KATARIINA YRJÖNKOSKI

Effectuation as a Framework for Organizational Partnership Building

Making a structure from apparently unstructured behaviour

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ACADEMIC DISSERTATION
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Dedicated to my daughter Eevi

PREFACE

Doctoral dissertations are rarely completed without any backup. Neither was this one. Over the course of the 3,5-year process, many people have crossed my path whose contribution to my work has likely been greater than any of them would have guessed. I would like to extend my sincerest thanks to the supervisor of my work, Professor Marko Seppänen, whose compassionate guidance provided me with the right balance between freedom and responsibility. Our numerous discussions not only enriched the doctoral dissertation process, but also slowly built up my identity as a researcher. Now I have a solid base to draw on, also in the future. I would also like to give special thanks to Professor Emeritus Hannu Jaakkola, who has supported me throughout the process. Hannu's straightforward encouragement has been like a solid rock: his decades of experience allowed him to see progress and a glimmer of light in my work, even when I couldn't see them myself.

I want to thank Paul M Hammaker Professor of Business Administration Saras Sarasvathy (University of Virginia), Professor Jukka Vesalainen (University of Vaasa) and Professor Hannu Kärkkäinen (Tampere University) for examining my dissertation. I appreciate the time and effort they used to give their insightful and valuable feedback on it.

The importance of peer support during the dissertation process cannot be stressed enough. My dissertation would have never been completed without my closest research colleagues Anu Suominen and Krista Sorri. Over the years, we have become a tight-knit trio – there is not one challenge that our mutual, slightly inappropriate humour would not have been able to put into perspective. I would also like to thank Anu for her endless willingness to help and guide a less experienced researcher. I want to thank Hannele Väyrynen and Erkki Kurkinen for their invaluable support, ideas and our conversations, which have significantly influenced the direction and progress of my work.

From time to time, the process has disrupted the balance between work and leisure. Friends and family have always brought me back down to earth. I would like to thank my dear friends Marjo Kuisma, Leena Roskala, Henna Väätäinen and Sanna Kuusisto for our fruitful conversations and for helping me stay healthy, active and creative during these hectic years. I want to thank my mother Tarja Rasimus and

Marjo Kuisma, the godmother of my daughter Eevi, for their babysitting help, which they have frequently and generously offered. I thank my husband Teppo Yrjönkoski for his flexibility, as well as bearing the main responsibility for family matters during the most intense periods of the dissertation process. Small and large encounters with all the other friends and relatives who I do not mention here by name have also been incredibly important. You know who you are - thank you.

I want to thank the Satakunta Regional Fund and The Satakunta Higher Education Foundation for financially supporting my work. I am grateful of such signal of considering my research topic important and worth encouraging.

Lastly: I never really thought that I would be the type to write a dissertation. Nevertheless, here it is. Limits are made to be broken, especially when they only exist in our own minds. Dare to dream.

In Pori, 28 October 2019

Katariina

ABSTRACT

TAMPERE UNIVERSITY

Faculty of Management and Business, Unit of Information and Knowledge Management

Yrjönkoski, Katariina. 2019. Effectuation as a framework for organizational partnership building - making a structure from apparently unstructured behaviour

Keywords: effectuation, causation, partnership building, networking, case study

This doctoral thesis aims to discover how effectuation appears in organizational partnership building. The research also aims to explore how contextual factors affect partnership building, and how effectuation may help to explain contextually different partnership-building acts. Partnerships are currently considered as crucial success factors in all industries. A vast literature base exists that approaches partnerships from various viewpoints. Effectuation and causation are two contrasting processes regarding decision making in organizations. Causation is coherent with planning approaches that are founded on finding opportunities, conducting predictions and pre-defined goals. Effectuation is coherent with learning/adaptive approaches and is characterized by experimentation, creating opportunities by utilizing the contingencies and resources at hand, and dynamic partnerships. Rather than pursuing pre-defined goals, the goals emerge as an output of an effectual process. Effectuation is linked to business settings that are characterized by a high level of uncertainty. Such settings are typical of start-up companies but may occur for established companies as well.

The objectives of this research were to strengthen and confirm the effectuation theory in the context of partnership building and to form new knowledge on partnership building particularly under the dominance of effectuation. The research was conducted as a comparative case study of four firms operating in Finnish software companies. The collected data, mostly based on interviews of top

management, was analysed through the lens of effectuation theory. Furthermore, the data was also analysed in an open-ended way to enable new findings on effectual partnership building.

The findings of this research indicate that effectuation is strongly detectable in partnership-building acts in particular contexts. The findings deepen prior knowledge of the connection between effectuation and partnership building, particularly describing the special characteristics of effectual partnership building. Prior research has provided empirical evidence of partnership orientation in both the effectual and causal approaches. However, the differences in these two partnership-building processes have not been very comprehensively covered in the prior literature. The results of this thesis also contribute to the co-existence and interplay of effectuation and causation. The research clarifies the roles of these two processes as different, yet effective partnership-building approaches when utilized in an appropriate situation. As a result of this research, a suggested model of partnership-building archetypes was formed. These archetypes illustrate four different partnership-building profiles, defined by certain key variables. Although the model is preliminary, it may be useful in outlining future research attempts on effectuation and partnership building. The model contributes to practical management work as well: understanding effectuation helps companies to attain the unique benefits that effectuation may provide. Such benefits include higher sensitivity for innovations, lower costs for testing the viability of new business ideas, and overall more relevant and sustainable partnerships. The research suggests further research avenues for deepening the understanding on the contextual factors that affect partnership building. Furthermore, the iterative refining of the presented model of partnership-building archetypes is proposed.

TIIVISTELMÄ

TAMPEREEN YLIOPISTO

Johtamisen ja talouden tiedekunta, tietojohtamisen yksikkö

Yrjönkoski, Katariina. 2019. Effektuaatio kumppanuuksien muodostamisen viitekehyksenä

Avainsanat: effektuaatio, kausaatio, kumppanuudet, verkostoituminen, case-tutkimus

Tässä väitöskirjassa tutkitaan, miten effektuaatio ilmenee yritysten kumppanuuspäätösten tekemisessä ja miten effektuaation avulla voi selittää kumppanuuksiin liittyviä, strategiaperusteisia aktiviteetteja erilaisissa tilanteissa. Kumppanuuksien oletetaan olevan tämän päivän liiketoiminnan keskeisiä menestystekijöitä, ja myös tutkimuksissa niitä on käsitelty runsaasti erilaisista näkökulmista. Effektuaatio ja kausaatio ovat yrityksen päätöksentekoon liittyviä, pääperiaatteiltaan vastakkaisia prosessipiirteistöjä. Kausaatio luonnehtii suunnitteluloogisia lähestymistapoja, joissa liiketoimintapäätökset tehdään perustuen ennustedataan, tarkasti määriteltyyn tavoitteeseen sekä näistä johdettuun, ennalta valmisteltuun suunnitelmaan. Effektuaation peruspiirteisiin kuuluu liiketoimintamahdollisuuksien luominen kokeilujen, käytettävissä olevien resurssien hyödyntämisen, ja dynaamisten kumppanuuksien kautta. Ennalta määriteltyjen tavoitteiden sijasta ne syntyvät effektuaalisten prosessien tuotteena. Effektuaation oletetaan dominoivan sellaisissa tilanteissa, joissa yrityksen toimintaympäristöä luonnehtii erityisen suuri epävarmuus. Tällainen tilanne on tyypillisesti esimerkiksi yritystoiminnan alkuvaihe, mutta myös muut liiketoiminnan tai markkinan muutokset, joissa keskeisiin liiketoiminta-artefaktoihin (esim. liiketoimintamalli, tarjooma, asiakkaat) liittyy erityisen paljon muutoksia.

Tutkimuksen tavoite oli sekä vahvistaa effektuaation teorian perusrakenteita että tuottaa uutta ymmärrystä kumppanuuksien muodostamiseen niissä tilanteissa, joissa effektuaalisen päätöksenteon odotetaan ilmenevän voimakkaana. Tutkimus kohdistuu suomalaisiin ohjelmistoyrityksiin, ja se toteutettiin neljän yrityksen tapaustutkimuksena, jossa haastateltiin yritysten avainpositioissa työskentelevät henkilöt. Haastatteluaineisto analysoitiin effektuaatioteoriaa vasten, pyrkien vahvistamaan sitä. Lisäksi aineisto analysoitiin etsien siitä sellaista uutta tietoa kumppanuksien muodostamisesta, jota effektuaation avulla voitaisiin selittää ja tutkia lisää.

Tutkimuksen tulokset osoittavat, että effektuaatio on havaittavissa päätöksenteon rakenteena vaikuttaen voimakkaasti myös kumppanuuspäätösten tekemiseen. Tulokset syventävät aikaisempaa ymmärrystä effektuaation ja kumppanuuksien yhteydestä, ja kuvaavat erityisesti effektuaatioon liittyvän kumppanuusajattelun erityispiirteitä. Aiemmissa tutkimuksissa on havaittu kumppanuuksien voivan kuulua sekä effektuaatioon että kausaatioon, mutta eroja näihin kahteen liittyvässä kumppanuusajattelussa ei ole juurikaan tutkittu aiemmin. Tulokset tuottavat uutta tietoa myös effektuaation ja kausaation yhteistyöstä, ja selkeyttävät näiden kahden roolia keskenään erilaisina, mutta tilannekohtaisesti hyödyllisinä päätöksenteon tapoina. Tutkimuksen tuloksena syntyi myös alustava malli kumppanuuksien muodostamisen erilaisista arkkityypeistä. Arkkityypit kuvaavat avainmuuttujien kautta neljä erilaista kumppanuuskäyttäytymisen mallia, ja tarjoavat vaihtoehtoisen tavan lähestyä kumppanuuksien rakentamista tulevissa tutkimuksissa. Tutkimustuloksista on hyötyä myös käytännön johtamistyölle: effektuaation ymmärtäminen ja toteuttaminen suunniteltuna käytäntönä voi auttaa saavuttamaan sille spesifejä hyötyjä, kuten laajempaa innovaatiopotentiaalin havaitsemista, nopeampaa ympäristöstä nousseiden mahdollisuuksien liiketoimintakelpoisuuden testaamista sekä tarkoituksenmukaisempia, tasapainoisempia kumppanuuksia. Tulosten perusteella tulevissa tutkimuksissa olisi hyödyllistä mm. tarkastella kumppanuuksien solmimisen taustatekijöitä effektuaalisen logiikan vallitessa yhä pidemmälle ja jatkaa tässä tutkimuksessa esitellyn arkkityyppimallin iteratiivista kehittämistä yhä tarkemmaksi.

CONTENTS

1 INTRODUCTION

This doctoral thesis focuses on effectuation in the partnership-building context. The topicality of this research is highlighted by the increasing attraction of networks as a dominant business paradigm (Contractor, Wasserman, & Faust, 2006; Parkhe, Wasserman, & Ralston, 2006). Networks, which are approached in this thesis through the concept of *partnership building*, have also received significant academic attention. Furthermore, the topicality of the research manifests itself in the discussions on an information-intensive society, in which networks and partnerships are time after time argued to be a key construct. *Effectuation*, the second key concept of this thesis, relates to the discussion of planned vs. adaptive strategies. However, according to the current understanding (Eisenhardt & Zbaracki, 1992; Harrison, Holmen, & Pedersen, 2010; Reymen et al., 2015; Wiltbank, Dew, Read, & Sarasvathy, 2006), planned and adaptive strategies are not extreme poles in a continuum of strategy schools. The current discussion considers strategy more as a manifold, multi-level and continuous process, likely to involve both planned and adaptive elements working interdependently (Reymen et al., 2015). Effectuation theory offers an alternative framework for exploring the mentioned emergent acts and their interplay with causal acts.

The empirical part of the study was carried out in four Finnish companies in the software industry. It was conducted as a case study, through in-depth interviews of 15 members of the top and middle management of these organizations. The topic was approached from a qualitative viewpoint, and the research strategy and methodological choices were led by an interpretivist paradigm. The collected data was analysed by applying relevant techniques of content analysis, utilizing Atlas.ti software. Before initiating this research process, the author had been working on framing the topic e.g. by conducting an introductory study in one of the case companies (Yrjönkoski & Suominen, 2018) and other activities aiming to gain a pre-understanding of the selected problem space (Yrjönkoski, Helander, & Jaakkola, 2016).

The introduction chapter gives an overall understanding of the topic of this thesis and proceeds as follows: section 1.1 introduces the motivation for the topic and the practical, challenges specific to partnership building it originates from; sections 1.2 and 1.3 frame the problem space and set the research questions that this thesis aims to answer.

1.1 Background

The author's interest in the themes of this thesis originally arose from personal practical experience in managerial positions in the software industry and other software- and information-intensive industries. Managerial work in small and medium-sized companies is often full of tackling uncertainty, resource scarcity and fast-changing environments. Dealing with new or turbulent business is sometimes exciting or even disquieting, as it often feels that it has to be done with extremely incomplete information and an insufficient picture of the business environment. In addition, questions related to partnerships occur almost daily. While partnership building is considered a key capability of a company's competitive advantage and a matter of national and global debate, for some reason many companies still do not seem to take the full advantage of building and utilizing partnerships. However, among managers partnerships are considered as positive and especially important means to access e.g. new markets, resource and knowledge (Valkokari, Valjakka, Viitamo, & Vesalainen, 2016).

Partnership building has been considered and explained through the lenses of several different concepts and frameworks (Aarikka-Stenroos, Sandberg, & Lehtimäki, 2014; Parmigiani & Rivera-Santos, 2011). However, "*no single grand theory of networks exists*", and, despite the extensive literature on networks, "*there is still a great deal we do not yet know*" (Provan, Fish, & Sydow, 2007). Furthermore, network management is highly conditioned by the context, and should therefore be explored context-dependently (Järvensivu & Möller, 2009; Möller & Halinen, 2017). Overall, the potential of partnerships is still seen to be very under-utilized e.g. in the Finnish software business (Yrjönkoski et al., 2016). Running any business requires understanding a dynamic, complex network of different actors, needs and trends. Understanding and joining a network is not a straightforward act. Thus, building and managing partnerships consciously requires a particular competence and is a continuous process. Pursuing research that aspires to expand the continuum of decision-making logic by offering a new systematic understanding of the phases that are not compatible with causal reasoning could result in more agile, resilient and balanced networks.

Management research has gained a vast knowledge base of causal models (e.g. Ansoff, 1965; Kotler, 1991; Porter, 1985). In these models, the emphasis is on analyzing and predicting the environment. In practice, this may even feel too slow or too ineffective, especially if the context is characterized by a high level of uncertainty. In such contexts, causal models may turn out to be problematic or useless, as the manager should a) have access to historical information or analogous situations that allow him/her to anticipate a likely future, and b) be relatively sure that the future will be sufficiently like the past so the plans can be based on predictions (Read, Song, & Smit, 2009). Furthermore, the extremities in the debate on planning vs. adaptive strategies have moved closer to each other. The current discussion aims to seek models that are more realistic in combining systematic planning and more informal techniques, like heuristics, adaptation, managerial cognition and use of strategic initiatives (e.g. Harrison et al., 2010; Read, Song, et al., 2009; Tikkanen, Lamberg, Parvinen, & Kallunki, 2005). This stream has offered alternative views in which, instead of *finding* opportunities, they are *co-created* by the company and its committed partners. (Read, Song, et al., 2009) Uncertainties and contingencies are considered good: *"the ideas with a lower degree of readiness often comprise the highest innovation potential"* (Martela, 2018). Effectuation theory has attracted interest as being such a view in the intersection of entrepreneurial, strategic and behavioral research. The interest may be a consequence of the encouraging empirical findings on it – in addition to the heuristic, flexible and experimental characteristics of effectuation, which may feel intuitively more reasonable and effective. It is believed to produce benefits that are unique and characteristic only of effectual processes. Regarding partnership building, traditional strategic planning is claimed not to be very useful (Möller & Halinen, 1999). However, structured management practices in general are pointed out to be significant in accounting for the variance in the productivity of a company (Bloom et al., 2019). Thus, it would be fruitful to develop a model that combines effectual features with a systematic structure. Previous findings on effectuation have also gained academic interest in the interplay of effectuation and causation; both can offer a path to a successful business, and new research is needed to understand what kinds of contexts are particularly fruitful for effectuation. Furthermore, it has been recognized that effectuation literature has so far paid insufficient attention to exploring the relationship between networking and effectuation (e.g. Kerr & Coviello, 2019b, 2019a).

As a summary, this research was inspired by problems related to partnership building, which in this thesis are explored via the effectual lens. This thesis aspires to increase our knowledge of how effectual decision-making logic is manifested in companies' partnership-building activities, in what kinds of circumstances it can be beneficial, and how effectuation and causation may be interrelated in partnership building. Effectuation is expected to explain partnership building and help to understand partnership building in varying contexts. Simultaneously, partnership building, previously considered an effectuation-specific act, is believed to help to observe effectuation and to build new knowledge of it. For the purposes of this thesis, partnership building is defined as comprising *all the partnership-related acts originating from any intended or emergent strategic alignment*. As this research focuses on effectuation in the partnership-building acts of a single company, the type, purpose and structure of the target network has been excluded from the scope of this thesis.

1.2 Research problem, key concepts and limitations

The research problem of this research is positioned at the intersection of two themes: 1) effectuation and its underlying causes and 2) partnership building within different contexts. The research problem is expressed as follows:

> *Effectuation theory is an emerging framework used to explore processes that employ experimentation, means-orientation and utilization of contingencies rather than predicting, planning and goal orientation. How does effectuation appear in partnership building and how could it be utilized to understand different partnership-building contexts?*

Effectuation and its opposite, causation, are two alternative approaches that are used in the new venture development process (Sarasvathy, 2001). Causation is consistent with planned strategy approaches (e.g. Ansoff, 1965, 1979; Porter, 1985). Effectuation theory assumes that the planning approach is problematic in uncertain conditions, where the future is not predictable (Chandler, DeTienne, McKelvie, & Mumford, 2011; Sarasvathy, 2001). Effectuation also relies on activities with a strong means orientation, rather than goal orientation. These activities comprise building on the resources at hand, experimenting, focusing resources that one can afford to lose, and leveraging surprises and unexpected situations. (Futterer, Schmidt, & Heidenreich, 2017; Sarasvathy, 2001)

Effectuation theory is a rather new and emerging framework that, in its original declaration, is described in a rudimentary manner (Sarasvathy, 2001). In the prior literature, the emerging theory of effectuation has been admitted as promising and interesting entrepreneurship framework (Arend, Sarooghi, & Burkemper, 2015; Matalamäki, 2017; Matalamäki, Vuorinen, Varamäki, & Sorama, 2017; Perry, Chandler, & Markova, 2012). However, effectuation theory has also received some criticism. It has been argued to exhibit slow and unrigorous development progress, an unsatisfactory level of testability, and lack of empirical studies (Arend et al., 2015; Matalamäki, 2017; Perry et al., 2012). Proposals on developing the theory have been expressed. Directions to develop the consistency of effectuation theory include, to name the major ones: moving from narratively describing effectuation to identifying the underlying causes of the proposed relationships, specifying the current problem landscape more explicitly, expressing interesting propositions, and building on previous work to develop the framework in a solid manner (see Arend et al., 2015). The first scales for measuring effectuation have been developed and validated (Chandler et al., 2011). Read et al. (2009) have developed guidelines for the measurement of effectuation, based on meta-analysis of effectual constructs and venture performance. In general, effectuation research is considered worth encouraging and developing (Arend et al., 2015; Perry et al., 2012), and much valuable work has been done to identify theoretical weaknesses that need more focus in future research (Arend et al., 2015). In addition, the first critical steps have been suggested towards an intermediate state, where the appropriate contributions should focus on development and testing of suggested models (Perry et al., 2012).

In the prior literature, effectuation has been approached from distinct directions. Broadly, the research on effectuation can be divided into two: effectuation as *entrepreneurial behaviour* and effectuation as a *strategy framework*. The first approach, effectuation as entrepreneurial behaviour, positions effectuation in the field of entrepreneurial or psychological research. This literature considers effectuation as individual behaviour and a technique of an individual's decision making, occurring particularly in the entrepreneur's decision processes (Busenitz & Barney, 1997; Engel, Kaandorp, & Elfring, 2017; G. Fisher, 2012; Stroe, Parida, & Wincent, 2018; York & Venkataraman, 2010; Zhang, Cui, Zhang, Sarasvathy, & Anusha, 2019). This study focuses on exploring effectuation from the second direction: as an organizational, strategic phenomenon. Here, strategy is considered as a "pattern in a stream of decisions", involving those fundamental decisions which shape the course of a firm (Eisenhardt & Zbaracki, 1992; Mintzberg & Waters, 1985). Strategy, in the setting of this thesis, can be anything in a continuum of intended and emergent strategies (Mintzberg & Waters, 1985). In intended strategies, managers formulate their intentions as precisely as possible and then strive for their implementation with a minimum of distortion. Emergent strategies are patterns or consistencies realized despite, or in the absence of, intentions (Mintzberg & Waters, 1985). They may result for instance from a collective, strong vision (ideological strategies), as patterns in an unconnected stream of decisions in sub-units or individuals (unconnected strategies), or originate in the central vision of an entrepreneur (entrepreneurial strategies). Emergent strategies, unlike intended strategies, are not a consistent process. The whole process of strategic management is a balance between formal planning and informal, motivated creating (Näsi & Aunola, 2001, pp. 1090–1110). In strategy literature, contrasting effectuation and causation manifests a traditional discussion of dominant management paradigms: i.e. rationality vs. bounded rationality, planning approach vs. adaptive approach, or predictive vs. non-predictive strategies (Eisenhardt & Zbaracki, 1992; Wiltbank et al., 2006). Effectuation theory has been positioned in the family of adaptive strategies, including emergent and transformative strategy models (G. Fisher, 2012; Wiltbank et al., 2006). However, the current paradigm in strategy frameworks considers strategy as a more manifold phenomenon, rather than seeing adaptive and planning approaches as a dichotomy. Instead of having one way of planning and implementing a strategy within one organization, the implemented strategy (Mintzberg & Waters, 1985) may consist of both planned and emergent elements. Entrepreneurs in large organizations may use more intuition and heuristics compared to managers (Busenitz & Barney, 1997); rationality in general is multidimensional and therefore decision-makers may be rational in some ways, but not in others (Eisenhardt & Zbaracki, 1992); or, prediction and control may occur independently (Wiltbank et al., 2006). Models that combine rational and bounded rational logic also exist. Mintzberg et al. (Mintzberg, Raisinghani, & Theoret, 1976) proposed a model of unstructured models, consisting of three phases and a set of routines under them. While the classic rational models present the phases of decision making as occurring sequentially, Mintzberg et al. (Mintzberg et al., 1976) propose that these phases and routines occur in the decision-making process, but do not have a sequential relationship (Eisenhardt & Zbaracki, 1992; Mintzberg et al., 1976). Effectuation and causation are presumed to work similarly – together, simultaneously and intertwined - which may result in a combination of intended and emergent acts (Sarasvathy, 2001).

Partnership building, observed via the effectual lens, is the particular area of interest for this thesis. Here, partnership building is considered to be all the partner-related acts that are a consequence of partnership-related strategy, whether intended or emergent. Partnership building is explored particularly as an organization-level phenomena. Furthermore, partnership building is construed as a synonym for "networking", which is also a common term for activities defined as "attaching to a network or building a network for a predefined purpose" (Sanastokeskus, 2010) or "developing bonds to certain other players in the network amounts to making alliances for the short or the long term" (Håkansson & Snehota, 1995, p. 266). The concept of partnership building in this thesis is considered particularly as an activity, thus limiting the scope of this research to partnership-related actions in a single company and/or within a relationship to a certain partner. The theoretical framework for partnership building in this research has been adopted from the IMP Group, an international network of scholars who approach management, innovation, marketing and technological development from an interactive perspective ("IMP Group," n.d.). The IMP Group's approach understands the network as a dynamic structure consisting of companies and the relationships between them (e.g. Håkansson & Ford, 2002). At the most generic level, a network is considered to be a domain of all possible actors in the industry. It cannot be restricted or delimited, as all the company-centred views of the network are incomplete and do not give an adequate basis for understanding the world around the company, and the opportunities offered by it. This so-called industry-level network represents the first level in the theoretical network model proposed in the IMP approach. In addition to the whole industry level, the IMP approach separates three more network levels: 1) a focal network consisting of a single company's position in the network, 2) relationship portfolios that present the current set of exchange relationships of a firm, and 3) a single dyadic relationship. (Ford, Håkansson, Snehota, & Gadde, 2002; Möller & Halinen, 1999)

Partnership building was originally identified as one of the four key constructs of effectuation. The heart of effectuation lies in *co-creating* opportunities with partners (Read, Dew, Sarasvathy, Song, & Wiltbank, 2009; Read, Song, et al., 2009). However, it has not been possible to connect partnerships to effectuation in particular, rather they have occurred as a shared construct in both effectuation and causation in later empirical studies (Chandler et al., 2011). This calls for further research to focus on what kind of partnership building is characteristic of effectuation.

1.3 Research questions and objectives

In this research, effectuation theory has been chosen as a framework for exploring partnership building as an organizational act. As the constructs and characteristics of effectual processes have been drawn at the level of a rudimentary theoretical model, their appearance at the practical level has not been investigated very extensively. The original principles of effectuation proposed by Sarasvathy (Sarasvathy, 2001) have even been modified in later studies (Brettel, Mauer, Engelen, & Küpper, 2012; Chandler et al., 2011), to adapt them to different contexts or to refine them as a contribution of their empirical findings. This research continues in this avenue and contributes to previous knowledge by setting the following research questions:

RQ1. How does effectuation emerge in partnership building?

The first research question enables the utilization of predefined principles of effectuation in drawing up the theoretical setting for this research. However, an unambiguous definition of effectual principles still does not exist, although different studies have resulted in refining them to fit the current context. This thesis utilizes work by Chandler et al. (2011), and builds the exploration of effectuation on the constructs validated as a result of their study.

However, relatively little is known of effectuation in practical partnership-building activities. Thus, it was supposed that the findings of this research might bring valuable new insights and deepen the existing definition of effectuation, specifically in partnership-building acts. The answer to RQ1 contributes to the base construct of effectuation theory, by deepening the understanding of effectuality. The prior literature on effectuation does not posit effectuation as "better" or "more efficient" when compared to causation in creating business artefacts. However, it points out a need for further research on the circumstances under which certain types of processes can provide particular advantages. This thesis aims to contribute to this area by identifying the attributes in the current context that play a role in the appearance of effectuation in the case companies.

The extreme poles in the discussion of rationality vs. bounded rationality in strategic planning have moved closer towards each other. Nevertheless, although the scientific validity of adaptive, non-predictive models has gained a lot of evidence, causality, often referred to as the "planning school," has perhaps the longest tradition as a dominating paradigm (Eisenhardt & Zbaracki, 1992; Wiltbank et al., 2006). This research is particularly interested in effectuation and the factors that cause effectual behaviour to appear in partnership building. The second research question concentrates on the underlying triggers for effectuation:

RQ2: How do contextual factors impact effectuation in partnership building?

Causation and effectuation are often presented as a dichotomy to enable clearer theoretical exposition. However, they are not a dichotomy. In her seminal and widely cited article, Sarasvathy (2001) states that effectuation and causation may occur "simultaneously, overlapping and intertwining over different contexts of decisions and actions". While effectuation and causation are presumed to work together, the knowledge of their co-occurrence and co-operation is still very inadequate (Johansson, Ellonen, Mckelvie, & Tarkiainen, 2015; Laine & Galkina, 2017). Previous studies have called for better understanding of the collaborative nature of effectuation and causation (Chandler et al., 2011; Sarasvathy, 2001). To answer this call in the partnership-building context, the third research question was posed as follows:

RQ3: How are effectuation and causation intertwined in partnership building?

While the observation in RQ1 and RQ3 focuses on effectuation *within* the organization, RQ2 explores the influences underlying effectuation both *in the organization and the environment* around it.

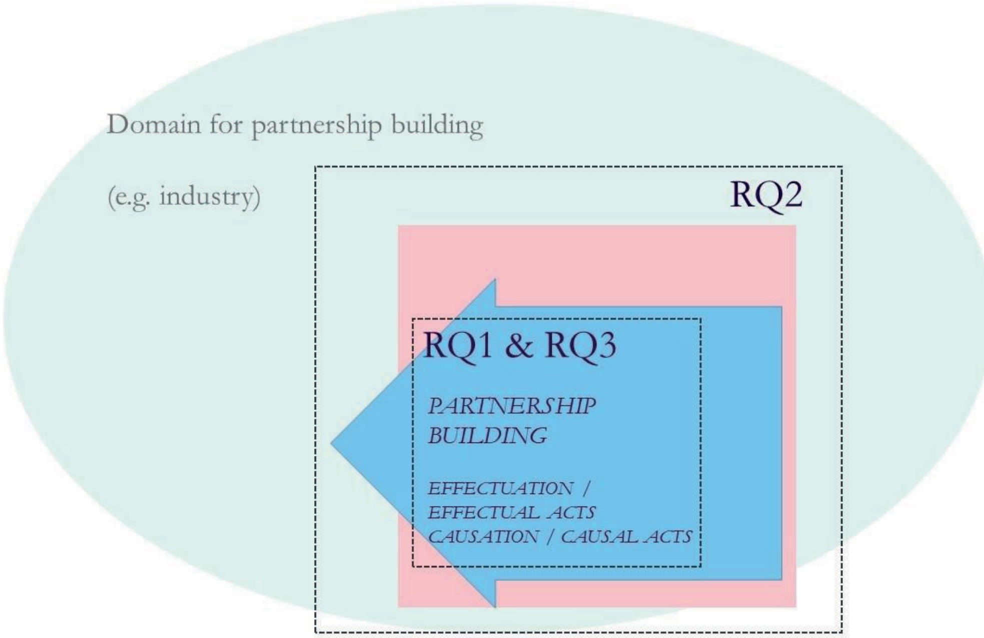

Figure 1. Positioning the research questions regarding intra-organizational and environmental factors.

Figure 1 presents the research questions and their positioning. RQ1 and RQ3 focus on the effectual features in partnership-building acts conducted within the case organization. The domain for networking describes the whole space of potential partnerships. Typically, the space may be defined by the industry the company operates in, but may also contain actors from other industries, related to the same business areas as the company. Partnership building, here, is considered an organizational-level act, and thus observed from a single company's point of view. RQ2 extends the observation to environmental factors, which, in addition to organizational factors, have an impact on the occurrence of effectuation alone and with causation. The arrow pointing outwards from the company describes the partnership-building activities that are directed outside the organization.

