Effectuation as a frame for networking decisions – the case of a Finnish information technology start-up

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Abstract. Effectuation is an emerging theory framework for managerial decision-making, particularly in the context of start-ups. It attempts to capture the nature of managerial decision-making in circumstances where the essential business artefacts, like markets, customers or business model, do not exist yet or are undergoing a revolutionary transformation. This study focuses on applying the effectuation theory to inter-organizational relationship building in the early phases of network formation. According to the theory, effectual processes are characterized by four main principles: 1) a focus on projects where the loss, in worst-case-scenario, is affordable 2) a focus in a short-term experiment to identify opportunities 3) control over an unpredictable future 4) a focus on cooperation to control the future. In this article, the subject is approached by considering those four principles and capturing the acts that manifest them in practice. The findings show that all four principles of effectuation are detectable in the early relationship building. The case company uses effectual processes to balance the uncertainty of the environment and to capture the arising opportunities. Furthermore, the case results suggest a tendency to adopt more systematic processes towards collaborators, as the business transforms into more stable one. The results complement previous research by illustrating the manifestations of four principles of effectuation in inter-organizational acts in practice. Further research should be devoted to revealing the diverse and versatile multidimensional nature effectual and causal models toward collaborator selection and processes that manifest them, instead of the current dichotomy of predictive and non-predictive strategies toward collaborators.

Keywords: Effectuation, Network, Relationship building, Start-up, Non-predictive strategy

1   Introduction

The mainstream of strategic and managerial literature consists of prediction and planning based frameworks (e.g. [1, 21]). However, while they are widely approved and utilized by thousands of successful business managers, they may not be useful in uncertain environments, such as start-up companies. Effectuation is an emerging theory framework for managerial decision-making. Effectuation aims to explain the behavior that is typical in uncertain environments of companies and to highlight a certain type of benefits that might be attained particularly by effectual processes [5, 9, 23, 25, 26, 29]. Therefore, the objective of this paper is to increase understanding of the trajectory of the start-up companies regarding their relationship building. Conforming to OECD's view, [20] we consider start-up as an early phase of an enterprise. We focus on the acts of companies in their early phases of networking, which may manifest the effectuation in their relationship building attempts. This paper discusses the four principles of effectuation presented in the previous literature that start-up companies may use in order to balance the dilemmas of their uncertain environments, which is inherent in emerging business areas and start-up companies. By responding to the call by Sarasvathy [25] for further research of manifestation of effectuation in a start-up context in practice, our empirical case study is guided by two research questions:

> *RQ1: How the effectuation principles manifest as inter-organizational acts of networking in practice in a start-up company?*

> *RQ2: How the shift between the effectuation and causal networking process manifests in a start-up company in practice?*

These questions deal with the effectuation principles that manifest when inter-organizational relationship and network building is a crucial element of start-up success and survival, such as in information technology (IT) industry. By studying the manifestations of effectuation principles in practice, we aim at seeking further, especially practical, insight to support management's decision-making, particularly in start-up companies. Our current belief is, that these questions on balancing the uncertain environment of start-ups by exploiting the available resources and controlling them, instead of predicting, are pondering many firms and their management, which the previous research of traditional, predictive strategies concerning relationship building has not been able to tackle. Therefore, we approach the subject by categorizing the discovered the manifestation of the effectuation theory according to the four principles of effectuation. The paper presents a single case of an egocentric network during the pre-networking and network formation phase in IT-industry. The goal of the paper is to identify and present the effectuation behavior the focal company uses during its early phase relationship building. Although the current literature of effectuation relates closely to both strategic and entrepreneurial research, in this study the topic is considered at the organizational level, as organizational, not an entrepreneur's individual behavior. In her seminal work, Sarasvathy defines effectuation and causation as "processes" and the main structures of effectuation as "principles". However, depending on a context, some other terms are

used as well: effectuation and causation are considered as "approaches", "behavior" or "decision-making logic", to mention some. For clarity matters, we hold to terms "process" and "act", in a meaning of the manifestation of effectuation, regardless whether they are higher-level networking policies or more practical operations.

