

THE EFFECTUATION METHOD IN THE SWISS AND THAI SME INTERNATIONAL OPPORTUNITY PROCESS: A CONCEPTUAL FRAMEWORK

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Abstract

The early 21st century presents an uncertain and unpredictable international business environment where business executives must navigate their business activities across national borders. This conceptual paper aims to propose a conceptual framework as a foundation for qualitative cross-national comparative research in international entrepreneurship. Two literature streams; 1) the effectuation method in decision-making and action, and 2) use of the international opportunity concept to inform conceptual framework development. Understanding of how effectual and causal logic are used in business processes and when and why either logic is used over another is still underdeveloped. This paper provides a research framework to conduct qualitative cross-national comparative research to guide international business executives in looking for adequate and effective decision-making solutions to tackle the uncertainty and risk of international business activities deployed across international borders in the 21st century. In conclusion, use of the effectual method in the international opportunity concept is not fully understood, with the current understanding lacking detail, and having an especially high need for qualitative comparative cross-national research between Switzerland and Thailand, particularly in the international architecture and engineering consulting service industry.

Keywords: effectuation method, causal logic, effectual logic, international entrepreneurship, international opportunity, SME internationalization

1. INTRODUCTION

The early 21st century presents a challenging endeavour for business executives of international architecture and engineering consulting services to identify, evaluate, and exploit international

opportunities. Decision-makers who operate in an international business environment are faced with a tremendous uncertainty caused by global crises such as the financial crisis in 2008 or the ongoing public-health crisis since 2020 caused by the Sars-CoV-2 virus. Uncertainty is not only generated on a global

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scale but also on a regional scale, for example the “Tom Yum Kung” crisis back in 1997 in Thailand.

In an uncertain and unpredictable environment, business executives need guidance to respond quickly to the rapidly shifting conditions, sustaining their organisations through the trials ahead. Traditional managers deal with challenges by relying on established structures and processes. These processes are designed to reduce uncertainty and support calculated bets to manage residual risks (Sarasvathy, 2001, 2008). In a crisis, however, uncertainty can reach extreme levels, and the normal way of working becomes overstrained. At such times, traditional management operating models rarely prove adequate, and organisations with inadequate processes can quickly find themselves facing existential threats (McKinsey, 2021).

For a century, the connection between uncertainty and entrepreneurial decision-making and action has concerned scholars across a wide variety of research fields in the social and human sciences (Knight, 1921; Sarasvathy, 2001, 2008). Entrepreneurial decision-making and action under conditions of uncertainty and risk cannot only rely on traditional marketing practices and the business planning procedures learned in business schools and entrepreneurial education. This is known as causal logic. To succeed in international markets, there is a more dynamic and practical approach for SMEs - effectual logic - which is intuitively practiced by individual decision-makers but not consciously known or taught (Sarasvathy, 2001, 2008).

This study aims to develop a conceptual framework based on an integrative literature review (Snyder, 2019; Torraco, 2005). The purpose of this conceptual paper is to present the significance and relevance of a qualitative cross-national comparative research in international entrepreneurship (Ahi et al., 2017; Chetty et al., 2015; Sarasvathy, 2013) using the example of Swiss and Thai SME international opportunity processes, in the international architecture and engineering

consulting service industry in general, and more specifically on effectual and causal logic decision-making and action.

2. THEORETICAL FOUNDATIONS

There are two literature streams informing the conceptual framework and providing the foundation for this empirical and qualitative comparative cross-national research. The first explores the effectuation method in decision-making and action (Sarasvathy, 2001, 2008), while the second deals with the international opportunity concept (Mainela et al., 2014, 2018; Tabares et al., 2021). The two streams are integrated to build the conceptual model.

2.1 Framework One: The Effectuation Method

Two global crises in the early 21st century, the public-health crisis caused by the Sars-CoV-2 virus, and the “Global Financial Crisis” of 2008, share uncertainty as a key factor due to their sudden emergence and global spread. According to Knight (1921), “uncertainty” can be defined as a non-quantifiable risk. It is a risk that cannot easily be traced so that its probability of occurrence and its impact cannot easily be predicted. The goal of an entrepreneurial decision-maker in such an uncertain and unpredictable business environment is not only “profit” but also to gain a competitive advantage, as well as to create value in society (Sarasvathy et al., 2010) and increase firm performance. This applies also to the internationalization process of the SME, allowing conduction of cross-border business activities.

Sarasvathy (2001) provides and contrasts two decision-making and action logics in uncertain and unpredictable business environments. She criticised the dominance of causal methods in the management and entrepreneurship literature and introduced effectuation logic as a complementary logic to the causal method in decision-making (Read et al., 2015). Sarasvathy (2001, p. 245) defined effectuation and causation as follows:

“effectuation processes take a set of means as given and focus on selecting between possible effects that can be created with that set of means” and “causation processes take a particular effect as given and focus on selecting between means to create that effect”. Sarasvathy (2001) illustrates the two decision-making and action logics with the example of preparing a meal. A causal chef chooses what meal to make, shops for the necessary ingredients and prepares it; effectual chefs see what ingredients are readily available, imagine possible meals to make, and choose one to prepare.

Business and management schools have traditionally taught causal, rather than effectual methods (Sarasvathy, 2001). Therefore, it is with no surprise, that having been taught “causal thinking”, MBA students report causal models when asked by a university professor how they would set up a hypothetical new venture (Dew et al., 2009).