The answers to the three presented research questions contribute to the effectuation theory. They extend the knowledge on the appearance of effectuation in practice, hence consolidating the definition of the concept and constructs of effectuation. Enriching the theory framework, defining the landscape, expressing new proposals and identifying the underlying causes of effectuation are areas where calls for further research have been made (e.g. Arend et al., 2015). Thus, the current study contributes by addressing an explicit research gap and exploring the influencing conceptual factors in this limited scope. Furthermore, the study contributes to the partnership-building literature by shedding light on different partnership-building contexts and influencing factors. This leads to both scientific and managerial contributions. Scientifically, the contribution of this thesis is expected to help to outline and direct future partnership-building related research activities by enabling researchers to consider the idiosyncrasies of the context in their research design. Non-causal acts have previously been seen as unfavourable deviations in the planning logic. The results of this research acknowledge the role of effectual logic as a beneficial and effective behaviour in certain contexts. By reinforcing that understanding, the results of this research may contribute to practical management questions, offering a framework to develop models for partnership-related managerial issues.

2 RESEARCH DESIGN

Research design is a process encompassing all the steps needed to carry out a study: framing the topic for specific research questions, reviewing the relevant prior literature, selecting the research approach, strategy and methods, analysing the data, and finally reporting the results (Creswell, 2014). Before coming to the actual research design, the chapter begins with section 2.1 introducing the overall process and the abductive, iterative nature of forming knowledge. This started from the phases of gaining a pre-understanding of the topic, and iteratively shaping it to frame an explicit research problem for this research. Previous, related work by the author is linked to the process and its role is explained. Section 2.1 also maps each step to a corresponding chapter in this thesis. The next section, 2.2, positions the current research in the field of organizational and management research. Section 2.3 discusses a few of the main research paradigms in organization science and presents the underlying paradigm for this research. As the underlying paradigm affects all the aspects of research design, the original ontological and epistemological choices are introduced. The selected research approach, strategy, methods, and the validation strategy are revealed in the following sections, 2.4 – 2.6. As conducting a literature review for a complex topic needs to be done with extreme care, the outlines of the review procedure are reported in section 2.7. Methods for collecting and analysing the data are presented in sections 2.8 and 2.9.

2.1 Overall view of the research process

In this thesis, the prior experience and academic publications of the author formed the initiation of the research process. The knowledge on the topic was obtained in the phases of pre-understanding and understanding. Pre-understanding refers to such things as the researcher's knowledge, insights and experience before engaging in a specific piece of research (Gummesson, 1991) pp. 50. Pre-understanding is beneficial in identifying and interpreting important events and phases. As Gummesson (1991, p. 51) argues, it is vital for academic researchers in management research to have personal experience from a position where they were responsible for making decisions. The process of this thesis was cyclic and iterative, as is typical for qualitative research. The hermeneutic cycle of gaining understanding in the starting phase of the process included utilizing the existing, learned theory and then refining the framework for this research as understanding of the topic increased. While the study itself is mostly deductive in nature, it also implements inductive characteristics in two ways. Firstly, understanding was formed in cycles, as the author published articles regarding the topic. Secondly, new theoretical knowledge of partnership building and effectuation together was also created as a result of this research.

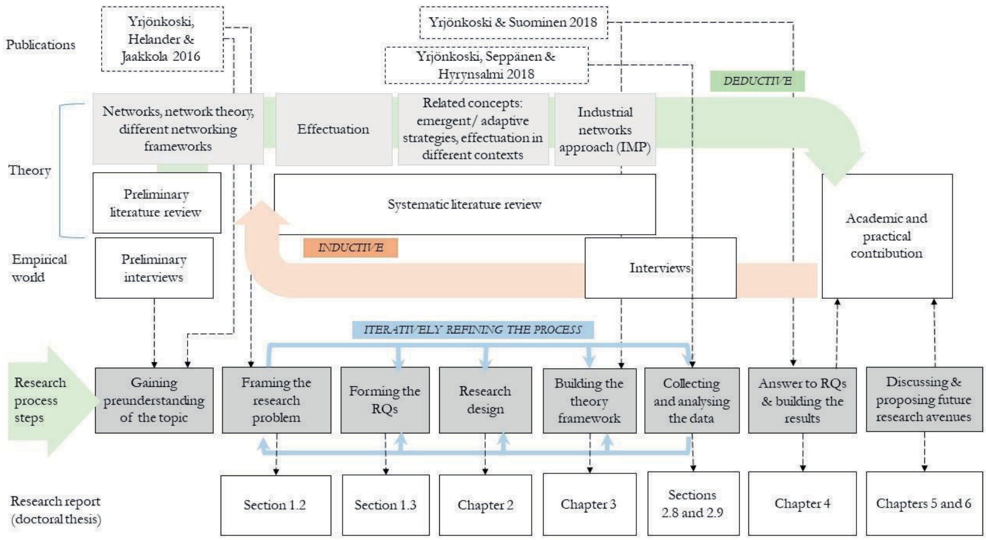

Figure 2. Abductive, iterative building of the knowledge and contribution in this research process.

Figure 2 presents the whole process of this thesis, including the acts for forming the pre-understanding. The interrelations of process steps and corresponding acts regarding theory and the empirical world are illustrated above by the process flow (grey rectangles). Under the process flow, the chapters that report each phase are linked.

Research design refers to the steps taken in planning the concrete acts for conducting the actual study. In this thesis, research design was preceded by a pre-phase, in which the research topic was gradually shaped and the research was initiated. Research design is an action plan for carrying out research: a logical sequence that connects the empirical data to research questions and to conclusions. It encompasses planning all the steps from reviewing the prior literature systematically to selecting the research approach, methods, and reporting the results. (Creswell, 2014; Yin, 1994, p. 18) Research design is, at the same time, closely linked to the nature of the research problem and to the underlying philosophical assumptions based on research traditions and the researcher's personal experiences.

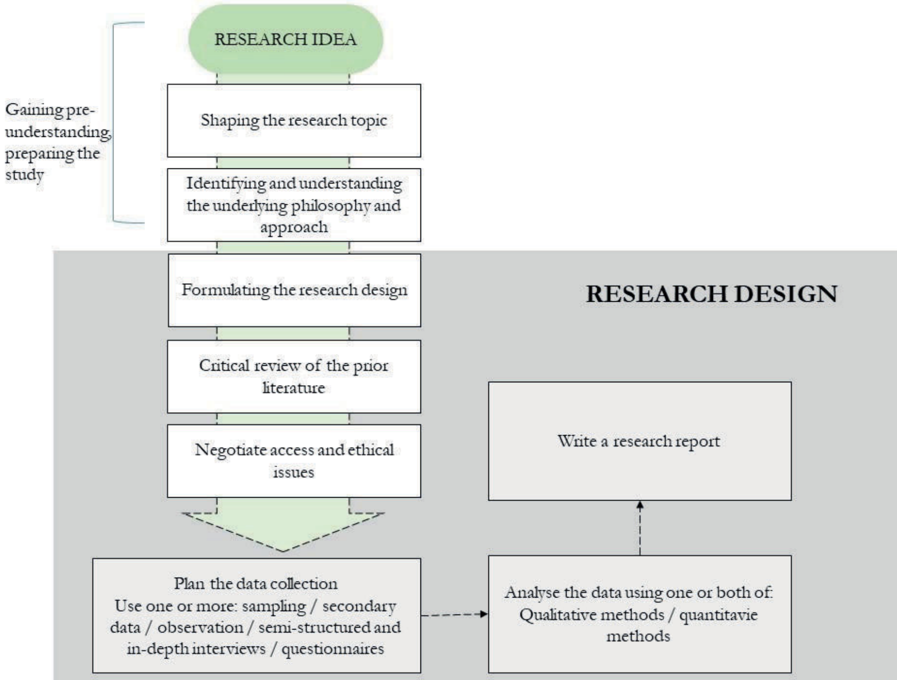

Figure 3. Research design as part of the research process. Developed from (Saunders, Lewis, & Thornhill, 2007, p. 10).

Figure 3 presents a generic structure of design research, developed from Saunders (2007). As Saunders proposes, the process of this study was reflective in each of the steps: they all included reflection and revisions when needed. On the other hand, all steps also include forward planning, as the design may develop along with the process.

In the following sections of this chapter, the underlying research philosophy, chosen research approach and resulting research strategy and method are explained in more detail. Saunders (2007, p. 124) illustrates the connection of research philosophy, approach to research as well as theory development, and research strategy in the "research onion", a layered model of the dimensions of research, each limited by the outermost layer.

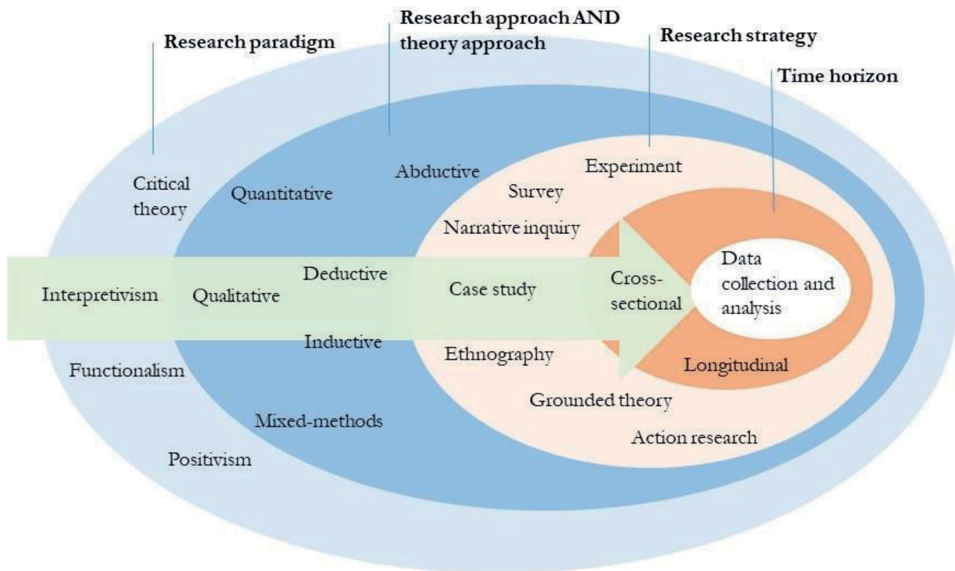

Figure 4. The research onion. The layers of research philosophy, research strategy and research methods in this research and their layered interconnection. Developed from (Saunders et al., 2007, p. 124).

In Figure 4, the positioning of this thesis is illustrated by developing the research onion and highlighting the underlying worldview and choices that were made for this research. The outer layer illustrates the philosophical assumptions as a basis for the research. They determine whether the approach to theory development is inductive, deductive or abductive. The research approach outlines the research strategy, as each of the approaches is linked to particular strategic and methodical choices. Choices influencing the practical level of research concern whether to conduct a cross-sectional or longitudinal study, and which methods for data collection and analysis are appropriate for the study.

In general, the research design and research process were influenced and steered by the nature of the focal framework, effectuation. While effectuation theory is currently in transition from nascent to the intermediate developmental stage (Perry et al., 2012), an unambiguous operationalization for effectuation in partnership-building still does not exist. Furthermore, the concept and terms of effectuation and its principles are rather theoretical. Therefore it was decided not to use them in the interviews, for example, as they were assumed to be unfamiliar to managers interviewed for this research. Thus, the themes in the interview framework were carefully selected to cover the constructs of effectuation, but the questions under those themes were intentionally left very broad. The discussion was then led to the desired themes according to the progress of each interview situation. Similarly, the analysis was conducted by interpreting the interviews carefully, considering the phrases and connecting them to the constructs of effectuation and partnership-building. These kinds of characteristics originating from the topic led the research process to contain a certain heuristics that often is typical for a research with a highly interpretive approach.

2.2 Organizational and management research in the field of social theory

This research belongs to the field of organizational theory, which is a collection of general propositions about organizations (Starbuck, 2003, p. 143). According to Van Maanen et al. (2007), the aim of organizational and management research is to "speculate, discover, and document, as well as to provisionally order, explain, and predict, (presumably) observable social processes and structures that characterize behaviour in and of organizations". The diverse schools of organizational theory approach organizations from different perspectives: system-structural, strategic choice, natural selection or collective-action views of organizations. These views represent qualitatively different concepts of organizational structure, behaviour, change and managerial roles. (Astley, 2019) This research takes up its position at the frontier of *collective-action* and *strategic* views. It considers organizations as a group of people and their relationships organized to serve certain purposes, but also recognizes the semi-autonomous networks that work together to construct their interactive environment and rules. The current study assumes the behaviour in organizations to be collectively constructed (Astley, 2019). Among all branches of science, organization science is relatively young, having developed since the middle of the 20th century (Starbuck, 2003, p. 144). The origins of an interpretive study emerged as a critique for the functionalist organization paradigm that defines organizations as "stable associations of persons engaged in activities directed to the attainment of specific objectives" (Burrell & Morgan, 1979, pp. 260–261).

As this thesis also aims to contribute to managerial aspects, the connections to management theory are recognized. Although the history of management literature is much longer than organization theory, Koontz (1980) positions management theory as a part of organization theory.

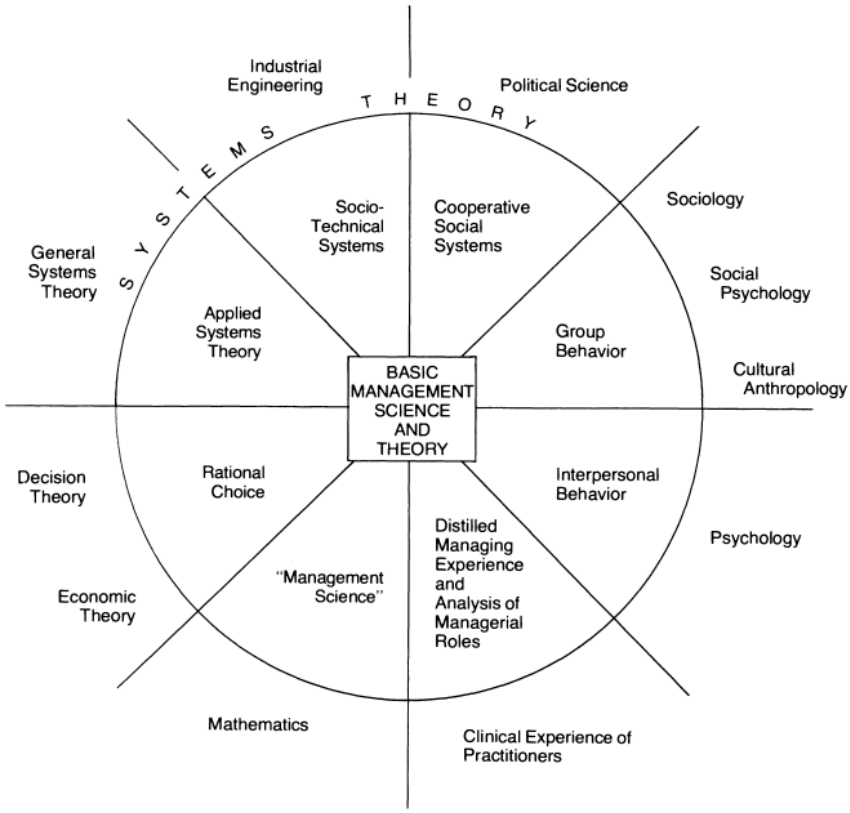

Figure 5. Management science in the intersection of several social theories (Koontz, 1980).

As illustrated in Figure 5, the core of management theory draws from several other fields of knowledge pertaining to management. Figure 5 also demonstrates the plethora of viewpoints of management. This study adopts the systems theory approach to management, and considers organizations as cooperative social systems.

2.3 Research paradigm

All research approaches its subject via explicit or implicit assumptions about the nature of the world and knowledge (Burrell & Morgan, 1979). These sets of assumptions are called *research philosophies*, *research paradigms* or, simply, just the *worldviews* of the researcher. Paradigms are general philosophical orientations based on certain basic beliefs regarding ontological, epistemological and methodological assumptions (Creswell, 2014, p. 6; Guba & Lincoln, 1994, p. 103). Although philosophical ideas remain largely hidden in practical research work, they have important consequences for the practical conduct of a study. They affect the way of interpreting what is seen, what kind of research instruments are appropriate, how the researcher affects the research process and which of the things seen by the researcher are real and important to document. (Creswell, 2014, pp. 5–6; Guba & Lincoln, 1994, p. 112; Rubin & Rubin, 2005, pp. 20–21). Thus, it is important for the researcher to understand the alternative options and to be aware of the assumptions on which her/his own perspective is based (Burrell & Morgan, 1979, p. ix). The above-mentioned basic beliefs are related to the following assumptions:

- *Ontology* refers to assumptions about the nature of reality. It aims to answer the question: "What is the form and nature of reality, and therefore, what can be known of it?" (Guba & Lincoln, 1994, p. 108; Saunders et al., 2007, p. 127)

- *Epistemology* refers to assumptions about constituting acceptable, valid and legitimate knowledge. It aims to answer the question: "What is the nature of the relationship between the knower and what can be known?" (Guba & Lincoln, 1994, p. 108; Saunders et al., 2007, p. 127) The answer is constrained by the preceding, ontological assumption. (Guba & Lincoln, 1994, p. 127). Epistemological assumptions also refer to assumptions of how the knowledge can be acquired – "*how can we know what we know?"* (Saunders et al., 2007, p. 129). For example: if a "real" reality is assumed, then the stance of the knower must be objective to be able to discover how things really work (Guba & Lincoln, 1994, p. 108).

- *Methodology* refers to assumptions about how the knower can find out whatever he/she believes can be known, in the constraints of the first two basic assumptions (Guba & Lincoln, 1994, p. 108). The methodological choice may be e.g. experimental / manipulative, hypothesis verification or mainly quantitative methods. The methodology and *methods* manifest different levels: methods must be fitted to a predetermined methodology (Guba & Lincoln, 1994, pp. 108–109). While methodology is a strategy or plan lying behind the choice and use of particular methods, the methods are concrete techniques or procedures used to gather and analyse data (Crotty, 1998, p. 3)

The spectrum of research paradigms is broad, and each field of science has its own traditions. There is no single and best philosophy in management research. When management research emerged as an academic discipline in the twentieth century, it drew from several disciplines in the social sciences and organizational practice: sociology, psychology, applied sciences like engineering, and the humanities. Thus, many of the research paradigms may offer something valuable to organizational research, representing a distinctive way of seeing the organizational realities. (Saunders et al., 2007, p. 126)

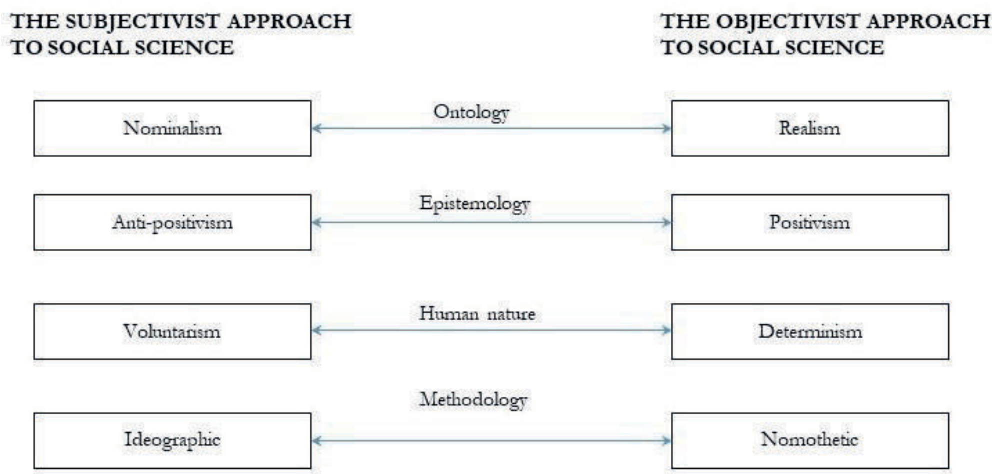

Figure 6. A scheme for analysing philosophical assumptions in social science (Burrell & Morgan, 1979, p. 3).

This thesis belongs to the field of social research and particularly to organization research within it. Thus, in this section, the underlying paradigm is discussed and reflected against the main paradigms in social theory. Burrell and Morgan (1979, pp. 3–4) preset the main philosophical assumptions particularly in social sciences in the *subjective-objective dimension* presented in Figure 6. The dimension and its extreme poles describe the alternatives in questions related to ontology, epistemology, methodology and human nature. The first, *ontological* debate of realism and nominalism, takes a stand on whether an external, unambiguous reality there exists worthy of study (Burrell & Morgan, 1979, p. 3). The nominalist position is based on the assumption that the social world external to the individual is nothing more than names, concepts and labels which are used to construct a reality. Realism, on the contrary, assumes an apprehendable reality to exist and to be driven by immutable natural laws and mechanisms. Whether or not the structures of that realism are labelled, they exist (Burrell & Morgan, 1979, p. 4; Guba & Lincoln, 1994, p. 109). The second, *anti-positivism – positivism debate* revolves around the relationship of the investigator and the investigated object. Positivist epistemology is based upon the traditional approaches which dominate the natural sciences. It is dualist and objectivist; the investigator is believed to be capable of studying the object without influencing it or being influenced by it (Guba & Lincoln, 1994, p. 110). For anti-positivists, the social world is relativistic and can only be understood from the point of view of the individuals involved. Thus, they reject the standpoint of the 'observer' as a valid vantage point for understanding human activities (Burrell & Morgan, 1979, p. 5). Transactionalism and subjectivism in anti-positivist epistemology mean that the investigator and the object are interactively linked (Guba & Lincoln, 1994, p. 111). As the notion that science can generate objective knowledge of any kind is rejected, from this viewpoint social science is seen as essentially subjective (Burrell & Morgan, 1979, p. 5). The third, the *voluntarism – determinism debate,* concerns the model of how a human is depicted in a social-scientific theory. While the determinist view regards man and his activities as being completely determined by the context in which he is located, the voluntarist view considers man as completely autonomous and free-willed (Burrell & Morgan, 1979, p. 6). The last, *ideographic – nomothetic debate* is linked to a methodology. The ideographic approach in social science is based on the view that the social world can only be understood by obtaining first-hand knowledge of the subject. This approach emphasizes the analysis of the subjective accounts generated by participating in situations and involving oneself in the everyday flow of activities. The nomothetic approach to social science lays emphasis on basing research on a systematic protocol and technique (Burrell & Morgan, 1979, p. 6).

In addition to the extreme positions of the four strands presented in Figure 6, social theory can be expressed by a position on the continuum of regulation – radical change. This line divides the viewpoints in social science according to whether they aim to explain or to change society. While the regulatory standpoint emphasizes the underlying unity and cohesiveness of society, radical change aims to find explanations for structural conflicts (Burrell & Morgan, 1979, pp. 16–17). Burrell & Morgan (1979) present the main paradigms of social science in a quadrant formed by two dimensions: the subjective-objective dimension presented below, and the regulatory – radical change dimension.

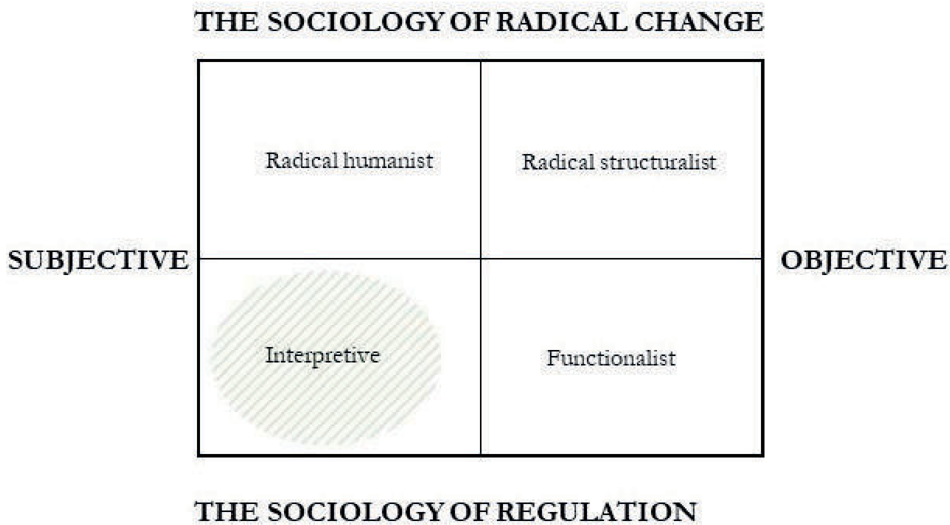

Figure 7. Four paradigms for the analysis of social theory (Burrell & Morgan, 1979, p. 22).

The four paradigms illustrated in Figure 7 represent simplified extremities in the two dimensions. The basic beliefs and the resulting choices of this research are traceable to the interpretive paradigm. The interpretive paradigm is classified as the subjective, regulative paradigm, illustrated as the shaded area in Figure 7. This paradigm embraces a wide range of philosophical and sociological thought which shares a common attempt to understand the social world primarily from the participants' point of view (Burrell & Morgan, 1979, p. 227). The basic assumptions, scientific traditions and the nature of the studied phenomenon position this thesis as interpretive social research.

This research, representing organization theory in the field of social science, aims to answer research questions of organizational behaviour in partnership building. It considers the organization as a system for human decisions and activities, which in this research concerns partnership building. The research problem is characterized by abstract concepts and mental structures, such as connections between effectual acts and partnership building. Individual meanings and purposes have a central role in understanding the phenomenon. The underlying worldview, originating from the traditions of the research field but also from the author's previous experiences and beliefs of the nature of organizational and managerial knowledge in her fields of interest, form the philosophical approach of this thesis. The research aims to understand effectuation as an emerging phenomenon and to contribute to the knowledge on both effectuation and partnership building. The two studied subjects, effectuation and partnership building, are mental constructs partially or totally shared by individuals working in the same organization. Thus, the phenomenon is assumed to require a deep understanding of the context and the meanings the participant give it. Consequently, this research represents the interpretive paradigm, often linked to the thoughts of Max Weber, who suggests that particularly understanding, *Verstehen*, is essential in human sciences (Crotty, 1998, p. 67). The ontological assumption of this thesis is based on a subjective reality that can only be understood by exploring and interpreting given meanings. The meanings, regarding the current study, are presumably strongly based on each interviewee's view, life situation and experiences. As the meanings given to the phenomenon are extremely sensitive to the participant's personal experiences and assumptions, a strong emphasis is placed on the chain of pre-understanding, understanding and interpreting them (Gummesson, 1991, p. 12). Epistemologically, this research approaches its object in a transactional manner. While the information is given by experienced participants, at the same time it is supposed that the investigator influences the outcome, and is influenced by the process. As the topic is abstract and individuals may assign different meanings to it, it is presumed that the interviews will be dialogical, and findings partially emerge in the interaction between the researcher and the participant. Both these directions of interaction were detectable in the data collection phase, and are discussed in section 6.3, Assessment of the study. The access to the case companies, together with existing methodological pre-assumptions, influenced the selection of methods to utilize. As this thesis presents a nomothetic point of view, emphasis was placed on the systematic but iterative planning of the research process. As the researcher was not able to participate in the studied activities, the necessary precautions were taken in planning the process. The aim was to confirm the supply of all the relevant information. Within the limitations of the research topic, the organizational level of effectuation was selected in particular, and the individual level excluded from the scope of the study. Despite this, it was assumed that the role of individuals would appear in the data, as the effectual acts revolve at the borderline of individual heuristics and organizational processes. Thus, while the assumption of human nature in this research is mainly deterministic, the voluntarity of individuals was noted. Identifying and being aware of these base assumptions led to the choices concerning the research approach, research strategy and methods, which are presented in the following sections.

2.4 Qualitative research approach

A research topic may be approached *qualitatively*, *quantitatively* or by mixing elements from both in a *mixed method* approach. Qualitative and quantitative approaches do not always appear as rigid, distinct categories, but represent a different ends on a continuum (Creswell, 2014, p. 3). Historically, there has been a heavy emphasis on quantification in science (Guba & Lincoln, 1994, p. 105). Sciences like mathematics, physics and chemistry lend themselves especially well to quantification and have therefore been considered as "hard". The social sciences, like organization science to which this thesis belongs, represent a less quantifiable arena (Guba & Lincoln, 1994, pp. 115–116). In recent decades, strong counterpressure against quantification has emerged. One of the themes of the critique is the exclusion of meaning and purpose that are often considered necessary to understand human behaviour. The qualitative view, instead, has gained increasing favour for many reasons, like the ability to provide rich insight (Guba & Lincoln, 1994, p. 106). Similarly this thesis, positioned in organizational research within social sciences, has a *qualitative* approach to its subject. The chosen approach determines the rest of the design choices: strategy, methods for data collection and guidelines for interpreting the data. (Creswell, 2014, pp. 4–5) According to Creswell (2014, p. 4), the qualitative approach is appropriate for exploring the meanings that individuals or groups ascribe to a social or human problem. As this thesis explores an abstract and mental construct of effectuation and related drivers behind partnership-building acts, the qualitative approach offers a relevant framework for pursuing the study. In contrast, *quantitative research* is appropriate for testing objective theories by examining the relationships among measurable variables. Compared to qualitative research, the results of a quantitative study are typically more generalizable (Creswell, 2014, p. 4).

As a qualitative study, the design of this thesis is holistic, and looks at the relationships within a complex system (Janesic, 1994, p. 210). The appearance of effectuation in the selected context of partnership building requires holistic understanding of the strategies, partnership-building practice, the influencing factors and relationships between them. Thus, the research process was formed iteratively, starting with gaining pre-understanding of partnership building and conducting a preliminary study exploring the existence of effectuation within partnership building (Yrjönkoski & Suominen, 2018). This formed an important phase of bounding the case and conceptualizing the object of the thesis (Stake, 1994, p. 244). As typical of qualitative designs in social sciences, the process involved the researcher as a research instrument to face the participants and conduct interviews (Janesic, 1994, p. 212). The qualitative approach also characterized the data analysis protocol: it was conducted inductively, building from particulars to general themes. Finally, interpretations of the meaning of the data were made (Creswell, 2014, p. 4).

The research approach also contains an approach to theory. The main alternatives to the theory approach are presented in Table 1, which summarizes the characteristics of *deductive*, *inductive* and *abductive* approaches to theory development.

Table 1. Deductive, inductive and abductive approaches to theory development (Saunders et al., 2007, p. 145).