This study proceeds as follows: first, we suggest that effectuation, as a phenomenon concerning inter-organizational relationship building, is a preliminary phase in a continuum of more systematic and predictive approaches to networking, and is dominant until the business is properly established. Second, we enrich the general theory of effectuation with a single-case study in which we identify preliminary networking acts that portray the four principles of effectuation theory in networks. The examined case includes top and middle-level managers describing their early relationship building processes in IT-industry.

The paper begins by exploring the literature related to the inter-organizational relationships and networks, and the concepts of effectuation. The relationship between effectuation and networking is also explored briefly. We then introduce the qualitative research design, including a single-case study of a start-up company operating in the IT industry. The findings section presents the manifestation of effectuation of the case company, viewed from the four principles of effectuation.

2 Effectuation in inter-organizational networks

2.1 Inter-organizational relationships and networks

Since the 1970's researchers been interested in networks and considered them as a strategic response to dynamic environmental pressures, thus naming it the network paradigm[7]. The network paradigm has yielded a vast literature of inter-organizational entities (IOE)[8], e.g. alliances, coalitions, clusters, partnerships, strategic alliances, strategic business 'nets', and networks. These IOEs have inter-organizational relationships (IORs) with each other and engage in inter-organizational acts, such as working together, collaborating, networking, contracting, outsourcing, cooperating, partnering etc. [8] Yet *"no single grand theory of networks exists"*[22]. As the majority of IORs fail, it has been suggested that the management practices and techniques that facilitate the ongoing success of IORs should be researched[3]. For example, there is very little research on early phase alliance formation, the phase where little trust is detected[2].

In general, networks are viewed in two main ways with two underlying assumptions about networks and their management: either that they are unmanageable emergent structures or with strategic orientation[14]. Although, the view of strategic orientation, *"networks are managed all the time",* would suggest overall well-planned inter-organizational acts, it does recognize the serendipity as an inherent part of network management, that "*consists of a complex pattern of activities—intentional or emerging, strategic or non-strategic—for framing, activating, mobilizing, and synthesizing*"[16]. Therefore, our study is based on the strategic view of networks. However, we see that emergence and serendipity are part of a continuum of the inter-organizational acts, that on one end are intuitive and on the other end prescriptive.

As there is an abundance of literature regarding networks, there are also a whole variety of different types of networks, which have different levels of analysis: micro - the egocentric network, and macro - the overall network structure [15]. Furthermore, there are also dyadic, triadic and global levels of network analyses, and even multi-level [6]. Yet, all three levels of network analysis: dyadic, triadic and global, may take place in networks of individuals, or of units, or of organizations [19]. Furthermore, regarding the methodological issues and choices, network research can be classified into four major categories: social capital research, network development research due to the direction of causality, and two additional classes to reflect the level of analysis of interpersonal and inter-organizational level research. The network development research scholars focus on recognizing the patterns and determinants of network formation and change [4]. Network formation has been researched to some extent and there have been discovered three main phases: 1) pre-networking or network formation phase, 2) network development phase and 3) solid networking [11]. In pre-networking and network formation phases, the preconditions are established, potential partners identified and joint interests considered.

In our study, we focus to an egocentric network, i.e. a network around one focal actor. As our interest is on the network development of one focal company, we are interested in the initiation and setting up the IORs and the inter-organizational acts during the pre-networking and network formation phase.

2.2   Effectuation theory in networks

Traditional management frameworks for decision-making are strongly based on causal reasoning. The classics of managerial literature, like Ansoff [1] and Porter [21], emphasize the importance or systematic analysis and a discipline for carefully predicting the business environment. That usually includes actions like carrying out market and competitor analyses, identifying customer segments, setting a specific goal and defining a well-considered strategy to reach it. However, the impact of causal planning tools may remain unattainable if the main business artefacts, like markets, customers or business model are not established enough. Such circumstances may occur, for instance, in the start-up phase or in industry or company transformations that significantly change the prevailing business regularities. In effectuation literature, situations such as described above are usually bundled to a concept of "uncertainty". [9, 25]

In her seminal article, Sarasvathy [25] proposes that decision-makers tend to act effectually if they believe they are dealing with relatively unpredictable phenomena. This tendency appears in the dominance of experimental and means-driven acts and iterative learning techniques. [9, 25] While this kind of behavior is often considered as unfavorable deviations in causal frameworks, effectuation theory aims to offer an idea of an alternative and equally acceptable process, which may suit better for cases of high uncertainty.