Effectuation is a method in entrepreneurship that challenges the

traditional understanding of entrepreneurial behavior (Sarasvathy, 2001, 2008). Sarasvathy (2008) introduced the idea that entrepreneurship can be conceptualized as a method à la the scientific method and was further developed in Sarasvathy and Venkataraman (2011). Science is a method to understand the world outside our control that we are born into and live within. Entrepreneurship is a method for shaping and cocreating that world through things within our control (Sarasvathy, 2021).

Effectual entrepreneurs act according to five principles (Sarasvathy, 2001, 2008). Contrasting these with causal logic (summarised in Table 1). They are starting with available means, rather than preselected goals, defined in terms of “who I am”, “what I know” and “whom I know” (available means principle). Effectual entrepreneurs are argued to: invest only what they can afford to lose in new venture projects, rather than seek to maximise returns (affordable loss principle); build a network of “self-selecting”

Table 1: Summarising and Contrasting Effectual and Causal Logic Principles

Effectual logic	Causal logic
<i>Starting with available means</i> Acting, based on what you have available: who you are, what you know and whom you know.	<i>Goal-oriented</i> Choose the best means to achieve pre-selected ends.
<i>Setting affordable loss</i> Evaluating opportunities based on whether the downside is acceptable, rather than on the attractiveness of the predicted upside.	<i>Expected return</i> Select projects offering the highest expected return.
<i>Forming partnerships</i> Forming partnerships with people and organisations willing to make a genuine commitment to jointly co-creating the future.	<i>Potential competitors</i> Undertake competitive analysis to position themselves in each, pre-existing market.
<i>Leverage contingencies</i> Embracing surprises that arise from uncertain situations, remaining flexible rather than tethered to existing goals.	<i>Avoid surprises</i> Seek to exploit pre-existing knowledge and treat contingencies as barriers to be overcome in pursuit of pre-selected ends.
<i>Non-predictive control</i> Future is neither found nor predicted but rather, made.	<i>Predict the future</i> Predict the future to position themselves to adapt to it.

Source: Own creation adapted from Sarasvathy (2001, 2008)

stakeholders, rather than undertake competitor analysis (forming partnership principle); and leverage unanticipated contingencies, rather than exploit pre-existing knowledge (leverage contingencies principle), in the process of co-creating a new venture by interacting with stakeholders (Non-predictive control principle). Effectual entrepreneurs seek to control the environment rather than predict its future state when taking new venture decisions (Wiltbank et al., 2006); if entrepreneurs can control the future, there is no need to predict it (Dew & Sarasvathy, 2007; Read & Sarasvathy, 2005; Sarasvathy, 2001, 2008). Hence, effectual and causal logic are often referred to as non-predictive control and predictive logic, respectively (Dew et al., 2009; Sarasvathy, 2004; Wiltbank et al., 2006). Through repeated stakeholder interaction, entrepreneurs are argued to acquire expanding resources while the venture's goals converge (Read & Sarasvathy, 2005; Sarasvathy & Dew, 2005).

Sarasvathy (2001) indicates that "both causation and effectuation are integral parts of human reasoning that can occur simultaneously, overlapping and intertwining over different contexts of decisions and actions" (p. 245). Effectuation studies have not specifically focused on examining their simultaneity (Read et al., 2016). In the literature, effectuation is mainly seen as a decision-making logic prevailing during the initial stages of business formation when the level of uncertainty about the venture, the service, and the potential market, is rather high (Sarasvathy, 2001, 2008). Further along in the next stages of business development, when the firm becomes more established and there is more certainty e.g., about its internal processes, management team, suppliers, customers, market infrastructures and the goals of entrepreneurial activities become more articulated and certain, traditional goal-oriented reasoning becomes more relevant and the logic of decision-making becomes less effectual (Sarasvathy, 2008; Sarasvathy & Dew, 2005). However, does it become causal? This transition and the dynamics of interplay between causal logic principles and

effectual logic principles are questionable, particularly considering the study by Perry et al. (2012) which argued that causation and effectuation are not the opposite ends of a continuum but have an orthogonal, or independent, uncorrelated relationship. This means that one can be present without the other or both can be present at the same time with varied intensity. Furthermore, using causal and effectual logics ambidextrously leads to positive firm-level outcomes throughout the new venture creation process (Braun & Sieger, 2021).

Effectuation has not been without critical aspects discussed in literature. Arend et al. (2015, 2016) have been the most cited critics of effectuation, claiming that it is an underdeveloped entrepreneurship theory. They have pointed out that effectuation emphasises description rather than explanation, fails to build on prior research and lacks a clear specification of context. Kitching and Rousse (2020) agree with this assessment but go further by arguing that effectuation theory does not, and cannot, explain venture creation fully because it lacks a robust conception of social context. Nevertheless, their evaluation of effectuation theory was informed by the critical realist philosophy of science, whereas Sarasvathy (2001, 2008) applied a constructivist philosophy of science. Furthermore, Kitching and Rousse's (2020) examination of effectuation theory was explicitly conceptual, rather than applied effectuation research.

This paper is informed by the constructivist philosophy of science, and is defined as applied effectuation research. Therefore, effectuation is seen as a method (Sarasvathy, 2008, 2021; Sarasvathy & Venkataraman, 2011) of entrepreneurship and not as a theory.

2.2 Framework Two: The International Opportunity Concept

Business executives are faced with significant questions when internationalizing their SME business activities across international borders. They are required to

make decisions on what, who, why, where, and how (Baker et al., 2005; Sarasvathy et al., 2013; Shane & Venkataraman, 2000; van Gelderen et al., 2021), throughout the international opportunity process (Mainela et al., 2014, 2018; Tabares et al., 2021) and to take action accordingly.