	DEDUCTION	INDUCTION	ABDUCTION
Logic	Deductive reasoning: when the premises are true, the conclusions must be true	Inductive reasoning: known premises are used to generate untested conclusions	Abductive reasoning: known premises are used to generate testable conclusions
Generalizability	From general to the specific	From the specific to the general	Generalizing from the interactions between the specific and the general
Use of data	Data is used to evaluate propositions or hypotheses related to an existing theory	Data is used to explore a phenomenon, identify themes and patterns and create a conceptual framework	Data is used to explore a phenomenon, identify themes and patterns, locate these in a conceptual framework and test it
Role of theory	Theory verification or falsification	Theory generation and building	Theory generation or modification, by incorporating existing theory where appropriate

This thesis, being mainly deductive from its theory approach, also manifests inductive characteristics. The deductive approach aims for theory verification (Saunders et al., 2007, p. 147). The first aspect, verifying the effectuation theory in the partnership-building context, represents the deductive part of this research. Existing theory formed the framework for modelling the research questions and organizing the empirical part. The second aspect, developing a model for partnership building and the appearance of effectuation, constitutes an inductive procedure. As Yin (1994, p. 28) proposes, case studies should be prepared for theory development from the beginning. Thus, the complete research design will provide strong guidance in determining what data to collect and how to analyse it. Deepening the theory-building viewpoint was iterative (Eisenhardt, 1989) and the final form of the resulting model developed along with the empirical and analysis phases. The study utilizes the advantages of case study in creating rich, valid concepts and in the heuristic identification of new variables and frameworks (George & Bennett, 2005, pp. 19–20), developing a descriptive, metaphoric model for partnership building (Yin, 1994, pp. 27–28).

2.5 Case study as a research strategy

While there are many other possible strategies – such as ethnographies, narrative research or grounded theory (Creswell, 2014, p. 12) - for designing a qualitative, organizational study, the topic of this thesis is particularly appropriate for an *explanatory, in-depth case study,* involving four case companies. This choice originates from the characteristics of the research problem: the study deals with an emerging framework of effectuation, and aims to answer the set of "how" questions presented previously in section 1.3 (Yin, 1994, p. 1). This research observes effectuation in partnership building from an interpretative viewpoint. The interpretative and explorative nature of the research topic also favours the selection of a case study approach (Eriksson & Kovalainen, 2008, pp. 3–23; Yin, 1994, p. 7). Furthermore, the case study strategy is particularly suitable for exploring a phenomenon and sharpening an existing theory, which this thesis also aims to pursue (Siggelkow, 2007; Yin, 1994, pp. 5–6). Another of the objectives of this thesis is to take steps towards the emerging research avenue of effectual partnership building. Selecting the case study strategy supports this attempt, as cases are often an effective way to inspire new ideas (Siggelkow, 2007). The case study is a widely used research strategy in social sciences, including traditional disciplines like psychology and sociology, as well as practice-oriented fields like organization and management science, because of the ability of case studies to offer effective tools for exploring a multidimensional phenomenon (Eriksson & Kovalainen, 2008, pp. 2–23; Yin, 1994, p. xiii). Here, partnership building is assumed to be a complex and multidimensional process with diverse influencers. The case study offers an advantageous opportunity to explore such a process from a holistic view by examining many different aspects and the relations between them (Gummesson, 1991, p. 76). Thus, the ability to present complex issues in an accessible and down-to-earth format makes the case study a useful strategy for the topic of this research, positioned in business and management research (Eriksson & Kovalainen, 2008, pp. 3–23).

Theory building is considered a central activity in organizational research and should therefore be an essential viewpoint in research design (Eisenhardt, 1989; Yin, 1994, p. 27). Furthermore, the case study is an appropriate strategy for theory building, particularly when little is known about a phenomenon, current perspectives seem inadequate, or serendipitous findings in a theory-testing study suggest the need for a new perspective (Edmondson & McManus, 2007; Eisenhardt, 1989). In addition, Eisenhardt (1989) argues strongly for theory-building case study research by introducing a hybrid model that employs features from both hypothesis-testing research and inductive, case-oriented research. However, this approach also started a critical discussion at the beginning of the 1990s. According to Dyer & Wilkins (1991), Eisenhardt's approach is too dominantly rooted in the positivist tradition, and ignores the strengths of a classic case study. In addition, the procedure in the proposed hybrid model focuses on creating constructs and building ready-to-test hypotheses. While Dyer & Wilkins (Dyer & Wilkins, 1991) consider the theory-building aspect of case studies worth encouraging in general, they claim that focusing too much on constructs and their measurability may lose the essence of a case study: contextual insights, the ability for an interpretive approach, and rich, in-depth descriptions of a phenomenon. The presented hybrid model is therefore considered to be too limited and, if it becomes the standard, even damaging to the theoretical progress of the field of management research. Thus, Dyer & Wilkins (1991) propose that when building a theory from case studies, researchers should not forget the goal of "telling good stories": to provide rich descriptions of the social scene, and to describe the contexts in which events occur.

This research was initially planned to verify the effectuation theory in the previously unexplored context of partnership building. In the research design phase, the objective of the study was extended to generating a rudimentary model for defining the influencers behind effectuation in partnership building, by taking advantage of serendipitous findings. Thus, this research manifests characteristics of both theory-testing and descriptive theory-building research. Such an approach to the case study responds to calls for more qualitative, contextual and interesting research (Dyer & Wilkins, 1991). In this approach "a clean theoretical slate" (no theory under consideration and no hypotheses to test) should be attempted to avoid biases (Eisenhardt, 1989). Although the current study adopted the effectuation theory and aimed to verify it in partnership building, the appearance of effectuation in diverse partnership-building contexts did not have a preordained theoretical perspective. Instead, some potentially important variables were identified in the prior literature and utilized in formulating the first iteration of the resulting model of partnership building and effectuation. The case study is considered to be particularly useful in such research; the conditions are believed to be highly pertinent to the phenomenon studied. By comparison, an experiment deliberately divorces a phenomenon from its contexts and focuses the attention on only a few variables (Yin, 1994, p. 13). In this research, presumptions were made of the variables that were chosen for observation regarding effectuation. These variables were the size, main business model and life cycle phase of the company. The variables are presented more detailed in section 2.8, Data collection. As the analysis proceeded, some of these variables turned out to be more categories, and the variables under them were defined more accurately. The resulting key variables are presented in the Results chapter of this thesis.

This study was conducted as a multiple-case study to gain understanding of effectuation in diverse partnership-building contexts. The multiple-case study was expected to provide rich data and therefore enable theory-building aspects. As proposed by Yin (1994, pp. 21–22), in the design phase of the study, attention was paid to the definition of "a case". *An organization* was chosen to be the unit of analysis, as it is related to the initial research question of partnership-building activities, and therefore offers the relevant information unit (Yin, 1994, pp. 21–25). As strategic selection of cases strengthens the validity of a case study, the purpose and target of the study were considered and cases selected accordingly (Flyvbjerg, 2006). Seawright & Gerring (2005) argue that random sampling is not a viable approach when the total number of cases is small, as the chosen cases should accurately represent the phenomenon of interest. In addition, cases should provide sufficient variation along the key dimensions of theoretical interest (Seawright & Gerring, 2005). Also, Yin (1994, p. 45) makes a conceptual difference between traditional sampling and *replication*, linking the latter in particular to case studies. Thus, this research utilized a theoretical replication by choosing purposefully *diverse cases*. Such cases are assumed to be different in the selected key dimensions and to produce contrasting results but for predictable reasons (Yin, 1994, p. 46). Diversity, here, means cases that offer variance along relevant dimensions. In this research, the appearance of effectuation in partnership building is assumed to be highly dependent on contextual factors, like the maturity of the company, company size, business model, organization-specific issues and practices, and organizational culture. Therefore, variance was achieved by using four cases that were different in these pre-assumed dimensions. Such cases provided information about the significance of various circumstances for the partnership-building process (Flyvbjerg, 2006). The cases of this research and the key variables initially selected to be under examination are presented in section 2.8, Data collection. As the study proceeded to analysis, other dimensions also proved to be relevant in delineating the partnership-building activities.

While the data for a case study can be collected by diverse methods (Crotty, 1998, p. 5; Yin, 1994, p. 93), this research focused on conducting in-depth key-informant interviews and supporting them with a structured, visual questionnaire filled by each interviewee. In general, data collection for case studies can rely on six sources of evidence: documents, archival records, interviews, direct or participant observations, or physical artefacts (Yin, 1994, pp. 79–80). When studying contemporary, abstract phenomena, it was assumed that the most relevant data would be provided by in-depth interviews. In addition, the case companies offered supportive, secondary data and complementary data. *Secondary data* refers to a situation where original qualitative data is accessed for secondary analysis – by the original researcher, or another researcher (Andrews, Higgins, Andrwes, & Lalor, 2012). The interviews made for the researcher's prior studies provided pre-understanding and were therefore utilized in planning the actual research interviews. More informal, *complementary data* was also utilized. Such complementary data consisted of media material and additional, informal discussions with the interviewees. A few of the companies have been regularly featured in different media. The media sources dealt with such issues as organizational culture, business growth, recruitment and HR issues. One of the interviews was completed with an additional, informal discussion of the future plans in the company regarding partnership building. One informal discussion was held with a representative of a customer organization from the public sector. This secondary data was utilized, assuming that it would provide complementary or contrasting data. Thus, it would deepen the holistic view and the understanding of the cases.

If decisions or activities regarding partnerships are documented, they often tend to be described as causal, whether they are or not. Furthermore, partnership-building acts are typically carried out one small piece at a time, between many other activities. Thus, observing them would have required a long time period. The access and time resources for observation were therefore unattainable. Conducting carefully planned, semi-structured interviews was selected as they were assumed to be the most relevant method for the chosen aims of this research. The interviews are presented in more detail later in this thesis, in section 2.8, Data collection.

2.6 Validation strategy for the research

As Creswell (2014, p. 201) proposes, a simple validity strategy for the study was outlined in the design phase of the research process by addressing the potential areas of challenges and threats, originating from the nature of the research topic, for example. Different criteria for assessing the quality of a case study have been proposed. While validity and reliability are the most often discussed evaluation criteria for a case study (Creswell, 2014, p. 201; e.g. Yin, 1994, pp. 33–38), other suggested measures include accuracy, complexity, transparency and reflexivity (Dubois & Gadde, 2014; Woodside, 2010). Gummesson (1991, pp. 161–162) states that the process should be conducted in a transparent manner that allows the reader to draw their own conclusions, the underlying paradigm should be presented, the research should possess credibility, and validity statements should be made. Validity, in general, means determining whether the findings are accurate from the standpoint of the researcher, the participant or the audience of the study (Creswell, 2014, p. 210). Yin (1994, pp. 33–38) divides validity into three subtypes: construct validity, internal validity and external validity. Several terms abound in the qualitative literature that address validity (Creswell, 2014, p. 201; Golafshani, 2003). Considered from a qualitative research point of view, Whittemore et al. (2001) suggest a distinction between primary and secondary validity criteria. In this division, credibility, authenticity, criticality and integrity are identified as primary validity criteria, whereas explicitness, vividness, creativity, thoroughness, congruence and sensitivity are identified as secondary validity criteria (Whittemore et al., 2001).

However, many authors agree that one should not attempt to evaluate qualitative studies with criteria adopted from traditional, quantitative research (e.g. Creswell, 2014, p. 201; Lincoln, 1995; Lincoln & Guba, 1985, pp. 293–297; Whittemore et al., 2001). Patton (2002) proposes that issues of quality and credibility intersect with audience and intended inquiry purposes, and particularly the constructivist and interpretivist perspectives have generated new language and concepts to distinguish quality in qualitative research. The traditional measures of validity and reliability are rooted in the positivist perspective, and thus they should be refined for use in naturalistic and interpretive paradigms (Lincoln, 1995; Lincoln & Guba, 1985, p. 294). Lincoln & Guba (Lincoln & Guba, 1985, pp. 289–294) propose standards that are more reflective of specific validity issues of qualitative research. In their work, they emphasize the need to "demonstrate the truth value of multiple perspectives, the dependability of findings amid variability, the applicability of findings to broader contexts, and the freedom from bias in the research process as validity issues to be addressed in the research process". As a result, they converted the term internal validity to credibility, external validity to transferability, reliability to dependability, and objectivity to confirmability (Lincoln & Guba, 1985, pp. 294–301). These four criteria were chosen for use in the assessment of this study. In addition, a fifth criteria, complexity, was used to confirm the holistic view of the topic throughout the research process (Dubois & Gadde, 2002).

2.7 Conducting the literature review

In this research, the literature review was planned carefully, as the topic consists of separate elements that form complex evidence. Thus, diverse literature review procedures were utilized to conduct a review to initiate a qualitative, interpretive organizational study. The aim was to map the relevant space for the intended research topic, in order to specify the research questions that would further contribute to the knowledge base, as well as revealing areas where more research is needed (Webster & Watson, 2016). Literature reviews are considered advantageous tools in theory development (Tranfield, Denyer, & Smart, 2003; Webster & Watson, 2016), which was also an objective of this research. The field of management research has been identified to be particularly in need of high-quality, summarizing and conceptualizing work, as the research field is rather new and the research agenda and question formulation therefore less well developed (Greenhalgh & Peacock, 2005; Tranfield et al., 2003).

Existing literature presents several different review guidelines that have been developed in different research contexts and deal with different levels of the review process. This research mainly utilizes mapping-type protocols because of the complexity of the research topic. While the other main approach, the procedure-based review, aims to be complete, unbiased and reproducible (Kitchenham, 2004), advocates of mapping-type reviews criticize those goals. They argue that, in most cases, a relevant literature review cannot be achieved by following a structured approach (Boell, Cecez-Kecmanovic, & Cecez-Kecmanovic, 2010). The literature review for this research was planned by developing the procedure from a few often-cited guidelines in management research. The review was topic-driven and concept-centric (Webster & Watson, 2016). Furthermore, as Järvinen (2008) proposes, in the case of a multi-conceptual research problem, reviewing the concepts is not enough. Based on initial reading of some articles and consulting experienced colleagues in the field, it was presumed that the traditional protocol-based strategy may fail to identify evidence, and informal techniques would be likely to increase the relevant yield of search efforts (Greenhalgh & Peacock, 2005). Thus, in this research, both the lens-directed approach (Järvinen, 2008, 2016) and informal, heuristic techniques (Boell et al., 2010) were used to obtain as relevant an understanding of the prior literature as possible. Such heuristic techniques included asking personal contacts and academic networks, serendipitous discovery (finding an interesting and relevant article accidentally), browsing and simply pursuing references that looked relevant (Greenhalgh & Peacock, 2005).

Table 2 summarizes the main differences between the above-mentioned often-cited literature review guidelines. Protocol-driven approaches are guidelines that focus mainly on the procedural, structural accomplishment of the review. In topic-driven approaches, the emphasis is placed more on identifying the characteristics of the topic, planning the process based on it, and allowing more informal techniques to be pursued as a part of the process. The presented summary is indicative and simplified, aiming to clarify the main differences between existing guidelines for literature reviews.

Table 2. Differences between mapping-type literature reviews (for emergent topics) and conventional literature reviews (for mature topics). Developed from (Boell et al., 2010; Greenhalgh & Peacock, 2005; Järvinen, 2008; Kitchenham, 2004; Wohlin, 2014).

	Protocol-driven approach (conventional-type SLR)		**Topic-driven approach (mapping-type studies)**	
	Database search	**Concept-centric approach**	**Lens-directed approach**	**Hermeneutic approach**
Topic	Technical, exact, mature	Complex, abstract, emerging	Multi-dimensional, multi-conceptual	Complex
Authors	Kitchenhamn, 2004	Wohlin, 2014 Webster & Watson, 2016	Järvinen, 2008 Järvinen, 2016	Boell et al. , 2013 Greenhalgh & Peacock, 2005
Goals	Conducting a complete, unbiased review	Classification and thematic analysis	Identifying a multi-dimensional set of literature relevant to a specific research problem	
Typical tools and methods	Keywords-based database searches	Database searches, snowballing	Developing lenses, multidimensional structures based on a current research problem	Database searches, snowballing, informal techniques and iterations
Quality evaluation	Very important to ensure that results are based on best quality evidence		Moderate, often complicated due to the inclusive and even heuristic nature of the search	
Results and reporting	The outcomes of primary studies are aggregated to answer the specific research questions Presented statistically, categorized, or concept-centric		A set of papers related to a topic area, presented and categorized around themes and research problems	

The topic of this research, effectuation in partnership-building contexts, consists of elements that a) differ by nature and b) have not been widely explored together in the prior literature. Therefore, the main concepts were separated to be able to choose an appropriate approach for selecting and reviewing the relevant literature for each of them. While effectuation is an emerging concept and lacks a coherent knowledge base, a plethora of research related to partnership building exists. The need for the review of related work on effectuation was to map the literature that contributes to the effectuation theory itself, rather than just applying the theory in other contexts. In addition, it was decided that effectuation as individual behaviour lay out of the scope of this research. Partnership building, in contrast, is much explored, rich in literature and different frameworks. Thus, the starting point for the literature review on partnership building was to choose a viewpoint and limit the according scope of the relevant literature. The review related to partnership building aimed to build a relevant context for this research from a selected viewpoint (IMP Group's interactive network approach) to obtain the necessary conceptual definitions for the research setting. Based on test searches and preliminary reading of some literature to gain a pre-understanding of the topic and their existing knowledge bases, both the main concepts were assumed to form complex evidence. Therefore, the review procedure was conducted mainly by manifesting the principles of the mapping-type review. Test searches were also conducted to identify the main keywords used in potentially relevant articles. It turned out that "effectuation" alone does not achieve a reasonable result, as the word is ambiguous, and is used in different meanings in many research fields, such as electronics, microbiology and pathology. The articles that best fit the scope, in addition to effectuation, mostly included some contrasting term like "causal", "causation", "predictive logic", "predictive strategy", or a term that refers to "effectuation" in the context of business like "uncertainty", "decision making" and "start-up". Thus, these terms were used as search criteria.

For this research, a step-by-step plan was made separately for effectuation and partnership-building literature. The phases of the procedure were planned by utilizing the existing guidelines, carefully considering the characteristics of the research topic and the criteria for relevant literature. Table 3 presents these steps and the main principles of conducting each of them for both of the reviewed themes.

Table 3. Steps of conducting the review of the prior literature to initiate this research.

	PHASE	EFFECTUATION	PARTNERSHIP BUILDING
1	Identifying the characteristics of the topic	Emerging, fragmented theory base	Mature, wide theory base, a plethora of different viewpoints and research schools
2	Identifying the need for knowledge to initiate this study	Basic knowledge on the effectuation theory	Introductory knowledge on the partnership-building approach to organization research A decent understanding of the selected framework (industrial networks approach)
3	Selecting the main approach	Mapping-type review, concept-centric	Mapping-type review, lens-directed
4	Defining the relevant data sources	Databases that are the most relevant sources for the field: Web of Science, Scopus	Author-based starting set of articles. Justification: the industrial network approach may not be detectable in searches on keywords, abstract or title, as the authors do not always mention their approach. The relevant literature can be more effectively founded starting from authors and journals, for example
5	Defining the rules for including / excluding data (conducted iteratively)	Effectuation AND a contrasting phenomenon must be mentioned together in the title, abstract or keywords. The article has to be "much cited" (min. 30 cites). (Database search) By reading the abstract, the paper has to fit the	Author-based search, using identified IMP approach's main authors + combining keywords (synonyms for "partnership building" evaluated and cross-checked from literature and Merriam-Webster Thesaurus) By reading the abstract, the paper has to fit the scope of this

PHASE	EFFECTUATION	PARTNERSHIP BUILDING
	scope of this study: contribute to the base theory, explore effectuation at organizational (not individual) level. (Reading the abstracts) Additionally: papers published between 2016 – 2019 were searched manually without the citation criteria, to find relevant articles that do not fill the citation criteria because of their novelty	study: contribute mainly to partnership building and its base constructs from IMP Group's approach (Reading the abstracts) Additionally: papers published between 2016 – 2019 were searched manually without the citation criteria, to find relevant articles that do not fill the citation criteria because of their novelty Snowballing the citations of relevant papers

2.8 Data collection

This research was chosen to target the Finnish software industry. The role of software is considered as critical in modern society. Software has become an essential part of many modern activities and services. Furthermore, the secondary impact on the economy is very strong. (Jansen, Cusumano, & Brinkkemper, 2013). Finland is an interesting target for study as it has been a pioneering country in the software industry in many ways (Peltonen, Rönkkö, & Mutanen, 2013). The trajectory of the Finnish software industry represents "an example of the establishing and maturing of the industry into one of the world's most high-quality software countries" (Peltonen et al., 2013). Furthermore, software and ICT have been proposed as one of central elements of the national economy, and have thus been a building block of the national strategy for several years. (Peltonen et al., 2013) This research was conducted by data gathered from four case companies. As the phenomenon of interest in this thesis is complex and the selected approach is holistic, cases were selected carefully to capture information as relevant as possible. When selecting the cases, it was kept in mind that the cases should be designed to enable analytical generalizations (Curtis, Gesler, Smith, & Washburn, 2000; Yin, 1994, p. 31). Yin

(1994, p. 32) claims that case studies should aim for *level two interferences*. These mean not only to report the findings of a case study, but also to aim for implementing policies and, furthermore, to develop them into theories. Inherently these cases do not represent all the possible variations of the effectuation-causation continuum and partnership-building contexts. However, based on the carefully set selection-criteria (see below), these four case companies were assumed to provide a sufficient base for an in-depth understanding of effectuation in different partnership-building contexts.

The pre-assumed dimensions to differentiate the cases were company size, business model, and the life cycle phase of the company. These dimensions were chosen based on the prior literature. Effectuation was originally developed in a new venture context (Sarasvathy, 2001). Later, the literature has also been extended to explore effectuation in large and mature companies (e.g. Matalamäki et al., 2017; Wiltbank et al., 2006). The prior literature indicates that effectuation is detectable as being different in companies of different size and maturity. Therefore, company size and the life cycle phase were selected as selection criteria in this research. Furthermore, it was assumed that the elements of the current business model of a software company influences its expectations towards partners (e.g. Zott, Amit, & Massa, 2011). Thus, the business model was chosen as a third selection criterion. The categories were divided very roughly, as the aim was to obtain contrasting cases. Thus, the exact limit value was not considered significant. The first dimension, *company size*, was selected to contrast the possible differences between small and big companies. The Finnish software industry is characterized by a large amount of small companies, and therefore the limit for a "big" company was set relatively low, at 150 employees. The second dimension is *business model.* According to Ojala (2016), the term business model has tended to be loosely defined in the literature. This research adopts the definition of Osterwalder (2018), in which the business model consists of four elements: product, value system, value delivery and revenue model (Ojala, 2016; Osterwalder et al., 2018). The business model is a distinctive case selection criterion regarding partnership building in this research. Thus, product, value system and value delivery were used as rough, separating attributes for case selection. 'Product' was divided into software projects, software products and cloud services, as these types were assumed to differ in the expectations towards partners. The product business consists of businesses in which the outcome is explicit, standalone software, sold as a similar product to all customers. It may be independent software or an element to use as part of a software architecture. The project business consists of businesses that are mainly conducted as customer-specific projects. The company may or may not have additional services like consulting. 'Value system' and 'value delivery' were classified according to whether the company had identified partners as part of their value system and/or value delivery. This was estimated from initial discussions when asking for access to the company.

The third dimension in this research, *life cycle phase,* is considered to reflect the phase of the company and its networks together. Three main phases of a business life cycle exist: birth, expansion and maturity (Dedehayir & Seppänen, 2015). In the birth phase, the company has been established and is seeking a scalable business model. In the expansion phase, the business is expanding into new territories of application. The third phase, maturity, is a period of consolidation and ensuring process excellence.

The key dimensions used in case selection are presented in Table 4.

Table 4. The key dimensions considered in case selection.

	SIZE	**BUSINESS MODEL**	**LIFE-CYCLE PHASE**
Categories	Options: Small, < 50 people Medium-sized, 50 – 150 people Big, > 150 people	Options (combination of the two): Product/project/cloud service or other services Value system involves partners / does not involve partners	Options: Birth/expansion/ maturity

The case selection resulted in four different companies. In addition, the accessibility of the companies had to be taken into account, as not all of the originally proposed companies were able to participate in the study. The final companies, their background information and categories in pre-defined key variables are presented in Table 5.

Table 5. Case companies, background information and key attributes in case selection (replication).

	BASIC INFORMATION		KEY VARIABLES IN CASE SELECTION		
	Main products	**Year founded**	**Size (personnel and revenue**	**Business model**	**Life-cycle phase**
COMP1	IT solutions from consultancy to implementation, in public and BtoB sector	2001	Revenue: €50 million Personnel: 500	Project business, value system employs partners	Mature, expansive
COMP2	Software project to BtoB customers, technology - independently	2003	Revenue: €7 million Personnel: 100	Project business, value system does not employ partners	Mature
COMP3	Software product to implement as part of Microsoft IT architecture	2017	Revenue: - Personnel: 7	Product business (customizable software), value system employs partners	Birth
COMP4	Cloud platform for digitalizing public license processes in a particular area of operations	2016	Revenue: €2.2 million	Cloud service, the role of partners in value system not defined	Expan-sion

The empirical data for this research was collected between November 2018 and January 2019. The interviews were conducted as key informant interviews. The interviewees were chosen to be experienced and knowledgeable in the area of interest and therefore assumed to provide the most useful information (Rubin & Rubin, 2005, p. 64). This thesis explores the complex, multidimensional phenomenon of partnership building, which is believed to be influenced by various different factors. Thus, the criteria for interviewees was a comprehensive, broad understanding of the whole company and the industry. This meant mainly a position in top management and relatively long experience in the current company or at least in a very closely-related business. For example, one of the interviewees in COMPANY1 had only been in his current position for 1.5 years, but had been working in a very closely-linked company and was familiar with the current business over a longer period. The interviewees of each company, their positions and years of experience are presented in Table 6.

Table 6. Interviewees and their positions in the case organization.

Company	Position	Years of experience (in current position / in the industry)
COMPANY1	Chief Operating Officer	1.5 / over 20
	Director, culture and people	11 / 17
	Principal consultant	6 / 15
	Business manager	7 / 9
	Project manager, subcontracting specialist	3 / 20
COMPANY2	CEO	15 / 23
	HR Manager	4.5 / 17
	Head of sales	1 / 15
	Chief Technology Officer	15 / 30
COMPANY3	CEO	4.5 / 17
	Head of Business Development and Partnerships	2.5 / 16
	Chief Technology Officer	2.5 / 21
COMPANY4	Business unit director	7 / 21
	Manager, public relations	3 / 14
	Sales manager	3 / 3

Qualitative interviews differ in their depth and breadth. This research was preceded by a phase of gaining pre-understanding and conducting interviews for preliminary studies on the topic. Thus, the patterns of interest were identified and prepared for a semi-structured interview. (Rubin & Rubin, 2005, p. 4). This thesis focuses on *interpreting* the meanings of partnership-building acts and linking them to an existing or new construct. In contrast, the other extreme pole would be a study focusing on describing events or processes. A matrix of differently scoped interviews and the appropriate usage is presented in Table 7. As proposed by Rubin & Rubin (2005, p. 5), such meaning-oriented, relatively broadly-scoped interviews would be appropriate for building initial frameworks and elaborating theories. The positioning of this research is illustrated by the blue oval.

Table 7. Differing purposes of qualitative interviews in dimensions of describing vs. interpreting and narrow-scoped vs. broadly-scoped. Developed from (Rubin & Rubin, 2005, p. 5).

	NARROWLY FOCUSED SCOPE	**IN-BETWEEN**	**BROADLY-FOCUSED SCOPE**
FOCUS ON MEANINGS AND FRAMEWORKS	Concept clarification	Theory elaboration	Ethnographic interpretation
IN-BETWEEN	Exit interview	Oral histories, organizational culture	Life history
FOCUS ON EVENTS AND PROCESSES	Investigative interviewing	Action research, evaluation research	Elaborated case studies

Each of the participants were interviewed once, and the duration of each interview was between 90 and 120 minutes. The duration was rather long to enable deep discussion and to provide descriptive data. On the other hand, the length was limited to two hours, as the interviewees in top-level positions might not have otherwise been willing to allocate their time for the interview.

The interview started with an *appreciative inquiry (AI)* element. The appreciative interview is a research tool that can be utilized to take the idea of the social construct of reality to its positive extreme (Gergen, 1999). AI was first developed as a tool for organizational change. The idea behind it is that instead of starting at the level of key problems and criticism, AI moves towards discovery, dreaming, designing and destiny (Michael, 2005). These four elements form the 4D framework of AI. Despite of the aim of the positive extreme, AI is not believed to turn a blind eye to the negative and difficult aspects that occur in all organizational experiences. In this research, effectuation and causation were identified as having potential for value overload, such as considering one of them better or more acceptable. Thus, AI was used to build a positive overall mindset towards the research topic (Cooperrider & Whitney, 2001; Michael, 2005). The actual interview questions were organized into themes and corresponding main questions. As the interview was supposed to be very dialogic, the themes were selected loosely to cover the principles of effectuation, strategies and practices of partnership building and issues related to them. In addition, follow-up questions and probes were planned to be ready for use if needed. In most of the interviews, they were used to guide the conversation, to ask for deeper descriptions of some of the themes or to ask for more detailed information (Rubin & Rubin, 2005, p. 129). The interview situation was completed by asking each interviewee to complete a visual questionnaire that contained contrasting questions of effectuation and causation. The role of the scale was to be a confirmatory instrument and enable data triangulation. The interview questionnaire and the visual questionnaire are attached in Appendices 1 and 2.

2.9 Data analysis

Content analysis was conducted to analyse the data collected for this research. Content analysis is a widely used quantitative research technique. It is a family of methods that facilitate the examination of qualitative data (Insch, Moore, & Murphy, 1997) and is useful for identifying trends and patterns in documents (Stemler, 2001). The empirical data of this research consisted of transliterated interviews, drawings, and pictures of a simple, visual effectuation questionnaire. The methods of content analysis can be applied to all this data (Insch et al., 1997; Stemler, 2001). Approaches to content analysis vary from intuitive, interpretive analyses to systematic, strict textual analyses (Shieh & Shannon, 2005). The research questions of this thesis deal with the emerging phenomenon of effectuation. Based on the understanding acquired in the literature review, the knowledge base was assumed to be at least slightly inconsistent. Thus, the data was observed through the lens of theory-related, directed content analysis orientation (Shieh & Shannon, 2005). Such orientation builds the analysis on partially or totally predefined constructs related to the theory framework used. As a theory-building aspect also exists in this research, the analysis was designed to enable findings outside the pre-defined analysis structure and codes.

