

IULIIA TRABSKAIA

Idea and opportunity identification and
implementation within
the entrepreneurial process and
journey



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School of Economics and Business Administration, University of Tartu, Estonia

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LIST OF AUTHOR'S PUBLICATIONS

The dissertation is based on four original papers, which will be referred to in the text by their respective numbers.

Study I. Mets, T., Trabskaja, J., Raudsaar, M. (2019). The Entrepreneurial Journey of Venture Creation: Reshaping Process and Space. *Revista de Estudios Empresariales. Segunda Época*, 1(1), 61–77. (Study I).

Study II. Trabskaia, I., Mets, T. (2021). Perceptual Fluctuations within the Entrepreneurial Journey: Experience from Process-Based Entrepreneurship Training. *Administrative Sciences*, 11(3), 84. (Study II).

Study III. Trabskaja, J., Mets, T. (2019). Ecosystem as the Source of Entrepreneurial Opportunities. *Foresight and STI Governance*, 13(4), 10–22. (Study III).

Study IV. Trabskaia, I., Shulatieva, I., Abusena, R., Gordin, V., Dedova, M. (2019). City branding and museums' souvenirs: towards improving the St. Petersburg brand: Do museums sell souvenirs or do souvenirs sell museums? *Journal of Place Management and Development*, 12(4), 529–544. (Study IV).

The results of the research presented at the conferences

1. The Annual Conference of the Estonian Economic Association 2020 Sustainable Estonia. Estonia. (January 23–24, 2020). Poster presentation: “Idea and Entrepreneurial Opportunity along the Entrepreneurial Journey. Idea-Opportunity Mechanism”.
2. Workshop Conducting experiments in entrepreneurship research: a paper development workshop for early-career scholars. Groningen, The Netherlands (October 8–9, 2019). Oral presentation “Idea and Entrepreneurial Opportunity along the Entrepreneurial Journey. Idea-Opportunity Mechanism”.
3. Conference and Doctoral Program on Entrepreneurship. The European University Network on Entrepreneurship (ESU 2018). Łódź, Poland. (September 9–15, 2018). Oral presentation: “Entrepreneurial opportunities and entrepreneurial ideas along the entrepreneurial journey”.
4. II Paper Development Seminar. “New developments in entrepreneurial process research”. The University of Seville. Sevilla, Spain. (April 22–23, 2019). Oral presentation “Ecosystem as the Source of Entrepreneurial Opportunities”.
5. EDEN Doctoral Seminar on Methods, Techniques and Theories in Entrepreneurship and Innovation. European Institute for Advanced Studies in Management (EIASM). Belgium. Brussell. (December 2–7,

- 2018). Oral presentation “Opportunity Recognition and Creation in the Entrepreneurial Journey”.
6. Lisbon University ISEG – Ulisboa ISEG. Lisbon. Portugal. Visiting researcher. (February–March 2019). Research Seminar conduction. Conducting research. Oral presentation “Culture and Perceived Opportunity. Cross-national view.”
 7. I. Paper Development Seminar. “New developments in entrepreneurial process research”. The University of Seville. Sevilla, Spain. (April 2–3, 2018). Oral presentation “Idea and Entrepreneurial Opportunity along the Entrepreneurial Journey. Idea-Opportunity Mechanism”.

CONTRIBUTION OF THE AUTHOR

Study I was developed jointly with prof. Tõnis Mets (T.M.) and Mervi Raudsaar (M.R.). Conceptualisation, (T.M.), methodology, T.M., M.R. and I.T.; validation, T.M.; investigation, T.M., M.R. and I.T.; resources, T.M., M.R.; writing – original draft preparation T.M., M.R. and I.T.; writing – review and editing, T.M.; supervision, T.M.

In this conceptual article, the candidate's contribution is the development of approaches to understanding the entrepreneurial journey and conceptualising the space and corridor of the entrepreneurial journey.

Study II was developed jointly with prof. Tõnis Mets. Conceptualisation, Tõnis Mets (T.M.) and Iuliia Trabskaia (I.T.); methodology, T.M. and I.T.; validation, T.M. and I.T.; investigation, T.M. and I.T.; resources, T.M. and I.T.; data curation, T.M. and I.T.; writing – original draft preparation T.M. and I.T.; writing – review and editing, T.M. and I.T.; visualisation, T.M. and I.T.; supervision, T.M.

In this paper, the candidate's contribution is developing the study design and theoretical foundation, organising experimental process-based entrepreneurship training of students, data collection and analysis, and interpretation.

Study III was developed jointly with prof. Tõnis Mets (T.M.). Conceptualisation, T.M. and I.T.; methodology, T.M. and I.T.; validation, T.M. and I.T.; investigation, T.M. and I.T.; resources, T.M. and I.T.; data curation, T.M. and I.T.; writing – original draft preparation T.M. and I.T.; writing – review and editing, T.M. and I.T.; visualisation, T.M. and I.T.; supervision, T.M.

The candidate's contribution is collecting and analysing data on the Estonian entrepreneurial ecosystem (including analysis of each pillar and analysis in three stages of ecosystem development, collection and analysis of case data, writing an introduction, literature review, methodology, and a conclusion).

Study IV was developed jointly with Iuliia Shulatieva (I.S.), Rebecca Abusena (R.A.), Valery Gordin (V.G.), and Maria Dedova (M.D.). Iuliia Trabskaia is the first and leading author. Conceptualisation, I.T.; methodology, I.T.; validation, I.T.; investigation, I.T.; resources, I.T. and V.G., M.D.; data curation, I.T. and I.S.; writing – original draft preparation I.T. and I.T., writing – review and editing, I.T. and R.A.; supervision, I.T.

The candidate's contribution is developing the theoretical foundation of the 'city brand-museum brand' link and the study's design, observation organisation, data collection and analysis, and interpretation.

1. INTRODUCTION

1.1 Research Motivation

In the 21st century, society, policymakers, and researchers have shown an increased interest in entrepreneurship development. Entrepreneurship supports the growth of prosperity and innovative activity, promotes sustainability in society, increases the level of well-being of the population, and reduces the unemployment rate. “It promotes the essential innovation required not only to exploit new opportunities, promote productivity, and create employment but also to address some of society’s greatest challenges” (Bosma *et al.*, 2020).

The current study focuses on crucial entrepreneurship constructs – entrepreneurial opportunity and the entrepreneurial idea. As many researchers admit (Davidsson, 2015; Dimov, 2011; Klein, 2008), these key constructs are still unclear, with many outstanding questions.

Entrepreneurship as a discipline is frequently defined as a study “of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited” (Shane and Venkataraman, 2000, p. 218). A large and growing body of literature examines the entrepreneurial opportunity construct (Alvarez, Barney, and Anderson, 2013; Ardichvili, Cardozo and Ray, 2003; Davidsson, 2003, 2015; Dimov, 2020). Entrepreneurial opportunity manifests itself in an entrepreneur’s ability to identify and create a bright idea and bring the idea into the market as the performance of the entrepreneurial process (Dyer *et al.*, 2008; Ireland, 2003). Therefore, the entrepreneurial process can be considered one of the core features of entrepreneurship (Shane, 2012; Davidsson, 2015). Consequently, the process view (Moroz and Hindle, 2012; Bhave, 1994) is one of the key approaches to understanding the entrepreneurship phenomenon. During the last ten years, considerable attention has been paid to the course of the process over time, leading researchers to analyse the dynamics of the features of the entrepreneurial process. This approach has brought attention to the role of time in the entrepreneurial process and the conceptualisation of the entrepreneurial journey as a research construct disclosing the temporal context of the entrepreneurial process (McMullen and Dimov, 2013; Wood, Bakker and Fisher, 2021; Mets, 2022). So far, research has reached a phase where it is necessary to deal with the basic concepts of entrepreneurship – opportunity and idea and related processes in dynamics.

Firstly, during the last ten years, research on developing entrepreneurial opportunities and ideas in the framework of the entrepreneurial process has intensified. Much literature has been published on entrepreneurial opportunities (e.g., Alvarez and Barney, 2007; Ardichvili *et al.*, 2003; Gaglio and Katz, 2001; Kirzner, 1997; de Bruin and Ferrante, 2011). Competing concepts of creation (Fletcher, 2006) and discovery (Shane, 2000; Shane and Venkataraman, 2000) illustrate the debate over the nature of opportunities and the mechanisms of formation and development of opportunities (e.g., Alvarez and Barney, 2007). To date, there has been little agreement on what happens with an entrepre-

neural opportunity from identification to implementation, the factors of properties for these processes, and how entrepreneurial opportunities are inter-related with the entrepreneurial process and journey. Vogel (2016, p.1) argues that “research on opportunities is still in a developmental stage [...] as evidenced in a number of recent publications [...] requiring further theorising before key advances in our understanding of opportunities [...] can be achieved”. Due to the nature of entrepreneurship as a dynamic process phenomenon, exploring an entrepreneurial opportunity is necessary using a process approach (Moroz and Hindle, 2012; Bhave, 1994; Ihrig, 2006). The multiplicity of authors’ positions (Davidsson, 2015; Dimov, 2007, 2020; Wood *et al.*, 2010, 2021; among others) leaves open the explanation of the idea-opportunity interrelationship.

Secondly, the relationship between the entrepreneurial idea and opportunity within the entrepreneurial journey means considering these two features’ dynamics and intrinsic sources. The entrepreneur’s decisions during the entrepreneurial journey depend on objective circumstances, how he or she perceives objective reality, and what goals he or she sets (McMullen and Dimov, 2013; Cha and Bae, 2010; Dimov, 2020). Previous studies have reported that opportunity relates to identifying, developing, and transforming an idea into a business concept (Leger-Jarniou and Tegmeier, 2017; Lumpkin and Lichtenstein, 2005). Despite differences in approaches toward understanding entrepreneurial opportunities, previous research argues that the opportunity identification process is closely related to the entrepreneurial idea. In the context of opportunity discovery and creation, as mentioned above, the question of whether opportunities objectively exist or are created by entrepreneurs appears (e.g., Eckhardt and Shane, 2003; Wood and McKinley, 2010; Mets, 2016a). However, much uncertainty still exists about the construct of the idea and the interconnection between entrepreneurial ideas and entrepreneurial opportunities. Researchers have not treated the objective-subjective side of such crucial aspects of this question as how entrepreneurs identify and develop their ideas along the journey, how the idea and opportunity are interconnected, and how the idea and opportunity develop with time along the entrepreneurial journey.

Thirdly, the entrepreneurial journey as a temporal performance of the entrepreneurial process is crucial (McMullen and Dimov, 2013; Mets, 2022). The entrepreneurial journey reflects how the entrepreneurial opportunity is identified, transformed, and implemented and how the opportunity changes depending on the impact of external and internal factors, such as ecosystem and cognitive factors. The entrepreneurial journey is traditionally understood as a “journey to produce value for others” (McMullen and Dimov, 2013, p. 1504). Understanding the nature of the phenomenon within the initial stages of the entrepreneurial process is vital since transforming an idea and opportunity in the later stages of the entrepreneurial journey becomes increasingly costly and time-consuming, as previous studies have shown (Cristofaro, 2019; Foo, Uy and Baron, 2009; Piredda, 2020). Affective components leave a stamp on the processes of an entrepreneurial idea and entrepreneurial opportunity identification and implementation (Cristofaro, 2019). Until the offering of value is realised

(exploitation of the opportunity) or not, there is no precise measure of the maturity of the process. However, this means the entrepreneur's decisions depend on perception and affective state. Affective factors are unrelated to a rational and logical analysis of the situation. In contrast, the affective state includes emotions, mood, and external events that can affect entrepreneurs' perceptions. Little research has been done on how emotional fluctuations affect entrepreneurs' perceptions and decisions in the entrepreneurial process (dynamics).

Fourthly, the entrepreneurial process is successful when its timing meets a window of opportunity. As Casson (1982) has argued, a window of opportunity is a necessary condition for opportunity identification and implementation. The opportunity window represents the sum of events and situations that make it possible to identify opportunities (Messica & Mehrez, 2002; Suarez *et al.*, 2015). We suppose that the realisation of an entrepreneurial opportunity on the entrepreneurial journey depends on the features of the entrepreneurial ecosystem (Isenberg, 2011; Stam, 2015). How the entrepreneurship ecosystem develops (in dynamics) in sync with the economic development phases (WEF, 2014) has only been modestly studied. The manifestations of the entrepreneurial process and ecosystem dynamics have yet to be addressed (Cohen, 2006; Mason and Brown, 2014; Roundy, Bradshaw and Brockman, 2018). Therefore, the impact of ecosystem dynamics on the entrepreneurial (start-up) process (and opportunity) needs to be clarified.

Fifthly, entrepreneurial opportunities originate from various environments – innovation, entrepreneurial, sectoral, digital, educational, university, regional, global, and other category ecosystems, and their combinations (Autio *et al.*, 2018; Velt *et al.*, 2018; Miller and Acs, 2017; Mets, 2016b; among others). The entrepreneurial ecosystem approach deals with the environment, interconnected actors, factors, and conditions influencing entrepreneurship development (Isenberg, 2011; Stam, 2015). These ecosystem elements have different meanings and contributions to developing entrepreneurial opportunities in different sectors in different countries (e.g., Velt *et al.*, 2018). Therefore, the entrepreneurial process and journey context from the propositions of the entrepreneurial opportunity to exploitation requires further exploration.

This thesis examines entrepreneurial ideas and opportunities nature, including dynamic aspects of these phenomena. The study seeks a better understanding of the framework and conditions for successful entrepreneurial ideas and entrepreneurial opportunity identification and implementation. This includes understanding how perception (affective factors) affects entrepreneurial ideas and entrepreneurial opportunity, how external factors (of the ecosystem) affect the entrepreneurial opportunity and the formation of a window of opportunity, and how entrepreneurial ideas and entrepreneurial opportunities are prepared to be implemented under the influence of varying factors and contexts.

1.2 Aim, Research Questions and Research Tasks

This study aims to give an insight into the antecedences and dynamics of an entrepreneurial idea and opportunity within the entrepreneurial process and journey. A better understanding of the dynamics of these essential entrepreneurship elements ensures the possibility of better choices and decisions both at the level of entrepreneurs and at the level of entrepreneurship and innovation support structure and policymaking. So far, it is necessary to be aware of the current theoretical positions, further develop them, and find support from empirical research.

The research questions and tasks are based on the set of knowledge gaps presented in the previous subsection. Gaps in knowledge are covered by the conducted Studies I-IV and by integrating the chapters of this dissertation. Due to the need to connect the studies, the goals and tasks of the individual studies do not coincide point-by-point with the dissertation tasks but represent a certain generality. Therefore, the topics discussed in the articles (Studies I-IV) partially overlap. The dissertation will examine five research questions based upon and further contributing to the current state of knowledge (Table 1).

Table 1. Correspondence of Studies, Research questions and Research Tasks

Study	Research questions	Research tasks
Chapter 1 Study I	RQ 1. What is the role of opportunity discovery and creation in entrepreneurship theory in general and the context of the entrepreneurial process and journey in particular?	1a. Give an overview of the place of entrepreneurial opportunity in entrepreneurship theory. 1b. Create an understanding of opportunity recognition (discovery and/or creation) within the entrepreneurial journey. Define the main research constructs.
Chapter 1 Study I Study II	RQ 2. How do idea and opportunity dynamics manifest themselves within the entrepreneurial journey: objective and subjective context?	2a. Develop an understanding of the role of dynamics in transforming ideas and opportunities within the entrepreneurial journey's objective and (entrepreneur's) subjective context. 2b. Trace idea and opportunity perception progression on the initial stage of the entrepreneurial journey (educational context, testing transformation aspect empirically).
Study II	RQ 3. How does the perception of entrepreneurial ideas and opportunities transform and fluctuate during the initial stages of the entrepreneurial journey?	3a. Create an understanding of perception impact on the idea and opportunity progression. 3b. Trace the dynamic progression of the idea and opportunity to identify and map the fluctuations of the idea–opportunity perception.

Study	Research questions	Research tasks
Study III	RQ 4. How do ecosystem factors influence entrepreneurial ideas and opportunities within the entrepreneurial process and journey?	4a. Systematize factors and stages of entrepreneurial ecosystem development. 4b. Identify factors that serve as the origin of opportunity window forming. 4c. Analyze the dynamics of entrepreneurial ecosystem development along with entrepreneurial opportunity and journey.
Study III Study IV	RQ 5. How do propositions for entrepreneurial opportunity identification, development and application processes manifest within the entrepreneurial process and journey in the examples of different industry and country contexts?	5a. Create an understanding of entrepreneurial opportunity application in sectoral settings. 5b. Apply ecosystem and opportunity understanding in different sectors – cultural (museum) and knowledge-based (engineering) businesses.

The approach to the research questions has been specified with the corresponding tasks carried out in the dissertation Studies I–IV and chapters to complement the topic developments of the individual studies (articles). Accomplishing these tasks requires the development of theory and theoretical models as well as empirical facts to prove them. It also requires using a more general methodology to combine separate studies into a whole.

1.3 Content and Novelty of the Research

The entrepreneurial process and opportunities are at the heart of the conceptual approach applied in the dissertation. This approach helps to advance our understanding of the temporal interrelation of opportunity discovery and creation and subjective and objective aspects of opportunity. A dynamic approach allows for combining different conceptual views on the idea, its nature, and various perspectives of the entrepreneurial opportunity. The studies that form the main content of the dissertation are organised in the following sections based on the entrepreneurial process, as shown in Figure 1. In addition to the positioning of Studies I–IV presented here concerning the entrepreneurial process, Figure 1 partially addresses the theoretical approach of the entire dissertation in the following chapters.

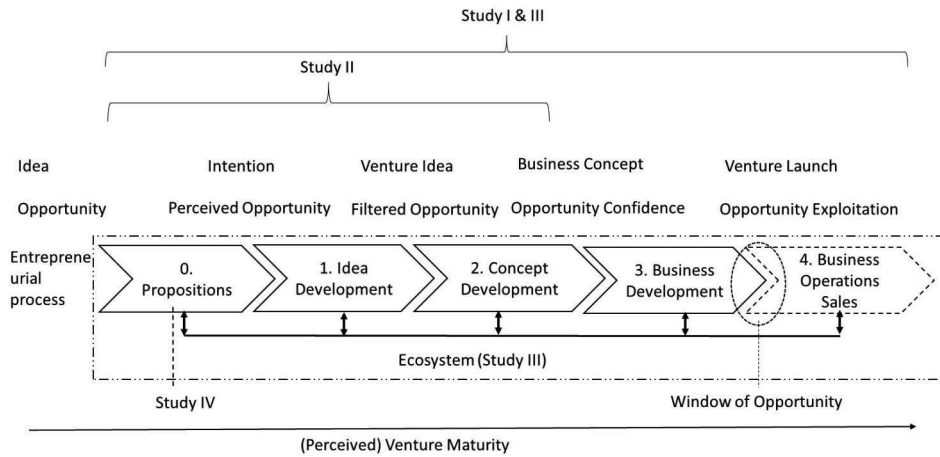


Figure 1. Conceptual schema of the thesis: entrepreneurial process coverage by Studies I – IV (based on Trabskaia and Mets, 2021; Mets, Trabskaia and Raudsaar, 2019)

Study I is a conceptual paper covering the entire entrepreneurial process. Understanding and modelling the entrepreneurial journey is a topical research task, as the entrepreneurial journey is a temporary expression of the efforts and activities of the entrepreneur – i.e., the entrepreneurial process. The study further develops the conceptualisation of the entrepreneurial process over time – the journey as a research construct, initiated by McMullen and Dimov (2013) and further develops the conceptualisation of the entrepreneurial process by Bhawe (1994) and others (e.g., Mets *et al.*, 2013). The study’s main contribution is developing a new approach to understanding and measuring the progression of the entrepreneurial journey. For this purpose, the dynamic stage model of the entrepreneurial process has been modified. Venture maturity has been indicated as an essential metric scale of the entrepreneurial journey – the venture maturity concept and scale help to describe the development of the feedback-driven entrepreneurial process over time. The entrepreneurial journey trajectory is also addressed within the so-called objective-subjective corridor.

