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## **Entrepreneurial Behaviours**

Nuancing the differences in practical application of effectuation and causation between serial- and first-time entrepreneurs.

Master's thesis in Management of Economics and Innovation

Anders Hallgren  
Oscar Lindström Rignell



MASTER'S THESIS 2017:E2017:103

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## **Abstract**

The purpose of this study is to provide a nuanced view of how the entrepreneurial behavioural models of effectuation and causation are applied by serial and first-time entrepreneurs in practice. The study has been carried out through semi-structured qualitative interviews with entrepreneurs belonging to both above mentioned categories, and the gathered data stands as basis for discussions and the drawn conclusions. General trends within the area of research focuses largely on identifying and explaining the advantages and disadvantages of the different approaches. This serves to clarify when and why applications of two models might be intertwined and the individuals attitude towards the proposed application in the present environment.



# Acknowledgements

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Anders Hallgren, Oscar Lindström Rignell, Gothenburg, May 2017





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# 1

## Introduction

*“Causation rests on a logic of prediction,  
effectuation on the logic of control.”*  
(Sarasvathy, 2001)

*“Both causation and effectuation are integral parts of human  
reasoning that can occur simultaneously, overlapping and  
intertwining over different contexts of decisions and actions”*  
(Sarasvathy, 2009)

### 1.1 Background

With a rapidly changing global business climate, and a rise in number of start-ups (Zwilling, 2013; Kiwi, 2016; Anderson, 2017) research surrounding entrepreneurial behaviours have intensified. Many seek to contrast the traditional entrepreneurial model, seen as a consideration of economical thinking as to how individuals or organizations locates areas of advantage where product/service demand exceeds present supply, and how this is acted upon (Fisher, 2012). If warranted, entrepreneurs are seen to take action in the form of locating resources so as to create unit with the prospect of developing and in extension delivering a product/service able to fill the demand of the opportunity. By so doing, possibilities for economical returns on the entrepreneurial venture arise (Fisher, 2012). Present studies however then attempt to contrast this traditional view of entrepreneurial behaviour with alternative theoretical models such as effectuation and causation (Sarasvathy, 2001) or additionally by entrepreneurial bricolage (Baker & Nelson, 2005). Effectuation, as defined by Sarasvathy (2001) is the process of taking a set of pre-existing means and utilize these for selecting conceivable effects that may be created with the particular set of means. Causation in contrast views a conceivable effect and focuses on acquiring and/or selecting means with which the desired effect may be reached. Entrepreneurial bricolage, according to Baker & Nelson (2005) may be simply described as making do with whatever means are readily available. These alternative models may be seen to propose that entrepreneurial course of action is determined by certain conditions, not only related to the individual but also his/hers surroundings. Above described research areas provide, as mentioned, alternative views of entrepreneurial behaviour, and additional focus have been cast on the differences related to the individuals depth of experience. These in comparison do not focus on simply the behavioural characteristics of the entrepreneur, but view traits related to behaviours as a gradually developing ability during the course of an entrepreneurs

life (Politis, 2008). Nuanced in this research is the influence of prior start-up experience on entrepreneurial ability to locate and exploit opportunities. The perspective generally suggest that serial entrepreneurs, due to their experience of prior start-ups, may be expected to possess a paramount ability to favourably deal with unexpected situations (Politis, 2008). Results of such studies incorporate the behavioural models supposedly related to the actions taken when facing unprecedented situations. What is thereby suggested is that a difference exists between serial and first-time entrepreneurs due to the by experience acquired skill-set. Favouring the serial entrepreneur by viewing prior experience as valuable organizational assets possible to be carried on to new ventures with a suggested increased likelihood of the ventures prosperity and survival (Politis, 2008).

Although results of prior research illustrates traits related to behavioural models as well as possible reasons behind these, nuance associated to where in the start-up process the behaviours are accented in relation to serial and first-time entrepreneurs is lacking. From previous research, the conclusion may be drawn that differences as to displayed behavioural traits exist, as well as a connection to their relation to the individual entrepreneurs characteristics. What we do not know however is where or how these behavioural traits are nuanced in the start-up process.

## 1.2 Problem Statement

Whilst previous research in the field of entrepreneurial behaviour is regarded as timely and utterly useful, important aspects are lost to attempts of general understanding and straightforward definition of alternative models. From pre-existing literature, behavioural theories may be seen to lack certain comprehensiveness so as to be utilized as guidance for action-taking. Knowledge attained through theoretical work, may act as a general guide as to possible individual mindsets in attempting an entrepreneurial venture, without the knowledge of if and when to apply said knowledge however, application in practice may become a recipe for failure. Empirical evidence of practical application of models is thereby crucial for ascertaining the use and possible mixture of applied behavioural models. Acquiring this knowledge may further increase the understanding of entrepreneurial behaviour models in practice and link evidence of practical application to theoretical knowledge. Following section (1.3) presents the purpose as well as the research question focused upon in this thesis.

## 1.3 Purpose and Research Question

From the above described lack of comprehensive practical application of theoretical knowledge considering the entrepreneurial behavioural models, the overall purpose of this study is to *nuance the differences in practical application of effectuation and causation in strategic, tactical and operational perspectives of the start-up process between serial- and first-time entrepreneurs*. Thereby, this study aims to provide empirical evidence of the differences in practical applications of the theoretical be-



havioural models described by Sarasvathy (2001) within the structure of strategic, tactical and operational processes. Looking at strategic, tactical and operational levels provides insight into long- as well as short-term planning, and how plans are executed, a more detailed insight into this is provided under section 3.2. Deeper insight into the simultaneous and intertwining existence of two behavioural models in practice (Sarasvathy, 2001) will be provided, nuancing the difference between first-time and serial entrepreneurs. Concluding, this study will attempt to answer the following research questions:

**RQ1:** How are the differences in entrepreneurial behaviour with regard to effectuation and causation nuanced in strategic, operational and tactical processes between serial and first-time entrepreneurs?

## 1.4 Scope

With regards to the research question presented above in section 1.3, this study focuses on nuancing where serial and first-time entrepreneurs differ in their behaviour characteristics, in correlation to the theoretical models of effectuation and causation. A justification for this study may be viewed in section 2.4. Due to the large scope of the research question as well as constraints set by Chalmers University of Technology, general restrictions have been set:

- Time frame for study is set to start January 2017 and to be concluded by the end of May 2017.
- A maximum of 15 organizations and companies will be included as basis for data, due to time restrictions, however, if saturation in answers is reached earlier, implying that no diverging data is attained, no more companies will be included.
- Present literature will be used as a basis for theory, thus, responsibility for changes and additions in literature is renounced

## 1.5 Report Structure

The main section of this study follows a chronological structure, consisting of the following sections:

1. *Introduction*
2. *Literature Review*
3. *Methodology*
4. *Results*
5. *Discussion*
6. *Conclusions*

Chapter 1 gives the reader an introduction to the background of the research, providing the research question and the overall purpose of the study. Following, Chapter 2 presents the theoretical basis upon which this paper is produced. Chapter 3 provides the methods with which the field-work and the following empirical study were conducted. Additionally, methodological considerations and limitations are herein shown. In chapter 4 the results are presented, both qualitative as well as quantitative. Chapter 5 offers a discussion in consideration of the findings. Chapter 6 considers the conclusions drawn from the gathered findings as well as recommendations for future topics of research.

# 2

## Literature Review

This chapter provides an overview of the theoretical basis upon which this study has been conducted. Firstly key concepts vital to understanding the area of research are provided, continued by describing the present trajectory for entrepreneurial fields of research. An in depth examination of entrepreneurial behavioural models is then provided and finally a justification of the research question in addition to the overall purpose concludes the chapter. The main purpose of this chapter is to provide a link between the theoretical basis and the purpose presented for the study.

### 2.1 Entrepreneurship

#### 2.1.1 An overview of entrepreneurship

Traditionally the view of entrepreneurship has been that of the process of gathering necessary means of production and creativity consisting of people, physical- and information resources, whilst doing so in an efficient way (Lazear, 2005). An entrepreneur might then be described as a person that put people together in such ways that combines physical resources and ideas in order to produce a venture that satisfies an identified demand. Such a person must then, logically, possess knowledge encompassing numerous business areas. Additionally he or she must also possess a talent for matching talented people and manage these. Comparatively one may see the entrepreneur as a contrast to the specialist, lacking the expert knowledge in a single area in favour for talent in a number of different skills.

#### 2.1.2 Trajectory of present entrepreneurial field of research

Initial research in the field of entrepreneurship largely focused on the entrepreneur as an individual, characteristics and traits. Such research attempted to, through identification of these individual traits, determine the entrepreneur from the non-entrepreneur (Brockhaus, 1980; Lazear, 2005). More recent studies can be seen to have surpassed the individual entrepreneur, instead focus has been attached to the behaviour. As described by McMullen & Dimov (2013), the field of entrepreneurial focus as an act might instead be viewed as a journey, the culmination of a collection of activities and experiences over a period of time. Models developed from the observed behaviours include the concepts of effectuation and causation (Sarasvathy, 2001; Baker & Nelson, 2005). Building upon behavioural research, an attempt to broaden the boundaries of the field has been made, this to include situational and

environmental factors. Shane & Venkataraman (2000) argue that solemnly focusing on possible advantages in performance in one firm in comparison to others isn't a sufficient measure of entrepreneurial performance based on the fact that the cost for other opportunities missed may be insufficient to compensate for this advantage. Through this, the connection between the two stated phenomena of presence of lucrative opportunities and presence of enterprising individuals is developed (Shane & Venkataraman, 2000). This is done in an attempt to include the quality variation within the entrepreneurial opportunity into the performance considerations. Large numbers of recent entrepreneurial work attempt to take the research of Shane & Venkataraman into consideration, adding to this, work has been done regarding the level of entrepreneurial experience. Research by Fischer (2012) strives to relate the manifestation of present behavioural theories in practice. In Fischer (2012) theories and theoretical ideas are being related to practical action and the extent to which these models are able to describe perceived behaviours is captured through empirical data.

## **2.2 Entrepreneurial behavioural models**

As previously presented, numerous behavioural models have been developed in attempts to theoretically portray observed entrepreneurial behaviour. Among these we find effectuation and causation (Sarasvathy, 2001) as well as entrepreneurial bricolage (Baker & Nelson, 2005) and the lean start-up methodology (Ries, 2012). Models crucial to this study, effectuation and causation as described by Sarasvathy (2001) are below explained in length (see sections 2.2.2 and 2.2.3), whilst entrepreneurial bricolage and lean start-up is shortly explained in section 2.2.1.

### **2.2.1 Entrepreneurial bricolage and lean start-up**

In this section a short explanation and definition of the concepts of entrepreneurial bricolage and lean start-up are presented. Both models displaying numerous attributes linked to effectuation, but shown from research to be less publicly utilized.

#### **2.2.1.1 Entrepreneurial bricolage**

No publicly accepted single definition of bricolage exists, but one presented by Baker & Nelson (2005) is to make do with combinations of whatever resources are readily at hand and applying these to new problems and opportunities. Making do in this sense, according to Baker & Nelson (2005), implies a bias towards taking action and actively engaging in problems and opportunities, this rather than lingering over whether a successful product/service may be produced.

#### **2.2.1.2 Lean start-up methodology**

Lean start-up methodology, introduced by Ries (2011), is inspired by the lean principles of manufacturing, which circles around avoiding waste and optimizing resource

spending. The methodology centers around close and continuous interaction with existing or potential customers, thus attempting to reduce uncertainties of ventures.

