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創業初心對創業關鍵決策的影響：

基於實效理論視角的探索性研究

Exploring the Role of Original Aspiration in Entrepreneurial  
Journey through the Lens of Effectuation Theory

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## 中文摘要

新創事業處於高度不確定性、資源稀少、目標模糊的脈絡之下，創業家因此需要面臨極大的決策壓力與挑戰。對創業家而言，每個決策都攸關公司行進的軌跡與成敗的命運。創業研究學者以往投注許多心力在研究創業家的決策邏輯，其中又以 Sarasvathy (2001 及 2008) 所提出的實效理論(Effectuation Theory) 最受到研究關注，她主張在新創脈絡之下，創業家決策通常採取資源導向邏輯，而非傳統的目標導向邏輯。實效理論自提出後累積相當多的理論討論與實證研究，然而，在諸多針對實效理論的討論中，依然無法針對一個核心問題提出清楚的解釋，那就是，為何創業家會在相同的決策情境下，使用不同的決策邏輯？

本論文以探索性的研究方法，提出目前在實效理論研究中較少觸及的「創業初心」(Original Aspiration) 這個概念，及其對創業決策的影響，希望能夠為前述問題提出更多的洞見。我們定義「創業初心」為創業家開啟創業旅程的初衷。面對將要來臨的眾多挑戰，創業家懷抱堅定且強大的初心，方能義無反顧投入每段事業旅程。我們透過多重個案研究法，歷經三年時間，收集了八家臺灣新創公司的 142 個關鍵決策，並進一步訪談挖掘每個決策背後的邏輯。

我們發現創業初心與一般短期的動機與目標不同。初心是創業家眾多關鍵決策的判準原則，亦有持續不易異動的特性。我們進一步整理關鍵決策並進行跨個案比較，發現初心又分為商業導向 (commercial-centric) 及非商業導向 (non-commercial-centric)，並對於創業家使用實效邏輯進行決策的傾向 (tendency) 產生不同影響。我們的研究顯示，非商業導向的初心使得創業家有較高傾向採用實效邏輯；反之，商業導向初心則有較高傾向使用目標導向的決策邏輯 (causation)。此外，對於目標模糊性 (attitude toward goal ambiguity) 及合作夥伴的態度 (attitude toward partnership) 為解釋初心如何影響實效傾向的重要因子。最後，本論文根據上述發現建立一個概念性的架構，以完整描繪初心與實效決策傾向之間的關聯，並提出對創業研究與實效理論進一步發展的潛在貢獻。

**關鍵詞：**實效理論、創業決策、創業初心

# ABSTRACT

Under entrepreneurial context characterized by high uncertainty, ambiguity, scarce resource, and intense pressure, every critical decision significantly affects the destiny of new ventures. Entrepreneurship researchers have thus dedicated substantial efforts to exploring how and why entrepreneurs make decisions differently from both non-entrepreneurs and other entrepreneurs. Among entrepreneurial decision-making research, effectuation theory (Sarasvathy 2001, 2008) has provided a solid framework and emerged as a main research stream. Yet the extant literature still left a puzzle as to why different entrepreneurs use effectual logic differently, even under similar context.

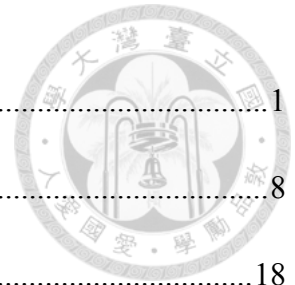
In this dissertation, we aim to tackle a critical yet less explored factor, **the original aspiration**, which affects entrepreneurs' decision-making logic through the lens of effectuation theory. We postulate that original aspiration, which refers to the entrepreneur's initial and most dominant aspiration in the venture-creation process, as an undiscovered key antecedent of effectuation tendency which might offer insights to solve the puzzle. Based on a qualitative and process research on 142 entrepreneurs' decision events from eight start-ups over a three-year time span, we discover the distinctive nature of original aspiration and its significant role on entrepreneurial decision-making over the entrepreneurial process. Subsequently, we classify original aspirations into non-commercial-centric and commercial-centric types, and offer evidences that different types of original aspiration lead to various effectuation tendency. Non-commercial-centric entrepreneurs have a high tendency to engage with effectuation logic, while commercial-centric entrepreneurs tend to use more causal logic. Furthermore, we uncover that attitude toward goal ambiguity and partnership as two manifestation factors underlying the relationship between original aspiration and effectuation tendency. We then develop a conceptual model depicting how

original aspiration shapes effectual tendency. These findings extend effectuation theory by advancing one of its most fundamental suppositions and showing how original aspirations influence the thinking behind the critical decisions along the entrepreneurial journey. Overall, our research endeavors to highlight a deeper understanding of the heterogeneity of entrepreneurs, hence broadens the knowledge of entrepreneurship research.

**Keywords:** Effectuation, Entrepreneurial Decision-Making, Original Aspiration

# TABLE OF CONTENTS

CHAPTER 1: Introduction .....	1
CHAPTER 2: Literature Review .....	8
CHAPTER 3: Research Method .....	18
CHAPTER 4: The Nature of Original Aspiration.....	27
CHAPTER 5: The Relationship between Original Aspiration and Effectuation Tendency ....	38
CHAPTER 6: Discussion and Conclusions .....	52
REFERENCES .....	84



# TABLES AND FIGURES

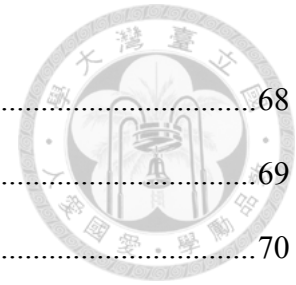
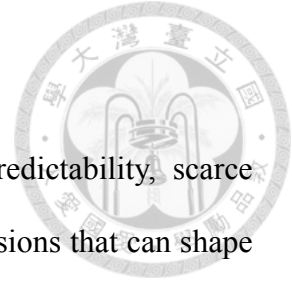


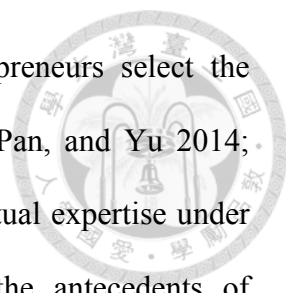
Table 1: Case information and data sources .....	68
Table 2: Decision coding schema .....	69
Table 3: Decision events coding of company S3 .....	70
Table 4: Illustrative examples of aspirations .....	72
Table 5: Supporting quotes for dominance of original aspirations .....	75
Table 6: Illustrative examples of static aspiration.....	78
Table 7: Cross-case comparison of key constructs .....	80
Table 8: Illustrative examples of attitude toward partnership as manifestations of effectual and causal logic .....	81
Figure 1: A conceptual model of effectuation tendency .....	82
Figure 2: A revised conceptual model of effectuation tendency .....	83

# CHAPTER 1: Introduction



The process of creating a new venture is characterized by unpredictability, scarce resources and time pressure. Entrepreneurs are confronted with decisions that can shape their venture's trajectory and destination (Davidsson and Honig 2003). Studying the nature of entrepreneurial decision-making is therefore essential for entrepreneurship research (Shepherd et al. 2014). Entrepreneurship scholars have been particularly interested in how entrepreneurs make decisions differently from non-entrepreneurs (Mitchell et al. 2002) and from other entrepreneurs (Shepherd and Patzelt 2017), and how the entrepreneurial context of high uncertainty, ambiguity, time pressure, and emotional intensity affects decision-making (Baron 2008). In this regard, Sarasvathy (2001) proposed that entrepreneurs adopt an effectuation approach as an alternative to a traditional planning-based causation approach when pursuing market opportunities. Using the effectuation approach, entrepreneurs formulate goals based on current available means and on their interactions with pre-committed stakeholders. They keep their goals flexible, take advantage of environmental contingencies, and attempt to control the future instead of predicting it. Since its introduction in 2001, effectuation has been theoretically elaborated and empirically tested with rigorous metrics (Perry et al. 2012; Read et al. 2016), and has become an emerging stream in the field of entrepreneurial decision-making research. In this dissertation, we aim to explore the undiscovered areas of entrepreneurial decision-making through the lens of effectuation theory.

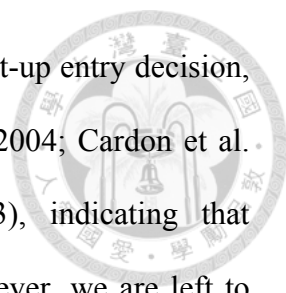
Recent research has indicated that although effectual logic is better suited for entrepreneurial contexts, entrepreneurs should use both effectual and causal logic to deal with different contextualities (Sarasvathy 2008; Berends et al. 2014; Reyman et al.



2015). The new venture is likely to perform better when entrepreneurs select the decision-making approach that fits the contingencies best (Sitoh, Pan, and Yu 2014; Smolka et al. 2016). In order to understand how to better use effectual expertise under different contingencies, researchers have begun to investigate the antecedents of effectuation and causation logic. Previous research on antecedents of effectuation divides into two streams: contextual factors and individual factors. Research studies focus on environmental or contextual factors have thus far concluded that uncertainty level, resources position, and stakeholder interaction influence effectuation behavior (Harms & Schiele 2012; Reyman et al. 2015; Laine and Galkina 2017). However, studies focus on the individual factors of effectuation have not conclusively demonstrated how the variation of entrepreneurs influence their effectual behavior. To brim such gap with further research is critical in building a comprehensive understanding of effectuation theory.

In this dissertation, we aim to fill this research gap by exploring *how do entrepreneurial original aspirations shape entrepreneurial decision-making behavior along the venture-creation process?* **Original aspiration** refers to the entrepreneur's initial and the most dominant aspiration he or she pursues for during entrepreneurial journey. Sarasvathy (2001) suggested entrepreneurs exploit all means on hand and create firm as an artifact to fulfill their generalized aspiration and consider aspirations an important basis of an entrepreneur's tendency to deploy effectuation or causation logic. Both entrepreneurship and psychology literature have also been suggesting that entrepreneurs create their ventures with various entrepreneurial aspirations, which leads to different decision-making behaviors along the entrepreneurial journey (Shane et al. 2003; Carsrud and Brannback 2011). Extant study has focused on how various





entrepreneurial aspirations influence a single decision, such as a start-up entry decision, an exit decision, or a human resource decision (Baum and Locke 2004; Cardon et al. 2005; DeTienne and Chandler 2010; Dunkelberg et al. 2013), indicating that entrepreneurial aspirations impact particular single decisions. However, we are left to wonder how entrepreneurial aspirations shape the overall use of effectuation during the venture-creation process. Does entrepreneurial aspiration influence only particular decisions, or does it play a more significant role, influencing multiple critical decisions over the whole journey? We thus postulate entrepreneurial aspiration as an undiscovered antecedent of effectuation, to provide insight to this unsolved puzzle. We see research opportunity to advance the knowledge of entrepreneurial decision-making research by studying how original aspiration shapes critical decisions in venture-creation process and thus aim to address this research opportunity by answering the following research questions.

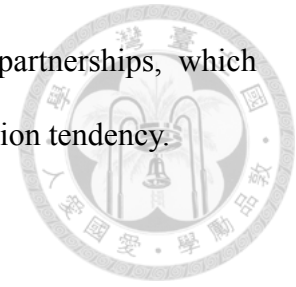
1. What is the role of original aspiration on critical decisions over the whole startup process?
2. How does original aspiration shape decision-making mechanism under differential entrepreneurship context?

To study these research questions, we chose an exploratory, multiple case research design, which has been recommended for investigating phenomena with limited understanding (Eisenhardt 1989; Yin 2009). We selected our samples from NTU Garage and AAMA, both were prestigious start-up community in Taiwan, and

employed three data sources in this study: (1) qualitative data from in-depth interviews; (2) archival data from company documents, press releases, and publications; and (3) on-site observations. Over a three-year span, we conducted 41 interviews and collected 142 critical decisions from eight ventures. Based on our data, we iteratively analyzed how entrepreneurial aspiration influenced entrepreneurs' decision-making behavior in two facets in order to provide a holistic view of the role of original aspiration on entrepreneurs' decision-making logic.

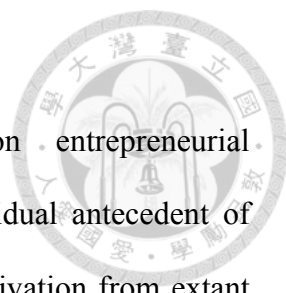
In the first facet, we focused on exploring the nature of original aspiration by mapping entrepreneurs' aspirations and rationale of each critical decision over the whole startup process. We found that entrepreneurs had multiple aspirations at beginning of startup journey, but one of these aspirations dominated others. Furthermore, this dominant aspiration rarely changed during the whole process, differing from current results of entrepreneurial goal and motivation. Given our discovery of the unique nature and significant role of entrepreneurs' aspirations, we then used the term *original aspiration* in this study to refer to an entrepreneur's initial and most dominant aspiration pursued in the entrepreneurial journey. Our study suggests that original aspiration not only influence particular single task decision as previous literature suggested, but impact multiple decisions over the whole venture-creation process. Furthermore, original aspiration serves as a guidance when entrepreneurs faced a dilemma, while also influence entrepreneurial persistency. In the second facet, we framed our research in a higher (aggregation) level and examined how commercial and non-commercial aspirations influenced entrepreneurs' effectuation tendency. We then found that different types of original aspirations influenced entrepreneurs' tendency of effectuation logic. Commercial and non-commercial original

aspirations led to different attitude toward goal ambiguity and partnerships, which manifested the relationship between original aspiration and effectuation tendency.



Our findings extend the knowledge of entrepreneurship by exploring how entrepreneurs' original aspirations influence their entrepreneurial decision-making. In doing so, we not only confirm prior studies on entrepreneurship (Carter et al. 2003; DeTienne et al. 2008) and effectuation (Read and Sarasvathy 2005; Dew et al. 2009; Jiang and Ruling 2019), but also offer several potential contributions.

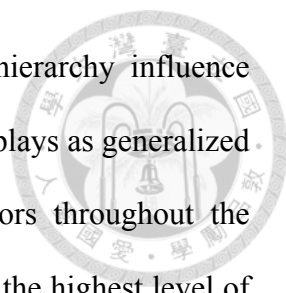
First, this dissertation extends effectuation theory by answering an unsolved puzzle of effectuation theory. A fundamental supposition of effectuation theory regarding individual factor mainly emphasizes on entrepreneurial experience. Although current research has supported this supposition but failed to offer conclusive answer why novice entrepreneurs have different effectual behaviors. Our finding provides an insight to this puzzle by showing that novice entrepreneurs have different effectuation tendency, influenced by their original aspirations, and thus entrepreneurs use effectual logic differently even when they face the same decision context. Our study complements the fundamental argument of effectuation theory by essentially pointing out that entrepreneurs learn and use effectual logic based on different starting points, which provides a holistic view of effectuation behavior. Moreover, our study also suggests that future effectuation research cannot overlook the heterogeneity of entrepreneurs. It is consistent with Sarasvathy's suggestion that the heterogeneity of entrepreneurs must be viewed with the progressive changes of time and context if we are to fully understand effectual behaviors (Sarasvathy 2003; Sarasvathy and Venkataraman 2011).



Second, our findings also contribute to research on entrepreneurial decision-making by identifying original aspiration as a key individual antecedent of decision-making logic, differing from entrepreneurial goal and motivation from extant results. We showed that original aspiration has dominant and long-lasting features and serves as guidance when entrepreneurs face dilemma and as benchmark of their exit decision. These findings suggest original aspiration plays a different role on entrepreneurs' decision-making logic other than short-term motivation and goal and future research needs to study original aspiration separately based on its distinctive nature and impacts.

Furthermore, recent entrepreneurial decision-making scholars encourage study to investigate how non-commercial factors (e.g., social factors and autonomy factors) influence entrepreneurial decision-making. Our finding showed that entrepreneurs pursuing financial returns emphasize competitor analyses and follow traditional goal-driven principles. In contrast, entrepreneurs who desire to make a social impact or create more autonomy use more flexible approaches to making decisions. These findings provide answers to recent calls to gain a better understanding of the role of noneconomic consideration in entrepreneurial decision-making and how entrepreneurs trade off when they face economic and noneconomic dilemmas (Shepherd and Patzelt 2017).

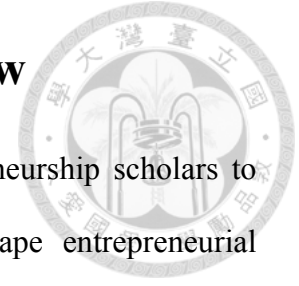
Finally, this study also contributes to research involving entrepreneurial aspiration and by positing original aspiration as in top level of goal hierarchy. A promising entrepreneurship research topic suggested by entrepreneurship scholars (Carsrud et al.



2017) is how motivations and goals at different levels of goal hierarchy influence entrepreneurs' behaviors. Our findings show that original aspiration plays as generalized goal that exerts major influence on key decision-making behaviors throughout the entrepreneurial journey. We suggest that original aspiration posits at the highest level of the goal hierarchy and plays a different role from lower-level subordinate goals or short-term motivations. This finding advances our understanding of entrepreneurial aspiration and goal by clarifying goal hierarchy, while also shedding light on a path to a fruitful research area. Overall, our research highlights that a deeper understanding of the heterogeneity of entrepreneurs could broaden the knowledge boundary of entrepreneurship research.

The remainder of this dissertation proposal is organized as follows. Chapter 2 reviews relevant literature and provides background for formulating research inquiries and inductively developing our findings. We propose a conceptual model linking key constructs as a guidance of our research exploration. Chapter 3 introduces research method in details to elaborate how we ensure rigorous data collection and analysis of our multiple cases study. Then we display our findings with a series of propositions in Chapter 4 and Chapter 5 respectively to provide a holistic view. Chapter 4 discusses on the nature and the role of original aspiration played in entrepreneur's decision-making behavior while Chapter 5 focuses on how original aspiration influence entrepreneurs' effectuation tendency. We conclude our findings by providing a conceptual model depicting underlying mechanism between original aspiration and effectual behaviors. Finally, Chapter 6 presents our theoretical and practical contributions, limitation and future research suggestions, followed by our conclusion.

## CHAPTER 2: Literature Review

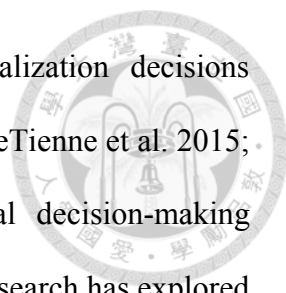


This study aims to find exploratory insights that permit entrepreneurship scholars to better understand the manner in which original aspirations shape entrepreneurial decision-making, through the lens of effectuation theory. We initially offer a brief overview of entrepreneurial decision-making. Next, we introduce fundamental framework and current findings of effectuation. We then discuss the extant research regarding aspirations, motivations, and display relevant research studying the relation between aspiration and effectuation. At the end of this chapter we point out theoretical gap from current entrepreneurial decision-making and effectuation literature, upon which the present thesis research will be based.