Study II discloses the dynamic character of the entrepreneurial (learning) process within the initial stages of the entrepreneurial process by potential entrepreneurs (students of entrepreneurial course). In Study II, we developed further the understanding of perception impact on the idea and opportunity progression in the initial stages of the entrepreneurial journey. Objective and affective factors (factors affecting mood and emotional state, which change the perception of phenomena, including ideas and opportunity) influence an entrepreneur’s decision-making process. The main gap in the study is whether the perception of the idea and opportunity is constant over time or during the entrepreneurial journey. The entrepreneur partly rethinks and changes the entrepreneurial idea and opportunity. So far, Study II aims to identify the dynamics of an idea–opportunity perception. Feasibility and attractiveness constructs were

applied as measures indicating perception. These constructs were applied to measure the fluctuation of the affective component.

The Study II contains methodological novelty. The data was collected during the experiential course on entrepreneurship. The course simulates an entrepreneurial process via process-based entrepreneurship training by applying feasibility and attractiveness self-assessment, observation, and in-depth interviews. This approach's novelty is measuring the entrepreneurial process from a dynamic perspective. Additionally, real-time measurement has been carried out. The call for real-time study of the entrepreneurial process has long been acknowledged but not frequently implemented. Most entrepreneurship studies have applied a retrospective approach. However, there is a hallmark in the field to apply real-time observation, allowing a more accurate capture of the phenomenon.

Study II added the concept of affective artefact generalising dimensions to describe the entrepreneurial journey. The results showed asynchronous fluctuations in these individual context-based perception variables, depending on the progression of the entrepreneurial journey. The results contribute to understanding the framework and conditions for forming and implementing an entrepreneurial idea and opportunity. Additionally, this research extends our knowledge of the entrepreneurial idea construct by understanding that the idea is not equal (unequivocally related) to the opportunity and is perceived as a separate phenomenon.

Study III examined the influence of ecosystem factors on forming (a window of) entrepreneurial opportunity. The study aims to explain how the transformation of the entrepreneurial ecosystem and the formation of entrepreneurial opportunities are correlated. The tasks of the study are to systematise factors and stages of entrepreneurial ecosystem development, to identify factors that serve as the origin of the formation of windows of opportunity, and to analyse the dynamics of entrepreneurial ecosystem development along with entrepreneurial opportunity development and progression of the journey. The model by Stam (2015) was applied to systematising factors of the entrepreneurial ecosystem. The authors adapted the model in the context of economic development stages (WEF, 2014, 2018). The interaction of sectoral ecosystems (educational, engineering, IT, among others) and a dynamic view (Mason and Brown, 2014) of the ecosystem were added. A dynamic approach is essential as the entrepreneurial ecosystem develops under changing political, cultural, and economic factors. To systematise the evolution trajectory of the ecosystem, two higher (efficiency- and innovation-driven) stages of economic development and the transition between them, according to the World Economic Forum (WEF, 2014, 2018), were utilised (in the example of the Estonian entrepreneurial ecosystem). Analysis of ecosystem factors and their changes at different stages of ecosystem development made it possible to understand under what conditions the window of opportunity is formed. The appearance of the window of opportunity is a necessary (pre)condition for entrepreneurial opportunity identification and implementation (Messica and Mehrez, 2002; Suarez *et al.*, 2015; Casson, 1982).

The window of opportunity is a collection of situations and conditions that create a platform for identifying and implementing an opportunity. The construct of a window of opportunity is a mechanism that links the trajectory of opportunity recognition/identification (entrepreneurial process) and the entrepreneurial ecosystem. Case studies of start-ups were analysed to identify the relationship between the entrepreneurial ecosystem and an entrepreneurial opportunity. The start-up period of the studied Estonian companies (ICT sector) represents varying degrees of the ecosystem's maturity: Regio and Mobi Solutions – efficiency-driven; GrabCAD – transition from efficiency – to innovation-driven; and Bolt (Taxify) – an innovation-driven economy.

The research contributes significantly to the systematisation of ecosystem evolution and dynamics. Additionally, the study discloses the impact of ecosystem evolution and dynamics on the development trajectory of start-ups. The study made it possible to identify the relationship between the maturity of the ecosystem and the process of implementing an entrepreneurial idea and opportunity in dynamics. The research identifies that the development of certain ecosystem factors became the source of opportunity window formation. Such ecosystem factors increased venture investment from “bootstrapping” to millions of euros of seed funding, shortened new product development cycles from 5–7 to 1–3 years, increased the integration of different ecosystems, enhanced trust level, and accelerated the market entry of new ventures. The study, therefore, made it possible to identify the framework and conditions for forming entrepreneurial opportunities. This research contributes to existing ecosystem approaches by examining the understanding of an ecosystem's role as an origin of the opportunity identification and implementation process. In addition, the ecosystem dynamic development analysis was made by studying the transformation of entrepreneurial ideas and opportunities and connections between the trajectories of the opportunity and the evolutionary paths of the ecosystem.

Study IV aims to disclose how entrepreneurial opportunity implementation is created. The study explores how entrepreneurial opportunity identification, creation, and application processes manifest in Russia's cultural (tourism) industry. This study was conducted on the example of museums in Saint Petersburg, which have rarely been studied through the lens of entrepreneurship. In this study, the city brand was considered the basis for identifying an entrepreneurial opportunity and the foundation for forming propositions for a window of opportunity. The city's brand is considered an instrument of opportunity creation. Seventy-six museums have been studied through observation to describe their shops' inventory by connecting souvenir topics with city brands.

Additionally, Russian museums were compared with the international context. The paper has several limitations. So far, in the theoretical part of Study IV, theories of entrepreneurship, ecosystem constructs and opportunities are not applied. However, despite the lack of terminology, Study IV describes in other terms how exactly the window of opportunity (formed by the city brand and the museum brand) affects the identification of entrepreneurial opportunities (the use of the theme of the city brand and the museum in the creation of souvenir

products). Thus, this study helps to understand how the ecosystem (cultural and entrepreneurial) influences the formation of entrepreneurial opportunities.

The research (Study I, II, III, IV) adds to a growing body of literature on the influence of context on entrepreneurial opportunity creation. The same ideas can be differently evaluated and transformed, depending on several factors, including the entrepreneurship environment. The construct of the idea cannot be evaluated in isolation. We consider that the major direction of future research is the analysis of the environment's influence on the idea-opportunity mechanism – the transformation of ideas and opportunities during the entrepreneurial journey. Moreover, research shows that, for example, a city brand creates propositions for a window of opportunity/additional opportunities for creative entrepreneurs in the context of the current thesis. Research (Studies III and IV) examined the sectoral context's impact on forming an entrepreneurial opportunity identification and implementation process.

1.4 Structure of the Thesis

The thesis has been organised in the following way. The first part represents the introduction, which includes motivation and key constructs, research aim, research questions and tasks, and the content and novelty of the research. Although the dissertation follows current general practice at the faculty, the logic of the opening topics is based on the (entrepreneurial) process approach (Figure 1). The second part consists of the theoretical framework of the dissertation. The key constructs and questions are presented in this section: entrepreneurial opportunity, competing theories of opportunity creation and discovery, measurability of opportunity construct, entrepreneurial opportunity creation and discovery, the entrepreneurial process, and the entrepreneurial journey. These two main topics are discussed together to a necessary extent as we look at the entrepreneurial journey resulting from understanding the dynamics of the entrepreneurial process. The topic is covered only in the context in which the dissertation contributes to the entrepreneurial process and journey approach. Four studies (I–IV) are presented in this part. The sequence of Studies I–IV does not follow the articles' publication chronology but is based on the approach to the entrepreneurial process and the topics, from general to individual and specific. The third part describes methods, analysis procedures, selection, and data. The fourth part includes four original papers published by the author (Studies I–IV). Part five presents the findings of the research and discussion. Finally, part six gives a conclusion, contributions, limitations, and directions for future research.

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2. THEORETICAL FRAMEWORK

2.1 Entrepreneurship

Entrepreneurship significantly contributes to developing the world economy and is recognised as a source of economic growth, employment, innovation, and sustainability (Etzkowitz *et al.*, 2000).

Over the past decades, researchers' interest in entrepreneurship has dramatically increased. Landström and Benner (2010) outline the history of entrepreneurship research. There are several classical works, such as Kirzner (1973), Shackle (1970), and Shane and Venkataraman (2000), that have contributed significantly to the development of entrepreneurship research.

There has been little agreement on many core questions in entrepreneurship-focused publications. In this vein, the definition of entrepreneurship is a contentious issue. Shane and Venkataraman (2000) point out that entrepreneurship was defined only through the entrepreneur's lens. According to this person-centric perspective (Eckhardt and Shane, 2003), an entrepreneur and his or her characteristics, features, behaviour, and decision-making play a major role in entrepreneurship. However, this understanding of entrepreneurship ignores process dynamics. Entrepreneurs can perceive and react differently to external environments, markets, and information. So far, the person-centric perspective is not a sufficient foundation for understanding the phenomena of entrepreneurship.

The resource-based view prevailed for a long time in understanding entrepreneurship (Barney, 1991). However, researchers consider that the resource-based view cannot fully explain the phenomenon of entrepreneurship (Alvarez and Barney, 2004, 2007). The role of the entrepreneur and entrepreneurial opportunity is essential in this context. Combining resources to create value and implement opportunities plays a more significant role than resources alone.

Shane and Venkataraman (2000, p. 218) argue that entrepreneurship involves a "nexus of two phenomena" – the entrepreneur and an entrepreneurial opportunity. Based on Venkataraman's (1997) article, they "[...] define the field of entrepreneurship as the scholarly examination of how, by whom, and with what effects opportunities to create future goods and services are discovered, evaluated, and exploited" (Shane and Venkataraman, 2000, p. 218). Following this influential essay on entrepreneurship, it becomes clear that entrepreneurship is a multifaceted phenomenon – firstly, variables associated with the entrepreneur's characteristics, perception, and behaviour. Secondly, variables and actions relate to entrepreneurial opportunities, processes of creation and discovery of opportunities. At the same time, the main feature of an entrepreneur is his or her ability to identify an opportunity. Thus, the two nexus phenomena are interconnected. In a later re-analysis, Shane (2012) emphasises the importance of the entrepreneurial process as a key feature of entrepreneurship.

Venkataraman (2004) and subsequent studies (e.g., Isenberg, 2011; Stam, 2015) conceptualise the role of the environment/entrepreneurial ecosystem in developing entrepreneurship and the entrepreneurial process. In their essay,

McMullen and Dimov (2013) highlight the importance of the time dimension – the entrepreneurial process as a journey approach.

Thus, in this dissertation, we understand entrepreneurship based on Shane and Venkataraman's (2000) view of the nexus of entrepreneur and opportunity (e.g., Sarason, Dean and Dillard, 2006). An entrepreneur combines resources and identifies opportunities throughout the entrepreneurial process and journey.

2.2 The Entrepreneurial Process and Journey

The concept of the entrepreneurial process is central to the discipline of entrepreneurship. The entrepreneurial process refers to the process approach (Van de Ven, 1992). One of the most significant current discussions is variance vs. process views (McMullen and Dimov, 2013). These approaches have different ontological bases and are actively discussed in the context of organisation studies.

Variance theories are outcome-driven. The independent input variables explain the outcome (dependent variable) (Poole *et al.*, 2000; Mohr, 1982). As a criticism of this approach, we can remark that it is based on static relationships of variables, oversimplifies the entrepreneurial process, and is inaccurate in a specific case (Mets, 2014). That is, the variable's value in different phases of the entrepreneurial process is not constant, and the theory of variables does not consider the dynamics of the process.

In contrast to the variance approach, process theories focus on events and development over time. "Process theory is founded upon a worldview that conceptualises processes, rather than objects, as the basic building blocks of how we understand the world around us" (Moroz and Hindle, 2012, p. 786). In this vein, the process approach is associated with an event-driven view (Van de Ven and Engleman, 2004). The temporal order and sequence of changes are explained using stories and the process of development of events. According to the process approach, input variables cannot predict outcomes. Whilst input variables are necessary, they are insufficient for predicting outcomes (Markus and Robey, 1988). "Variance explanation involves necessary and sufficient causes; process explanation involves only necessary causes" (McMullen and Dimov, 2013, p. 1487).

The process theory (Steyaert, 2007; Van de Ven and Engleman, 2004; Pentland, 1999) requires establishing how one event affects another, the sequence of events, and which patterns generally predict events. As Van De Ven and Poole (2005) point out, the process approach is more complex than the variance approach and requires consideration of the temporal connection of events and processes' dynamics. "Process theories may incorporate several different types of effects into their explanations, including critical events and turning points, contextual influence, and formative patterns" (Van De Ven and Poole, 2005, p. 12).

In entrepreneurship settings, the process approach seems to be the most relevant for explaining the phenomenon of entrepreneurship. The most frequent/

typical manifestation of the entrepreneurial process is the new venture creation process (NVC) (Davidsson and Gruenhagen, 2021). Thus, a set of incoming resources can hardly predict the entrepreneurial performance of a future start-up. An optimal combination of resources is more relevant than quantity (Alvarez and Barney, 2000, 2005; Cha and Bae, 2010). The entrepreneurial process is the identification of opportunities to create value through trial and error (Cha and Bae, 2010). To create new value, knowledge, resources, and information are required. However, all these components are separate, and entrepreneurs create their optimal combination (Baker, Miner and Eesley, 2003) along the entrepreneurial process.

The process theory approach (e.g., Bhawe, 1994) shows the entrepreneurial process as a set of several feedback-driven stages. Opportunity is a “fundamental and elementary ingredient of the entrepreneurial process” (Ihrig, 2006, p. 39). According to the effectuation theory (Savasvathy, 2008), the opportunity is constantly changed, adapted, and/or repeated to implement opportunity in the entrepreneurial process. The entrepreneurial process (Bhawe, 1994) links different stages from the entrepreneurial idea to opportunity implementation (Cha and Bae, 2010) and can be defined as the accumulation of resources and capabilities (Keupp and Gassmann, 2009).

Overall, the entrepreneurial process is a chain that starts with identifying an opportunity and ends with implementing the opportunity (Vogel, 2016; Mets, 2014). The entrepreneurial process includes all phases of development and transformation of an entrepreneurial opportunity.

The entrepreneurial process is still a discussible construct, and questions have been raised about the entrepreneurial process over time. Attempts were made to compare entrepreneurial developments to the biological life cycle (Reynolds and Miller, 1992) and organic developmental processes (Levie and Lichtenstein, 2010). Since this approach does not correspond to the entrepreneurial process of NVC stages (Mets, 2022), it will not be analysed further. McMullen and Dimov (2013) propose to apply the entrepreneurial journey construct to examine the entrepreneurial process in the context of time. McMullen and Dimov (2013) argue that the problem with entrepreneurship-focused publications is the lack of process orientation and the neglect of the time factor in empirical studies. McMullen argues (2015, p. 662), “[...] it is this journey that is too often ignored by economic theory.” In this research (McMullen and Dimov, 2013), the authors raise questions about the entrepreneurial journey – the essence, ending, beginning, variables and constants in the entrepreneurial process. The entrepreneurial journey still lacks conceptualisation and operationalisation and is understood as a process in which ideas and resources are transformed into processes and plans (Selden and Fletcher, 2015). “Entrepreneurial journey is an emergent hierarchical system of artefact-creating processes” (Selden and Fletcher, 2015, p. 605). Cha and Bae (2010, p. 31) define the journey as “a combination of volitional and emergent process of transforming potentiality into actuality”. The entrepreneurial journey consists of a series of decisions and actions. These decisions and actions lead to the

creation, discovery, and objectification of opportunities, to the transformation of ideas into functional performance.

We hereby define the entrepreneurial journey as a research construct that is a derivative of the entrepreneurial process. It is a realisation/progression trajectory of the entrepreneurial process in time scale or/and other dimensions (based on Cha and Bae, 2010; McMullen and Dimov, 2013; Mets, 2022). The entrepreneurial process is a series of actions and activities by entrepreneurs. Overall, the entrepreneurial journey is the temporary characterization of the entrepreneurial process and the events that take place in the entrepreneurial process.

2.3 Entrepreneurial Opportunity. Opportunity Discovery and Creation

Entrepreneurial opportunity plays a central role in understanding the entrepreneurship phenomenon (Shane and Venkataraman, 2000; Wood and Mckinley, 2010; Vogel, 2016). Despite the importance of the construct, there is increasing concern and many questions in studying entrepreneurial opportunities. In this vein, researchers working on the conceptual understanding of opportunity note that many theoretical and empirical studies do not provide definition the phenomenon of entrepreneurial opportunity (Vogel, 2016; Hansen *et al.*, 2011). Davidsson argues that researchers “follow – against their own definition [...] and advice [...] – the unfortunate tradition of applying the same “opportunity” label within the same manuscript to different types of entities at different levels of abstraction” (Davidsson, 2017, p. 84). Therefore, it is a complex task to examine entrepreneurial opportunity since there is no agreement on the core construct. Questions have been raised regarding the relevance and measurability of opportunity, since it is difficult to capture and examine empirically (Foss and Klein, 2012; Kitching and Rouse, 2016). For example, Kitching and Rouse (2016) argue that it is a call to concentrate on “entrepreneurial actions”, since measuring entrepreneurial actions is much easier from a methodological point of view than measuring entrepreneurial opportunities. Davidsson (2015) notes that opportunities are not a relevant framework for studying entrepreneurship and suggests new constructs (External Enablers, New Venture Ideas, and Opportunity Confidence), which is also a criticism of the opportunity approach.

Despite the constraints mentioned above, there are several reasons why entrepreneurial opportunity remains at the centre of research. The entrepreneurial opportunity allows us to capture the fundamental phenomenon of entrepreneurship: the ability to identify potential and transform it into something tangible. So far, many researchers (Wood and Mckinley, 2017; Vogel, 2016) support the opportunity-based framework.

The most influential basic concepts of entrepreneurial opportunities are the Schumpeterian opportunity or innovation opportunity (Schumpeter, 1934) and the Kirznerian opportunity or arbitrage opportunity (Kirzner, 1973). According to Schumpeter, opportunity is innovative in nature, and the entrepreneur iden-

tifies opportunity through innovation. The core assumption made by Kirzner is that opportunities exist in the market, i.e. exist objectively. Opportunity refers to the imitative phenomenon (Jong and Marsili, 2015). Entrepreneurs mainly take advantage of differences between markets and imitative existing ideas, adapting them for new contexts, environments, and industries.

Whether an opportunity has been created or discovered has become a much-disputed subject (Alvarez and Barney, 2007; Vaghely and Julien, 2010; Venkataraman, 2003; Eckhardt and Shane, 2003). If the opportunity is discovered, then it exists objectively and considered as objective phenomenon. An opportunity exists in the market, independent from the perception of an entrepreneur. If an opportunity is created, it is a subjective phenomenon created by the entrepreneur, existing in the mind of the entrepreneur, or created by the actions of the entrepreneur (Alvarez and Barney, 2007; Alvarez, Barney, and Anderson, 2013; Dyer *et al.*, 2009; Wood and McKinley, 2010). This aspect relates to a technology startup that implements an invention. The invention is created by the inventor (sometimes, the entrepreneur) – it did not exist before. Such an approach is the patent law doctrine (Mets, 2016a). Two sides ‘created or discovered’ of an opportunity is the most critical issue that leaves an imprint on the understanding of the nature of entrepreneurship (subjective and objective aspects of processes), the entrepreneurial process, and all actions of an entrepreneur, including leadership, performance results, and strategy.