### 2.2.2 Causation

Causation, the behavioural model described by Sarasvathy (2001), has a particular objective as foundation and puts focus on selecting between conceivable means with which this objective might efficiently be reached. Thus being, individuals involved in creation of new ventures, following the causation model initiates the process through clearly defining the desirable effect to be accomplished (Chandler et al., 2011). Following, in depth and systematic exploration of possible entrepreneurial opportunities are undertaken, these normally adhering to established markets, seeking situations where demand exceeds supply. Opportunities are observed and evaluated with focus on possible expected returns, then chosen based upon maximizing this return. Continuous planning lays the foundation of this behavioural model, efforts being placed on regular and repeated planning and analysis tasks, all whilst attempting to exploit the individuals immediate resources, in form of knowledge and information. Highlight continuously being on reaching the initially envisioned effect with the logic, as described by Read & Sarasvathy (2005), "To the extent we can predict the future, we can control it".

Entrepreneurs involved in ventures, adhering to causal principles can be seen to rationalize decision-making, basing choices upon all available information with possible relevance. Additionally, all sources of information are screen for relevance to the situation and environment in which the decision is rooted (Chandler et al., 2011). Large quantities of entrepreneurial research related to the search for venture-opportunities can be identified. Considered in these is the theory that entrepreneurial venture opportunities are strongly influenced by situational forces, forces which the individual causal entrepreneur competently interprets. Doing so requires up-to-date knowledge and information about ongoing market trends and presently existing venture developments within the market area to be exploited. Through continuous screening, locating an opportunity in the right market with the greatest prospect for return may be achieved. Thus, entrepreneurs adhering to causation need be well versed in search and implementation skills (Chandler et al., 2011). From above mentioned influences of comprehensive planning connected to causation, Sarasvathy (2001) argues that causation processes may be efficiently applied to root out the best, fastest, and most efficient as well as economical methods towards achieving the initially desired vision/effect. Further, it is argued for that competitive advantage is facilitated in markets where informational basis is constituted by expert knowledge through the use of causal behaviour (Sarasvathy, 2001). Expanding on this topic, as well as the continuous activities of planning undertaken in causal endeavours, plans of action, through step-by-step guides, further promotes the ability to connect actions to results, and ensures that the correct path towards the effect is accomplished.

In contrast, whereas causation endeavours to predict the future, events outside the scope of prediction constitutes the largest potential drawback of entrepreneurial causation. Contingencies may be developed for possible predictable unknowns, but if

these unknowns pass the scope of prediction, causational planning limits response and may result in the collapse of the venture.

### 2.2.3 Effectuation

Effectuation, being the counterpart of causation, focuses not on the effect, but on the means readily at hand. Commencing with the means, and attempting to create entrepreneurial ventures through non-predictive strategies (Sarasvathy, 2009). Five principles of non-predictive strategies embodies the model of effectuation, being:

- The bird-in-hand principle
  - Essence of this principle is the focus towards means-driven (as opposed to effect-driven) action. Herein implied is the wider range of possibilities to create novelty through use of existing resources rather than simply focusing on increasing efficiency in accomplishing a set effect.
- The affordable-loss principle
  - Describing pre-commitment to personal loss, this principle urges towards discarding investments in resource taxing analysis regarding expected returns, in favour for individual reflection about what one is willing to sacrifice.
- The crazy-quilt principle
  - This considers stakeholder interaction, dictating openness to negotiate with any and all stakeholders in a position to commit to the venture, without regard for possible opportunity costs or competitive analysis. Additionally it decrees that involved stakeholders determine the effect of the venture, not the other way around.
- The lemonade principle
  - Suggesting a need for acknowledging and appropriating contingency through leveraging surprises in comparison to attempting to avoid the unknown is herein implied. Unknowns are to be overcome or adapted to, not avoided.
- The pilot-in-the-plane principle
  - This principle argues that depend on and work in coherence with human interaction is the prime driver of opportunity, in comparison to limiting a ventures efforts to the exploitation of external factors, e.g. technological trends.

In contrast to causation, attempting to control a predictable future, effectuation is based upon the logic that "To the extent that we can control the future, we do not need to predict it." (Sarasvathy, 2009). This translates to a shift in the individual entrepreneurs view of the environment (global as well as local) in which he/she operates. Characteristical traits of the effectuation-oriented entrepreneur include, but are not limited to (Sarasvathy, 2009):

- An ever changing, open world, where human action plays an crucial part.
- Rather than viewing effects as firm or given, effectuators strive towards creating opportunities.

- Markets and organizations are viewed, not as prospects of creating competitive advantage, but as inspiration for creating novelty, not only for the individual, but the world. Thus, markets and/or market-segments are increasingly probable to be created rather than located.
- In keeping to the principles of non-predictive strategies, the effectuator does not attempt to avoid the unknown, but endeavours to reach success. Failure, thus, is recognized as essential for success, rather than the opposite. Through this view of failure, effectuators adapt and learn to overcome and adapt to failure, building on experience so that the risk for failure might be reduced.

Effectuation, adhering to above mentioned principles and individual character traits, thereby allow numerous ways of conducting the creation of new ventures. Focusing on the means allows for a wide scope of possible outcomes, enabling the construction of the venture to be connected in an advantageous way for both the entrepreneur as well as the operating environment. A close and continuous interaction with stakeholders, be they potential customers or partners, allows for diverse inputs of inspiration as well as talent (Sarasvathy, 2009). This does however provide an area of potential difficulty, concerning which the individual entrepreneur must be skilled, coordination and communication. Expanding the network of inputs as well as possible delegation of creative tasks must be well managed, but non-restrictive. Achieving consistency in these fields promises to result in an effect, closely related to the demand of the stakeholders, thus increasing the potential for return.

Continuing with looking at risk-management, in contrast to causation, and adhering to the five embodying principles, uncertainty becomes somewhat irrelevant to the effectuator. Through exploring new ways of handling unknown events and merge affordable-loss with stakeholders of the individuals choice, new possibilities for ventures are instead created. Choice of stakeholders should subsequently be done following the line of thought, that commitments should entered into without regard for the possible opportunity costs. Stakeholders as such will consequently eliminate uncertainty, and ease the ventures entry to market, not uncommonly through pre-commitments (Sarasvathy, 2009).

Through above mentioned characteristics of effectuation and the individual entrepreneur practicing the principle of effectuation, an expressed flexibility saturates the nature of of the logic. Essential to the effectuator, this flexibility allows for capturing possible advantages of environmental changes (Sarasvathy, 2001; Chandler et al., 2011), whilst maintaining the possibility to abandon unfruitful endeavours. Flexibility in this sense also allows for the change in effect resulting from the venture, influenced by the opportunities presented during the course as well as the individual investments and contributions of stakeholders (Sarasvathy, 2001).

### 2.2.4 Comparing observed behavioural traits of causation and effectuation

*“Both causation and effectuation are integral parts of human reasoning that can occur simultaneously, overlapping and intertwining over different contexts of decisions and actions.”* (Sarasvathy, 2001).

Considering the statement by Sarasvathy (2001) above, the link between the two is in the individual entrepreneurs usage, theoretical differences however are numerous.

Chandler et al. (2011), based upon the research of Sarasvathy (2001) has outlined four main principles differentiating the models of causation and effectuation:

- Effectuation focusing on short-term iterative experimentation so as to identify entrepreneurial venture opportunities in an unpredictable future setting, compared to causation, attempting through focus on final effect to predict the future.
- pre-commitment to personal loss, and worst case scenarios viewed as affordable through effectuation principles in contrast to a maximization of expected returns in accordance to causation.
- Focus on early commitments and possible strategic alliances with stakeholder in an attempt to reduce the unpredictable, being effectuation, causation comparatively focusing, through extensive research and analysis, on predicting future events.
- Flexibility allowing for the capturing of possible advantages of environmental changes, by effectual principles, versus the use and profiting of presently existing markets, capabilities and resources spoken for by causation.

Additionally, studies have been conducted, focusing on the differences, in practical application, of the two models by e.g. Fischer (2012). Expressing that, in agreement with the statement by Sarasvathy (2001) (at the top of this section) a combination of approaches may often be seen in entrepreneurial work. However whereas effectual behaviors may be employed singularly, causal approaches however are always employed alongside with effectual behaviors (Fisher, 2012). The reasons for this might be found in the dynamic nature of effectual approaches. Below are displayed contrasting characteristics of causation and effectuation approaches. Fisher herein attempts to elaborate somewhat on the previously mentioned four main principles, as described by Chandler et al. (2011), Fischer (2012) applies an approach wherein theoretical perspectives are used to interpret what is known about a situation.



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**Contrasting Causation and Effectuation**


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Categories of Differentiation	Causation Processes	Effectuation Processes
Givens	Effect is given	Only some means or tools are given
Decision-making selection criteria	Help choose between means to achieve the given effect Selection criteria based on expected return Effect dependent: Choice of means is driven by characteristics of the effect the decision maker wants to create and his or her knowledge of possible means	Help choose between possible effects that can be created with given means Selection criteria based on affordable loss or acceptable risk Actor dependent: Given specific means, choice of effect is driven by characteristics of the actor and his or her ability to discover and use contingencies
Competencies employed	Excellent at exploiting knowledge	Excellent at exploiting contingencies
Context of relevance	More ubiquitous in nature More useful in static, linear, and independent environments	More ubiquitous in human action Explicit <i>assumption</i> of dynamic, nonlinear, and ecological environments
Nature of unknowns	Focus on the predictable aspects of an uncertain future	Focus on the controllable aspects of an unpredictable future
Underlying logic	To the extent we can predict future, we can control it	To the extent we can control future, we do not need to predict it
Outcomes	Market share in existent markets through competitive strategies	New markets created through alliances and other cooperative strategies

---

**Figure 2.1:** Categories of differentiation for causal and effectual behaviours (Fischer, 2012)

Read & Sarasvathy (2005) has previously focused on the individuals characteristics, differentiating human expertise as a foundation for a pre-disposition to either effectual or causal behaviour. This is done by comparing the characteristics of an expert, being very knowledgeable and/or skillful in a particular area, in contrast to that of an entrepreneur. Looking at figure 2.2 the view of the "entrepreneur is visibly similar to that of an effectuator, whilst the "expert" may be seen as a practitioner of causal behaviour. Much like the four principles of Chandler et al. (2011) and the additional work by Fischer (2012) these portray how theoretical research differentiates effectual and causal behaviour. Adding to this, Read & Sarasvathy (2005) includes own observations in the form of company/organizational cases which has displayed the theoretical observations.