Effectuation theory consists of four principles that deal with exploiting the available resources and controlling the environment instead of predicting it. Principles are general constructs that group the features of operative and decisional acts. Those four principles are listed on the following [5, 25]:

1. The Principle of Affordable Loss. Decisions are driven by the idea of affordable loss, rather than optimizing profit. The organization focuses on projects where the loss in a worst-case scenario is still affordable.
2. The Principle of Partnering. Decisions are characterized by active partnering attempts, rather than conducting competitive analyses. The organization tends to collaborate to control the future, as they can not predict it.
3. The Principle of Exploiting the Contingencies. Decisions focus on exploiting the contingencies to remain flexible, rather than exploiting the pre-existing knowledge.
4. The Principle of Control. Decisions and actions aim to control the future rather than predict it. Short-term experiments are preferred to identify business opportunities.

Effectuation and causation are often described as a dichotomy or two extremes of a continuum. Causation is consistent with rational decision-making perspectives, which is mostly based on analyzing, predicting and planning in such conditions where the environment and outcomes are predictable. While effectual processes take particular means as given and focus on selecting between possible effects that can be created with them, causation processes take a particular effect as given and focus on selecting between means to create the effect. [5, 25] However, previous literature suggest that in reality, causation and effectuation may occur simultaneously, overlapping or intertwining over different contexts of decisions. Yet, it has been proved that a path to new venture may follow a well-defined causal path but as well a well-defined effectual path. An important venue for further research is to determine the circumstances under which each approach is more appropriate. [5, 25]

Network orientation is an integral part of effectuation. When looked through effectual lenses, all business is a matter of an effectually born network exploiting the opportunities and converting them into new artefacts, i.e. new business, solutions or even new markets. The effectual network is a dynamic construct of interactions between stakeholders. The network is initiated by pre-commitments between the first set of actors and grows iteratively over time. Every new stakeholder committing the network extends the resources available for the network - but also sets new constraints to it. While the network grows and the outcome, i.e. business, market, etc., turns to more stable and predictable, the network tends to turn less effectual, too. [26]

Internationalization, as a specific case of networking [17], has many characteristics of effectuation. Instead of being a formal search and selection process, the foreign market selection seems to emerge from opportunities presented by network members. Moreover, especially when conducted under uncertainty, internationalization attempts in small firms are intentionally carried out in an effectual manner. [12, 13]

3   Research process: method and case description

We chose a case study approach [10, 27, 28] to empirically search the manifestations of the principles of effectuation theory. First, we examined the literature on network theory, as well as the theory of effectuation, particularly in a network context. Then, we selected one start-up company together with its egocentric network as the case study. This particular company (described below) was chosen because of its idiosyncrasy: it is a start-up company, yet stable enough to reflect their path of early phases of networking. Thus, the case is interesting from both academic and practical viewpoints and gives unique information about the early phase acts regarding relationship building.

COMPANY LTD (name anonymized due to confidentiality reasons) is a Finnish IT startup firm. It was established in 2017 as a spin-off of another software company. Its core business is to develop a cloud platform for digitalizing certain public administration processes, which are typically participated by companies and local authorities. The service is based on open source; the source code is available in GitHub platform. Currently, COMPANY LTD's network consists of external information system and data service operators, as well as local authorities, BtoB, and BtoC customers. The company has also progressed in its internationalization efforts lately and concluded an agreement of their first international service implementation.