International opportunity as a concept and the object of entrepreneurship study has gained increasing interest from international entrepreneurship (IE) scholars in recent years. Mainela et al. (2014) argued that international opportunity has the potential to be a “unifying concept of international business and entrepreneurship in IE as a field of scholarly research.” The ‘opportunity’ concept has been a key focus of entrepreneurship research for a long time. Venkataraman (1997) proposed that entrepreneurship as a scholarly field should focus on opportunities as its distinctive domain and seek to understand how opportunities are brought into existence and with what consequences. Shane and Venkataraman (2000) defined 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” (p. 218).

Mainela et al. (2014) reviewed the state of knowledge concerning opportunities in the IE field by reviewing content-analysis articles published between 1989 and 2012 and concerning the concept of opportunities. They found the articulation of the conceptual features of international opportunities and opportunity-focused behaviors to be limited, and the full potential of the opportunity focus to be underexploited. They argued that IE research should pay more attention to international opportunities and the cognitive and behavioral processes leading to their discovery and creation.

The SME international opportunity process can be studied in three stages: 1) international opportunity identification, 2) international opportunity evaluation; and 3) international opportunity exploitation. Stage one - International opportunity identification is defined as how the international

opportunity comes into existence. This can be either by international opportunity creation (effectual logic method) which occurs through co-creation, or international opportunity discovery (causal logic method) via serendipity or active search (Alvarez & Barney, 2010; Sarasvathy, 2001, 2008; Tabares et al., 2021). Stage two - International opportunity evaluation is defined as the reasons why the created or discovered opportunities may be viewed favorably or rejected. Moreover, it includes how decisions are made regarding the pursuit of international opportunities that have been created or discovered (Alvarez & Barney, 2007; Baker et al., 2005; Shane & Venkataraman, 2000) and the according actions. Stage three - International opportunity exploitation is defined as the reasons for actions following the entrepreneurial decision to pursue a created or discovered opportunity. Moreover, this stage also includes the acquisition and mobilization of resources in pursuit of that opportunity (Alvarez & Barney, 2007; Baker et al., 2005; Shane & Venkataraman, 2000). The international opportunity view on SME internationalization provides an understanding of international entrepreneurship in full. The three stages must be examined and should not be limited to the international opportunity aspect but to what, who, why, where, and how (Baker et al., 2005; Sarasvathy et al., 2013; Shane & Venkataraman, 2000; van Gelderen et al., 2021) international opportunities are identified, and decisions are made in the pursuit of those international opportunities.

2.3 The Effectuation Method in SME Internationalisation:

An emerging research stream in IE has applied the effectuation method to SME internationalization (e.g., Ahi et al., 2017; Galkina & Chetty, 2015; Kalinic et al., 2014). This stream is built upon the argument that due to the unpredictability of the internationalization environment (Vahlne & Johanson, 2017), SMEs cannot rely only on

traditional market research, competitive analysis, and market planning, in their internationalization efforts. SMEs must find entrepreneurial pathways to pass national borders (Schweizer et al., 2010). Scholars in this stream argue that shifting from causal to effectual logic supports SMEs in focusing on construction versus positioning strategies (Wiltbank et al., 2006) and controlling the internationalization process by applying the logic of affordable loss and networking to overcome the liability of outsidership by forming new networks, entering into related networks, improving their position inside those networks, and increasing the level of trust and commitment in relationships (Kalinic et al., 2014). This logic supports SMEs in shaping the market as a network of relationships (Read et al., 2009), within which partners share tacit knowledge of internationalization opportunities (Vahlne & Johanson, 2017). Applying effectual logic in internationalization studies does not imply ignoring the importance of predictive goal-oriented approaches. Instead, the effectuation method considers the applicability of both effectual and causal logics in different situations (Read et al., 2015; Sarasvathy et al., 2014). As Sarasvathy et al. (2014) observed: “while effectual approaches open up and

create new markets at low costs of failure, causal approaches can help stabilize and establish leadership in those new markets” (p. 63).

A systematic literature review conducted by Karami et al. (2019) established that SMEs play a dominant role in the extant effectual internationalization research. Amongst 30 studies, 13 were focused on SMEs (e.g., Schweizer et al., 2010; Chetty et al., 2014, 2015; Laine & Galinka, 2016), with two focused on small firms (e.g., Sarasvathy et al., 2014; Chandra et al., 2015; Crick & Crick, 2014), seven on International New Ventures (e.g., Ciszewka-Mlinaric et al., 2016; Evers et al., 2012), or Born Globals (e.g., Sullivan Mort et al., 2012; Nummela et al., 2014). There was only one study which focused on the individual level (Dutta et al., 2015), a study on the entrepreneurial intentions of students. Therefore, the need for a greater understanding of the individuals that are central to a firm’s internationalization behavior (Karami et al., 2019; Knight & Cavusgil, 2004) is crucial. The effectuation method is not limited to smaller firms; rather it is a logic which is applicable to any size of firm regardless of how limited or rich their resources (Read et al., 2015). This focus on smaller firms in the extant literature might

Table 2: IE research industry focus - Effectual and causal logics in SME internationalization

Nr	Study	Micro	SME	Industry Focus
1	Fishammar & Andersson, 2009		x	Manufacturing
2	Schweizer et al., 2010		x	Pharmaceutical
3	Anderson, 2011		x	Production
4	Harms & Schiele, 2012		x	Gazelle INV
5	Nowiński & Rialp, 2013		x	High-Tech Game & Toy
6	Sarasvathy et al., 2013	x		Manufacturing
7	Chetty et al., 2014		x	Science & Technology
8	Crick & Crick, 2014		x	High-Tech Manufacturing
9	Kalinic et al., 2014		x	Manufacturing / Production
10	Chetty et al., 2015		x	Mixed software industries
11	Galinka & Chetty, 2015		x	Mixed industries
12	Schweizer, 2015		x	Medical Tech
13	Laine & Galinka, 2016		x	Mixed industries
14	Ahi et al., 2017		x	Mixed Production Industries
15	Cai et al., 2017	x		Manufacturing

Source: Own creation adapted from Karami et al. (2019)

signal the dominance of the concept of limited resources (e.g., financial and human) as an assumption in scholars' minds (Karami, 2020).

