boxes for sending/receiving of shipments.	For the time being, the domestic market; plans to export
6	A mobile app. To create it, the companies worked for six months in the U.S. Silicon Valley accelerator, where 2 other mobile apps were also developed and successfully implemented.	100 % export
7	A mechanical engineering design company that uses artificial intelligence from drawing to finished equipment.	For the time being, the domestic market; plans to export

As can be seen, almost 80 % of the companies are exporters, incl. BG. This indicates valid ‘entrance’ methodology. Undoubtedly, the results of the first test cycle are satisfactory; by improving and repeating the cycle, it is possible to achieve even better results.

Validation of the methodology for advancement of the entrepreneurial mindset as a driving force for the creation of a successful BG strategy.

A kind of ‘pilot project’ of the training methodology is validated. Workshops, seminars and programs of individual mentoring and coaching to encourage entrepreneurs think differently and approach problems from a range of different angles, to built network relationships, have been pushed forward. In order to verify the effectiveness of the methodology, it has been possible to track the progress and results of the one particular task.

A task was set for the mid-term evaluation of the training results. Working alongside other entrepreneurs in the business incubators, mutual contacts can make a major contribution to entrepreneurs’ growth and guidance to strategic partnerships. Participants of the training program were tasked with developing and presenting their business models. A networking workshop was organized after the business models presentation session. Participants were given a following task: using such elements (building blocks) as key resources, channels, key partners, included in the business model, it was necessary to create mutual cooperation networks, helping each other with own contacts and available resources.

The main goal of this activity was to create confidence in nascent entrepreneurs and the courage to talk about their problems and needs with others.

Partnering activities inside the business incubator, successfully started within the workshop of the training process, should continue to develop in further business practice, seeking a strategic approach to external partnerships.

Figure 3.5 provides an illustrative example of the growth of a startup company facilitated by participation in the training programs implemented by the LIAA Sigulda business incubator.

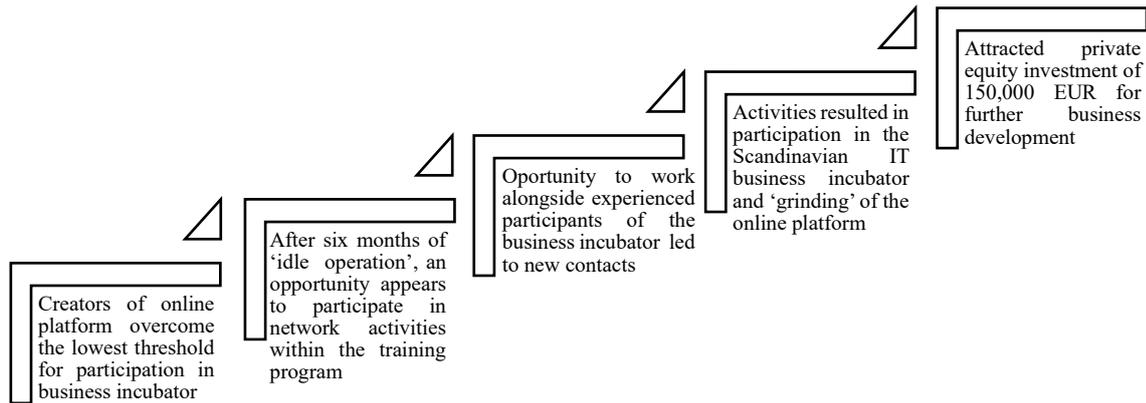


Fig. 3.5. The growth of a startup company driven by network relationships (developed by author).

As presented in Fig. 3.5, the growth of the startup company, driven by network relationships, can be characterized by the following stages:

1. Nascent IT company, creators of 'buy, sell, trade' online platform, overcome the lowest threshold for participation in the LIAA Sigulad business incubator.

The positive decision of the business incubator representatives was facilitated by the fact that two out of the three founders of the company were highly qualified specialists in their fields (one – a successful IT specialist and the other – a professional in the field of marketing and sales and promotion). They had a strong desire to operate in the global market.

2. After months of 'idle operation' an opportunity appears to participate in network activities within the training program. The nascent entrepreneurs took this opportunity.