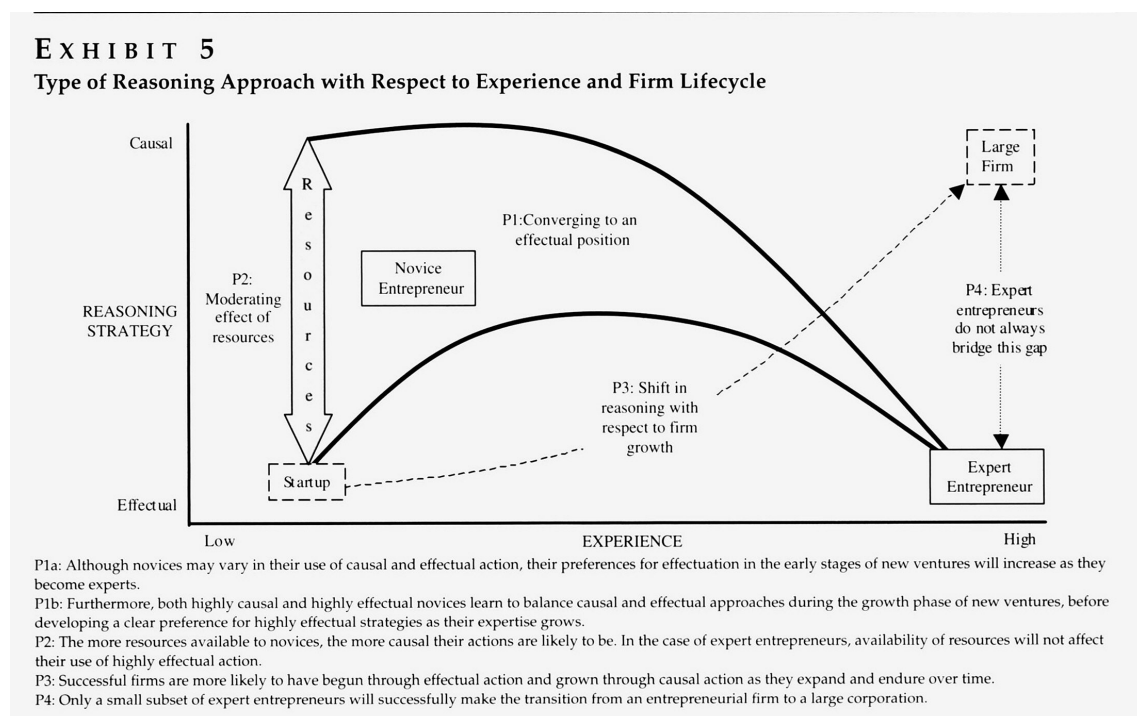
**EXHIBIT 4**  
**Parallels between Expert Entrepreneurs and Experts in General**

<b>Effectual Position (Exhibit 2)</b>	<b>Experts in General (cites are only examples, each topic has much related work)</b>	<b>Expert Entrepreneurs</b>	<b>Observation</b>
Creation	Experts have a sense of information relevance (Charness et al., [2001]) that they combine with information filtering (Leifer, [1991]) to reduce reliance on prediction.	Expert entrepreneurs notice predictive nature of key pieces of market research and reject the use of such predictive pieces as irrelevant.	Expert entrepreneurs reject the use of predictive information. Ex: Real Networks
Can	Experts organize information (Ericsson and Lehmann, [1996]) according to solutions, so that automatic pattern coding and matching (Chase and Simon, [1973]) returns feasible solutions that can be implemented.	Expert entrepreneurs model the new venture creation problem as a Marchian ([1982]) –Knightian ([1921]) –Weickian ([1979]) space, focusing on problems that they are able to solve.	Expert entrepreneurs prefer to do the things they can to control those parts of the environment they deem controllable. Ex: Ben & Jerry’s
Means	Through superior memory (Ericsson and Charness, [1994]) and advanced search (Simon and Simon, [1978]), experts’ greater knowledge base enables them to integrate and synthesize information (Boshuizen and Schmidt, [1992]), develop a physical intuition through modeling (Simon and Simon, [1978]), and benefit from forward versus backward reasoning (Chi et al., [1982]).	Expert entrepreneurs focus on available means of: who they are what they know whom they know And select solutions based on those means (as opposed to setting goals and then assembling the means necessary to accomplish those goals).	One of the means that separates expert entrepreneurs from novices is what they know.
Contingency	Experts use problem abstraction (Fiske et al., [1983]) and decision framing (Bettman and Sujar, [1987]) to build contingent (Glaser, [1996]) strategies, enabling quick recovery from mistakes (Shanteau, [1992]).	Expert entrepreneurs manage risk through creating or identifying contingent courses of action.	Contingency provides expert entrepreneurs with a wider range of viable strategy choices.
Affordable Loss	Not currently addressed by expert literature.	Expert entrepreneurs evaluate maximum downside risk as opposed to upside potential.	Future research opportunity.
Partnership	Not currently addressed by expert literature.	Expert entrepreneurs use pre-commitments from partners to shape the environment.	Future research opportunity.

**Figure 2.2:** Displays general parallels between experts and entrepreneurs (Read & Sarasvathy, 2005)

Read & Sarasvathy (2005) continues by arguing that the maturity of the individual and his/hers level of knowledge and experience plays a key role looking at which behavioural pattern is most likely to be observed (deeper study of entrepreneurial learning may be seen in section 2.3). Here, Read & Sarasvathy (2005) proposes that entrepreneurs with a high degree of expertise are more prone to be effectual, whereas novice entrepreneurs tend to be more causal. Nonetheless, a wider range of observed behavioural traits linked to the two models may yet be seen in the

group constituting novice entrepreneurs. This assumption is based on the existence of "talent", because even though expertise is a skill developed over time through experience and learning, talent may easily influence the behaviour of the individual. In extension to this individual behaviour, Read & Sarasvathy (2005) also consider the life cycle of the venture in parallel to the individuals maturity. It is argued that highly successful firms, incorporating higher levels of innovation are more likely to be started through the use of effectual behaviours. Size and/or growth, of the organization is also a key figure by which Read & Sarasvathy (2005) propose an argument, lasting firms with generally high levels of growth, just as the level of innovation tends to be directly linked to effectual behaviours. An illustration depicting the relation between the level of experience and the tendencies towards the two entrepreneurial models may be seen below (figure 2.3).



**Figure 2.3:** Illustrates the reasoning approach during a ventures lifecycle

Moving from purely theoretical research to more practical applications, Fischer (2012) has conducted research incorporating a number of new internet ventures from the time-span of 2000-2003. In his study, Fischer translate theoretically described behaviours and translates these into generally observed behaviours, which are then applied to his practical study. The observed behaviours are thus not specifically attained from the internet-ventures studied by Fischer, but are created pre-study, then applied by Fischer in his study of internet-ventures. Results of this may be seen in figure 2.4.

## 2. Literature Review

Definition	Behaviors
<p><b>Causation</b> processes take a particular effect as given and focus on selecting between means to create that effect</p>	<p>Causation (adapted from Chandler et al., 2011; Sarasvathy, 2001)</p> <ul style="list-style-type: none"> <li>• Identifies an opportunity before developing anything:               <ul style="list-style-type: none"> <li>◦ Gathers information about customer needs to identify a gap</li> <li>◦ Analyzes technological trends</li> </ul> </li> <li>• Identifies and assesses long-run opportunities in developing the firm:               <ul style="list-style-type: none"> <li>◦ Maps out (writes up and discusses) scenarios for the firm's future</li> <li>◦ Creates and compares financial projections for firm growth</li> </ul> </li> <li>• Calculates the returns of various opportunities:               <ul style="list-style-type: none"> <li>◦ Conducts net present value analysis or probability analysis to choose between various alternatives</li> </ul> </li> <li>• Develops a business plan:               <ul style="list-style-type: none"> <li>◦ Produces a written business plan document</li> <li>◦ Presents a business plan to external audience</li> </ul> </li> <li>• Organizes and implements control processes:               <ul style="list-style-type: none"> <li>◦ Establishes an internal reporting structure (management accounts and monthly reporting)</li> <li>◦ Designs and implements a clear organizational structure</li> </ul> </li> <li>• Gathers and reviews information about market size and growth:               <ul style="list-style-type: none"> <li>◦ Gathers data about the market</li> <li>◦ Interviews potential customers</li> </ul> </li> <li>• Gathers information about competitors and analyzes their offerings:               <ul style="list-style-type: none"> <li>◦ Gathers data about competitors</li> <li>◦ Analyzes data about competitors</li> <li>◦ Uses data about competitors as an input into key decisions</li> </ul> </li> <li>• Expresses a vision and/or goals for the venture:               <ul style="list-style-type: none"> <li>◦ Articulates a vision or goal</li> <li>◦ Holds strategic sessions in which goals are discussed</li> </ul> </li> <li>• Develops a project plan to develop the product and/or services:               <ul style="list-style-type: none"> <li>◦ Produces a project plan</li> <li>◦ Monitors product and market development in relation to a project plan</li> </ul> </li> <li>• Writes up a marketing plan for taking the products/services to market:               <ul style="list-style-type: none"> <li>◦ Produces a marketing plan</li> <li>◦ Implements and monitors marketing activities in accordance with a marketing plan</li> </ul> </li> </ul>
<p><b>Effectuation</b> is a process in which a set of means is taken as given, and the entrepreneur focuses on selecting between possible effects that can be created with that set of means.</p>	<p>Effectuation (adapted from Chandler et al., 2011; Sarasvathy, 2001)</p> <p>Items pertaining to the effectuation construct loaded onto four factors:</p> <p><b>Experimentation</b></p> <ul style="list-style-type: none"> <li>• Develops multiple variations of a product or service to arrive at a commercial offering:               <ul style="list-style-type: none"> <li>◦ Creation of multiple different product prototypes</li> <li>◦ Delivering different services in the process of finding an offering</li> </ul> </li> <li>• Experiments with different ways to sell and/or deliver a product or service:               <ul style="list-style-type: none"> <li>◦ Use of different distribution channels</li> <li>◦ Use of different revenue models</li> </ul> </li> <li>• Changes the product or service substantially as the venture develops</li> </ul> <p><b>Affordable loss</b></p> <ul style="list-style-type: none"> <li>• Commits only limited amounts of resources to the venture at a time:               <ul style="list-style-type: none"> <li>◦ Seeks out ways of doing things in inexpensive ways</li> </ul> </li> <li>• Limits the resources committed to the venture in to what could be lost:               <ul style="list-style-type: none"> <li>◦ Develops product or service using only personal resources</li> </ul> </li> </ul> <p><b>Flexibility</b></p> <ul style="list-style-type: none"> <li>• Responds to unplanned opportunities as they arise:               <ul style="list-style-type: none"> <li>◦ Rapidly changes the offering or revenue model of the venture as new opportunities arise</li> </ul> </li> <li>• Adapts what they are doing to the resources on hand:               <ul style="list-style-type: none"> <li>◦ Focuses on what is readily available when deciding on a course of action</li> </ul> </li> <li>• Avoids courses of action that restrict flexibility and adaptability:               <ul style="list-style-type: none"> <li>◦ Consciously rejects courses of action that will lock them in (relationships or investments)</li> </ul> </li> </ul> <p><b>Precommitments</b></p> <ul style="list-style-type: none"> <li>• Enters into agreements with customers, suppliers, and other organizations:               <ul style="list-style-type: none"> <li>◦ Negotiates with other parties prior to having a fully developed product or service</li> </ul> </li> </ul>

**Figure 2.4:** List of Causal and Effectual behaviors by Fischer (2012).

## 2.3 Entrepreneurial learning

Prior experience, within a work-environment or outside, is a crucial factor for understanding how and why differences between novice and serial entrepreneurs exist. Previous research provides insight into the matters concerning entrepreneurial learning and the effects these have upon the subconscious choice of entrepreneurial models. As an example of this, Politis (2008) suggests that serial entrepreneurs, whom have had the opportunity to gather a greater amount of knowledge and experience through prior start-up situations have an increased chance of developing a "mindset and a problem-solving ability, which in turn increase their ability to identify and exploit further opportunities." (Politis, 2008) Further, Politis (2008) suggests, with basis in prior research that "entrepreneurs who have been involved in starting up a new venture also seem to be more successful and effective in starting up and managing their second and third organizations. If this is true, what expertise and special knowledge do these entrepreneurs gain from doing their first start-up, and how do entrepreneurs develop their personal experiences into such expertise and special knowledge?" (Politis, 2005) Below are some identified reasons that explains some reasons that might be behind this development of personal experience.