Analysing previously published IE research on effectual and causal logic in SME internationalization (Karami et al., 2019) as depicted in table 2, it can be seen that these studies were mainly conducted in the High Tech/Software and production/manufacturing industries. None were conducted generally in the service industry or specifically on international architecture or engineering consulting services. Moreover, only two out of 15 relevant studies were conducted on micro firms. Table 2 provides an overview of prior IE research, including the year of publication, author, and research setting in terms of firm size and industry focus.

Conducting empirical research on SMEs in the international architecture and engineering consulting service industry is of high interest. As previous research on the internationalization of architecture and

engineering consulting services has been conducted exclusively from a traditional management and marketing view point (Rimmer, 1988; Erramilli, 1990; Coviello & Martin, 1999; Winch, 2008), and as such, only considers causal logic (Sarasvathy, 2001, 2008). Based on these patterns, IE research on the internationalization of SMEs in the architecture and engineering consulting service industry, applying both causal and effectual logic, appears to be new.

2.4 Effectuation method and SME Internationalization: Research Methodology

Table 3 presents previous IE research which has applied an effectuation method to investigate the SME internationalization process (e.g., Nowiński & Rialp, 2013; Sarasvathy et al., 2013; Schweizer et al., 2010). This area has been developed through four sub-areas: 1) the decision-making process (Andersson, 2011; Chetty et al., 2015; Crick & Crick, 2014; Kalinic et al., 2014); 2)

Table 3: IE Research – Studies of Effectual and Causal Logic in SME Internationalization

Author & publication date	Firm size		Geographical Context					Methodology Approach				
	Micro	SMEs	Europe	Asia	Oceania	Cross-National Study	Conceptual Paper	Quantitative Methodology	Qualitative Methodology	Single Case study	Multiple Case study	Interviews
1 Fishammar & Andersson, 2009												
2 Schweizer et al., 2010												
3 Anderson, 2011												
4 Harms & Schiele, 2012												
5 Chetty et al., 2013												
6 Nowiński & Rialp, 2013												
7 Sarasvathy et al., 2013												
8 Crick & Crick, 2014												
9 Kalinic et al., 2014												
10 Chetty et al., 2015												
11 Galinka & Chetty, 2015												
12 Schweizer, 2015												
13 Laine & Galinka, 2016												
14 Ahi et al., 2017												
15 Cai et al., 2017												
16 Prashantham et al., 2019												
17 Karami, 2020												
Aggregated choice of methodology	3/17	14/17	12/17	3/17	2/17	3/17	2/17	3/17	13/17	3/17	8/17	10/17
<i>Proportions: I) CROSS-COUNTRY</i>						I)		II)	III)			
<i>II) QUANTITATIVE III) QUALITATIVE</i>	17.6%	82.4%	70.6%	17.6%	11.8%	17.6%	11.8%	17.6%	86.7%	17.6%	47.1%	58.8%

Source: Own creation adopted from Karami et al. (2019).

market choice and market entry mode (Ahi et al., 2017; Harms & Schiele, 2012; Sarasvathy et al., 2013; Galinka & Chetty, 2015); 3) the role of networks (Schweizer et al. 2010; Chetty, 2013); and 4) the speed of SME internationalization (Prashantham et al., 2019).

Further findings of data presented in Table 3 indicate that qualitative cross-national comparative research is lacking within the context of IE, contributing only 17.6% out of a possible 86.7% of qualitative methodology studies. Qualitative cross-national comparative studies were conducted between highly developed economies by Chetty et al. (2014; 2015) who compared Finland, Denmark and New Zealand; and Ahi et al. (2017) who provided research comparing Italy and Finland. Qualitative cross-national studies have not been empirically conducted in emerging economies, nor have comparisons been made between developed and emerging economies. There has been no qualitative cross-national comparative studies conducted for Europe and Asia, or more specifically for Switzerland and Thailand. IE activities in different countries are expected to differ due to differences in socio-economic and country-level institutional profiles (Busenitz et al., 2000).

In summary, there are multiple reasons to conduct a qualitative cross-national

comparative research on Swiss and Thai SME internationalization through an effectual lens: 1) to gain additional knowledge on causal and effectual logic decision-making and action in two different socio-economic environments; 2) to gain additional knowledge of causal and effectual logic decision-making and action comparing a developed and an emerging economy; and 3) as can be seen in Table 3, study of the use of effectuation methods in the SME international opportunity process has not yet been conducted in a qualitative cross-national comparative research (Karami et al., 2019), and is therefore new.

3. CONCEPTUAL FRAMEWORK

Focusing on the individual role of an agent (who) in the international opportunity concept (Mainela et al., 2014, 2018; Tabares et al., 2021) applied on the SME internationalization process, business executives must make profound decisions and take action throughout the SME international opportunity process by facing uncertainty, limited resources, and network dynamics in conducting cross-border business activities (Sarasvathy et al., 2013). When applying causal and effectual logic principles that match surrounding conditions, practical solutions are important. Business executives take various routes to identify, evaluate, and exploit opportunities (Matalamäki, 2017).