3. Mutual cooperation networks with other nascent entrepreneurs, helping each other with own contacts and available resources, helped the company meet participants of the business incubator who already have successful international business experience (they are currently involved in a business incubator with slightly different goals than the beginners). The success stories of the most experienced entrepreneurs played an important role in encouraging further action. At the same time, opportunity to work alongside experienced participants of the business incubator led to new contacts.

4. Activities resulted in participation in the Scandinavian IT business incubator and 'grinding' of the worked out 'buy, sell, trade' online platform.

5. Private equity investment of 150,000 EUR for further business development was attracted. This is the first significant result achieved and a great incentive for a startup company to stay active. The illustrative example justifies the applicability of the methodology for the

advancement of entrepreneurial mindset as a driving force for the creation of a successful BG strategy.

Assessment of learning outcomes

Assessment of learning outcomes was provided after the ‘touch point’ presentations of participants. The aim of the assessment was to find out the initial results of the training process, provide improvements, if necessary, because the goal of the overall training process is building on key findings to further develop the roadmap for a successful competitive strategy in the global markets. It was decided to include the findings and insights collected through the questionnaire into a report with recommendations to further develop the training process (see Table 3.15).

Table 3.15

Assessment of the Training Process Outcomes (developed by author)

Question to be answered by the respondents	Answers and the number of respondents who provided them
What progress has your company made after the training	<ul style="list-style-type: none"> ✓ Increased self-confidence helps to promote the focus of opportunities to international markets and the strategic agility, as a result specific international business opportunities were obtained – 42 % ✓ Increased business and personal networks which have created opportunities for growth – 53 % ✓ New opportunities in international markets have appeared – 63 % ; ✓ According to the target time schedule, the defined export markets have been reached – 42 % ✓ Successful resource planning has been developed – 31 %
What additional topical issues should be included in the training program in order to achieve the set goals	<ul style="list-style-type: none"> ✓ To deepen foreign institutional knowledge – 65% ✓ To know more about ways of serving international markets and about finding out customers’ problems – 28 %; ✓ Help to keep pace with rapid technological developments – 16 %; ✓ Further workshops with entrepreneurs with successful international experience – 87 % ✓ Knowledge about international standards (e.g. ISO 9001; ISO 14001) the observance of which can strengthen internal control systems of firms and reduce uncertainty and transaction costs – 21 % ✓ Knowledge about the effects of joint R&D on business performances – 19 %
What would you need to demonstrate high innovative performance	<ul style="list-style-type: none"> ✓ Additional knowledge about how to create new ideas and concepts that can improve the innovation results – 20 % ✓ Information and knowledge about government support initiatives – 63 %

The initial part of training programs, influenced by effectuation theory, has been successfully provided; the task to improve readiness of entrepreneurs to enter international market has been fulfilled. The next section of the programs will be based more on issues related

to causation, the conventional understanding of decision-making reasoning based on planning and prediction efforts, and on combining of both approaches – rooted in causation and effectuation theories.

Finally, it can be concluded that the aim of the research to develop and validate a research-based training methodology for business incubators targeted to provide entrepreneurs with activities focused on the development of entrepreneurial mindset as a set of individual level characteristics with a view to moving towards development of a successful BG strategy has been reached.

CONCLUSIONS AND RECOMMENDATIONS

During the research carried out as part of the Doctoral Thesis, the author has come to the following conclusions.