Reasoning behind causal and effectual behaviours as described by Politis (2008) is that "Causal reasoning uses techniques of analysis and estimation to explore and exploit existing and latent markets. Effectual reasoning, on the other hand, calls for synthesis and imagination to create new markets that do not already exist." (Politis, 2005)

Considering this, in combination with previous research by Sarasvathy (2001) concerning the types of ventures wherein the two models are clearly distinguished, clues as to the learning outcomes are somewhat clarified. Causal behaviour is primarily observed by ventures exploiting preexisting knowledge with the aim of creating an offering with competitive advantages in an already existing market. Through knowledge acquired without previous experience from the market itself one may identify the needs and possible gaps available, and thus, successfully attempt a venture. This is possible as the "preexisting knowledge forms the source of competitive advantage, such as expertise in a new particular technology" (Sarasvathy, 2001). On the other hand, entrepreneurs with an inclination towards exploiting or largely even creating new markets have limited to none of this preexisting knowledge to use as a basis for competition. As described by Politis (2005) "entrepreneurs that rely on effectuation as the predominant logic are primarily involved in exploiting contingencies around them to explore new environments and create markets that do not yet exist." (Politis, 2005)

Considering the above mentioned differences in marketing strategies and their associated entrepreneurial models, a difference in the levels of learning from experiences is thereby made clear. Through building upon preexisting knowledge one will naturally gain the basic knowledge surrounding the process of starting up a venture, however, having done through the use of preexisting sources, elements of uncertainty are excluded. Surely uncertainties are involved in any type of start-up, and obsta-

cles will always be present, dealing with non-existent markets provide uncertainties beyond that of causal reasoning. This may be shown through the mindsets of serial entrepreneurs willingness to tackle such uncertainties, which through Politis (2008) research is clear. "They also show a higher preference for welcoming uncertain situations in order to make use of such events in their subsequent business venturing. These insights suggest that the preference for effectual decision-making, at least in part, may come from the experience of launching additional new ventures." (Politis, 2008).

One may conclude from this section as Politis (2008) suggests, that "The skills, preferences and attitudes of entrepreneurs are critical in the creation of a new venture, because they are the building blocks that shape individual and organizational behaviour." (Politis, 2008). From developing a venture that creates new markets, individuals are more prone to tackle obstacles and deal with uncertainties, thereby offering the possibility for greater rewards looking at experiences, this in comparison to a venture marked with a more causal behaviour model.

### 2.4 Justification of research question

Although entrepreneurship as a research field is relatively new (Shane & Venkataraman, 2000) a number of different approaches has been suggested. Sarasvathy (2001) suggests the approach of effectuation when starting an entrepreneurial venture, comparing it to the approach of causation. General trends within the area of research focuses largely on identifying and explaining the advantages and disadvantages of the different approaches. Literature published is largely based upon previous theoretical research, even though evidence of connections to practical applications and implementations may be observed, e.g. Fischer (2012). Differences as to the level of experience in connection to tended observed behaviours has been highlighted by Read & Sarasvathy (2005) as well as by Politis (2005;2008). However, levels of experience as well as the degree to which the two entrepreneurial models of effectuation and causation are applied are generally observed as a whole. As Read & Sarasvathy (2005) points out, a wider range of observed behavioural traits linked to the two models may be seen in novice entrepreneurs. This spectrum of research leaves a lot to be discussed, thus, through nuancing how the different models are applied, and at what stages of the individual entrepreneurs level of experience and expertise. This serves to clarify when and why applications of two models might be intertwined and the individuals attitude towards the proposed application in the present environment.

# 3

## Methods

This chapter will give an overview of the methods used for gathering and analyzing data, as well as explain the possible drawbacks of these.

### 3.1 Data Gathering

From the literature studies conducted, the chosen tool for evaluating the levels of effectuation and causation of an organization is the research by Fischer (2012). The herein primarily utilised section is displayed in figure 2.4. Data gathering was decided to be done through semi-structured, qualitative interviews. Semi-structured, qualitative interviews allows for greater nuance in results, where qualitative answers may be discussed, comparatively, questionnaires might have been used, thus gaining data appropriate for quantitative analysis but less so for qualitative. The next step in data gathering was to locate and interview organizations of interest, fitting the previously mentioned criteria of serial- and novice-entrepreneurs. Organizations where contacted for interest in participating in interviews, the demand being that these be held with the founder(s) so as to get the true answers and not have these described by a second voice through a spokesman with an aim to glorify the organization. No firm number of interviews was pre-selected, but a saturation in answers deemed to be the goal towards which to work. Thereby interviews where started, and founders where located through mass-mailing inquiries about interest as well as through personal contacts as well as the personal contacts of own networks. In order to later be able to analyze the interviews, a rough outline of questions where formulated from Fischer (2012) describing behavioural patterns (see figure 2.4). Fischer (2012) did not have the framework that this study proposes, thus, a division of the, by Fischer (2012) observed behavioural traits was done. Traits related to the different categories of the framework where clustered and fitted into the newly decided upon categories, explained in section 3.2. When reaching out to organizations, an expressed desire of having interviews face-to-face was made. By holding the interviews face-to-face rather than by telephone reduces the likelihood for company glorification through the personal need for honesty in the face of the interviewer. A substitute for face-to-face interviews was supplied in the form of a video-conferencing possibility rather than a telephone interview, partly as organizational founders may be out of country but also due to possible limitations on their time. So as to have a maximum fluency in the interviews these were recorded so as to be transcribed at a later point.

### 3.1.1 Organization & company selection

As previously explained, the research is done with consideration to first-time (Novice) and serial-entrepreneurs. How a company/organization is categorized is described in below sections.

For clarification, for below sections 3.1.1.1 and 3.1.1.2 when referring to financially beneficial endeavours, it is implied that the endeavour(s) have provided an economical gain to the founder(s).

#### 3.1.1.1 First-time entrepreneurs

Entrepreneurs are categorized as first-time/ "Novice" in this study if they conform to the following requirements:

- Organization has not been active for more than 4 years.
- Entrepreneur has no work-experience from previous financially beneficial entrepreneurial endeavours.
  - Singular acts of financial benefit does not conform as entrepreneurial, such as the sale of services for a single project.
- It is the first entrepreneurial venture to reach company status.
- Company must be financially mature.
  - The entrepreneurial endeavour must be financially backed by investors, self-sustaining and/or have an assured potential for financial benefit for the founder.

*Example* first-time entrepreneurial venture

Active for 5 years, and founded with no previous experience from starting a company but with a vision and self earned knowledge, now having reached a point of financial benefit to company founder and continuously grows.

#### 3.1.1.2 Serial-entrepreneurs

Serial-entrepreneurs are classified through conforming to the requirements:

- Entrepreneur must have experience from having founded previous organizations with company status.
- Previous engagements must include financially beneficial endeavours.
- Entrepreneur must have founded a company/organization within the last 10 years, so as to have up-to-date knowledge of starting up an organization under similar global economical conditions as the potential novice entrepreneurs.

*Example* serial entrepreneurial venture

With experience from previous start-ups, some outside international, among others towards the Norwegian off-shore oil industry. Now having been active for almost 3 years during which the initial vision has had to undergo some changes but with a positive result on finances which is predicted to increase.



## 3.2 Categorical Distribution

Rather than attempting to singularly draw general conclusions as to towards which entrepreneurial model serial- and first-time entrepreneurs might suggest tendencies, an expanded framework is proposed. This enabling the analysis from different perspectives of planning and executing activities within the start-up process. This will allow for general conclusions as to the tendencies of application of the entrepreneurial models (effectuation versus causation), as well as nuance the combination of the two in different sections. The chosen framework are strategic, tactical and operational, thus supplying a view of long-term versus short-term planning, as well as the execution of activities. Framework is explained in sections 3.2.1 to 3.2.3. Definition of the sub-divisions have been done through own augmentation with inspiration from Riskope (2014).

### 3.2.1 Strategic

Strategic refers to the organizations "strategy, or direction, and making decisions on allocating its resources to pursue this strategy." (Riskope, 2014). Strategic decisions are viewed as long term, encompassing the organizational vision and includes the whole business.

### 3.2.2 Tactical

Tactical decisions are viewed as short range (about 1-2 years or less) with focus on "current operations of various parts of the organization." (Riskope, 2014). Tactical planning typically serves to outline what goals individual parts of an organization must pursue for organizational success within the time-span. Individual areas may include marketing, personnel, and finance.

### 3.2.3 Operational

Operational goals are to link "strategic goals and objectives to tactical goals and objectives. It describes milestones, conditions for success and explains how, or what portion of, a strategic plan will be put into operation during a given operational period." (Riskope, 2014). Normally, operational decisions and planning evolve around "people, systems and processes through which a company operates." (Riskope, 2014).

## 3.3 Analysis Tools & Methods

In order to analyze the gathered data, the interviews were firstly transcribed using a software called *ExpressScribe* which allows for playbacks in speeds of users choosing as well as hot-keys for pause/play, minimizing time for catching up or having to write from memory.

As mentioned in section 3.1 the questionnaire in appendix A.1 is adapted from the behavioral patterns described by Fischer (2012). These questions formed the foundation on which the semi-structured qualitative interviews were held. The questions

are divided into three categories; strategical, tactical, and operational with the intent to later be able to categorize the result.

### 3.3.1 Qualitative

A qualitative analysis of transcribed data will be produced by mapping information in the transcriptions to the different behaviours within the framework of strategic, tactical and operational activities. So to each behaviour, if possible, a suiting quotation from the transcription will be linked. If there is no suitable quotation found, the behaviour will be analyzed from the knowledge about the company gathered from the interviews and by reading between the lines.

### 3.3.2 Quantitative

With all interviews transcribed an excel-sheet was set up, based on the sections in figure 2.4. Additionally a scoring method was implemented, a scale of 1 to 5, wherein a score of 1 translates to *Not agree* and a 5 being *Completely Agree*. In comparison to Fischer (2012), using only a three point scale, it is believed that for a higher degree of accuracy, giving a wider scope to the possible implementation, a five point scale gives a more holistic view.

Further, the opinion that effectuation and causation are contrasting extremes of entrepreneurial behaviour may, as depicted with the five point scale, not necessarily be accurate. This study chooses to view the two models as independent, thereby, by not being effectual, one does not necessarily have to be causal.

Scoring is based on the transcribes of the interviews, citations directly linked to every score. Scoring is made by agreement between the two authors, when differing scoring emerges, a discussion, backed by citations is done in order to agree on a single score. Both authors will additionally review all scores, so as not to include any differences of opinion. The scores were then summarized for each category (strategic, tactical and operational) as well as divided between effectuation/causation and first-time versus serial entrepreneur. Sums are calculated to form a quantitative representation of the analysis, complementing the qualitative.

## 3.4 Methodological Limitations

As with any method, limits to its accuracy exists, these are herein described and reasoning behind the choice of method argued for.

First and foremost, utilizing presently existing literature as a basis may result in an unconscious bias. Simply due to the fact that literature utilized may be biased in nature, but through reasoning and reviewing multiple sources the information on which greater parts of the process is based upon, sufficient non-bias may be supposed.