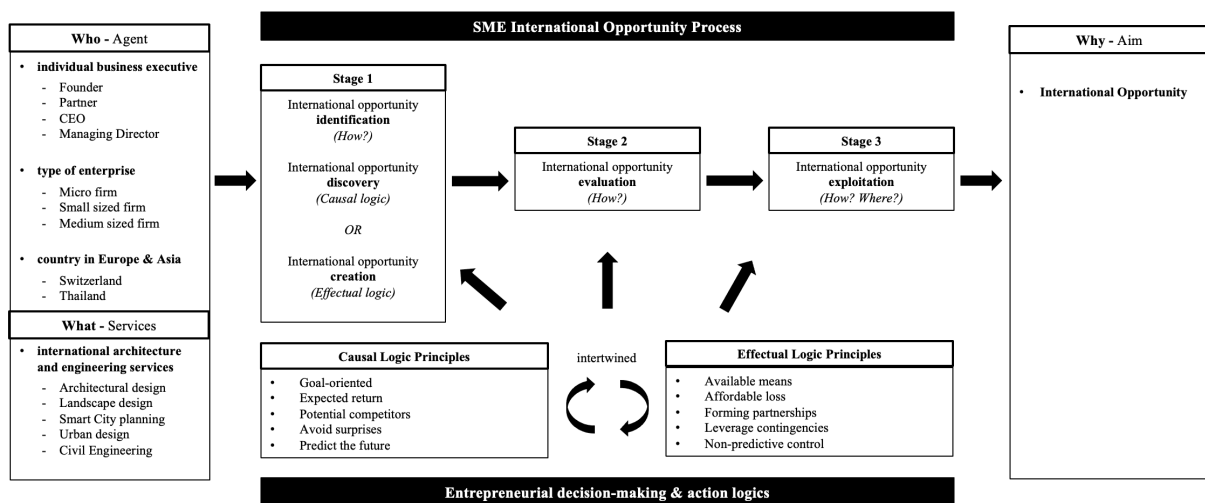


Figure 1: Conceptual Framework
Source: Own creation.

Therefore, to understand entrepreneurial decision-making and action is of high relevance.

This research takes a process perspective on causal and effectual logic in decision-making and action throughout three stages 1) international opportunity identification; 2) international opportunity evaluation and; 3) international opportunity exploitation. Meanwhile, emphasis is placed on the importance of the individual business executive and their impact on the firm's cross-border business direction and successful internationalization, throughout the SME international opportunity process. The categories of themes for the proposed study are adopted from van Gelderen et al.'s (2021) framework of what (services), who (agent), why (aim), where (international opportunity exploitation), and how (causal or effectual decision-making and action logics), to develop the conceptual framework in this paper based on the arguments presented above and depicted in Figure 1.

Combining the concept of international opportunity (Mainela et al., 2014, 2018; Tabares et al., 2021) in the SME internationalization process, together with the effectuation method (Sarasvathy, 2001, 2008, 2021), defines the conceptual framework for studying individual decision-making and action logic in the context of a successful SME international opportunity process (why - aim), using the example of international architecture and engineering consulting services (what - services). Furthermore, this study builds on previous research that has initiated the process of integrating the effectuation method in the SME internationalization process (Schweizer et al., 2010; Sarasvathy et. al., 2013; Kalinic et al., 2014; Chetty et al., 2015).

This research proposes conducting a qualitative cross-national comparative research in two different socio-economic environments and country-level institutional profiles (Busenitz et al., 2000) based on the argument that only 17.6% out of a possible 86.7% of qualitative methodology studies

have been conducted via qualitative cross-national comparative research (see Table 3). In addition, conducting research using the example of Swiss and Thai architecture and engineering consulting services, this study might discover exploratory findings, that may yield new understandings or lead to other research in terms of geographical, social, and cultural conditions, and might discover new insights in methodological challenges in qualitative cross-national comparative business research. Due to the selection of a qualitative cross-national comparative research in two divergent countries such as Switzerland and Thailand, which vary in terms of geographical, social, and cultural conditions, there may be differences or similarities in applying causal or effectual decision-making and action logic throughout the international opportunity process.

4. DISCUSSION AND CONCLUSION

In the 21st century, SMEs conduct cross-border business activities in an uncertain and unpredictable business environment. Considering these characteristics gives rise to decision-making paradigms besides the traditional causal logic approach taught in business schools and entrepreneurial education. There is a more dynamic approach for SMEs in practice - effectual logic - which is intuitively used by individual business executives but not consciously known or taught (Sarasvathy, 2001, 2008). The effectuation method provides an adequate and effective solution to tackle uncertainty and risk in business activities across international borders in the 21st century.

Previous research on the effectuation method and SME internationalization has focused mainly on the High Tech/software and production/manufacturing industries (Table 2). None has been conducted generally in the service industry or specifically on international architecture and engineering consulting services. Moreover, previous research on the internationalization of architecture and engineering consulting

services has been exclusively conducted from a traditional management and marketing point of view (Rimmer, 1988; Erramilli, 1990; Coviello & Martin, 1999; Winch, 2008) and thus, has only considered causal logic (Sarasvathy, 2001, 2008). Further findings of data presented in this paper (Table 3) indicate that qualitative cross-national comparative research is lacking within IE (Karami et al., 2019). Cross-national studies have not been conducted in emerging economies, nor comparing developed and emerging economies. There has been no cross-national study conducted for Europe and Asia, or more specifically for Switzerland and Thailand (see Table 3). Therefore, such a study would be new.