The new trend is for researchers to argue that discovery and creation theories do not have to be conflicting (Schaefer, 2017). It is possible to combine these approaches. We again return to the dynamic approach and the fact that identifying opportunity is not a one-off act. It is a process that is repeated many times over. This brings us back to the importance of a dynamic perspective and introducing the entrepreneurial journey construct.

Overall, this dissertation defines “entrepreneurial opportunity” as the ability to transform ideas into goals and performance.

2.4 Entrepreneurial Opportunity and Idea along the Entrepreneurial Journey

Dynamics and the entrepreneurial journey are the fundamental approaches to understanding the phenomenon of opportunity. This view allows for bridging conflicting theories of discovery and creation.

Firstly, after the initial opportunity enactment, there is a subjective entrepreneurial idea, but then the entrepreneur must make it objective and reach a consensus with stakeholders (Wood and McKinley, 2017; Wood *et al.*, 2014).

Secondly, the research to date has focused on opportunities at the initial stage of new venture creation, as a one-time decision. However, if we look from a dynamic point of view and consider the identification of opportunities along the entrepreneurial path, we see that the identification of opportunity is a phenomenon that continues over time. Constant opportunity “revision” is necessary to realise entrepreneurship (entrepreneurial process). According to Kirzner (1973),

new information constantly comes to the market. So far, following this new information, it is necessary to constantly re-identify the opportunity. Moreover, the entrepreneurial ecosystem is constantly transforming. Firstly, demand changes. Secondly, new direct and indirect competitors appear with new products and services. Thirdly, institutional factors and legal regulation of the state are changing. All changing combinations of ecosystem factors affect opportunity transformation and trigger the need to create and discover opportunities continuously.

Previous studies have reported that entrepreneurial ideas are closely related to identifying opportunities (e.g., Vogel, 2017). Despite this, no clear distinction exists between an entrepreneurial opportunity and an entrepreneurial idea.

One recent influential study on entrepreneurial ideas is Vogel's (2017) article in *Entrepreneurship Theory and Practice*. Vogel (2017, p. 944) points out, "one main reason as to why progress in scholarly understanding of opportunities has been hindered is that the majority of prior work has not distinguished between the constructs of venture ideas and venture opportunities". The author defines an idea as a vague concept of a future company and proposes to separate venture idea from venture opportunity based on individual-level factors and external factors. In this approach, the author suggests several stages of idea development, triggers, paths, stages of incubation, and exploitation. His conceptual framework proposes three trajectories of idea development depending on the following triggers: recourse push, market pull, and desire to start.

Clausen (2020) develops Vogel's discussion of the entrepreneurial idea. He proposes to take translation theory as the basis, according to which an abstract idea is placed in the framework of a given time and place changes. Thus, opportunity development progresses from ostensive ideas through performative ideas to venture offerings. Clausen's approach is critical because it emphasizes the role of dynamics and the role of context.

Davidsson (2015) argues that individual cognition is essential for understanding opportunities. Affective factors impact entrepreneurial behaviour and the identification and implementation of entrepreneurial opportunities (Cristofaro, 2019; Baumeister *et al.*, 2007; Forgas, 1995; Schwarz and Clore, 2007) since the entrepreneur operates in conditions of uncertainty. Entrepreneurs' decisions are based on analysis, logical thinking, and rational assessment of the potential opportunities for creating and developing a business and are influenced by affective states, such as mood and perception of individual environmental events. Thus, fluctuations in the trajectory of the entrepreneurial journey are an objective phenomenon that accompanies learning because of feedback received during the entrepreneurial process. However, an entrepreneur's decisions and behaviour depend on his or her cognitive qualities and how he or she perceives the state of his or her business development in the context of the environment, resources, and personal interests. Subjective perception and emotions play an essential role in entrepreneurial decisions. Affective factors, in addition to internal and external environments, influence the behaviour of entrepreneurs, and

often, the entrepreneur transforms the original idea into an unrecognizable form by the end of the entrepreneurial journey (Mets, 2018, 2021).

Affect influences the dynamic and fundamentally changes the entrepreneurial decision-making process (Wood *et al.* 2014). A few studies have found the influence of affective factors on entrepreneurial behaviour (Autio *et al.*, 2013; Wood *et al.*, 2014; Cardon *et al.*, 2012; Dimov, 2007; Foo *et al.*, 2015). However, considering entrepreneurial opportunities in dynamics, the question remains: how do affective components affect the transformation of ideas and opportunities? What is the role of affective fluctuations? These are questions that still need to be addressed in entrepreneurship research.

2.5 Ecosystem Framework and Window of Opportunity

An entrepreneur does not exist in a vacuum. The entrepreneurial environment of each country has been considered unique (Spigel, 2017). The characteristics and behaviour of an entrepreneur are formed under the influence of external conditions. Also, the entrepreneurial process, journey, and opportunities are formed under the influence of external settings. External conditions have long been considered in entrepreneurship studies, but more often as separate factors. “The opportunities themselves often emerge from changes in economic, technological, governmental and social factors” mention Baron and Shane (2013, p. 13), and “conditions under which the entrepreneur is acting may be changing and rendering the venture idea and business models wholly or partly” (Léger-Jarniou and Tegtmeier, 2017, p. 131–132).

The ecosystem approach in business initiated by Moore (1993) is developed further for entrepreneurship in the works by Isenberg (2011) and Stam (2015). Quite recently, Isenberg (2011) has questioned this approach, suggesting that it is possible to distinguish a particular system of elements that make up an entrepreneurial ecosystem. The ideas of Isenberg have been further developed by Foster with co-authors (Foster *et al.*, 2013) and Stam (2015). Stam has proposed a system of pillars that make up an entrepreneurial ecosystem. Pillars cover the entire system an entrepreneur operates, and entrepreneurial opportunities are formed, dividing all pillars into two groups: Systemic conditions (Networks, Leadership, Finance, Talent, Knowledge, Support Services) and Framework conditions (Formal Institutions, Entrepreneurship Culture, Physical Infrastructure, Demand).

The ecosystem transforms and evolves over time, creating new conditions for entrepreneurship development. The dynamic development of the ecosystem has been practically ignored in previous studies. For this dissertation, it becomes essential to analyse the transformation of the ecosystem, its dynamic development, and the connection between the transformation of the ecosystem and the development trajectories of entrepreneurial opportunities. In the entrepreneurial ecosystem context, the question of dynamics is also essential, as in other entrepreneurial phenomena.

An important question is what can be considered the performance of the entrepreneurial ecosystem. A number of successful companies and the level of entrepreneurship development can represent ecosystem performance. Reaching success in entrepreneurship means identifying and exploiting entrepreneurial opportunities. Pre-conditions for that are coming from the environment. In this context, the window of opportunity construct plays a key role. Previous studies have argued that the window of opportunity is a set of events and conditions that make it possible to identify opportunities (Messica and Mehrez, 2002; Suarez *et al.*, 2015). There is still little knowledge of how the window of opportunity bridges the entrepreneurial ecosystem and entrepreneurial opportunities.

3. METHODOLOGICAL CONSIDERATIONS

Description of the entrepreneurial process in (time scale) dynamics is a fundamental characteristic of entrepreneurship (McMullen and Dimov, 2013; Mets, 2015, 2022). Consideration of entrepreneurship as a process is the basis of this dissertation. A qualitative process-based approach is applied to deeply understand the dynamic process phenomenon (Mets, 2015). This research covers the entrepreneurial process in different aspects: idea and opportunity, stages of the process and ecosystem, as presented in Figure 1. According to this approach, entrepreneurial activity is not a one-time event/phenomenon but a feedback-driven process. The entrepreneurial process connects different stages, from the entrepreneurial intention to the actual performance. Entrepreneurial opportunities are part of this process (Shane and Venkataraman, 2000). The maturity of the process and opportunity indicates the entrepreneurial activities and journey progression. From a methodological point of view, we apply a process approach that allows us to study the entrepreneurial process's dynamics phenomenon.

The thesis design is based on the general aim and the research questions of the studies that support it. The research forms a coherent whole with the literature review, theoretical introduction and concluding chapters of the dissertation. The research questions aim to understand the subject's general state-of-the-art and current theoretical approaches, create the models necessary for the study, and collect specific empirical data. Based on the research questions, the following methodologies have been used to implement the tasks (Table 2).

The research utilises various methods of gathering and analysing data. The study is based on qualitative approaches. The qualitative approach is essential to achieve the objectives of the present study. First and foremost, we are interested in understanding phenomena and how to gain in-depth insights into the problem of the opportunity identification process from multiple perspectives. In addition to the general methodology of the dissertation disclosed above, Studies I–IV employed the mixed method approach:

1. System thinking and system approach were used to model the entrepreneurial journey and understand the interconnections between the entrepreneurial process, journey, venture maturity, time, and space (Study I).
2. A mixed method longitudinal observation, combined with a questionnaire and semi-structured in-depth interviews, was applied to identify idea-opportunity interaction in the initial stage of the entrepreneurial journey (Study II).
3. A case-study design and an inductive, exploratory approach were used to analyse the interaction of entrepreneurial opportunities and the entrepreneurial ecosystem (Study III).
4. Observation was employed to analyse the opportunity formation process in the context of the cultural industry (Study IV).

Table 2. Design of the dissertation research project

Study	Research task	Method and approach
Chapter 1 Study I	1a. Give an overview of the place of entrepreneurial opportunity in entrepreneurship theory. 1b. Create an understanding of opportunity recognition (discovery and/or creation) within the entrepreneurial journey. Define the primary research constructs.	Focused literature review and state-of-the-art analysis. System thinking and system approach.
Chapter 1 Study I Study II	2a. Develop an understanding of the role of dynamics in transforming ideas and opportunities within the entrepreneurial journey's objective and (entrepreneur's) subjective context. 2b. Trace idea and opportunity perception progression on the initial stage of the entrepreneurial journey (educational context, testing transformation aspect empirically).	System thinking, system approach, and mixed method composed of longitudinal observation combined with a questionnaire and semi-structured in-depth interviews were applied to identify idea-opportunity interaction in the initial stage of the entrepreneurial journey.
Study II	3a. Create an understanding of perception impact on the idea and opportunity progression. 3b. Trace the dynamic progression of the idea and opportunity to identify and map the fluctuations of the idea-opportunity perception.	A mixed method combining longitudinal observation, a questionnaire, and semi-structured in-depth interviews were applied to identify idea-opportunity (interaction) perception in the initial stage of the entrepreneurial journey. The study is based on a sample of seven PhD students.
Study III	4a. Systematise factors and stages of entrepreneurial ecosystem development. 4b. Identify factors that serve as the origin of opportunity window forming. 4c. Analyse the dynamics of entrepreneurial ecosystem development along with the entrepreneurial opportunity and journey.	Case-study design and inductive exploratory approach were used to analyse the interaction of entrepreneurial opportunities and the entrepreneurial ecosystem.
Study III Study IV	5a. Create an understanding of entrepreneurial opportunity application in sectoral settings. 5b. Apply ecosystem and opportunity understanding in different sectors – cultural (museum) and knowledge-based (engineering) businesses.	Case-study and observation were employed to analyse the opportunity formation process in the industry (cultural industry) context.

Study I Approach: This conceptual-theoretical article uses a systems approach to develop a dynamic stage model of the entrepreneurial process. Previous approaches to the entrepreneurial process are generalised, and a method for describing the entrepreneurial journey is created. Also, the objective-subjective approach to entrepreneurial opportunity is developed in the so-called corridor field of various criteria.

Study II. Approach: The study of transformation and fluctuations of idea and opportunity perception under the influence of affective factors is based on two constructs that reflect perception: feasibility and attractiveness (Fitzsimmons and Douglas, 2011). Moreover, both constructs are interpreted as a belief in opportunity (Wood *et al.*, 2014). Belief in opportunity is a prerequisite for new venture creation. Affective factors influence decisions to create and develop a new business. Affective factors are understood as different influences on the entrepreneur's mood and emotional state. In the framework of this study of the topic of the course, the complexity of the topics acted as a factor influencing the affective state and perception of potential entrepreneurs (students taking the course and developing their business idea).

A qualitative mixed observation method combined with a questionnaire and semi-structured in-depth interviews was applied. The first phase included observing the current state of idea development and assessments by student entrepreneurs. The course trainer observed/monitored the development of the seven students' ideas through the submitted homework (in an online environment) and self-assessments, which were presented before each subsequent topic was addressed in the learning process. An observation has several advantages; for instance, it helps resolve the crucial issue of real-time data collection and analysis, while most entrepreneurial studies are based on the retrospective approach. The retrospective approach (Dimov, 2016) does not provide an understanding of opportunity, process, and journey as continuous phenomena. The validity of retrospective research in the current context is debatable since, in retrospect, the last solution/option used and the path that led to it will be best remembered. Observation solves this problem by making it possible to explore how opportunities are born and transformed and to trace the dynamics of the process and the trajectory of the journey on an ongoing basis.

The second phase of the empirical study included in-depth interviews with the course participants. The main goal was to understand how and why the perception of opportunities changed during the course and its influence on the entrepreneurial opportunity, process, and journey.

A mixed method combining longitudinal observation, a questionnaire, and semi-structured in-depth interviews were applied to identify idea-opportunity (interaction) perception in the initial stage of the entrepreneurial journey.

A limited number (seven) of observations were used in this study. Initially, it was planned to apply an experimental design. However, the study's design was later adjusted, and the experiment was replaced by observation. It is important to note that the study is based on a qualitative approach since it is vital to understand the phenomenon. Observation of several individual trajectories of the

perception of the idea and opportunity made it possible to reveal the difference in the perception of these phenomena. In addition to the observations made, in-depth interviews were conducted, which allowed a detailed understanding of the perception of the idea and opportunity.

At the beginning of the course, potential entrepreneurs (students) were asked to formulate the idea of a future start-up. Among the ideas were necessity-driven ideas (such as cafes) and opportunity-driven ideas (based on new medical equipment).

Study III. Approach: The approach is based on a phase model of economic development (Rostow, 1962), a model of an ecosystem (Stam, 2015), a dynamic view for studying an ecosystem (Mason and Brown, 2014), and a view on the opportunity as on phenomenon in a temporal dimension (Muñoz and Dimov, 2015).

The first part of the empirical section discusses the analysis of the entrepreneurial ecosystem (with examples of Estonian-origin start-ups). An integral approach to the study is a dynamic view of the ecosystem. The development of the ecosystem has been systematised since 1995, as follows, according to the World Economic Forum (WEF, 2014): the efficiency-driven stage, the transition from the efficiency stage to the innovation-driven stage, and the innovation-driven stage. The study is based on WEF's (2014) comparative categorization of innovation-driven ecosystem maturity in Estonia. The dissertation did not examine/validate maturity criteria. The general conclusion was that the growth of ecosystem maturity was accompanied by a shortening of the start-up (product) development period.

The second part of the empirical section follows a case-study design with an in-depth analysis of the role of the entrepreneurial ecosystem in opportunity identification and transformation processes, and it illustrates the dynamic development of the entrepreneurial ecosystem. The investigated companies have demonstrated different paths and trajectories for development, and they have made various contributions to the entrepreneurial ecosystem of Estonia. This study used four cases: Regio, Mobi Solutions, GrabCAD and Bolt. These companies were selected according to several criteria, including their compliance with one of the stages of economic development (the efficiency-driven stage, the transition from the efficiency stage to the innovation-driven stage, and the innovation-driven stage). The study details the cases of the GrabCAD and Bolt company. The description of Regio and Mobi Solutions cases is contained in other works of the article's co-author (Mets, 2008, 2016b). Therefore, the description of two cases is omitted/cited in this study. However, the paper presents an analysis of the development trajectory of these companies in the context of the development of the entrepreneurial ecosystem.

Data: Empirical research is based on data from different sources: official databases; data provided by international organisations (World Economic Forum (Global Competitiveness Index), the World Bank, Eurostat, Global Entrepreneurship Monitor (GEM), Global Entrepreneurship Index (GEI), OECD (Country statistical profiles), Freedomhouse); data provided by Estonian organi-

sations and platforms (Statistics Estonia, Estonian Development Fund, Business Register, Bank of Estonia, Start-up Estonia); and other secondary data, as well as the personal knowledge and experience of the authors, who have witnessed the transformation of the Estonian ecosystem.

Study IV. Approach: Observation was allied to identify how entrepreneurial opportunities are shaped in the context of industry (cultural industry). The culture industry was chosen due to the lack of its significant exploration from an entrepreneurial angle while being one of the most evident examples of opportunity identification. Perhaps the culture industry contains many barriers to developing entrepreneurship. It was crucial to demonstrate how entrepreneurs identify opportunities with the benefit of cultural heritage in the culture industry.

Data: We used a purposeful sample of 76 museums located in St. Petersburg. The sample was chosen based on museum visitor numbers, i.e. the most visited museums were selected from a list on the St. Petersburg Cultural Committee website. We could then narrow down this initial sample further, excluding those that could not be studied for reasons such as being closed or refurbished (12 museums). This left a total of 64 museums that were visited in person. Additionally, the websites of ten Russian and ten foreign museums were examined to benchmark the functional structure of the inventories. The process of data collection at the museums visited occurred in several stages. First, the researchers examined each shop's product range, identifying inventory patterns across museums. A toolkit matrix was used to aid this process of classifying inventory across several functional and topical characteristics. Goods were also classified and categorised according to content.

A particular task is the integration of the articles and dissertation's theoretical overview and discussion into the whole. For that purpose, we widen the use of methods and approaches already implemented in Studies. The explorative approach (for more on this approach, see, e.g., Kyrö *et al.* 2013) is employed before generalising behavioural patterns of students and entrepreneurs. Understanding the broader field of (flexible) pattern matching (for more on the approach, see, e.g., Sinkovics, 2018) enables searching for similarities and synchronicity between the processes in startups and the entrepreneurial ecosystem. Of course, this can be done by carefully considering the facts and generalisations.

4. STUDIES I-IV

5. FINDINGS AND DISCUSSION

The present study makes several noteworthy contributions to the process-based view on entrepreneurship. We begin by discussing the findings of individual studies. Then, we take the discussion to a more general level by linking the results of individual studies. We hereby open the main findings and results in the entrepreneurial process and journey context.

1. The first objective of the conceptual study (Study I) sought to deepen understanding and develop models of the entrepreneurial process and journey. The interrelation of idea-opportunity and space during the entrepreneurial journey is a critical gap that we aim to cover. As a result of the study, we determine the indicator for measuring the entrepreneurial journey and its progression. The principal dimension and metric of the entrepreneurial journey, besides time scale, is the stage of venture maturity. The findings contribute to understanding the entrepreneurial process and journey and help to measure and assess the progression stage of the entrepreneurial journey. The stage assessment/measure is subjective as an entrepreneur perceives it until the actual venture's launch and regular business. Achieving regular business activity alone is an objective criterion for the maturity of the entrepreneurial process and journey. The fundamental problem statement in the current (dissertation) study's context is the manifestation of entrepreneurial opportunity in the space between different edges (Discovery-Exploitation, Arbitrage-Innovation, Existing-Created) and the nature of the phenomenon – Discrete or Continuous. The dynamic view serves as the foundation to bridge conflict theories. So far, entrepreneurial opportunities can be discovered and/or created at different stages of the entrepreneurial journey. Entrepreneurs can lay the foundation for the work of a startup at one stage, existing opportunity, and at another stage, created opportunity. Additionally, innovation and arbitrage can be applied at different stages of the entrepreneurial journey and the company's maturity.