1. Small and medium-sized enterprises (SMEs) are considered to be the engines of economic growth, they play a key role in generating employment opportunities, producing value-added products, and bringing innovations to national economies. These are the key factors forming the contemporary entrepreneurial society phenomenon.
2. These enterprises are also increasingly entering international markets to exploit the potential of their innovative products and services in a larger marketplace, strive to adapt to transnational markets to compete, grow, and survive. The founders of companies have increasingly adopted a global vision, as a result, the phenomenon of born global (BG) companies has arisen and challenged traditional views on internationalization.
3. Common understanding of the born global definition has been found as a result of domestic expert focus group discussions: *Born Global Company is a company oriented to revenues from international market, capable of the market offering that meets the needs of the international market customers; a company that uses modern technologies.*
4. A born global company can emerge only with the help of an entrepreneur who possesses a certain set of individual features.
5. Entrepreneurial mindset as a specific state of mind and a dynamic process orientates human conduct toward entrepreneurial activities and outcomes.
6. Individual level characteristics of entrepreneurial mindset are the main factors forming a specific state of mind which orientates a human towards entrepreneurial activities and outcomes.
7. Analysis of the scientific literature discovered that theories, prevailing in the periods of internationalization, justified the occurrence of BG. The basis for decision-making in BGs may alternate between causation and effectuation. The two logics operate together and have been conceptualized as two main decision-making strategies for BG, at the same time serving as the main theoretical basis in the period of prevalence of the BG phenomenon.
8. The niche strategy allows the small players like BGs to avoid head-to-head competition with larger, broadly-based firms that tend to target mass markets. Success of specialized areas called 'niches' is based first of all on the path of introduction of novelties. Network relationships play the key role in supporting the niche strategy.

9. In the case of BG, the individual level characteristics of entrepreneurial mindset forming a specific state of mind which orientates entrepreneur towards the specific outcomes, e.g. successfully created niche strategy, is based on network relationships. The link between entrepreneurial mindset, born global phenomenon and born global strategy is formed.
10. The survey method, which is mainly concerned with the analysis of qualitative evidence in a reliable manner and enables the reviewer to note the various views and experiences of respondents, was chosen as a data collection tool. It proved to be appropriate and applicable for data collection for further presence analysis of individual level characteristics of entrepreneurial mindset for group of respondents.
11. The fuzzy-set qualitative comparative analysis (fsQCA) was used for survey data analysis. The application of the fsQCA method was successful, although this complex mathematical method is very rarely used in the field of cognition issues.
12. Results of the research show that there is a necessity for better empirical explanation of the outcomes, necessity of better understanding of causal and effectual decision making logic to surveyed entrepreneurs because whereas this study concerns the BG firms, effectuation logic is particularly relevant for developing agility within BG firms, as they most often operate in new niche markets and have to make decisions in the absence of clear preexisting goals.
13. It was concluded that training programs are needed to improve the understanding of causal and effectual decision making logic, these programs should be based on the individual level characteristics of the entrepreneurial mindset. The successful BG strategy is the result of the dynamics of the entrepreneurial mindset hence based on the individual level characteristics of the entrepreneurial mindset.
14. The next conclusion is that the methodology for advancement of the entrepreneurial mindset leading to BG should be formed. The methodology should consist of 2 parts: (1) methodology for evaluation of nascent entrepreneur's readiness for BG and (2) methodology for advancement of entrepreneurial mindset leading to creation of successful BG strategy.
15. To validate the methodology, the LIAA business incubators were selected as organizations designed to accelerate the growth and success of entrepreneurial companies through an array of business support resources and services.
16. The initial part of training programs, influenced by effectuation theory, has been successfully provided; the task to improve readiness of entrepreneurs to enter international market has been fulfilled.

17. Results, obtained during the assessment of learning outcomes, which was provided after the ‘touch point’ presentations of participants, are applicable in further development of the methodology.
18. The aim of the research to study the theoretical aspects of entrepreneurial mindset as a dynamic process and its interaction with a born global phenomenon and to develop and validate a methodology for advancement of the entrepreneurial mindset as a driving force for the creation of a successful born global strategy, has been reached.

Recommendations

For policy makers

1. To show more interest in encouraging and accelerating startups’ export activity in order to promote economic growth and boost job creation, to adopt policies that assist SMEs and startups in order to expand into export markets.

2. As born global companies is still-young and little-known area for the economy of Latvia, the recommendation is to adopt policies that help to learn more about this contemporary phenomenon, thus stimulating the interest of nascent entrepreneurs to afford to operate in export markets.

3. Recommended forms of government support are: financial aid-related support initiatives and marketing support initiatives (information-related, training-related, trade mobility-related). Through government agencies potential exporters can access foreign market knowledge, and government support then contributes to the acquisition of accurate knowledge about international markets.