The aim of this conceptual paper was to present the significance and relevance of a qualitative cross-national comparative research at the intersection of international entrepreneurship and effectuation (Sarasvathy, 2013) using the example of international architecture and engineering consulting services. The two main research dimensions have been briefly presented by means of an integrative literature review: 1) the effectuation method (Sarasvathy, 2001, 2008), and 2) the international opportunity concept (Mainela et al., 2014, 2018; Tabares et al., 2021). The conceptual framework, as a foundation for an empirical and qualitative cross-national comparative research in two different socio-economic environments and country-level institutional profiles (Busenitz et al., 2000) was developed.

In conclusion, the effectual method in the international opportunity concept is not fully understood, while there is a particular need for qualitative cross-national comparative research between Switzerland and Thailand in the context of international architecture and the engineering consulting service industry. Conducting qualitative cross-national comparative research to gain a better understanding of entrepreneurial decision-making and action throughout the SME international opportunity process is of high significance.

5. LIMITATIONS AND FUTURE RESEARCH

The authors are cognisant of limitations in the proposed empirical and qualitative cross-national comparative research. First, the proposed empirical and qualitative cross-national comparative research is based on the empirical context due to differences in socio-economic and country-level institutional profiles (Busenitz et al., 2000). Therefore, the application of the expected results to other national contexts may be limited and requires additional study. Second, the findings will be primarily based on qualitative data, they can be generalized analytically, but not statistically. The research may be subject to cultural, geographical, and industry bias, as it will focus exclusively on business executives of Swiss and Thai SMEs in the international architecture and engineering service consulting industry. The findings may only apply in these specific contexts. Third, the proposed conceptual framework in this paper treats macro, small, and mid-sized enterprises (SME) equally. However, all three enterprise types have differences in their legal structure and international markets. Fourth, there may be possible bias from the retrospective nature of the qualitative data, such as decisions expressed and actions remembered by interviewees, which may have happened a long time ago.

Finally, qualitative research relies on face-to-face interviews for data collection (Patton, 2015). The ongoing global health crisis and disruptions caused by Sars-CoV-2 restrictions, are affecting face-to-face interviews. Therefore, the interviews must be conducted remotely via video-call (e.g., LINE, Microsoft Teams). Moreover, access to business executives who are occupied with their own business issues, especially considering the affects of Sars-CoV-2 might be restricted. Nevertheless, the aim is to enhance the body of international entrepreneurship and effectuation knowledge, through exploration and examination of the differences and similarities in using effectual and causal logic decision-making and actions

in Swiss and Thai SME internationalization. Furthermore, there is an aim for a better understanding of the entrepreneurial process of SME internationalization in two different socio-economic and country-level institutional environments through the lens of effectuation (Sarasvathy, 2001, 2008).

REFERENCES

- Ahi, A., Baronchelli, G., Kuivalainen, O., & Piantoni, M. (2017). International market entry: how do small and medium-sized enterprises make decisions. *Journal of International Marketing*, 25(1), 1–21.
- Alvarez, S. A., & Barney, J. B. (2007). Discovery and Creation: Alternative Theories of Entrepreneurial Action. *Revista Organizações em Contexto*, 3(6), 123–152.
- Alvarez, S. A., & Barney, J. B. (2010). Entrepreneurship and epistemology: the philosophical underpinnings of the study of entrepreneurial opportunities. *Academy of Management Annals*, 4, 557–583.
- Andersson, S. (2011). International entrepreneurship, born globals and the theory of effectuation. *Journal of Small Business and Enterprise Development*, 18(3), 627–643.
- Arend, R. J., Sarooghi, H., & Burkemper, A. (2015). Effectuation as ineffectual? Applying the 3E theory-assessment framework to a proposed new theory of entrepreneurship. *Academy of Management Review*, 40: 630–652.
- Arend, R., Sarooghi, H., Burkemper, A. (2016). Effectuation, not being pragmatic or process theorising, remains ineffectual: Responding to the commentaries. *Academy of Management Review*, 41(3): 549–556.
- Baker, T., Gedajlovic, E., & Lubatkin, M. (2005). A framework for comparing entrepreneurship processes across nations. *Journal of International Business Studies*, 36(5), 492–504.
- Braun, I., Sieger, P. (2021). Under pressure: Family financial support and the ambidextrous use of causation and effectuation. *Strategic Entrepreneurship Journal*, 1–34.
- Busenitz, L., Gómez, C., & Spencer, J. (2000). Country Institutional Profiles: Unlocking Entrepreneurial Phenomena. *The Academy of Management Journal*, 43(5), 994–1003.
- Cai, L., Guo, R., Fei, Y., & Liu, Z. (2017). Effectuation, exploratory learning and new venture performance: evidence from China. *Journal of Small Business Management*, 55(3), 388–403.
- Chandra, Y., Styles, C., & Wilkinson, I. F. (2015). Opportunity portfolio: Moving beyond single opportunity explanations in international entrepreneurship research. *Asia Pacific Journal of Management*, 32, 199–228.
- Chetty, S. K., Partanen, J., Rasmussen, E. S., & Servais, P. (2014). Contextualising case studies in entrepreneurship: a tandem approach to conducting a longitudinal cross-country case study. *International Small Business Journal*, 32(7), 818–829.
- Chetty, S., Ojala, A., & Leppäaho, T. (2015). Effectuation and foreign market entry of entrepreneurial firms. *European Journal of Marketing*, 49(9–10), 1436–1459.
- Ciszewska-Mlinaric, M., Obloj, K., & Wasowska, A. (2016). Effectuation and causation: two decision-making logics of INVs at the early stage of growth and internationalisation. *Journal for East European Management Studies*, 21(3), 1–23.
- Coviello, N. E., & Martin, K. A.-M. (1999). Internationalization of Service SMEs: An Integrated Perspective from the Engineering Consulting Sector. *Journal of International Marketing*, 7(4), 42–66.
- Crick, D., & Crick, J. (2014). The internationalization strategies of rapidly internationalizing high-tech UK SMEs: planned and unplanned activities. *European Business Review*, 26(5), 421–448.
- Dew, N., & Sarasvathy, S. D. (2007).