### 2.1 Decision-making under entrepreneurship context

Entrepreneurship scholars have dedicated substantial time to exploring how and why entrepreneurs think differently from both non-entrepreneurs (Mitchell et al. 2002) and other entrepreneurs (Shepherd and Patzelt 2017). Studies have also emphasized that the entrepreneurial context is characterized by high uncertainty, ambiguity, time pressure, emotional intensity, and high risk, which can have substantial impact on how entrepreneurs evaluate specific situations and make decisions (Baron 2008). Entrepreneurial decision-making is important because the strategic decisions firm leaders make have a major impact on the firm's future direction and performance (Davidsson and Honig 2003).

The theoretical progress in understanding how entrepreneurs make different types of decisions in different contexts, including, for example, the decision to become an entrepreneur (Douglas & Shepherd 2000), opportunity exploitation decisions (Choi &



Shepherd 2004; Shepherd, Patzelt & Baron 2013), internationalization decisions (Williams & Grégoire 2014), and exit decisions for new ventures (DeTienne et al. 2015; Wennberg, et al. 2010). We categorized current entrepreneurial decision-making research into three streams. First, entrepreneurial decision-making research has explored how individual characteristics, such as entrepreneurial experience (Baron & Ensley 2006), failure experience (Behrens & Patzelt 2017), entrepreneurial self-efficacy (Shepherd et al. 2013) and passion (Stroe et al. 2018) impact entrepreneurs' decision policies. Second, research on decision-making in entrepreneurship focused on decision cues based on established theoretical concepts, such as characteristics of venture resources or types of environmental uncertainty (Mitchell and Shepherd 2010) and known players of the entrepreneurial process. Finally, a considerable part of decision-making research in entrepreneurship has been focused on a unique decision-making logic under entrepreneurial context, such as bricolage and effectuation (Sarasvathy 2001, 2008; Baker and Nelson 2005). Since its introduction, effectuation has been theoretically explained and empirically tested with rigorous metrics (Perry et al. 2012; Read et al. 2016). The emerging stream of effectuation research offers persistent findings that entrepreneurs create firms as artifacts to fulfill their generalized aspirations by exploiting all means on hand and dynamically adjusting their goals. Scholars of entrepreneurial decision-making has argued the existing literature is far from fully capturing the complexity and dynamics of entrepreneurial decisions (Shepherd and Patzelt 2017) and invite recent research to focus on some emerging theory to advance the field. In this dissertation, we use effectuation as primary proxy to examine entrepreneurs' decision-making tendency. In the follow paragraphs, we briefly introduce basic concepts and current findings of effectuation theory.

## 2.2 Effectuation

Entrepreneurship researchers have argued that entrepreneurs make decisions with a more flexible and adaptive approach rather than using planning-based logic. Sarasvathy (2001) introduces effectuation as a non-predictive logic by which entrepreneurs make critical decisions throughout the venture creation processes. The core of effectuation theory is that the nature of the entrepreneurial context consists of three key elements: knightian uncertainty, goal ambiguity, and isotropy (Sarasvathy 2008, p.70). Entrepreneurs cannot precisely predict the future and set clear strategic goals under this dynamic context. Thus, during the process of venture creation, entrepreneurs define their goals based on interactions between means, market and stakeholders (Sarasvathy and Dew 2005; Read et al. 2009). An effectual decision-making process can be regarded as an iterative process involving searching, experimenting, and learning what fits better, given the entrepreneurial context of uncertainty, goal ambiguity and scarce resources. Sarasvathy (2001, 2008) develops five principles to elaborate on the differences between effectuation and causation.

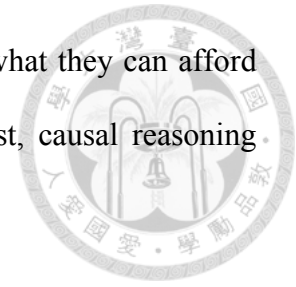
*Bird-in-hand* (starting with the means in hand vs. pre-set goals)

When effectual entrepreneurs set out to build a new venture, they start with their means: who I am, what I know, and whom I know. Then, the entrepreneurs imagine possibilities that originate from their means. In contrast, causal logic works inversely by assembling the means to accomplish pre-set goals.

*Affordable loss* (focusing on the downside risk vs. the expected return)



Effectual entrepreneurs limit risk and choose goals by evaluating what they can afford to lose, instead of seeking all-or-nothing opportunities. In contrast, causal reasoning first targets a return, then works to minimize the associated risks.



*Lemonade* (leveraging contingencies vs. avoiding surprises)

Effectual entrepreneurs embrace the surprise factor. They interpret contingencies and surprises as potential opportunities to create new markets or to outperform their competitors. Causal reasoning works to minimize the probability of unexpected outcomes.

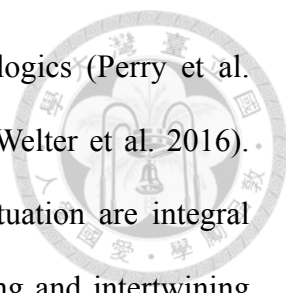
*Patchwork quilt* (forming partnerships vs. competitive analysis)

Effectual entrepreneurs build partnerships with self-selecting stakeholders. They reduce uncertainty and co-create the new market by obtaining pre-commitments from key partners and interested participants early in the venture. Causal reasoning presumes that competitors are rivals with whom to compete to win the market.

*Pilot-in-the-plane* (controlling vs. predicting)

By focusing on activities within their control, effectual entrepreneurs know their actions will result in the desired outcomes. An effectual worldview is rooted in the belief that the future is neither found nor predicted, but rather made. Causal reasoning accepts that established market forces will cause the future to unfold.

While effectuation and causation have been explained and used as two opposite constructs at early phase, recent studies have started to show effectuation and causation



co-existed during entrepreneurial process as two complementary logics (Perry et al. 2012; Sitoh et al. 2014; Reyman et al. 2015; Smolka et al. 2016; Welter et al. 2016). Sarasvathy (2001, p.245) indicates that “both causation and effectuation are integral parts of human reasoning and can occur simultaneously, overlapping and intertwining over different contexts of decisions and actions...Effectuation processes are not posited here as better or more efficient than causation processes in creating artifacts such as firms.” Neither causation nor effectuation is considered a superior approach in the process of creating a new venture. Sitoh et al. (2014) argues that effectual and causal logic can coexist and that they are configured in specific ways during different phases of the product creation process. Smolka et al. (2016) suggests that effectuation and causation can be seen as complementary ways of thinking, helping entrepreneurs to cope with different contingencies. A new venture is likely to be profitable when the entrepreneur selects the decision-making approach that fits the context best. In order to understand how to better use or learn effectual expertise under different contingencies, recent studies have started to examine the antecedents of effectual and causal logics.

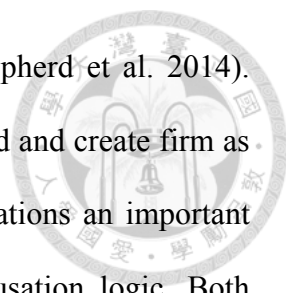
### **2.3 Antecedents of effectuation and causation**

Previous research on antecedents of effectuation divides into two streams: contextual factors and individual factors. In contextual factors stream, scholars have been studying factors around uncertainty, resources position, industry, and stakeholder. Laine and Galkina (2017) shows that changing perception of institutional uncertainty affect the intensity of effectuation and causation logic. Reymen et al. (2015) argue that entrepreneurs switch between effectuation and causation depending on contextual factors, such as the level of environmental uncertainty, resource position, and stakeholder interaction. Research studies focus on environmental or contextual factors

have thus far concluded that uncertainty level, resources position, and stakeholder interaction influence effectuation behavior. (Harms and Schiele 2012; Sitoh, et al. 2014; Reyman et al. 2015; Laine and Galkina 2017; Villani et al. 2017).



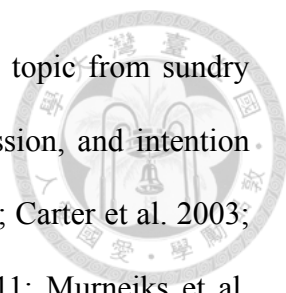
On the other hand, studies focusing on the individual antecedent of effectuation have made progress yet have not conclusively illustrated how variety of entrepreneurs influence their effectual behavior. Effectuation theory originally suggests that experienced entrepreneurs with greater entrepreneurial expertise in venture creation tend to use more non-predictive approach (Dew et al. 2009; Read et al. 2009). The initial assumption of individual antecedent of effectuation based on Sarasvathy's findings has been entrepreneurial expertise. Nonetheless, expertise has only been studied with little attention (Johansson and McKelvie 2011) and understanding. We follow Sarasvathy's (2008) postulation that effectuation can be part of one's personal nature, which means that some people might naturally prefer or be more proficient with effectuation logic (Sarasvathy 2008, p.131). Furthermore, entrepreneurs use or learn effectual logic based on their nature and cognitive ability while heterogeneity of entrepreneurs must be viewed to fully understand effectual behaviors (Sarasvathy and Venkataraman 2011). The recent effectuation literature has also started to focus on personal factors of effectuation and considered effectual behavior by novice entrepreneurs to further discover other individual antecedents. Researchers studied career management practice, identity, passion, and self-efficacy partially explained effectual behavior, yet none of these factors alone would necessarily explain any effectual tendency (Engel et al. 2014, 2017; Alsos et al. 2016; Stroe et al. 2018). Among these recent and emerging studies exploring individual factors which shape effectuation behaviors, entrepreneurs' aspirations and motivations have been the subject of inquiry



in a growing set of entrepreneurial decision-making research (Shepherd et al. 2014). Sarasvathy (2001) suggested entrepreneurs exploit all means on hand and create firm as an artifact to fulfill their generalized aspiration and consider aspirations an important basis of an entrepreneur's tendency to deploy effectuation or causation logic. Both entrepreneurship and psychology literature (Shane & Locke 2003; Carsrud & Brannback 2011) have also been suggesting various aspirations and motivations lead to different actions and behaviors, especially decision-making behavior. Yet, to the best of our knowledge, we do not see too much discussion between the relationship between aspiration and effectuation behavior. This dissertation thus aims to explore this research topic. Thus, we show a particular interest in exploring how the degree of emphasis on effectual or causal logic along venture-creation process would be shaped by entrepreneurs' aspirations during the initiation of the new ventures.

## **2.4 Entrepreneurial aspiration and effectual behavior**

In this dissertation, we define entrepreneurial aspiration as the vision that drives people to undertake entrepreneurial action from the start while continuously pursuing it within the entrepreneurial process. Creating a new venture is known to be a tough task. Entrepreneurs must commit substantial time and resources to launch a new venture and overcome all the unknown challenges to survive. People require strong aspirations to undertake entrepreneurial action, and such aspirations play a significant role in the process. It is important to understand the role of entrepreneurial aspiration when trying to understand entrepreneurial outcomes (Shane et al. 2003). The extant entrepreneurship and psychology literature (Shane et al. 2003; Carsrud and Brannback 2011) has been suggesting that the “how and why” entrepreneurs start up their ventures end up influencing their actions and behaviors later on, especially decision-making behavior



(Shepherd et al. 2014). We have considered research studying this topic from sundry perspectives, including aspirations, reasons, motivations, goals, passion, and intention (Bagozzi and Dohlakia 199; Birley and Westhead 1994; Baron 1998; Carter et al. 2003; Cardon et al. 2005; Zhao et al. 2010; Carsrud and Brannback 2011; Murneiks et al. 2014), and that each element has provided a distinctive contribution to the current base of knowledge. For example, researchers have shown that extrinsic motivation explains variations in entrepreneurs' decisions to persist with poorly performing firms (DeTienne et al. 2008) and their exit strategy (DeTienne et al. 2010; Wennberg et al. 2010). Entrepreneurial passion research has postulated that fervor is associated with intention and career choice, thus providing important impulses in the entrepreneurial process (Baum and Locke 2004; Cardon et al. 2005). Dunkelberg et al. (2013) studies how entrepreneurs' initial goals affect resource allocation decisions and discovers that owners with nonpecuniary goals put in more of their own—and their family's—hours while owners with monetary goals tend to hire more outside employees. In sum, current effectual research offers certain evidence to the relationship between entrepreneurial aspiration and certain single decision.

We focus on aspiration in this dissertation to echo recent calls from Sarasvathy (2008) and entrepreneurship scholars (Read et al. 2016; Shepherd and Patzelt 2017) to explore the role of generalized aspiration. We postulate that the visionary aspiration driving people to undertake entrepreneurial action at beginning becomes the aspiration they continuously pursue in entrepreneurial process. The nature of this visionary aspiration differs from goals, reasons, purposes, and motivations and plays a more significant role than current research suggested.

## 2.5 Literature gap and research opportunities

Whereas the extant literature provides certain insight and indicates that entrepreneurial aspiration or reason influences effectual behavior, we notice a potential research opportunity to advance the knowledge of the relationship between entrepreneurial aspiration and entrepreneurial decision-making. While current effectuation research conducts the study on single decision in static setting, recent effectuation dialogue has started encouraging future research to study effectuation in process perspective or in aggregation level (Garud and Gehman 2016; Gupta et al. 2016; Read et al. 2016). For example, does entrepreneurs have any pre-dominant preference to influence their single decision (Jiang and Ruling 2019)? Meanwhile, Sarasvathy (2008) and entrepreneurship scholars such as Shepherd and Patzelt (2017) suggest that entrepreneurs' generalized aspiration could play an important role to influence entrepreneurs' behavior over the whole process. Taken together, we thus postulate that each entrepreneur's aspiration might lead to different effectuation tendency, and different effectuation tendency might influence effectual behavior over the whole venture-creation process. We then propose an initial conceptual model as shown in Figure 1, to guide our research exploration and theoretical development.

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Insert Figure 1 about here  
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Based on the proposed model, we further articulate our two research questions. While original aspiration is a newly introduced construct, we need to gain a

fundamental understandings of original aspiration before we study the mechanism underneath. Thus, our first research question is:



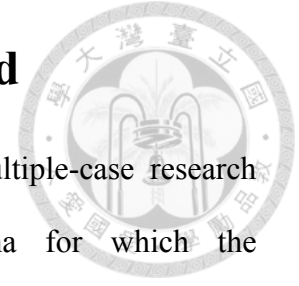
1. What is the role of original aspiration on critical decisions over the whole startup process?

After we unravel the nature of original aspiration, we then revise our typologies of original aspirations and level of analysis based on our findings in order to further explore the relationship between each construct and answer our key research question:

2. How does original aspiration shape decision-making mechanism under differential entrepreneurship context?

In the next chapter, we present how we design our research method to study these two research questions in details.

## CHAPTER 3: Research Method



To address the research questions, we chose an exploratory, multiple-case research design, which is recommended for investigating phenomena for which the understanding is limited (Eisenhardt 1989; Yin 2009). Each case serves to confirm or refute inferences drawn in the others. Typically, this process yields more a robust, generalizable theory than does a single-case design (Eisenhardt and Graebner 2007). In this dissertation, we collected critical decisions from eight Taiwanese novel start-ups through semi-structured interviews, archival data, and on-site observations. We first analyzed the rationale behind each critical decision to explore the role of original aspiration on entrepreneurial decision-making, presented in Chapter 4. Then, we aggregated critical decisions and employed inductive approach to develop the mechanism explaining how and why original aspiration shaped effectuation tendency, presented in Chapter 5. Based on iterated comparisons between theoretical reviews and case evidence, we then developed several propositions and concluded in a refined conceptual model. We will explain details of our research design in the following sections.

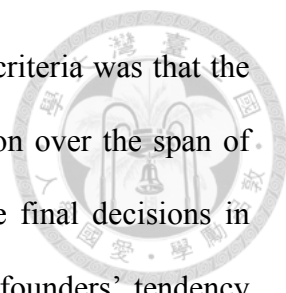
### 3.1 Sampling Procedures

We selected our samples from two prestigious start-up communities in Taiwan. The first sample source is the NTU Garage community. The NTU Garage is an incubator for early stage ventures and is part of National Taiwan University, the flagship research-led university in Taiwan. Since 2013, NTU Garage has incubated 132 ventures, 12 of which have raised seed funding. Our second source of sample cases is the Taipei branch of the Asia America Multi-Technology Association (AAMA). Founded in Silicon Valley in 1979, AAMA has been the largest pan-Asian technology association in the world and its



Taipei branch is the most prestigious entrepreneurial society in Taiwan. Since 2012, AAMA Taipei has incubated 126 ventures and raised 200 million US dollars. These two sample sources had a pool of 250 start-ups and befitted our research settings for two reasons. First, both communities focus on young and innovative products or business models, while embracing diversity of industries and styles. This characteristic provides an ideal context to study entrepreneurs with various aspirations. Second, the author was the director and advisor of the NTU Garage and had been a partner with AAMA, which provided a good “guanxi” with both communities. In Chinese context, *guanxi* refers to a bonding and a reciprocal obligation to respond to requests for assistance (Tseng 1998). Good *guanxi* offered a unique and rare opportunity for close observation of potential cases.

We used purposeful sampling to select cases on the basis of appropriateness and relevance to the study (Eisenhardt and Graebner 2007). The cases may be chosen to replicate previous cases, extend emergent theory, and to provide transparent observable and relevant data. (Pettigrew 1990; Eisenhardt 1989). The selected cases had to be similar with respect to four criteria. First, in our study, we aim to explore how different types of original aspiration influence critical decisions, thus one of most important criteria is the variety of original aspiration among our cases. We selected cases based on our prior archival study and pilot interview to maximize the variation of original aspiration among our participants. Second, we selected novice entrepreneurs to isolate the effect of entrepreneurial expertise. Entrepreneurial expertise is the only individual antecedent found in current effectuation research and we had to control for its effect in order to explore the role of another individual antecedent, original aspiration. Third, all ventures had to be in the same geographic location so they face a similar environmental



context in terms of funding, talent pool, and stakeholders. The last criteria was that the founders were willing to allow the collection of detailed information over the span of three years. We also selected founders who had authority to make final decisions in order to ensure consistency between company decisions and the founders' tendency toward effectuation. Within these three criteria, we adopted the maximum variation principle in terms of original aspiration, to explore commonality and heterogeneity among cases to answer the research question. Based on the selection criteria, archival documents and field observations, we selected eight cases: three from the NTU Garage, and five from the AAMA.