In contrast to variance theory (Poole *et al.*, 2000; Mohr, 1982), we considered the phenomena and mechanisms of entrepreneurship not as a static combination of variables but as a dynamic process based on process theory (Moroz and Hindle, 2012; Van de Ven and Engleman, 2004; Pentland, 1999). We considered how events influence each other and how the dynamics change the trajectory of the development of the phenomenon (this approach is applied to understanding the constructs of the entrepreneurial journey, opportunity, idea, and process).

2. The purpose of the second study (Study II) was to advance the understanding of whether the perception of an idea and an opportunity are the same/equal. The study aims to cover the gap between how emotional fluctuations affect entrepreneurs' perceptions and decisions in the entrepreneurial process (dynamics). Reviewing the literature, no previous research was found on the association

between idea and opportunity. An analysis of the behaviour of potential entrepreneurs was carried out by applying entrepreneurial process-based training imitating real entrepreneurial processes. The results of this study show that the perceptions of an idea and an opportunity are different. For potential entrepreneurs, an idea and an opportunity are two separate phenomena. Additionally, an important task was to reveal the influence of affect. The results showed that entrepreneurs' perceptions of ideas and opportunities differ and are influenced by affect. According to the results obtained (Figures 2 and 3, Study II), the perception of the idea and opportunity changes during the course. Figure 2 (Study II) illustrates how the knowledge and skills gained during the course affect the improvement of perception by potential entrepreneurs. Figure 3 (Study II) illustrates the individual trajectory of fluctuations in potential entrepreneurs' perception and affective state in sync with the course topics.

For explanation of the idea-opportunity mechanism, we apply dynamic view. The mechanism of interaction between idea and opportunity was considered earlier by Trabskaia and Mets (2019). So, based on the analysis of previous literature, we found that the idea and opportunity, as dynamic and developing phenomena, are in constant interaction, constant movement within the cycle (drawn as a circle, Figure 2). This interaction is influenced by the trigger of the idea and the source of the idea (see Trabskaia and Mets, 2019). Idea and opportunity arise during different stages of the entrepreneurial journey and represent the constant process. Different idea triggers stimulate idea creation and modification along the entrepreneurial journey. So far, idea triggers can influence the entrepreneurial process at the various stages of the entrepreneurial journey. Also, ideas originating from different sources can be implemented in the entrepreneurial process. In this vein, opportunity as a continuous phenomenon can be created and discovered along the entrepreneurial process. Overall, ideas (stimulated by different triggers and sources) and opportunity interact constantly (form a circle).

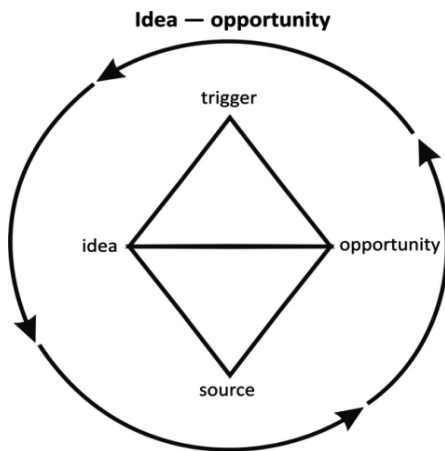


Figure 2. Idea-opportunity interconnection. Source: Trabskaia, Mets, (2019).

In line with Ihrig (2006), we argue that opportunity is the foundation of the entrepreneurial process. As in the seminal work of Bhawe (1994), we looked for the entrepreneurial process as a process continuing from an entrepreneurial initial idea to opportunity implementation. However, in contrast to previous studies (Bhawe, 1994; Cha and Bae, 2010; Keupp and Gassmann, 2009), we considered the impact of the affective state on the development of entrepreneurial ideas and opportunities.

Our study is based on a call in the entrepreneurial literature to separate the idea from the opportunity (e.g., Vogel, 2017). In line with Clausen (2020), we found that an idea and opportunity should be studied in time and events settings. However, unlike some authors, including Vogel (2017) and Clausen (2020), we tested the idea and opportunities and the impact of the affective component on idea-opportunity interrelations. Previous literature (Cristofaro, 2019; Davidsson, 2015; Wood *et al.*, 2014) pointed out that affect significantly influences the behaviour of individuals. In line with this, we empirically tested this proposition and showed the effect's impact on potential entrepreneurs' behaviour.

3. Study III empirically identified the influence of external factors on opportunities (the impact of ecosystem dynamics on the entrepreneurial (start-up) process (and opportunity)). We applied and adopted the entrepreneurial ecosystem pillars approach (Stam, 2015). Based on the concept of the entrepreneurial ecosystem, we systematised external factors that display the state of an entrepreneur's environment. In the paper (Study III), we indicated the influence of systematic factors on the formation and development of entrepreneurial opportunities, including networks, leadership, finance, talent, knowledge, and framework factors (formal institution, entrepreneurship culture, physical infrastructure, demand). We found that a set of these factors creates a window of opportunity, and developing these factors encourages the development of opportunities. The assumptions about the significant role of external factors were expressed by several researchers (for example, Baron and Shane (2013), Léger-Jarniou and Tegtmeier (2017)), and study III confirmed their vision.

The study highlighted stages of entrepreneurial ecosystem development. An important aspect is the dynamic view of external factors influencing the formation of entrepreneurial ideas and opportunities. To define dynamic development, we examined the Estonian economy through the lens of development stages (WEF, 2014). According to the WEF (World Economic Forum) concept, an economy's developmental stages are Efficiency-driven, Transition from Efficiency- to Innovation-driven, and Innovation-driven.

We used the Estonian entrepreneurial ecosystem as an example for analysis. The study showed that different stages of an ecosystem's evolution and factors changing at various stages of transformation of an ecosystem affect entrepreneurial ideas and opportunities, considerably altering them and creating new windows of opportunity. Accordingly, we found that factors changing at various stages of transformation affect the speed of an entrepreneurial startup journey and product development (Figure 3).

For companies, these developments in the ecosystem mean a drastic shortening of the period of product development. In the 1990s and at the beginning of the 2000s, this period could last 7–10 years. For example, the development periods for Regio or Mobi Solutions (Mets, 2008, 2016b) were mainly “boots-trapping” their product development. GrabCAD and Bolt (Taxify) present much faster developments – one to four years with more significant investments. This characterises growing competition for exploiting entrepreneurial opportunities. It also shows the temporal narrowing of the opportunity window – the ecosystem aspect. However, this is also a sign of the growing maturity of the entrepreneurial ecosystem in Estonia and globally.

Cases of Regio and Mobi Solutions are signs of the ecosystem efficiency-driven stage. The cases are of fundamental importance for developing role models for companies in different industries, as they have contributed to the entrepreneurial culture of Estonia. Many factors determine success in the prospect of developing the economy and ecosystems. These are, first, going global. Secondly, innovation as the basis for development. Third, innovative business models. GrabCAD is a revolutionary open innovation platform for industry collaboration, connecting peer engineers-designers into a knowledge community (through sharing solutions in a shared library) and creating a global collaboration environment between designers and manufacturing companies. In general, this helped the start-up to become global and gain trust (expressed in international investments). Bolt is a sign of the innovation-driven phase. Success at this stage of economic development is no longer only the global nature of the company, the shortening of the period of both company launch and product development. Bolt has become a global leader, ruling the competition with global market takeovers.

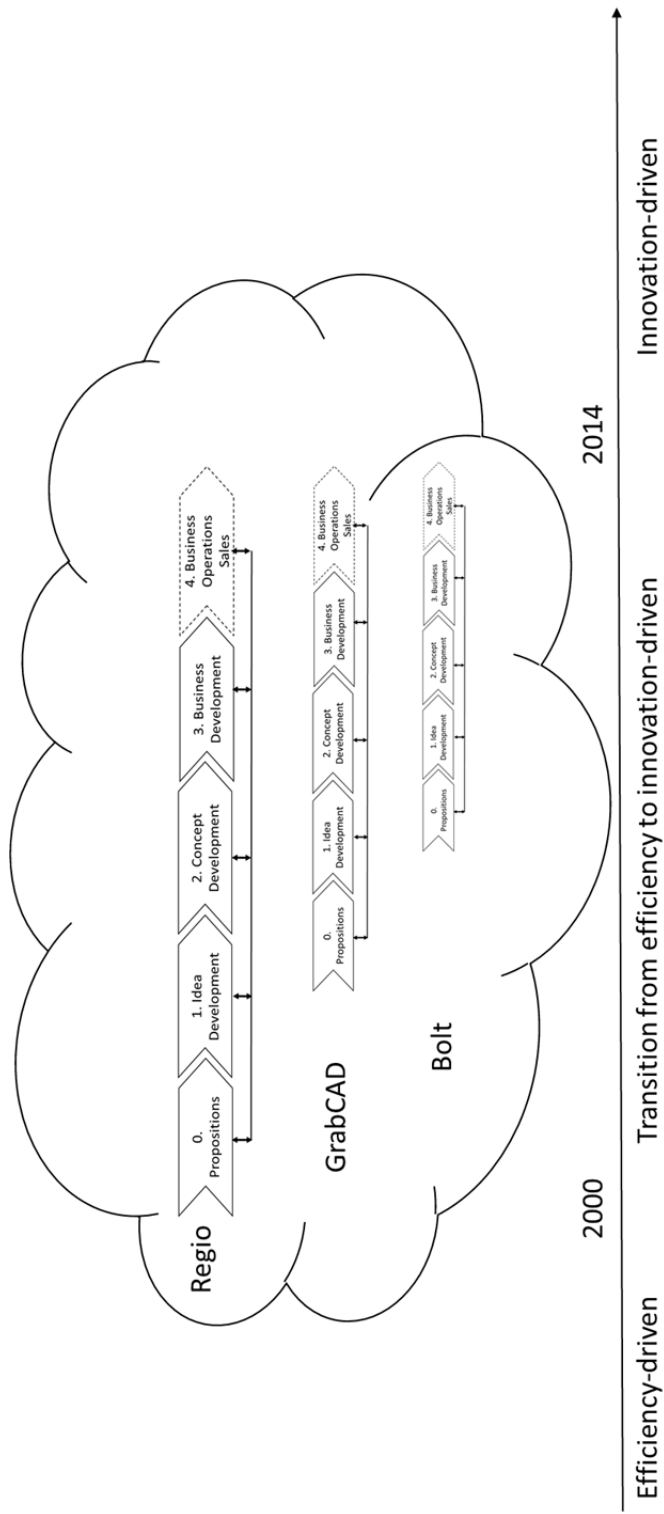


Figure 3. The impact of the entrepreneurial ecosystem on the start-up period

Moreover, in Study III, we analyzed the development path of entrepreneurial opportunities after creating a start-up (in the later stages of business development). This has been a long-standing request, as McKinley (2017) noted that understanding opportunity is problematic since this phenomenon is mainly studied in the early stages of creating startups.

4. We aim to clarify the entrepreneurial process and journey context from the propositions of entrepreneurial opportunity to exploitation. Throughout the research, we managed to examine opportunity application/proposition cases in different countries (Estonia and Russia) and in different industries (IT, service platform and culture sectors) of knowledge-based sectors (Studies III and IV).

In Study III, the authors tracked the application of global opportunities originating from the country's ecosystem. Thus, we examined the influence of ecosystem factors – pillars on the formation of opportunities and windows of opportunity. In line with Suarez, Grodal and Gotsopoulos (2015), we consider the window of opportunity as a vital phenomenon for a company's entry into the market. The study helped indicate that several factors facilitate the formation of a window of opportunity. Integration and cooperation of sectoral ecosystems (educational, entrepreneurial, engineering, design, etc.), integration of local and global entrepreneurial ecosystems, and growing confidence level became the key factors in forming a window of opportunity.

A window of opportunity appears under the influence of various conditions. Study IV showed that a city's brand creates/prepares a window of opportunity for entrepreneurs. In this case, the window is a chance to use the city's branded cultural heritage and the museum's branded cultural heritage in entrepreneurial activity. The city brand in these settings can be considered an intangible asset or resource. Using the city brand theme in souvenir products, entrepreneurs create an optimal combination of resources, use a non-material resource to attract customers and create additional value. So far, we argue that entrepreneurs have used that window of opportunity (Rivetti and Migliaccio, 2017).

Thus, in Study IV, local brands of cultural institutions, including museums, create more significant entrepreneurial opportunities than city brands. Development strategies of museums, use of local brands, new consumer behaviour patterns, and demand for local brands – all these factors show how exactly the entrepreneurial opportunity (creation) concept can be implemented at the industry level. Research IV contributes by applying theory in the context of the cultural realm. Also, this study helps to identify entrepreneurs and intrapreneurs. In the context of the cultural sphere (museums), a window of opportunity is created for entrepreneurs (external actors concerning the museum) and intrapreneurs (museum employees involved in the creation of souvenirs).

Table 3. Findings of dissertation

Study	Research task	Findings
Chapter 1 Study I	<p>1a. Give an overview of the place of entrepreneurial opportunity in entrepreneurship theory.</p> <p>1b. Create an understanding of opportunity recognition (discovery and/or creation) within the entrepreneurial journey. Define the primary research constructs.</p>	<p>1a. To determine the place of opportunity in entrepreneurial theory, in the study, we identified the manifestation of entrepreneurial opportunity in the space between different edges (Discovery-Exploitation, Arbitrage-Innovation, Existing-Created) and the nature of the phenomenon - Discrete or Continuous (see Figure 4). Opportunity is critical to consider in context and concerning other constructs of entrepreneurial theory, such as the entrepreneurial process, journey, discovery, and creation theories.</p> <p>1b. The new trend is for researchers to argue that discovery and creation theories do not have to be conflicting (Schaefer, 2017). It is possible to combine these approaches. We again return to the dynamic approach and the fact that identifying opportunity is not a one-off act. It is a process that is repeated many times over. This brings us back to the importance of a dynamic perspective and introducing the entrepreneurial journey construct. This dissertation defines “entrepreneurial opportunity” as the ability to transform ideas into goals and performance.</p> <p>Primary research constructs are defined in Annex 1.</p>
Chapter 1 Study I Study II	<p>2a. Develop an understanding of the role of dynamics in transforming ideas and opportunities within the entrepreneurial journey’s objective and (entrepreneur’s) subjective context.</p> <p>2b. Trace idea and opportunity perception progression on the initial stage of the entrepreneurial journey (educational context, testing transformation aspect empirically).</p>	<p>2a. We determine the indicator for measuring the entrepreneurial journey and its progression (time scale, venture maturity).</p> <p>2b. According to our knowledge, empirical (real-time) testing and comparison of the development of the idea and opportunity was carried out for the first time. We found that the perception of an idea and an opportunity differ; entrepreneurs perceive them as separate phenomena. Also, the dynamic development of these phenomena occurs individually and differs significantly. Moreover, the obtained results allow us to speak about the influence of the affective component (mood, sensation, external circumstances) on the perception of the idea and opportunity (Figures 2,3 Study II).</p>
Study II	<p>3a. Create an understanding of perception impact on the idea and opportunity progression.</p>	<p>3a. Research II revealed that opportunity and idea are dynamic phenomena that change over time. Since an opportunity and an idea can be subjective at different stages of development, the entrepreneur’s perception is essential. As shown in Study II, the idea and opportunity change significantly depending on the changes in the entrepreneur’s perception (and affective state).</p>

Study	Research task	Findings
	3b. Trace the dynamic progression of the idea and opportunity to identify and map the fluctuations of the idea–opportunity perception.	3b. Research II found that an idea and an opportunity develop in a dynamic way. The study also shows fluctuations of ideas and opportunity depending on the affective state of the entrepreneur.
Study III	<p>4a. Systematise factors and stages of entrepreneurial ecosystem development.</p> <p>4b. Identify factors that serve as the origin of opportunity window forming.</p> <p>4c. Analyse the dynamics of entrepreneurial ecosystem development along with the entrepreneurial opportunity and journey.</p>	<p>4a. Study III identified the stages of development of the entrepreneurial ecosystem based on the concept proposed by WEF (2014) (an economy’s developmental stages are Efficiency-driven, Transition from Efficiency-to Innovation-driven, and Innovation-driven). This approach was first introduced analysis of the transformation of the entrepreneurial ecosystem. Based on the entrepreneurial ecosystem pillars approach (Stam, 2015), the factors fundamentally influencing the development of the ecosystem were identified.</p> <p>4b. As indicated in Study III, at different stages of development, different pillars and their combination are antecedence of opportunity window formation. In order to identify these factors, it is important to conduct a systematic and detailed analysis of all pillars of the entrepreneurial ecosystem. For example, as indicated in Study III, at certain stages of the development of the antecedence of opportunity window forming ecosystem, the government decided to introduce IT and entrepreneurial education at all levels. At another stage, leaders and role models became the source of opportunity window formation.</p> <p>4c. The study showed that different stages of an ecosystem’s evolution and factors changing at various stages of transformation of an ecosystem affect entrepreneurial ideas and opportunities, considerably altering them and creating new windows of opportunity. Accordingly, we found that factors changing at various stages of transformation affect the speed of an entrepreneurial journey and product development.</p>
Study III Study IV	5a. Create an understanding of entrepreneurial opportunity application in sectoral settings.	5a. The papers examined entrepreneurial opportunities in several sectors, including the knowledge-based and cultural sectors. Sectoral application of the developed theoretical understanding of opportunity was essential, as it shows how a theoretical approach can practically contribute to sectoral analysis.

Study	Research task	Findings
	5b. Apply ecosystem and opportunity understanding in different sectors – cultural (museum) and knowledge-based (engineering) businesses.	5b. In Study III and Study IV, we looked at networks, cultural (museum) and knowledge-based (engineering) to test our understanding of opportunity and ecosystem. The sectors were specifically chosen to be polar - culture and engineering, to understand how the ecosystem forms an opportunity window in different contexts. In the context of the engineering sector, growing trust in the ecosystem, the introduction of a new foundation in education, new leaders and landmarks have become factors influencing ecosystem change and the formation of an opportunity window. Within the cultural sector, the formation of a city brand has created a window of opportunity.

Previous studies found no dimensional framework that considers the entrepreneurial process and journey as research constructs. Therefore, there is also no unified understanding of entrepreneurial opportunity stimulating an entrepreneur’s journey. Generalizing, we can say that this study is one in the ongoing discussion on the nature of entrepreneurial ideas and opportunities. As our theoretical approach (Study I) and empirical analysis (Study II and III) show, the content of both basic concepts is in dynamic change. In this part, we agree with the proposals of Clausen (2017) and Wood and McKinley (2017), who argue that a dynamic approach allows for connecting conflicting points of view on the nature of entrepreneurial opportunity.

Idea-opportunity interrelationship is not uniquely dependent on each other. It depends on the development stage of the entrepreneurial process/journey and the entrepreneur’s perception – this indicates a subjective aspect. In our approach, an entrepreneurial opportunity does not exist, nor is it merely created subjectively, but an entrepreneur integrates both aspects.

Developing an idea (often called a business idea) in the entrepreneurial process can start from a product/service, technology, business model or another opportunity but eventually flows into a venture idea (implementation of the opportunity). Nevertheless, it develops on the field/scale of “Existing-Created” during the entrepreneurial process/journey, regardless of whether the entrepreneur “discovered” or “created” this opportunity. The idea-opportunity and entrepreneurial journey compatibility will be revealed when going to market.

In many publications, as shown above, discovery and creation theories are two conflicting/competing approaches to understanding the nature of the opportunity. We support the research line that proposes a process view (Moroz and Hindle, 2012; Bhawe, 1994; Ihrig, 2006) and applies the process approach (Study I). This study examined the role of opportunity discovery and creation based on a case-study (Study III). Considering the development of opportunity in dynamics, in the context of the entrepreneurial process and journey, we found that the entrepreneur can alternately discover and create opportunity at different (sub)stages of the entrepreneurial journey. This approach is in line with the approach of Schaefer (2017), which suggested that a dynamic view would allow

conflict theories to be connected. Thus, opportunity discovery and creation are combined within one entrepreneurial journey, as shown in the case of GrabCAD (Study III). Reaching a real entrepreneurial (business) opportunity contains both exploratory and creative elements. Although the result may be revolutionary in terms of the sector practice (GrabCAD platform for engineers), the development process (from service to library to specialized “Facebook” to collaboration platform) includes a step-by-step approach that includes the experience of one type or another (discovery-creation) element. It is a learning process where one step of implementation and new experience leads to another.