At the data coding level, the process begins by an identification of key concepts or variables and building codes at an appropriate level – either code or category level – and then continues by iterative analysis and refinement of the codes as needed (Saldana, 2009) p. 49). This aims to harmonize the coding with the conceptual framework of the study and to ensure the analysis answers the research questions. As the combination of effectuation and partnership building has been less studied in the prior literature and therefore is not consistently supported by existing theory, space was also left for a data-related/inductive approach to the data and theory. The coding and analyses were conducted by utilizing a CAQDAS (Computer Assisted Qualitative Data Analysis) software program (Atlas.ti). In addition to the research problem, the underlying research philosophy as well as the selected approach guided the selection of coding methods for this research. Aiming for a theory-related, yet partially data-driven analysis, the coding was carried out in iterations. The codes and categories were partially developed as the analysis proceeded. The coding methods listed in the following section were employed as first-cycle methods. Categories resulting from the first cycles were refined into codes by utilizing structural coding and in vivo coding also as second-cycle methods (Saldana, 2009, p. 150). As the codes typically evolve and become more complex during the process, the initial code categories were intentionally kept as simple as possible. On the other hand, the approach to analysis was data-driven, and therefore the code structure was allowed to evolve as the analysis proceeded.

Structural coding belongs to the elemental coding methods that are primary approaches for qualitative data analysis. It is suitable particularly for studies employing multiple participants, semi-structured data-gathering protocols, as in this thesis. Structural coding is a base technique to start organizing data around research questions (Saldana, 2009) pp. 51). In this study, pre-defined themes and elements, like effectual principles, were originally used to form structural codes. They were used to identify large segments of data on broad topics, in order to form the basis for an in-depth analysis (Saldana, 2009, p. 68). Phrases representing these elements were then arranged under these codes, to both code and categorize it (Saldana, 2009, p. 66). After coding the effectual constructs, the similarly coded segments were then collected together for more detailed coding and analysis.

The other significant first-cycle technique in this research was category coding. Category coding is appropriate for developing domains and the taxonomies below them and to organize the behaviour of interviewees and the meanings they give to their experiences (Bradley, 1980, pp. 30–31; Saldana, 2009, p. 133). In this research, category coding was used to code themes that were presumed to exist, but could not be pre-defined in detail. Such themes included reasons for effectuation and general partnership-building practices. According to Bradley (1979, p. 111), semantic relationships within categories may differ. In this thesis these relationships were intentionally kept simple. Thus, the main relationship within the developed domains was strict inclusion (for example: "achieving greater innovativeness" is "an influencer of effectuation").

In addition to structural and category coding, this research utilized three coding techniques: values, attribute, and in vivo coding techniques. Values coding is a coding technique belonging to the family of affective coding methods. Affective methods investigate subjective qualities of human experience, like feelings, emotions, values and conflicts (Saldana, 2009), pp. 88-89). In this research, values coding was employed to capture organizational attitudes and values related to partners and partnership building. Attribute coding is useful for logging essential information about the data and demographic characteristics of the participants (Saldana, 2009, p. 55). In this research, it was utilized to code background information, such as years of work experience, and the age and education of the participants. In addition, the attributes of the company such as age, revenue and number of personnel were coded by this technique. In vivo coding is a foundation method for grounded theory, although it is also applicable to other approaches (Saldana, 2009, p. 74). While this research is mainly deductive in its theory approach, inductive characteristics also exist. It was presumed that partnership building would manifest effectuation in a manner that has not been captured in prior research. In vivo coding was utilized to mark such indicators and expressions in the interviews that seemed important. The meaning and relevancy of such phrases was analysed and decided later in analysis, and the coded phrases moved under an appropriate category or code. All the mentioned coding methods and their usage in this thesis are summarized in Table 8.

Table 8. Coding methods used in this thesis.

CODING TECHNIQUE	USAGE IN THIS STUDY
Attribute coding	Background information of the case companies and the interviewees.
Structural coding	Pre-defined constructs of effectuation.
Category coding	Influencers and reasons for effectuation and causation. Partnership-building strategies and practices.
Values coding	Values and attitudes regarding partnerships. Attitudes to effectuation or causation. Recommendations to remain or change the dominating mode.
In vivo coding	Serendipitous, interesting observations that might be worth considering in later phases of analysis.

The main themes that were coded were effectuation, the principles of effectuation, factors that influence effectuation and /or partnership building, effects of effectuation, partnership-related issues, contextual factors, and descriptions of the current, dominating mode.

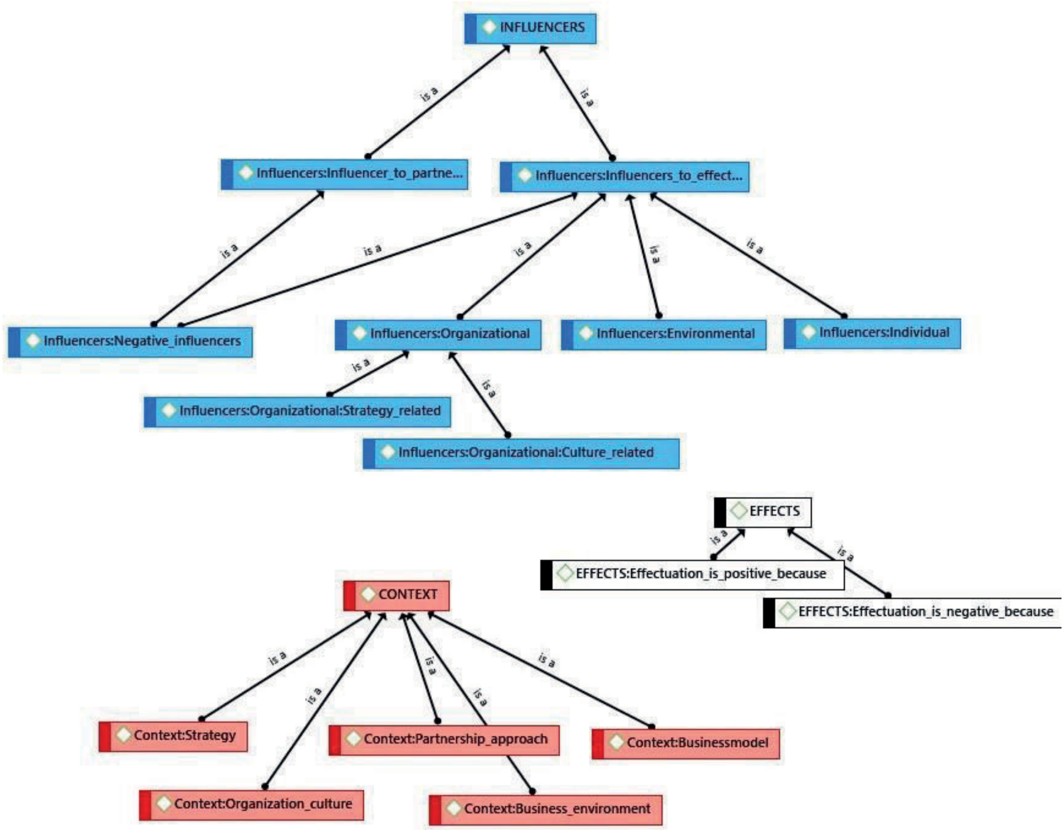

Figure 8. Main code structure for analysing the data in Atlas.ti software, part 1.

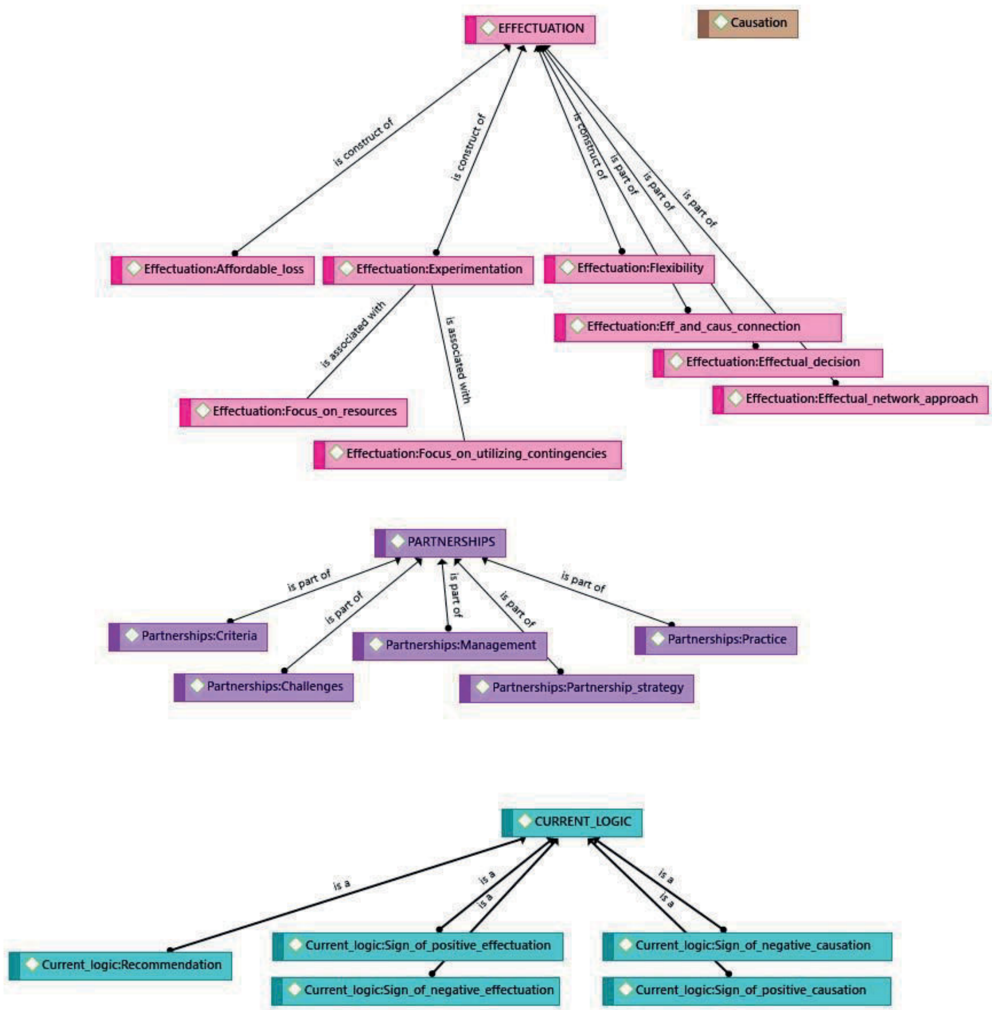

Figure 9. Main code structure for analysing the data in Atlas.ti software, part 2.

Figures 8 and 9 present the main codes used to analyse the data. EFFECTUATION is a category code for codes describing effectual principles and other effectuation- related issues. PARTNERSHIP is a category for codes that describe various partnership-related themes, such as management, practices, values towards partners, and criteria and expectations for partners. INFLUENCERS is a category for codes that contain quotations describing factors that affect partnership building, effectuation or both. CONTEXT contains codes that characterize environmental, organizational and individual factors. EFFECTS contain codes that are used to mark clear indications of experienced benefits or disadvantages of effectuation. CURRENT_MODE is a category for codes that mark quotations containing a description of the current effectuation or causation, and the value (positive/negative) given to it. “Recommendations” under this category refer to such quotations that indicate a tendency to move towards another logic.

The visual questionnaires were extracted by using a rough magnitude estimation scale (e.g. Koskey & Stewart, 2014) for each of the effectual principles. In the visual questionnaire, each of the principles was explored by two or three questions. The answers were then transferred to the following numeric scale: 5 = strong effectuation, 4 = moderate effectuation, 3 = no significant effectuation or causation, 2 = moderate causation, 1 = strong causation. For each interviewee, a mean value was calculated for each of the effectual principles. These mean values were then evaluated within a single company. As the number of respondents was small, the final construct of the value of each principle had to be conducted in an interpretive manner. If the answers of all respondents in a single company were close to each other in effectuation or causation, the result was taken into account as supportive data. If the answers from respondents within a single company differed significantly (e.g. were evenly distributed between causation and effectuation), no interpretation of the result could be made, and the result was ignored.

3 RELATED WORK

This chapter describes the theoretical foundations for effectuation and partnership building in this research. Section 3.1 introduces effectuation as a process framework, which, in this thesis, has been applied to partnership building. The section also determines the close key concepts and theoretical choices made in this research, which outline the territory of applying the effectuation theory. While the effectuation theory has adopted its philosophical roots from several different theoretical approaches, the background and main connections are briefly introduced. In section 3.2, a theoretical framework for partnership is presented. The chapter begins by introducing the general network approach in organization theory. Next, the focal concepts of partnership building used in this thesis are explained. The last section, 3.3, focuses on summarizing and synthesizing the previous literature and research proposals that are specifically of interest to this thesis. It delineates the space for this study and presents the theoretical model for setting the research questions.

3.1 Effectuation

Effectuation theory, as currently understood in management research, was introduced for the first time by Sarasvathy (Sarasvathy, 2001) as a model for processes involved with creation of business artefacts, such as companies, markets and economies. Sarasvathy argues that underlying the majority of management discussions and literature is the assumed existence of these artefacts and contexts of business within which decisions and activities take place (Sarasvathy, 2001). This creates a need for exploring effectuation as a process in such situations where the level of uncertainty is high (Sarasvathy, 2001). The core idea of effectuation, originally introduced in the entrepreneurial and start-up context, is that rather than discovering and exploiting opportunities that pre-exist in the world, effectuation is a mechanism to *generate* opportunities from the realities of the environment and existing value systems (Sarasvathy, 2008, p. xiii).

However, both effectuation and causation can form a base for a successful venture, and therefore there should not be a debate on an explicit "superiority". Under what circumstances which types of processes provide particular and relevant advantages is the focal issue to solve in empirical studies regarding effectuation (Sarasvathy, 2001).

The nature of effectuation is often explained by contrasting effectuation with causation. Together they are two alternative approaches to the creation of business artefacts (Sarasvathy, 2001). While causal processes emphasizes *previously determined* plans and proceeding towards set goals, effectuation proposes an approach of utilizing the set of *resources at hand* to discover new opportunities (Matalamäki, 2017; Read, Song, et al., 2009; Sarasvathy, 2001). Table 8 below presents different aspects of the above-mentioned contrast. Despite being presented as extremities to enable a clearer theoretical exposition, they can occur simultaneously, overlapping and intertwining over different contexts and actors (Sarasvathy, 2001).

Table 9. Contrasting effectuation and causation at the level of process principles. (Read, Dew, et al., 2009; Sarasvathy, 2001).

	CAUSATION	EFFECTUATION
Given	A particular goal is given/pre-defined. Decisions are about choosing between optional means to achieve the goal.	A particular set of means is available. Decisions are about what kind of opportunities could be created by them.
View of the future	Predictive: The future is forecast as a continuation of the past. Accurate prediction is considered necessary and useful.	Creative: The future is co-created by willing and pre-committed agents (partners).
Decision-making selection criteria	Choose between means to achieve the given effects.	Choose between possible effects that can be created with given means.
Competences employed	Excellent at exploiting existing knowledge.	Excellent at exploiting contingencies.
View of risk	Expected return: Pursue new opportunities based on the (risk-adjusted) expected value.	Affordable loss: Pursue satisfactory opportunities without investing more resources than stakeholders can afford to lose.
Attitude towards other actors	Competitive: Protect what you have and maximize your share of the opportunity.	Partnership-oriented: Share what you have with committed partners because relationships shape the trajectory of the opportunity.
Attitude towards unexpected events	Avoid. Surprises are bad and considered to be deviations from the plan. Prediction and planning aim to minimize the impact of unexpected events.	Leverage: Surprises are good and have a potential for innovations. Imaginative rethinking of possibilities transforms the unexpected into new opportunities.
Outcomes	Market share in existent markets through competitive strategies.	New markets created through alliances and other cooperative strategies.

In effectuation literature, hypotheses are not set for the general superiority of effectual or causal processes. Instead, it calls for further research to gain knowledge on which process is more useful in which situation, and suggests a newly coherent paradigm of decision making (Sarasvathy, 2001; Wiltbank et al., 2006). While effectuation is originally approached as an entrepreneurial and start-up phase process, recent studies have considered it in the contexts of mature businesses and large corporations as well (Matalamäki et al., 2017; Svensrud & Asvoll, 2014). In this thesis, effectuation is considered an organizational-level decision-making phenomenon. Thus, the theoretical frame for this research is mainly built from organization-level literature on effectuation.

3.1.1 The four constructs of effectuation

Effectuation consists of four *principles* that characterize effectual behaviour in decision making (Sarasvathy, 2001). They are constructs that describe the unique characteristics of effectual processes and differentiate effectuation and causation (Chandler et al., 2011; Sarasvathy, 2001). Effectual principles describe a way of making decisions which aims to remain flexible and to be more reactive when needed to capture opportunities and turn them into innovations (Chandler et al., 2011; Sarasvathy, 2001). Here, the four principles are explained as in the original effectuation theory (Sarasvathy, 2001). However, the principles have been applied in various, context-specific ways in later literature (Brettel et al., 2012; Chandler et al., 2011; Reymen, Berends, Oudehand, & Stultiëns, 2017).

Principle 1. Carrying out short-time experimentation (effectuation) rather than being led by predictive data (causation). In effectual processes, it is typical to carry out short-term experiments to identify business opportunities in an unpredictable future (effectuation) rather than predict the future and define the final objective. When the environment is not predictable enough, effectuation focuses on controllable aspects of the future. In the effectual approach the future is (co)created. In contrast, causal logic forecasts the future as a continuation of the past. Carrying out predictions and having a business plan does not imply a lack of ability to experiment; the distinctive issue is the willingness and ability to change dynamically when confronted with new information (Read, Dew, et al., 2009; Read, Song, et al., 2009; Sarasvathy, 2001).

Principle 2. Making decisions in the limits of affordable loss (effectuation) rather than making decisions with the purpose of maximizing expected returns (causation). Causal models focus on maximizing profit and selecting the optimal strategy for that. Effectuation approaches risk by predetermining how much loss is affordable and aims to experiment with as many strategies as possible within these boundaries. It prefers focusing on projects where the loss in a worst-case scenario is affordable (Chandler et al., 2011; Sarasvathy, 2001).

Principle 3. Exploiting contingencies (effectuation) rather than exploiting preexisting capabilities and resources (causation). While causation might be preferable when pre-existing knowledge, such as superior knowledge in a particular new technology, forms the source of competitive advantage, effectuation is assumed to be better for exploiting contingencies that arise unexpectedly over time (Sarasvathy, 2001).

Principle 4. Emphasis on pre-commitments and alliances to create more options (effectuation) rather than considering other companies from a competitive viewpoint (causation). Effectuation emphasizes overall partnering for several reasons. Partnering is a crucial means to control the future, reduce or eliminate uncertainty and to pass entry barriers. Furthermore, partnerships are considered a holistic mechanism for creating the future: opportunities are co-created (vs. not found) with partners who are committed to share the risk but will also benefit from the success (Chandler et al., 2011; Read, Dew, et al., 2009; Sarasvathy, 2001).

3.1.2 Connections to other theories and concepts

In its initial declaration, effectuation theory is delineated by three philosophical and theoretical doctrines that deal with the philosophical problematic set-up of decisions involving future phenomena (Sarasvathy, 2001). Firstly, a definition of effectuation as an empiricist approach to the question of creation is adopted. This approach is described in the works of William James for example, one of the leading thinkers in psychology and philosophy of the late nineteenth century. Empiricism asserts that knowledge comes only or primarily from sensory experience. As a scientific philosophical approach, empiricism emphasizes the role of evidence, especially as discovered in experiments (Wikipedia, n.d.). James based his work on the belief that the mind of the observer and the act of observation affect any empirical approach to truth, and therefore no entirely objective analysis exists (Becker & James, 1944; Sarasvathy, 2001). In his essay "The Experience of Activity," he concluded that real activities are always needed to make things be, change or happen, and therefore any causality must be exerted in activity (Becker & James, 1944). These empirical and experimentative foundations are coherent with the idea of effectuation.

Secondly, Sarasvathy (2001) adopts problem framing for the question of *changing and ambiguous goals* from American organizational theorist James March, who has focused on understanding decisions made by individuals, organizations and society and on the factors that influence decision making (Augier, 2004). March, as one of the most significant organizational theorists, has been a strong influencer on various ideas originating from the concept of *bounded rationality*. Bounded rationality is related to the limitations of human knowledge and behaviour that prevent organizations in the real world from manifesting the ideas of neoclassical theory. This questions the assumptions of neoclassical theory (Veblen, 1900), which considers that people and organizations act independently with rational preferences and on full and relevant information. The concept of bounded rationality underpins many modern developments in organizational and strategy literature (Augier, 2004).

Thirdly, a closely related concept to effectuation is *uncertainty*. This is based on the concept of "Knightian uncertainty", which relates to economist Frank Knight's work drawing a conceptual distinction between the concepts of "risk" and "uncertainty" (Knight, 1921). Uncertainty, in the context of effectuation theory, refers to circumstances where central business artefacts, such as the business model, customers or market, are unclear or incomplete. Sarasvathy has developed the concept of effectuation and its connection to uncertainty narratively, based on thought experiments (Sarasvathy, 2001), but later empirical research has showed that for instance, one of the constructs of effectuation, experimentation, is positively correlated with uncertainty (Chandler et al., 2011). Furthermore, Welter & Kim (Welter & Kim, 2018) have expanded the concept of uncertainty and do not consider it as the only boundary condition for effectuation. Based on a simulation study, they suggest that effectuation is a dominant framework in both uncertain and risky conditions. Effectuation is proposed to offer a more consistent, although not profit-optimizing path to higher venture performance, regardless of the ability to predict the future (Welter & Kim, 2018). In addition to uncertainty, another feature that may favour effectuation is *isotropy*: it is not clear which elements of the environment to pay attention to and which to ignore (Sarasvathy, Dew, Read, & Wiltbank, 2008).

In early studies, effectuation and related uncertainty are introduced mainly in entrepreneurial and start-up contexts (e.g. Berends, Jelinek, Reymen, & Stultiëns, 2014; Ylinenpää, 2009). Thus, the effectuation literature can be considered to belong partially to entrepreneur research. The studies founded on entrepreneurial theories have selected an individual perspective on effectuation. They approach effectuation as a human behavior: a reasoning logic involving intuition, heuristics, and utilization of personal contacts and social networks (Dew, Read, Sarasvathy, & Wiltbank, 2009; G. Fisher, 2012; Goel & Karri, 2006; York & Venkataraman, 2010). These studies assume that the behaviour of an entrepreneur differs significantly from that of non-entrepreneurs. Several positive empirical findings on effectuation exist. Experienced entrepreneurs are more likely to use effectuation compared to recently graduated novices (Dew et al., 2009). Entrepreneurial effectuation has also been discovered to be positively connected to new venture performance (Futterer et al., 2017; Read, Song, et al., 2009). Furthermore, effectuation and causation have been studied together in an entrepreneurial setting. It has been proposed that their interplay and the entrepreneur's ability to shift between the two logics emerge as a key entrepreneurial skill (Reymen et al., 2015). While effectuation utilizes intuition and heuristics and thus appears in the decision making of start-up entrepreneurs, experienced entrepreneurs and managers may also have a tendency to be more effectual compared to novices. Novices seem to take predictive information as seriously as signals from the current environment. In contrast, experts manifest more effectual acts, such as using feedback, conducting post hoc analyses, automatically screening and utilizing context-related information and analogic reasoning. These are coherent with the experimentation, flexibility and means-orientation that are essential in effectuation (Dew et al., 2009). Effectuation has also been noted to interact with specific personality characteristics of the entrepreneur, such as the tendency to be more susceptible to over-trust, even more than the situation merits (Goel & Karri, 2006).

In addition, an organizational stream of effectuation literature exists. In this literature, effectuation is approached as an organizational decision-making process, or as a strategy framework, for example. The latter is discussed next. The concept of effectuation can be positioned as part of a wider discussion of two dominant paradigms in strategic and managerial decision-making: the *planning approach* and the *adaptive approach* (Eisenhardt & Zbaracki, 1992). While causation is consistent with planned strategy approaches, effectuation processes are associated with adaptive strategy approaches (Chandler et al., 2011; Harms & Schiele, 2012; Sarasvathy, 2001). When considered through the effectual lens, these two approaches differ primarily in how they cope with uncertainty: whether to try harder to predict better (planning school) (e.g. Ansoff, 1979; Augier, 2004; Porter, 1985; Wiltbank et al., 2006) or to move faster to adapt better (G. Fisher, 2012; Mintzberg & Waters, 1985; Wiltbank et al., 2006). The effectual approach is proposed as an early phase strategy (Reymen et al., 2015) but also as a potential strategy for innovations and business growth for established or large companies (Matalamäki et al., 2017; Svensrud & Asvoll, 2014). Prediction has been traditionally fundamental to the conceptions of how to control future outcomes (Wiltbank et al., 2006) but it requires conditions where the future can be considered as a picture of the past. A strategy debate has emerged recently, and the two strategic extremities are even considered unrealistic regarding their assumptions on decision making (Eisenhardt & Zbaracki, 1992). Such research streams have emerged that aim to bridge the gap between planning and adaptive approaches and combine a more realistic assumption of human decision making with a systematic planning procedure (Wiltbank et al., 2006). Wiltbank et al. (2006) separate the concepts of prediction and control in their review of different strategy models. Their division is presented in Figure 10.

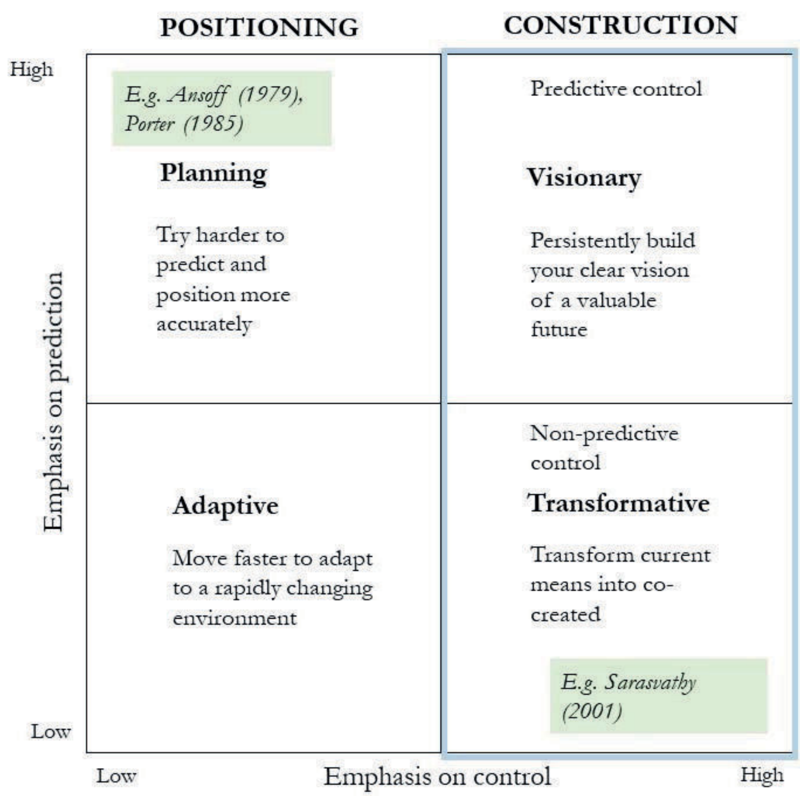

Figure 10. Strategy schools with prediction and control separated (Wiltbank et al., 2006).

In Figure 10, strategy models are positioned in two dimensions: level of prediction-orientation and level of control-orientation. Effectuation is classified as a transformative strategy. Figure 10 contrasts traditional, predictive models with effectuation and shows their positioning in the planning strategies. These extremities are illustrated by the green shading in Figure 10. As Wiltbank et al. (2006) summarizes in his review article, both the planning and adaptive approaches have gained vast empirical evidence. While several studies show that the planning approach is more efficient regarding uncertainty, several examples of studies also exist that emphasize the superiority of adaptation, learning and minimizing the use of predictive rationality. Sympathizers of the planning school typically see "shortcuts", like heuristics and intuition, only as a deviation in causal logic. In contrast, adaptation strategy literature argues that, in dynamic situations, planning may lock an organization into a certain strategy, slow adaptation, and leave some important changes in the environment unnoticed (Wiltbank et al., 2006). Werhahn et al. (2015) have taken the concept of effectuation from individual level to the level of corporate strategy and developed a multidimensional measure of effectual orientation. Effectuation, as an organizational phenomenon, is developed to a new construct of *effectual orientation*. It represents a strategic approach that puts weight on implementing effectual principles on employees' everyday work. (Werhahn et al., 2015).

3.1.3 Effectuation in different research settings

Effectuation theory was originally developed in a new venture setting (Sarasvathy, 2001) and attracted a lot of interest among entrepreneurship scholars. Since then, the interest in exploring effectuation in established and mature companies (Matalamäki et al., 2017; Wiltbank et al., 2006) and large corporations as well (Svensrud & Asvoll, 2014) has evolved. In addition, Sarasvathy (2001) proposes the development of a general theory of effectuation in her seminal article. Considered as a general model for decision making under uncertainty, effectuation could be applied to any other process of creation. Yet no such generally accepted theory on effectuation exists. However, several studies have been carried out to apply effectuation to different business operations. Such operations that are explored through the effectual lens include R&D management (Brettel et al., 2012), product innovation (Berends et al., 2014), business model development (Reymen et al., 2017) and new market creation (Read, Dew, et al., 2009).

The relationship between effectuation and venture performance has been the focus of interest in a few studies. Effectuation has been discovered to be more effective in creating business model innovations particularly in settings of high industry growth. These innovations enhance corporate venture performance. Correspondingly, in low industry growth settings, causation turned out to be more effective in creating business model innovation (Futterer et al., 2017). In their meta-analytical review, Read et al. (Read, Song, et al., 2009) propose that three of the principles of effectuation are positively connected with effectuation in new venture settings. These three principles are means-orientation, leveraging contingencies and partnerships (Read, Song, et al., 2009). As innovative R&D processes are recognized as an important source of competitive advantage, Brettel et al. (2012) studied effectuation in an R&D context. They argue that effectuation is beneficial in projects with a high level of innovativeness.

Effectuation theory articulated the principle level constructs for effectual behaviour. Since then, researchers have made attempts to detect these theoretical principles in practice. In addition, some scale development attempts have been made. Chandler et al. (Chandler et al., 2011) carried out a four-stage process to develop a scale for measuring effectuation and causation. Brettel et al. (Brettel et al., 2012) examined effectuation in corporate R&D processes and, in addition to verifying that the effectual principles had occurred, they also showed a positive correlation between effectuation and highly innovative R&D projects. Werhahn (Werhahn et al., 2015) built a corporate-level concept of effectual orientation that comprises the appearance of effectual principles in the work of individuals. As a result of these studies, various proposals for the principles of effectuation have been made.