### **3.2 Data Collection**

We employed three data sources in this study: (1) qualitative data from in-depth interviews; (2) archival data from company documents, press releases, and publications; and (3) on-site observations. Our primary data source was semi-structured interviews with the eight founders and certain co-founders and employees from each firm. We collected background information from company websites and press releases to create initial lists of historical events from each company. Our interview questions were divided into two parts. The first part focused on personal and motivational perspectives regarding the entire entrepreneurial journey at the initial stage, such as their initial aspiration during the beginning of the venture, their expectations before start-up, and their confidence levels regarding the entire entrepreneurial process. The second part focused on the rationale behind each critical decision during the venture-creation process. We referred to firms' archival data, a previous validation study (Chandler et al. 2011) and five effectuation principles (as defined by Sarasvathy 2008) in order to

further define the questions. We ended the interviews with a question about future plans and their aspirations at the time.



To reduce retrospective bias, we conducted several rounds of interviews from 2014 to 2017. We started the first round of interviews in 2014, and conducted two to three rounds of follow-up interviews to track events on an almost yearly basis to minimize recall bias. We also conducted interviews with co-founders and key employees, with the intent to triangulate the rationale behind each critical decision. Using data from multiple respondents in an organization can reduce the possibility of recall bias (Golden 1992). In sum, over the three-year span, we collected 142 decision events from 41 interviews. All the interviews were recorded and transcribed, resulting in 428 single-spaced pages.

We also used archival data to reduce recall bias and validate the interview content. Archival data regarding the pre-start-up and start-up activities of the nascent ventures were scarce. Nevertheless, we were able to collect specific materials such as pitch slides, business proposals, market analyses, and financial reports through our network. In addition, relevant written documentation from the media (e.g., magazines, newspapers, press, and internet articles) also served as data sources. Using these data, we listed out key events chronically and cross checked the information with the interviewees to minimize recall bias. After the interviews, we mapped the excerpts with the archival data in order to ensure the validity of the contents and our analysis.

We conducted on-site observations and participated in the new ventures' staff meetings and daily operations. On-site observation benefited our research for two reasons. First, we were able to confirm the decision process of the venture and the

authority of the founder. Second, we gained better understanding of the organizational and institutional context that helped in analyzing the interview data. Triangulation gave rise to data accuracy and generated insights from the analysis. Table 1 shows a summary of the key participant facts and data collection efforts. The names and details of all participants and firms have been changed to ensure confidentiality.

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Insert Table 1 about here  
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### **3.3 Data Coding and Analysis**

This study conducted a three-step iterative exploration into the role of aspiration on entrepreneurial decision-making and how different founders' aspirations influenced their effectuation tendency. We first coded each decision as effectuation, causation, or a hybrid and created a decision chronicle for each venture case. In the second step, we classified the founders' aspirations by grouping themes that emerged from interview data. In the last step, we mapped the founders' aspirations, decision chronicles based on synthetic analytical strategy (Langley 1999), and inductively identified the patterns that emerged to explore how entrepreneurial aspirations shape entrepreneurial decision-making over the venture-creation process.

#### ***Step one: Creation of an effectual decision chronicle***

We first coded each decision within each case as either effectual, causal, or a hybrid. We integrated the three sources of data and created a chronicle of key decisions for each venture. Key decision events were defined as critical choices or actions taken related to

key tasks during the venture-creation process. These key tasks included product design and development, market and business development, team and organization management, financial and resource planning, and administrative execution. Two research assistants participated in this study, one who had worked at NTU Garage, and another who had worked in several start-ups. We independently examined the data and identified key decisions and events; the results were reviewed by the author and the two research assistants. After a few rounds of discussion, a consensus was reached on which key decisions to include in the event history.

After generating the decision event history for each case, we then coded each event as effectuation, causation, or a hybrid with a coding scheme developed based on the principles of effectuation (Sarasvathy 2008; Dew et al. 2009) and the coding indicators in previous literature (Chandler et al. 2011; Reyman et al. 2015). Our coding schema followed Dew et al. (2009) in differentiating effectuation and causation on four dimensions. We then developed several indicators and guidelines in each dimension based on Sarasvathy (2008), Chandler et al. (2011), and Reyman et al. (2015). (Please see Table 2).

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Insert Table 2 about here  
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As Table 2 showed, each decision event was coded as corresponding to four effectual (potentially ranging from 0 to 4 E) and four causal dimensions (potentially ranging from 0 to 4 C). In other words, the extreme base would be one decision showed all four effectuation and causation indicators. We coded a decision as effectuation when

only effectual indicators appeared on schema. On the other hand, we coded a decision as causation when only causation indicators appeared. If effectual and causal indicators co-occurred in the same decision event, we coded this decision as a hybrid. The author and the research assistants coded each decision with coding schema independently, and debated a few differences until agreement was reached. Table 3 presents a summary of Case S3 as an example of the data coding results.

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Insert Table 3 about here  
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### ***Step two: Aspiration categorization***

We then identified founders' aspirations based on our first interview question: "Why did you start up this business?" and follow-up probes. Next, we extracted all of the related content and triangulated the aspirations with archival data and interview excerpts from the co-founder and colleagues. Last, we identified a total of 16 aspirations, with each founder having one to three aspirations, and deductively narrowed them down to five items. (Please see Table 4 for the summary of aspirations.). The five aspiration categories are:

1. make the world and society better
2. self-actualization
3. create my own company and organizational culture
4. create my own product
5. financial return



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Insert Table 4 about here  
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After we identified five original aspiration items to study how such aspiration shapes new venture creation, we discovered the role of original aspiration. Nevertheless, our within- and cross-case analysis suggested that some patterns were similar among the five original aspirations items. Thus, we further collapsed some of the typologies and regrouped the categories based on our analysis and previous literature. We first identified financial gain and social impact as two categories because they have been long concluded to be primary start-up aspirations (Carter et al. 2003; Dacin et al. 2011; Dunkelberg et al. 2013). We then found that the other aspirations all related to individual and non-monetary achievement. For this study, we grouped these individual and non-monetary aspirations into one, “autonomy-centric aspiration” because these aspirations relate mostly to the entrepreneurial self. Our coding process led to three categories of founders’ original aspirations: *social-centric*, *commercial-centric*, and *autonomy-centric*.

### ***Step three: Mapping aspiration and critical decisions***

We then conducted *within-case* analysis, delineating emergent themes and patterns for each case. We mapped each aspiration with each critical decision chronologically and discovered that the founder’s aspiration played a unique role in each venture and influenced how decisions were made throughout the venture-creation process. We then studied relevant research papers and continued with *cross-case* analysis to find

instances of generalized themes and patterns across the eight cases to develop explanatory concepts. The details of the findings appear in the next section.





## CHAPTER 4: The Nature of Original Aspiration

Our analysis soon signaled that original aspiration has certain distinctive nature across our founder interviews. In this chapter, we first display two distinctive features and significant role of original aspiration in entrepreneurial process which we found by iteratively examining the rationale of 142 critical decisions from our participants.

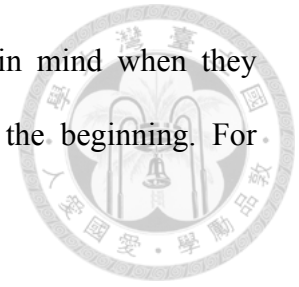
### 4.1 The Features of Original Aspirations

#### *One original aspiration dominates all*

The first question in our interview was, “Why did you start up this business?” Every founder answered this question with tremendous passion and excitement. They started their businesses with one or multiple aspirations to achieve their visions in mind. Some might want to make a fortune from their ventures while also to fulfill their need for achievement. Some might have just one clear vision in mind to make society better. For example, Susan got her Master’s degree and worked for social enterprise in the USA. One time she came back to Taiwan for a vacation and realized how social enterprise ecosystem was undeveloped in Taiwan. She was then aspired to develop a social enterprise platform for Taiwan

*When I built this platform in 2012, not too many people in Taiwan had heard about Social Enterprise. I learned all-new knowledge and skills in the US, and I was eager to bring all of these new concepts back to Taiwan to make my home country better. (Susan)*

While some participants in our study have one clear aspiration in mind when they started up their business, others have multiple aspirations since the beginning. For example:



*I just wanted to earn big money, I guess. I lacked a sense of security regarding my financial savings. I analyzed the industry and recognized that I had a chance to make a profitable return from this market opportunity. I found an unmet need in the market, so I decided to exploit this opportunity. (Helen)*

*I think I also want to start a business in my own styles, autonomy is important to me and also I like the feeling that the whole team make a lot of effort and achieve the goal. (Helen)*

Helen created her fashion service venture with two aspirations, one was a commercial aspiration, and the other was for her own autonomy. She pursued both aspirations simultaneously at beginning. Nevertheless, a further exploration shows that Helen prioritize one aspiration over others.

*I created my business for two reasons, one is to gain more financial return, the other is to build my own company and culture. Profit first though, after all that was the original aspiration driving me to initiate all of this. (Helen)*

Despite two aspirations existed, we found that Helen prioritized financial return over autonomy. In a similar vein, Henry also has his own priority between social impact and

financial return. After he resigned from his high income financing industry, he created a company, aspiring to deliver natural food and cosmetic products to customers.



*Although we need sufficient money to sustain our business, we never set profit as the top priority because that's not why we founded this company. We founded this company in order to provide our customers with authentic and natural products. Everything we do has to be consistent with our aspiration. (Henry)*

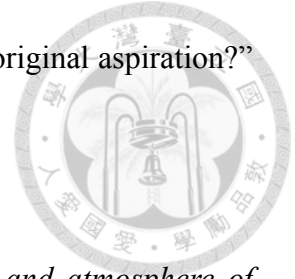
After we investigated how entrepreneurs prioritized their aspirations, we found that the entrepreneurs in the study either began with one single aspiration or with multiple aspirations but prioritized one particular original aspiration over the others. (Please see Table 5 for a summary.) Based on these findings, we then identified each of the eight founders' original aspiration from interview excerpts and proposed that each entrepreneur had one original aspiration in mind that dominated all other aspirations in the whole process. We then continuously explored the feature of each founder's original aspiration.

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Insert Table 5 about here  
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### ***The original aspiration has long-lasting character***

To further explore the nature of original aspiration during the venture-creation process, we compared the original aspirations of our participants to their current aspirations and future plan, based on the answers to the following questions: "What is the future plan

for you and your business?” and “Has anything changed from your original aspiration?”  
For example:



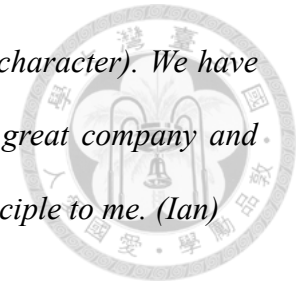
*I don't think we are there quite yet. Yes, the awareness and atmosphere of social enterprise has been rising a lot, but there are still a lot of things we can do to make Taiwan society better. This vision (aspiration) has never changed a bit in my mind. This question is very good, we have actually discussed about this several times. I believe what we will do is still being a pioneer in this field, based on what we can do to help this society the most. (Susan)*

*Original aspiration is different from our short-term goals, or daily tasks goals, which you can always adjust according to contingencies. We have weekly meeting and discuss how we deal with all the challenges or constraints, sometimes we revise our goals of certain activities or business. However, if your original aspiration changes quite often, it seems strange to me. (Susan)*

Ian also explained that he initially developed an innovative IoT kitchen appliance with his friends and then decided to start up his business. Until now, his original aspiration has been the same, to accomplish a great achievement with good teamwork.

*Have I told you what I care the most during my entrepreneurial journey? The team. I started my business for fun, for creating my own product, for fighting with my buddies. After all these years, I further realized the joy from overcoming a challenge with my team always gave me a big lift. I really enjoyed that feeling. It might sound weird but I just love to be a captain to lead all my crew sail cruise the*

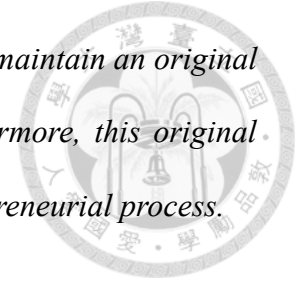
*ocean to find the one piece, like Luffy (a Japanese animation character). We have several plans to grow our business. But for now, building a great company and product so we can fight together is still the most important principle to me. (Ian)*



In this study, we observed founders learning and changing in their entrepreneurial knowledge and skills in all aspects—in their domain-knowledge, in their management and leadership skills, and in their short-term task goals. However, their original aspiration stayed static in the start-up process (see Table 6 for illustrative examples). This finding provided a novel insight and suggested that original aspiration possibly affected entrepreneurial behaviors differently from entrepreneurial goals and motivations (Carsrud and Brannback 2011). Although previous research has been suggested that entrepreneurs changed their aspirations and goals frequently under dynamic and unpredictable contexts (Carsrud and Brannback 2011), we observed that entrepreneurs' original aspirations rarely changed in venture-creation process. In other words, entrepreneurs kept chasing the same original aspiration since the beginning of their journey. Taken our findings toward the features of original aspirations together, we postulate that an original aspiration has different nature from entrepreneurial goal and motivation, meaning original aspiration would dominate other aspirations and remain static during the entire entrepreneurial journey, as shown in our proposition below.

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Insert Table 6 about here  
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**Proposition 1.** *Entrepreneurs usually have multiple aspirations but maintain an original aspiration that dominates other aspirations. Furthermore, this original aspiration stays static throughout the dynamic entrepreneurial process.*



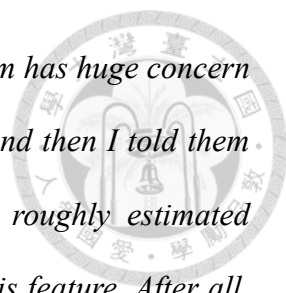
To highlight the unique features that this dominant and long-lasting aspiration exerts throughout the entrepreneurial journey, we adopted the term **original aspiration** in this study to refer to an entrepreneur's initial and most dominant aspiration. Nevertheless, current finding merely hinted at general insight, yet concluded that how original aspirations shaped entrepreneurial decision-making. Therefore, we next turn to further explore the role of original aspirations and examine the relationship between an original aspiration and effectuation decisions.

#### **4.2 The Role of Original Aspirations**

The process of creating a new venture is characterized by uncertainty, scarce resources, and time pressure, each critical decision would lead the company to a different destination. Entrepreneurs are confronted with dilemmas that can shape their venture's trajectory and destination. In our research, we found that entrepreneurs linked back to their original aspiration when they faced dilemma, in order to make the final decision.

We first observed that every entrepreneur mentioned their original aspirations frequently when they talked about their rationale behind several controversial decisions over the whole venture-creation process. As one interviewee remarked:

*How do I solve the conflict with my co-founders? Hm...you need a golden rule. I remember there is one time, me and Kay and Sam discussed about a product*

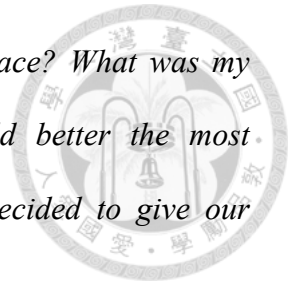


*feature, Kay wants this feature for marketing purpose, while Sam has huge concern on product quality issue. We just could not reach agreement. And then I told them to go back to our golden principle, profit and market. We roughly estimated potential profit and cost and then we decided not to develop this feature. After all, we all agree that is why we start and join this business. (Barry)*

We then further looked into those decisions involving the original aspirations and found that when founders struggled from severe conflicts, or when they faced a dilemma, they tended to refer to their original aspiration to decide which alternative they would choose. One of the common dilemma entrepreneurs faced was the decision to quit. The creation of a new venture is full of uncertainties and entrepreneurs must be willing to take personal and psychological risks to start an entrepreneurial journey. Moreover, entrepreneurs need to be persistent in their endeavors when they face difficulties and challenges. Our study found that original aspiration influenced entrepreneurial exit decision and persistence. In 2013, Henry's company faced a shortage of cash-flow and several business and operation problems. He was frustrated and considered closing the organic food business and went back to banking. He then listed out the pros and cons to leave current business but then he decided to give his business another chance because he still desired to realize his original aspiration, which was to develop natural product for customers and to create a better living environment.

*In the first two years, I thought about giving up a few times. There was one time really close, we almost decided to quit. We lost half of our capital. We could not boost our sales. It was like standing in the middle of dark and I did not know where to go. I really thought about quitting and going back to my old career path.*

*But eventually I asked myself, “why did I start up at first place? What was my original aspiration? Did I still consider making the world better the most important thing in my life?” the answer was yes. Then I decided to give our business and our product another shot. (Henry)*



In a similar vein, original aspiration also gave Ian energy when he faced challenges and considered to close the business.

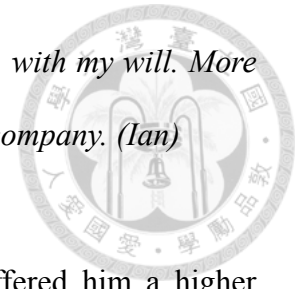
*Developing an innovative product is a difficult task. Launching an innovative product and conquer the beachhead market is an even harder task. We struggled in our research and development process and we were short of money. I was thinking maybe we should stop before burning too much money. But the support from our teammates reminded me of my original aspiration and provided me more energy to keep going on our journey. (Ian)*

Besides the closure decisions, entrepreneurs face various types of dilemma, such as, fundraising, business expansion, product design...etc., as we also saw original aspiration influenced these decisions. For example:

*After we shipped out 3000 units of our products to our backers, two VCs approached us, one gave us higher valuation but we had to, partially, sacrificed our control of our future market strategy. The other one took smaller share with lower valuation, but gave us full control of our business. I really struggled for this decision. One of my best friend asked me, “what do you want from this business?”*



*I then realized I want to continue this adventure with my team, with my will. More money is great, but that's not the most important thing for our company. (Ian)*

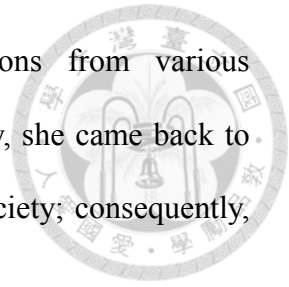


Ian faced two funding options from his investors: one clearly offered him a higher valuation and more financial and business resources, while the other offered him a lower valuation but allowed him to have full control over his own business. He struggled between these two options but eventually returned to his original aspiration. Ian wanted to overcome all the challenges with his teammates so he decided to take the lower valuation option with full control. This example illustrates how the founders' original aspirations serve as a guiding principle to help entrepreneurs make decisions when they face a dilemma. In the other case, Susan discussed her business expansion decision, which was a dilemma between profit growth and social impact, and her rationale behind this final decision was:

*We chose not to take on some business—even though it was very profitable—for two reasons. First, our organizational capability was not there yet. Second, the business was inconsistent with our values and aspirations. A corporate once offered a good opportunity to do an e-commerce platform. We turned that down because I do not think that opportunity was in accordance with our aspiration and capability. (Susan)*

When a Chief Investment Officer in a big corporation offered a new and tempting e-commerce business proposal to Susan, she struggled whether she should take the offer. If she took the offer, she would not need to worry about cash flow and growth, but the firm would have to trade off part of its social impact and its autonomy. After many

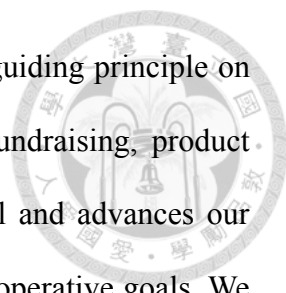
meetings with co-founders and seeking advice and suggestions from various stakeholders, she still could not make the final decision. Eventually, she came back to why she started up the venture: to help Taiwan become a better society; consequently, she decided to pass up the offer.