Data gathering being the most time consuming part of this study was done through semi-structured qualitative interviews, allowing for greater understanding and reduced risk for organizational bias. With consideration to constraints, foremost the time-constraints, pre-deciding on the number of interviews to be carried out is likely to result in either a number wherein certainty of the overall situation is lost due to a low number of participating interviewees. It may however also result in a reduced time for analyzing the gathered information, which in turn reduces the quality of analysis and thereby the credibility, if the number of participants is larger than necessary. Thereby, including as many interviews as possible until such a time as saturation of results are achieved assures that sufficient information is gathered. Face-to-face interviews, encompassing all performed interviews, ensures access to the desired recipient. To questionnaires, the founders of the organization are unlikely to be the respondent and even if so, these may attempt to glorify the organization. Carrying out surveys as opposed to the presented method would enable the possibility for greater numbers of participants due to the reduced workload, both carrying out the interviews as well as transcribing. Surveys do however come with limitations, some of these are presented below:

- Risk for inaccurate answers due to dishonesty (conscious or unconscious).
- Reduced respondent comfort in providing answers that may seem to portray these in unfavourable manners.
- Answers given without conscious reasons due to e.g. boredom or lack of time.
- Including close-ended questions reduces data validity.
- Risk of differing answer distribution, some organizations may miss (unconsciously) or simply choose not to answer certain questions (consciously), thus leaving an uneven distribution of data.
- Answer options may be differently interpreted by different respondents.

Selection of organizations and companies adhered to requirements set for classifying what in the study was to be categorized as a first-time or serial entrepreneur. Requirements set for first-time and serial entrepreneurs were based upon knowledge concerning the maturity cycle of companies.

An implemented structure composed of strategic, tactical and operational serves to show the distribution in different models of entrepreneurial behaviours, these may be chosen differently dependent on which lines of thought the study desires to study. Number of segments may be supplemented to increase diversity in the manner of tendencies towards examined entrepreneurial models. This might prove effective if additional entrepreneurial models are examined, for this study, the structure of strategic, tactical and operational was deemed suitable. This may in part be argued due to the time-limitations of the research, with a larger number of possible segments in which to categorize organizations, a larger number of participants is required, something that, with the presently used methods would require an extension of the time-limit. When analyzing data, several tools may be utilized, of which a scoring-model was implemented and scoring carried out objectively. Disadvantages include, but are not limited to; a risk for bias, scoring done based solely upon own knowledge and ability to interpret supplied answers. A thorough literature study to gain knowledge and presence during the execution of interviews serve

### 3. Methods

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to reduce the above mentioned risks. Additionally, including two interviewers provides an increased insight into possible underlying reasons for answers. Transcribing interviews have served to reduce strain on memory alone, thus reducing risk of human error in analyzing answers.

# 4

## Results

In this chapter the results from the study are presented.

Behaviours are divided into three different categories; Strategic, Tactical, and Operational. In the qualitative section the behaviour of each participant will be described. In the quantitative section the ratio between effectuation and causation for Serial and First-time entrepreneurs are then calculated for each category. The categories derive from the behaviours translated from the logic of effectuation and causation by Fischer (2012), as can be seen in Figure 2.4. The behaviours in each category are:

Strategical behaviours:

- Gathers information about customer needs to identify a gap
- Analyzes technological trends
- Maps out (writes up and discusses) scenarios for the firm's future
- Produces a written business plan document
- Presents a business plan to external audience
- Articulates a vision or goal
- Holds strategic sessions in which goals are discussed
- Rapidly changes the offering or revenue model of the venture as new opportunities arise
- Consciously rejects courses of action that will lock them in (relationships or investments)
- Negotiates with other parties prior to having a fully developed product or service
- Produces a project plan

Tactical behaviours:

- Gathers data about the market
- Interviews potential customers
- Gathers data about competitors
- Analyzes data about competitors
- Uses data about competitors as an input into key decisions
- Produces a marketing plan
- Implements and monitors marketing activities in accordance with a marketing plan
- Use of different distribution channels
- Use of different revenue models
- Changes the product or service substantially as the venture develops

Operational behaviours:

- Establishes an internal reporting structure (management accounts and monthly reporting)
- Designs and implements a clear organizational structure
- Creation of multiple different product prototypes
- Delivering different services in the process of finding an offering
- Seeks out ways of doing things in inexpensive ways
- Focuses on what is readily available when deciding on a course of action
- Develops product or service using only personal resources

### 4.1 Qualitative results

In this section the qualitative results will be presented from the perspective of each of the interviewees. Focus will be held on how each of the interviewees behaved in the three categories; strategic, tactical, and operational.

#### 4.1.1 Serial entrepreneurs

In this section the qualitative results of the serial entrepreneurs will be presented.

##### 4.1.1.1 Serial entrepreneur 1

Serial entrepreneur 1's (further on S1) academical background is a 4-year technical education on the upper secondary school level as well as several evening courses in marketing communication, idea history, and copyrighting to mention some. S1 has previous working experience from the military service, serving as security guard, salesman of office supplies, warehouse manager, designer and salesman of decorations (pins, medals, trophies etc.) and later on local manager at the same company. S1 has had entrepreneurs in the family. From a strategical perspective S1 gathered information about customer needs to identify possible gaps in the market and analyzed technological trends. On the other hand S1 did not produce a written business plan nor did S1 present any business plan to external audience. S1 did however articulate a vision or goal. From an strategical effectuation behaviour perspective S1 showed a more consistent behaviour. S1 would rapidly change the offer or revenue model of the venture as new opportunities arose. S1 would to some extent consciously reject courses of action that would lock them in (relationships or investments). S1 would negotiate with other parties prior to having a fully developed product or service, as can be exemplified by following quote:

"Yes, we had a number, 6 companies that we started with the first year where we made deals where they had to pay for us helping them with different things."

- Serial 1

Looking at the tactical causation behaviours S1 both gathered data about the market and interviewed potential customers, as can be exemplified with the following quote:

"We started from that we went around and talked from 2013 until the turn of the year 2014/2015 where X and I went around and talked to many actors and companies in the region."

- Serial 1

From a tactical effectuation perspective S1 also to some extent gathered and analyzed data about competitors but did not use this data as input to key decisions. Neither did S1 produce a marketing plan or implemented and monitored marketing activities according to the marketing plan. From an effectual perspective also showed a mixed behaviour. S1 did use different distribution channels but did not use different revenue models or change the product or service substantially as the venture developed. From an operational causation perspective S1 did not establish an internal reporting structure, and to some extent designed and implemented a clear organizational structure. From the operational effectuation perspective S1 did not create multiple different services in the process of finding an offering. However, S1 did seek out ways of doing things in inexpensive ways and developed the service using only personal resources. S1 did to some extent focus on what was readily available when deciding on course of action.

#### 4.1.1.2 Serial entrepreneur 2

Serial entrepreneur 2's (further on S2) academical background is upper secondary school education together with studying half a year abroad in the US with focus on accounting, psychology, and import/export. Previous working experience for S2 is import of cars and motorcycles at the age of 14, store manager at an enduro company, worked with computers and servers, and has had a consulting firm in Norway before setting up business in Sweden. S2 has entrepreneurs in the family. From a strategical causation perspective S2 shows, to a great extent, a causal behaviour. S2 gathers information about customer needs and to identify gap and to some extent analyzes technological trends, which is exemplified by following quote;

"I'm inspired a lot by what happen in the US, for example San Fransisco etc. and this start-up wave is very large there and msot of the trends come to Sweden, but much later. This model has blossomed in both Malmö and Stockholm, so we thought 'why not take it to Gothenburg.'

- Serial 2

S2 also, to a great extent, maps out scenarios for the firm's future as well as produces a written business plan document. However, S2 does not present the written business plan to external audience. S2 articulates a vision and goal as well as holds strategic sessions in which goals are discussed. This is exemplified by following quote:

"No, our main purpose is to build start-up part, so we want that to increase, not that the consultancy part shall decrease, but that the increase results in a 50/50 distribution."

- Serial 2

S2 also produces a project plan but keeps it flexible. From a strategical effectuation perspective S2 rapidly changes the offering or revenue model of the venture as new

opportunities arise. S2 also consciously rejects courses of action that will lock them in (relationships or investments), and negotiates with other parties prior to having a fully developed product or service, which is exemplified with the following quote:

"Yes, we try to work similar to LEAN, so when something shows up we start with sketches and drafts, but we never produce the product fully before seeing that it has customer benefit. As soon as we have interested customer with buying capacity we start the development 'for real'."

- Serial 2

From the tactical causation perspective S2 does, to a great extent gather data about competitors, but to a less extent analyzes data about competitors, and does not use the data as input to key decisions. Neither does S2 produce a marketing plan or implements and monitors marketing activities in accordance with a marketing plan. This is exemplified with the following quote:

" No, it's actually our Achilles heel. We are very good at selling to customer when we meet the face-to-face, but I can confess that we're not especially good at marketing"

- Serial 2

From a tactical effectuation perspective S2 does not use different distribution channels, but uses different revenue models. S2 also changes the product or service substantially as the venture develops. This is exemplified with the following quote:

"When we started we only did the start-up part, then we had a turn-over of 6-700k the first year. Then we started with the consultancy part and instead had a turn-over of 17M"

- Serial 2

From an operational causation perspective S2 to a less extent designs and implements a clear organizational structure. From an operational effectuation perspective S2 to some extent create a multiple different product prototypes. S2 does not deliver different services in the process of finding an offering. However, S2 does seek out ways of doing things in inexpensive ways and to a great extent develops the product and service using only personal resources as well as focuses what is readily available when deciding on course of action.

### 4.1.1.3 Serial entrepreneur 3

Serial entrepreneur 3's (further on S3) academical background consists of stand-alone courses, mostly in psychology and law. S3 has previous work experience in the travel business, running and founding a travel company. S3 works with starting up new companies as a sort of coach for other entrepreneurs. S3 has entrepreneurs in the family. From a strategical causation perspective S3 gathers and information about customers to identify a gap and analyzes technological trends. This is exemplified by following quote:

"There is a lot to gain from finding out exactly how it is. I use to tell the students that if we now have decided to do this that we think we are



unique with, it already exists. Find it, find the business plan, and start from there."

- Serial 3

S3 produces a written business plan document but does not present the business plan to an external audience. S3 articulates a vision or a goal, but does not hold strategic sessions in which goals are discussed. S3 does, to some extent, produce a project plan. From a strategical effectuation perspective S3 rapidly changes the offering or revenue model as new opportunities arise. S3 also consciously rejects courses of action that will lock them in (relationships or investments). This is exemplified by following quote:

"Don't get any investors or privies, but rather work together"

- Serial 3

S3 negotiates with other parties prior to having a fully developed product or service. From a tactical causation perspective S3 both gathers data about the market and interviews potential customers. S3 also gathers data about competitors, analyzes the data, and uses the data as input into key decisions. However, S3 produces a marketing plan to some extent, and does not implement and monitor marketing activities in accordance with a marketing plan. From a tactical effectuation perspective S3 uses different distribution channels but does not use different revenue models. S3 does change the product or service substantially as the venture develops, as is exemplified with following quote:

"Today you use to produce a plan that is very flexible and fast moving. If you don't take care of people it will come back to you very soon, or the effects behind it. So then it will be very short-lived. To do a good ground work but include in the process a very fast-changing business model. Therefore an opportunity to be able to change in a short notice."

- Serial 3

From an operational causation perspective S3 does not establish an internal reporting structure. S3 does to some extent design and implement a clear organizational structure. From an operational effectuation perspective S3 does not create multiple different product prototypes but does deliver different services in the process of finding an offering. This is exemplified with the following quote:

"Before I started the agency, 3 different groups made a business plan on how we should introduce it in Sweden. It wasn't so many new things, but this ability because of working with it the whole time and have found new advantages, you kind of read between the lines."

- Serial 3

S3 does seek out ways of doing things in inexpensive ways. S3 also develops the product or service using only personal resources. S3 focuses on what is readily available when deciding on a course.