For researchers and academicians

4. The suggestion is to provide further research on the issues related to integration of BG strategies into modern company’s strategic development model, with the aim of raising companies' awareness of the importance of operating in the global market.

5. Further studies testing the functionality of methodology proposed in this research need to be conducted in order to raise further discussion between academics and practitioners reducing the gap between theory and practice in the research of the relationship between BG phenomenon, entrepreneur as the main factor of this process and the entrepreneurial mindset.

6. Do not be afraid to involve SMEs as potential for BG in joint R&D projects despite the fact that small companies are more vulnerable to risks entailed in joint R&D. The expected benefits of R&D collaborations for small companies are that they reduce the risks and cut the costs and allow these companies access to the know-how network.

For business companies and business incubators

7. To learn from the experience of the best business incubators worldwide, as a result, introduce new tools to stimulate knowledge acquisition about global markets for nascent entrepreneurs.

8. To develop and implement collaborative projects with scientific institutions to further explore the factors that should be encouraged to promote entrepreneurs ability to operate successfully in global markets.

9. To promote business and social networking, domestic and international, from the perspective of their contribution to knowledge and resource flows and availability.

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APPENDICES

APPENDIX 1

Likert Scale as the Data Analysis Tool

Definition: A psychometric response scale primarily used in questionnaires to obtain participant's preferences or degree of agreement with a statement or set of statements. Likert scales are a non-comparative scaling technique and are unidimensional (only measure a single trait) in nature. Respondents are asked to indicate their level of agreement with a given statement by way of an ordinal scale.

Variations: Most commonly seen as a 5-point scale ranging from 'Strongly Disagree' on one end to 'Strongly Agree' on the other, with 'Neither Agree nor Disagree' in the middle; however, some practitioners advocate the use of 7 and 9-point scales which add additional granularity. Most commonly seen as a 5-point scale ranging from 'Strongly Disagree' on one end to 'Strongly Agree' on the other, with 'Neither Agree nor Disagree' in the middle, has been considered suitable for the analysis of the data of the particular study (1 – Completely Disagree; 2 – Disagree; 3 – Neither Agree nor Disagree (Neutral); 4 – Agree; 5 – Completely Agree).

. The method is named after Dr. Rensis Likert, a sociologist at the University of Michigan, who developed the technique. His original report entitled "A Technique for the Measurement of Attitudes" was published in the Archives of Psychology in 1932. His goal was to develop a means of measuring psychological attitudes in a 'scientific' way. The typical Likert scale is a 5- or 7-point ordinal scale used by respondents to rate the degree to which they agree or disagree with a statement. In an ordinal scale, responses can be rated or ranked, but the distance between responses is not measurable. Each specific question has its response analysed separately for the current research, although the method allows to sum the response with other related items to create a score for a group of statements. This is also why Likert scales are sometimes called summative scales.

Description of the Qualitative Comparative Analysis (QCA)

Method

Introduction to the qualitative comparative analysis (QCA) method

Qualitative Comparative Analysis (QCA) developed by Charles Ragin, 1987, is a method of comparative nature geared toward multiple case studies in a small- or medium-N research design. QCA bridges the divide between quantitative and qualitative methods (Ragin, 1987).

Description of the method

QCA develops a conception of causality that leaves room for complexity (Ragin, 1987).

This implies the following:

- most often, it is a combination of conditions (potential explanatory variables) that eventually produces a phenomenon – the outcome (phenomenon to be explained);
- different combinations of conditions may produce the same outcome;
- depending on the context, a given condition may very well have a different impact on the outcome (Rihoux, Marx, 2013).

QCA embodies some key strengths of the quantitative, or analytic-formalized approach:

- it allows one to analyse more than just a handful of cases, which is seldom done in case-oriented studies; it opens up the possibility to achieve more parsimonious explanations; its key operations rely on Boolean algebra and set logic and requires that each case be reduced to a series of variables (conditions and an outcome);
- it uses set logic and set connections which are asymmetric by design (Ragin, 2008); set-theoretic analysis, like qualitative research more generally, focuses on uniformities and near-uniformities – taking into consideration several combined properties of the ‘cases’ considered as whole configurations – and not on general patterns of association (Ragin, 2008);
- minimization algorithms, allow researchers to identify (causal) regularities that can be expressed with the fewest possible conditions within the whole set of conditions that are considered in the analysis;
- QCA systematizes the mental operation of identifying ‘*necessary*’ and ‘*sufficient*’ (combinations of) conditions; QCA using conventional Boolean sets (i.e. variables can be coded only ‘0’ or ‘1’, and thus have to be dichotomized) (Rihoux, Marx, 2013).