In this case, our on-site observations also provided excellent insights into the real-time dynamic process of Susan making the final decision. We joined the staff meeting when Susan discussed their business expansion decision. One business manager suggested they should expand the business to an e-commerce platform because of the market potential, while another manager argued that the company could not take the high risk behind this strategic move. Eventually, Susan decided not to make the move because it conflicted with her original aspiration. During the entire meeting, Susan mentioned the words “values, original aspiration, and beliefs” 12 times; this displayed the power of an entrepreneur’s original aspiration as a guiding principle. Taken all these findings together, we developed a proposition below.

***Proposition 2.*** *Original aspirations influence not only single decision but multiple critical decisions in venture-creation process and serve as guidance when entrepreneurs face dilemma.*

Collectively, these analyses indicate that entrepreneurs’ original aspiration plays a more significant role in entrepreneurial decision-making than suggested in the current literature. Our evidence shows that original aspiration indeed affects not only single task decisions but multiple decisions and entrepreneurs’ decision-making logic over the entire venture-creation process, especially when they face dilemma. This finding



provides a novel insight that entrepreneurial aspiration serves as a guiding principle on critical decisions such as business expansion, human resources, fundraising, product design, etc., throughout the start-up journey. This insight is critical and advances our study into the next phase by distinguishing original aspiration from operative goals. We posit original aspiration as an ultimate vision or mission at top level of goal hierarchy which guide and influence several multiple operative goals and decisions at lower levels. Thus we clarify the relationship between aspirations at upper level and operative goals at lower levels in goal hierarchy and recognize characteristic of aspiration or goal, such as ambiguity or commitment, at different level might have different effects.

Nevertheless, while we show the role of original aspiration on entrepreneurial decision-making, we have yet to answer the question why novice entrepreneurs use different decision-making logic even face similar context. To answer this question, we aggregate and analyze our data into a higher level to explore how the heterogeneity between original aspirations shape decision-making tendency and display our findings in the next chapter.

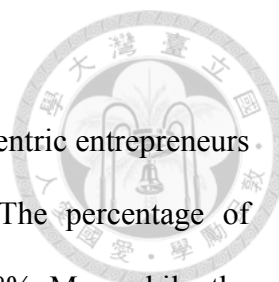
## CHAPTER 5: The Relationship between Original Aspiration and Effectuation Tendency



With a clearer picture as to *what* is the nature and the role of original aspiration in venture-creation process, in this chapter, we reveal *how* and *why* original aspiration shapes entrepreneurial decision making mechanism through the lens of effectuation theory. First, we uncover different types of original aspiration lead to different effectuation tendency. Second, as we iteratively explore our data, we discover explanatory factors for this mechanism and develop a conceptual model in the end of this chapter.

### 5.1 Different original aspirations lead to various entrepreneurs' effectuation tendencies

To further explore how original aspiration types shaped effectuation tendency, we first aggregated all critical decisions across 8 cases and matched up with entrepreneurs' original aspiration. Our initial analysis captured an emerging theme between original aspirations types and effectuation tendency while also suggested social-centric and autonomy-centric aspirations share similar pattern. We then decided to merged social-centric and autonomy-centric aspirations into non-commercial aspiration for the sake of scientific parsimony. This reformation of original aspiration types was also consistent with suggestions from recent entrepreneurial decision-making literature. Extant research mainly discussed how commercial aspiration or goal influence entrepreneurs' behaviors, and that entrepreneurship scholars recently encouraged future studies to pay more attention to the impact of non-commercial aspiration (Shepherd and Patzelt 2017).



The results of the mapping showed that all 5 non-commercial-centric entrepreneurs tended to make critical decisions based on effectuation logic. The percentage of effectual decisions out of their total decisions ranges from 50% to 78%. Meanwhile, the percentage of effectual decisions out of total decisions from 3 commercial-centric entrepreneurs is respectively 31%, 44%, and 52%, which signaled they tended to use less effectual logic to make critical decisions. (Please see table 7.) This result gave us a preliminary indication that non-commercial-centric aspiration led to high tendency to engage with effectuation logic while commercial-centric aspiration led to low tendency to effectuation logic, as the proposition shown below.

**Proposition 3.** *Non-commercial-centric aspiration leads to higher effectuation tendency, meaning entrepreneurs prefer effectual logic when making critical decisions. Meanwhile, commercial-centric aspiration leads to lower effectuation tendency.*

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Insert Table 7 about here

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We then further analyzed our interview data and focused on exploring how and why non-commercial-centric and commercial-centric aspirations led to different tendencies toward effectual logic. Our analysis pointed to the types of original aspirations as important underlying mechanisms that shape effectuation tendency while

two key factors, attitude toward goal ambiguity and attitude toward partnership, manifested this mechanism. We further elaborate our findings in the next section.

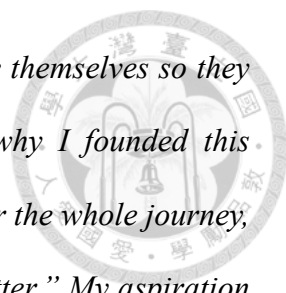


## 5.2 Attitude toward goal ambiguity

In this section, we first further illustrate the definition of goal ambiguity as contextual background to our findings. We have clarified that original aspiration posits as generalized goal at top of goal hierarchy and influence operative goals at lower level. March and Simon (1958) argue that an organization transforms its original aspiration or vision into generally specified new operative sub-goals and discover a set or more specified means for achieving these sub-goals. Meanwhile, Simon (1997) argues goals at different level have different underlying criteria and nature. Organizational theory and public administration literature also separate mission ambiguity and goal ambiguity at different levels and consider goal ambiguity the difficulty of transforming mission or aspiration at higher level into specific operative sub-goal at lower action level. In this study, we separate original aspiration and operative goals and define goal ambiguity as *the amount of interpretive margin in translating an organization's mission or original aspirations into directives and guidelines for specific actions to be taken to accomplish the mission* (Moore 1995; Scott 2003).

Ambiguity is one well-known characteristic under entrepreneurial context. In this study, we found all participants encountered goal ambiguity when they tried to transform their original aspirations into their operative goals. For example,

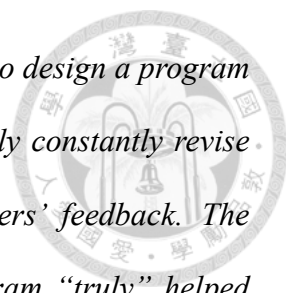
*The educational system in Taiwan is in chaos, and young students are deeply anxious as they face an uncertain future. I was a sociology major and have been a career advisor since my senior year. I am eager to help young students,*



*encouraging them to step out of their comfort zone and explore themselves so they can select their path by knowing themselves better. That's why I founded this company. However, when I tried to set a goal for my venture, for the whole journey, the only thing that popped into my mind was "the more, the better." My aspiration was to help teenagers explore themselves and find their talents, which I believed would eventually make Taiwanese society better. How would I know whether our program could truly help teenagers, and how much we had to do to really help Taiwan? Maybe 1,000 students? Maybe 10,000 students? Maybe even 10 students will be good enough? In the end, I just told myself I will try my best to help more people. (Chang)*

*At first, everything was vague, I felt like I need to set a goal on our revenue, profit, cost...and everything. But I really had no idea how to set a clear goal, an excellent plan, or a strategy (Barry)*

While all participants consider transforming original aspiration into operative goals challenging, we found that non-commercial-centric and commercial-centric entrepreneurs have different attitude toward goal ambiguity. Non-commercial-centric entrepreneurs are more tolerant toward goal ambiguity and they tend to clarify goal ambiguity with their actions. For example, when Chang first tried to divide her aspirations into annual goals and to conquer these goals month by month, she realized she did not know how to measure the social impact of her business. But interestingly, she still took actions despite of operative goal ambiguity.



*When we first designed our service, we did not know how to design a program to help young students explore themselves better. We could only constantly revise the program features based on my experience and customers' feedback. The problem is that it is very difficult to know whether our program "truly" helped them. During the process, we learned a lot and had a better vision of our domain. I have a better idea of what I can do, but you know what? Education is a big and broad field: the more you know, the more impact you want to make. Do we really make this society better? Now we have become more famous and many opportunities have come to us. It is easier to evaluate which new businesses might help us make more money, but it is hard to know which ones can help young students more. Eventually, I decided to listen to my heart and expanded to high school students because I have more confidence and resources in that area. And I believe each action taken had made some impact, yet we just did not know how much the impact. Someday we will see, I guess. (Chang)*

Unable to set a clear goal and plan, Chang still made most decisions based on what she was capable of doing and how much she could accomplish, while also adjusting her short-term goal dynamically according to the feedback from her actions. This means-driven mind-set fitted the effectuation principle. In a similar vein, other non-commercial entrepreneurs also stated how they tend to accept goal ambiguity and take actions to clarify it.

*We expanded our product line to natural cosmetics on the basis of our customers' support. As I said, our aspiration is to provide customers with a true and authentic product experience, which we believe improves both human lives*

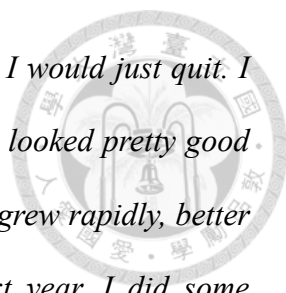


*and the environment. When we discussed our new potential product line, we did not have a roadmap in mind. We did not know which product line could fulfill our initial aspiration, but from our loyal customers' feedback, we recognized that natural healthcare products could solve their problems while further expanding our impact...We think figuring out what we should do is the best way to make a true social impact. (Henry)*

*I did not set a clear goal or milestone for my business. I just feel like to do this and follow my intuition. Sometimes I asked myself, is it good enough? Is that what I want? The answer is always like: I am working hard on something meaningful, that is good enough. So I usually go step by step, see what I got on my hand and do what I can do the best. And many times, it really impressed me that the feedback from my action always help me know what I want or even fulfill somewhat a little bit of aspiration. (Kyle)*

We found that non-commercial-centric entrepreneurs accept an unclear goal and take actions first based on available means under vague environment with high goal ambiguity and clarify goal ambiguity with their actions taken. This tolerance of ambiguity and action-first attitude fits with effectual mindset with experimenting spirit and flexibility goal adjustment. In contrast, we found that when facing goal ambiguity, commercial-centric entrepreneurs are more uncomfortable and attempt to collect information to clarify goal ambiguity before they make decisions or take actions.

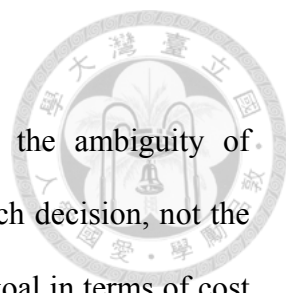
*At the beginning, I set up my goal in terms of financial reward. I told myself I need to set up a clear goal to make sure I make enough money—at least equal to*



*how much I can get as an employee—within a year. Otherwise I would just quit. I did some quick math on the market size and potential return; it looked pretty good to me so I decided to start this business. Sales at our first store grew rapidly, better than I expected. Then I started to plan my business for next year. I did some analysis and decided we should double our profit for the next year; then we started planning to open the second and third stores. I care about the results, if we cannot guarantee a good result, then why bother start taking this actions? (Helen)*

Commercial-centric entrepreneurs tend to use the existing framework and knowledge for pursuing clearly set financial figures. In other words, they consult business experts and scholars from both industry and academia and leverage extant frameworks and tools to help people managing strategic plans and to chase a well-set commercial goal. For example, when Barry expanded the business to a global market, he did a quick back-of-the-envelope calculation of market analysis and financial forecast. He then decided to formulate a strategic business plan tailored to the Southeast Asian market.

*In 2016, the business stabilized in Taiwan and we started discussing going global to increase growth. There were several countries on our list. As usual, we evaluated our market based on the business potential. We calculated potential costs and investment returns, did a market assessment, and then decided to go with Southeast Asia. We actually have more connections in other countries, but we figured that we had the best potential in the Southeast Asia region. I thought we had to do this with a clear plan and goals because this is an important strategic move to us. We needed to put a lot of money on this move so we better be prepared. I could not take this action with blinded eyes. (Barry)*



We found that commercial-centric entrepreneurs tend to clarify the ambiguity of operative goals because they care about the results and return of each decision, not the meaning of the process and action. Thus they attempt to set a clear goal in terms of cost and return perspective so they can both measure the progress to ensure their performance. This attitude leads more to causation tendency. Taken together, we find that the non-commercial-centric aspiration leads to a higher tolerance toward goal ambiguity, and entrepreneurs with non-commercial centric aspiration tend to take action based on means on hand and dynamic adjust their operative goals based on the feedback from actions. They are comfortable to clarify the goal ambiguity on the process and this attitude leads to higher effectuation tendency. In contrast, commercial-centric entrepreneurs are uncomfortable with goal ambiguity because they believe unclear goal and action might influence their performance in terms of financial results. Thus they tend to clarify goal ambiguity before making decisions or taking actions, which leads to lower effectuation tendency. We then postulate that attitude toward goal ambiguity as key factor manifest the relationship between original aspiration and effectuation tendency and developed our proposition below.

***Proposition 4.*** *Non-commercial-centric aspiration leads to higher tolerance of goal ambiguity, which results in an increase in the entrepreneurs' effectuation tendency. Commercial-centric aspiration leads to low tolerance of goal ambiguity which results in a decrease in effectuation tendency.*

### 5.3 Attitude toward partnership

We found that the other element distinguishing non-commercial-centric aspiration and commercial-centric aspiration was attitude toward partnership. All non-commercial-centric entrepreneurs who chased for social impact or personal values were very open-minded in engaging with their partners. They did not consider other players chasing on same aspiration competitors or threats. For example:

*I do not care who got more credit for our work, my company or our partner's company. My principle is we have to be fair, and nobody take advantage on this relationship. I love to see more players jumping into this field because the society will thus become better. It might be weird to say this, but we welcome the competition. (Susan)*

*As far as I know, we are the first team providing this kind of program to young students, and we have not done enough yet. I do not see intense competition in this domain. We share our experience with the other player while we also learn from them. Sometimes we launch marketing campaign together because we can share the cost and get more exposure. I don't know, maybe because we both love to see this critical problem can be solved. (Chang)*

*We are not competing with those traditional FMCG (fast moving consumer goods) players, because we use natural ingredients and target on different segmentation. Yes, we do see some emerging competition in this segmentation but I do not worry about this too much. First, I am confident with our product knowledge; second, if these new comers can also sell "good" products to*

*customers, it is great. We should gain more market share from those big company which sells homogeneous products, instead of competing with each other. (Henry)*

Instead of competing with other players, the social-centric entrepreneurs welcomed more players to co-create an impact on society in order to achieve their aspirations. Interestingly, although all three social-centric founders were open to partnership, they did not aggressively seek out resources and partnerships along the process. Yet, potential partners approached them, initiated an engagement, and ended up forming partnerships.

*At very beginning, our investor came to us, and gave us a lot of useful advices. He then joined our board and helped us raise the money as well as his social connections. I truly appreciated all his help because that gave us a lift when we struggled the most. (Susan)*

The nature of the firm's social-aspiration drew attention and good will from Henry's partners to spontaneously approach to them.

*We had been struggling on market development and sales channel at beginning. One day, our first partner, who is a well-known organic drink brand, came to us and taught us his "secrets" of doing business, for free. He said, I love your product and attitude and do not want to see you fail, that is why I came to help. We were so lucky. The partnership with him helped us conquer our beachhead market, and our business took off from that battle. (Henry)*

*The first time I heard their story, I thought this young company is amazing to make this world better. Apparently they did not know how to do business in this industry. I could help them survive. (Partner of Henry)*

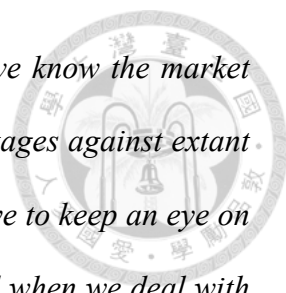


Meanwhile, autonomy-centric entrepreneurs also tended to leverage resources and partners to assist them achieving their personal aspirations. Ian started his venture to develop an innovative product with his team. He enjoyed working with his teammates to overcome all challenges and help his customers creating a new life style.

*We need to control our schedule for product development, for order fulfillment, for maintaining our cash flow. There are tons of difficult tasks ahead and we have no experience for most of those tasks. We need partners or mentors to help us out. I prioritize the benefits from my partners over the risk of profit appropriations. (Ian)*

We found that non-commercial entrepreneurs had open attitudes to partnerships and their passions to pursue their aspiration attracted resources; this combination resulted in more reliance on partnerships, which fitted one of the effectuation principles and explained why non-commercial-centric aspiration led to a higher effectuation tendency.

On the other hand, commercial-centric entrepreneurs had a cautious attitude to partnership while they paid more attention to competitor analyses. They conducted partnership assessment more carefully in order to protect their own competitive advantages and profit.