### 4.1.1.4 Serial entrepreneur 4

Serial entrepreneur 4's (further on S4) academical background consists of a Msc degree in technology creation. S4's previous work experience consists of various summer jobs. S4 began the entrepreneurial track by importing pouring-stoppers for bottles. S4 does not have any entrepreneurs in the family, but there are entrepreneurs in the family of S4's partner, who inspired S4 to become an entrepreneur. From a strategical causation perspective S4 does gather information about customer needs to identify a gap and also analyzes technological trends. S4 does not map out scenarios for the firm's future. S4 does not produce a written business plan or presents a business plan for an external audience. This is exemplified with the following quote:

"There is nothing chronicled, I don't believe in business plans. Business plans serves a purpose if you're applying for money or to be active in a research purpose. But of course we have a business plan, in our heads."

- Serial 4

S4 articulates a goal or a vision and holds strategic sessions in which goals are discussed. S4 also produces a project plan. From a strategical effectuation perspective S4 rapidly changes the offering or revenue model as new opportunities arise. S4 does consciously rejects courses of action that will lock them in (relationships or investments). This is exemplified by the following quote:

"Such is our philosophy, it lets us control ourselves and our business without any influence from the outside."

- Serial 4

S4 negotiates with other parties prior to having a fully developed product or service. From a tactical causation perspective S4 does to some extent gathers data about the competitors. S4 does interview potential customers and puts emphasis on this. S4 to some extent gathers data about competitors, analyzes the data, and uses the data as input in key decisions. S4 does not produce a marketing plan and does not implement and monitor marketing activities in accordance with a marketing plan. From a tactical effectuation perspective S4 does not use different distribution channels but does use different revenue models. S4 also, to some extent, changes the product or service substantially as the venture develops. From an operational causation perspective S4 does not establish an internal reporting structure, but does design and implement a clear organizational structure. From an operational effectuation perspective S4 creates multiple different product prototypes and delivers different services in the process of finding an offering. S4 seeks out ways to do things in inexpensive ways. This is exemplified by the following quote:

"We take no, or very low, salaries, so we can invest more into developing the service and the company. This gives us a shorter runway."

- Serial 4

S4 develops the product or service using only personal resources and focuses on what is readily available when deciding on a course of action.

#### 4.1.1.5 Serial entrepreneur 5

Serial entrepreneur 5's (further on S5) academical background consists of a degree from a technical university. The current business is number 5 or 6 in order. From a strategical causation perspective S5 both gathers information about customer needs to identify a gap and analyzes technological trends. S5 also, to a great extent, produces a written business plan document and present the document to an external audience. S5 does to a less extent articulate a vision or a goal and does not hold strategic sessions in which goals are discussed. S5 does also produce a project plan. From a strategical effectuation perspective S5 rapidly changes the offering or revenue model of the venture as new opportunities arise. S5 does not consciously rejects courses of action that will lock them in (relationships or investments). However, S5 negotiates with other parties prior to having a fully developed product or service. This is exemplified by the following quote:

"Yes, we had the first paying customer from the point I started to work full-time. So pretty early on we had a paying customer that we interacted with. So they pretty much payed for the product development."

- Serial 5

From a tactical causation perspective S5, to some extent, gather data about the market but does not interview potential customers. S5 does not gather data about competitors, and therefore does not analyze any data about competitors or use the data as input into key decisions. This is exemplified by the following quote:

"So, the competition in this segment does not really exist, but it's in such case consultancy bureaus or IT departments that build similar solutions on separate occasions."

- Serial 5

S5 does not produce a marketing plan, as they are pure B2B business, and does therefore not implement and monitor marketing activities in accordance with a marketing plan. From a tactical effectuation perspective S5 does not use different distribution channels or different revenue models, but does change the product or service substantially as the venture develops. From an operational causation perspective S5 does, to some extent, establish an internal reporting structure, but does not design and implement a clear organizational structure. From an operational effectuation perspective S5 does create multiple product prototypes and delivers different services in the process of finding an offering. S5 does seek out ways of doing things in inexpensive ways. S5, to some extent, develops the product using only personal resources. S5 does focus on what is readily available when deciding on a course of action.

#### 4.1.2 First-time entrepreneurs

In this section the qualitative results of the first-time entrepreneurs will be presented.

### 4.1.2.1 First-time entrepreneur 1

First-time entrepreneur 1's (further on F1) academical background consists of a BSc in logistics and an ongoing education corporate entrepreneurship. F1 has previous work experience in working in a store and an internship working with projects and technical support. The current business has been active for approximately 9 months. From a strategical causation perspective F1 does not gather information about customers to identify a gap, but does, to a great extent analyze technological trends. This is exemplified by the following quote:

"We've looked on what happens in other parts of the world, like USA. There's a lot going on with shared economy and that you shouldn't consume more than necessary."

- First-time 1

F1 does not produce a written business plan document and consequently does not present a business plan to an external audience. F1 does articulate a vision or a goal and does hold sessions in which goals are discussed. F1 does, to some extent, produce a project plan. From a strategical effectuation perspective F1 does not rapidly change the offering or revenue model as new opportunities arise. F1 does consciously reject courses of action that will lock them in (relationships or investments). F1 negotiates with other parties prior to having a fully developed product or service. From a tactical causation perspective F1 gathers data about the market, and to less extent interview potential customers. F1 does gather data about competitors, and to some extent analyzes the data. However, F1 uses the data as input into key decisions to a less extent. F1 does not produce a marketing plan, and therefore does not implement and monitor marketing activities in accordance with a marketing plan. From a tactical effectuation perspective F1 does not use different distribution channels and revenue models. F1 does not change the product or service substantially as the venture develops. From an operational causation perspective F1 does not establish an internal reporting structure and does not design and implement a clear organizational structure. From an operational effectuation perspective F1 does not create multiple product prototypes and does not deliver different services in the process of finding an offering. F1 does seek out ways of doing things in inexpensive ways. This is exemplified with by the following quote:

"We've been very restrictive with the money. Because I've done the webpage myself and bought a theme on wordpress, then I've used free stuff. We've spent money on the office, and that's because we need an office."

- First-time 1

F1 does develop the product or service using only personal resources. F1 does, to some extent, focus on what is readily available when deciding on a course of action.

### 4.1.2.2 First-time entrepreneur 2

First-time entrepreneur 2's (further on F2) academical background consists of a BSc at technical university. F2's previous work experience consists of work at a bike shop,

work at different automotive companies. A lot of sale and a lot of industrial work. F2's current business is in the sporting goods section. From a strategical causation perspective F2 gathers information about customer needs to identify a gap and to some extent analyzes technological trends. F2 also produces a written business plan document and presents the business plan document to an external audience. F2 does articulate a vision or a goal. This is exemplified by the following quote:

"The vision had gone from solving a problem with smelly soccer shoes to solving a problem for everyone that have sneakers etc. Today the vision is that our product should be as equally of an accessory as the water-bottle is to the training, our product should be for the training shoes."

- First-time 2

F2 also holds strategic sessions in which goals are discussed and produces a project plan. From a strategical effectuation perspective F2 rapidly changes the offering or revenue model of the venture as new opportunities arise. F2 does, to some extent, consciously reject courses of action that will lock them in (relationships or investments) and does not negotiate with other parties prior to having a fully developed product or service. From a tactical causation perspective F2 gathers data about the market and interviews potential customers. F2 also gathers data about competitors, as is shown by the following quote:

"We also look at what competitors do and if there are any new challengers. Distributors are also good at warning about something they see or hear that might resemble a competitor."

- First-time 2

F2 analyzes the data about competitors and to some extent uses the data as input into key decisions. F2 does, to some extent, produce a marketing plan and implements and monitors marketing activities in accordance with a marketing plan. From a tactical effectuation perspective F2 does, to some extent, use different distribution channels. F2 does, to a less extent, use different revenue models. F2 does not change the product or service substantially as the venture develops. From an operational causation perspective F2 does, to a great extent, both establish and an internal reporting system and design and implement a clear organizational structure. From an operational effectuation perspective F2 does not create multiple different product prototypes and does not deliver different services in the process of finding an offering. F2 does seek out ways of doing thing in inexpensive ways. This is exemplified by the following quote:

"We started with our own capital, which I think has been good. A lot of people says that if you get capital from the start it is easy to burn. But now, if you put smaller amounts which doesn't generate anything you still get a little bit mad. You learn to pick your battles and investments, where to get most 'bang for buck'."

- First-time 2

F2 develops the product or service using only personal resources and to some extent focus on what is readily available when deciding on a course of action.

### 4.1.2.3 First-time entrepreneur 3

First-time entrepreneur 3's (further on F3) academical background consists of a BSc in mechanical engineering and an on-going MSc education in product development. F3 has previous work experience in working in a workshop and has done a lot of work with detail handling. Has entrepreneurs in the family. F3's current business is in the engineering consultancy sector. From a strategical causation perspective F3 does not gather information about customer needs to identify a gap and does not analyze technological trends. F3 does, to a less extent, map out scenarios for the firm's future. F3 does not produce a written business plan document and therefore does not present a business plan for external audience. F3 does articulate a vision or a goal. F3 does not hold strategic sessions in which goals are discussed and does not produce a project plan. From a strategical effectuation perspective F3 rapidly changes the offering or revenue model of the venture as new opportunities arise. F3 consciously rejects courses of action that will lock them in (relationships or investments) and to a less extent negotiates with other parties prior to having a fully developed product or service. From a tactical causation perspective F3 does, to a less extent, gather data about the market and does not interview potential customers. F3 does not gather data about competitors, and there does not analyze any data and does not use it as input into key decisions. F3 does not produce a marketing plan. This is exemplified by the following quote:

"No, I haven't seen the need for that, I'm using contacts instead."

- First-time 3

F3 therefore does not implement and monitor marketing activities in accordance with a marketing plan. From a tactical effectuation perspective F3 does not use different distribution channels but does use different revenue models. F3 does not change the product or service substantially as the venture develops. From an operational causation perspective F3 does not establish and internal reporting structure and does not implement and design a clear organizational structure. From an operational effectuation perspective F3 does not create multiple different product prototypes and does not deliver different services in the process of finding and offering. However, F3 does seek out ways of doing things in inexpensive ways. F3 also develops the product or service using only personal resources. F3 focuses on what is readily available when deciding on a course of action.

### 4.1.2.4 First-time entrepreneur 4

First-time entrepreneur 4's (further on F4) academical background consists of BSc in software engineering and a MSc in entrepreneurship. F4's previous work experience consists of being part of various school associations and management of tech events. F4's current business is in the marketing research business. From a strategical causation perspective F4 does not gather information about customer needs to identify a gap but does analyze technological trends. F4 does map out scenarios for the firm's future. F4 both produces a written business plan document and presents it to an external audience. F4 does, to some extent, articulate a vision or a goal

and to some extent holds strategic sessions in which goals are discussed. F4 does, to some extent produce a project plan. This is exemplified by the following quote:

"Both yes and no. We don't wish to cement anything."

- First-time 4

From a strategical effectuation perspective F4, to some extent, rapidly changes the offering or revenue model of the venture as new opportunities arise. F4 does not consciously reject courses of action that will lock them in (relationships or investments) and does not negotiate with other parties prior to having a fully developed product or service. From a tactical causation perspective F4 gather data about the market and interviews potential customers. F4 does also gather data about customers and analyzes the gathered data. This is exemplified by the following quote:

"We do look at competitors and analyze strengths and weaknesses."