Theoretical approach

Configuration theory and concept of 'fit':

- some combinations of conditions are better coaligned than others;
- interdependencies among attributes;
- a typology of ideal types occur at a high rate.

A set-theoretic approach uses Boolean algebra to determine which combinations of organizational characteristics combine to result in the outcome in question (Ragin, 1987, 2000). At the centre of set-theoretic approaches lies the idea that relationships among different variables are often best understood in terms of set membership (Fiss, 2007).

Fuzzy-set qualitative comparative analysis (fsQCA) as configuration of the qualitative comparative analysis (QCA) method

Configuration Sets

A set-theoretic approach starts from the idea that attributes of cases are best described in set relations and not in terms of variables. Sets are theoretical constructs (Rihoux, Marx, 2013). The crisp-set (csQCA) and fuzzy-set (fsQCA) are configuration sets of qualitative comparative analysis (QCA). With (csQCA), each case is assigned one of two possible membership scores in each set included in a study: 1 (membership in the set) or 0 (nonmembership in the set). Fuzzy sets (fsQCA) extend crisp sets (csQCA) by permitting membership scores in the interval between 0 and 1 (Fiss, 2007). Full membership to a set and full nonmembership in a set are qualitative states and assessments (Rihoux, Marx, 2013).

Fuzzy sets (fsQCA)

The basic idea behind fuzzy sets is to permit the scaling of *membership scores* and thus allow partial or fuzzy membership:

- a membership score of 1 indicates full membership in a set;
- scores close to 1 (e.g. 0.8 or 0.9) indicate strong but not quite full membership in a set;
- scores less than 0.5 but greater than 0 (e.g. 0.2 and 0.3) indicate that objects are more 'out' than 'in' a set, but still weak members of the set;
- a score of 0 indicates full nonmembership in the set (Ragin, 2007).

Thus, fuzzy sets combine qualitative and quantitative assessment:

- 1 and 0 are qualitative assignments ('fully in' and 'fully out', respectively);
- values between 0 and 1 indicate partial membership;

- the 0.5 score is also qualitatively anchored, for it indicates the point of maximum ambiguity (fuzziness) in the assessment of whether a case is more ‘in’ or ‘out’ of a set;
- each case is assigned the degree to which the case fits

1.00 = fully in

0.80 = mostly in

0.60 = more in than out

0.40 = more out than in

0.20 = mostly out

0.00 = fully out.

Fuzzy membership scores address the varying degree to which different cases belong to a set (including the two qualitative states, full membership and full nonmembership), not how cases rank relative to each other on a dimension of opened variation (Ragin, 2007).

Operations on fuzzy sets

There are three common operations on fuzzy sets: *negation*, *logical and*, and *logical or*. These three operations provide important background knowledge for understanding how to work with fuzzy sets.

Negation. Fuzzy sets can be negated. With crisp sets, negation switches membership scores from ‘1’ to ‘0’ and from ‘0’ to ‘1’. This simple mathematical principle holds in fuzzy algebra as well, but the relevant numerical values are not restricted to the Boolean values 0 and 1, but extend to values between 0 and 1. To calculate the membership of a case in the negation of fuzzy set A (i.e. not-A), simply subtract its membership in set A from 1, as follows: (membership in set not-A) = 1 – (membership in set A) or $\sim A = 1 - A$ (the tilde sign ‘~’ is used to indicate negation) (Ragin, 2007).

Logical and. Compound sets are formed when two or more sets are combined, an operation commonly known as set intersection. With fuzzy sets, *logical and* is accomplished by taking the minimum membership score of each case in the sets that are combined. The minimum membership score, in effect, indicates degree of membership of a case in a combination of sets. Its use follows the ‘weakest link’ reasoning. For example, if a membership of the condition in the set is 0.7 and its membership in the second set is 0.9, its membership in the combination of both sets is the smaller of these two scores, 0.7. A score of 0.7 indicates that this case is more in than out of the intersection. For each intersection, the *lowest* membership score provides the degree of membership in the combination (Ragin, 2007).