We found that there is no substantive contradiction between the two theories of entrepreneurial opportunity. They complement each other. However, this means the process may contain many bigger and smaller steps between the edges of discovery and creation, representing a continuous process. Of course, the entrepreneurial opportunity trajectory from starting point A (Figure 4) may run towards one edge or the other of the Corridor. The same feedback loops (may) exist in the entrepreneurial journey. This means the entrepreneur finds themselves on the wrong path when moving towards (perceived) venture maturity. As a result, he or she re-evaluates the progress made so far and, repeating the previously completed process (sub)stages, continues to develop his or her business idea/product/service and opportunity.

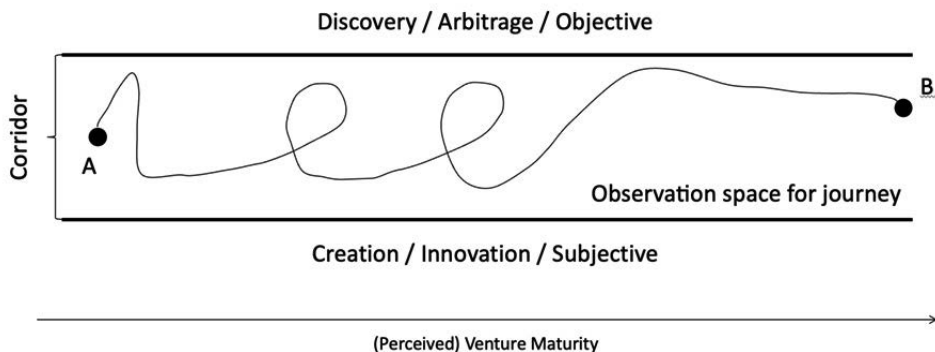


Figure 4. Entrepreneurial journey in the corridor between Discovery-Creation, Arbitrage-Innovation and Objective-Subjective edge of opportunities framing the entrepreneurial journey

Figure 4 illustrates a dynamic approach combining competing theories. Opportunity can be created and discovered within the framework of the development of the same entrepreneurial journey. The contribution to the theory lies in the fact that the dynamic approach allows the combination of conflicting theories of opportunity creation and discovery. First, an entrepreneur can create an opportunity and create demand. However, with the progress of the company’s development, the entrepreneur creates and discovers opportunities within the framework of one entrepreneurial journey, with objective and subjective sides of oppor-

tunity. An opportunity can be subjective (perceived) at the initial stage of the entrepreneurial journey. However, during the company's development, the entrepreneur must reach a consensus with stakeholders, co-founders, buyers, and partners. Thus, by reaching a consensus, the entrepreneur objectifies the opportunity. The same situation applies to innovations and arbitrage. What is an innovative opportunity at the initial stage of the company's development can, at the next stage, become an arbitrage? Overall, looking at the entrepreneurial opportunity through the lens of the dynamic approach, we can see that one entrepreneurial journey can combine both opportunity discovery and creation, objective and subjective sides of opportunity, and innovation and arbitrage.

The relationship between an idea and an opportunity is still acute in entrepreneurial-focused publications. The question is whether they are two different constructs or identical. As part of the study (Study II), it was revealed that entrepreneurs' (business) idea and an opportunity are different constructs, and the perception of an idea and an opportunity differ. In addition, it was found that subjective factors, including the affective factor, influence the idea and an opportunity. The perception of an idea and an opportunity (their feasibility) change depending on the affective state of the entrepreneur. The influence of objective factors on idea development and opportunity was also identified (Study III). An idea and opportunity change under the influence of the pillars of the entrepreneurial ecosystem. However, in this process, the entrepreneur's decisions are also related to the subjective perception of objective conditions.

6. CONCLUSIONS

The main aim of this study was to shine a new light and give insight into the entrepreneurial opportunity phenomenon within the entrepreneurial process and journey from a dynamic perspective. The study led to the following conclusions.

1. Despite the widespread debate over the concept of entrepreneurial opportunity, the main challenges stem from entrepreneurship as a dynamic process phenomenon, of which entrepreneurial ideas and opportunities are a part. Dynamics combines opportunity creation and discovery approaches, innovation, and arbitrage views. There are practically no approaches to these concepts within the entrepreneurial process and journey where they are viewed as the main features of the entrepreneurship discipline. The scientific discussion about the origin and nature of the entrepreneurial opportunity and idea is ongoing – whether it has an objective or subjective origin and, consequently, whether opportunities are discovered or created or a combination of the two.
2. The analysis of the entrepreneur's behaviour during the entrepreneurial journey clearly shows the subjective nature of an idea and an opportunity (perception). During the journey, the entrepreneur's perception of the opportunity and idea is influenced by the dynamics of the entrepreneurial process and emotional reactions to it. Whether the perceived entrepreneurial opportunity is confirmed as real will be revealed when the idea and opportunity are realised through the entrepreneurial journey.
3. According to the theory of planned behaviour, perception is a predictor of entrepreneurial behaviour. This real-time cognitive component of the entrepreneurial process is challenging in terms of measurement. The study has shown that perceptions of one's ideas and opportunities significantly affect behaviour. Therefore, most previous research has focused on other entrepreneurial activity indicators. The study indicated that fluctuations of emotions/affection and related perceptions are integral to an entrepreneurial journey. Idea and opportunity attractiveness and feasibility perceptions depend on the context and progression of the entrepreneurial process and journey. We found that the transformation of ideas and opportunities is subject to strong positive and negative fluctuations as additional information emerges and entrepreneurial skills grow.
4. The dynamic development of the ecosystem is multidimensional, both in the local-global and cross-sector sense, accelerating the entrepreneurial process, shortening the start-up cycle period, and creating ever-smaller windows of opportunity. With the transition from an efficiency-based to an innovation-based development phase (according to the World Economic Forum), Estonian start-ups have won global trust, characterised by over 95 per cent foreign investment in start-ups of Estonian origin. At the same time, the best

Estonian examples demonstrate the shortening of start-up cycles several times over.

5. A window of opportunity is formed under the influence of external ecosystem factors as perceived by entrepreneurs (Study III). A window appears under the influence of various conditions. Study IV showed that a city's brand creates a window of opportunity for entrepreneurs. In this case, the window of opportunity is a chance to use the branded cultural heritage of the city and a particular museum in entrepreneurial activity. Thus, in Study IV, local brands of cultural institutions, including museums, create more extensive entrepreneurial opportunities than city brands. Development strategies of museums, use of local brands, new consumer behaviour patterns, and demand for local brands show exactly how entrepreneurial opportunities could be implemented at the industry level and how windows of opportunity are formed at the same level.

The findings enhance our understanding of the entrepreneurial opportunity, process, and journey. This work contributes to the existing knowledge on idea-opportunity interrelations and the role of behavioural factors (perception) and external factors (ecosystem) in the opportunity trajectory.

6.1 Practical Implications

The research makes several practical contributions.

Firstly, (Study II) the research results can be applied in the educational process. When teaching students in entrepreneurship courses, it is vital to apply the model developed in this study and give a clear understanding of the entrepreneurial journey and opportunity as dynamic phenomena that change and develop over time. The approach will allow students (potential entrepreneurs) to understand that the idea needs to be constantly transformed. Teaching students those ideas and opportunities are separate constructs with different perceptions is also essential. Additionally, in entrepreneurial courses, it is crucial to track the dynamics of the development of ideas and opportunities and encourage the students themselves to keep a diary of changes.

Furthermore, entrepreneurs can understand from these results that their perception of ideas and opportunities depends on affective factors (affecting mood, emotional evaluation, subjective perception) and should be assessed in different conditions to increase the degree of objectivity. In the text of Study II, recommendations are given for implementing and researching entrepreneurial process-based training. Thus, considering the above, the study's results can be used as the basis for forming a new model of entrepreneurial courses. An essential part of the model is flexibility, considering the dynamics and changes in phenomena over time and the subjectivity of assessments of self-observation by students (introduce diaries of self-observation).

Secondly, (Study III) our empirical study highlights the complexity of the entrepreneurial opportunity phenomenon. It helps policymakers create a strategy for regional (entrepreneurship) development. In addition, the results regarding the interaction and interconnection of entrepreneurial, educational, and engineering ecosystems are valuable for building a long-term strategy for the integration of education into ecosystem development (developing entrepreneurial skills and entrepreneurial thinking in the community).

Thirdly, (Study IV), the results of the empirical research allowed empirical testing of the opportunity implementation process and understanding of the role of the context (in the example of the cultural industry and the knowledge-based sphere). These results will enable various stakeholders to make better decisions.

Fourth, the results of the study may be helpful to policymakers. Given the study results, it is possible to develop a more effective strategy for developing entrepreneurship and stimulating entrepreneurial activity. Moreover, the study results help form a system of measures for developing individual industries (cultural, high-tech). Additionally, the ecosystem and dynamics approaches are a working means for analyzing the development of national entrepreneurial ecosystems and their development.

6.2 Limitations and Suggestions for Future Studies

Finally, the generalisability of these results is subject to certain limitations.

Firstly, in terms of the analysis of the opportunity and idea (Study II), a limited sample (one group of students) and a period (a few months) are among the limitations. The study was focused on the initial stages of the entrepreneurial journey. It would be of great interest to trace the real-time development of the opportunity and idea not only at the initial stages but also at the following stages of the entrepreneurial process.

The most important limitation of Study III lies in the fact that the examination of the influence of ecosystem factors on the formation of the opportunity and window of opportunity (Study III) was conducted using only the Estonian case, which is a limitation since Estonia has several specific traits – its Soviet past, and an active transformation of the economy. Future trials should assess the impact of ecosystem factors on the example of numerous economies at different stages of development, of varying sizes, and with diverse historical backgrounds.

Another limitation of the study is that Study IV examines entrepreneurial opportunities in the cultural context, aiming to identify how the brand of a city and a museum create a window of opportunity. A further study could assess the development of entrepreneurial opportunities at various stages of creating a brand – the initial and later stages. Further research is needed to assess different industrial contexts and compare how the opportunity window is formed in various industries.

This research has given rise to many questions in need of further investigation. Our theoretical and empirical-qualitative findings can serve as a basis for propositions and hypotheses for future (quantitative) research.

The first reference to the Idea-Opportunity gap suggests several new questions: does anything change in the Idea-Opportunity mechanism in different types of companies? Are there differences in various types of entrepreneurships, for instance, in the knowledge-based and social entrepreneurship mechanisms? How does the Idea-Opportunity mechanism function at the entrepreneurial teams' level (when teams make decisions in contrast to individual decision-making)? These research questions represent a new avenue for future studies.

The construct of the idea cannot be evaluated in isolation. Additionally, the same ideas can be differently evaluated and transformed depending on several factors, including the entrepreneurship environment. Future research should, therefore, concentrate on investigating different dynamic environments' context influences on the Idea-Opportunity mechanism and the transformation of ideas and opportunities during the entrepreneurial journey.

Do the concepts in the studies essentially overlap with the system of concepts (of practical everyday language) used by the participants in the entrepreneurial process? A separate topic could be the terminology of entrepreneurial opportunities and ideas in research and the entrepreneur's conceptual-cognitive approach to these terms, which we did not study. However, this affects the relevance of survey results and could be addressed in future studies.

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SUMMARY IN ESTONIAN

Idee ja võimaluse tuvastamine ja rakendamine ettevõtlusprotsessis ja -teekonnal

Uurimuse aktuaalsus ja motivatsioon

Ettevõtlusvõimaluste tuvastamine ja rakendamine kujutavad endast keerulist protsessi abstraktsete mõistete tõlkimisest konkreetseteks eesmärkideks ja tulemusteks. Doktoritöös süvenetakse ettevõtlusvõimaluste kujunemisse ja nende arengusse ajas. Arvestades kiireid ja ümberkujundavaid muutusi ettevõtlusmaastikul, mida iseloomustab uudsete tehnoloogiate pidev esile kerkimine, teabe rohkus, tarbijate nõudmiste muutumine ja uute konkurentide ilmumine, muutub selle dünaamika mõistmine äärmiselt asja- ja ajakohaseks.

Esiteks, viimaste kümnendite jooksul on kasvanud seisukohtade paljusus ettevõtlusvõimaluste olemuse tõlgendamisel (sh., Alvarez ja Barney, 2007; Ardichvili *et al.*, 2003; Gaglio ja Katz, 2001; Kirzner, 1997; de Bruin ja Ferrante, 2011; Davidsson, 2015; Dimov, 2007, 2020; Wood *et al.*, 2010, 2021). Senistes uuringutes on vähe tähelepanu pööratud ettevõtlusidee ja -võimaluse vastastikusele seosele ettevõtlusprotsessis ja -teekonnal.

Teiseks, ettevõtlusidee ja -võimaluse seostamine ettevõtlusprotsessi kulgemise kontekstis tähendab vajadust nende nähtuste päritolu käsitlemiseks dünaamikas. Jätkuvaks diskussiooniteemaks on küsimus, kas ettevõtlusvõimalused eksisteerivad objektiivselt või on need loodud ettevõtjate poolt (Alvarez ja Barney, 2007; Davidsson, 2015; Wood *et al.*, 2010, 2014), ning mis toimub nendega ettevõtlusteekonnal.

Kolmandaks, ideede ja võimaluste käsitus dünaamikas nõuab ettevõtlusprotsessi uurimist ajalises kulgemises – ettevõtlusteekonnal, ja ettevõtja subjektiivse kognitiivse ja afektiivse taju mõju nende nähtuste mõtestamisele. Kui nende tegurite mõju on uuritud pigem üldiselt (Foo, Uy ja Baron, 2009; Piredda, 2020), siis, milline on emotsionaalsete kõikumiste mõju ettevõtlusprotsessi dünaamikat arvestades, on jätkuvalt vähe käsitletud.

Neljandaks, ettevõtlusprotsessi edukus sõltub asjaolust, kuidas ettevõtlusidee ja ettevõtlusvõimaluse kasutamine on ajastatud nn 'võimaluse aknas' (Casson, 1982). 'Võimaluse akna' olemasolu sõltub keskkonnast – ettevõtluse ökosüsteemist (näiteks, Isenberg, 2011; Stam, 2015). Samas, ettevõtluse ökosüsteemi (arengu) dünaamika ja selle mõju ettevõtlusvõimalustele ning ettevõtlusprotsessile vajab täiendavat selgitamist.

Viiendaks, ettevõtlusvõimaluste päritolu tuleneb erinevatest keskkondadest, milleks võib olla innovatsiooni, ettevõtluse, sektoraalne, digitaalne, hariduslik, ülikooli, regionaalne, globaalne ja nende tunnuste kombinatsiooniga ökosüsteem (Autio *et al.*, 2018; Velt *et al.*, 2018; Miller ja Acs, 2017, Stam, 2015).

Doktoritöö käsitleb ettevõtlusvõimalust, ettevõtlusprotsessi ja teekonda erinevates keskkondades, samuti on see valdkond edasisteks uuringuteks.

Doktoritöös uuritakse ettevõtlusvõimalusi mõjutavaid tegureid, hõlmates ettevõtja afektiivset ettekujutust olukordadest dünaamikas, ökosüsteemiga seotud mõjureid (elemente), samuti nende kontseptsioonide rakendamist erinevates valdkondades, sealhulgas teadmismahukates tehnoloogia-sektorites ja kultuuri valdkonnas.

Eesmärk, uurimisküsimused ja uurimisülesanded

Uurimistöö peamiseks eesmärgiks on avada idee ja ettevõtlusvõimaluse dünaamiline iseloom ettevõtlusprotsessis ning teekonnal. Parema arusaama oluliste ettevõtluse elementide dünaamikast tagab võimaluse teha paremaid valikuid ja otsuseid nii ettevõtjate kui ka ettevõtluse ning innovatsiooni tugistruktuuri tasandil ja poliitika kujundamisel. Uurimisküsimused ja ülesanded on esitatud Tabelis 1.

Tabel 1. Uuringu uurimisküsimused ja ülesanded

Uuring	Uurimisküsimused	Uurimisülesanded
Peatükk I Uuring I	1. Milline roll on võimaluse leidmisel ja loomisel ettevõtlusteoorias üldiselt ning ettevõtlusprotsessi ja teekonna kontekstis konkreetselt?	1a. Anda ülevaade ettevõtlusvõimaluse kohast ettevõtlusteoorias. 1b. Luua arusaam võimaluse tuvastamisest (avastamisest ja/või loomisest) ettevõtlusteekonnal. Määratleda peamised uurimiskonstruktsioonid (konstruktid).
Peatükk I Uuring I Uuring II	2. Kuidas idee ja võimalus väljenduvad ettevõtlusteekonnal: objektiivne ja subjektiivne vaade?	2a. Arendada välja arusaama dünaamika rollist ideede ja võimaluste kujunemisel ettevõtlusteekonnal objektiivses ja (ettevõtja) subjektiivses kontekstis. 2b. Kaardistada idee ja võimaluse taju arengut ettevõtlusteekonna esialgsel etapil (õppimise kontekst, taju kujunemise empiiriline testimine).
Uuring II	3. Kuidas ettevõtlusideede ja võimaluste (ettevõtja) taju muundub ja fluktureerib ettevõtlusteekonna algsetel etappidel?	3a. Luua arusaam, mis mõju on (ettevõtja) tajul idee ja võimaluse kujunemisele. 3b. Jälgida idee ja võimaluse kujunemise (taju) dünaamikat, et tuvastada ja kaardistada idee-võimaluse taju kõikumised ettevõtlusteekonnal.
Uuring III	4. Kuidas ökosüsteemi tegurid mõjutavad ettevõtlusideid ja võimalusi ettevõtlusprotsessi ja teekonna käigus?	4a. Süstematiseerida ettevõtluse ökosüsteemi arengu tegurid ja etapid. 4b. Tuvastada tegurid, mis kujundavad 'võimaluse akent'. 4c. Analüüsida ettevõtluse ökosüsteemi, ettevõtlusvõimalust ja teekonda koostoime dünaamikas.

Uuring	Uurimisküsimused	Uurimisülesanded
Uuring III Uuring IV	5. Kuidas eeldused ettevõtlusvõimaluse tuvastamiseks, arenguks ja kasutamiseks avalduvad ettevõtlusprotsessis ja teekonnal erinevate majandussektorite ja riikide (konteksti) näidetel?	5a. Luua arusaam, ettevõtlusvõimaluse rakendusest sektoraalses kontekstis. 5b. Rakendada arusaama ökosüsteemist ja ettevõtlusvõimalusest erinevates sektorites - kultuuri (muuseum) valdkonnas ja teadmuspõhistes alustavates (tehnoloogia) ettevõtetes.

Uurimuse sisu ja uudsus

Doktoritöö keskmes on ettevõtlusprotsess, idee ja ettevõtlusvõimalused ettevõtlusteeconnna (dünaamilise arengu) kontekstis. See lähenemisviis arendab edasi senist arusaama ettevõtlusvõimaluse tuvastamise ja loomise vastastikustest seostest ettevõtlusteeconnnal, samuti võimaluse käsitlusest subjektiivse ja objektiivse nähtusena. Nähtuste dünaamikast lähtuv käsitlus võimaldab kombineerida erinevaid kontseptuaalseid vaateid ideele, selle olemusele ja ettevõtlusvõimaluse erinevatele perspektiividele. Uuringud I–IV, mis moodustavad doktoritöö tuuma, on järjestatud vastavuses ettevõtlusprotsessi struktuurile, nagu on näidatud Joonisel 1. Doktoritöö üldine teoreetiline käsitlus on avatud Peatükis 2. See avab lühidalt kaasaegse käsitluse ettevõtlusest, ettevõtlusprotsessist ja teekonnast, ettevõtlusvõimalusest ja teaduslikust diskussioonist selle olemusest, ettevõtlusvõimaluse ja idee kujunemisest ettevõtlusteeconnnal ning ökosüsteemist, mis raamib ‘võimalus(t)e akent’. Peatükk ühtlasi juhatab sisse Uuringute I–IV probleemipüstituse.