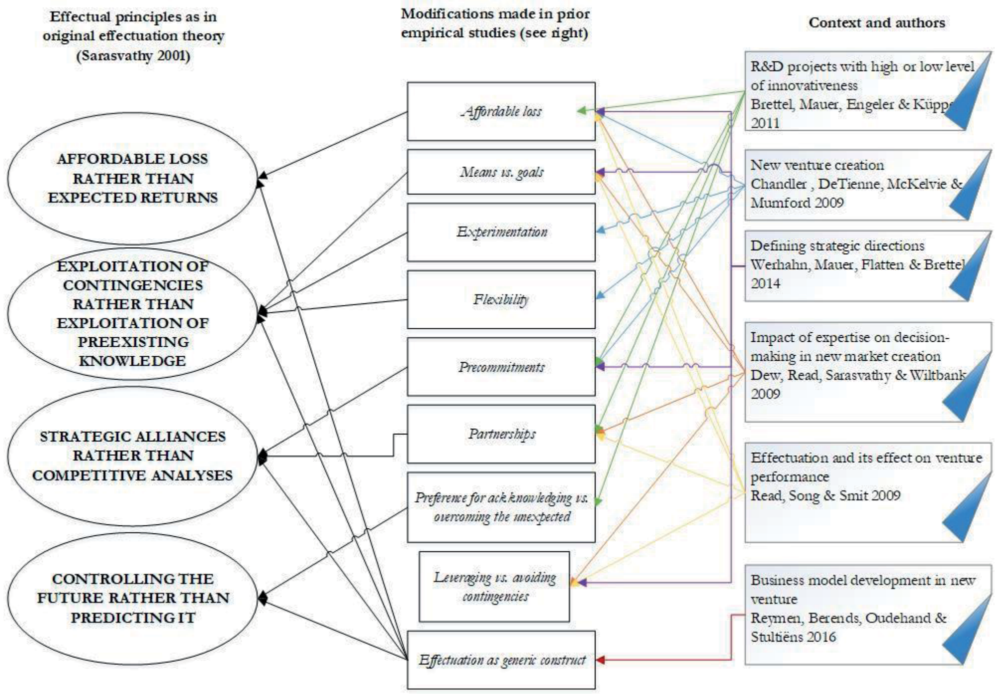

Figure 11. Main effectual principles in original form and their diverse modifications in prior literature.

Figure 11 presents examples of the modifications made to the original effectual principles in prior research literature. The principles have been either modified in initiating the study to fit the current context, or refined as a result of the study. So far, no unambiguous scale or operationalization exists. Perry et al. (2012) make suggestions how to design empirically rigorous effectuation studies consistent with the developmental state of the theory. Firstly, the existing literature asks predominantly open-ended questions about effectuation as a phenomenon of interest. To move to an intermediate state, research questions should focus on the relationships between effectuation and established constructs. Secondly, as the effectuation theory is still considered to be at a nascent level, problems can arise if quantitative data and analysis methods are used (Edmondson & McManus, 2007). When the research reaches an intermediate state, it is proposed that both qualitative and quantitative data be collected. Thirdly, as research on effectuation transitions to the intermediate state, measures must be developed. Furthermore, the development of measures should follow a formative rather than reflective approach (Edmondson & McManus, 2007; Perry et al., 2012).

As this thesis studies effectuation in the partnership-building context, there is no existing operationalization specifically for partnership building. The principles were chosen based on the pre-understanding of the topic and the reviewed partnership-building literature. Table 10 presents examples of operationalizing effectuation in the prior studies that were utilized in the design of this research.

Table 10. Examples of effectuation in practice. Presented items are chosen from among the three principles utilized in this research. Developed from (Brettel et al., 2012; Chandler et al., 2011; Reymen et al., 2017; Werhahn et al., 2015).

EXPERIMENTATION	AFFORDABLE LOSS	FLEXIBILITY
Trying to integrate surprising results during R&D projects, even though they were not in line with the original project target	Considering potential losses as decisive for the selection of an R&D option	Allowing the business to evolve as opportunities emerge
Allowing new R&D findings to influence the project target	Approving the budget on the basis of considerations about acceptable losses	Adapting what is being done to the resources at hand
Carrying out venture planning in small steps during implementation	Selecting the R&D option mostly based on minimization of risks and costs	Being flexible and taking advantage of opportunities as they arise
Allowing the project to evolve as opportunities emerged	Making decisions on capital expenditure primarily based on potential risks and losses	Adapting what is being done to the resources at hand
Using potential setbacks or external threats as advantageously as possible	Being careful not to commit more resources than it can be afforded to lose	Avoiding such courses of action that restrict flexibility and adaptability
Experimenting with different products and/or business models	Being careful not to risk more money than it can be afforded to lose	Keeping the R&D project intentionally flexible to adjust to new findings
Providing products and services that differ substantially from what was first imagined	Considerations about potential losses being decisive for the selection of the corporate venture	Despite potential delays in execution, remaining flexible and taking advantage of opportunities as they arise
Trying a number of different approaches before establishing a business model that works	Carrying out selections of the corporate venture (out of possible ventures) mostly based on minimization of risks and costs	
Keeping the venturing process flexible enough to be adjusted to the new findings.	Significant consideration of the potential risk of the corporate venture	
Letting the new findings influence the target of the corporate venture		

EXPERIMENTATION	AFFORDABLE LOSS	FLEXIBILITY
	Taking decisions on capital expenditure primarily based on potential risks and losses	

The operationalization presented was not used as such in the interviews for this research, but formed a base for building the theory framework for data collection and analysis.

3.1.4 Partnership building in the context of effectuation theory

Partnership orientation is an integral part of effectuation and is one of its original four constructs (Sarasvathy, 2001). Later, effectuation research was weaved into network theory, which considered effectuation as "a network-driving and network-dependent phenomenon" as well as extending the concept of effectuation from individual exploration towards different network levels for wider analysis (Kerr & Coviello, 2019b). It has been recognized that positing effectuation only for entrepreneurial frameworks may provide too narrow an understanding of partnership processes (e.g. Kerr & Coviello, 2019b). When observed through the effectual lens, all business is a matter of an effectually born partner network exploiting opportunities and converting them into new artefacts, such as new business, solutions or markets. The effectual network is a dynamic construct of interactions between stakeholders (Sarasvathy & Dew, 2005). In the effectual approach, the creation of any of these artefacts is a process that transforms extant reality into new markets or businesses. This opposes the assumption that any actual market is one of many possible markets that could be specified and then explored (Sarasvathy, 2008, p. 100).

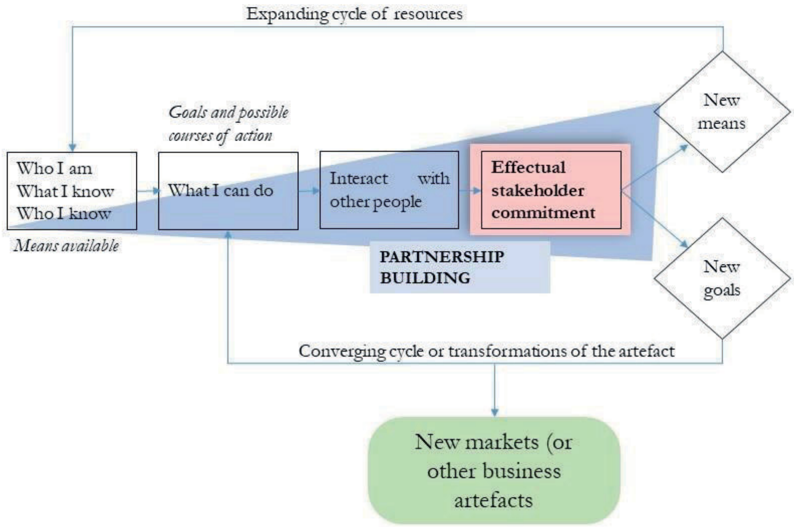

Figure 12. Effectual network and the process of partnership building. Developed from (Sarasvathy, 2008, p. 101).

Figure 12 presents a dynamic model of an effectual network. The example is limited to a case of market creation, but could equally as well be applied to the creation of any business artefact, such as new products or new business innovations. The figure shows how the first effectual commitments initiate the effectual network. Each new commitment sets in motion two concurrent cycles, one expanding and the other converging. Every new commitment expands the network. Connections may emerge between two partners, suppliers and customers, but also between entrepreneurs and investors (Sarasvathy, 2008, pp. 102–106). As the network grows over time and the outcome, e.g. a new market, becomes more stable and predictable, the network tends to become less effectual. This happens as the network eventually coalesces into a distinct new market (Sarasvathy, 2008, p. 106; Sarasvathy & Dew, 2005). In this thesis, the activities of partnership building are considered to occur in the phases highlighted with a blue triangle in Figure 12. Partnership building is assumed not to appear alone or independently, but always driven by a broader driver originating from a strategy and/or the goals of the company. Correspondingly, Engel et al. (2017) propose that partnership building is particularly an entrepreneurial action, and closely linked to uncertainty. Here, partnership building is considered coherently with effectuation. Instead of focusing on reaching goals by targeting desired goals, entrepreneurial partnership building is the activity from which these goals emerge in the first place (Engel et al., 2017). As effectuation theory was originally developed in the context of creation – such as a new venture or innovations – it can be assumed that goals as well as expectations towards the network are in continuous flux. Prior research has for instance linked the utilization of different network ties to a particular kind of resource needs (Soetanto, Huang, & Jack, 2018).

Internationalization, considered as a specific case of partnership building (Johanson & Vahlne, 2009), has many characteristics of effectuation. Rather than a formal search and selection process, foreign market selection may emerge from opportunities presented by network members. Moreover, especially when conducted under uncertainty, attempts at internationalization by small firms are intentionally carried out in an effectual manner (Evers & O'Gorman, 2011; Galkina & Chetty, 2015). Schweizer, Vahlne & Johanson (2010) propose an entrepreneurial model of the internationalization process, incorporating effectual actions like exploiting contingencies and iteratively seeking and deepening commitments with partners. In this model, internationalization is seen as a result of a firm's efforts to improve its position within its network or networks, by conducting effectual actions (Schweizer et al., 2010).

Despite the importance of partnership building as part of effectuation, the prior research has not been able to show that partnership, as such a generic concept, would be particularly linked exclusively to effectuation. Instead, partnerships are found to belong to both effectuation and causation, thus being a shared construct (Chandler et al., 2011; Futterer et al., 2017). Prashantham, Kumar, Bhagavatula & Sarasvathy (2019) have separated effectual and causal approaches to partnership building and also proposed the causal-effectual distinction as an important avenue for further research. In the work of Prashanthan et al. (2019), the connection of effectuation to speed of internationalization is explored. While the effectual approach to network building is argued to be positively associated with initial entry speed and the need for international scope, it is argued that the causal approach is positively associated with speed of international commitment. Thus, decision-makers should be aware of their approaches to partnership building, and to pursue causal partnership building to attain subsequent high international growth. Table 11 presents the effectual and causal approaches to partnership building, applied to five effectual principles.

Table 11. Effectual versus causal approaches to partnership building. Developed from (Prashantham et al., 2019).

EFFECTUAL PRINCIPLE	Corresponding effectual partnership-building actions	Corresponding causal partnership-building actions
Means-orientation	Starting with people one knows	Invoking dormant ties and seeking referrals or resources
Forming partnerships	Responding to and working with self-selected stakeholders; people who are interested in being a part of the venture are likely to make efforts to reach out	
Affordable loss	Pursuing a relationship knowing the downside of pursuing the relationship	Calculating the potential benefit of each relationship and pursuing these accordingly. Weakening the relations that do not provide the necessary resources
Leveraging contingencies	Reviving old acquaintances or approaching new ones met serendipitously who can help	Cold-calling potential resource providers, taking planned actions to preserve ties that can provide resources
Non-predictive control	Persuading others to be a part of one's activity or provide requisite resources	Planning and strategizing carefully vis-à-vis actions that can help generate resources

3.2 Partnerships

Conceptualizing organizational forms as "network organizations" has been of significant scholarly interest in recent decades (Contractor et al., 2006). It is argued that all organizations need relationships with others to survive, and network organizations are supposed to supplant the bureaucratic forms of organizations (Contractor et al., 2006; Parmigiani & Rivera-Santos, 2011). In this thesis, the concept of *partnership building* is linked to networks and used correspondingly with the term networking. Partnership building is considered as all the partner-related and conscious acts originating from a strategy or strategic high level policy of the company.

3.2.1 Partnership building in the field of network research

Network research has expanded exponentially since the middle of the 20th century and has reshaped global business architecture. This results from a general shift away from individualist and atomic explanations, towards more contextual, relational and systemic understanding (Borgatti & Foster, 2003; Parkhe et al., 2006). The idea of network organization became popular during the 1980s and 1990s. A network organization is characterized by repetitive, trusted exchanges among semi-autonomous organizations, with the purpose of protecting transactions and reducing their costs. From a managerial view, the competitive environment of firms is undergoing a fundamental change. As business becomes more global, turbulent and competitive, traditional markets are being replaced with networks (Möller & Halinen, 1999). They are intended to balance the flexibility of markets with the predictability of traditional, hierarchical organizations (Borgatti & Foster, 2003).

From an organizational theory perspective, companies partner with each other to "complete tasks more effectively, gain powerful allies, become connected with other more distant organizations and gain access to greater and more diverse sources of social capital" (Parmigiani & Rivera-Santos, 2011). Borgatti & Foster (2003) define a network in general as "a set of actors connected by a set of ties". The ties connect pairs of actors, and can be directed or undirected. Moreover, the ties can be dichotomous or valued, and function differently depending on their type (Borgatti & Foster, 2003). Furthermore, regarding organizations, Parmigiani & Rivera-Santos (2011) define these relationships as "strategically important, cooperative relationships between a focal organization and one or more other organizations to share or exchange resources with the goal of improved performance". As this study explores partnership building as a set of activities by a single focal company, the adopted viewpoint to partnership building is *egocentric*. The research on networks has been split into different streams and approaches. Borgatti & Foster (2003) identify eight different categories in existing network research. This thesis is positioned in the school of network organizations, the others being labelled e.g. social capital, embeddedness, joint ventures, interfirm alliances and social cognition. In addition, several approaches to networks exist within the organizational view – also labelled interorganizational relationships (IORs). These approaches differ in their thematic emphasis and underlying assumptions about their respective focal actors, the definition and characteristics of the network structure, and procedures to manage the actors belonging to a network (Aarikka-Stenroos et al., 2014). Multiple established network approaches include strategic networks, joint ventures, buyer-supplier agreements, industrial networks (IMP), innovation networks, trade associations and the economics of networks (Aarikka-Stenroos et al., 2014; Parmigiani & Rivera-Santos, 2011). Examples of a few established network approaches and their basic assumptions are presented in Table 12.

Table 12. Examples of established network approaches (Aarikka-Stenroos et al., 2014).

NETWORK APPROACH	CHARACTERISTICS	KEY SOURCES
The economics of networks	Focus on network effects and competition in the network environment; network externalities	Katz & Shapiro (1985)
Entrepreneur networks	Emphasis on small firms' networking for resources, e.g. for growth and internationalization	Aldrich & Zimmer (1986)
Industrial networks	Emphasis on interactive relationships between networked companies. The basic assumption is that networks cannot be managed.	Håkansson & Ford (2002)
Innovation networks	Emphasis on managing networked firms for R&D and innovation	Dhanaraj & Parkhe (2006)
Network theory	Focus on network dynamics	Powell, White, Koput & Owen-Smith (2005)
Social networks	Focus on relationships of social entities, i.e. individuals and organizations	Burt (1993), Granovetter (1973) and Uzzi (1996)
Strategic networks	The basic assumption being that networks of companies can be managed towards a shared goal	Gulati (1998), Jarillo (Jarillo, 1988) and Möller & Svahn (2003)
Actor networks	Networks comprise material and semiotic relations between humans and non-human objects	Latour (2005) and Law (1992)

This study utilizes particularly the industrial network approach in framing and defining partnership-building acts. The choice is based on certain coherencies with the effectuation theory and industrial network approach. The main coherencies influencing this selection were the following three commonalities:

- The core nature: the dynamic character of effectuation remains the dynamic character of a network in the IMP approach
- The basic assumption of network management: no possibility for "egocentric management" from the viewpoint of a single company. Instead, the goals and visions have to be built together
- An overall approach to the network: in the IMP approach the network is a mechanism for utilizing leverage. In addition, in effectuation the network is a mechanism for solving problems emerging in the network

Overall, as effectuation was originally developed in an entrepreneurial context, assuming that entrepreneurs deal with constant change in their business, the networks in effectual context may also be assumed to be dynamic by nature (Soetanto et al., 2018). In the framework of effectuation, the tendency to build partnerships is recognized as one of the central principles of effectual behaviour. Effectual partnership building is described as a specific approach to partners. Partnerships are understood as a focal mechanism for converting contingencies into opportunities, aiming to reduce uncertainties and to erect entry barriers (Sarasvathy, 2001). However, the empirical evidence on partnerships regarding effectuation has been mixed. Such findings have been made that "partnerships" as a high level concept can be linked to both effectuation and causation (e.g. Chandler et al., 2011), and therefore more research should be conducted to explore particularly such partnership building behaviour that is characteristic of effectuation.

3.2.2 IMP approach to partnership building

The interactive network approach originates from the IMP project. The project was initiated by a group of researchers who had observed things that, in their opinion, could not be explained by the prevailing theoretical approaches. The four main challenges to those prevailing approaches were identified. The challenges and the suggestions of the initial IMP project are presented in Table 13.

Table 13. IMP group's suggestions for the challenges of prevailing theoretical approaches (Ford & Håkansson, 2006).

CHALLENGE	SUGGESTION
Business sales or purchases cannot be considered as isolated events involving customers that entered and then left the market for a particular product	Transactions are simply episodes in continuing relationships between supplier and customer. The main task for researchers should be trying to understand these relationships. For companies, the main task is trying to understand how to manage the relationships.
Marketing cannot be considered as consisting of independent action by a supplier in constructing its marketing mix and projecting it at a passive market	The focus is on interaction between active suppliers and customers, both of which could be involved in determining, developing and implementing the transactions between them
Customers (or suppliers) cannot be considered to be a homogeneous, atomistic group	Companies interact with a relatively stable, heterogeneous and individually significant group of customers and suppliers
It is not possible to make sense of either marketing or purchasing processes by considering them separately	Emphasizing the similarity of the tasks in which both parties were engaged. Understanding of what is happening can only be obtained by simultaneously analysing both the buying and selling sides of relationships.

Whereas most conventional approaches to relationships between companies consider transactions to be independent and unidirectional, the interactive approach of the IMP group highlights the dynamic, balanced and two-directional nature of interaction. The IMP group's research refers to *partnership building* as "the conscious attempts of an actor to change the structure or process of interactions within particular relationships or the wider network in which it operates" (Ford & Mouzas, 2013). In the interactive approach of IMP literature, all companies are considered to operate within a network of interdependencies that stretch across the business landscape. Because of the interactive nature of the business environment, the companies within a network are not considered free to act according to their own aims. Instead, each company's actions can fully be understood within a structure of network relationships (Håkansson & Ford, 2002). The interdependencies are both an opportunity and a constraint, simultaneously. While they expand the resources that the companies can develop and effectively exploit, they also constrain the abilities of companies to implement their own, independent strategies (Ford & Håkansson, 2013). The emergence of interdependencies are preceded by the continuing relationships between companies and the *interaction* taking place in these relationships. Instead of isolated transactions between companies, each node, with its unique set of technical and human resources, is bound together with many others in a variety of different ways through its relationships. From a managerial viewpoint, these interdependencies are likely to be a prime focus of managerial activity (Ford & Håkansson, 2013; Håkansson & Ford, 2002). The relationships are long-term, often complex, and their current form is the outcome of previous interactions (Håkansson & Ford, 2002).

The relationships between companies differ by nature and type, and are influenced by a number of factors. Such factors include what has happened in the past in the relationship, what each of the parties has previously learned in its other relationships, and finally what is currently happening between the companies in the relationship and in others in which they are involved. In addition, the expectations of both companies affect what the aims of their future interactions are, and what happens in the wider network outside the ones the company is directly involved in (Håkansson & Ford, 2002).

3.2.3 Managing the network and partnership building

In general, managing networks differs from managing a company, as networks have no organizational hierarchy in which managers could apply the traditional organizational line management. Instead, managerial acts have to be conducted in more co-operative and non-hiearchical manner. (Planko, Chappin, Cramer, & Hekkert, 2017). It is argued that network management is fluid, and the utilization of management behaviours varies over time (McGuire, 2002) and over different types of networks (Järvensivu & Möller, 2009). The industrial network approach has a vast knowledge base on the structure of a network, and on understanding the underlying process of the interaction between parties. However, less attention has been paid to making contributions to managerial and strategy literature (Baraldi, Brennan, Harrison, Tunisini, & Zolkiewski, 2007). Overall, in the IMP approach, managing the network from egocentric goals and strategies is considered to be impossible (e.g. Baraldi et al., 2007). This is an alternative view to many other network approaches, which consider that the network contains subordinate relationships of clients and subcontractors, or that the management of the network is developed to support a strategy or the competitive advantage of a single focal company, for example (Jarillo, 1988; Kale, Dyer, & Singh, 2001). In the industrial network approach, interactive relationships provide an opportunity for the company to influence others, but the same relationships allow others to influence the company (Håkansson & Ford, 2002). Thus, partnership building is a balance between the opportunities and restrictions that will follow each partnership. In addition, to achieve benefits from a network, specific organizational skills have to be developed (Möller & Svahn, 2003).

The research on networks has evolved via different schools, particularly during the 2000s. According to Möller & Halinen (2017), the contemporary research on network management is divided into two major streams. The first is a steady emergence of streams including strategic networks or value networks. This stream addresses managerial solutions, critical capabilities and cognitive views on how managers construct and use network pictures. The second stream that has appeared recently is the extension of network management research to new application domains and organizational constellations. Such domains include ecosystems, fields and platforms (Möller & Halinen, 2017). Business network researchers in particular have begun adopting an ecosystem approach to network management (Aarikka-Stenroos & Ritala, 2017), although it is not clear to what extent the network theory and the existing network management knowledge cover any of these new domains (Möller & Halinen, 2017).

The first of the current network management research streams is the strategic nets perspective. The term 'net' is used in the literature to distinguish these purposefully created networks from the emergent or boundless network view characterizing IMP research, for instance (Möller & Halinen, 2017). The strategic nets approach proposes that networks are formed by a few actors pursuing specific mutual goals having contractually defined roles and responsibilities (Möller & Halinen, 2017). Strategic nets are also considered possible to manage, analyse and categorize (Parolini, 1999). The industrial network approach is sceptical about the ability to control these resources. On the contrary, the resources are assumed to be controllable only through the medium of relationships and interaction (Baraldi et al., 2007). While the industrial network approach considers the organization mainly to be unable to control the networks they belong to, a firm still has to act, to try and control and influence, to suggest ideas, set limits and seek for opportunities (Harrison et al., 2010). Thus, in the IMP perspective, strategic behaviour is embedded, interactive, evolutionary and responsive, rather than independently developed and implemented (Håkansson & Ford, 2002; Harrison & Prenkert, 2009). The idea of *strategizing* (e.g. Harrison et al., 2010) draws strongly on the IMP network view and is founded on efforts to examine the nature of strategic behaviour in the network context (Abrahamsen, Henneberg, Huemer, & Naudé, 2016; Möller & Halinen, 2017). According to Harrison et al. (2010), rather than forming strict strategies, companies should define *strategic initiatives* to allow for conscious strategies at the same time as adaptations in activities and resources occur (Harrison et al., 2010). From the strategic nets viewpoint, Möller & Svahn (2003) and further Möller & Halinen (2017) propose a value-system continuum that draws on the resource-based view (e.g. Wernerfelt, 1984) and the dynamic capabilities perspective (e.g. Teece, Pisano, & Shuen, 1997).

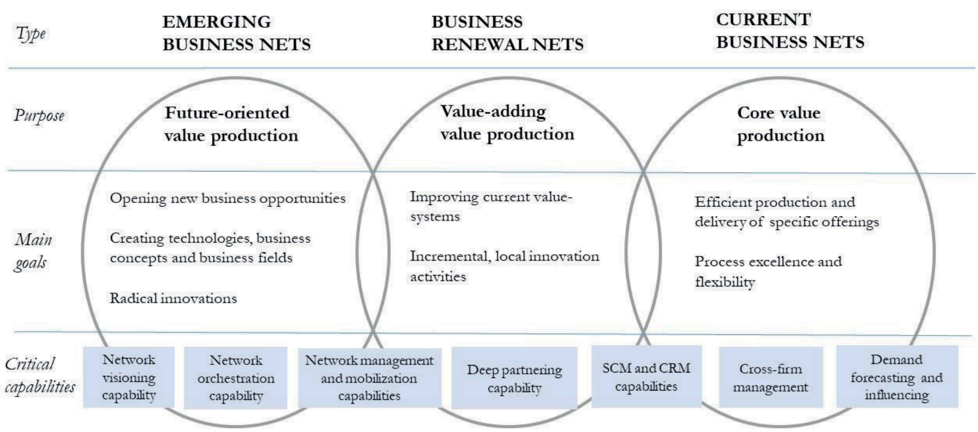

Figure 13. Network value system continuum (Möller & Halinen, 2017; Möller & Svahn, 2003).

Figure 13 illustrates the value system continuum of networks (Möller & Halinen, 2017; Möller & Svahn, 2003). *Emerging business nets* concern the network constellation through which new technologies, business concepts or markets are created. This domain is characterized by vaguely identified ideas about the future involving great uncertainty. This uncertainty may involve the actors, activities and resources etc. necessary for the implementation of the ideas. Business renewal nets describe value systems that are based on current value systems and therefore are well specified. However, they are modified as a consequence of local innovation activities. Business renewal nets aim to improve current value systems. Current business nets are clearly defined and stable systems. Moreover, actors, processes and specific offerings indicate a high level of determination. Typical examples are multi-tiered demand-supply networks (Möller & Halinen, 2017). The classification of the above-mentioned three generic types of nets manifests the key point of the strategic nets approach: because of the different properties of each type it is possible to build assumptions concerning the network management in each different case (Möller & Halinen, 2017). The development of these three value systems is iterative; new networks appear as existing networks deepen or fade away. Figure 13 also proposes the critical capabilities needed in each phase of network development. In addition, the main managerial questions and actions in each phase differ from each other.

The second research stream on network management is interested in extending the viewpoint to new domains (Aarikka-Stenroos & Ritala, 2017; Möller & Halinen, 2017). This literature approaches networks as a tool for constructing new economic sectors (e.g. Planko et al., 2017), business fields (e.g. Van Bockhaven & Matthyssens, 2017) or ecosystems (e.g. Aarikka-Stenroos & Ritala, 2017). These domain extensions are nested by their nature: a sector consists of several business fields, which themselves can contain a subset of ecosystems. Thus, each construct does not have to refer to a unique empirical domain; rather, various constructs summarize a particular research perspective that can reveal a unique aspect of complex phenomena (Möller & Halinen, 2017). In particular, the ecosystem concept is being increasingly used in business network research (Aarikka-Stenroos & Ritala, 2017). Aarikka-Stenroos & Ritala (2017) propose shifts in four areas of managerial opportunities and challenges. These shifts are listed and explained in Table 14.

Table 14. Major shifts in managerial opportunities and challenges in the era of ecosystems (Aarikka-Stenroos & Ritala, 2017).

SHIFT	EXPLANATION
Shift to wider collaborations to be managed	Instead of choosing partners and nets, firms have to choose between networked or competitive ecosystems including both vertical and horizontal relationships. This requires wider understanding of institutions, regulators, users and other actors that may have a distant, yet crucial impact on the organization's success.
Shift in processes relevant for managing exchange	A larger set of relevant domains and processes regarding management is needed. Interactions in ecosystems may occur between very diverse participants who exchange ideas, knowledge and expertise. The breadth and scope of relevant knowledge have increased.
Shift in methods and tools of management	Because of the complexity and extensive boundaries of the ecosystem, multiple knowledge can be derived from it. Methods and tools are needed to maximize the contributions of ecosystem actors (e.g. social media, crowdsourcing and virtual forums).
Shift in pace	Co-evolution (interactions and processes between the actors, technologies and institutions of an ecosystem) and increased dynamics in ecosystems are changing the pace of interaction. This generates new challenges regarding management. Adaptation to increased dynamics and rapid change is needed.

Although the ecosystem approach shows potential for examining management spanning value chains, networks and industry boundaries, the added value of an ecosystem approach for current network research is not always evident (Aarikka-Stenroos & Ritala, 2017). Möller & Halinen (2017) offer an integrated view of the current knowledge on managing networks, and propose the framework illustrated in Figure 13.

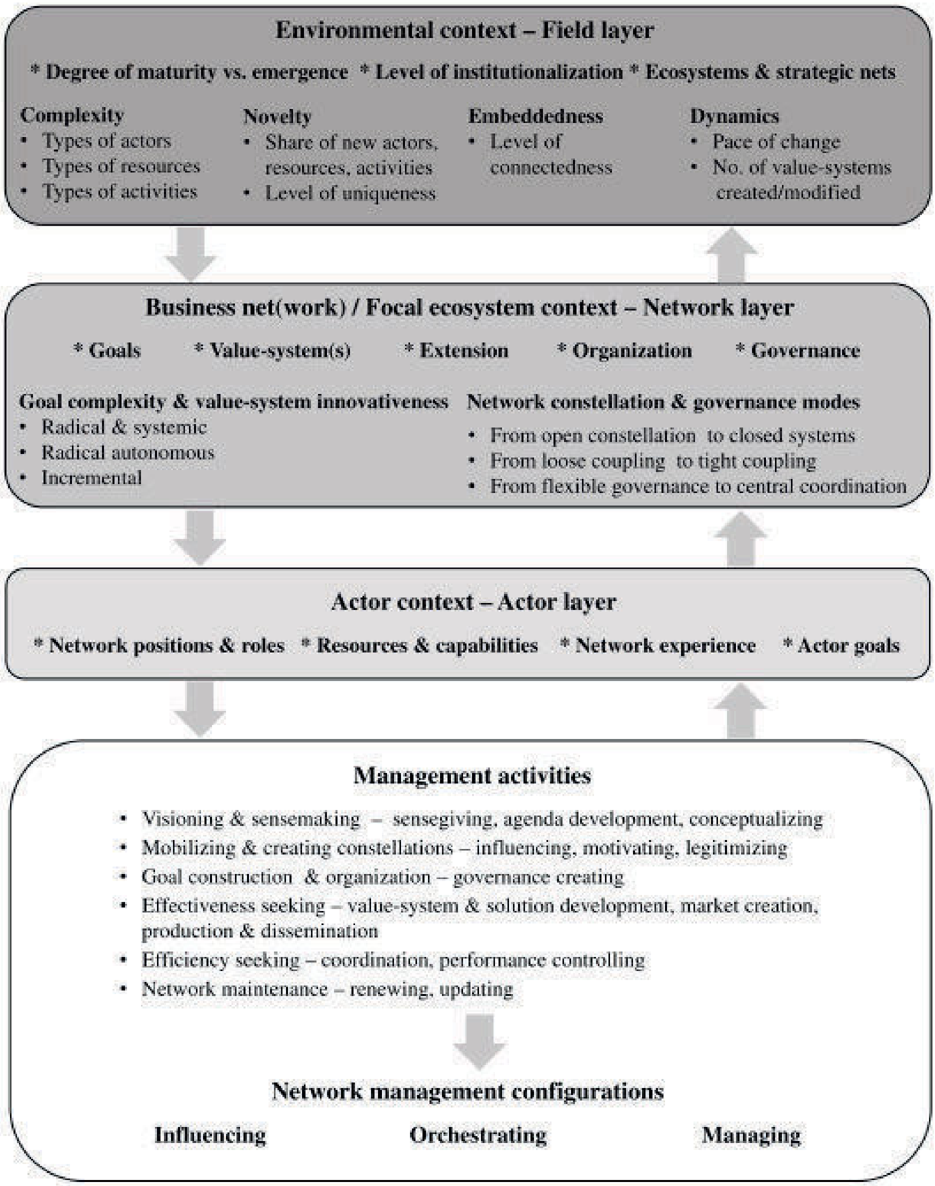

Figure 14. An integrative framework of network management.