The research material was composed of theme interviews that were supported by network pictures drawn by the interviewees. The manifestations of the effectuation principles regarding relationship building in the early phases of the case start-up company was studied by interviewing its four members of senior management. The interviewees were also asked to draw a sketch of their network. Interviews were carried out as theme interviews. As they were intended to give preliminary understanding whether the effectuation principles are detectable, the terms of effectuation were not used in the questions and interviewees were allowed to describe their networking acts rather freely. Another reason for forming the questions very neutral was the aim to avoid social desirability bias. As causal logic is a strong norm in managerial discipline, highlighting the effectual behavior could have led the interviewees to answer in a manner that they supposed to be viewed favorably. Interviews were transcribed to text files, which were then carefully analyzed. The analysis of the research material was carried out with Atlas.ti. The qualitative interview material was coded mainly with structural coding. Based on the theoretical setting for this study, we used pre-defined categories and codes for the four main principles of effectuation. Structural coding is appropriate to label conceptual phrases that relate to a specific research question used to frame the interview. It both codes and categorizes the data. Further, in vivo coding was also utilized. In this study, structural codes were used to label the phrases indicating each of the four effectuation principles. In vivo coding was utilized to label other effectuation related themes, which were identified as potentially meaningful concerning our research questions. [24] In practice, the phrases indicating each of the principles were identified. In addition to identifying the main effectual main principles, all the phrases referencing to shifts between effectuation and causation were also gathered. They were used to analyze the factors the interviewees relate to the transition between these two logics.

4   Results

Analyzing the material resulted findings on both research questions: the manifestation of effectuation principles and the transition between effectual and causal logics. In addition, some significant findings on overall effectual network approach arose. In this chapter, we will present the findings divided in mentioned three categories in the following order: first, we report the findings on overall effectual network approach, second, we describe the findings on the manifestations of the effectuation principles, and last, we highlight some interesting points related to transition between effectuation and causation.

4.1   Findings on overall effectual approach

In our analysis of the interviews, we discovered that the top management and middle management differed by their focus relating networking. While top managers were more likely to describe strategic decision-making, high-level principles and approaches to networking, middle management dealt mainly with operational networking themes, like knowledge and collaborative issues. This may be a logical reflection of their daily work assignments. However, this resulted in the top managements' answers being more informative when looking for understanding the effectual and causal approaches behind the acts.

In general, interviewees seemed to use a strongly effectual framing when considering networks. They mentioned the network as a crucial factor in creating the new solution - or, a new ecosystem, as the case company wants to do. The phrases they used to describe the role of the network indicated the belief of the network as a driving force for creating new business. This reflects the idea of the effectual network as an enabler for the transformation process, i.e. the process of converting contingencies and opportunities to a new business together with network stakeholders.

In the interviews, the interviewees described their mindset towards relationship building and distribution of resources with more capable partners:

> "But surely there is also our COMPANY LTD'S ideology, about the code being an open source code and we talk about open interfaces, operations and culture. Furthermore, in a way we want to enable that we can operate with everyone. My own thinking has been that if there is someone, who does things better than us, it makes sense that they do it and we concentrate on things that we manage to do better than anyone else. Exaggeratedly put "we do everything by ourselves"- thinking, is quite an old school to me, we rather exploit the best know-how."

The interviewees expressed that relationship building and distribution of resources with more capable partners is a sensible and contemporary act, as it enabled their own concentration on their core competencies and thus overall better performance. This expression can be interpreted as a manifestation of overall effectual thinking that emphasizes the exploiting of network resources and knowledge. Partnerships were seen as crucial for innovating and/or creating new business. When the interviewee was asked about

discovering the "blue ocean" for strategy with the partnership, the interviewee expressed it to be a self-evident truth.

> "Yes. Do you believe that the blue ocean is found especially in collaboration then?"
> "It is not a matter of faith, it is crystal clear…[laughter]…"

This expresses an essential matter i.e. it is believed that the emerging potentialities will mould into a real business in collaboration with the network.

4.2   Findings on the effectuation principles

The main finding on the effectual main principles was the discovery of all four of them. However, there were differences on the clarity each of the principles appeared in the interviews. The principle of partnering and the principle of exploiting contingencies were easy to detect as they emerged in several expressions. The principle of affordable loss and the principle of control were expressed in a weaker manner, but still detectable. In the following, we will present the findings interviewees' networking discourse concerning each of the four main principles.