Uuring I on kontseptuaalne teoreetiline artikkel, mis käsitleb ettevõtluse põhinähtusi – ettevõtlusprotsessi ja teekonda. Kasutatud ettevõtlusprotsessi mudel struktureerib selle terviku etappideks, mis võimaldab avada protsessi kulgemist ajas – teekonnana. Sellega arendatakse edasi ettevõtlusprotsessi senine käsitlus (Bhave, 1994; Mets *et al.*, 2013) ja rakendatakse McMulleni ja Dimovi (2013) ettevõtlusteeconnna (kontseptsiooni) uurimiskonstruktsiona, mis on senise teooria oluline edasiarendus. Kasutusele võetud ettevõtlusprotsessi ‘küp-suse’ (taseme) kontseptsiooniga muudetakse ettevõtlusprotsess ja teekond mõõdetavaks (läbi artifaktide kui verstapostide) kogu selle ulatuses. Lisaks, arendatakse edasi ettevõtlusteeconnna ‘välja’ mõistet. Mõlemad lähenemisviisid on uudne panus ettevõtluse uuringutesse.

Uuring II keskendub alustava ettevõtja (vastaval kursusel osaleva üliõpilase) ettevõtlusvõimaluse ja idee (tajumise) dünaamikale ettevõtlusprotsessis uue ettevõtte arendamise algsetel etappidel. Uuringu oluline panus ettevõtluse teaduskirjandusse on afektiivsetest teguritest põhjustatud ettevõtja kognitiivse käitumise (taju) ning otsuste fluktuueerumise kaardistamine dünaamikas. Uuring demonstreerib afektiivsete tegurite mõju ettevõtja idee ja ettevõtlusvõimaluse hinnangute kujunemisele. Uurimuse tulemusena tekkis arusaam, et ettevõtlus-idee ja võimalus on ettevõtja jaoks kaks erinevat konstruktsiooni. Lisaks,

uurimuse metodoloogiline uudsus seisneb reaalajas mõõtmistel kasutades spetsiaalselt arendatud aruandlusliku meetodi instrumenti.

Uuring III arendab edasi ettevõtlusvõimaluse 'akna' mõistmist ettevõtluse ökosüsteemi dünaamika kontekstis. Ettevõtluse ökosüsteemi dünaamikat Eestis analüüsitakse Maailma Majandusfoorumis kasutatava arengufaaside raamistikus. Ökosüsteem on artikli käsitluses ettevõtlusvõimaluse allikas kui ka selle kasutamise võimaldaja. Eesti alustavate (teadmuspõhiste) tehnoloogiafirmade (idufirmade) kaasuste põhjal tuvastatakse arendusperioodi olulist lühenemist sünkroonis ökosüsteemi küpsuse kasvuga, mis iseloomustab globaalset konkurentsi ettevõtjate vahel ettevõtlusvõimaluse üha kitseneva 'akna' kasutamisel.

Uuring IV täiendab Uuringus III kajastatud tehnoloogia rakendamise seotud ettevõtlusvõimaluste käsitlust kultuuri (muuseumide) valdkonnas loodavate brändingust tulenevate võimalustega Venemaal. On märkimisväärne, et ettevõtlusvõimaluse moodustamine kultuurivaldkonnas ja 'aknana' interpretatsioon dissertatsiooni diskussioonis (Ptk. 5) on esmakordne.

Väitekirja struktuur

Väitekiri koosneb raamtekstist ja neljast artiklist (kontseptuaalne skeem on esitatud Joonisel 1). Väitekiri on üles ehitatud järgmiselt: esimeses osas on sissejuhatus, mis sisaldab motivatsiooni ja põhikonstruktsioone, uurimiseesmärki, uurimisküsimusi ja -ülesandeid ning uurimistöö sisu ja uudsuse kokkuvõtet. Teise osa moodustab väitekirja teoreetiline raamistik. Kolmandas osas esitatakse dissertatsiooni üldine metoodiline lähenemine ja Uuringute I–IV metoodika spetsiifilisemalt. Neljas osa sisaldab nelja artiklitena publitseeritud uuringut (I–IV). Viies – uuringuid I–IV ja eelnevaid dissertatsiooni peatükke kokkuvõttev arutelu toob välja peamised tulemused. Doktoritöö järeldused, võimalikud rakendused, piirangud ja ettepanekud tulevasteks uuringuteks on kokkuvõetud viimases – kuuendas osas.

TEOREETILINE RAAMISTIK

Ettevõtlus

Viimastel aastakümnetel on suurenenud ühiskonna huvi ettevõtluse kui jätkusuutliku arengu mootori vastu. See asjaolu on tõstnud ettevõtluse kui teadusliku distsipliini uuringute tähtsust oluliselt. Kui varasemate uuringute fookuses on olnud ettevõtja (Shane ja Venkataraman, 2000), ja hiljem ressursi-põhine ettevõtluse käsitlus (Barney, 1991), siis praeguseks on kujunenud välja kompleksne distsipliin rõhuasetusega ettevõtlusvõimalustel ja protsessidel.

Shane ja Venkataraman (2000, lk. 218) määratlevad ettevõtlust ettevõtja ja ettevõtlusvõimaluse seosena ja uurimisvaldkonnana „[...] kuidas, kelle poolt, ja milliste tulemustega võimalusi luua tooteid ja teenuseid avastatakse, hinnatakse ja kasutatakse.” Selles kontekstis on olulised, esiteks, ettevõtjat iseloomustavad

omadused (muutujad) ja, teiseks, tegurid ja protsessid seoses ettevõtlusvõimlustega. Hilisemas järel-analüüsis Shane (2012) rõhutab ettevõtlusprotsessi kui ettevõtluse põhitunnuse tähtsust. Venkataraman (2004) ja teised (näiteks, Isenberg, 2011; Stam, 2015) kontseptualiseerivad ettevõtluse keskkonna – ettevõtluse ökosüsteemi funktsiooni.

Eeltoodud lähenemisviisist lähtub dissertant oma uuringutes.

Ettevõtlusprotsess ja teekond

Ettevõtluse keskne tunnus on ettevõtlusprotsess, see viitab vajadusele protsessipõhiseks lähenemiseks (*process approach*) (Van de Ven, 1992) uuringutes. Kõige sagedasem ja tüüpilisem ettevõtlusprotsessi ilming on uue ettevõtte loomise protsess (New Venture Creation Process – NVC) (Davidsson ja Gruenhagen, 2021). Sellest tuleneb, et sisendressursid pole piisavad ennustamiseks tulevase ettevõtte (idufirma, *start up*) toimimist. Optimaalset ressursside kombinatsiooni peetakse olulisemaks kogusest (Alvarez ja Barney, 2000, 2005; Cha ja Bae, 2010). Ettevõtlusprotsessi määratletakse võimaluste identifitseerimisena, mille kaudu luuakse väärtust katse ja eksituse meetodil (Cha ja Bae, 2010). Väärtuse loomiseks vajatakse teadmisi, ressursse ja informatsiooni, millest ettevõtja loob optimaalset kombinatsiooni ettevõtlusprotsessi käigus (Baker, Miner ja Eesley, 2003).

McMullen ja Dimov (2013) kritiseerivad muutujatel [staatilistel mudelitel ja seostel] põhinevaid ettevõtlusuuringuid ja pakuvad rakendada ettevõtlusteekonna mõistet selleks, et käsitleda ettevõtlusprotsessi ajalises kontekstis dünaamilisena. Autorid väidavad, et probleem ettevõtlusele keskenduvate artiklitega on protsessi-orientatsiooni ja ajateguri puudumine, ning teekonna mõiste ignoreerimine majandusteoorias. Samuti, autorid püstitavad küsimusi (empiiriliste vastusteta) ettevõtlusteekonna kohta – olemus, lõpp, algus, muutujad ja konstandid ettevõtlusprotsessis. Ettevõtlusteekond koosneb tehtud otsustest ja tegudest. Need otsused ja tegevused viivad loomiseni ja avastamiseni, muundades ideed ja võimalused reaalsuseks.

Me defineerime ettevõtlusteekonda mõttelise konstruktsioonina, mis on ettevõtlusprotsessi tuletis ajas. See on ettevõtlusprotsessi elluviimise/arengu trajektoor ajaskaalal, aga on võimalik, et teistes dimensioonides (põhineb autoritel: Cha ja Bae, 2010; McMullen ja Dimov, 2013; Mets, 2022). Ettevõtlusprotsess on (ettevõtja) tegevuste/tegude jada. Ettevõtlusteekond on, esiteks, dünaamiline (ettevõtlusprotsessi käsitus ajas), teiseks aga strateegiline printsiip (teekonna valik, mis määrab, kas/kuidas võimalus avastatakse või luuakse). Ettevõtlusteekond on ettevõtlusprotsessi ja sellega seonduvate sündmuste kajastus ajas.

Ettevõtlusvõimalus. Võimaluse avastamine ja loomine

Ettevõtlusvõimaluse käsitus võimaldab saada aru ettevõtluse fundamentaalsest nähtusest: oskusest identifitseerida potentsiaali ja muundada seda millekski kombatavaks (Shane ja Venkataraman, 2000). Põhiline aspekt võimaluse ära-

tundmiseks ja arendamiseks on dünaamilise lähenemisviisi rakendamine. Dünaamiline lähenemisviis ettevõtlusele nõuab ka dünaamilist vaadet võimalusele.

Teine aspekt võimaluse äratundmises on alternatiiv: võimaluse avastamine (discovery theory) või loomine (creation theory). Kui võimalus on avastatud, siis see eksisteerib objektiivselt. Kui võimalus on loodud, saab seda nimetada subjektiivseks nähtuseks, mis on tekitatud ettevõtja poolt. See eksisteerib ettevõtja peas või on loodud ettevõtja tegevuse tagajärjel (Alvarez ja Barney, 2007; Alvarez, Barney ja Anderson, 2013; Dyer *et al.*, 2009; Wood ja McKinley, 2010). Võimalus ja selle tuvastamine on üks olulisematest kontseptsioonidest ettevõtluse olemuse mõistmisel (kas subjektiivne või objektiivne nähtus/protsess), mõjutades ettevõtlusprotsessi ning ettevõtja tegevusi, kaasa arvatud juhtimist, tulemusi ja strateegiat.

Hiljutine käsitlus väidab, et avastamise ja loomise teooriad ei pea olema vastuolulised (Schaefer, 2017). Võimalik on kombineerida need kaks lähenemisviisi. Nii jõutakse dünaamilise lähenemisviisi juurde ja mõttele, et võimaluse tuvastamine ei ole ühekordne tegu. See on protsess, mis kordub pidevalt. See viib meid ühtlasi dünaamilise perspektiivi ja ettevõtlusteekonna konstruktsiooni olulisuse tunnistamiseni. Doktoritöö määratleb ettevõtlusvõimaluse konstruktsiooni kui võimet kujundada ideid eesmärkideks ning neid eesmarke ellu viia.

Ettevõtlusvõimalus ja idee ettevõtlusteekonnal

Ettevõtlusvõimalusi ja ideid peetakse ettevõtluse võtmemõisteteks. Hoolimata üha suuremast tähelepanust ettevõtlusvõimalustele ja ideedele, on nende nähtuste olemus jätkuvalt arutelu teema. Esiteks, kõige olulisem arutelu toimub ettevõtlusvõimaluste avastamise ja loomise üle, nagu kirjeldatud eespool. Küsimus, kumb neist vastandlikest teooriatest peegeldab tegelikku võimaluste tuvastamise protsessi ja kuidas need teooriad on seotud üldise ettevõtlustegevusega (ettevõtlusprotsessiga), on endiselt lahtine. Teine oluline lünk ettevõtluskirjanduses on ettevõtlusidee ja võimaluse omavaheline seos, kas idee ja võimalus on eraldi nähtused või identsed. Kolmandaks, milline roll on ettevõtjate arusaamadel ja kuidas arusaamad mõjutavad ettevõtlusideid uue ettevõtte loomise alguses, milline on afektiivsete tegurite roll. Neljandaks, puudub endiselt ühtne lähenemisviis sellele, kuidas välised tegurid mõjutavad võimaluste äratundmist. Ilmselgelt on olemas märkimisväärne hulk välistegureid/tingimusi. Kuidas nende keerulist mõju arvestada, pole selge. Lisaks on need tingimused pidevas muutuses ning oluline on seda dünaamilist arengut ja muutumist arvesse võtta.

Teaduskirjanduses toimub diskussioon, kas idee ja võimalus on kaks erinevat või üks ja sama nähtus. Vogeli (2017) ja Clauseni (2020) läbi viidud (teoreetilised) uuringud peavad ideed ja võimalust kaheks erinevaks konstruktsiooniks. Clausen (2020) pakub muundumise teooriat, mille järgi abstraktne idee muutub antud aja ja koha raamistikus. Seetõttu, võimaluse areng edeneb ostensiivsest ideest performatiivse ideeni ja lõpuks ettevõteteni. Clauseni lähene mine rõhutab dünaamika ja konteksti rolli.

Davidsson (2015) väidab, et isiklik tunnetus on hädavajalik võimaluste äratundmiseks. Afektiivsed tegurid mõjutavad ettevõtja käitumist kui ka ettevõtlusvõimaluste äratundmise ja rakendamise võimet. Tunnetus mõjutab dünaamikat ning muudab põhjalikult otsuste tegemise protsessi (Wood *et al.*, 2014). Kui hinnata ettevõtlusvõimalusi dünaamikas, jääb oluliseks küsimus: kuidas afektiivsed tegurid mõjutavad ideede ja võimaluste ümberkujunemist? Milline roll on afektiivsetel võnkumistel/kõikumistel? Need küsimused vajavad jätkuvat tähelepanu ettevõtlusuuringutes.

Ökosüsteemi raamistik ja võimaluse aken

Ettevõtlusprotsess, teekond ja võimalused on välja kujunenud osaliselt väliste tegurite mõjul. Ökosüsteemi käsitus ettevõtluses on arenenud Moore (1993), Isenbergi (2011), Stami (2015) jt mõjul. Stam pakkus välja süsteemi, milles ettevõtluse ökosüsteem põhineb 'sammastel', mis on jagatud kaheks grupiks: süsteemsed tingimused (võrgustikud, juhtimine, rahandus, talent, teadmised, tugiteenused) ja raamistiku tingimused (ametlikud institutsioonid, ettevõtluskultuur, füüsiline infrastruktuur, nõudlus).

Ettevõtluse ökosüsteemis avaldub ettevõtlusvõimaluse 'aken', millena mõistetakse teatavat sündmuste ja tingimuste kogumit, ning mis teeb võimalikuks ettevõtlusvõimaluse tuvastamise ja kasutamise (Messica ja Mehrez, 2002).

Ökosüsteemi dünaamilist arengut peaaegu pole käsitletud varemates uurin gutes. Doktoritöö raames oli vajalik analüüsida muutusi ökosüsteemis, selle dünaamilist arengut ja seost ökosüsteemi kujunemise ning ettevõtlusvõimaluste arengu trajektooride vahel. Küsimus dünaamika kohta jääb oluliseks ettevõtluse ökosüsteemi kontekstis kui ka teistes ettevõtlusega seotud nähtustes.

METODOLOOGILISED KAALUTLUSED

Doktoritöö töö on üles ehitatud protsessipõhisele lähenemisviisile, käsitledes ettevõtlust kui tagasisidepõhist iteratiivset protsessi, mis aja jooksul areneb – alustades kavatsusest ja kulmineerudes idee(de) elluviimisega. Uuring põhineb kvalitatiivsel lähenemisviisil, mis võimaldab mõista uuritud nähtuste olemust. Doktoritöö uuringutes rakendati segameetodit (Tabel 2): süsteemne mõtlemine ja süsteemne lähenemine (I Uuring); pikaajaline vaatlus, lisaks küsimustik ja poolstruktureeritud süvaintervjuid (II Uuring); juhtumiuuring (III Uuring); vaatlus (IV Uuring).

1. Süsteemset mõtlemist ja lähenemist kasutatakse ettevõtlusteeconna modelleerimiseks ja sügavama arusaama saavutamiseks ettevõtlusprotsessi, teekonna ja selle 'välja', ettevõtte loomise küpsuse, aja ja koha vastastikusest seosest (Uuring I).
2. Segameetodit, mis koosneb pikaajalisest vaatlusest, küsimustikust ja poolstruktureeritud intervjuudest, kasutatakse selleks, et tuvastada idee-võimaluse vastastikust toimet reaajas ettevõtlusteeconna algsetel etappidel (Uuring II).
3. Juhtumiuuringu kavandamist, induktiivset ja uurivat lähenemist on kasutatud ettevõtlusvõimaluste ja ökosüsteemi analüüsimiseks (Uuring III).
4. Vaatlust on kasutatud selleks, et analüüsida võimaluse moodustamise protsessi kultuurivaldkonna kontekstis (Uuring IV).
5. Uurimus põhineb kvalitatiivsel lähenemisviisil. Kvalitatiivne lähenemine on vajalik käesoleva uuringu eesmärkide saavutamiseks. Eelkõige soovitakse mõista ettevõtlusvõimaluse äratundmise ja rakendamise protsessi dünaamikat, seonduvaid nähtusi ja problemaatikat erinevatest vaatepunktidest.

Tabel 2. Doktoritöö uurimisprojekti metoodika kavand

Uuring	Uurimisülesanne	Meetod ja lähenemine
Peatükk 1 Uuring I	1a. Anda ülevaade ettevõtlusvõimaluse kohast ettevõtlusteoorias. 1b. Luua arusaam võimaluse tuvastamisest (avastamisest ja/või loomisest) ettevõtlusteeconnal. Määratleda peamised uurimiskonstruktsioonid (konstruktid).	Kirjanduse ülevaade ja analüüs. Süsteemne mõtlemine ja lähenemine.
Peatükk 1 Uuring I Uuring II	2a. Arendada välja arusaam dünaamika rollist ideede ja võimaluste kujunemisel ettevõtlusteeconnal objektiivses ja (ettevõtja) subjektiivses kontekstis. 2b. Kaardistada idee ja võimaluse tajumise arengut ettevõtlusteeconna esialgsel etapil (õppimise kontekst, taju kujunemise empiiriline testimine).	Süsteemne käsitlus/mõtlemine ja segameetod, mis koosneb pikaajalisest vaatlusest, aruandlusliku meetodi instrumendist, küsimustikust ja poolstruktureeritud intervjuudest, on rakendatud selleks, et tuvastada idee-võimaluse vastastikust mõju ettevõtlusteeconna algsetel etappidel.
Uuring II	3a. Luua arusaam, mis mõju on (ettevõtja) tajul idee ja võimaluse kujunemisele. 3b. Jälgida idee ja võimaluse kujunemise (taju) dünaamikat, et tuvastada ja kaardistada idee-võimaluse taju kõikumised ettevõtlusteeconnal.	Segameetod, mis koosneb pikaajalisest vaatlusest koos küsimustikuga ja põhjalike intervjuudega, on rakendatud selleks et tuvastada idee-võimaluse (vastastikuse mõju) taju ettevõtlusteeconna algset etapil. Uuring põhineb seitsme doktorandi juhtumil.