Figure 14 presents a network management view that consolidates the main streams of network management research (Möller & Halinen, 2017). The model is based on assumption that contextual factors influence the feasibility of potential new networks and value systems. These factors are divided into three categories: the environment where the network is being constructed, the network itself, and the single actors in the network. The proposed six management activity sets, illustrated in Figure 14, have different emphases in different types of networks. Furthermore, three prototypical configurations of network management are outlined: influencing, orchestrating and managing. These three types reflect the different emphasis on management activities when considering the networks in emergent fields, extensive/renewal networks or well-established strategic nets (see Figure 13) (Möller & Halinen, 2017). In addition to Möller & Halinen (2017), other models for managerial activities have been suggested in the prior literature. McGuire (2002) proposed a universal network management framework based on four basic functions: framing, activating, mobilizing and synthesizing. Järvensivu & Möller (2009) have developed this framework further by linking together the discussion on the manageability of networks and the IMP-type literature on the functions, tasks and actor roles in the network. It is argued that network management is fluid and the utilization of management behaviours vary over time (McGuire, 2002) and over different types of networks (Järvensivu & Möller, 2009). A particular network capability - the ability to build, handle, and exploit relationships – has also been recognized as a part of strategic capability architecture, playing an important role in formation of other capabilities (Vesalainen & Hakala, 2014).

4 RESULTS

In this chapter, the empirical results of the studied four cases are presented. Findings on effectuation are presented in sections 4.1 – 4.9. After that, the chapter continues by collecting these results into a framework of four different partnership-building profiles, characterized by a set of key attributes. This framework summarizes the findings of this study by constructing a new viewpoint to decision making related to partnership building. It also links effectual decision making to a particular type of partnership-building situation.

4.1 First encounter with the data: general observations on research topic and interviews

Effectuation, together with partnership building in general, seemed to be an inspiring topic for interview discussions. It also became clear that “building partnerships” or “networking” is not an unambiguous and collectively defined act even within a single company. All the interviewees were representatives of top-level management. Despite that position, some of them still hesitated to talk about partnerships, as they felt they did not have the “right” information or adequate insight into the partnership issues of the company. The interviewees were advised to consider a “partnership” however they liked and as it appeared in their individual working context. The only limiting guideline was to exclude supporting functions like financial administration services unless they bring clear value to the business and thereby the relationship is deeper than simply having single transactions between parties.

The interview situations were positive, and the topic seemed to be inspiring to each of the interviewees. Effectuation seemed to be quite an intuitive and understandable phenomenon to the interviewees. Compared to causal, planned acts, it was apparently easy to discuss activities that manifest effectuation. Such activities felt natural and logical to most of the interviewees. In general, issues of partnership building were not easy to keep separated from general business strategies and practices. These themes had to be carefully considered in analysis. Also, guiding comments and questions had to be presented in particular to discover partnership-building related insights from the transcripts. Contrary to the expectations of the author, effectuation was not considered an unfavourable phenomenon in all the case companies. As the interviews proceeded, participants even showed a tendency to be more positive towards effectuation.

4.2 Overall appearance of effectuation in partnership building

The first research question of this research focuses on the manifestation of effectuation in the case companies. Based on the prior literature, this study adopted three constructs from the original four, modified in prior empirical studies on effectuation (Brettel et al., 2012; Chandler et al., 2011). These three presupposed constructs were *experimentation, affordable loss and flexibility*. Partnership is one of the original four principles. However, it was not used in this thesis for certain reasons. In prior empirical studies, overall "partnership" as a high-level concept is particularly linked neither to effectuation nor causation. Chandler et al. (Chandler et al., 2011) argue in their validation study that "partnership" is a shared construct, and is linked to both effectuation and causation. A similar proposal has been made by Fisher (G. Fisher, 2012) in his comparison of causal, effectual and bricolage behaviour among entrepreneurs. In the first interviews flexibility was detected in two meanings, and after considering them, they were both allowed and detected in later interviews too. As many of the terms related to effectuation are ambiguous and abstract, the researcher had to do a lot of interpretation with the meanings of various phrases indicating effectual features. The meanings and uniformity with effectuation were confirmed through additional questions when needed, to detect the relevant phrases which are linked to effectuation, for example.

In addition to interviews, effectuation was also estimated by a visual questionnaire. The scale consists of pairs of sentences that represent effectuation and its causal contrast. These sentences are positioned at the ends of a line segment. Interviewees were asked to visually draw a mark on the line, as close to the option (effectuation/causation) that they thought currently dominated in their organization.

All three principles of effectuation were detectable in the interviews. However, one of them was significantly stronger than the others: characteristics of experimentation were indicated in every interview, also in those where the company as a whole did not turn out to be acting effectually in its partnership decisions. On the other hand, the partnership-building decisions seemed to be in line with general, upper-level strategies and management practices, and were therefore partially communicated as intertwined.

4.3 The principle of experimentation

In the theory of effectuation, experimentation in practice is described to be experimenting with different products or business models, having an offering that is substantially different than was first imagined (Chandler et al., 2011), being means-focused rather than goals-focused and starting from the considerations "What I know – Who I am – Who I know" (Read, Song, et al., 2009) (see Table 9). In the interviews, experimentation was verbally communicated with expressions such as "willingness to conduct pilots with new partners", "capability to test partnerships by low or easy decision-making process", and "experimenting with partners without aiming at a specific plan of revenues or profits". Experimentations were described as emerging in many different sources; one of them being individual contacts and the "hints" that individuals receive from their networks. They may include information about new, established companies with interesting technology competences, or information about skilled persons for recruitment. The appearance of experimentation was estimated from the expressions used by the interviewees. If interviewees in the same company expressed significantly more experimenting than its causal contrast, the company was defined to have strong experimentation. The contrasting opinion was construed from comments that express e.g. "focusing on planned actions" or "not experimenting."

In the companies with strong experimentation, it was mainly reported as a positive, beneficial way of partnership building. In the biggest case company, there was even an aim to maintain experimenting characteristics intentionally. Furthermore, this means that particular long-term commitments or agreements were not usually made, and therefore some economic benefits may remain unattained. In spite of that, one interviewee still argued that the benefits of not being formally committed were greater than the disadvantages. He/she considered this to be a good way to avoid risks and to stay agile in choosing the right partners in varying situations. Such agility is needed especially for the fast acquisition of technology competencies in specified locations in order to be cost-effective. The second case company with strong effectuation reported a different practice concerning commitment. They have developed a step-by-step model for starting a partnership. In this model, a framework agreement is signed at a relatively early phase of the partnership. The difference between these two case companies may be the result of the very different roles played by partnerships. While the first-mentioned company uses the partner network mainly for resource and competence flexibility, the second company has chosen a retail channel strategy for their sales. The first company is also large, both in revenue and in the number of personnel, and is not dependent on partners, as they have a wide in-house resource pool. The second company has founded their cash flow mainly on the retailer network, and therefore more confirmatory actions, like formal agreements, have to be done.

The most common reasons for experimentation expressed by the interviewees expressed were *time efficiency* and *greater innovation potential.* Firstly, experimentation is considered as a more reasonable way to confirm the relevancy of a certain partner, compared to trying to analyse the candidates beforehand. This requires continuous sensitivity and the readiness to notice suitable candidates and to react fast when needed:

"We don't need to spend an enormous amount of time [seeking partners] but we keep the antennas open all the time."

However, in this case company, the comment "keeping the antennas open" does not happen spontaneously or without any allocation of time and work for seeking partnerships. They have a particular person who is in charge of staying aware of the potential partner pool. He uses different channels, from informal (e.g. individual contacts, "the bush telegraph") to formal (e.g. skills and location data systematically gathered from social media applications). Secondly, experimenting with partners was believed to be a better way to create innovations, compared to planned activities. The interviewees recognized that, while it may be more likely to lead to innovation, it also required a change in attitudes. As can be seen from the following quotation, the interviewee said that extra courage is needed to experiment, since you never know about the result when you start:

"Yes, you get bravery (from the partners). The network is a place where a lot of ideas arise, and you should have the courage to try, even though you do not know whether it will be good or bad."

"Courage", in this case could refer to the organization's mindset towards uncertainty. Overall, in this research data, the attitude to uncertainty and surprises seemed to be coherent at the level of a single company. Whereas some of the companies positively accepted uncertainties as opportunities, others clearly considered them a threat.

One of the case companies, which showed strong signs of experimentation, described their management practices regarding experimentation with partners. An interviewee from COMPANY3 with long experience in partnership and network management, considered the management of experimenting to be very important, though challenging. The most important challenge in his opinion was that when managing experimentations and networks overall, it is not possible to manage causalities. Instead, one should manage from the current scenario, which is coherent with the effectual characteristics of utilizing contingencies. It requires a different approach and skills, compared to traditional, planned management frameworks.

> *"It is the same in experimenting. Your thoughts go in the direction of your hypothesis. You start to create sketches for experimentations. One should be directed by the current scenario. Many signals appear and 'reacting proactively' is an interesting expression that is used often. But, [you have to] start to play with ideas: now I see weak signals, what if it is true? Some companies need a plan, but in the experimentation culture we just do things on the fly. "*

In this research data, effectuation seems to be a recurring mode as business develops, not a straightforward continuum towards causality. This is also detectable in the experimentation in the case companies. When new business openings occur, the organization may be more experimenting again, despite being otherwise in the mature stage. One interviewee described it as "returning to the start-up phase". That may concern only the new part of the business, while the rest of the business may simultaneously follow a more planned line. The interviewee described this when talking about internationalization in his organization:

"… now, when we are trying to enter [an international target] market, of course we are more open-minded and … it is like returning to the start-up phase."

The case companies where experimentation was strongly detectable were also very aware of resource limitations. Interviewees emphasized that the experimentations had to be conducted carefully to ensure that the risk was tolerable. It seems that there is a connection to the principle of affordable loss. Also, experimenting with partners is not possible if a company wants to avoid all partner-related risks. COMPANY4 reported a conflict regarding experimentation. All of the interviewees from the company claimed that they would conduct experiments with partners, but it is not "allowed". When asking more about the reasons for that, they mentioned mainly the ownership of the company. While the interviewees believed that new business would emerge from experiments and seeking active co-operation with partners, their proposals for partnerships were not accepted by the Board. The interviewees expressed that they were "managed in a conservative manner", by which they referred to the expectations for planned and predicted actions. They had to be able to present short-term financial predictions for the partnership.

To conduct experimentation successfully, the interviewees emphasized the need for transparency and shared benefits. If there is no immediate economic driver for co-operation, there should be something else: a shared vision that makes both believe that something interesting and significant is yet to come. Experimentation is a "state of mind" that it is wished to maintain in the two case companies with strong effectuation. As the interviewees indicated, conversation is needed and potential partners need to be kept close, as you need dialogue to create innovations. If you are alone and not close and familiar with partners and their capabilities and ideas, the ideas will remain unexplored.

In these interviews, experimentation was clearly connected to means-orientation and utilizing contingencies. These were analysed separately in the content analysis of this research, but mostly interpreted as being closely related to each other. The nature of experimentation seems to differ in small and big companies: while the big COMPANY1 experiments to become aware of the best-skilled resources, the small COMPANY3 experiments to find a scalable model for operation. However, related to experiments, it is also considered important that the amount of simultaneous experiments is not too high. This enables appropriate focusing on the experiments and partners with the most potential. Thus, causality is needed to direct the partners towards the goals of the organization and to be conscious of the strategy-level boundaries for partnership building.

4.4 The principle of affordable loss

The principle of affordable loss is the weakest detectable principle of the three explored principles of effectuation. In the interviews, none of the interviewees mentioned issues that could have been directly linked to affordable loss. Rather, affordable loss seems to be an integrated, built-in aspect in the mindset of effectuation-intensive companies. When asking leading questions about the characteristics of affordable loss, interviewees considered them somehow selfevident. Previous empirical studies have operationalized affordable loss, for example as follows: "being careful not to commit more resources than we could afford to lose" or "we were careful not to risk so much money that the company would be in real trouble financially if things didn't work out" (Chandler et al., 2011). Such questions were answered by expressing that "no one would do that". Some interviewees of these companies mentioned features of affordable loss, like "operating within the limits of own resources" in a sub-clause when talking about experimenting.

On the other hand, companies that did not show strong signs or any signs at all of effectuation mentioned partnership-related risks in many contexts. It seems that they are very risk-conscious and even avoid risks. One of the case companies took a particular decision not to build partnerships. They indicated that decision through arguments such as "we do not want to use subcontractors, and we do not want to be a subcontractor to anyone else". When asked about the reasons for that decision, they mentioned unwillingness to risk their unique organizational culture. The other reason they mentioned was an assumption about the quality problems following partnerships. All of the interviewees in that case company mentioned superior quality as their own principle. Overall, they felt that keeping the quality at the desired level would involve too much work. However, some of their projects are multi-supplier projects, and therefore they have partners designated by the customer. In these partnerships the case company described focusing on the concrete outputs of the partner. They did not have any expectations of potential common value-creation or plans to extend the co-operation outside the current project. Other companies were considered suppliers, not partners in a co-operative meaning.

"We don't really have partners, in the meaning you want [to explore]. They usually deliver something. And it is good if they deliver what we ordered. The ball is on the other side. The ball is in the court of the opposing party."

4.5 The principle of flexibility

The principle of flexibility is moderately detectable in the data, particularly in the same companies that also manifest strong experimentation. Here, flexibility was discussed in two senses: firstly, utilizing partnerships to remain flexible; secondly, being flexible in starting partnerships and acting with partners. Flexibility in business was considered in COMPANY1 particularly to mean flexible and well-timed access to skilled resources. This study was conducted in 2018 and 2019, when there was a period of growth in the whole software industry. This affected partnership building in COMPANY1, as the volume of its business is large and the availability of various technology competences is critical. An interviewee from COMPANY1 described how he looked for free resources from the shortlist of potential partners in the sales phase of a project:

"And you have to ask every time, because the timing is so important in resourcing and sales. … it does not help, if there is some company that has 200, 300 or 400 experts on a particular technology, and none of them is free – like it often is, in the current business situation. So it does not help. You have to "ping" every time [= each of the potential companies has to be asked one by one]. … And usually there are no free people anywhere, which is a sign of profitable business."

In order to optimize flexibility, COMPANY3 has developed a tacit practice for managing their partner pool. The interviewee described the rough tiered model that he used when seeking partners for a certain project. The model does not exist as documented process or tool, but is a tacit practice of the interviewee, who is in charge of subcontractor partners. The interviewee described the tiered model that starts from a shortlist of familiar partners that have been validated in previous projects. If there were no resources available in the companies in that inner circle, he extended the search to companies on the next tier. In COMPANY3, apparently effectual and unplanned behaviour incorporates a surprisingly systematic process that seems to combine both effectual and causal features.

4.6 Two types of effectuation

One significant finding of this research is that effectuation may be an intentional framework for partnership building. Additionally, it may be unplanned and fragmented. Whereas in two case companies, effectuation was described as a positive phenomenon that they wish to maintain, the other two companies indicated that it was confusing and negative, and they showed attempts to move towards causal processes. Thus, this research proposes the existence of two different types of effectuation which are described below. In the rest of this thesis, they are referred to as *structural effectuation* and *fuzzy effectuation*. After introducing the two types, the distinctive attributes of structural and fuzzy effectuation are presented.

4.6.1 Structural effectuation

Structural effectuation is relevant, positive and advantageous in the current context of the company. It originates from the conscious acceptance of effectual acts and understanding of effectuation as a controllable construct. The case companies (COMPANY1 AND COMPANY3) that consider effectuation as mainly advantageous share a particular combination of attributes. The most significant finding concerning these attributes is a clearly outlined, communicable partnership strategy. In the case companies, strategy does not exist as a documented process, but appears in the collective understanding and narrative of partnership-building practices. In these case companies, effectuation does not appear in isolation: causal acts were also described by the interviewees. Effectuation seems to be accepted as a continuous part of partnership building and communicated in a positive, favourable manner. These companies do not consider effectuation as a deviation, although they may mention a need for more planned activities in some issues. These companies seem to have a relevant fluctuation of effectuation and causation. In addition, they express a common, organization-level understanding that both are necessary. This fluctuation contains causal phases for outlining and crystallizing the strategy, and effectual phases for creating, confirming flexibility and innovation. Causal phases were mentioned as also being necessary for communication reasons. Structuring and defining the business in the causal phases provides concrete, verbalized material for communicating the main policies to the organization. Difficulties in communicating the management policies were mentioned as a particular, effectuation-related challenge in both of the effectuation-intensive companies. The outputs of causal phases may be analytical and planned, such as percentual goals for subcontracted work or criteria for target sales per partner. Furthermore, a defined partnership strategy means that the role of partners is specified in some way. In COMPANY3, this definition also contains a rudimentary phase model of new partner entry. These main level policies and targets frame the space for effectuation that may follow the causal phase.

Effectuation and its justification in these two companies seemed to be coherent throughout the organization. The interviewees in these companies were able to communicate the effectual characteristics and to link effectuation logically to some strategic goal or principle. The logical narratives of the mentioned link between a strategic goal and effectuation proceeded as in the following examples:

"We are a mature and big company with projects all over the country – so the range of our technology competences has to be wide – we need a big pool of different technological experts – effectuation is the fastest way to reach them and to start a new project fast."

"We are in a new market – the business logic is evolving – it is impossible to predict or trust old models – experimenting and "failing fast" is probably the most efficient way."

The effectuation-intensive case companies COMPANY1 and COMPANY3 have specific justifications for effectuation and its effectiveness in their contexts. Even though the interviewees in these companies are experienced managers with wide knowledge of traditional, causal management models, they all prefer the existence of effectuation in partnership building. One interviewee from COMPANY1 described an example of causal management tools and their conscious preference for effectuation:

> *"These strategic management [lecturers, books etc.] say that if you don't have an explicitly defined strategy, the organization will fall into daily ad hoc choices. And I said that we make quite a lot of [intentional] ad hoc choices. I think that there is a clear strategy in our CEO's head, but he cannot explain it to anybody" [laughs].*

Structural effectuation seems in this data to be connected to highly relational values regarding partnerships. Such values are openness, transparency and "win-win" thinking. Openness and transparency are described as attempts to offer partners enhanced visibility of the business. This is considered to be motivating, as the partners have a continuous landscape for the potential possibilities of the relationship. On the other hand, the aim was for such visibility to support the partners in being active and offering their resources unprompted. The companies indicating structural effectuation were also more satisfied with the collaboration and value achieved from partners overall. Well-being aspects were highlighted in these companies and extended to partners. The interviewees described they wanted to be a "nice place to work" for everyone, mentioning the partners in particular.

4.6.2 Fuzzy effectuation

Fuzzy effectuation originates from a conflicting or undefined understanding of partnerships and their role. It is an ineffective, inconsistent modus operandi that was considered disadvantageous in the case companies. Market-related reasons also came up in the interviews. COMPANY4 operates in a formal niche market. Actors in their business environment have a long history and traditional roles and long-term customer relationships. As the market is very specific, the number of potential partners is limited. Furthermore, the traditional structures in the business field cause strong, competitive scenarios between companies. Newcomers may not be welcome in this limited field. This leads to a lack of openness and win-win thinking, which are important in effectual partnership building.

Such fuzzy effectuation in this data originates from various factors. These factors may be organizational, individual or originating from the market environment in which the company is operating. In this data, organizational inconsistencies seem to originate from an inadequately defined role of partnerships. This may be due to irregularities in defining and communicating the vision and goals of one's own business, as well as the lack of appropriate definition for the expectations and significance of partnerships. Fuzzy effectuation is also sensitive to conflict with the expectations of other parts of the organization. This conflict existed in COMPANY4, as the owners of the company were inclined towards causal logic in partnership building related decisions. This was manifested as demands to present financial estimates of the revenue before starting any kind of partnership, for example. Interviewees said that they understood this demand to a certain extent, but at the same time they felt that partnership building was under-valued, poorly utilized and difficult in their organization.

Fuzziness in partnership building related activities may also be driven by environmental factors. In this data, the company that manifests characteristics of fuzzy effectuation is doing business in a traditional field where the roles of actors have a long history. As the company is disrupting the traditional setting, the attitudes of the other actors may be disproportionately defensive and competitive. Thus, it may not be easy to be experimentative and open towards other companies.

4.7 Effectual partnership-building approach

As the analysis proceeded, more and more signs began to appear of a similar, unique approach to describing and managing partnerships. These signs occurred particularly in the case companies that showed strong effectuation in partnership building. In this section, these features are described and summarized into a concept of an effectual partnership approach. In the prior literature, terms like partnership, co-creation and effectual network occur and are linked to effectuation (e.g. Read, Dew, et al., 2009). However, they have been used mainly in the context of strong uncertainty, like start-up businesses. Furthermore, despite being apparently coherent with the effectual partnership approach in this thesis, partnerships or an effectual network do not explicitly define the characteristics of the partnerships or network particularly when effectuation dominates. The findings of this research illustrate a rudimentary picture of an effectuation-specific way of thinking and conducting partnership building.

On the whole, the two effectuation-intensive case companies refer to their business as "networked", also including their own organization as part of the network. The interviewees from these companies verbalized the network as a "community" or "family". In these companies, partnership-related values and attitudes seem to be strongly visible and mentioned time and again during the interviews. In this data, the effectuation-intensive companies both have a partnership strategy, which may appear like a more or less formal process. In any event, the role of partnerships is defined at some level, albeit not in great detail in these case companies. Interviewees in COMPANY1, one of the case companies with strong effectuation, described the trajectory of this partnership strategy. In the early phases of the business, partnerships were mainly utilized to acquire competences by learning from partners. At the moment, the learning aspect is no longer as significant, but the partners form a flexibility element in an expanding, geographically widening business. The reasons for partnership building in general seem to have changed as the company grew. In the early phases, there was more need to acquire new competences from partners. As the company grew, the role of the network shifted more towards a "load balancer", providing flexibility in both directions in different business situations.

In COMPANY 3, partnerships are more critical, and therefore the role is defined in even more depth. Interviewees from COMPANY3 described their partnership-approach as being based on understanding the motivation of each node in the network. Nodes also include individuals who are gatekeepers and therefore it is important to keep them motivated. Overall, the effect of individuals' social relationships, networks and contacts is obvious. In COMPANY1 each of the interviewees also mentioned the effect of individual persons in some context.

Partnerships in these effectuation-intensive case companies are considered not only in terms of the current capabilities and features of the partner. In addition, the potential they may bring to the collaboration in future may be critical. Such an example was mentioned by an interviewee in COMPANY1. He described that they also seek companies that "behave interestingly" in networks, such as social media or real-life networks. Here, the actual competences are not the main reason for the attraction. Instead, the potential value, cultural and brand compatibility make the partner interesting.

The decision making that appears in an effectual network approach is low and happens context-relatedly. This means that the possibilities to carry out decisions are moved very close to the practice, and are allowed to occur dynamically and in a timely manner. The interviewees gave an example from a project organization, where all possible decisions concerning the project were carried out by the people who were involved with the current situation in question. This requires the project to be proceeding normally, with no deviations that would require special interventions. Low decision making is not only a right or benefit: it also requires openness from the company. In addition, the people involved in decision making are required to have the willingness and capability to take responsibility, to understand the business in a wide sense and to work in a self-directed manner to be able to make good decisions. A "good" decision is one that does not cause any harm, and keeps the company going forward.

The findings presented below propose the existence of a particular process of effectual partnership building. The process is illustrated in Figure 15.

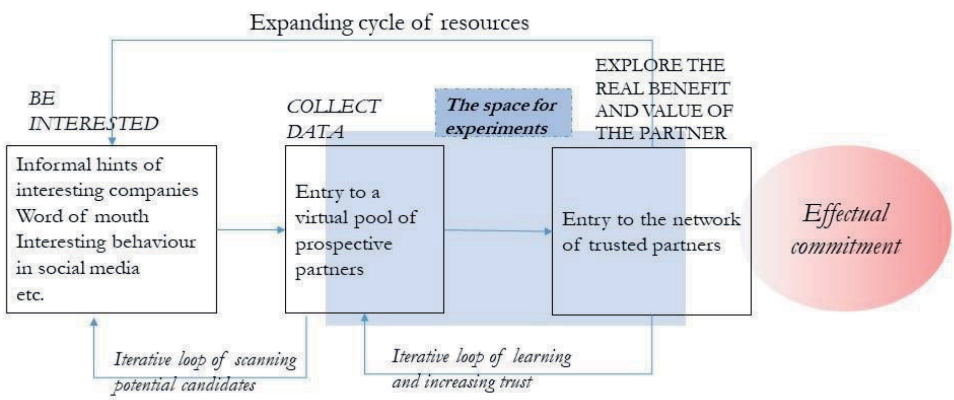

Figure 15. The process of effectual partnership building.

Figure 15 presents a generic process of building partnerships effectually. The phases of the process were detectable in the research data regarding the companies that particularly manifested structural effectuation. The process starts with the continuous observation of interesting companies. The most important act of this phase is being interested; one should be ready to build connections to potential companies quickly when they occur. This requires an especially open, transparent attitude towards other actors. The next phase, taking the potential partner to the first phase of the network, should include active data collection on the candidate: competences, cultural compatibility and other critical attributes are observed and collected. Experiments are mainly conducted in this phase. Through these experiments, the partner moves towards the next phase, more trusting partnership. This state is the result of a learning process that enables reciprocal trust to develop. Alongside this learning process, effectual commitments take form. Effectual commitment appears most often as a mental aim to deepen the partnership and commit more profoundly to common value generation. It does not necessarily contain any concrete commitments, such as a fixed amount of work or prices. After reaching the state of effectual commitment, the partnership may continue, deepen or even fail. Simultaneously, new partners are taken into the process iteratively.

The effectual approach to partnerships seems to recognize the significance of individuals. Not only in the aspiration to take the well-being of individuals into account, but also to detect and utilize the individual's motivational factors. A COMPANY1 interviewee described this as follows:

> *"Money cannot be first. People have to be first."*

COMPANY3 has a delivery channel strategy, and thus successful partnership building is a critical factor. The interviewees described that they have analysed the motivational factors in the critical network very thoroughly. The network consists of different companies, but also independent individuals, such as "evangelists" and thought leaders who have to be persuaded. Thus, the partnership building in COMPANY3 also contains several individual-level activities, e.g. social events, parties, leisure activities with partners. This is due to the assumption that the better the motivation at all levels of the network, the more successful the network will be.

> *"When you have a business value, and a social value [in networks], they are two different things. When you start to build partnerships, you have to remember that people will not come because of the business value only. They need the business value of course,*

but they will not do anything with you if there is no social debt. And you cannot create social debt other than by being very open, and facing the person just as he is."

In an effectual partnership-approach, competition occurs as well, but is not considered a threat.

"Finland is small and it happens all the time; first you are a partner with someone, and then suddenly the partner is a competitor. Of course you can limit it by contracts – if the risks are big, so the contracts are more formal and so on. But, often it is very typical that the same sub-contractors are utilized here and there, and you can be a sub-contractor as well. Of course, sometimes it may happen that your customer suddenly is someone else's customer. But it does not happen because someone has "stolen" the customer. In that case, we have not succeeded in keeping the customer."

4.8 Contextual factors affecting partnership building

One of the objectives of this research was to explore the contextual factors that affect partnership building. This exploration was conducted from a "clean theoretical slate", without any assumptions of the affecting factors. The affecting factors were often mentioned among other themes in interviews, and guided by follow-up questions when needed. The factors that appeared can be categorized into three groups: market- or environment-related factors, strategy-level organizational factors, and factors related to organizational culture and values. In addition, a fourth level, the level of individuals, appeared recurrently in the interviews, but was intentionally left outside the scope of this research and was therefore analysed only as a single category.

The first category contains market-related factors. Partnership building is not conducted in a vacuum. On the contrary, in many ways the environment defines the relevancy, possibility and ease of the partnership-building acts. If the market that the company operates in is positive towards collaboration, this encourages partnership-building acts. This is typical in such businesses where the roles of companies are not fixed to long traditions, for example. COMPANY3 operates in a particular software ecosystem that encourages activity in partnership building. Competition also exists in this environment, but it is not considered to limit the possibilities for partnership building. In contrast, COMPANY4 operates in a traditional market in the public sector in which the level of competitiveness seems to be higher. There partnership building requires much more effort, as the competitive aspects easily lead to limiting partnership-building attempts. Also, the width of the market is a significant affecting factor. COMPANY3, which operates in a relatively narrow niche, has stated that partnership building is not easy. The current situation in the industry, as well as in the near environment has a major effect on partnership building. The level of competitiveness is higher in certain companies. Furthermore, if the actors in the same value chain are very different, finding a common goal and culture may be challenging. To effectuate freely and effectively, the near market should be relatively dynamic and free of traditional actor roles that cause competition. Many features of the business may have an effect: if the common goals and benefits are easy to see, partnership building is easier.

Strategy-level factors originate from strategies, policies or other high-level statements made in the company. The most important affecting factor is the role of partnerships in these policies. As this research proposes that both causation and effectuation are needed for effective partnership building, the role of partnerships should be visible in the above-mentioned guidelines. Particularly in COMPANY1 and COMPANY3, partnerships are clearly indicated to have a role in the business. Furthermore, the characteristics of the role define the type and effort put into partnership-building acts. As the partnerships are the main delivery channel and therefore particularly crucial for COMPANY3, the investment in partnership building is rather high. Despite being in the birth phase, COMPANY3 has maybe the most planned partnership-building practices, although effectuation is also very strong. Strategy may also be formed so that partnerships are consciously excluded. COMPANY2 stated that it does not use subcontractors or other partners, and does not offer subcontracting to other companies. When asked about the reasons, they mentioned that they wished to protect their organizational culture and quality.