The Principle of Exploiting the Contingencies. This principle covers an idea of all acts being driven by utilizing the resources and opportunities at hand, rather than building the strategy strictly on pre-existing knowledge. The interviewees highlight in several comments their attitude on the network as a source of collaborational innovations, more than a source of pre-defined capabilities and resources. One interviewee even emphasizes the benefits that are more likely to reach when acting effectually: when the goal and plan are not too fixed, innovational ideas may be more likely to appear.

> "Well, then could good innovations be outlimited by accident if the things are defined too precisely beforehand."

Here it is expressed those benefits the effectuation may bring, i.e. viewing the company's environment more broadly, thus enabling discovering innovations that causal behavior might outlimit.

> "… and then I saw very clearly, that if we try to penetrate the markets, the only choice we have is to begin to change the rules of the game, and as we are small, we have to seek the teammates to do the change with us."

Above the interviewee expresses the network and partners as an only choice to transform the contingencies into new business.

The interviewees also describe the partnership to have a trajectory, which is in many phrases characterized by the depth of trust. The deeper the partnership is (or is aimed), the stronger is the trust needed. Experimenting with partners is described also as a mechanism for building the trust between companies.

The Principle of Partnering. The interviewees had a clear mindset of partnering as an inborn and favorable culture in their company. They considered it a contemporary and almost self-evident way of action. Further, they emphasized win-win –situation as a necessity and expressed a fair play and loyalty even when it was not the most profitable option for the company itself.

The interviewee illustrated the essential bidirectional benefits of partnering:

> ”you have to be sensible, meaning the partnership cannot work if both parties do not benefit from it”

> “… and when you have the win-win –thinking, you don't have to think about who has the most of power.”

The interviewees expressed that the win-win-thinking is mandatory for successful partnering and articulated the act of complying also to the needs and requirements of the counterparty, thus manifesting positive mindset towards networking. Network that benefits all parties is considered as a motivator for collaboration, which even minimizes the need for formal commitments in the current phase.

The interviewees are aware that competitive settings may emerge, but they still do not feel reasonable to focus on analyzing the competition. On the opposite, they mention it to be an old-fashioned manner.

> “I present this in a bit pointed way now, but in my opinion, it is quite old-fashioned thinking.” (speaks about using many resources on analyzing competitors)

> “Of course challenges may raise, we may start developing the service, and then we step on the feet of a certain partner. Then it has to be discussed, whether we can still work together or will it cause a break between us. “

The Principle of Affordable Loss. This principle had the weakest reflection in this dataset. That may be due to its nature: whether to be driven by managing the risk or by optimizing the profit may be such an unconscious and personal behavior, that identifying it in verbal expressions may require questions that are more specific. However, the interviewees described their networking overall as very open and trusting, though they still are aware of potential competitive settings and other risks.

> “… ok, we do not want to be too naive, we tell a lot to the external world and to partners, but not everything. But mostly, if we have some plans, we also tell them. The plans may not always come true, but so what?”

The interviewees expressed in several phrases their win-win-attitude and sustainability in resource utilization. They all agreed that it is most reasonable for everyone to focus on own core business and to acquire the rest from the network – even when it will not optimize their own profit.

The Principle of Control. This principle reflects the tendency to control the future, as well as they, can, instead of trying to predict the future which is considered too difficult in the current phase. The interviewees describe the difficulty of predicting, and mention they rather experiment with different partners. Experiments and pilot projects "separate the sheep from the goats"; if there is no trust and common business interests, after all, the partnership dies or turns to standby.

> *"... well, then it is such, that it is very seldom possible to know beforehand is it going to work or not. "*

> *"We are still so young company, so much is happening all the time. So it is just the best way to conduct a pilot to see if it is going to work. "*

Although the interviewees mention that plans and high-level strategies also exist, they still seem to prefer experimenting as the best way to find the good partner matches in the current phase.

4.3   Findings on the transition between effectuation and causation

The data showed us the dynamic nature of both effectual and causal networking logics. Although effectuation seemed to be the dominating behavior at the moment, all of the interviewees indicated an idea of moving towards more causal and systematic practices on partner selection. When this would happen, seemed to be imagined as some sort of maturity level or turning point. The interviewees expressed repeatedly that now they are acting effectually and felt it acceptable, but more systematic would be needed, and was already under development.