- Innovations, stakeholders & entrepreneurship. *Journal of Business Ethics*, 74(3), 267–283.
- Dew, N., Read, S., Sarasvathy, S. D., & Wiltbank, R. (2009). Outlines of a behavioral theory of the entrepreneurial firm. *Journal of Economic Behavior & Organization*, 66(1), 37-59.
- Dew, N., Read, S., Sarasvathy, S. D., & Wiltbank, R. (2009). Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices. *Journal of Business Venturing*, 24(4), 287-309.
- Dutta, D. K., Gwebu, K. L., & Wang, J. (2015). Personal innovativeness in technology, related knowledge and experience, and entrepreneurial intentions in emerging technology industries: a process of causation or effectuation? *International Entrepreneurship and Management Journal*, 11(3), 529–555.
- Erramilli, M. K. (1990). Entry Mode Choice in Service Industries, *International Marketing Review*, 7, 5.
- Evers, N., Andersson, S., & Hannibal, M. (2012). Stakeholders and marketing capabilities in international new ventures: evidence from Ireland, Sweden, and Denmark. *Journal of International Marketing*, 20(4), 46–71.
- Frishammar, J., & Andersson, S. (2009). The overestimated role of strategic orientations for international performance in smaller firms. *Journal of International Entrepreneurship*, 7(1), 57-77.
- Galkina, T., & Chetty, S. (2015). Effectuation and networking of internationalizing SMEs. *Management International Review*, 55(5), 647-674.
- Harms, R., Schiele, H. (2012). Antecedents and consequences of effectuation and causation in the international new venture creation process. *Journal of International Entrepreneurship*, 10, 95-116.
- Kalinic, I., Sarasvathy, S. D., & Forza, C. (2014). Expect the unexpected: implications of effectual logic on the internationalization process. *International Business Review*, 23(3), 635-647.
- Karami, M., Wooliscroft, B. & McNeill, L. (2019). Effectuation and internationalisation: a review and agenda for future research. *Small Business Economics*, 55, 777-811.
- Karami M. (2020). Effectual Versus Causal International Opportunity Discovery and Creation: Implications for SMEs' Competitive Advantage. In: Ratten V. (eds) Entrepreneurship and the Community. Contributions to Management Science. Springer, Cham.
- Kitching, J., & Rouse, J. (2020). Contesting effectuation theory: Why it does not explain new venture creation. *International Small Business Journal*, 38(6), 515–535.
- Knight, F. (1921). *Risk, Uncertainty, and Profit*. Boston, MA: Hart, Schaffner & Marx; Houghton Mifflin Company.
- Knight, G. A., & Cavusgil, S. T. (2004). Innovation, organizational capabilities, and the born-global firm. *Journal of International Business Studies*, 35 (2), 124-141.
- Laine, I., & Galkina, T. (2016). The interplay of effectuation and causation in decision making: Russian SMEs under institutional uncertainty. *International Entrepreneurship and Management Journal*, 13, 905-941.
- Mainela, T., Puhakka, V., & Servais, P. (2014). The concept of international opportunity in international entrepreneurship: A review and a research agenda. *International Journal of Management Reviews*, 16(1), 105-129.
- Mainela, T., Puhakka, V., & Sipola, S. (2018). International entrepreneurship beyond individuals and firms: On the systemic nature of international opportunities. *Journal of Business Venturing*, 33(4), 534-550.
- Matalamäki, M. J. (2017). Effectuation, an emerging theory of entrepreneurship towards a mature stage of the development. *Journal of Small Business and Enterprise Development*, 24(4), 928-949.