Factors related to organizational culture were explored only in general terms in this research. As organizational culture is a complex concept, more detailed interpretation of these themes would need a further research focus specifically on these issues. However, the affecting factors were classified in this group when the interviewee clearly indicated that they emerged from the cultural background. The following citation is an example of such a factor.

> *"We are not (in the field) seeking for companies that we could experiment with. Very easily we would get stuck, pondering and contemplating. We do not have such a culture [for easy experimenting]. We are managed in quite a traditional manner at the moment."*

On the other hand, organizational culture is also considered to be a limitation on partnership building. In COMPANY2 their own organizational culture is felt to be very unique, and partners are considered a threat to it. It is assumed that protecting the culture would be too laborious.

4.9 Co-existence of effectuation and causation

In the data collected for this study, two companies were shown to implement structural effectuation, which means intentional, effective and beneficial effectual behaviour. As the data suggests, both of these companies effectuate up to certain limits. In the interviews the limits were described as high-level policies that set boundary conditions, positioned the partnerships in the company's current business context, gave guidelines for affordable risks or segments that potential partners hold within the industry. These policies were described to be causal by nature, as they may even contain numerical goals of competence and location criteria for potential partners. These causal phases seem to recur time after time. Between these causal phases, effectuation dominates the partnership-building acts in the company. Causal periods are needed to form a structure in which both long-term guidance and short-term pursuing of flexible experimentations happen in a relevant manner. This combination builds an *effectuation sandbox* that arranges and directs effectual partnership building towards the high-level goals of the company.

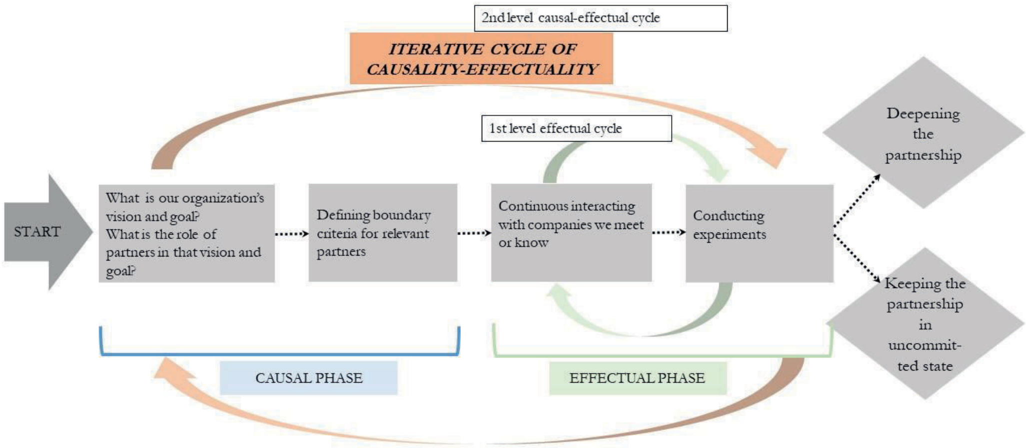

Figure 16. The causality-effectuality cycle.

Figure 16 presents a causality-effectuality cycle, a model of causation and effectuation working together in partnership building. The cycle is related particularly to structured effectuation. First, causal steps are needed to initiate partnership building. In the resulting sandbox, effectuation may occur: new partners are observed in different formal and informal channels, experiments are conducted, and opportunities leveraged to co-create innovations. It is significant that, although the process in Figure 16 starts with a causal phase, it does not necessarily always do so. In the case companies of this research, the scope described in the interviews mainly started with causation. However, if a new venture is started by an individual entrepreneur, maybe with a different level of experience, the first phase could equally well be effectuation.

The first-level cycle in Figure 16 describes these effectual acts. Effectual phases may contain formal or informal procedures for partner entry. Partnerships built in the effectual phase may even deepen into more formal states, or remain in an effectual state. Deepening the partnership may lead to more formal commitments and agreements and long-term, planned collaboration. Partnerships that are left in an effectual state may even end, or remain in a "hold" state until the next collaborative task. As partnership building requires new policies, whether they originate from practical experiences of partnership building or strategic changes, returning to causal mode may be necessary. The implications of the new context refine the effectual sandbox. In Figure 16, this loop is illustrated as the second-level causal-effectual cycle. These cycles occur inside each other, both iteratively.

4.10 Four partnership-building profiles

The appearance of effectuation in different partnership-building contexts was explored in more detail. As case replication is based on diversification in key variables, the case companies differed in their main business model, company size and life cycle phase. As the collected data was analysed, additional variables were identified as potentially affecting the appearance of effectuation. These variables were both company-related and external, such as market-related, season-related and ownership-related. Furthermore, the above-mentioned findings indicate that certain attributes are linked, particularly in structured effectuation. Two dimensions that seemed to differentiate the case companies were the overall attitude to the role of partnerships, and the guiding approach to the management of partnerships. These dimensions and their descriptions are presented in Table 15.

Table 15. The two dimensions of partnership-building principles.

DIMENSION	MEANING	EXTREMES
Partnership picture	The general assumption of the nature of the main value that it is aimed to achieve from partnerships	Partnerships are utilized mainly to achieve flexibility in business operations vs. Partnerships are a river of possibilities that are not detectable
The main partnership management guideline	The collective understanding of the focal driver for managing partnership building	Defining the own goals and leading the partnerships to serve that agenda vs. Generating a common story or vision for the partner network and leading all actors to implement it

The key findings on partnership building in this research were arranged using these dimensions. This resulted in *four archetypes of partnership building*. Archetypes can be understood as an original form or a prototype of a character or a concept. Archetypes can be useful, as organizational structures and management systems are best studied by analysing broad patterns rather than by analysing detailed properties of organizations (Greenwood & Hinings, 2017). An archetype presents a set of structures and systems consistently reflective of a single, underpinning interpretive scheme. Archetypes are specific for an institutional sphere or an industry sector (Greenwood & Hinings, 2017). Here, archetypes represent a set of attributes related to partnership building and their values as detected in this study. It is significant that, while the data derived from four companies, no single archetype represents a single case company. Rather, the archetypes represent four different partnership-building patterns that could be induced from the data. The archetypes identified in this research are arranged according to the two dimensions and presented in Figure 17.

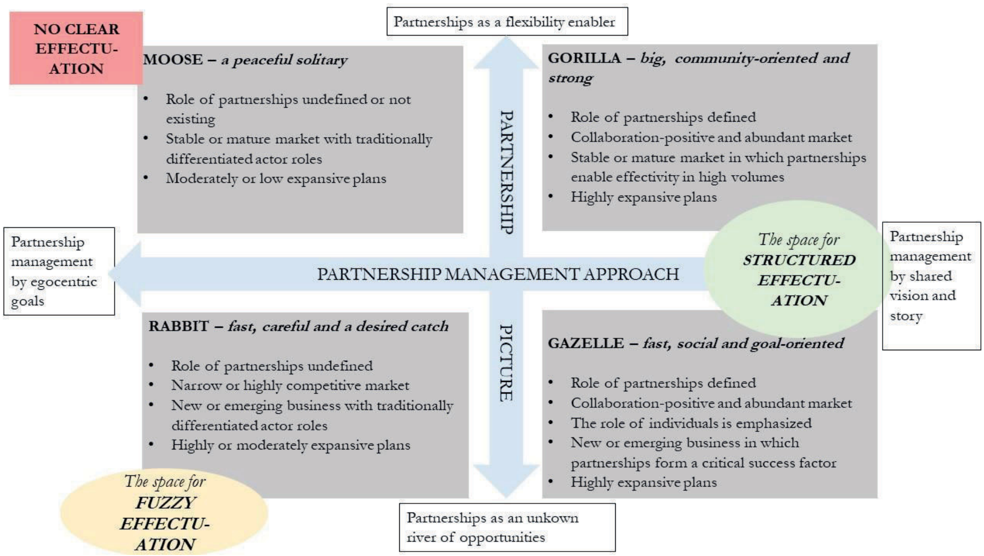

Figure 17. The four archetypes of partnership building.

Being archetypes means that they share the key attributes in a very imprecise manner. The attributes that distinguish these archetypes are presented in Table 16.

Table 16. The differentiating attributes of the four partnership-building archetypes.

ATTRIBUTE	VALUE
Role and significance of partnerships defined	Role is defined as positive Role is not defined Role is defined as negative
Dynamics and competitiveness of the market	Open market, low or moderate, yet positive competition Closed market with traditional actor roles, defending against competition
Level of growth orientation of the company	High growth orientation and expansive plans Moderate growth orientation and expansive plans Low growth orientation and expansive plans
Amount of partnership-building efforts	Relatively high Moderate Relatively low
Significance of individuals	Considered high, taken into account in partnership-building acts Considered high but unable or not wished to control Not emphasized

The two types of effectuation identified in this research can be linked particularly to certain archetypes: while gorillas and gazelles manifested mostly the characteristics of structural effectuation, rabbits were mainly characterized by fuzzy effectuation. The fourth profile, the moose, did not show any clear signs of effectuation in the partnership-building context at all. The findings related to the moose did not apparently indicate causality either. However, exploring causality was excluded from the scope of this thesis, and therefore it is possible just to note that effectuation is missing.

4.10.1 The strong and community-oriented gorilla

The gorilla is big, and wishes to build a community that shares a common culture and vision. Gorillas may already have a long history in partnership building. The expectations of partners may have changed over time. The size and volume enables the gorilla to define its own position in the market, which strongly affects the way it manages partnership-building actions. In addition, the gorilla has defined the attributes of an ideal partner: the gorilla has scanned all the companies of a certain size in Finland with interesting competencies. As the volumes are big, a gorilla does not need to be envious of projects. It is charitable and wants to share welfare and prosperity with other actors too. However, this is possible in the current expansion in the industry, when there is plenty of work for every skilled company in the software business. Table 17 presents the key attributes and their values for a gorilla.

Table 17. The key attributes and their values for a gorilla.

ATTRIBUTE	VALUE
Role and significance of partnerships defined	Role is defined and regularly updated
Dynamics and competitiveness of the market	Open market, low or moderate, yet positive competition
Level of growth orientation of the company	High growth orientation and expansive plans
Amount of partnership-building efforts	Relatively high
Significance of individuals	Considered high, taken into account in partnership-building acts

One company in this research data exhibits several characteristics of a gorilla. The company has a very clear understanding of partnerships and their meaning for their business. While they repeatedly mentioned partnerships as a source of learning and achieving new competencies, in the current situation the partnerships are mainly a flexibility element. Still, the learning aspect is strong. The company described the high-level principle for partnerships as something that has to be learned, and partnership has to keep the gorilla moving forward.

4.10.2 The fast and friendly gazelle

Gazelles are young, pursuing clear attempts to fast growth. They may be in a start-up phase or otherwise building up new business. Gazelles live in an environment that is positive and favourable to partnership building. A plethora of different actors operating in a networked community exists in the external world of gazelles. The role of partnerships is critical to gazelles, and therefore relationally much effort is put into partnership-building activities. The environment is strongly communicative and interactive. The management is characterized by building visions and aiming to understand the motivations of other actors – even at the level of individuals. Overall, gazelles consider the role of individual people to be critical. They seek persons that are gatekeepers, champions or other influencers in their environment, and put their effort into learning mechanisms to motivate them to co-operate. The key attributes of a gazelle are presented in Table 18.

Table 18. The key attributes of a gazelle.

ATTRIBUTE	VALUE
Role and significance of partnerships defined	Role is defined and is critical
Dynamics and competitiveness of the market	Open market, positive competition
Level of growth orientation of the company	High growth orientation and expansive plans
Amount of partnership-building efforts	Very high
Significance of individuals	Considered high, taken into account in partnership-building acts

The case company that manifests many of the characteristics of a gazelle was a start-up company producing and commercializing a software tool for a particular software ecosystem. As the company has chosen a full sales channel strategy, it naturally invests heavily in partnership building. The marketing and sales activities consist mainly of tasks related to partnership building. The company has defined a process for partner entry and a support function and information systems regarding partners. This gazelle places remarkably heavy emphasis on individuals. They mentioned that the motivation of individuals has to be understood and the relationships have to be almost like friendships, in the meaning of helping each other sincerely, being a "good guy" and building a family-like, social culture.

4.10.3 The agile and bouncing rabbit

Rabbits move fast but at the same time are not sure about the direction regarding partnerships. They want to explore new, innovative ways to solve traditional problems and processes. However, the environment is not positive towards partnership building. Certain actors have been operating in the field a long time, and the any newcomer raises competitive, suspicious attitudes. As the niche is quite narrow and the number of potential customers in Finland is limited, competition is high. Thus, regardless of the rabbit's flexible and positive attitude, it is hard to find partners in an industry where old traditional roles are strong. In the rabbit's environment the level of uncertainty is high. However, the uncertainty differs significantly from that typically appearing in start-up settings, for example. This uncertainty is a result of very fixed structures and highly diverse actors with very different agendas. The differences are challenging if the main goals and values of the businesses are based on very different values and assumptions, for example. Table 19 presents the key attributes of a rabbit and their values.

Table 19. The key attributes of a rabbit.

ATTRIBUTE	VALUE
Role and significance of partnerships defined	Role is not defined
Dynamics and competitiveness of the market	Narrow market, traditional actors, defending competition
Level of growth orientation of the company	Moderate or high growth orientation and expansive plans
Amount of partnership-building efforts	Relatively low, non-continuous
Significance of individuals	Not emphasized

According to the research data, the company that represents several features of a rabbit has passed the start-up phase but is still looking for a focus and aiming at high growth, also in international markets. The management believes that the company would benefit from a better utilization of partnerships. However, there is a conflict between the Board and the ownership. The board is described to trust on causal process in partnership-building. That manifests e.g. in claiming for short-time financial calculations and predictions regarding the partnership. The management that was interviewed for this thesis, tend to be more effectual and would like to experiment, exploring the value of a certain partnership.

4.10.4 The peaceful and independent moose

Moose like to live alone. They are strong, dynamic but also peaceful towards the other actors in their environment. Moose like creating superior solutions and producing high-level quality. The internal quality assumptions are even so high that the moose considers them to be a reason for not involving partners. In addition, the moose wants to be in charge of the customer and be known for high quality and ease of doing business. Moose may have a strong inner culture and common spirit. Moreover, they may behave effectually in other contexts, despite being reluctant to form partnerships. Moose do not have very high growth plans; they would rather have moderate and organic growth. Table 20 presents the key attributes of a moose and their values.

Table 20. The key attributes of a moose.

ATTRIBUTE	VALUE
Role and significance of partnerships defined	Role is defined as negative: partnership building is not active
Dynamics and competitiveness of the market	Open market, moderate competition
Level of growth orientation of the company	Low or moderate growth orientation, steady organic growth
Amount of partnership-building efforts	Low
Significance of individuals	If partnership-building situations appear, collaboration is considered to depend mainly on individual practices and skills

One company in this research, COMPANY2, manifests several features of a moose. The company has made a conscious decision not to be active in partnership building. The two main reasons for that are their unique organizational culture and high quality standards. They want to protect the culture, as they believe that partnerships may jeopardize it. The company is involved in partnership-building situations as they sometimes operate in multi-supplier projects, and therefore have to implement particular parts of the projects with another actor. In these situations, they demand the same quality level from their partners. In addition, they described the success of the collaboration as dependent on the partner: as long as the output from the partner is accurate, the company is satisfied. More weight is placed on concrete output than on relational attributes like trust, openness or pleasant collaboration. The company wants to control the relationship with the customer and take the main responsibility, and therefore does not want to take the role of subcontractor in any other actor's business. The company does not exhibit effectuation very clearly in the partnership-building context. However, they may behave effectually in other contexts, such as new technology entry.

5 DISCUSSION

The main objective of this chapter is to summarize the results of this research and to consider them in terms of the research questions and the theoretical background of this thesis. The findings are discussed according to the three research questions that were set for this research in section 1.3.

5.1 Appearance of effectuation in partnership building

The thesis focused on partnership building by exploring it through the lens of effectuation. The prior research on effectuation has established the theory by using grounded theory methodology (Sarasvathy, 2001) and developed it towards an intermediate phase (e.g. Read, Dew, et al., 2009; Reymen et al., 2015). In addition, the first attempts have been made to conduct empirical research and to develop validated scales to measure effectuation (Brettel et al., 2012; Chandler et al., 2011; Werhahn et al., 2015). Effectuation is studied in various contexts such as strategic operations, R&D and new ventures. Appropriate partnerships are also considered as a crucial resource for any business. Thus, the first objective was to explore whether effectual behaviour appears in partnership building. The first research question addressed this issue and was formulated as follows:

RQ1. How does effectuation emerge in partnership building?

Three of the four principles of effectuation: experimentation, affordable loss and flexibility, have been detected in prior studies conducted by Chandler et al. (2011) and Werhahn (2015) for instance. In their studies, experimentation was very strongly exhibited, while signs of affordable loss were the weakest of the three principles. This research gave rise to similar findings: the principle of experimentation is clearly detectable in all the case companies that manifested effectuation, while affordable loss appeared mainly in connection to experimentation, as a boundary condition for conducting experiments. Affordable loss has been detected in prior empirical studies as companies being wary of not investing more resources than they can afford to lose. This may be natural in human behaviour: being ready to take unaffordable risks is often linked to problem behaviour, such as various addictions. As experimenting and seeking for flexibility are not seen as such risky forms of behaviour, this might explain the weak signals of affordable loss.

The findings on flexibility in this research differ from previous studies by deepening the understanding of it. Flexibility in the data of this research appears in two different forms. Firstly, the flexibility seen in companies in their early phases is targeted at being agile and fast in creating opportunities together with committed partners. Secondly, the flexibility in companies in mature phases aims at remaining flexible in changing business contexts and business cycles. This finding extends the knowledge on the appearance of effectuation in different companies and contexts.

Part of the exploration of effectuation entailed understanding the underlying factors that render effectuation either beneficial or disadvantageous. In prior studies, effectuation is assumed to be a dominating logic particularly in the start-up phase, but the focus moves towards causality as business stabilizes. This research argues that the life cycle phase of the company is not the overriding influencer on the dominating logic. Strong effectuation is detectable in the partnership building of a big and mature company, as well as in a small start-up. Such findings on effectuation in overall business and strategizing have been proposed by Wiltbank (2006) and Matalamäki (2017), among others. This research brings valuable confirmation of that aspect by detecting the same phenomenon in partnership building. Instead of resulting only from the uncertainty of a start-up company, this thesis proposes that effectuation may also originate from other factors, like organizational culture and different values regarding partnerships.

While the prior literature has treated effectuation and the four constructs mainly as single-level structures, this research enriches the understanding by proposing effectuation to be a more multi-levelled phenomenon. The findings of the research indicates that different forms of effectuation appear in different contexts. In the prior literature, effectuation has been studied extensively in settings that are conducive to effectuation. This study is based on the assumption that the absence of causation does not necessarily mean the presence of beneficial, effectual effectuation. The findings of this study support this assumption by indicating the existence of two different forms of effectuation.

The prior literature on effectuation has formulated and developed the effectuation theory in general new venture settings, both conceptually and empirically (Chandler et al., 2011; Futterer et al., 2017; Read, Song, et al., 2009; Sarasvathy, 2001). Overall, this research contributes significantly to effectuation theory by proposing adjustments and new insights on the theory, particularly in the partnership-building context.

This research approached partnership building using the IMP Group's interactive network framework. Networks and partnerships have been of increasing academic interest for decades, and a plethora of different approaches exists. This research adopted the IMP approach because of certain consistencies between effectuation and the IMP network approach. Firstly, neither of them is limited to a particular type of network or business. Secondly, effectuation and the IMP network approach share the idea of the network as a dynamic structure, aspiring to create opportunities. Selecting another framework for defining partnerships might have changed the characteristics and results of this research. Approaching partnerships, for instance from the strategic nets viewpoint might have limited the observations on the early phases of partnerships, as strategic networks are more dominantly based on the idea that formality in partnerships increases over time. Choosing the innovation network or entrepreneurial network approach would have changed the course of this research, as the theoretical base for conducting the research would have been different in nature. Entrepreneurial networks are popular among researchers, as the entrepreneurial approach considers the entrepreneur and entrepreneurial behaviour as a key factor in creating successful innovations and start-up companies. However, choosing the entrepreneurial network viewpoint would have biased this research towards the individual level of analysis. In this research, the selected unit of analysis was the corporate level, as the aim of the research was to develop the idea of systematic and purposeful effectuation (Read, Sarasvathy, Dew, & Wiltbank, 2016).

Figure 15 presents a model of effectual partnership building, including an iterative loop of learning and increasing trust. The model is based on the data of this research, exploring partnership building from the viewpoint of a single company. However, it has been presented in the prior literature that the process is also affected by the self-selection behaviour of the potential partner (Galkina & Chetty, 2015; York, O'Neil, & Sarasvathy, 2016). Self-selection refers to an iterative cycle of choosing the partnership recurrently, and gaining a stronger voice in the common process of shaping the innovation or other output of the collaboration. As this research focuses on a single organization and does not cover the viewpoint of a partner organization, the presented model does not take self-selection into account. However, this model could also be linked to the decision processes of partners and explore the impact of partner self-selection and other behaviour.

5.2 Impact of contextual factors on effectuation in partnership building

The second research question of this research was formulated as follows:

RQ2: How do contextual factors impact effectuation in partnership building?

The co-existence of effectuation and causation has been the subject of several calls for further research (Galkina & Lundgren-Henriksson, 2017; Johansson et al., 2015; Reymen et al., 2017). Johansson et al. (Johansson et al., 2015) emphasize in particular the importance of a contextual approach, resting upon the assumption that the choice of decision-making logic fluctuates based on factors including the human capital of the decision maker and the organizational environment. Therefore, the second research question of this research focuses on a relevant theme, contributing to the coherent theory development in the field of effectuation literature. While the prior effectuation literature has identified the role of partnership building as a focal element of effectuation (Chandler et al., 2011; Sarasvathy, 2001), the characteristics of particularly effectuation-related partnership building is a rather unexplored topic. Prior research has also pointed out that partnerships incorporate both causation and effectuation (Chandler et al., 2011). However, it is essential for effectuation that partnerships alone are considered as a key mechanism in creating opportunities (Read, Dew, et al., 2009; Sarasvathy, 2008), and, in the effectuation setting, partnership building is approached as a discovery process (Engel et al., 2017). Causation is characterized by pre-planning, goal-orientation and approaching opportunities as 'found~~ed~~' instead of 'created'. Thus, the research problem of this research was based on the assumption that the partnership-building logic differs from effectuation-related partnership building, characterized by experimenting, means-orientation and approaching opportunities as 'created'. Therefore this research aspired to explore the idiosyncrasies of effectual partnership building and contribute to both effectuation and partnership-building literature with a new understanding of the underlying factors in different partnership-building contexts.

In the prior literature, effectuation has been linked mainly to the early phases of a business. In addition, effectuation has been limited to appearing mainly in conditions of high uncertainty, or at least of significant risk (Welter & Kim, 2018). The results of this research propose that uncertainty is not the main boundary condition for effectuation. In this research data, mature companies manifested strong, effectual features and considered the features to be a persistent state of certain operations. Effectuation is considered to provide unique benefits, such as remaining flexible in accessing the right resources, and building a positive organizational culture/partnership culture that manifests relational values like transparency, win-win thinking and trust. This research also contributes to effectuation research by suggesting that effectuation, occurring in cycles with causation, appears with different weightings in different partnership-building contexts. Galkina & Lundgren-Henriksson (2017) have pointed out similar findings in a context of coopetition (i.e. a process that corporates competition and co-operation simultaneously).

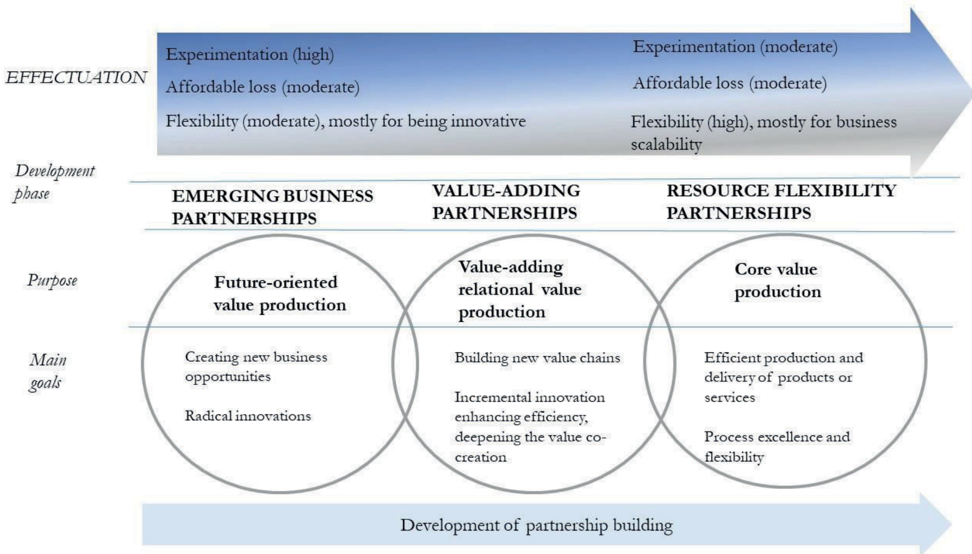

Figure 18. Variance in appearance of effectuation within different development phases of partnerships. Developed from (Möller & Halinen, 2017; Möller & Svahn, 2003).

Figure 18 reflects the findings on different emphases of effectuation in various phases of network development (Möller & Halinen, 2017; Möller & Svahn, 2003). In the early phases of business, effectuation appears as strongly experimentative behaviour. In more established phases, the emphasis switches more towards flexibility, particularly as an action to extend the scalability of the business.

The effectual approach, generally speaking, treats partnership building as a growth process. It has been described as an unknown river that has to be stepped in to gain any benefits. The benefits are not possible to see outside of the partnerships. These findings are coherent with the prior discussion of 'opportunities found vs. opportunities created' (e.g. Alvarez & Barney, 2007). The interviewees highlighted that to gain relevant partnerships, experiments have to be conducted, the company hast to be active and ready to maintain a continuous conversation with potential partners. This has to be preceded by a conscious decision to include partners in the value system of the company.

A significant contribution of this research is that two types of effectuation exist. The prior literature has explored effectuation as a process that is similar in all contexts. However, this research has identified structural effectuation and fuzzy effectuation which differ in their underpinning factors and outcomes. Whereas structural effectuation is experienced as beneficial, fuzzy effectuation is described mainly as confusing or even unfavourable. These two types of effectuation are driven by different contexts. While the benefits of effectuation seem to be achievable by a structured form, there still exist situations where apparently effectuation-like behaviour is mainly aggravation and therefore labelled fuzzy effectuation in this research. In an individual context, beneficial effectuation may result from the intuitive behaviour of an entrepreneur (G. Fisher, 2012; Goel & Karri, 2006). However, planning and conscious decisions are always needed in the organizational context to effectuate in an effective manner. Thus, structure in effectuation and causation is needed to enable the required managerial communication in partner network. On the whole, effectuation is not a 'free speedway' to successful partnership building or business.

In addition, the prior literature has not explored the form of effectuation as the contextual factors change. This research contributes by proposing that, while the role of experimenting that is dominant at birth is an introductory finding, it also encourages future research to focus on variations in the form of effectuation.

The results of this research were further developed into a 2x2 matrix, presented in section 4.10, illustrating four archetypes of partnership building. A 2x2 matrix is a useful tool for the initial sorting of qualitative data in such cases where the most interesting features of the data can be reduced to two simple variables. In addition, because of their apparent simplicity, several 2x2 matrices have attracted huge interest and become tempting frameworks to explain different managerial phenomena. Much-cited examples of 2x2 matrices include Porter's matrix (Porter, 1998) for generic strategies and the Boston matrix for planning strategic activities ("Boston Matrix," n.d.) regarding products and investments etc. The first, Porter's matrix, presents four generic strategies in two dimensions: the scope (narrow or broad) and source of competitive advantage (differentiation or cost). Similarly, the Boston matrix categorizes products into two dimensions: growth speed (high or low) and market share (high or low) and proposes that the investments in products or business lines be planned based on this categorization. These matrices are highly-cited particularly in practical literature and among consultants and managers. The idea in both of them is to separate patterns and to build general guidelines. Nevertheless, there is a risk of simplifying too much – in all 2x2 matrixes. Putting strategies, products, or partnership-building behaviour into only four categories does not explain all combinations or all influencing factors. As the scope of this research is limited and does not aim to capture all the contextual partnership-building influencers, the matrix is naturally also a simplification. Thus, it has to be taken into account that the matrix developed does not explain all the partnership-building contexts, but needs further research efforts to make it more accurate. However, this simple matrix may be beneficial in defining the directions for understanding and exploring partnership building, as it proposes a set of different contextual attributes. It may bring new ideas to the contextual research of partnership building. Furthermore, it may form a foundation for developing future managerial models for partnership building.

5.3 Co-existence of causation and effectuation

Since the widely-cited seminal article by Sarasvathy (2001), effectuation and causation are defined not as the ends of a continuum, but rather appearing together. Yet, the interplay of effectuation and causation has remained rather unexplored. This research aimed to seek better understanding of this important interplay. The third research question was formed as follows:

RQ3: How are effectuation and causation intertwined in partnership building?

Galkina & Lundgren-Henriksson (2017) have explored effectuation in a process of coopetition and concludes that a) effectuation appears with different emphases in different development phases of the coopetition process and b) causation is detectable particularly in the implementation phase of the coopetition process, whereas effectuation dominates in the preceding formulation phase. The findings of this research are partially coherent with Galkina & Lundgren-Henriksson: both effectuation and causation have a unique role in structural effectuation. The contribution of this research is that, particularly in partnership building, causation is needed to direct and adjust the partnership-building policies and acts. Thus, causation forms a sandbox in which structural effectuation may appear. Unless causal steps are taken, the benefits of effectuation will not be attained.

This research focused mainly on purposefully conducted partnership-building acts. However, considering effectuation, it could be questioned whether partnerships are mostly built purposefully. Partnerships could equally well emerge from managerial cognition (Stubbart, 1989; Tikkanen et al., 2005): managerial activities and operations that are decided through a particular cognitive system, like strategy or management practice. Harrison et al. (Harrison et al., 2010) have proposed that the usage of strategic initiatives allows the combining of conscious strategizing and ongoing adaptations. The findings on the interplay of effectuation and causation in this research are coherent with these ideas to some extent. While causation is needed to conduct purposeful guiding actions, effectuation could consist of acts that emerge from managerial cognition and adaptive intentions.