*Although we are confident with our innovative product, we know the market competition is intense. We have to build our competitive advantages against extant players and also be very careful with those new comers. We have to keep an eye on the market. Oh...and that's also why we have to be very careful when we deal with strategic alliance. We need to do a comprehensive evaluation to make sure our partner can contribute to our profit growth. Also we have to make sure we can trust them. (Barry)*

*We are very careful with the partnership. We have been working on our service process and now we are the leader of this industry. Many companies approached us and offered strategic alliance proposals to me. So, far we only have one strategic partner, who has been our supplier for two years. We are doing pretty good all by ourselves. I don't see we need any partner in the near future unless it can give us a booming growth. (Helen)*

Commercial-centric entrepreneurs seek to maximize profit. Our participants tend to assess a partnership more cautious, in terms of risk perspective, to ensure their gains still on their pockets. Thus cautious mentality toward their competitors and partners leads to higher causation tendency. Taken together, we find that non-commercial-centric entrepreneurs have open attitude toward partnership and they rely on stakeholders to achieve their original aspirations. Meanwhile, commercial-centric entrepreneurs conduct more cautious assessments of their stakeholders because they put high priority on their own profit appropriation. Therefore, they have lower effectuation tendency. We summarize our findings in propositions below. (Please see table 8 for example summary)



**Proposition 5.** *Non-commercial-centric aspiration leads to open attitude to partnership engagement, which results in an increase in the entrepreneurs' effectuation tendency. On the other hand, commercial-centric aspiration leads to cautious attitude to partnership assessment, which results in a decrease in effectuation tendency.*

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Insert Table 8 about here  
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To summarize our findings, we conclude that non-commercial-centric and commercial-centric aspirations led to very different effectuation tendencies, manifested by different attitude toward goal ambiguity and partnerships. Non-commercial-centric entrepreneurs had a higher effectuation tendency because they had higher tolerance of goal ambiguity and they embraced partnerships more. They tend to clarify goal ambiguity with actions and interactions with partners. Meanwhile, their open-minded attitudes toward stakeholders resulted in more partnership alliances to fulfill their non-commercial aspirations, which echoed the effectual principle. On the other hand, commercial-centric entrepreneurs sought to maximize profit, so they tended to assess partnerships and used more extant planning-based business practices, which echoes a causal logic. Taken together, our findings not only confirm our initial conceptual model proposed in Chapter 2 but also discovered new insights and constructs to illustrate the mechanism between original aspiration and effectual behavior. We thus postulate a



revised conceptual model as shown in Figure 2, and articulate more detail in the following paragraphs.



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Insert Figure 2 about here  
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Our findings firstly show unequivocal evidence to unravel the significant role of original aspirations, and thus we revised terminology of our key construct from entrepreneurial aspiration to original aspiration in order to highlight its unique nature distinguishing from other aspirations or short-term goals. Then we aggregated all critical decisions across cases and discovered that each type of original aspiration led to different effectuation tendency. These two findings confirmed the initial linear linkage between original aspiration and effectual behavior. Furthermore, we extended this fundamental initial linear relationship by discovering attitude toward goal ambiguity and partnership as two key factors manifesting the relationship between original aspiration and effectuation tendency. Non-commercial-centric aspiration leads to high goal ambiguity and an open attitude toward partnership, which fits with effectual principles and logic. On the contrary, commercial-centric aspiration leads to low goal ambiguity and cautious attitude toward partnership, which result in higher causation tendency. We then revised our conceptual model in order to depict how these two factors manifest the relationship between original aspiration and effectual tendency. In the next chapter, we will further discuss our findings and potential contributions in details.

## CHAPTER 6: Discussion and Conclusions



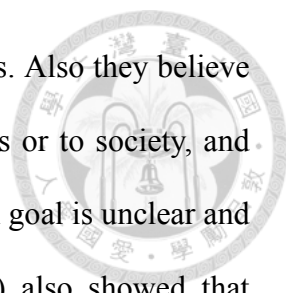
This dissertation aims to extend the knowledge of entrepreneurship research by answering two research questions: *what* is the role of original aspiration in venture-creation process, and *how* and *why* original aspirations shape entrepreneurial decision-making logic? Thus far we have shown the distinctive nature of original aspiration in Chapter 4, and presented the relationship between original aspiration and effectuation tendency in Chapter 5. At the end of previous section, we integrate our findings and propose a conceptual model to depict the mechanism between original aspiration and effectuation tendency. In this chapter, we set to further discuss our findings and potential theoretical contributions to the extant literature of entrepreneurship in general, and of effectuation theory in particular. Then we present practical implication and our research limitation. Finally, we conclude our dissertation with future research suggestion and our key takeaway.

### 6.1 Findings discussion

In this section, we discuss the connection between our findings and extant literature to further elaborate potential insights.

#### *Attitude toward goal ambiguity and effectuation tendency*

Our findings show that non-commercial and commercial aspirations lead to different decision-making tendency, which is consistent with previous literature. Fauchart (2011) have proved that people with non-commercial focus, such as community or society, evaluate themselves and interpret information on the basis of responsibility and authenticity. This argument is consistent with our non-commercial participants' behaviors while they consider their employees as their responsibility so

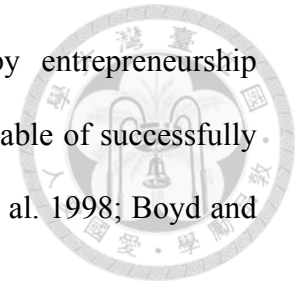


they take affordable loss as major concern when they make decisions. Also they believe each action they take would make meaningful impact to themselves or to society, and that belief might be the reason they can take incremental moves even goal is unclear and solve the goal ambiguity on the go. Meanwhile, Fauchart (2011) also showed that people pursue personal wealth tend to evaluate themselves on the basis of professionalism, meaning their ability to act professionally and apply solid business knowledge to achieve their goals. Furthermore, their frame of reference is usually their competitors. This argument is consistent with our commercial participants' behaviors that they are uncomfortable with their unclear goal because they believe unclear goal will harm their performance. They tend to solve the goal ambiguity and act professionally when making decisions. This mindset fits more with causation logic and consistent with our proposition. In this discussion, we also noticed that beliefs might be a key factor influencing entrepreneurs' attitudes and future research should explore this relationship.

### ***Entrepreneurial self-efficacy (ESE)***

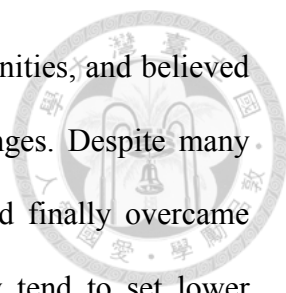
Although our analysis showed a clear pattern of the relationship between original aspiration and effectuation tendency, we observed that Aaron used effectual logic more frequent than two other commercial-centric founders while Ian used less effectual logic than other non-commercial-centric founders. Meanwhile, the frequency of two extreme cases, Susan (78.57%) and Barry (31.82%) also caught our attention. We then further examined our data and found another factor, entrepreneurial self-efficacy, which might impact effectuation tendency. We observed that entrepreneurs whose level of confidence was high at the initial stage of their entrepreneurial journey might prefer goal-driven logic. The concept of initial confidence level toward entrepreneurial journey is

consistent with *entrepreneurial self-efficacy (ESE)*, defined by entrepreneurship researchers as the strength of a person's belief that she or he is capable of successfully performing the various roles and tasks of entrepreneurship (Chen et al. 1998; Boyd and Vozikis 1994).



Wood and Bandura (1989) argued that highly self-efficacious individuals construct success visions that lead to positive performance, and that these individuals involve themselves in more analytical activities in order to predict and control turbulence. Furthermore, goal-setting theory currently includes self-efficacy as a key component of the processes through which individuals establish self-set goals, and proposes that self-efficacy also affects a person's beliefs regarding whether or not certain goals can be attained (Bandura and Locke 2003). Some studies on the relationship between ESE and goal-setting characteristics have proposed that ESE influences personal goal setting and goal commitment. For example, Boyd and Vozikis (1994) suggested that the higher the degree of entrepreneurial self-efficacy, the higher the degree of goal setting and the stronger the commitment to the goal. Entrepreneurs with high levels of entrepreneurial self-efficacy set more ambitious goals and are more firmly committed to those goals, which is in accordance with causal logic, and mitigates the tendency toward effectual logic.

While we further examine our interview data, we found that all eight participants believed they could achieve their aspirations in the initial stage of their new business venture. Yet, each entrepreneur had a different level of entrepreneurial self-efficacy. Entrepreneurs with high self-efficacy tend to set higher goals and believe they can overcome all the challenges ahead to reach their goals. For example, in 2014, Kyle



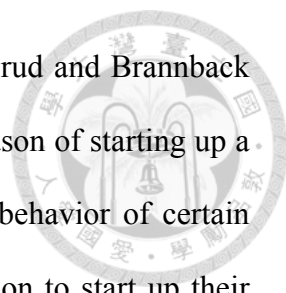
expanded business lines from one to eight, based on market opportunities, and believed that the company could overcome the operational capacity challenges. Despite many challenges during the growth stage, Kyle stayed with his plan and finally overcame these challenges. In contrast, entrepreneurs with low self-efficacy tend to set lower goals and take a means-driven approach to grow their business. Susan believed that following ambitious goals or plans beyond what she perceived as feasible would end in failure and delay business progress. Susan preferred to make incremental progress for her business. Low self-efficacy amplified Susan's tendency to start with means on hand rather than following pre-set goals. Taken together, we thus postulate that entrepreneurial self-efficacy might also influence effectuation tendency. Nevertheless, we recognized that this is an explorative study and a preliminary postulation, yet we believe our preliminary finding could serve as a starting point to link effectuation and ESE literature.

## **6.2 Potential theoretical contributions**

In our study, we position a novice entrepreneur's original aspiration to creating a venture as a key mechanism shaping his or her tendency of decision-making logic throughout the entrepreneurial process. The key takeaway from this study is that by looking at novice entrepreneurs' original aspirations at the beginning, we can have a better understanding of the rationale behind their critical decisions along the journey. Building on this central insight, we discuss our potential contributions in three aspects.

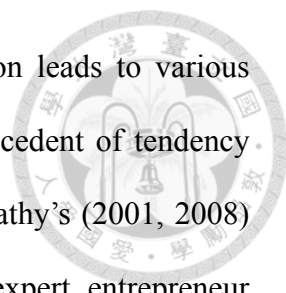
### ***The distinctive nature of original aspiration***

While cognitive processes involve motives and goals, entrepreneurial aspiration, motivation, and goals have been an important explanatory mechanism for

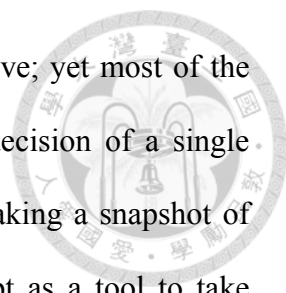


entrepreneurial behaviors and performance (Shane et al. 2003; Carsrud and Brannback 2011, Carsrud et al. 2017). Previous literature has shown that the reason of starting up a new business or short-term motivation influence decision-making behavior of certain single tasks. Our findings show that entrepreneurs' original aspiration to start up their new ventures has distinctive features from their reasons or short-term motivation. This original aspiration not only rarely change but also influence multiple critical decisions over the whole venture-creation process. This finding contributes to entrepreneurship research by distinguishing original aspiration from goal and motivation. A promising entrepreneurship research topic suggested by Carsrud et al. (2017) is how motivations or goals at different levels of goal hierarchy influence entrepreneurs' behaviors. Bagozzi and Dholakia (1999) suggest that goals can be divided into three levels: higher-level goals, a focal goal, and lower-level subordinate goals and it is fair to assume that the higher up in the hierarchy the goal or motivation is, the more influence the goal has (Carsrud et al. 2017). Our findings show that each entrepreneur has an original aspiration that refers to a generalized goal that exerts major influence on key decision-making behaviors throughout the entrepreneurial journey. Based on our findings, we postulate that original aspiration is the entrepreneur's end state goal at the highest level of the goal hierarchy and plays a different role from lower-level subordinate goals or short-term motivations. This finding advances our understanding of entrepreneurial aspiration and goal by pointing out the different nature and roles of original aspirations and clarifying goal hierarchy, while also shedding light on a path to a fruitful research area.

### ***The relationship between original aspiration and effectuation***



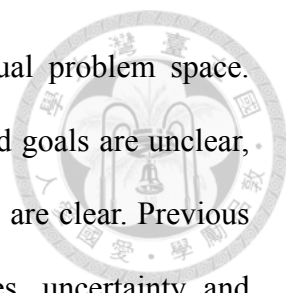
A key finding of our study is that different original aspiration leads to various effectuation tendency. This finding posit original aspiration as antecedent of tendency toward decision-making logic, based on effectuation theory. Sarasvathy's (2001, 2008) seminal protocol study—facing the same context, 74% of the expert entrepreneur participants in the study behaved in accordance with the effectuation model at least 63% of the time—opens a window to inspect how effectuation better deals with an entrepreneurial context. However, Sarasvathy's study (2001, 2008) left a puzzle inadequately answered: why do different entrepreneurs use effectual logic differently, even when they face identical contextual environments? A fundamental supposition of effectuation theory regarding individual factor is that entrepreneurs learn effectuation when their entrepreneurial experience grows. Although current research has supported this supposition but failed to offer conclusive answer to this puzzle. Our finding provides an insight by showing that novice entrepreneurs without entrepreneurial experience have different effectuation tendency at the beginning, influenced by their original aspirations, and thus entrepreneurs use effectual logic differently even when they face the same decision context. Our study complements the fundamental argument of effectuation theory by essentially pointing out that entrepreneurs learn and use effectual logic based on different starting points, which provides a holistic view of effectuation behavior. Moreover, our study also suggests that future effectuation research cannot overlook the heterogeneity of entrepreneurs. It is consistent with Sarasvathy's suggestion that the heterogeneity of entrepreneurs must be viewed with the progressive changes of time and context if we are to fully understand effectual behaviors (Sarasvathy and Venkataraman 2011).



Notably, effectuation theory develops from a process perspective; yet most of the research studies on effectual behavior are based on effectuation decision of a single activity coded by single or mixed effectual principles. Instead of taking a snapshot of single activity, Jiang and Ruling (2019) used an “episode” concept as a tool to take temporal aspects into account to capture the effectuation process between its initiation and termination. She found that the content and timing of each single activity might vary and lead to fluctuation of single decisions in the process. Studying effectuation in a single activity perspective might miss an overview of the whole effectuation process. Jiang and Ruling (2019) encouraged effectuation scholars to explore the general tendency of founding teams or entrepreneurs to use effectuation using a process perspective, instead of looking at how single effectual or causal activities were carried out. In this study, we echo Jiang’s suggestion to examine all critical decisions and find that original aspiration has a unique nature: it influences the general tendency of entrepreneurs’ effectual behavior during the venture-creation process. On the other hand, although the general tendency affects each single decision, entrepreneurs seem to have various concerns behind single task decisions that are contingent to each specific circumstance. We believe this insight contributes to a conceptual clarity of effectuation theory and suggests that future effectuation research could study the relationship between tendency level and single decision level (Sarasvathy 2008; Arend et al. 2015; Read et al. 2016).

Furthermore, the results of this study show that goal ambiguity is a key factor, which manifest the relationship between original aspiration and entrepreneurs’ effectuation tendencies. This insight brings our attention to revisit the current understanding of goal ambiguity in the effectuation field. Uncertainty, resource position,

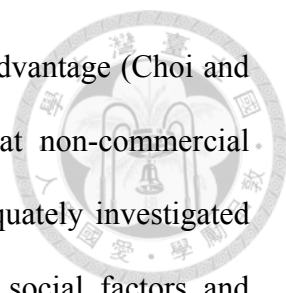




and goal ambiguity are three cornerstones constituting the effectual problem space. Effectual logic would be useful when the future is unpredictable and goals are unclear, while causal logic is useful when the future is predictable and goals are clear. Previous effectuation research studies focus on the other two cornerstones, uncertainty and resource position, and have thus far concluded that both factors significantly influence effectuation behavior (Harms and Schiele 2012; Sitoh et al. 2014; Reyman et al. 2015; Laine and Galkina 2017). Yet, studies empirically exploring how goal ambiguity influences effectual behavior are scarce. Our study finds that while all our participants have had a clear and firm original aspiration, they faced different level of goal ambiguity, which influenced how they operationalized their goals at a lower level. For example, commercial-centric founders who clearly know they want to make a fortune within five years will set their annual financial targets and make their business plans accordingly. However, non-commercial-centric founders, who clearly know they want to make the society better, could not be able to evaluate this aspiration properly, so they tend to act upon feedback from society and stakeholders. Our finding is consistent with Simon's argument that goals exist in hierarchies (Simon 1964), and with Dew et al. (2009) stating that while goals at the highest levels might be clear, goals at lower levels might be highly ambiguous. Our study contributes to effectuation research by taking the first step toward exploring the role of goal ambiguity and inviting more effectuation research to join efforts in order to unveil more aspects of goal ambiguity in relation to effectuation.

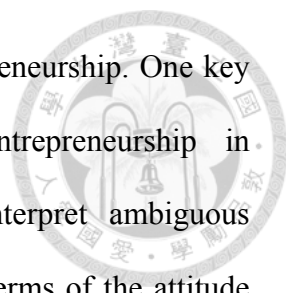
### ***Non-commercial aspiration and social entrepreneurship***

The majority of entrepreneurship studies have focused on the financial aspects of entrepreneurs' assessments of potential opportunities, including whether a potential



opportunity is likely to provide the firm a sustainable competitive advantage (Choi and Shepherd 2004; Haynie et al. 2009). However, studies show that non-commercial aspirations drive many entrepreneurs and the research has not adequately investigated whether and how commercial and non-commercial factors (e.g., social factors and autonomy factors) influence entrepreneurial decision-making. This study fills this gap by focusing on how nascent entrepreneurs' different motivations affect their attention and interpretation of information and their final choice among alternatives. Our analyses clearly show that entrepreneurs rely on their original aspirations when they face a dilemma. In addition, entrepreneurs pursuing financial returns emphasize competitor analyses and follow traditional goal-driven principles. In contrast, entrepreneurs who desire to make a social impact or create more autonomy use more flexible approaches to make decisions. These findings provide answers to recent calls to gain a better understanding of the role of noneconomic consideration in entrepreneurial decision-making and how entrepreneurs trade off when they face economic and noneconomic dilemmas (Shepherd and Patzelt 2017).

Furthermore, in our study, we particularly see a great promise in what effectuation theory can contribute to the study of social entrepreneurship. Social entrepreneurship research suggests that effectuation fits with the social entrepreneurship context characterized by a dynamic learning process shaped through ambiguous aspiration and market opportunities (VanSandt et al. 2009; Dacin et al. 2011). Nevertheless, the interplay of social entrepreneurship (SE) and effectuation has been under-studied. This study shows that attitude toward goal ambiguity and partnerships together illustrate how social-centric entrepreneurs make decisions differently than entrepreneurs with other aspirations. This finding is consistent with previous SE study, while providing new



insight into the relationship between effectuation and social entrepreneurship. One key difference between non-commercial-and commercial-centric entrepreneurship in previous studies is the how they evaluate themselves and interpret ambiguous information. (Fauchart 2011; Austin et al. 2012). Furthermore, in terms of the attitude toward partnership, it has been suggested that successful social entrepreneurs work with and build bridges among very diverse stakeholders (Alvord et al. 2004). Social entrepreneurs also allow their stakeholders to participate more and co-create the future (Tan and Tan 2005). Our findings align with these arguments and shows that these unique characteristics of social-centric entrepreneurs result in a higher effectuation tendency. Taken together, our study illustrates prominent examples that effectuation fits with the SE context and calls to make more connections between effectuation and SE.