- McKinsey (2021). When nothing is normal: Managing in extreme uncertainty. Retrieved July 13, 2021, from <https://www.mckinsey.com/business-functions/risk/our-insights/when-nothing-is-normal-managing-in-extreme-uncertainty>.
- Nowiński, W., & Rialp, A. (2013). Drivers and strategies of international new ventures from a Central European transition economy. *Journal for East European Management Studies*, 18(2), 191-231.
- Nummela, N., Saarenketo, S., Jokela, P., & Loane, S. (2014). Strategic decision-making of a born global: a comparative study from three small open economies. *Management International Review*, 54(4), 527-550.
- Patton, M. Q. (2015). *Qualitative Research and Evaluation Methods* (4th ed.), Thousand Oaks: SAGE Publications, Inc. 4th Edition.
- Perry, J. T., Chandler G. N., & Markova, G. (2012). Entrepreneurial Effectuation: A Review and Suggestions for Future Research. *Entrepreneurship Theory and Practice*, 6(7), 837-861.
- Prashantham, S., Kumar, K., Bhagavatula, S., & Sarasvathy, S. D. (2019). Effectuation, network-building and internationalisation speed. *International Small Business Journal*, 37(1), 3-21.
- Read, S. A., & Sarasvathy, S. D. (2005). Knowing What to Do and Doing What You Know. Effectuation as a form of entrepreneurial expertise. *The Journal of Private Equity*, 9(1), 45-62.
- Read, S., Dew, N., Sarasvathy, S.D., & Wiltbank, R. (2009). Marketing under uncertainty: The logic of an effectual approach. *Journal of Marketing*, 73, 1-18.
- Read, S., Sarasvathy, S. D., Dew, N. & Wiltbank, R. (2015). Unreasonable Assumptions in ASB. Detail of discussion in Read, Sarasvathy, Dew & Wiltbank (2016). Downloaded from www.effectuation.org.
- Read, S., Sarasvathy, S. D., Dew, N., & Wiltbank, R. (2016). Response to Arend, Sarooghi, and Burkemper (2015): Co-creating effectual entrepreneurship research. *Academy of Management Review*, 41(3), 528-556.
- Rimmer, P. J. (1988). The Internationalization of Engineering Consultancies: Problems of Breaking into the Club. Environment and Planning A: *Economy and Space*, 20(6), 761-788.
- Sarasvathy, S. D. (2001). Causation and effectuation: toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26 (2), 242-263.
- Sarasvathy, S. D. (2004). Constructing Corridors to Economic Primitives: Entrepreneurial Opportunities as Demand-Side Artifacts. In J. Butler (ed.), *Opportunity Identification and Entrepreneurial Behavior*, pp. 291-312. Greenwich CN: Information Age Publishing.
- Sarasvathy, S. D., & Dew, N. (2005). New market creation through transformation. *Journal of Evolutionary Economics*, 15(5), 533-565.
- Sarasvathy, S. D. (2008). *Effectuation: Elements of Entrepreneurial Expertise*. Massachusetts: Edward Elgar. US.
- Sarasvathy, S. D., Dew, N., Read, S., & Wiltbank, R. (2008). Designing organizations that design environments: lessons from entrepreneurial expertise. *Organization Studies*, 29(3), 331-350.
- Sarasvathy, S. D., Dew, N., Velamuri, S. R., & Venkataraman, S. (2010). Three views of entrepreneurial opportunity. In Z. J. Acs & D. B. Audretsch (Eds.), *Handbook of Entrepreneurship Research*. pp. 77-96, Boston: Springer.
- Sarasvathy, S. D., & Venkataraman, S. (2011). Entrepreneurship as Method: Open Questions for an Entrepreneurial Future. *Entrepreneurship Theory and Practice*, 35(1), 113-135.
- Sarasvathy, S. D., Kumar, K., York, J., & Bhagavatula, S. (2013). An Effectual

- Approach to International Entrepreneurship: Overlaps, Challenges, and Provocative Possibilities. *Entrepreneurship Theory and Practice*, 38(1), 71-93.
- Sarasvathy, S. D., Menon, A. R., & Kuechle, G. (2013). Failing firms and successful entrepreneurs: serial entrepreneurship as a temporal portfolio. *Small Business Economics*, 40(2), 417-434.
- Sarasvathy, S., Kumar, K., York, J., Bhagavatula, S., (2014). An effectual approach to international entrepreneurship: overlaps, challenges, and provocative possibilities. *Entrepreneurship Theory and Practice*, 38, 71-93.
- Sarasvathy, S. D. (2021). The Middle Class of Business: Endurance as a Dependent Variable in Entrepreneurship. *Entrepreneurship Theory and Practice*, 00(0), 1-29.
- Sarasvathy, S. D. (2021). Even-if: Sufficient, Yet Unnecessary Conditions of Worldmaking. *Organization Theory*, 2(0), 1-9.
- Schweizer, R., Vahlne, J. E., & Johanson, J. (2010). Internationalization as an entrepreneurial process. *Journal of International Entrepreneurship*, 8(4), 343-370.
- Schweizer, R. (2015). Decision-making during small and medium-sized enterprises' internationalisation: effectuation vs. causation. *Journal of International Business and Entrepreneurship Development*, 8(1), 22-41.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Snyder, H. (2019). Literature review as a research methodology: An overview and guideline. *Journal of Business Research*, 104, 333-339.
- Sullivan Mort, G., Weerawardena, J., & Liesch, P. (2012). Advancing entrepreneurial marketing: evidence from born global firms. *European Journal of Marketing*, 46(3/4), 542-561.
- Tabares, A., Chandra, Y., Alvarez, C. (2021). Opportunity-related behaviors in international entrepreneurship research: a multilevel analysis of antecedents, processes, and outcomes. *International Entrepreneurship Management*, 17, 321-368.
- Torraco, R. J. (2005). Writing integrative literature reviews: Guidelines and examples. *Human Resource Development Review*, 4 (2005), 356-367.
- Vahlne, J. E., & Johanson, J. (2017). From internationalization to evolution: the Uppsala model at 40 years. *Journal of International Business Studies*, 48(9), 1087-1102.
- Van Gelderen, M., Wiklund, J., & McMullen, J. S. (2021). Entrepreneurship in the Future: A Delphi Study of ETP and JBV Editorial Board Members. *Entrepreneurship Theory and Practice*, 00(0), 1-37.
- Venkataraman S. (1997). The distinctive domain of entrepreneurship research: an editor's perspective, In Katz J. et Brockhaus R. (Eds.), *Advances in entrepreneurship, firm emergence, and growth*, Greenwich, CT: JAI Press, 3, 119-138.
- Wiltbank, R., Dew, N., Read, S., & Sarasvathy, S. D. (2006). What to do next? The case for non-predictive strategy. *Strategic Management Journal*, 27(10), 981-998.
- Winch, G. M. (2008). Internationalisation strategies in business-to-business services: the case of architectural practice, *The Service Industries Journal*, 28,1, 1-13.