When the interviewee was questioned, whether there is any systematism in the networking acts, he responded:

> *"No, so far nothing can be described as systematic. These municipal system suppliers have come to us as given. Regarding the service development side, it has been like pulling ropes that have come to our way. However, now we have also a clear aim, which we have to take care so that this balance stays, and a kind of prioritizing of the partnerships that are really [important].*

This is an expression of current, unsystematic effectuation logic, that from now on with the aim of "life cycle", will also grow to more systematic, even causal encompassing networking acts.

> *"well, I have considered it good, that it has not been too formal with us, but we have been able to react fast and gone with the flow according to the situation, and in a way, it has been ok to remain a certain kind of intuition. However, now that the volumes are growing and personnel increasing and operations expanding, we are forced to include some kind of formality. "*

Effectuation is seen even beneficial in the early phases of business development, how-ever as portrayed, there is an idea that in the long run, more formal i.e. causal handling of business would serve better. This could also be interpreted that the organizations might perceive that there exists a maturity point, after which more systematic planning could be feasible.

The interview data gives a notion of a turning or maturity point, in which some set of elements will be known and stable enough to handle with causal planning tools.

> ”...but we have passed that phase, where we can carry on only by a sort of gut feeling.”

This expresses identification of a sort of breaking point after which it would be clearer or more beneficial to plan with causal logic. At the same time with carrying out the interviews, we allowed the participants also to draw a sketch of their current network, if they felt so. Some of the drawings reflected a systematic in partner selection; current partners were categorized by the type of their output services or products. Partners were also divided into "collaborative partners" in a meaning of common marketing and rev-enue sharing, and to "suppliers" in a meaning of the mostly unidirectional buyer-seller relationship.

> "... or, it is so that, if it is in disorder in the beginning, so we should try to build more systematics, but there will always be some part that is still in disorder. And what is the balance between things in order and things in disorder, it is varying all the time and it is ok."

Here the interviewee indicates multidirectional fluctuation between effectuation and causation. When asked about partner-related risks, i.e. ownership and other juridical questions, the interviewees expressed a need for more formal commitments in the fu-ture. Especially the data owner questions may require more careful consideration and agreements.

> "So far it has been relatively clear, but it can be that it is an area that will become more challenging in the future. And even now there is that – yet there have not been such situations - but now that a lot of material is accumulated to our service and if, for example, [customer X] will give up at some point, who has the ownership to the material – well [customer X] of course, because we are like an Outlook, we enable the data transfer. But this is not necessarily clear to everybody, and now that we have these further plans, for example, one of the focal issues in the near future that is talked about is the selling the data, data selling."

While this reflects the effectual way of establishing pre-commitments, it is also a sign of emerging need for more causal partnering process.

5   Discussion

Understanding the processes the companies adopt for their relationship building in the early phases of their development, and consequently, the effects of the made acts have on the success of the business is one of the most significant fields of research to help companies to success and develop competitive advantage in current, fragmented business environments. The importance of networking as an integral and strategic part of any business has been recognized for decades. However, the frameworks for networking strategies have been mainly tied to a causal management norm, which has left the managers to lack tools for tackling early phase networking dilemmas. In her seminal work, Sarasvathy shed light on a new insight of considering the acts of uncertain phases as a valuable logic with idiosyncratic benefits. Further exploration of this approach would lay the ground for developing systematics and strategic frames for these phases of a business trajectory, which, moreover, could even boost the innovational activity as the effectual processes allow the companies to experiment with more numbers of new ideas with lower costs. As a Finnish philosopher Frank Martela states: "The less prepared ideas often capture the highest innovation potential."[18]