Johansson et al. (2015) explored the co-existence of effectuation and causation in innovation operations. They identified unique roles for effectuation and causation: whereas effectuation is needed for flexible and fast testing and releasing of innovations, causation is needed for example to legitimize the project and obtain internal funding. This research detected similar co-existences: whereas causation is required to direct and communicate the strategy-based boundaries for partnership building, effectuation is needed to enable flexibility and experiments to effectively build the right partner network.

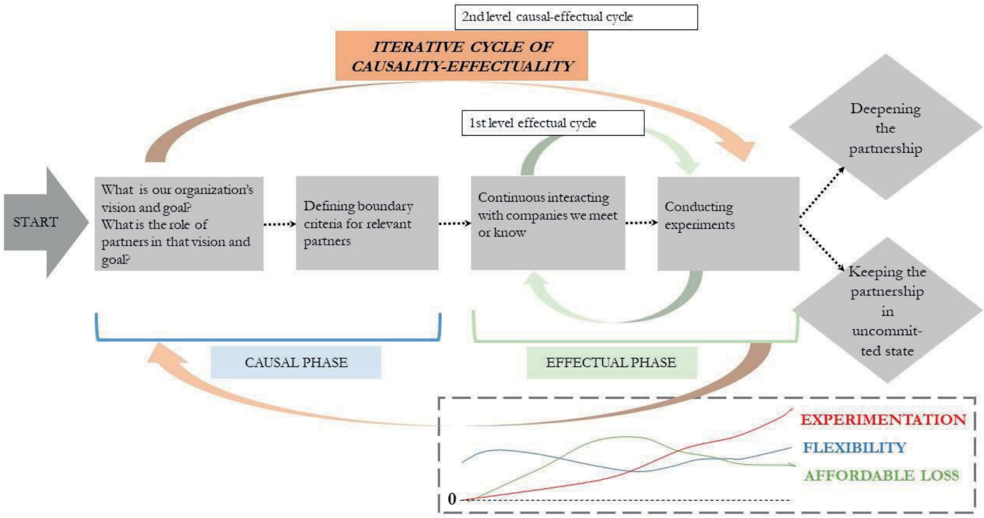

Figure 19. Proposal of the behaviour of effectual principles in the causality-effectuality cycle.

The data and scope of this thesis did not enable a more detailed observation of the appearance and fluctuation of effectual principles within the causality-effectuality cycle. However, indicative signs were detected that experimentation, flexibility and affordable loss show up differently in various phases of the cycle. This varying appearance is presented in Figure 19. At the beginning of the effectual phase, flexibility is necessary to find potential partners (i.e. skills, competencies, locations) in a dynamic and agile manner. As the partners emerge for further evaluation, the risks are evaluated as well, guided by the principle of affordable loss. The risk-consciousness remains in the rest of the cycle, but not at such a high level. When the most potential candidates have reached the phase of starting an experiment or pilot, the experimentative activity will increase. This behaviour of effectual principles is an indicative proposal, and a potential avenue for further research.

6 CONCLUSIONS

This chapter summarizes the contributions of this thesis and their relevance to both science and management practice. The quality aspects of the study are also discussed.

6.1 Scientific contributions

This research focused on the appearance of effectuation in partnership building, contextual factors underlying and impacting partnership building, and the co-existence of effectuation and causation in partnership building. From a scientific viewpoint, the objective was to confirm the existing theory base on effectuation, as well as building new understanding on the phenomenon of effectuation. Furthermore, the research aimed to contribute to the partnership-building literature by introducing a suggested model for exploring and explaining partnership building through the effectual lens. The main scientific contributions are presented as follows.

Contribution to the theory of effectuation. Despite attracting increasing academic interest lately, the effectuation theory is still considered to be in a nascent or early intermediate developmental stage (Arend et al., 2015; Perry et al., 2012). After the first formulation of the effectuation theory, empirical studies have been conducted, aiming to observe the manifestation of effectuation in practice. Effectuation has been explored in different business sub-settings, including R&D, internationalization and innovations. Yet, a clear "general theory of effectuation" does not exist, although the call for it was already made in the widely-cited seminal article of Sarasvathy (2001). This research contributes to the development of effectuation theory by extending the understanding of effectual behaviour in partnership building and bringing a new viewpoint to the practical manifestation of effectuation. Overall, the theory development aspects of this research are valuable, as there exists a general need for more rigorous theory development, particularly in case studies (e.g. Devers, Misangyi, & Gamache, 2014; Eisenhardt, 1989; Goffin & Bianchi, 2018; Webster & Watson, 2016). Management research, to which this thesis belongs, is identified as a challenging field from the viewpoint of theory development, as the state of theory building in management research is claimed to be "of concern" and thus requiring more academic attempts (Devers et al., 2014). On the other hand, the reporting of rich detail about interesting phenomena for which no theory yet exists should also be considered worth encouraging, as it opens up avenues for further research to develop a theory to explain the phenomena. In addition, rich qualitative research is beneficial particularly in organizational research, where exploring patterns is typically more useful than exploring details. This research also answers this call by providing rich case data on a complex and holistic phenomenon. As a result, this research proposes partnership-building archetypes that manifest the partnership-building patterns detected in the data. This research also approaches effectuation partially as a formative, rather than a reflective construct, and thus consolidates the development of effectuation theory (Prashantham et al., 2019; Read et al., 2016).

Contribution to corporate-level effectuation. Effectuation research originally developed in entrepreneurship and start-up literature. Recently, an interest to explore effectuation in established companies has emerged. Matalamäki (2018) has identified four main streams in the scientific dialogue on effectuation research. This research contributes to two of these dialogues: *effectuation in existing companies* and the *co-existence of effectuation and causation*. Overall, the corporate viewpoint on effectuation has been proposed as one of the significant avenues for further research (e.g. Johansson et al., 2015). This research contributes to partnership-building literature from the viewpoint of established businesses as well. As the case companies in this research were selected that differ in life cycle phase and company size, the findings are not limited to the early phases of business or to start-up companies. The findings propose that established, mature companies utilize effectuation as well, and even consider it worth maintaining.

Contribution to co-existence of effectuation and causation. Despite often being presented as a dichotomy for a clearer theoretical exposition, effectuation and causation occur simultaneously, intertwined and overlapping, as they are both an integral part of human reasoning (Sarasvathy, 2001). However, relatively little is known about their co-existence. This study contributes to this dialogue by proposing a suggested model for the fluctuation of causation and effectuation, and their roles in partnership building.

Contribution to more contextual partnership-building research. While a plethora of literature on networks and partnerships exists, a need for more contextual research on them has been identified. For example, Möller & Halinen (2017) argue that the environmental, network and actor context jointly form the conditions for feasible network management. In this research, partnerships were explored via the lenses of effectuation and the key contextual factors that were identified as affecting the occurrence of beneficial, effectual partnership building. Although the combinations of critical contextual variables in this research are suggestive, the proposals of this research may encourage future partnership-building research that can better adopt the viewpoint of the contextual approach.

6.2 Managerial contributions

In addition to being a theory-building study, the initial research problem arose from a managerial practice. While building a framework of partnership-building archetypes for future scientific work, at the same time the study aimed to provide practical understanding of partnership building and the critical factors related to it in diverse contexts. The contributions of this research help to understand the diversity of partnership-building contexts and the accordant need for alternative approaches in decision making. This research highlights the key contextual factors, such as the necessity for strategy-level policies in partnership building. Being aware of the key organizational factors may help managers to adapt their partnership-building acts to suit the current context better.

From the managerial perspective, this research points out the importance of purposefully making decisions regarding partnership building. Although the origins of a partnership may not always be in purposeful acts, the development of relevant partnerships usually needs planned activities to meet the expectations of the parties in the partnership. While causation may be more familiar and therefore considered to be desirable behaviour, effectuation may be more realistic in particular circumstances. Thus, the evidence on the appropriateness of effectuation may expand the selection of managerial activities, as the previously "unplanned and unfavourable" behaviour is understood as a structural and beneficial way of acting. On the other hand, this research stresses that effectuation in a fuzzy, uncontrolled manner is more likely to be disadvantageous. Not all unplanned behaviour can be explained by an aspiration for dynamic or agile operations. The findings of this research suggest that planned acts are needed even when the highest possible level of flexibility is desired. Without certain necessary causal acts, dynamic and agile acts may remain problematic. This research encourages managers to build the structure on decision making step-by-step, and to utilize varying logic and possibilities of effectuation and causation.

6.3 Assessment of the study

According to Yin (1994, pp. 33–34), quality evaluation using several tactics should be applied throughout the execution of a case study. This research adopts an interpretive paradigm and is conducted from a qualitative approach, following a defined case study strategy. The theory framework is based on the emerging theory of effectuation, combined with a specific partnership-building approach. While validity can be one of the strengths of a qualitative study (Creswell, 2014, p. 201), developing the standards for it is challenging because of the necessity to incorporate rigour, subjectivity and creativity into the scientific process (Whittemore et al., 2001). Due to the nature of this research, the issues related to the above-mentioned characteristics of an interpretive study were recognized as the most significant quality questions (Patton, 2002). Thus, the four evaluation viewpoints proposed by Lincoln & Guba (1985) were applied to accomplish a valid, scientifically coherent process with a clear chain of evidence. In addition, the criteria of complexity (Dubois & Gadde, 2002) was applied in order to confirm the holistic approach to the research topic. The evaluation criteria used in this research are compiled in Table 21.

Table 21. Criteria for evaluating this research.

Evaluation criteria	Explanation
Credibility (& construct validity)	The conscious effort to establish confidence in an accurate interpretation of the meaning of the data (Whittemore et al., 2001). Establishing correct operational measures for the concepts being studied (Yin, 1994, p. 33).
Dependability (& reliability)	Demonstrating that the operations of the study can be repeated, with the same results 94, p. 33). Constancy of the data over similar conditions (Cope, 2009).
Confirmability	To extend the confidence that the results would be confirmed or corroborated by other researchers. Includes reflexivity: describing and reflecting the process objectively and critically (Dubois & Gadde, 2014). Presenting the paradigm and the values originating from it (Gummesson, 1991, p. 160). Showing a clear connection between theory and methods (Van Maanen et al., 2007).
Transferability	Extending the degree to which the results can be transferred to other contexts or settings (Forero et al., 2018; Lincoln & Guba, 1985, p. 316).
Complexity	Capturing complexity of nuances and contexts, adopting system thinking to explore complex processes in organizations (Woodside, 2010). Avoiding the "positivistic trap" of trying to explain and test all relationships and patterns in complex structures (Dubois & Gadde, 2002).

While conducting the study, these issues were reflected on iteratively. Evaluating the *credibility and construct validity* of this research are closely linked together. The study deals with a nascent topic, effectuation. Validated measures and operationalizations for exploring effectuation and partnership building together do not exist. Thus, defining the concepts and terms used in interviews, as well as linking the meanings and making interpretations in the analysis phase were conducted carefully. The prior empirical work on effectuation was read (Brettel et al., 2012; Chandler et al., 2011; Werhahn et al., 2015) and suggestions for future steps in theory development (Perry et al., 2012) of effectuation were taken into account. The defined constructs were reflected in the pre-understanding gained before conducting the final interviews.

The traditional meaning of reliability refers to ensuring that if a later investigator follows the same procedure described by an earlier study, the later investigator should arrive at the same findings and same conclusions (Yin, 1994, pp. 36–37). Furthermore, the developed measure of *dependability* refers to the consistency of the data in similar conditions that can be achieved when another investigator concurs with the decision trails at each stage of the research process (Cope, 2009). As this thesis follows a particular research tradition and contains interpretations, the background, personal experience and the pre-understanding gained have an inevitable influence on the final form of the research process, as well as the resulting findings and conclusions. Thus, the phases of the study, the procedure of collecting and analysing the data and the justifications for interpretations made are reported on as carefully as possible. This aims to ensure that when conducted by another researcher – or utilized in further research – the findings will be rigorous and not depend significantly on the researcher. However, considering the underlying transformative epistemology that is characteristic of the interpretive paradigm, knowledge is formed in the interaction between researcher and participants. Therefore, the findings may always be influenced by individual factors.

Confirmability in this thesis addresses the question of extending confidence that the results would be confirmed or corroborated by other researchers (Forero et al., 2018; Lincoln & Guba, 1985, pp. 318–320). The strategy to extend the degree of confirmability includes critical reflexivity: reflecting on, identifying and controlling issues originating from underlying assumptions, the flexibility of the qualitative process and various biases that may affect the study. As this research was conducted by an iterative process, reflection was also carried out throughout the research process. The interpretive worldview and its basic assumptions were identified, and the threats originating from it were controlled by following pre-planned quality guidelines for conducting the interviews and data analysis. For example, the prior experience of the author was assumed to cause challenges for conducting a neutral interview. Thus, the interview situations were carefully planned, and the quality checklist for conducting the interview was checked at the beginning of each interview. Similarly, researcher-related factors might have influenced the manner of analysing the data. On the other hand, this is also a strength of the present research: a personal history in management positions led to a more accurate understanding of the terms and verbal protocols used by the interviewees.

According to Turner (2007), one of the most sensitive and crucial areas in qualitative research design is the interview protocol. Bias management is one of the major challenges of using the interview. To avoid it, the interview protocol for this research was planned using the following guidelines, presented in Table 22 (Choi & Pak, 2005; Rubin & Rubin, 2005, pp. 156–157, 92–93, 134–137; Turner, 2007).

Table 22. Guidelines applied to the interview protocol design. Developed from (Choi & Pak, 2005; Rubin & Rubin, 2005, pp. 156–157, 92–93, 134–137; Turner, 2007).

GUIDELINE	PURPOSE	EXAMPLES OF IMPLEMENTATION IN THIS RESEARCH
Building trust through the process	To obtain rich and open answers, to ensure a rewarding interview experience for the participant	Carefully presenting the background of the researcher, the purpose of the study, privacy and other details of the research process
Creating appropriate and effective research questions	To obtain adequate data to enable qualified interpretation	Considering the wording of the questions (e.g. avoiding uncommon and too difficult words), being neutral i.e. avoiding wording that might influence answers, using accurate questions e.g. for separating behaviour from belief, or individual opinion from organizational opinion
Planning and using relevant follow-up questions and probing questions	To keep a discussion going while providing clarification	Asking for clarification to confirm meanings, avoiding leading questions and words
Encouraging the interviewees to give vivid descriptions and nuanced answers	To obtain rich, descriptive data	Using appropriate questions and probing questions

In addition to careful planning, the experience of the interviewer influences the quality of the result (Chenail, 2011; Turner, 2007). In this research, the background experience of the researcher supported the design of a qualified interview protocol. Also, previous interviews had been carried out in prior work by the author. These provided valuable experience on conducting interviews, particularly on this topic. As part of applying critical reflection through the research process, the potential biases were identified and the risk for their occurrence was evaluated (Schwandt, 2007). Two potential biases for this research were identified: social desirability bias regarding the topic, and researcher bias regarding the prior experience and attitudes of the researcher. Social desirability bias occurs when a respondent is unwilling to report accurately on sensitive topics because of his perceptions of what is correct or socially acceptable in the current context (R. J. Fisher, 1993). In the design phase of this research, the assumption was that causality would be considered more desirable and acceptable, as it could have been the dominating logic taught to many managers. However, the risk for this bias turned out to be opposite. In the case companies, effectuation was in some parts considered a positive phenomenon and thus worth maintaining. A slight researcher bias may have influenced the interview situation: effectuation seemed to be described in more positively as the interview proceeded. Also, the visual questionnaires that were completed at the end of the interviews indicated a more positive attitude towards effectuation than the verbal parts of the interview. This is assumed to originate from the nature of the dialogue between the researcher and the participants. The dialogues were rich and inspiring, as the interviewees were allowed to speak about their own work and professional goals and interest. In addition, the interviewer's own professional worldview might lean more towards effectuality. Thus, neutrality on the topic was not always easy to maintain. The aim was to ensure the objectivity of the comments and answers for instance by means of confirmatory questions when needed. Triangulating different data sources in this research strengthens the confirmability of this thesis from certain aspects: data for exploring effectual principles was collected both in the interviews and from the visual scales. As the concepts relating to effectuation are not widely used among managers, the interviews were the main source of data, as the common understanding between the researcher and the interviewee was most often formed dialogically.

The criterion of generalizability has traditionally been utilized in the assessment of quantitative studies, as it is rooted in a positivist worldview. As a qualitative study particularly on an emerging theory of effectuation, it is not relevant to aim for generalizable results in the conventional meaning (e.g. Golafshani, 2003; Lincoln & Guba, 1985; Whittemore & Chase, 2001). As Yin argues in a discussion of the generalizability of a case study: "*Yet no set of cases, no matter how large, is likely to deal satisfactorily with the complaint*" (Yin, 1994, p. 37). Instead, the objective for this thesis was to explore an emerging phenomenon, to identify patterns and to build a suggestive theory as an invitation for further work on the topic (Edmondson & McManus, 2007). Thus, the criterion of *transferability* is more appropriate for assessing a case study. This refers to the degree to which the results can be generalized or transferred to other contexts or settings (Forero et al., 2018). This research was limited to study companies that operate in the software business. The cases were replicated by aiming for diverse cases, to get access to different partnership-building cases. However, as only four different cases were studied, this thesis does not provide saturation of the whole software business, but aims to present four adequately different cases to build a suggestive model of key variables (Edmondson & McManus, 2007). Thus, the resulting model and proposals of this study are transferable for utilization in further research on the topic, considering that this research may not explain all the diverse partnership-building contexts in software companies.

In addition to the four criteria of assessing the qualitative *study* (Lincoln & Guba, 1985), this research was evaluated using a fifth criterion, *complexity*. Complexity refers to a case study's ability to capture and explore a complex phenomenon. This study deals with partnership building and effectuation, which further consists of sub-constructs, such as effectual principles or diverse influencers on effectual partnership-building behaviour. Based on a case study of four cases, this thesis is not able to cover the causal relationships of the complex settings of the study. However, it describes the phenomenon and aims to understand what kind of factors influence. The adopted complexity and system thinking led to the development of a suggestive theory on exploring partnership building in diverse contexts. The selected research design and all the choices within it support the rigorous path of such research.

To summarize the evaluation of this research with the presented five criteria, this study has been conducted in a coherent, reflective manner, aiming to remain aware of the challenges and possibilities originating from both the topic and the selected research strategy. The quality assessment has been carried out continuously, throughout the process. While limitations in transferability and other quality aspects appear, the research has been accomplished with sufficient quality within the defined boundaries. The limitations have been identified and are further discussed in section

6.4. Proposals for further work that also extend the findings regarding validity aspects are made in section 6.5.

6.4 Limitations of the study

As for all research, this research also has its limitations. The limitations of this thesis are related to various factors: the nature of the topic, the selected research strategy and the factors related to the environment of the research setting. As the study focuses on the emergent topic of effectuation and applies it to a new context of partnership building, the study had to be conducted by following an appropriate path. The theory framework is relatively new and the knowledge base relatively fragmented. Thus, a relevant objective for this research was to consolidate the effectuation theory, gain new understanding on effectual behaviour in the selected context and culminate in developing the findings into a suggestive model of partnership building. The characteristics of the topic, the state of the theory, and the consequent selection of possible methodological choices due to these factors set the first limitations for the study (Edmondson & McManus, 2007). While considering this as a limitation, it should also be understood as a positive sign of an attempt to contribute to theory building coherently.

Management research is sometimes claimed to be immature in its methodology, theory building and evaluation practices (e.g. Edmondson & McManus, 2007; Siggelkow, 2007; Van Maanen et al., 2007; Webster & Watson, 2016). Therefore it is important to understand how the methodological fit is affected by the state of the prior theory (Edmondson & McManus, 2007). The path to a coherent whole of knowledge on any topic requires the taking of systematic and gradual steps. As Edmonson (Edmondson & McManus, 2007) proposes, the state of the existing theory determines the appropriate process for conducting the study. However, although a new conceptual framework is presented as a proposal resulting from this research, the limitations are recognized and an attempt is made to avoid overdetermination of the phenomenon by emphasizing the archetypical nature of the presented model of partnership building (Siggelkow, 2007). Decisions made while designing and conducting this research also aimed to deal with some of the issues in the theoretical state of effectuation pointed out by Perry et al. (Perry et al., 2012).

While the transferability of this research alone can be considered a limitation, it can be turned into a strength: the study forms an important step in understanding the phenomenon of interest, and thus prepares the path for further studies by offering rich and deep descriptions and conclusions enabled by the selected approach (Langley, 1999). While the four cases of the study draw a relatively rich picture of different partnership-building contexts, using more cases, both diverse and similar, would naturally have led to yet better and deeper understanding of the variables that affect partnership building. However, the case selection for this research was made with appropriate systematics, and the research design was conducted to concentrate on details of each case particularly profoundly. The target industry of this research was limited to the software business. While all industries may share part of the general partnership-building questions and challenges, this thesis explored the topic particularly in the software business. Thus, the results and conclusions of this thesis are not applicable to any other industries as they are, without consideration and moulding to fit such partnership-building questions that are relevant in the selected industry. This may stem from several reasons. The software business, in general, may naturally have a stronger tendency to conduct flexible and experimenting acts, due to the dynamic character of the business. In addition, the routine for agile approaches for instance in daily operations may be more familiar. These factors may have a certain coherency with effectuation, and therefore result in effectual behaviour. An example of this is seen in Fisher's study (G. Fisher, 2012), in which he explored six Internet ventures. Findings indicated that all six companies manifested clear effectuation. As Internet ventures can be considered to have similarities with software companies, software companies might be assumed to possess the same emphasis on effectuation rather than causation. However, there are no comparative studies on other industries.

The conditions in the software industry for this research were specific in a manner that could have impacted the results. During the time of conducting this study, the whole software industry was enjoying a period of growth. There was plenty of work for everyone, and therefore it was more natural to highlight the collaborative values, simultaneously leaving the competitive aspects in a minor role. This special period in the industry arose in several interviews, usually considered as motivating and increasing the partnership-building attempts. Interviewees also supposed that if the market situation were different (e.g. period of slow growth or even recession), the partnership-building acts would be less intensive. They considered it a good idea to build partnerships in the good times also as a precaution for weaker times, but practically no one from the companies really took this into account in their current partnership building.

6.5 Proposals for future work

To summarize the prior literature: effectuation is an emerging theory that would benefit from more research on the empirical manifestation of effectuation, consolidating the theory of effectuation, for example. Partnership building differs from effectuation as it has a wide literature base – although the literature is not very well defined from the viewpoint of which partnership-building approach would be most appropriate in what situation. This research contributes to both of these issues: firstly, by exploring effectuation in a new context, and secondly, contributing to partnership-building literature by proposing initial key variables for separating different partnership-building situations. The scope of effectuation and partnership building in general is wide. Thus, the proposals for further work presented below are made mainly on a similar cross-section of the two concepts used in this thesis. While causality has traditionally been a dominant norm in managerial literature and practice, effectuation is less familiar and even considered an unfavourable deviation of causal logic. However, the prior research on effectuation has pointed out that effectuation has unique benefits. Neither effectuation or causation should be claimed to be "better", but rather the focus should be on gaining deeper understanding of which of the approaches would be more useful in what kind of situation. This research proposes the sequential co-existence of effectuation and causation in partnership building. Johansson et al. (2015) have detected three different forms of co-existence. In further research, co-existence would be a beneficial avenue to explore, from both a scientific and managerial viewpoint.

The 2x2 matrix of partnership-building archetypes provides a new theoretical suggestion for approaching partnerships in terms of effectual and causal decision-making logic. As the presented matrix is rudimentary and developed from limited data, future research could develop the matrix further. In addition to developing more detailed and multi-variable descriptions of archetypes, as well as building new archetypes, it would be interesting to develop a model for a managerial framework, e.g. for generic partnership-building strategies. As the contributions of this research are mainly theoretical and suggestive, future research is needed to develop more practical management models that enable a worthwhile utilization of the findings of this research. On the whole, the research on effectuation would benefit from continuing the exploration of partnerships via the effectual lens by extending the data to a wider number of both different and similar cases.

As a limitative choice of this research, partnership building was explored particularly from the viewpoint of a single organization. In further research, it would be beneficial for the research model to include the viewpoint of partners. This approach may require modifications to both the theoretical framework and analysis techniques, in order to build results from both the organization's and its partner's interview data. However, studying these both together would further enrich the knowledge of effectuation in the partnership building context. In such an exploration, it would be particularly interesting to link different concepts of individual entrepreneurial behaviour, such as over-trust and self-selection, to the research model.

To conclude, as a result of this research, a suggested model for the interplay of effectuation and causation in partnership building has also been proposed. This model may offer an intriguing avenue for further research. Exploring the practices for initiating an effectual process in established companies would be a useful managerial contribution and may provide a significant option for building an innovation-oriented mindset in a company. The different scenarios for the potential partnership ought to be elaborated in further research. Such scenarios would include spelling out the role of goal change in situations where a partnership is for some reason kept at the uncommitted stage.

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APPENDIX 1. THE INTERVIEW FRAMEWORK

INTERVIEW FRAMEWORK AND GUIDELINES FOR THE INTERVIEWER

The interview situation is facilitated, as it is important to pay attention to the three cornerstones of a successful atmosphere: focus, presence and feeling safe.

Facilitation aims to a) create a safe atmosphere in which the interviewee is willing to speak openly and provide rich and descriptive data, and b) avoid the potential biases that may occur in interviews.

***FOCUS**: What is the objective of the dialogue? Encourage the interviewee to be as open and honest as possible. Motivate him as well!*

"The goal of the interview is that you will tell me about the partnerships of your company. I hope you will speak as realistically as possible. There are no right or wrong answers. There are many different ways to build good partnerships, and I want to find out these different ways. I am particularly interested in the practices of your company.

What are the benefits of participating in the interview for you?

- You will help the research to develop and to build new knowledge (this may be valuable for some interviewees).
- The interview provides a possibility for reflection and finding new viewpoints on the partnership-related practices in your organization."

PRESENCE AND SAFE ATMOSPHERE

- The objective is to create a feeling: "You are the most important person to answer these questions at the moment!"
- Listen – start the interview by listening intently to the story of the interviewee. Good questions to start the story may be, for example "It

would be nice to hear the story of your working career" - a personal question that shows interest in the interviewee and his/her opinions.

- Present the topic of the interview in a multi-sensory manner: in this interview, "megatrend cards" were used to carry out a small exercise to prepare for the actual interview.
- Introduce yourself!
- Note that some people speak as they think, while some people need silence to think and speak after thinking. Be sensitive to these differences and encourage interviewees to take their time when needed.
- 5x WHY – use if needed?
- The interviewee may have concerns about the interview: are my answers right? Is this interview so important that it is reasonable to spend time on it? What are the privacy issues of the interview? etc. Try to dispel such worries.

INDICATIVE SCHEDULE FOR THE INTERVIEWEE

1. Initiation 5-10 min
2. Appreciative interview 5 min
3. Megatrend card exercise 5 min
4. Interview, according to the following themes 45 – 60 min

APPRECIATIVE INTERVIEW

An appreciative interview aims to direct the interviewee positively by pointing out successes and good things.

- What kind of issues are a strength in your company?
- In what kind of issues do you think you are particularly good with partners?
- Mention some situations where you think you have succeeded particularly well.

INTERVIEWEE THEMES

GENERAL APPROACH AND ATTITUDES TOWARDS PARTNERS

This theme is based on the concept of "effectual network" and the effectual principles of "competitive vs. collaborative".

- Considering the partners as a critical and necessary factor
- Partnerships & new businesses or products. What kind of role do the partners have?
- Win-win thinking?
- Expected benefits
- Experienced benefits
- Challenges and disadvantages
- Influencing factors that shape the partnership acts? (e.g. strategy, competences, culture…)

CURRENT PARTNERSHIPS AND DEVELOPMENT OF PARTNERSHIP NETWORK

This section aims to explore partnerships: main types, roles etc.

- Who are your partners and what kinds of role do they have?
- How have the current partnerships developed? (use follow-up questions when needed)
- Network management practices that are used at the moment / have been used?
- What is important about the partners you have at the moment?
- General criteria for new partners?

DECISION-MAKING PROCESS

This section aims to detect the general practices of decision making in partnership building

- Who is in charge of making decisions at each level?
- How are decisions made? Is there a systematic process for choosing partners?
- Do you have tools or models for managing partnerships?

CHANGES IN DECISION MAKING, DIFFERENT LOGIC (EFFECTUATION VS. CAUSATION)

This section aims to detect the fluctuation and changes between effectuation and causation, and indications of the relevancy of each logic (experienced benefits disadvantages in certain situations)

- How have the decision-making practices developed / should they be developed?
- What kind of factors have influenced these changes?
- What kind of factors influence the current decision making and the need for changes in the future?
- What kind of system (if one exists) do you have for partnership building and how has it developed?
- What happens to the partnerships that deepen and develop as "long-term partnerships"?
- Influencers?
    - Business model, products, market, strategy?
    - Capabilities of the company?
    - Relational factors, like trust?
    - Organizational culture?

BACKGROUND

- Age, size (revenue and personnel) of the company
- Life cycle phase
- Educational background and position of the interviewee
- Working experience in the company / in the industry

APPENDIX 2. VISUAL EFFECTUATION QUESTIONNAIRE

E

We conduct agile experiments and pilots without analysing the final benefits at the beginning	We analyse the potential pilots carefully and systematically decide which of them we want to implement.
We prioritize such partnerships that are assumed to optimize the financial profit.	We proceed with the partners via iterative experiments and focus to control the financial risks.
The development of our business is mostly based on utilizing the opportunities that arise from the environment.	The development of our business is steered mainly by strategy-based, long-term planning and predicting.

A

Our partnership building is mainly characterized by experiments and risk management.	Our partnership building is mainly characterized by seeking strategic compatibility and aiming for maximum profit.
We evaluate partner-related risks at the very beginning, and take care that the partnership does not cause too big a financial or resource-related risk.	In the early phases of the partnerships we focus on compatibility and interesting capabilities. The risks are identified and controlled along the way.

F

We allow the partnership network to emerge as the opportunities appear.	Our partnership network is managed by a pre-planned strategy, partner portfolio and other management tools.
We start by defining the goals for the business, and proceed by seeking the partners that provide the right resources to achieve the goals.	We are willing to change and adapt our plans according to what kinds of partners we are able to utilize.
Partnerships are not the primary means for remaining flexible.	We aim to be active in partnership building, as the partnerships are the main means for remaining flexible.
We avoid such decisions that limit our future possibilities to build new partnerships or conduct experiments with others.	Partnership decisions are carried out carefully, and partnerships are long-term commitments for us.
Our partnership network is mainly as we defined it at the beginning.	Our partnerships have changed a lot. We tried several different partners before we found the appropriate network.