- First-time 4

F4 also uses the gathered data about competitors as input to key decisions. F4 does not produce a marketing plan and therefore does not implement and monitor activities in accordance with a marketing plan. From a tactical effectuation perspective F4 does use different distribution channels but does not use different revenue models. F4 does, to some extent, change the product or service substantially as the venture develops. From an operational causation perspective F4 both establishes an internal reporting structure and implements and designs a clear organizational structure. From an operational effectuation perspective F4 creates multiple product prototypes, as can be exemplified by the following quote:

"From a hardware standpoint, which is how you must measure it, so the first version was built in March to April last year. It used Bluetooth and AAA-batteries. We rolled with that until the end of the summer."

- First-time 4

F4 does not deliver different services in the process of finding an offering. F5 does not seek ways of doing thing in inexpensive ways. This is exemplified by the following quote:

"That's why we've burnt money quicker than other start-ups which works without salaries. Approximately 80-85% of the costs in the company are our salaries."

- First-time 4

F4 does not develop the product using only personal resources. F4 does focus on what is readily available when deciding on a course of action.

## 4.2 Quantitative results

The foundation of the results is the interviews. The interviewees were scored with focus on their behaviours and scored on a scale from 1 to 5 in each behavioural category. A score of 1 in this instance being the equivalent of not agreeing with the stated question, whilst a 5 is the equivalent with completely agreeing. Whilst most

## 4. Results

questions were answered, those that did not have participants from among both groups, serial and first-time entrepreneurs, or where not answered by any, were left out. Thus, a possibly higher number of answered questions by any single entrepreneur does not merit a greater span of possible total score. Scores were then used to form the results of the study. The behaviours derive from the work done by Fischer (2012) and can be seen in figure 2.4

The causation scoring table, from which an average causation score for both groups has been calculated looks like:

Causation Behaviors	First-time 1	First-time 2	First-time 3	First-time 4	Serial 1	Serial 2	Serial 3	Serial 4	Serial 5
Identified an opportunity before developing anything									
Gathers information about customer needs to identify a gap	1	4	1	1	5	5	5	5	5
Analyzes technological trends	4	3	1	5	5	3	5	5	5
Identified and assessed long-run opportunities									
Maps out (writes up and discusses) scenarios for the firm's future	3	5	2	5	1	4	3	1	5
Develops a business plan									
Produces a written business plan document	1	5	1	5	1	5	5	1	4
Presents a business plan to external audience	1	5	1	5	1	1	1	1	4
Organizes and implements control processes									
Establishes an internal reporting structure (management accounts and monthly reporting)	1	4	1	5	1		1		3
Designs and implements a clear organizational structure	1	4	1	5	3	2	3	5	1
Gathers and reviews information about market size and growth									
Gathers data about the market	5	5	2	5	5	4	5	3	3
Interviews potential customers	2	5	1	5	5	3	5	5	
Gathers information about competitors and analyzes their offerings									
Gathers data about competitors	5	5	1	5	3	4	5	3	1
Analyzes data about competitors	3	5	1	5	3	2	5	3	1
Uses data about competitors as an input into key decisions	2	3	1	5	1	1	5	3	1
Expresses a vision and/or goals for the venture									
Articulates a vision or goal	5	5	5	3	5	5	5	5	2
Holds strategic sessions in which goals are discussed	5	4	1	3	1	5	1	5	1
Develops a project plan to develop the product and/or services									
Produces a project plan	3	5	1	3	1	4	3	5	5
Writes up a marketing plan for taking the products/services to market									
Produces a marketing plan	1	3	1	1	1	1	3	1	1
Implements and monitors marketing activities in accordance with a marketing plan	1	5	1	1	1	1	1	1	1

**Figure 4.1:** Scoring results for causal behaviours

The effectuation scoring table, from which an average effectuation score for both groups has been calculated looks like:

Effectuation behaviors	First-time 1	First-time 2	First-time 3	First-time 4	Serial 1	Serial 2	Serial 3	Serial 4	Serial 5
Develops multiple variations of a product or service to arrive at a commercial offering									
Creation of multiple different product prototypes	1	1	1	5	1	3	1	5	5
Delivering different services in the process of finding an offering	1	1	1	1	1	1	5	5	5
Experiments with different ways to sell and/or deliver a product or service									
Use of different distribution channels	1	3	1	5	5	1	5		1
Use of different revenue models	1	2	5	1	1	5	1	5	1
Changes the product or service substantially as the venture develops	1	1	1	3	1	5	5	3	5
Commits only limited amounts of resources to the venture at a time									
Seeks out ways of doing things in inexpensive ways	5	4	5	1	5	5	5	5	5
Limits the resources committed to the venture in to what could be lost									
Develops product or service using only personal resources	5	5	5	1	5	4	5	5	3
Responds to unplanned opportunities as they arise									
Rapidly changes the offering or revenue model of the venture as new opportunities arise	1	5	5	3	5	5	5	5	5
Adapts what they are doing to the resources on hand									
Focuses on what is readily available when deciding on a course of action	3	3	5	5	3	4	5	5	5
Avoids courses of action that restrict flexibility and adaptability									
Consciously rejects courses of action that will lock them in (relationships or investments)	5	3	5	1	3	5	5	5	1
Enters into agreements with customers, suppliers, and other organizations									
Negotiates with other parties prior to having a fully developed product or service	5	1	2	1	5	5	5	5	5

**Figure 4.2:** Scoring results for effectual behaviours

The comprehensive results in table 4.1 show that Serial entrepreneurs have an average effectual score of 42,8 while First-time entrepreneurs have an average effectual score 30,25. Further on, the comprehensive results show that Serial entrepreneurs have an average causal score of 49,8 while First-time entrepreneurs have an average causal score of 52,25.



**Table 4.1:** Comprehensive results

Group	Average Effectual Score	Average Causal Score
Serial Entrepreneurs	42,8	49,8
First-time Entrepreneurs	30,25	52,25

The results of table 4.2 show that, on average, Serial entrepreneurs scored 13,8 in strategical effectuation and 27,6 in strategical causation. First-time entrepreneurs on the other hand scored, on average, 9,25 in strategical effectuation and 25,5 in strategical causation.

**Table 4.2:** Strategical results

Group	Average Strategical Effectual Score	Average Strategical Causal Score
Serial Entrepreneurs	13,8	27,6
First-time Entrepreneurs	9,25	25,5

The results in table 4.3 show that serial entrepreneurs, on average, scored 8,8 in tactical effectuation and 18,2 in tactical causation. First-time entrepreneurs scored, on average, 6,25 in tactical effectuation and 21,25 in tactical causation.

**Table 4.3:** Tactical results

Group	Average Tactical Effectual Score	Average Tactical Causal Score
Serial Entrepreneurs	8,8	18,2
First-time Entrepreneurs	6,25	21,25

The results of table 4.4 show that serial entrepreneurs, on average, scored 20,2 in operational effectuation and 3,8 in operational causation. First-time entrepreneurs scored, on average, 14,75 in operational effectuation and 5,5 in operational causation.

**Table 4.4:** Operational results

Group	Average Operational Effectual Score	Average Operational Causal Score
Serial Entrepreneurs	20,2	3,8
First-time Entrepreneurs	14,75	5,5



# 5

## Discussion

In this chapter a discussion surrounding the results from the gathered data is conducted, possible reasons for the existence of differences and/or similarities are elaborated upon. For ease of understanding, the discussion has been divided into the structure researched, those of strategic, tactical and operational, as well as overall, or rather encompassing discussions. Additionally, some methodological considerations are presented, as to how the study could have alternatively been carried out as well as possibly improved.

### 5.1 Concerning Results

The study looked at the behaviours of both serial and first-time entrepreneurs with regards to if their behaviours were effectual and/or causal. Important to mention is that a behaviour, which can derive from the basic logical beliefs of the participants, can also derive from the environment they are active in. For example, if one entrepreneur does not gather data about the competitors it can simply be explained by the fact that there are no real competitors within their business segment. It is then hard to really say that they are not behaving causal in this sense. With this in mind we do believe that the overall picture of the participant's behaviour still holds as there are behaviours affected by the environment all across the participants.

### 5.2 Strategic

What the results show is that serial entrepreneurs to a greater extent than first-time entrepreneurs gathers information about customer needs to identify a gap. What we believe this depends on is that the first-time entrepreneurs aims to do something that they are interested in, and to actually start their own business. Serial entrepreneurs on the other hand have already had their own business or even businesses and for them the goal is to be profitable regardless of what kind of business they're in. Worth to mentioned is also that having your own business of course provides a platform on which new ideas and knowledge passes your way, making it easier to identify potential gaps. With only one exception, all of the participants, in one way or another, analyzed technological trends. Although this is adheres to causal behaviour in accordance with Sarasvathy (2001), we believe that it's easy to understand why a majority did it. With the technological development that is today, you simply must keep up. The one participant that didn't analyze technological trends worked as a technological consultant and got projects assigned to him

by his customers and therefore didn't feel the need to actively search the market for new trends. To produce a written business plan document did not specifically differ between the groups. This behaviour differed overall as some thought it was very important and made the foundation from which the company would prosper and others said that they of course had given thought to the usual parts of a business plan but found a written business plan to be sort of obsolete as they believed that you really could not cement anything, but rather be flexible. The common thought by those who saw value in actually making a business plan was also that you should keep it flexible, in order to be able to respond to a fast changing environment and future. We get the feeling that the old traditional business plans are not used as much, or in the same way anymore. The world is changing faster and faster, and it is not slowed down by increased globalization and digitalization, and the business plans of today reflects that. You need to be able to respond quickly to change. To present the business plan were more common among the first-time entrepreneurs than the serial entrepreneurs. However, the ones that had presented their business plan to an external audience did it towards potential investors. It was more common among first-time entrepreneurs to hold strategic sessions in which goals were discussed than among serial entrepreneurs, although a majority in both groups had goals. What this depends on is hard to say, maybe first-time entrepreneurs are more nervous about the process, and have another kind of investment in their business making success crucial for them. Maybe the more experienced serial entrepreneurs have learned to trust the progress and doesn't need to hold strategic sessions as often to discuss their goals but works towards it instead. Looking at how many of the participants that rapidly changed the offering or revenue model of the venture as new opportunities arose, we can see that it is a majority in both groups. There is of course the opportunity to make money and do more business if you respond to new opportunities. This, we believe, outweighs keeping your offering or revenue model intact. All participants had a flexible view of their business and a will do be able to respond quickly to changes and opportunities as well. A majority of both groups consciously rejected courses of action that will lock them in. The cases where this was not done is in cases where the entrepreneurs have taken in external funding. But the overall view were to do most things themselves, and try to be as free as possible to do whatever they would want to do. What could be seen from the entrepreneurs willingness to negotiate with other parties prior to having a fully developed product was that serial entrepreneurs were more prone to do so. Experience might have thought them that this is something worth doing. Potential up-sides with negotiating with parties prior to having a fully developed product is that you are aware of the potential of your idea, but also to get input on further development. First-time entrepreneurs might want to develop their idea exactly as they want it to be instead of having to change it to fit customers.

What can be seen from the study is that serial entrepreneurs tend to be more causal and more effectual than first-time entrepreneurs, from a strategical perspective. In general what we saw was that serial entrepreneurs wanted to be a bit more flexible than first-time entrepreneurs, and to be able to change direction when something new came up. Both groups displaying the traits of effectuators according to Chandler et al. (2011), "Flexibility allowing for the capturing of possible advantages of

environmental changes". But at the same time, serial entrepreneurs had clearer view of the market, the potential of their service or product and overall better research on market they would conduct business in. This diverging from Chandler et al. (2011), that state that the inverse of previously stated effectual trait is "the use and profiting of presently existing markets, capabilities and resources" linking the serial entrepreneurs to a great extent to traits of causation in parallel with their effectual behaviour.