Uuring	Uurimisülesanne	Meetod ja lähenemine
Uuring III	4a. Süstematiseerida ettevõtlusökosüsteemi arengu tegurid ja etapid. 4b. Tuvastada tegurid, mis kujundavad 'võimaluse akent'. 4c. Analüüsida ettevõtluse ökosüsteemi, ettevõtlusvõimalust ja teekonda koostoime dünaamikas.	Juhtumiuuringu kavandamine ning induktiivne ja uuriv lähenemisviis on kasutusel ettevõtlusvõimaluste ja ökosüsteemi vastastikuse toime analüüsimiseks.
Uuring III Uuring IV	5a. Luua arusaam, ettevõtlusvõimaluse rakendusest sektoraalses kontekstis. 5b. Rakendada arusaama ökosüsteemist ja ettevõtlusvõimalusest erinevates sektorites – kultuuri valdkonnas (muuseum) ja teaduspõhistes alustavates (tehnoloogia) ettevõtetes.	Juhtumiuuringut ja vaatlust kasutatakse selleks et analüüsida ettevõtlusvõimaluse tekke ja kujunemise protsessi valdkonna (tehnoloogia, kultuur) kontekstis.

TULEMUSED JA ARUTELU

Dissertatsiooni Uuringud I–IV annavad panuse ettevõtluse protsessipõhisesse käsitluse ja selle võtmemoistete – ettevõtlusprotsess ja teekond, ettevõtlusvõimalus ja idee, mõtestamisse ning arendamisse. Lisaks, hinnatakse ettevõtluse fenomeni ja mehhanisme dünaamikas põhinedes protsessiteoorial (Moroz ja Hindle, 2012; Van de Ven ja Engleman, 2004; Pentland, 1999), vastandudes muutujate teooria põhiste käsitlustele (Poole et al., 2000; Mohr, 1982). Kuna muutujate teooriast lähtuvad uuringud põhinevad staatilistel mudelitel mõõtes konkreetset nähtust üksnes mingil konkreetset momendil, see lähenemisviis ei sobi protsesside dünaamika (protsessipõhiseks) käsitluseks (McMulle ja Dimov, 2013). Sobivad aga narratiivid ja kaasus-uuringud ning reaajas mõõtmised (Mets, 2022). Käesoleva dissertatsiooni tulemused on lühidalt kokku võetud Tabelis 3, mis on käesoleva arutelu osaks.

Esiteks, arendatakse välja ettevõtlusprotsessi dünaamiline käsitlus – ettevõtlusteekond ja mõõdikud protsessi kulgemise mõõtmiseks/hindamiseks (Uuring I). Küpsuse kriteeriumi ja artifaktide (kui mõõdikute ehk 'verstapostide') kasutamine ettevõtlusprotsessi ja teekonna kulgemise (trajektoori) kirjeldamiseks ja mõõtmiseks on ettevõtlusuuringutes esmakordne. Ettevõtlusvõimaluse avastamise ja loomise teooriad tunnistavad ainult ühte neist variantidest. Võimaluse tuvastamine ja arendamine meie käsitluses toimub seevastu nende ääretingi-mustega (Avastamine-Ekspluatatsioon, Arbitraaž-Innovatsioon, Eksisteeriv-Loodav) ettevõtlusteekonna väljal, nagu selgitame dissertatsiooni arutelu peatükis.

Teiseks, Uuring II kujundab arusaama idee ja võimaluse fenomenist ning sellest, kas idee ja võimaluse tajumine on omavahel võrreldav või mitte. Uuringus, lähtudes üleskutsest eraldada idee ja võimalus (näiteks, Vogel, 2017), Clausenilt (2020), leiame, et ideed ja võimalust peaks uurima aja ja koha

taustal. Siiski, erinevalt Vogelst (2017) ja Clausenist (2020), me testisime afektiivse komponendi mõju idee-võimaluse vastastikusele seosele. Eelnev kirjandus (Cristofaro, 2019; Davidsson, 2015; Wood et al., 2014) osutab sellele, et afekt mõjutab oluliselt indiviidi käitumist. Kooskõlas sellega, me näitasime afekti mõju potentsiaalsete ettevõtjate käitumisele. Potentsiaalsete ettevõtjate käitumist analüüsi ettevõtlusprotsessil põhineva reaalsel protsessi imiteeriva ettevõtlustreeningu käigus. Uuringu käigus leiti, et idee ja võimalus on pidevas vastastikuses toimes, pidevas muutumises. See vastastikune toime on mõjutatud idee käivitamisest ja idee allikast (vaata: Trabskaia ja Mets, 2019). Uuringu tulemused näitavad, et ettekujutused ideest ja võimalusest on erinevad ja ettevõtja tajub neid erinevalt. Idee ja võimalus on ettevõtja seisukohalt kaks erinevat fenomeni.

Kooskõlas Ihriguga (2006) me väidame, et võimalus on ettevõtlusprotsessi aluseks. Sarnaselt Bhave'i tööga (1994), me vaatleme ettevõtlusprotsessi kui protsessi, mis algab ettevõtlusideest ja jätkub kuni võimaluse rakendamiseni. Võrreldes teiste uurimustega (Bhave, 1994; Cha ja Bae, 2010; Keupp ja Gassmann, 2009), tähelepanu on suunatud sellele, kuidas mõjutab afektiivne seisund ettevõtlusidee ja võimaluse arengut.

Uuring III uuris välistegurite mõju ettevõtlusvõimalustele. Eeldused selleks vaatenurgaks tulenevad mitmest varasemast publikatsioonist (näiteks, Baron ja Shane, 2013; Léger-Jarniou ja Tegtmeyer, 2017). Uuring III kinnitab välisteguritega seonduvaid oletusi. Uurimuses rakendati ettevõtlusökosüsteemi 'sammaste' lähenemisviisi (Stam, 2015). Uuringus III tuvastati ökosüsteemi sammaste mõju ettevõtlusvõimaluste moodustamisele ja arengule, arvestades selliseid tegureid nagu võrgustikud, juhtimine, rahandus, talent, teadmised, institutsionaalne raamistik. Lisaks varasemates töodes käsitletud teguritele, kasutame 'võimaluse akna' lähenemisviisi. Leidsime, et ajaliselt sünkroniseeritud 'sammaste' ja tegurite kogum moodustab 'võimaluse akna' konkreetsele idufirma tehnoloogilisele äriideele.

Sünkroniseerimise teemaga seostuvad ökosüsteemi arengu tase ja etapid, mida vaadeldakse dünaamilisena, kus välistegurid mõjutavad ettevõtlusideede ja võimaluste moodustumist. Dünaamika kontekstis, me vaatleme Eesti majandust läbi arengu etappide prisma (WEF, 2014). Vastavalt Maailma Majandusfoorumi (WEF – World Economic Forum) kontseptsioonile, majandusliku arengu etapid on järgmised: Efektiivsus-põhine (efficiency-driven), üleminek Efektiivsus-põhiselt Innovatsiooni-põhisele ja lõpuks Innovatsiooni-põhine (innovation-driven).

Regio ja Mobi Solutions juhtumid on toodud välja Efektiivsus-põhise etapi näidetena. Need näited kujundasid (lisaks Skypile) rolli-mudelit uutele ettevõtetele erinevates majandusharudes, panustades sellega Eesti ettevõtluskultuuri. Edukus majanduse ja ettevõtluse ökosüsteemi vaates on määratud erinevate teguritega. Esiteks, globaalseks muutumine. Teiseks, innovatsioon kui arengu alus. Kolmandaks, innovaatilised ärimudelid. Eesti Innovatsiooni-põhisele arenguetapile ülemineku perioodi näiteks on GrabCAD. GrabCAD'i panus on revolutsiooniline (mehhaanika) inseneri-disainis ja mehhaanikatööstuses

tervikuna, sealhulgas mehhaanikainseneride erinevate disainiplatvormide (CAD) ja kogukonna ning selle teadmuse integreerimine, samuti, veel olulisemana – ettevõtete ja inseneride globaalse koostöö platvorm.

Üldiselt, innovatsiooni-põhisele arengule ülemineku etapiga Eestis kaasnes idufirmade globaalseteks kasvamine ja usalduse saavutamine (mis on väljendatud rahvusvahelistes investeeringutes). Bolt on toodud välja innovatsiooni-põhise etapi näitena. Edu sellel majandusarengu etapil ei seisne ainult selles, et ettevõtte on esindatud rahvusvahelisel turul. Bolt kujunes rahvusvaheliseks liidriks ning konkureerib rahvusvahelisel turul.

Lisaks ökosüsteemi küpsuse kasvu ja võimaluse akna sünkroonsuse nähtusele, täheldasime sellega kaasnevat idufirma tootearenduse ja turule mineku perioodi lühenemist. See asjaolu kasvatab ettevõtluse (kohalike) ökosüsteemide ja idufirmade globaalset konkurentsi veelgi.

Uuringustes III ja IV me saime hinnata võimaluse kujundamise ja rakendamise juhtumeid erinevates riikides (Eesti ja Venemaa) ning erinevates teadmusesel põhinevates valdkondades (IT, teenus-platvorm ja kultuurivaldkonnad). Uuringus III, autorid jälgisid rahvusvaheliste võimaluste rakendamist lähtudes riigi ökosüsteemist. Seega, me hindasime ettevõtluse ökosüsteemi ja majandusarengu tegurite mõju võimaluste tekkele ja võimaluse akna moodustamisele Eesti idufirma näitel. Meie hinnang on kooskõlas Suarez, Grodali ja Gotso-poulosi (2015) käsitlusega võimaluse aknast kui olulisest fenomenist äri siseneamiseks turule. Leidsime võimaluse akna kasutusi teadmuspõhistes valdkondades. Ökosüsteemide integratsioon ja koostöö (haridus, ettevõtlus, tehnika, disain jt; lokaalsete ja rahvusvaheliste ökosüsteemide integratsioon) ning riiklikud initsiatiivid tõstavad (investeerimisalast) kindlustunnet ja saavad võimaluse akna moodustamise peamiseks eeldusteks. Ühe sellise eeldusena tuleb vaadelda ka turunduslikke meetmeid, mille näiteks Uuringus IV on toodud lokaalsed kultuurivaldkonna institutsioonide (muuseumid) brändid.

Tabel 3. Doktoritöö tulemused

Uuring	Uurimisülesanne	Tulemused
Peatükk 1 Uuring I	1a. Anda ülevaade ettevõtlusvõimaluse kohast ettevõtlusteoorias. 1b. Luua arusaam võimaluse tuvastamisest (avastamisest ja/või loomisest) ettevõtlusteekonnal. Määratleda peamised uurimiskonstruktsioonid (konstruktid).	Määratlemaks võimaluse kohta ettevõtluse teoorias, me identifitseerisime ettevõtlusvõimaluse ilmingu erinevate ääretunnuste (Avastamine-Kasutamine, Arbitraaž-Innovatsioon, Eksisteeriv-Loodud) vahelisel väljal ja fenomeni loomuse – diskreetne või pidev, vaheldumise. Oluline on võtta arvesse ettevõtlusvõimalus kontekstis ja suhtes teiste ettevõtlusteooriatega nagu ettevõtlusprotsessi, teekonna, avastamise ja loomise teooriad. Uue arengusuunana on tekkinud veendumus, et võimaluse avastamine ja loomine ei pea olema vastuolulised teooriad (Schaefer, 2017). Võimalik on kombineerida neid lähenemisviise. Me jõuame taas dünaamilise käsitluse juurde ja arusaamani, et võimaluse tuvastamine ei ole ühekordne akt. See on protsess, mis kordub pidevalt palju kordi. See tähtsustab veelkord dünaamilise perspektiivi ja ettevõtlusteekonna kontseptsiooni olulisust. Üldistatuna, käesolev doktoritöö defineerib 'ettevõtlusvõimalust' kui tingimuste kogumit kujundada idee eesmärkideks ja nende teostamiseks. Uurimuse põhikonstruktsioon(id) on esitatud Lisa Tabel 1.
Peatükk 1 Uuring I Uuring II	2a. Arendada välja arusaam dünaamika rollist ideede ja võimaluste kujunemisel ettevõtlusteekonnal objektiivses ja (ettevõtja) subjektiivses kontekstis. 2b. Kaardistada idee ja võimaluse taju arengut ettevõtlusteekonna esialgsel etapil (õppimise kontekst, taju kujunemise empiiriline testimine).	Me määratleme indikaatorid ettevõtlusteekonna ja selle arengu (ajaline mõõtkava, ettevõtte küpsus) mõõtmiseks. Tuvastasime ettevõtlusteekonna kulgemist (dünaamikat) kirjeldava näitajana artifaktid, mis võivad olla materiaalsed ja immateriaalsed. Ettevõtlusteekonnal on artifaktid tajutud (ettevõtja poolt) – subjektiivne ettevõtlusprotsessi (ühtlasi uue ettevõtte) küpsuse mõõdik. Idee teostumisel selgub, kas tegemist oli ühtlasi ka objektiivse mõõdikuga. Toetudes kättesaadavale infole, idee ja võimaluse taju arengu empiiriline (reaal-ajas) testimine ja võrdlus viidi läbi esmakordselt. Me leidsime, et arusaam ideest ja võimalusest on erinev; ettevõtjad tajuvad neid kahe erineva nähtusena. Samuti, nende nähtuste dünaamiline areng avaldub eraldi ja oluliselt erinevalt. Enamgi veel, saadud tulemused aitavad meil edasi mõtestada afektiivsete tegurite (tuju, tunne, välistegurid) mõju idee ja võimaluse tajumisele (Joonis 2 ja 3, Uuring II).
Uuring II	3a. Luua arusaam, mis mõju on (ettevõtja) tajul idee ja võimaluse kujunemisele.	Uuring II näitab, et võimalus ja idee on dünaamilised nähtused, mis muutuvad ajas. Kuna võimalus ja idee võivad olla subjektiivsed erinevatel arengu etappidel, ettevõtja tajumisvõime on oluline. Uuringus II, idee ja võimalus muutuvad sõltuvalt ettevõtja tajumisvõime (afektiivne seisund) muutumisest.

Uuring	Uurimisülesanne	Tulemused
	3b. Jälgida idee ja võimaluse kujunemise (taju) dünaamikat, et tuvastada ja kaardistada idee-võimaluse taju kõikumised ettevõtlusteekonnal.	Uuringus II leitakse, et idee ja võimalus arenevad dünaamiliselt. Samuti, uuring näitab idee ja võimaluse (taju) kõikumisi sõltuvalt ettevõtja afektiivsest seisundist, mis kujunes koos protsessi käigus saadava täiendava infoga ja ettevõtja kasvava pädevusega ettevõtlusteekonnal.
Uuring III	4a. Süstematiseerida ettevõtluse ökosüsteemi arengu tegurid ja etapid. 4b. Tuvastada tegurid, mis kujundavad 'võimaluse akent'. 4c. Analüüsida ettevõtluse ökosüsteemi, ettevõtlusvõimalust ja teekonda koostoime dünaamikas.	Uuring III identifitseeris ettevõtlusökosüsteemi arengu etapid, mis põhinevad Maailma Majandusfoorumi (WEF, 2014) välja pakutud kontseptsioonil (majandusliku arengu etapid: Efektiivsus-põhine, üleminek Efektiivsus-põhisest Innovatsiooni-põhisele, Innovatsiooni-põhine). See oli esmakordne Eesti ettevõtlusökosüsteemi siirde analüüs. Tuginedes ettevõtlusökosüsteemi 'sammaste' kontseptsioonile (Stam, 2015) tuvastati ökosüsteemi arengut oluliselt mõjutavad tegurid Eesti näitel. Erinevad arenguetapid, erinevad sambad ja nende kombinatsioonid kujundavad võimaluse 'akna' ajas. Selleks, et tuvastada need tegurid, on oluline läbi viia süstemaatilist ja detailset ettevõtlusökosüsteemi sammaste analüüsi. Teatud ajaliseks eelduseks arengu algetappidel oli valitsuse otsus juurutada IT ja ettevõtlusharidus kõikidel tasemetel. Järgmisel etapil muutusid liidrite ja eeskujude rollimudelid võimaluse akna eeskujudeks. Uuring näitab, et erinevad ökosüsteemi evolutsiooni mõjutavad etapid ja tegurid, mõjutavad ettevõtlusideid ja võimalusi neid märgatavalt muutes ja luues uusi võimaluste aknaid. Me leidsime et need tegurid, mis kasvatasid ökosüsteemi küpsust, kiirendasid ettevõtlusteekonna kulgu ja tootarendust.
Uuring III Uuring IV	5a. Luua arusaam ettevõtlusvõimaluse rakendusest sektoraaalses kontekstis. 5b. Rakendada arusaama ökosüsteemist ja ettevõtlusvõimalusest erinevates sektorites - kultuuri valdkonnas (muuseum) ja teadmuspõhistes alustavates (tehnoloogia) ettevõtetes.	Töös uuriti ettevõtlusvõimalust erinevate sektorite kontekstis, kaasa arvatud teadmuspõhises ja kultuuri sektoris. Arendatud ettevõtlusvõimaluse teoreetilise arusaama harukondlik rakendamine näitas, kuidas teoreetiline lähenemisviis annab praktilise panuse harukondlikuks analüüsiks. Uuringutes III ja IV, me käsitlesime kultuuri- (muuseumid) ja teadmuspõhiste (tehnoloogia) sektorite võrgustikke, selleks et kontrollida meie arusaama võimalustest ja ökosüsteemist. Polaarsed sektorid olid teadlikult valitud (kultuur ja tehnika) selleks, et mõista kuidas ökosüsteemis moodustub võimaluse aken erinevates sektorites. Tehnoloogiaspektori kontekstis kasvav usaldus ökosüsteemi, uue haridusliku aluse juurutamine, uued liidrid ja pöördepunktid said nendeks faktoriteks, mis mõjutavad ökosüsteemi muutusi ja võimaluse akna moodustamist. Kultuurisektoris, linna brändi kujundamine, on loonud võimaluse akna ka kultuuri valdkonnas.

Võttes kokku varasemad uuringud, me leiame, et seni on praktiliselt puudunud dimensioonide raamistik ettevõtlusprotsessi ja teekonna kui uurimiskonstruktsiooni mõõtmiseks. Seega, ei ole ühist arusaama kuidas ettevõtlusvõimalus suhtestub (ettevõtja) ettevõtlusteedkonda. Üldistatult, saame väita, et käesoleva dissertatsiooni uuringud on üks osa kestvast arutelust ettevõtlusidee ja võimaluse olemusest, arendades edasi nende kontseptsioonide dünaamilist käsitlust. Teoreetiline lähenemisviis (Uuring I) ja empiiriline analüüs (Uuring II ja III) näitavad, et mõlema kontseptsiooni sisu on dünaamilises muutuses. Selles osas me oleme nõus Clauseni (2017) kui ka Woodi ja McKinleyga (2017), kes väidavad et dünaamiline lähenemisviis annab võimaluse ühendada vastuolulisi punkte ettevõtlusvõimaluse olemusest.

Idee-võimaluse vastastikune suhe ei tähenda alati, et need sõltuvad vastastikku. See sõltub ettevõtlusprotsessi/teekonna arengu etapist ja ettevõtja kognitiivsest võimekusest (tajust) – subjektiivne aspekt. Meie kasutatud lähenemisviis ettevõtlusvõimaluses peituvad nii objektiivsed kui subjektiivsed aspektid – põhinedes millelgi (eeldusel), mis eksisteerib, ettevõtja loob uusi võimalusi viies oma ideed ellu.