### **6.3 Practical Implications**

Our exploratory study also offers several practical implications. First, new venture stakeholders such as investors, incubation institutes and mentors provide critical decision-making advice to entrepreneurs to co-create better venture performance. New ventures need to rely on experienced stakeholders' advice to avoid some rookie mistakes. Nevertheless, miscommunication between stakeholders and entrepreneurs can harm the chemistry of partnership and eventually hurt venture performance. Our study shows that entrepreneurs' original aspiration and cognitive perceptions significantly influence their decision-making behaviors. Thus, we recommend that stakeholders take entrepreneurs' aspiration, self-efficacy, and decision-making tendency into account when advising entrepreneurs to ensure better communication and performance. Furthermore, our study extends the knowledge of entrepreneurial decision-making logic and confirm certain principles regarding critical actions. We suggest venture capital

investors and accelerator consultants could cooperate with academic scholars to develop a systematic framework to enhance new venture performance.

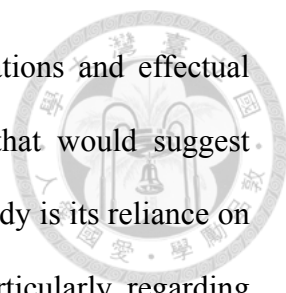


Second, in the field of entrepreneurial education, heterogeneity has been acknowledged as a key factor in students' learning style and performance. Human dimensions shall play a greater role in entrepreneurial education (Fayolle 2013). Most entrepreneurial training programs focus on profit maximization and business plans; however, our study suggests other foci. We find that social-centric entrepreneurs face more challenges regarding goal ambiguity than commercial- or autonomy-centric entrepreneurs. Hence, this study suggests that effectuation or entrepreneurial education programs should consider individual differences when developing learning initiatives and giving guidance. Education or training programs designed for social entrepreneurs should provide more methodologies and know-how to help social-centric entrepreneurs to clarify their goal and set performance indexes

Finally, our study shows that original aspiration plays a significant role and influence critical decisions and entrepreneurial persistence in venture-creation process. Entrepreneurship education program should pay more attention on inspiration of original aspiration. Meanwhile, it is essential to encourage students accessing their original aspiration thoroughly instead of casually jumping into entrepreneurial action so we can improve the success rate of start-ups.

## **6.4 Limitation and Future Research**

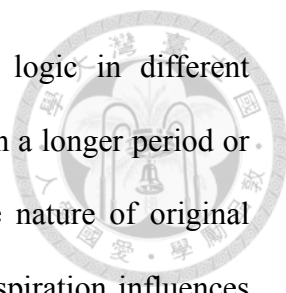
### ***Limitation***



While this research study displays insights on original aspirations and effectual behaviors in a process perspective, we note certain limitations that would suggest potential avenues for future research. The major limitation of our study is its reliance on retrospective data, which could jeopardize the interview data, particularly regarding earlier phases of the case histories. In our study, we use several approaches to reduce recall bias. Nevertheless, future studies would benefit from tracking key decisions in real time. Second, given that our research is conducted in a mono-cultural context in eight new ventures, we acknowledge that these findings may not be generalizable to other cultural or sample settings. Our design seeks to create new insights with in-depth exploration of a relatively small sample that is suitable for theory extension (Eisenhardt 1989; York et al. 2016). Nevertheless, future researchers may thus assess the generalizability of our findings to new ventures in different geographic or cultural settings, or examine our findings by using validated measures of original aspirations with a larger sample size, or triangulating effectuation coding with self-report rating. Finally, for our sample, the survivor bias might be not negligible. While our study focus on behavior rather than performance and survivor bias might be a smaller concern, yet we realized that generalization can thus only be drawn to surviving businesses and we suggest future research to study both survivor and non-survivor to provide better generalizability.

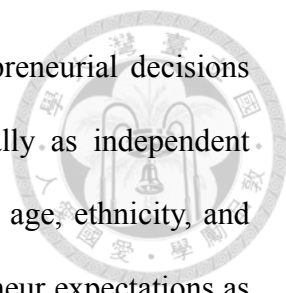
### ***Future Research***

Our study extends the knowledge of entrepreneurship; it also sheds light on several avenues for future research. First, we discover original aspiration as a key individual factor influencing multiple decisions and playing a significant role over the whole venture-creation process. We suggest future research to further study the relationship



between original aspiration and entrepreneurial decision-making logic in different context. For example, studying the dynamics of original aspiration in a longer period or of the failed start-up firms will enhance our understanding of the nature of original aspiration and entrepreneurial persistency. Studying how original aspiration influences critical decisions of born global companies could also extend our knowledge of international entrepreneurship. Furthermore, as we discussed in previous section, original aspirations might lead to different beliefs (or vice versa) which might influence entrepreneurs' attitude and decision-making tendency. We suggest future research to explore the relationship between original aspiration, effectuation tendency, and other social psychology constructs such as, beliefs, identity, or perception in order to further clarify the relationship and boundary among each element.

Second, our study echoes recent call from entrepreneurship scholars and show that non-economic aspiration lead to different entrepreneurial behaviors. Our research can serve as a promising departure point for the relationship between social entrepreneurship and effectuation theory. Future work could advance the understanding of this relationship by viewing our findings in conjunction with current social entrepreneurship constructs. For example, we postulate that an open attitude toward partnerships might come from altruism, which has been discussed in social entrepreneurship studies (Tan and Tan 2005). Sarasvathy and Dew (2008), however, argues that effectual entrepreneurs use intelligent altruism, which is more rational than naïve or general altruism. A comparison of commercial- and social-centric entrepreneurs in terms of naïve and intelligent altruism should advance the understanding of both social entrepreneurs and effectual behavior.

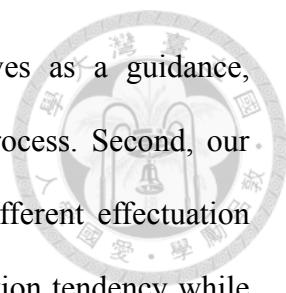


Finally, original aspiration has a meaningful impact on entrepreneurial decisions and more empirical models should include them as well—typically as independent variables along with other entrepreneur descriptors such as gender, age, ethnicity, and education. A recent line of papers, for example, focuses on entrepreneur expectations as an intervening variable between past business experience and future business activity (Townsend et al. 2010). A logical extension would be to include original aspiration explicitly in the explanatory framework. A proposed model could be original aspiration as the intervening variable between experience and expectations, as influencing future business activity in parallel with expectations, or as intervening variable between expectations and activity, or as exerting some combination of such influences. Whatever the specific approach, we believe the inclusion of original aspiration as variables would provide a more realistic representation of how entrepreneurs make decisions.

Furthermore, we also encourage future research conducted mixed methodology study. For example, to run confirmative analysis on coding events to derive further insights.

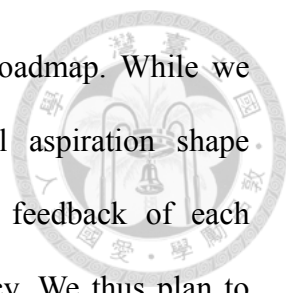
## **6.5 Conclusions**

The entrepreneurial process occurs only when people act to pursue personal aspirations. An entrepreneur's original aspiration is the starting point of his or her entrepreneurial journey. Even so, little is known about how original aspiration impact entrepreneurs' behaviors and actions. In this dissertation, we aim to extend the knowledge of entrepreneurship by exploring the role of original aspiration and how original aspiration shape entrepreneurs' decision-making logic in venture-creation process. Based on our multiple cases study from eight entrepreneurs and the rationale behind their 142 critical decisions, we have three key findings. First, we found that original aspiration has a distinctive nature other than startup reasons, short-term motivations or goals. Original



aspiration dominates among other goals or aspirations and serves as a guidance, influencing multiple critical decisions over the venture-creation process. Second, our study showed that different types of original aspiration lead to different effectuation tendency. Non-commercial-centric aspiration leads to high effectuation tendency while commercial-centric aspiration leads to low effectuation tendency. Finally, we found that attitude toward goal ambiguity and partnership explain why non-commercial-centric and commercial-centric aspirations lead to different effectuation tendency. Our findings made several potential theoretical contributions by confirming prior studies on entrepreneurship (Carter et al. 2003; DeTienne et al. 2008) and effectuation (Read et al. 2005; Dew et al. 2009; Jiang and Ruling 2019) and offering an original and meaningful insights. First, our finding provided a strong support that original aspiration is an important individual antecedent of effectuation and suggested that original aspiration would be a valuable factor from which to advance general understanding of effectuation. Our classification of original aspiration could also serve as a foundation for future aspiration research. Second, we found attitude toward goal ambiguity and partnership as two manifest factors explaining the various effectuation tendency among different original aspirations. This enriched current understanding of interplay between individual and contextual factors. By revealing that non-commercial-centric and commercial-centric aspirations lead to different attitude toward goal ambiguity, we argued that goal ambiguity is the undermined key contextual antecedents of effectuation logic, and should be studied in order to further understanding problem space of effectuation. Last, our discussions of effectual tendency and decision of single activity in process perspective contributed to conceptual clarity of effectuation theory and encouraged future research studies of entrepreneurship in process view.





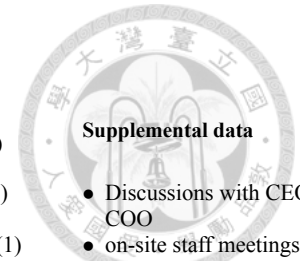
This dissertation also serves as a departure of my research roadmap. While we used longitudinal multiple case study to explore how original aspiration shape entrepreneurs' effectuation tendency, we also observed that the feedback of each decision or action seemed to loop back to the effectuation tendency. We thus plan to explore the dynamics of effectuation tendency and entrepreneurial learning in venture-creation process, which also echoes current call to study the transition from effectuation to causation (Read et al. 2016). Furthermore, in this study, we noticed that two born global start-ups adopted different decision-making logic to enter international market. We plan to further study this phenomenon and aim to extend the knowledge of effectuation boundary.

To sum up, our study presents how entrepreneurs' original aspirations shape their critical decisions by studying eight entrepreneurs and their venture creation journey. Our study shows original aspirations as key antecedent of effectual tendency, and illustrates that different aspirations posit entrepreneurs at different starting line when they use and learn effectuation. We also discovered a unique nature and significant role of entrepreneurs' original aspiration.

An ancient Chinese wisdom saying sings, "Keep to your original aspiration, and it will lead you to your final destination." Through the lens of original aspiration, we bring human agency back to effectuation research and obtain fundamental insights into founders and their entrepreneurial journey.

**Table 1: Case information and data sources**

Source	Firm	Product	Founder	Gender	Age	Professional Background	Annual sales	Employees (# of ppl)	Year Founded	First Interview	Total # of interviews	Informants (# of interviews)	Supplemental data
NTU Garage	C1	Fashion service	Helen	F	30	N/A	\$3M	22	2012	2014	5	(Helen) CEO (3) COO (1) Sales Manager (1)	<ul style="list-style-type: none"> <li>• Discussions with CEO and COO</li> <li>• on-site staff meetings</li> <li>• Press releases</li> <li>• Interview with sales manager</li> <li>• Interview with customer</li> </ul>
	E1	IoT Device	Ian	M	31	N/A	\$2M	14	2011	2014	5	(Ian) CEO (3) COO (2)	<ul style="list-style-type: none"> <li>• Discussions with stakeholder</li> <li>• Press releases</li> <li>• Interview with customer</li> </ul>
	S1	Social Service	Chang	F	29	N/A	\$2M	14	2012	2014	4	(Chang) CEO (3) COO (1)	<ul style="list-style-type: none"> <li>• Discussions with stakeholder</li> <li>• Press releases</li> <li>• Interview with customer</li> </ul>
	S2	Organic food Personal care	Henry	M	37	Banking (5 years)	\$3M	25	2010	2014	5	(Henry) CEO (2) COO (2) Marketing Manager (1)	<ul style="list-style-type: none"> <li>• Discussions with employee</li> <li>• Company website</li> <li>• Press releases</li> <li>• Interview with Marketing manager</li> </ul>
AAMA	C2	IoT Device	Barry	M	35	Retail (4 years)	\$4M	30	2012	2014	7	(Barry) CEO (4) CMO (2) CTO (1)	<ul style="list-style-type: none"> <li>• Discussions with CEO</li> <li>• Press releases</li> <li>• Industry reports</li> <li>• On-site staff meetings</li> </ul>
	S3	Social Service	Susan	F	31	Consulting (2 years)	\$1M	10	2013	2015	7	(Susan) CEO (3) COO (2) Staff (2)	<ul style="list-style-type: none"> <li>• Discussions with CEO</li> <li>• Press releases</li> <li>• On-site staff meetings</li> </ul>
	E2	Software	Aaron	M	32	Marketing (2 years)	\$2M	26	2012	2016	4	(Aaron) CEO (3) CTO (1)	<ul style="list-style-type: none"> <li>• Discussions with customer</li> <li>• Press releases</li> <li>• Interview with investor</li> </ul>
	E3	Social Service	Kyle	M	32	N/A	\$2M	14	2010	2016	4	(Kyle) CEO (2) COO (2)	<ul style="list-style-type: none"> <li>• Discussions with stakeholder</li> <li>• Press releases</li> <li>• Interview with customer</li> </ul>



**Table 2: Decision coding schema**

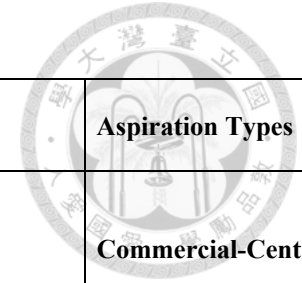
Dimension	Indicators	Dimension	Indicators
<b>Effectuation : Mean-driven</b>	Building on own knowledge base and other available existing resources Defining only rough visions while leaving the details open Experimenting with different products and business models Product is substantially different than first imagined Adapted what we were doing to the resources we had	<b>Causation : Goal-oriented</b>	Base actions upon expectations and predictions Defining and pursuing project goals or operative goals specifically Evaluating planned progress and configure resources to meet the target Organizing and implementing control process to make sure we meet the objectives We design and plan business strategy
<b>Effectuation : Affordable Loss</b>	Looking at downside risk first Be willing to make affordable personal sacrifices for the best of the venture Investing limited amount of money, time, and effort Managing growth expectations and ambitions Not commit more resources than we could afford to lose not to risk so much money that company would be in trouble financially if things didn't work out	<b>Causation : Expected returns</b>	Maximize personal profit Calculating and evaluating expected outcomes or returns Planning development in big steps (including large recruitments or expansion) Analyzing total market size and landscape
<b>Effectuation : Leverage Contingency &amp; Flexibility</b>	Accepting and incorporating unexpected feedback allowing business to evolve as opportunities emerged Avoiding course of actions that restricted our flexibility	<b>Causation : Avoid surprises</b>	Carefully interacting with environment for secrecy reasons Carrying out plans as defined in cases of unforeseen developments Drawing back from project or in cases of surprises
<b>Effectuation : Patchwork (Partnerships)</b>	Co-create business with customers Reaching trust-based flexible partnership agreements and commitments Engaging in stakeholder collaborations to create the future Using pre-commitments from stakeholders to reduce uncertainty and ambiguity as often as possible	<b>Causation : Conducting competitor analysis and Partnership assessment</b>	Carrying out systematic market research activities Acquiring resources through market transactions or contract-based agreements Creating and carry out competitor analysis and positioning

**Table 3: Decision coding of company S3**

Year	Events	Description	First order coding	Decision Principle	Decision Mode
2011	Aspiration & Business Idea	I had a strong desire to introduce the concepts of social enterprise to Taiwanese society. My internship in a social enterprise inspired me. At the beginning, my plan was just to build a website and post the latest knowledge and information from the social enterprise domain, via my translation. I love translation. I did not set a big goal for that. I thought I could start with a lot of little steps and eventually change Taiwanese society.	Building on own knowledge base or other available existing resources	Means driven / Who I am / what I know	Effectual
2011	Team Formation	Translating the latest article in the social enterprise domain is simple and interesting to me. My first idea was to do this on my own; I didn't plan to find a partner. Some of my friends heard of my idea and came to me, offering to help, so I actually started this with 4 to 5 friends.	Building on own knowledge base or other available existing resources	Means driven / Whom I know	Effectual
2012	Business Expansion	We had a fan page on FB, and fans urged us to put on some events. We then invited a keynote speaker and produced the first event. Surprisingly, over 100 people paid for this talk. Then we decided to hold a big annual forum, and tickets sold out quickly. We then started to invest more money and hire more people for this business line.	Co-create business with customers	Patchwork quilt	Effectual
2013	Company Establishment	For business and legitimacy purposes, I thought we needed to set up a company. I asked all our team members if they were willing to make a long term commitment. Two of them said yes, and off we went. Our goal was to build up a social enterprise community; that was all. We did have a gut feeling about what we could achieve but we did not have a specific number or schedule. Our only concerns were that we not lose too much money and that we make it profitable.	Concerning downside risk, not expected return	Affordable loss	Effectual
2013	Co-founder Selection	After our team had worked together for one year, we started up our company. There were six people on our team before we started the company. Three members quit to follow other careers. They went on to corporations such as Yahoo and IBM. Three of us chose to stay. We didn't set any specific goal when we started our company. We simply believed we could help this society by stimulating awareness of social enterprise. We had nothing to lose; how bad could it be? We just tried our best with no regrets. At the very beginning, our team grew organically.	Forming the team officially with committed members	Means driven / Whom I know; patchquilt	Effectual
2013	Business Expansion	The investors and board of directors suggested that we should start to plan and prepare for an incubator business to provide a total solution for new co-ventures. An incubator business was not on my mind. I was not enthusiastic about an incubator business, but we knew this business could create value for both our partners and our customers. This business was different from the other lines--those for which I would die, regardless of profitability. The incubator business was more like a strategic move for us, thanks to the advice of all our stakeholders.	We designed and planned business strategies and implemented control process to meet our objectives	Goal-driven / pre-set goal; Expected return	Causal
2013	Capital Size	Our operation cost was low and we did not need a lot of capital, but being a government business requires a certain minimum amount of capital so we wanted to raise capital to meet the requirement. One of our board members helped us raise the money. The process was quick and smooth; I did not go through any painful fund-raising.	Engaging in stakeholder collaborations to create the future	Means driven / whom I know; Patchquilt	Effectual
2013	Business and organization growth plan	I felt more comfortable growing step by step rather than setting an ambitious goal. We had never made any big move and had been growing steadily. Our organizational growth followed the same pace. We added new people only when necessary. I always have to be cautious about cash flow and I do not waste money; I do what I can do best.	Firm grows incrementally based on available skill set and concern about cash flow and cost; Managing growth expectations and ambitions	Means driven; Affordable loss	Effectual
2014	Incubation program design	The incubation program for a social enterprise is different from other accelerator programs. Social entrepreneurs have unique personalities and aspirations, and we need to design our program based on these characteristics. Per our advisors' suggestion, I acquired an authorization from a UK Social Enterprise incubation program, and launched the program in Taiwan. We revised the program based on our resources and the Taiwanese context over the years. The UK program gave us a big lift at the very beginning.	We implemented control process to meet our objectives	Goal driven; Avoiding surprise	Causal