### 5.3 Tactical

In accordance with the literature study, reflecting previous research, causation being based upon continuous research and analysis, whilst effectuation, rather than having focus on specific markets consider possible stakeholders to a great extent. What can be seen from the results in the qualitative analysis (see section 4.1) is somewhat in agreement to these statements. Most of the interviewed entrepreneurs confesses to gathering data, to greater or lesser extent, concerning the market as well as competitors. Data gathered is, with two exceptions, analyzed by the entrepreneurs, however, looking at the extent to which the data is utilized as an input into key decisions, a major difference exists between first-time and serial entrepreneurs. Serial entrepreneurs do to a lesser extent utilize the data analysis as input into key decisions in comparison to the observed response from first-time entrepreneurs. Agreeing with causal behaviour as explained by Sarasvathy (2001), that through the attainment of information, decisions regarding the fastest and most promising plan of action towards return may be taken. This may be attributed to the fact that serial entrepreneurs might sub-consciously utilize the data as input due to extensive experience, allowing for sub-conscious conclusions to be utilized without reflecting on the why's. This does however indicate a more effectual approach by serial entrepreneurs, since they do not attempt to predict future events in making key decisions. First-time entrepreneurs, more keen on utilizing the data as input into key decisions may be viewed to attempt to predict the future based upon the information, and thus making decisions based upon expected returns. Overall the participants did not confess to produce any marketing plans. Reasons for general trend may be attributed in part to the fact that most organizations included in this study are inclined towards business-to-business, thereby not needing to market themselves to as large an extent. Other reasons for this observed behaviour may be connected to a wish for flexibility, seizing chances for marketing when they arise, such as social media, and thereby not tying marketing to a set plan. As a result of the lack of marketing plans, just as few were seen to monitor acts of marketing, thus reducing the amount of overall data gathering. Flexibility in this sense may indicate effectual behaviour, but all that can be said is that there is a lack of causation.

A use of different revenue models and distribution channels were not, as one might expect to be interconnected. Rather, equal parts of serial as well as first-time entrepreneurs have at some point experimented with the use of different revenue models and distribution channels. Observed was however that in most cases, experimenta-

tion was done either the distribution channel or the revenue model, but not both. Many reasons for the experimentation exists, analysis of the market resulting in more profitable distribution channels and revenue models may have arisen, similarly, changes in the market may have made certain channels or models obsolete, and thus changes had to be made. A general inclination towards experimenting within either area suggests the appearance of traits belonging to effectuation (Chandler et al., 2011), but without more extensive knowledge as to the reasons behind all changes, these might just as well be seen to have been made out of necessity, not an expressed positive attitude towards experimentation. However, in accordance with Sarasvathy (2009), the effectuation-oriented entrepreneur sees "An ever changing, open world, where human action plays a crucial part". Thus, even without knowing the underlying reasons, it may be argued that the decision is made due to the awareness, from the entrepreneur, of this ever changing, open world.

Experimentation and adhering to stakeholder wishes may well be the underlying reasons for substantial changes in product. Something observed to a far greater extent within the group of serial entrepreneurs, in comparison to a single occurrence of a lesser extent in first-time entrepreneurs. Serial entrepreneurs thereby to a greater extent embody the behaviour of effectuation, substantially changing their product(s)/service(s) during the course of their venture. Reasons possibly being a closer relation to their stakeholders, a focus on their means and capabilities rather than on a set vision of the final product/service. First-time entrepreneurs in contrast did not do any, or to a lesser extent, changes to the initial product/service, thus indicating the focus on a desired effect rather than focusing on means, thereby displaying tendencies of causation. This was a surprising behaviour to observe due to the continuous stakeholder interaction described to be taking place among first-time entrepreneurs. Serial entrepreneurs in general had a great extent of interaction with stakeholders, something that in all probability might stand as a reason behind their substantial changes in the product. First-time entrepreneurs confessed to similarly maintain close interaction with stakeholders, but in effect not mirroring the serial entrepreneurs behaviour in the change in products. Serial entrepreneurs hence, once again displaying a greater extent of agreement with effectual characteristics in line with Sarasvathy (2009), proclaiming that "effectuators does not attempt to avoid the unknown, but endeavours to reach success". For first-time entrepreneurs, scenarios might be those of either cases where the initial product was already as good as any stakeholder could possibly want it, or, more expected, a decision based upon expected return and a limitation of means with which the product could be substantially changed to garner a superior product without greater loss. The later being that of an analyzing of prospects of expected return, a causal behaviour (Sarasvathy, 2001).

### 5.4 Operational

Internal reporting structures are to a greater extent implemented by first-time entrepreneurs, something that might spring from inexperience. From what has been continuously been described by serial entrepreneurs, internal reporting structures

may be effective for upper management in large scale organizations, however, in a start-up, not encompassing a larger group of individuals under a direct management, this is viewed only as a time waste and is thereby unnecessary for the continued development of the organization. In connection to this, a clear organizational structure is viewed very differently. On this topic serial entrepreneurs are far more inclined, underlying may be that the results of a clear organizational structure brings about a greater efficiency in work, brought about by clear networks of communications and what tasks may be related to which part of the organization. Creation of multiple product prototypes, as well as delivering different services in the process of finding an offering are both more generally found in serial entrepreneurs. Indicating both a closer interaction with stakeholders, through use of several product prototypes, as well as experimentation in form of different services provided in the process of finding an offer. Through these, response from stakeholders will enable the serial entrepreneurs to finalize the product/service closer to the demands of stakeholders and ensure that the needs and demands from the market are properly satisfied. Increased levels of stakeholder interaction as well as experimentation yet again prove serial entrepreneurs to display a higher probability of effectual tendencies.

All entrepreneurs, serial as well as first-time (with one exception), attempt to find less financially taxing ways of establishing their start-ups. Focusing resources on areas increasing chances of return. This is closely connected to pre-commitments and a ties to locking the entrepreneur in relationships. This will allow, as described by Chandler et al. (2011) for capturing possible advantages, as well as abandoning unfruitful endeavours. The single first-time entrepreneur without consideration for attempting to achieve tasks in inexpensive ways were tied to investors from the start, not risking own capital, thereby not viewing affordable loss similarly as the other organizations included. This closely relates to the fact that this organization was also the single one to neither focus on readily available resources, nor personal resources, thereby being the single most causal within this behaviour. Comparatively all other organizations to some extent worked with what was readily available as well as used personal resources in developing their products/services. In so doing, displaying tendencies of effectuation.

## 5.5 General

From the performed study, agreements with previous research may be stated, but also disagreements. In general it may be agreed that serial entrepreneurs display an increased number of traits belonging to effectuation, argued for by Read & Sarasvathy (2005) to be due to a possibly elevated maturity of the individual, as well as his/her level of knowledge. Read & Sarasvathy (2005) in accordance with Politis (2008) both argue for the role of entrepreneurial learning, that, with increased experience of entrepreneurial endeavours, the individual is more likely to apply an effectual behaviour towards the venture. This may be agreed upon to a certain extent, but as displayed under section 4.2, first-time entrepreneurs, with less practical knowledge, might still, if so through information or the existence of talent, display similarly high levels of effectuation. Further, this study is in agreement with, by Fischer (2012) stated, that "causal approaches are always employed along-

side effectual behaviours". However, it does not necessarily agree with Fischer's statement that effectual behaviours may be employed singularly, since no proof of singularly effectual approaches have been found. Theoretically this might, or might not be the case, but as for practical applications, this study has found no proof of effectuation being employed singularly. Additionally, from the results associated with strategic planning (long-term), serial entrepreneurs, claiming a higher degree of effectuation do also inherit a higher degree of causal behaviours (see table 4.2) and from the qualitative analysis we understand that market information is crucial for both entrepreneurial groups. Whilst Chandler et al. (2011), based upon Sarasvathy (2001), has outlined what might be seen as the four main principles differentiating causation and effectuation, and stating that "effectuation focuses on short term iterative experimentation so as to identify entrepreneurial venture opportunities". What is seen in the results may indicate that great informational basis is necessary in order to carry out this iterative experimentation, and thus rather than being an extreme opposite, partly causal behaviour is in this sense a pre-requisite for effectuation to take place. If so, the assumption that effectuation may be employed singularly is clearly incorrect.



# 6

## Conclusion and implications

### 6.1 Conclusion

The study aimed to provide nuanced view of the practical implementations of effectuation and causation, comparing serial entrepreneurs and first-time entrepreneurs. Effectual and causal behaviour were divided into a framework of three categories; strategical, tactical, and operational. The conclusions are that there are differences in behaviour between serial entrepreneurs and first-time entrepreneurs. There are also differences in behaviours between the two at sub-levels. Serial entrepreneurs are both more causal and more effectual than first-time entrepreneurs when at the strategical level. Serial entrepreneurs are less causal and more effectual than first-time entrepreneurs when observing tactical- and operational levels.

### 6.2 Directions for future research

With regards to the research question, the judgment of analyzing behaviours in accordance to two models is seen as the area in greatest need of continued research. Is it possible to view effectuation and causation simply as contrasting extremes, or as independent perspectives. If so, what other models might need be developed to fully comprehend the behaviours displayed by entrepreneurs? Additionally, to expand on this research, additional organizations/companies should be included as a basis for analysis.

A clear understanding that simply two models of entrepreneurship, looking at what might be seen as extremes, may need to be revised if deeper understanding as to the differences between first-time and serial entrepreneurs is to be obtained. Simply put, proven by the results, entrepreneurs normally do not simply follow one model, effectuation or causation, but utilize both, in combinations and/or separate, for different parts. Thus, additions to the number of models need be included and/or developed. Examples of additions to models have been encountered during the study, such as e.g. entrepreneurial bricolage, defined by Baker (Baker and Nelson, 2005) as "*making do by applying combinations of the resources at hand to new problems and opportunities.*", or the lean start-up methodology (Ries, 2011). With additional models into which certain entrepreneurs might be categorized, deeper knowledge will emerge.



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# A

# Appendix

## Topics of discussion

### Background:

- Do you have an academical background, if so what?
- What is your prior work experience?
- Do you have any entrepreneurs in your close relations (family/friends/partner)?
  - Has this had an impact on your career?
- How long have you been in business?
- Is this your first entrepreneurial venture?
  - If not, what prior ventures have you partaken in?

### Strategical:

- How did you go about launching your business?
  - What was the initial goal?
  - Did it change along the way?
- In the beginning of this venture, what role did market information play?
  - Did your product/service derive from a need/gap on the market?
  - Trend?
- What where your business plan from the beginning?
  - How did the development of the business plan go?
- How did the revenue model look like?
- Set from start? Tried several?
- When did first commitment occur?
  - Partnering up before a finished product was in place?
  - Customer orders before finished product was in place?
- Were you locked in somehow by agreement with a third party?

### Tactical:

- To what degree is the market both in terms of competition and customers assessed?
  - Analysed on a periodic basis?
- Is/was there a clear project plan?
- Is/was there a clear marketing plan?
- How did your distribution channels look like in the beginning?
  - One? Many? Tried several?
- Would you have done anything differently from the start with the knowledge/experience you know have?

### Operational:

- How was the product/service produced?
  - Involvement of others?
  - Numerous variants?
  - Did it change substantially along the way?
- What was your initial customer segment?
  - Did it change along the way?
  - What inspired the changes?
  - Broader? Diversified?

Figure A.1: Basis for semi-structured interviews