Besides causality, effectuation is regarded as one method of decision-making attitudes for relationship building in companies' networking endeavors. However, there is a lack of empirical cases that illustrate the usage of effectuation logic in companies' decision-making interrelated with their relationship building. Therefore, this article responds to the research need and contributes by portraying a case of one start-up company with its egocentric network operating in information technology. The article contributes to the theory of effectuation in network context, and more specifically to the concept of effectuation by highlighting the manifestations of four effectuation principles in practice. Our results showed, that all the four effectuation principles earlier introduced in the literature conceptually, do manifest as inter-organizational acts in the case company's relationship building in the early phases of its formation. Thus, this article confirms the previously conceptual views of the effectuation of Sarasvathy and her colleagues, as well as Chandler [5, 9, 23, 25, 26, 29] as a valid decision-making logic for companies in an uncertain environment and/or situation, such as in the start-up phase. Moreover, our results showed that effectuation as a phenomenon is more detectable in the discourse of the top managements, thus implying that effectuation processes are, in fact, an integral part of strategic goal-setting and decision-making, as suggested by Sarasvathy and Chandler, than of daily operations of putting the chosen strategy into practice.

All of the four principles of effectuation theory, i.e. The Principle of Exploiting the Contingencies, The Principle of Partnering, The Principle of Affordable Loss, and Principle of Control, manifested in the case results. The Principle of Exploiting the Contingencies manifested as acts being driven by utilizing the resources and opportunities at hand. Thus making the novel innovations and business opportunities prospective, yet depending on the situation, requiring a trajectory of trust. The Principle of Partnering manifested as a culture of win-win based collaboration, that is viewed contemporary and almost self-evident way of action. The Principle of Affordable Loss, manifested as the focus on own core business even if it does not optimize the company's own profit.

The Principle of Control manifested as a preference to experiment regarding potential partners in order to control the future, rather than pursuing to predict it. However, there was a difference in the clarity, those four principles of effectuation manifested in the case organization's inter-organizational acts. In our case, The Principle of Affordable Loss manifested with the weakest reflections, which may be due to its nature. The Principle of Affordable Loss incorporates behavior of either risk prone or risk avert, thus being dependent on the personal traits of an individual. However, it might also give different results at inter-organizational level depending on the business and industry the organization is operating in. However, our results indicate that the four principles of effectuation may not be equally represented in a single company, but manifest more or less evidently depending on the trajectory the company is in. However, as there is a lack of cases of manifestations of effectuation in practice, further cases would shed more light to the potentially different levels of existence of the four principles of effectuation in the various phases of the company's development. Moreover, since there is an abundance of literature regarding effectual behavior of an individual entrepreneur, and lack of the descriptions of the phenomenon of organizational behavior, the effectuation theory would also benefit from the study both at individual and organization levels.

Additionally, our results showed, that the effectual behavior offers the companies a chance to "play the field", seek relationships and opportunities that may lead to successful business endeavors or innovation, that potentially would not have been detected with traditional causal decision-making behavior/logic. Particularly in the early phase of the company, as well as in the early phases of the networking the effectual behavior is considered having many positive benefits. When regarding networks with effectual lenses, they are a fundamental organism for any new venture creation. This finding contributes to the networking literature by accompanying the previously recognized need for a wider spectrum of strategic collaboration building frameworks [e.g. 22].

Furthermore, our findings imply that while the dilemmas of uncertain environments of start-ups are dealt with effectual processes, they tend to turn to more predictive in time. Results also imply that the shift from effectuation-oriented logic to causal-oriented one may require a certain maturity or turning point to be reached. As we detected several indicators of this kind of turning point or zone, we consider this as a significant venue for further research. Exploring the attributes of this maturity point would give valuable understanding of multidirectional and intertwining nature of effectuation and causation. As a contribution, we suggest that instead of dichotomous, adversarial discussion of either non-predictive or predictive strategy of relationship building, a strategy spectrum, which depending on the company's maturity may have more or less characteristics of effectuation, even concurrently depending on the partnership/relationship at hand, is acknowledged. As the effectuation theory in inter-organizational settings is still in its infancy, in general, clarification of the concepts would benefit the theory development.

As a practical implication, this study clarifies the effectuation behaviour as a potential and functional approach to managers for relationship building in the early or otherwise uncertain phase of the company's development.

As a single case study, this research does have its limitations. Particularly, as being a single case study it portrays only a specific view on effectuation. However, as being a carefully selected case, this study gives valuable preunderstanding of effectuation as networking-related phenomena. After all, despite its limitations, this study succeed in enriching the verification of the rudimentary theory of effectuation and in pointing some interesting avenues for further exploration.

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