Year	Events	Description	First order coding	Decision Principle	Decision Mode
2014	Business Selection	We chose not to take some business, even if it was very profitable, for two reasons. First, organizational capability was not there yet. Second, the business was inconsistent with our values or aspirations.	Turn down new business opportunities based on available capabilities.	Means driven / what I know	Effectual
2015	Organizational design	During the early years, we relied on volunteers to support most of our operations. Those volunteers helped us a lot. A few volunteers became our employees after we founded our company. After our company grew bigger, we needed all-around players with multi-tasking skills, but some of these senior employees could not get used to the faster pace. I had to lay them off. That was a painful decision which I was so hesitant to make. Eventually I realized it would get worse or ugly and further damage our friendship, and, of course, our growth, so I had to do this.	Replaced pre-committed volunteers with official employees. Drawing back from project or in cases of surprises	Goal driven; Avoiding surprise	Causal
2016	Business selection	One of our partners invited us to do an e-commerce platform for social enterprise but I decided to turn down the invitation, at least for now. The level of uncertainty was too high. We did not have any e-commerce experience and I saw no synergy with our current business. I would have to build another team just for e-commerce business and our customers might not like it.	Firm grows incrementally based on available skill set and concern about cash flow and cost; Managing growth expectations and ambitions	Means driven	Effectual
2017	Global business expansion	A global business opportunity came in an invitation from the Taiwanese government. We had become more and more famous and had been working with the Taipei City Council to promote the concept of social enterprise. One day, the Social Council invited us to host an Asia Regional event. After the event, we got some business opportunities from Hong Kong and Japan. That was how we started our global business.	Engaging in stakeholder collaborations to create the future	Patchquilt / Partnership	Effectual
2017	Future Plan	In regard to our plans for the future, I am open to any option, and we do not have to stick with the current business roadmap. My aspiration is to help Taiwan become a better place, and I believe we have made some impact already. Many potential businesses have come to us and we have had to make choices. That will be the most important task for me in 2018. I will see what this society needs me to do. I would love to see more players jumping into the social enterprise field so I can hand our job over to them. Then I can explore new areas and do things no other players want to do. The only thing for sure right now is that we will choose our new business based on our capability and experience, and the needs of society.	Consider feasibility, responsibility, and original aspiration when thinking about future plan	Means driven / Patchquilt	Effectual

**Table 4: Illustrative examples of aspirations**

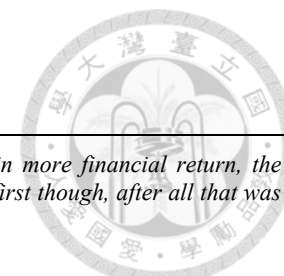


Founder	Why did you start up your business? (with other related excerpts)	First order code	Second order code	Aspiration Types
Helen	<i>At beginning, I set up my goal, in terms of financial return. I told myself I need to make enough money, at least equal to how much I can get as an employee, within a year. Otherwise I would just quit. I did some quick math about market size and potential return, it looked pretty good to me so I decided to start this business</i>	Founder has strong desire on profit-making	Financial Return	<b>Commercial-Centric</b>
	<i>Even now I set annual financial target and watched closely with our cash flow. Whenever any conflict with my co-founder, suppliers, or partners, I followed two principles: money and people. Actually money first. We adjusted our business and service operation according to profit and market</i>	Founder use financial return as key guidance to make decisions	Financial Return	<b>Commercial-Centric</b>
	<i>I think I also want to start a business in my own styles, autonomy is important to me and also I like the feeling that the whole team make a lot of effort and achieve the goal.</i>	Founder cares about autonomy for starting business in own style	Create my own company and culture	<b>Autonomy-Centric</b>
Ian	<i>I just love the process of creating an innovative product, especially with a talented team and members. I did not start up this business for money or to change the world. Well, I do not know how our IoT device can change the world. The first time we saw our functional prototype, we went wild with joy and tears and I realized that is what I was looking for. I want to create a team, a product, with my own style.</i>	Founder has self-interest on creating own style product and organization	Create my own product	<b>Autonomy-Centric</b>
	<i>I might have to revise my answer a little bit. I am not that self-less, money is important and surely I dream to make crazy money by doing this business. It is just not my top priority.</i>	Financial return is also an entrepreneurial goal	Financial return	<b>Commercial-Centric</b>
Chang	<i>Education system in Taiwan is a chaos, and young students have strong anxiety facing uncertain future. I was a sociology major and have been a career advisor since senior year. I eager to help young students by encouraging them to step out of comfort zone and explore themselves, so they can select their path with knowing themselves better. That's why I found this company</i>	Founder has strong desire to help young students find their career path	Make the world and society better	<b>Social-Centric</b>

Founder	Why did you start up your business? (with other related excerpts)	First order code	Second order code	Aspiration Types
	<i>At the same time, during this process, I feel I am doing something meaningful and that matters a lot to me. From my childhood, my dad used to teach me that I am lucky and have more resources than some other children, I should leverage this resource to help others. I think that rooted in my heart so when I help other people, I feel truly happy because I fulfill my destiny.</i>	Founder described doing something meaningful is important to her	Self-actualization autonomy and	<b>Autonomy-Centric</b>
Henry	<i>We need sufficient money to sustain our business, but we never put profit first priority because that's not what we found this company for. We found this company in order to provide our customers authentic and nature products. Everything we do have to be consistent with our aspiration.</i>	Providing authentic and nature products is much more important than making money	Make the world and society better	<b>Social-Centric</b>
	<i>I have to say, creating my own company and culture is also my aspiration. I was from banking industry and I have experienced high pressure career. I want to build a culture which provide my employees work-life balance and treat them really well.</i>	Create a company providing work-life balance to employees	Create my own company and culture	<b>Autonomy-Centric</b>
Barry	<i>I expected I can make money from this business when I started up, otherwise, why bother? it is never a secret profitability comes first in our company. Having said that, I also have a vision to build a company culture values our employees' talents and efforts.</i>	Founder put profit as top priority.	Financial Return	<b>Commercial-Centric</b>
	<i>I feel good to conquer the market and build a company with my own way, I would say this is also the beauty of startup.</i>	Founder love running business with partners	Self-actualization autonomy and	<b>Autonomy-Centric</b>
Susan	<i>When I built this platform in 2012, not too many people in Taiwan had heard about Social Enterprise. I learned all-new knowledge and skills in the US, and I was eager to bring all of these new concepts back to Taiwan to make my home country better</i>	Founder has strong desire to make Taiwan society better	make the world and society better	<b>Social-Centric</b>
	<i>Social enterprise could make the world and Taiwan Society better. When I first came back to Taiwan, only few people heard about social enterprise and only small number of social institutions existed. So I decided to promote social enterprise in Taiwan in belief that social enterprise can make this world a better place</i>	Founder has strong desire to make Taiwan society better	make the world and society better	

Founder	Why did you start up your business? (with other related excerpts)	First order code	Second order code	Aspiration Types
Aaron	<i>I saw this interesting problem, as a challenge, and I felt this was also meaningful to me so I wanted to take this challenge. We started our business for this. Personally, I had to day, surely I dreamed to make a big money so I could reach financial free stage earlier so that I could enjoy my life.</i>	Founder consider solving a problem the core motivation	Create my own product and solve the problem	<b>Autonomy-Centric</b>
	<i>To be fair, actually, I also aspire to make some money from this business, who else not? I had dreamed about making a big fortune then I could sell my stocks, retire early and enjoy the rest of my life. But tell you what, it is not that easy.</i>	Founder has aspiration to make money from this business	Financial Return	<b>Commercial-Centric</b>
Kyle	<i>From my perspective, most entrepreneurs have high ego. At first, I thought I was eager to make this world better, but then I realized, "it has to be me". I was doing all this in my own interest. It would be fantastic to bridge Taiwanese people to emerging countries and improve local environment. Deep inside my heart I recognized that it has to be me to make all this happen, to achieve all this. To be honest, it overrides my social aspiration</i>	Founder started social business for his own ego and sense of achievement.	Self-actualization and autonomy	<b>Autonomy-Centric</b>
	<i>Sure I also want to make this world better when I see those severe social issues everywhere. I was just saying, being honest with myself, I think I started this business mostly on the purpose of my vanity and self-fulfillment</i>	Founder consider social impact also important for him to start up	make the world and society better	<b>social-Centric</b>





**Table 5: Supporting quotes for dominance of original aspirations**

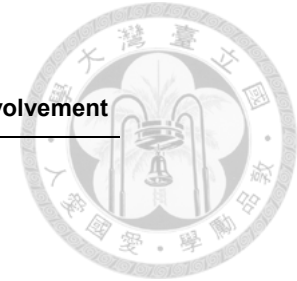
Founders	Why did you start up your business? ( with other related excerpts)	Entrepreneurial Aspiration	Original Aspiration dominates / Original Aspiration as a guidance	Original Aspiration
Helen	<i>At beginning, I set up my goal, in terms of financial return. I told myself I need to make enough money, at least equal to how much I can get as an employee, within a year. Otherwise I would just quit. I did some quick math about market size and potential return, it looked pretty good to me so I decided to start this business</i>	Commercial-Centric	<i>I created my business for two reasons, one is to gain more financial return, the other is to build my own company and culture. Profit first though, after all that was the original aspiration driving me to initiate all of this</i> <b>(Commercial over Autonomy)</b>	Commercial-Centric
	<i>I think I also want to start a business in my own styles, autonomy is important to me and also I like the feeling that the whole team make a lot of effort and achieve the goal.</i>	Autonomy-Centric	<i>Even now I set annual financial target and watched closely with our cash flow. Whenever any conflict with my co-founder, suppliers, or partners, I followed two principles: money and people. Actually money first. We adjusted our business and service operation according to profit and market</i> <b>(Commercial over Autonomy)</b>	
Ian	<i>I just love the process of creating an innovative product, especially with a talented team and members. I did not start up this business for money or to change the world. Well, I do not know how our IoT device can change the world. The first time we saw our functional prototype, we went wild with joy and tears and I realized that is what I was looking for. I want to create a team, a product, with my own style.</i>	Autonomy-Centric	<i>Have I told you what I care the most during my entrepreneurial journey? The team. I started my business for fun, for creating my own product, for fighting with my buddies. After all these years, I further realized the joy from overcoming a challenge with my team always gave me a big lift. I really enjoyed that feeling. It might sound weird but I just love to be a captain to lead all my crew sail cruise the ocean to find the one piece, like Luffy (a Japanese animation character).</i> <b>(Autonomy over Commercial)</b>	Autonomy-Centric
	<i>I might have to revise my answer a little bit. I am not that self-less, money is important and surely I dream to make crazy money by doing this business. it is just not my top priority.</i>	Commercial-Centric	<i>After we shipped out 3000 units of our products to our backers, two VCs approached us, one gave us higher valuation but we had to, partially, sacrificed our control of our future market strategy. The other one took smaller share with lower valuation, but gave us full control of our business. I really struggled for this decision. One of my best friend asked me, “what do you want from this business?” I then realized I want to continue this adventure with my team, with my will. More money is great, but that’s not the most important thing for our company.</i> <b>(Autonomy-centric aspiration as guidance)</b>	
Chang	<i>Education system in Taiwan is a chaos, and young students have strong anxiety facing uncertain future. I was a sociology major and have been a career advisor since senior year. I eager to help young students by encouraging them to step out of comfort zone and explore themselves, so they can select their path with knowing themselves better. That’s why I found this company</i>	Social-Centric	<i>What I desire most is still to make Taiwan society better, though education or cultivating talents is what in my mind now, I think my original aspiration is to make our society better, this will always be my top priority.</i> <b>(Social over Autonomy)</b>	Social-Centric
	<i>At the same time, during this process, I feel I am doing something meaningful and that matters a lot to me. From my childhood, my dad used to teach me that I am lucky and have more resources than some other children, I should leverage this</i>	Autonomy-Centric		

Founders	Why did you start up your business? ( with other related excerpts)	Entrepreneurial Aspiration	Original Aspiration dominates / Original Aspiration as a guidance	Original Aspiration
	<i>resource to help others. I think that rooted in my heart so when I help other people, I feel truly happy because I fulfill my destiny.</i>			
Henry	<i>We need sufficient money to sustain our business, but we never put profit first priority because that's not what we found this company for. We found this company in order to provide our customers authentic and nature products. Everything we do have to be consistent with our aspiration.</i>	Social-Centric	<i>We need sufficient money to sustain our business, but we never put profit first priority because that's not what we found this company for. We found this company in order to provide our customers authentic and nature products. Everything we do have to be consistent with our aspiration. (Social mission is the first priority)</i>	Social-Centric
	<i>I have to say, creating my own company and culture is also my aspiration. I was from banking industry and I have experienced high pressure career. I want to build a culture which provide my employees work-life balance and treat them really well.</i>	Autonomy-Centric	<i>We consider being good to stakeholder is consistent with our value and aspiration. While I enjoying the sense of achievement of building my own company and culture, I would still say that I start this business at first place is to make this society and world better. (Social over autonomy)</i>	
Barry	<i>I expected I can make money from this business when I started up, otherwise, why bother? it is never a secret profitability comes first in our company. Having said that, I also have a vision to build a company culture values our employees' talents and efforts.</i>	Commercial-Centric	<i>Developing an innovative product was a fun task (Autonomy), but we started this business to make a profit. Maximizing profit is the main principle (Commercial). Whenever we cannot reach agreement on key decisions, for example, adding a new feature to the product or expanding our market into a new region, we evaluate our options based on profitability. (Commercial-Centric over Autonomy-Centric)</i>	Commercial-Centric
	<i>I feel good to conquer the market and build a company with my own way, I would say this is also the beauty of startup.</i>	Autonomy-Centric	<i>How do I solve the conflict with my co-founders? Hm...you need a golden rule. I remember there is one time, me and Kay and Sam discussed about a product feature, Kay wants this feature for marketing purpose, while Sam has huge concern on product quality issue. We just could not reach agreement. And then I told them to go back to our golden principle, profit and market. We roughly estimated potential profit and cost and then we decided not to develop this feature. After all, we all agree that is why we start and join this business. (Commercial-centric aspiration as a guidance)</i>	
Susan	<i>When I built this platform in 2012, not too many people in Taiwan had heard about Social Enterprise. I learned all-new knowledge and skills in the US, and I was eager to bring all of these new concepts back to Taiwan to make my home country better</i>	Social-Centric	<i>In regard to our plans for the future, I am open to any option, and we do not have to stick with the current business roadmap. My aspiration is to help Taiwan become a better place, and I believe we have made some impact already. Many potential businesses have come to us and we have had to make choices. I will see what this society needs me to do. (Strong social-centric aspiration)</i>	Social-Centric

Founders	Why did you start up your business? ( with other related excerpts)	Entrepreneurial Aspiration	Original Aspiration dominates / Original Aspiration as a guidance	Original Aspiration
	<i>Social enterprise could make the world and Taiwan Society better. When I first came back to Taiwan, only few people heard about social enterprise and only small number of social institutions existed. So I decided to promote social enterprise in Taiwan in belief that social enterprise can make this world a better place</i>		<i>We chose not to take on some business—even though it was very profitable—for two reasons. First, our organizational capability was not there yet. Second, the business was inconsistent with our values and aspirations. <b>(Social-centric Aspiration as a guidance)</b></i>	
Aaron	<i>I saw this interesting problem, as a challenge, and I felt this was also meaningful to me so I wanted to take this challenge. We started our business for this.</i>	Autonomy-Centric	<i>I was passionate to develop a solution to solve this problem, with my own design and style. (Autonomy) Meanwhile, I also aspire to become a billionaire, that would also be great (Commercial), I have dreamed about I can just go surfing in summer and skiing in winter after reaching financial-free status. And I actually realized we consider financial plan and financial figures as our first priority. <b>(commercial over Autonomy).</b></i>	Commercial-centric
	<i>To be fair, I also aspire to make some money from this business, who else not? I had dreamed about making a big fortune then I could sell my stocks, retire early and enjoy the rest of my life. But tell you what, it is not that easy.</i>	Commercial-Centric		
Kyle	<i>From my perspective, most entrepreneurs have high ego. At first, I thought I was eager to make this world better, but then I realized, “it has to be me”. I was doing all this in my own interest. It would be fantastic to bridge Taiwanese people to emerging countries and improve local environment. Deep inside my heart I recognized that it has to be me to make all this happen, to achieve all this. To be honest, it overrides my social aspiration</i>	Autonomy-Centric	<i>From my perspective, most entrepreneurs have high ego. At first, I thought I was eager to make this world better, but then I realized, “it has to be me”. I was doing all this in my own interest. It would be fantastic to bridge Taiwanese people to emerging countries and improve local environment. Deep inside my heart I recognized that it has to be me to make all this happen, to achieve all this. To be honest, it overrides my social aspiration <b>(Autonomy over social)</b></i>	Autonomy-Centric
	<i>Sure I also want to make this world better when I see those severe social issues everywhere. I was just saying, being honest with myself, I think I started this business mostly on the purpose of my vanity and self-fulfillment</i>	social-Centric	<i>Sure I also want to make this world better when I see those severe social issues everywhere. I was just saying, being honest with myself, I think I started this business mostly on the purpose of my vanity and self-fulfillment <b>(Autonomy over Social)</b></i>	