Idee (tihti nimetatud äriideeks) arendamine ettevõtlusprotsessis võib saada alguse tootest või teenusest, tehnoloogiast, ärimudelist või muud tüüpi võimalusest, mis lõpuks jõuab ettevõtte (idufirma) ideeni (võimaluse rakendamine). Ettevõtlusvõimalus areneb ettevõtlusprotsessi/teekonna 'eksisteeriv-loodud' väljal, sõltumata sellest, kas ettevõtja avastas või lõi võimaluse. Idee-võimaluse ja ettevõtlusteedkonna kooskõla tulemus avaldub siis, kui jõutakse turule.

Paljudes artiklites avastamise ja loomise teooriad on kaks vastuolulist lähenemisviisi võimaluse sisu mõistmiseks. Me toetame seda lähenemist, mis pakub protsessi vaadet (Moroz ja Hindle, 2012; Bhave, 1994; Ihrig, 2006) ja rakendab protsessi (dünaamilist) lähenemisviisi. See tähendab ettevõtja suuremaid ja väiksemaid samme nii avastamise kui uute võimaluste loomise suunas, nagu kirjeldab Joonis 4. Me leiame, et ei ole vastuolu kahe ettevõtlusvõimaluse teooria vahel. Need täiendavad teineteist. Siiski, see tähendab, et protsess võib sisaldada suuremaid ja väiksemaid samme kahe äärmuse (avastamise ja loomise) vahel, mis omakorda viitab pidevale protsessile võimalike katkestustega (Mets, 2022). Võimaluse trajektoori alguspunkt A (Joonis 4) ettevõtlusteedkonnal võib kalduda ühe või teise koridori ääre poole. Trajektoori mõjutavad tagasiside tsüklid.

Ettevõtlusteedkonna raamistikus võimalus võib olla avastatud ja loodud, nagu näitab GrabCAD-i kaasus (Uuring III). Kuigi realiseerunud ettevõtlusvõimalus (koostöö platvorm inseneridele) on revolutsiooniline sektori mõistes, ettevõtja jõudis selleni otsingut ja loovaid elemente vaheldades. Sama olukord on võimaluse objektiivsete ja subjektiivsete külgedega. Võimalus võib olla subjektiivne ettevõtlusteedkonna algusetapil. Siiski, ettevõtte arendamisel ettevõtja peab saavutama konsensusse aktsionäride, kaasasutajate, ostjate ja partneritega. Konsensuseni jõudmisega ettevõtja objektifitseerib võimalust. Sama olukord rakendub innovatsioonile ja arbitraažile. See mis on innovaatiline võimalus ettevõtte arengu algetapil, võib järgmisel etapil muutuda turu laienduseks (arbitraažiks).

Vaadates ettevõtlusvõimalusele läbi dünaamilise lähenemisviisi prisma, me näeme, et ettevõtlusteekond võib kombineerida endas nii võimaluse avastamist kui ka loomist, võimaluse objektiivsed ja subjektiivsed pooled, ning mõlemaid, innovatsiooni ja arbitraaži.

JÄRELDUSED

Dissertatsioon tervikuna aitab kaasa ettevõtlusvõimaluste dünaamika mõistmisele ja protsessipõhisele lähenemisele. Me jõudsime järgmiste järeldusteni:

1. Vaatamata ettevõtlusvõimaluse kontseptsiooni laialdasele arutelule, peamised väljakutsed tulenevad ettevõtlusest kui (dünaamilisest) protsessi nähtusest, mille osadeks on ettevõtlusidee ja võimalus. Dünaamika ühendab võimaluse loomise ja avastamise lähenemisviisid, kui ka innovatsiooni ja arbitraaži vaated. Lähenemisviisid ettevõtlusprotsessi ja teekonna kontseptsioonidele kui ettevõtluse peamistele tunnustele peaaegu puuduvad. Jätkub teaduslik diskussioon ettevõtlusidee ja võimaluse tekkest ja olemusest – kas neil on objektiivne või subjektiivne päritolu, kas võimalusi avastatakse või luuakse, või on tegemist kahe nähtuse kombinatsiooniga.
2. Ettevõtja käitumise analüüs ettevõtlusteekonna ajal näitab subjektiivset olemust idee ja võimaluse tajumisel. Selle teekonna ajal, ettevõtja arusaam võimalusest ja ideest on mõjutatud ettevõtlusprotsessi dünaamikast ja emotsionaalsest reaktsioonist sellele. Kas tajutud ettevõtlusvõimalus on reaalne või mitte, on võimalik aru saada ettevõtlusteekonna käigus, kui idee ja võimalus on realiseerinud.
3. Lähtudes planeeritud käitumise teooriast, (võimaluse) taju ennustab ettevõtlikku käitumist. See ettevõtlusprotsessi kognitiivne komponent on reaalajas raskesti mõõdetav. Uuringud on näidanud, et isiku idee ja võimaluse tunnetus mõjutab käitumist. Seepärast varasemad uuringud keskenduvad ettevõtlustegevuste mõõdikutele/indikaatoritele. Uuring näitab, et emotsioonide kõikumine ja sellega seotud idee ja võimaluse taju on ettevõtlusteekonna lahutamatu osa. Idee ja võimaluse atraktiivsuse ja teostatavuse taju sõltuvad ettevõtlusprotsessi ja teekonna kontekstist ja kulgemisest. Me leidsime, et ideede ja võimaluste kujunemise tulemuseks on tugev emotsioonide positiivses ja negatiivses suunas kõikumine sõltuvuses uue informatsiooni laekumisest ja oskuste kasvust ettevõtlusteekonnal.
4. Dünaamilise ökosüsteemi areng on mitmemõõtmeline, nii lokaalse-globaalse kui ka valdkonnaüleles mõttes, kiirendades ettevõtlusprotsessi, lühendades idufirma tsükli stardiperioodi ja kitsendades võimaluse aken. Üleminekul Innovatsiooni-põhisesse arenguetappi (Maailma Majandusfoorumi järgi) Eesti ettevõtluse ökosüsteem on võitnud globaalse usalduse, mille tunnuseks on, et üle 95% Eestiga seotud idufirmade investeeringutest tuleb rahvusvahelistelt investoritelt. Samal ajal, parimad näited Eesti idufirmadest demonstreerivad mitmekordset stardiperioodi lühenemist, võrreldes varasemaga.
5. Võimaluse aken kujuneb välja ökosüsteemi globaalsete välistegurite mõjul, nagu ettevõtja neid tajub (Uuring III). Aken ilmub erinevates tingimustes.

Uuring IV näitas, et linna bränd loob võimaluse akna eeldused ettevõtjatele. Sel juhul võimaluse aken annab šansi kasutada linna kultuurilise pärandi ja konkreetse muuseumi brändi ettevõtlustegevuseks. Uuringus IV, kohalikud kultuuriinstitutsioonide, sealjuures, muuseumide brändid, loovad palju laialdasemaid ettevõtlusvõimalusi kui linna brändid.

Üldiselt, uuringuga saadud teadmised täiustavad meie arusaama ettevõtlusvõimalusest, ettevõtlusprotsessist ja teekonnast. Käesolev töö annab panuse teadmusesse idee-võimaluse vastastikusest seosest kui ka käitumuslike (taju) ja välistegurite (ökosüsteem) rollist ettevõtlusvõimaluse arengutrajektooris.

Praktiline väljund

Tehtud uurimuse praktiline panus on mitmekülgne.

Esitaks, Uuring II tulemusi saab rakendada koolitusprotsessis. Protsessipõhine dünaamiline lähenemisviis annab tudengitele, tulevastele ettevõtjatele, arusaama sellest, et idee peab olema pidevas arengus. Üliõpilastele õpetatakse, et ideed ja võimalused on omavahel seotud, kuid siiski eraldiseisvad konstruktsioonid, ning sõltumata algse idee iseloomust (toode/teenus, ärimudel, vajadus, jne.), kanaliseerub see äris ettevõtte ideena. Toetudes saadud tulemustele ettevõtja saab aru, et ideede ja võimaluste tajumine sõltub afektiivsetest teguritest, seega neid tuleb hinnata erinevates tingimustes selleks, et suurendada tulemuste objektiivsust.

Teiseks, Uuring III ökosüsteemist aitab luua piirkondlikku arengukava. Saadud tulemused ettevõtluse, hariduse ja tehnoloogia ökosüsteemide vastastikustest suhetest ja mõjudest, on kasulikud pikaajaliste regionaalse arengu ja teiste strateegiate kujundamiseks.

Kolmandaks, Uuringus IV toodud brändingu aspektid on kasulikud (kultuuri)-turismi arendajatele ja planeerijatele.

Neljandaks, eeltoodud soovitused koos ja tervikuna võiksid olla kasulikud poliitikakujundajatele ettevõtluse, regionaalse arengu, (ettevõtlus)hariduse ja innovatsiooni valdkonnas.

Piirangud ja ettepanekud tulevasteks uuringuteks

Esiteks, piiratud valim (üks tudengite grupp) ja suhteliselt lühike ajavahemik (paar kuud) said piiranguteks võimaluse ja idee analüüsi protsessis (Uuring II). Uuring vaatleb reaalses ettevõtlusteekonna algseid etappe. Täielikuma käsitluse huvides peaks uuring reaalses jätkuma järgmistel ettevõtlusprotsessi ja teekonna etappidel täiendamaks seniseid kaasuste käsitlusi kirjanduses.

Uuringu III olulisem piirang seisneb selles, et ettevõtluse ökosüsteemi tegurite mõju hindamine võimaluse ja võimaluse akna moodustamisele viidi läbi ainult väikese majandusega Eesti ja Eestist lähtuvate idufirmade näitel.

Järgmine piirang on selles et Uuringus IV vaadeldakse ettevõtlusvõimalusi kultuurivaldkonna kontekstis eesmärgiga tuvastada, kuidas linna ja muuseumi brändid loovad eeldusi võimaluse aknaks. Tulevane uuring võiks hinnata ettevõtlusvõimaluste arengut brändi loomise ja kasutamise järgmistel etappidel. Täiendavalt on vajalik, et laiendada uuringute valdkonda sektoraaalselt (lisaks IT ja kultuuri valdkondadele), samuti riigiti ja suurematele valimitele.

Dissertatsioon tõstatab mitu küsimust, mis nõuavad edasist uurimist.

Esimene viide 'idee-võimaluse' vahelisele lüngale tõstab esile mitmed uued küsimused: kas midagi muutub 'idee-võimaluse' mehhanismis erinevat tüüpi ettevõtetes? Kas esineb erinevusi eri tüüpi ettevõtluses, näiteks teadmusele tuginevate ja sotsiaalharu ettevõtluse mehhanismides? Kuidas idee-võimaluse mehhanism toimib tiimide tasandil? Need uurimisküsimused loovad ruumi tulevastele uuringutele.

Idee konstruktsiooni pole võimalik hinnata isolatsioonis ettevõtlusteekest ja selle keskkonnast. Lisaks, on ilmne, et samad ideed võivad olla erinevalt hinnatud ja edasi arendatud, mis sõltub mitmest tegurist nagu, näiteks, sektor ja ettevõtluskeskkond. Järgmised uuringud peaksid keskenduma erinevate dünaamiliste keskkondade (kontekstide) mõjule eri sektorite idee-võimaluse mehhanismis, ja ideede ning võimaluste arendamisele ettevõtlusteekestl.

ANNEX I. Major constructs of the research

Entrepreneurship	<p>Entrepreneurship is a process through which a person (entrepreneur) combines resources and identifies ideas and opportunities to implement opportunities under the influence of different factors.</p> <p>Based on: Shane and Venkataraman (2000); Sarason, Dean and Dillard (2006).</p>
Entrepreneurial opportunity	<p>Entrepreneurial opportunity is the ability to identify and create a bright idea and bring the idea into the market as the performance of the entrepreneurial process and the ability to transform ideas into goals and performance along the entrepreneurial process and journey.</p> <p>Based on: Alvarez, Barney, and Anderson (2013), Ardichvili, Cardozo and Ray (2003); Davidsson (2003, 2015); Dimov (2020); Dyer et al. (2008); Savasvathy (2008).</p>
Entrepreneurial process	<p>Entrepreneurial process is a chain of activities (actions) starting from idea and opportunity identification (creation/discovery) and including opportunity transformation and implementation via the accumulation of resources and capabilities. The entrepreneurial process includes all phases of development and transformation of an entrepreneurial opportunity.</p> <p>Based on: Vogel (2016); Mets (2014); Bhave (1994); Cha and Bae (2010); Keupp and Gassmann (2009); Shane (2012); Davidsson (2015); Moroz and Hindle (2012); Davidsson and Gruenhagen (2021).</p>
Entrepreneurial journey	<p>Entrepreneurial journey is the temporary (or other dimension) appearance/characterisation of the entrepreneurial process and the events that take place in the entrepreneurial process. The entrepreneurial journey consists of a series of decisions and actions. These decisions and actions lead to the creation, discovery, and objectification of opportunities, to the transformation of ideas into functional performance.</p> <p>Based on: McMullen and Dimov (2013); Wood, Bakker and Fisher (2021); Mets (2022).</p>
Opportunity window	<p>The opportunity window represents the sum of events and situations that make it possible to identify and realise the opportunity.</p> <p>Based on: Messica and Mehrez (2002); Suarez et al., (2015).</p>

CURRICULUM VITAE

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Education (institution, date of graduation, year of award of academic degree / completion of studies)

2000–2004 Economics, PhD, St. Petersburg State University of Economics and Finance, Saint-Petersburg, Russia
2000–2003 Fine Art, Eq. to MA, Academy of Arts, Saint-Petersburg, Russia
1995–2000 Management, Eq. to MA, St. Petersburg State University of Economics and Finance, Saint-Petersburg, Russia

Professional career

2020–till present Associate Professor, School of Economics and Business Administration, Tartu University, Tartu, Estonia
2019 Visiting researcher, School of Economics, Lisbon University ISEG – Ulisboa ISEG, Lisbon, Portugal
2018–2020 Research Fellow, School of Economics and Business Administration, Tartu University, Tartu, Estonia
2011–2018 Associate Professor, Senior researcher, School of Economics and Management, National Research University Higher School of Economics, Saint-Petersburg, Russia
2005– 2011 Associate Professor, School of Economics and Management, St. Petersburg State University of Economics and Finance, Saint-Petersburg, Russia

A list of publications (recent)

- Burkov I., Gorgadze A., Trabskaya I. (2023). Satisfaction Dimensions Influencing Consumers' Behavioral Intentions Through Structural Topic Modeling Analysis of Restaurant Reviews. *Consumer Behavior in Tourism and Hospitality*. Indexed by Scopus Q2.
- Trabskaya J., Mets T. (2021). Perceptual Fluctuations within the Entrepreneurial Journey: Experience from Process-Based Entrepreneurship Training. *Administrative Sciences*, vol. 13, Issue 1, 13. doi Indexed by Scopus Q2.
- Gorgadze A., Sinitsyna A., Trabskaya J., Bala T. (2021). The Impact of New Affective Components on Museum Visitor Retention: The Context of Major City Event Using SEM and Ctree. *International Journal of Event and Festival Management*. vol. 12. No. 2. P. 203–223. doi Indexed by Scopus Q 2.

- Trabskaia J., Mets T. (2019). Ecosystem as the Source of Entrepreneurial Opportunities. *Foresight and STI Governance*, vol. 13, No. 4, pp. 10–22. Indexed by Scopus Q 2.
- Mets T., Trabskaia I., Raudssaar M. (2019). The Entrepreneurial Journey of High-Tech Venture Creation. *Revista de Estudios Empresariales. Segunda época*. No 1, pp. 61–77. Indexed by WebScience.
- Trabskaia, I., Shuliateva, I., Abushena, R., Gordin, V., Dedova, M. (2019). City Branding and Museum Souvenirs: Towards Improving the St. Petersburg City Brand. *Journal of Place Management and Development*, vol. 12 No. 4, pp. 529–544. <https://doi.org/10.1108/JPMD-06-2017-0049pp>. Indexed by Scopus Q2.

Research grants and scholarships

Recent:

- 2020–2022 R&D project EIT HEI Initiative: Innovation Capacity Building for Higher Education: Fostering Knowledge Transfer from Universities to Business – Innovation to Unicorn (UNicorn), European Commission
- 2020–2022 R&D project Innovating Social Entrepreneurship Education, European Commission
- 2016 Application of tools of web analytics for research on effects of cultural and creative industries, Basic Research Program Project of National Research University Higher School of Economics

Other administrative and professional activities (organisation of conferences, participation in editorial boards, participation in various councils, professional associations, legislative bodies, committees of experts, etc.)

Teaching experience

Recent:

- 2019–2023 Entrepreneurship in Arts and Creative Industries (MA level, Eng.)
- 2019–2023 Knowledge-Based Start-up Entrepreneurship (Doctoral level, Eng.)
- 2019–2023 Principles of Entrepreneurship (BA level, Eng.)
- 2020–2023 Master Seminar (MA level, Eng.)
- 2016 Online course. Coursera. St Petersburg – the Capital of Peter the Great’s Empire.

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Haridus (asutus, lõpetamise kuupäev, akadeemilise kraadi saamise / õpingute lõpetamise aasta)

2000–2004 Majandusteadus, PhD, Peterburi Riiklik Majandus- ja Rahandusülikool, Peterburi, Venemaa
2000–2003 Kaunid kunstid, Eq. to MA, Kunstiakadeemia, Peterburi, Venemaa
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2020 – praegu Kaasprofessor, Majandusteaduskond, Tartu Ülikool, Tartu, Eesti
2019 Külalisteadur, Majandusteaduskond, Lissaboni Ülikool ISEG – Ulisboa ISEG, Lissabon, Portugal
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Publikatsioonide loetelu (hiljutised)

- Burkov I., Gorgadze A., Trabskaya I. (2023). Satisfaction Dimensions Influencing Consumers' Behavioral Intentions Through Structural Topic Modeling Analysis of Restaurant Reviews. *Consumer Behavior in Tourism and Hospitality*. Indekseeritud Scopus Q2 poolt.
- Trabskaya J., Mets T. (2021). Perceptual Fluctuations within the Entrepreneurial Journey: Experience from Process-Based Entrepreneurship Training. *Administrative Sciences*, vol. 13, Issue 1, 13. doi Indekseeritud Scopus Q2 poolt.
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- Trabskaia, I., Shuliateva, I., Abushena, R., Gordin, V., Dedova, M. (2019). City Branding and Museum Souvenirs: Towards Improving the St. Petersburg City Brand. *Journal of Place Management and Development*, vol. 12 No. 4, pp. 529–544. <https://doi.org/10.1108/JPMD-06-2017-0049>pp. Indekseeritud Scopus Q2 poolt.

Uurimistoetused ja stipendiumid

Hiljutised:

- 2020–2022 EIT kõrgharidusastutustele suunatud teadus- ja arendusprojekti meede kõrghariduse innovatsioonivõimekuse suurendamiseks: „Teadmussiidre edendamine ülikoolidest ettevõtetesse – innovatsioonist üksarvikuks” (Fostering Knowledge Transfer from Universities to Business – Innovation to Unicorn, UNicorn), Euroopa Komisjon
- 2020–2022 Teadus- ja arendusprojekt „Uuenduslik sotsiaalse ettevõtluse haridus” (Innovating Social Entrepreneurship Education), Euroopa Komisjon
- 2016 Veebianalüütika vahendite rakendamine kultuuri- ja loomemajanduse mõjude uurimiseks, Riikliku teadusülikooli majanduskõrgkooli alusuuringute programmi projekt

Õpetamiskogemus

Hiljutised:

- 2019–2023 Ettevõtlus humanitaarias ja loomemajanduses (magistriõpe, ingl k)
- 2019–2023 Teadmuspõhine iduettevõtlus (doktoriõpe, ingl k)
- 2019–2023 Ettevõtluse põhimõtted (bakalaureuseõpe, ingl k)
- 2020–2023 Magistriseminar (magistriõpe, ingl k)
- 2016 Veebikursus Coursera. Peterburi – Peeter I impeeriumi pealinn.

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