Logical or. Two or more sets also can be joined through logical *or*- the union of sets. When using fuzzy sets, *logical or* directs the researcher's attention to the *maximum* of each case's memberships in the component sets. That is, a case's membership in the set formed from the *union* of two or more fuzzy sets is the maximum value of its memberships in the component sets (Ragin, 2007).

Fuzzy subsets. The key set theoretic relation in the study of causal complexity is the subset relation. Such relationships may be better understood in terms of *necessity* and *sufficiency*, which describe the ability to generalize from a limited set of cases to larger populations (Fiss, 2007):

- *necessity*: almost always presents if outcome occurs, but does not produce the outcome;
- *sufficiency*: causal complexity – the degree to which a condition is present relative to other conditions and the outcome.

The interpretation of *sufficiency* must be grounded in the researcher's substantive and theoretical knowledge; it does not follow automatically from the demonstration of the subset relation (Ragin, 2007).

Truth tables help in fuzzy set analysis

The bridge from fuzzy set analysis to truth tables has three main pillars:

- the first pillar is the direct correspondence that exists between the vector space defined by fuzzy-set causal conditions (Ragin, 2000);
- the second pillar is the assessment of the distribution of cases across the logically possible combinations of causal conditions (i.e. the distribution of cases within the vector space defined by the causal conditions);
- the third pillar is the fuzzy set assessment of the *consistency* of the evidence for each causal combination with the argument that it is a subset of the outcome.

The subset relation is important because it signals that there is an explicit connection between a combination of causal conditions and an outcome (Ragin, 2007). Ragin, 2006, refers to this relative importance as *coverage* – that is, the proportion of instances of the outcome that exhibit a certain causal combination or path. Subsett analysis procedure provides scores of *consistency* and *coverage*, the two key concepts related to QCA, for conditions and configurations of conditions:

- *consistency* refers to the percentage of causal configurations of similar composition which result in the same outcome value (if the consistency of a configuration is low, it

is not supported by empirical evidence, therefore, it should be considered less relevant than other configurations with higher consistency);

- *coverage* refers to the number of cases for which a configuration is valid, unlike consistency, the fact that a configuration coverage is low does not imply less relevance (Ragin, 1987, 2000; Roig-Tierno *et al.*, 2017).

Every row in the table represents a configuration of the conditions that produce a particular outcome (Ragin, 2000, 2008; Roig-Tierno *et al.*, 2017).

Assessing the consistency of fuzzy subset relations

Once the empirically relevant causal combinations have been identified using the procedures described above, the next step is to evaluate each combination's consistency with the set theoretic relation in question. To assess the consistency of fuzzy subset relations, a formula is used:

$$\text{Consistency } (X_i \leq Y_i) = \Sigma (\min (X_i, Y_i)) / \Sigma (X_i),$$

where *min* – the selection of the lower of the two values;

X_i – membership scores in a combination of conditions;

Y_i – membership scores in the outcome.

When all of the *X_i* values are less than or equal to their corresponding *Y_i* values, the consistency score is 1.00, where ‘min’ indicates the selection of the lower of the two values, *X_i* represents membership scores in a combination of conditions, and *Y_i* represents membership scores in the outcome. This measure of consistency prescribes substantial penalties for large inconsistencies, but small penalties for near misses (e.g. an *X_i* score of .85 and a *Y_i* score of .80) (Ragin, 2007).

Metadata of the Research

APPENDIX 3



Rezultatu_kopsavilku
ms (LV).xlsx

APPENDIX 4



Rezultatu_kopsavilku
ms (English).xlsx

APPENDIX 5



Processing of results
fsQCA (LV).pdf

APPENDIX 6



Processing of results
fsQCA (EN).pdf

APPENDIX 7



Results of fsQCA
(LV).pdf

APPENDIX 8



Results of fsQCA
(EN).pdf



Summary of
processing and result