**Table 6: Illustrative examples of static aspiration**

Founder	Original Aspiration	Future Plan / Current Aspiration	Original Aspiration Evolvement
Helen	<b>Commercial-Centric</b>	<i>I have learnt a lot during these years. The goal of next two years is to scale up our business. We plan to do two things: to open up more stores, and to expand our business scope. I focus on our service process, which is core to my business last year and we have build up our core competence for now. But I need to make sure we keep establishing our competitive advantages and hope I can achieve my profit target in 2019. Maybe I will have different goals then.</i>	<b>Commercial-Centric (Steady)</b>
Ian	<b>Autonomy-Centric</b>	<i>Have I told you what I care the most during my entrepreneurial journey? The team. I started my business for fun, for creating my own product, for fighting with my buddies. After all these years, I further realized the joy from overcoming a challenge with my team always gave me a big lift. I really enjoyed that feeling. It might sound weird but I just love to be a captain to lead all my crew sail cruise the ocean to find the one piece, like Luffy (a Japanese animation character). <b>(Autonomy over Commercial)</b></i>	<b>Autonomy-Centric (Steady)</b>
Chang	<b>Social-Centric</b>	<i>To be honest, even after all these years, I have learn from this journey. It is still very hard for me to make future plans. I think as long as I can make this society better, I will just do it. We do have some plans for expanding our service into high school area. that's our plan for next two years.</i>	<b>Social-Centric (Steady)</b>
Henry	<b>Social-Centric</b>	<i>Well, nothing much. We do have a lot of plans on our list. Basically one first thing is we want to complete our healthcare product lines to offer our customers total solution for natural products. The other thing is I will spend more time promoting concept of B corp. which is consistent with our values.</i>	<b>Social-Centric (Steady)</b>
Barry	<b>Commercial-Centric</b>	<i>I want to reach IPO status in 2020. I have already laydown milestones for our IPO. It is very tough but I feel also very exciting. I can see our ultimate goal there, all I have to do is overcome all the obstacles to get there.</i>	<b>Commercial-Centric (Steady)</b>



Founder	Original Aspiration	Future Plan / Current Aspiration	Original Aspiration Evolvement
Susan	<b>Social-Centric</b>	<i>I don't think we are there quite yet. Yes, the awareness and atmosphere of social enterprise has been rising a lot, but there are still a lot of things we can do to make Taiwan society better. This vision (aspiration) has never changed a bit in my mind. This question is very good, we are actually discussion about this. I believe what we will do is still being a pioneer in this field, based on what we can do to help this society the most</i>	<b>Social-Centric (Steady)</b>
Aaron	<b>Commercial</b>	<i>We are planning create a new business line, we will use our technology to develop new software. We are now evaluating market opportunities for our new product.</i>	<b>Commercial (Steady)</b>
Kyle	<b>Autonomy-Centric</b>	<i>Three years after we launched our business, I started to think what do I want, and what should our company do. I realized that I had done enough for self-fulfillment, or I have already proved I can make it. But I am not sure how much I have contributed to this society, or this world. I think it is time for me to do more. In that, I reviewed our service and made a big adjustment. I want to make this society better more than ever, at least for now. Maybe that is because I have achieved my original aspiration...maybe</i>	<b>Social-Centric (Dynamic)</b>



**Table 7: Cross-case comparison of key constructs**



**Table 6. Cross-Case comparisons of key constructs**

Case Firms	S3	S1	E3	S2	E2	E1	C1	C2
Founder	Susan	Chang	Kyle	Henry	Aaron	Ian	Helen	Barry
First Order Original Aspiration	Social	Social	Autonomy	Social	Commercial	Autonomy	Commercial	Commercial
<b>Second Order Original Aspiration</b>	<b>Non-Commercial</b>	<b>Non-Commercial</b>	<b>Non-Commercial</b>	<b>Non-Commercial</b>	<b>Commercial</b>	<b>Non-Commercial</b>	<b>Commercial</b>	<b>Commercial</b>
<b>% of Effectual Decisions</b>	<b>78.57%</b>	<b>72.22%</b>	<b>60.00%</b>	<b>55.00%</b>	<b>52.94%</b>	<b>50.00%</b>	<b>44.44%</b>	<b>31.82%</b>
Total Decision #	14	18	15	20	17	18	18	22
Effecutation	11	13	9	11	9	9	8	7
Causation	3	4	5	7	7	8	9	14
Hybrid	0	1	1	2	1	1	1	1
Attitude toward Goal Ambiguity	Tolerant	Tolerant	Tolerant	Tolerant	Uncomfortable	Tolerant	Uncomfortable	Uncomfortable
Attitude toward partnership	Open	Open	Open	Open	Cautious	Open	Cautious	Cautious



**Table 8: Illustrative examples of attitude toward partnership as manifestations of effectual and causal logic**

Original Aspiration	Excerpts from interview	Decision Logic	First Order Themes
<b>Non-Commercial Aspiration</b>	<i>As far as I know, we are the first team providing this kind of program to young students, and we have not done enough yet. I do not see intense competition in this domain. We share our experience with the other player while we also learn from them. Sometimes we launch marketing campaign together because we can share the cost and get more exposure. I don't know, maybe because we both love to see this critical problem can be solved. (Chang)</i>	Effectual	<b>Open attitude to engage with partners</b>
	<i>We are not competing with those traditional FMCG (fast moving consumer goods) players, because we use natural ingredients and target on different segmentation. Yes, we do see some emerging competition in this segmentation but I do not worry about this too much. First, I am confident with our product knowledge; second, if these new comers can also sell "good" products to customers, it is great. We should gain more market share from those big company which sells homogeneous products, instead of competing with each other. (Henry)</i>	Effectual	<b>Open attitude to engage with partners</b>
	<i>I do not care who got more credit for our work, my company or our partner's company. My principle is we have to be fair, and nobody take advantage on this relationship. I love to see more players jumping into this field because the society will thus become better. It might be weird to say this, but we welcome the competition. (Susan)</i>	Effectual	<b>Open attitude to engage with partners</b>
<b>Commercial Aspiration</b>	<i>We are very careful with the partnership. We have been working on our service process and now we are the leader of this industry. Many companies approached us and offered strategic alliance proposals to me. So, far we only have one strategic partner, who has been our supplier for two years. We are doing pretty good all by ourselves. I don't see we need any partner in the near future unless it can give us a booming growth. (Helen)</i>	Causal	<b>Cautious on partnership</b>
	<i>Although we are confident with our innovative product, we know the market competition is intense. We have to build our competitive advantages against extant players and also be very careful with those new comers. We have to keep an eye on the market. Oh...and that's also why we have to be very careful when we deal with strategic alliance. We need to do a comprehensive evaluation to make sure our partner can contribute to our</i>	Causal	<b>Cautious on partnership</b>



**Figure 1: A conceptual model of effectuation tendency**

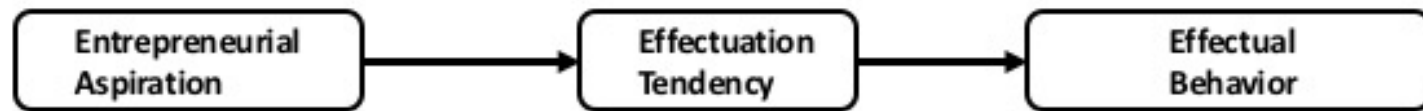
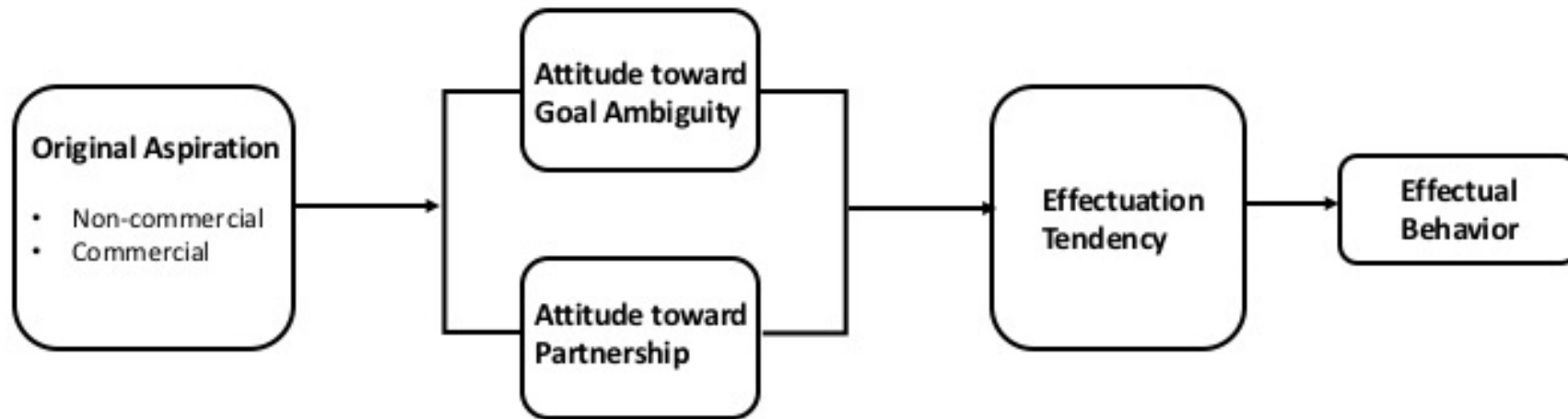




Figure 2: A revised conceptual model of effectuation tendency



## REFERENCES



- Alsos, G.A., Hytti, U., & Solvoll, S. (2016). Entrepreneurs' social identity and the preference of causal and effectual behaviours in Start-Up Processes. *Entrepreneurship & Regional Development*, 28, 234-258.
- Alvord, S.H., Brown, L.D., & Letts, C.W. (2004). Social entrepreneurship and social transformation. *The journal of applied behavioral science*, 40(3), 260-282
- Arend, R. J., Sarooghi, H., & Burkemper, A. (2015). Effectuation as ineffectual? Applying the 3E theory- assessment framework to a proposed new theory of entrepreneurship. *Academy of Management Review*, 40(4), 630–651.
- Austin, J., Stevenson, H., & Wei-Skillern, J. (2012). Social and commercial entrepreneurship: Same, different, or both? *Entrepreneurship & Regional Development*, 47(3), 370-384.
- Bagozzi, R.P., & Dholakia, U. (1999). Goal setting and goal striving in consumer behavior. *Journal of Marketing*, 63, 19-32.
- Baker, T., & Nelson, R. E. (2005). Creating something from nothing: Resource construction through entrepreneurial bricolage. *Administrative Science Quarterly*, 50(3), 329–366.
- Bandura, A. (1977). Self-efficacy: Toward a Unifying Theory of Behavioral Change. *Psychological Review* 84, 191–215.
- Bandura, A. (1986). Social Foundations of Thought and Action. Prentice Hall, Englewood Cliffs, NJ.
- Bandura, A., & Locke, E.A., (2003). Negative Self-Efficacy and Goal Effects Revisited. *Journal of Applied Psychology* 88(1), 87-99.
- Baron, R. A. (1998). Cognitive mechanisms in entrepreneurship: Why and when entrepreneurs think differently than other people. *Journal of Business Venturing*, 13(4), 275-294.
- Baron, R. A. (2008). The role of affect in the entrepreneurial process. *Academy of Management Review*, 33(2), 328–340.
- Baron, R. A., & Ensley, M. D. (2006). Opportunity recognition as the detection of meaningful patterns: Evidence from comparisons of novice and experienced entrepreneurs. *Management Science*, 52(9), 1331–1344.

Baum, J.B., & Locke, E.A., (2004). The relationship of entrepreneurial traits, skills, and motivation to subsequent venture growth. *Journal of applied psychology*, 89(4), 587-598.

Behrens, J., & Patzelt, H. (2017). Corporate entrepreneurship managers' project terminations: Integrating portfolio-level, individual-level, and firm-level effects. *Entrepreneurship Theory and Practice*.

Berends, H., Jelinek, M., Reyman, I., & Stultiens, R. (2014). Product innovation processes in small firms: Combining entrepreneurial effectuation and managerial causation. *Journal of Product Innovation Management*, 31(3), 616-635.

Birley, S., & Westhead, P., (1994). A taxonomy of business start-up reasons and their impact on firm growth and size. *Journal of Business Venturing*, 9, 7-31.

Boyd N.G., & Vozikis G.S. (1994). The Influence of Self-Efficacy on the Development of Entrepreneurial Intentions and Actions. *Entrepreneurship Theory and Practice* 18, 63–77.

Cardon, M.S., Zietsma, C., Saparito, P., Matheme, B., & Davis, C. (2005). A tale of passion: New insights into entrepreneurship from a parenthood metaphor. *Journal of Business Venturing*, 20(1), 23-45.

Carsrud, A. & Brannback, M. (2011). Entrepreneurial Motivations: What do we still need to know? *Journal of Small Business Management*, 49(1), 9-26.

Carsrud, A., Brannback, M., Elfving J., & Brandt K. (2017). Motivations: the entrepreneurial mind and behavior. *Revisiting The Entrepreneurial Mind, Springer. Ch13*, 185-209.

Carter, N. M., Gartner, W.B., Shaver, K.G., & Gatewood, E.J. (2003). The career reasons of nascent entrepreneurs. *Journal of Business Venturing* 18, 13-39.

Chandler, G. N., DeTienne, D. R., McKelvie, A., & Mumford, T. V. (2011). Causation and effectuation processes: a validation study. *Journal of Business Venturing*, 26(3), 375–390.

Chen, C.C., Greene, P.G., & Crick, A. (1998). Does Entrepreneurial Self-efficacy Distinguish Entrepreneurs from Managers? *Journal of Business Venturing* 13, 295–316.

Choi, Y.R., & Shepherd, D.A. (2004). Entrepreneurs' decisions to exploit opportunities. *Journal of Management*, 30(3), 378-395.

Dacin, M.T., Dacin, P.A., & Tracey, P. (2011). Social entrepreneurship: A critique and future direction. *Organization Science*, 22(5), 1203-1213.

Davidsson, P., & Honig, B. (2003). The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18(3), 301-331.

Dew, N., Read, S., Sarasvathy, S.D., & Wiltbank, R. (2009). Effectual versus predictive logics in entrepreneurial decision-making: Differences between experts and novices. *Journal of Business Venturing*, 24, 287–309.

DeTienne, D.R., Shepherd, D.A., & DeCastro, J.O., (2008). The fallacy of “only the strong survive”: the effects of extrinsic motivation on the persistence decisions for under-performing firms. *Journal of Business Venturing*, 23 (5), 528–546.

DeTienne, D. R., & Chandler, G. N. (2010). The impact of motivation and causation and effectuation approaches on exit strategy. *Frontiers of Entrepreneurship Research*, 30(1), 1–13.

DeTienne D.R., McKelvie, A., Chandler, G.N., (2015). Making sense of entrepreneurial exit strategies: A typology and test. *Journal of Business Venturing*, 30. 255-272

Douglas, E. J., & Shepherd, D. A. (2000). Entrepreneurship as a utility maximizing response. *Journal of Business Venturing*, 15(3), 231–251.

Dunkelberg, W., Moore, C., Scott, J., & Stull, W. (2013). Do entrepreneurial goals matter? Resource allocation in new owner-managed firms, *Journal of Business Venturing*, 28, 225-240.

Eisenhardt, K. M. (1989). Building theories from case study research. *The Academy of Management Review*, 14(4), 532-550.

Eisenhardt, K. M., & Graebner, M. E. (2007). Theory building from cases: opportunities and challenges. *Academy of Management Journal*, 50(1), 25–32.

Engel, Y., Dimitrova, N.G., Khapova, S.N., & Elfring, T. (2014). Uncertain but able: Entrepreneurial self-efficacy and novices’ use of expert decision-logic under uncertainty. *Journal of Business Venturing Insights*, 1, 12–17.

Engel, Y., Burg, E., Kleijn, E., & Khapova, S.N. (2017). Past career in future thinking: How career management practices shape entrepreneurial thinking. *Strategic Entrepreneurship Journal*, 11(2), 122-144.

Fauchart, E. & Gruber, M. (2011). Dawinians, communitarians, and missionaries: The role of founder identity in entrepreneurship. *Academy of Management Journal*, 54(5), 935-957.

Fayolle, A. (2013). Personal views on the future of entrepreneurship education. *Entrepreneurship & Regional Development*, 25, 692-701.

Garud, R., & Gehman, J. (2016). Theory evaluation, entrepreneurial processes, and performativity. *Academy of Management Review*, 41(3), 544–549.

Golden, B.R., (1992). The Past Is the Past--Or Is It? The Use of Retrospective Accounts as Indicators of past Strategy. *Academy of Management Journal*, 35(4), 848-860.

Gupta, K. V., Chiles, H. T., & McMullen, S. J. (2016). A process perspective on evaluating and conducting effectual entrepreneurship research. *Academy of Management Review*, 41(3), 540–544.

Harms, R., & Schiele, H. (2012). Antecedents and consequences of effectuation and causation in the international new venture creation process. *Journal of International Entrepreneurship*, 10(2), 95–116.

Haynie, J.M., Shepherd, D.A., & McMullen, J.S. (2009). An opportunity for me? The role of resources in opportunity evaluation decisions. *Journal of management studies*, 46(3), 337-361.

Jiang, Y., & Rüling, C.-C. (2019). Opening the Black Box of Effectuation Processes: Characteristics and Dominant Types. *Entrepreneurship Theory and Practice*, 43(1), 171-202.

Johansson, A., & McKelvie, A. (2012). Unpacking the antecedents of effectuation and causation in a corporate context. *Frontiers of Entrepreneurship Research*, 32(17), 1-15.

Laine, I., & Galkina, T. (2017). The interplay of effectuation and causation in decision-making: Russian SMEs under institutional uncertainty. *International Entrepreneurship and Management Journal*, 13, 905-941.

Langley A. (1999). Strategies for theorizing from process data. *Academy of Management Review*, 24(4), 691-710.

March, J.G., & Simon, H.A., (1958). *Organizations*. New York

Mitchell, R. K., Smith, J. B., Morse, E. A., Seawright, K. W., Peredo, A. M., & McKenzie, B. (2002). Are entrepreneurial cognitions universal? Assessing entrepreneurial cognitions across cultures. *Entrepreneurship Theory and Practice*, 26(4), 9–32

Mitchell, J. R., & Shepherd, D. A. (2010). To thine own self be true: Images of self, images of opportunity, and entrepreneurial action. *Journal of Business Venturing*, 25(1), 138–154.

Moore, M.H. (1995). *Creating public value: Strategic management in government*. Cambridge, MA: Harvard University Press.

Murheiks, C.Y., Mosakowski, E., & Cardon, M.S., (2014). Pathways of Passion: Identity Centrality, Passion, and Behavior Among Entrepreneurs. *Journal of Management*, 40(6), 1583-1606.

Perry, J. T., Chandler, G. N., & Markova, G. (2012). Entrepreneurial effectuation: a review and suggestions for future research. *Entrepreneurship: Theory and Practice*, 36(4), 837–861.

Pettigrew, A. (1990). Longitudinal field research on change: Theory and practice. *Organizational Sciences*, 1(3), 267-292.

Read, S., & Sarasvathy, S.D. (2005). Knowing what to do and doing what you know: Effectuation as a form of entrepreneurial expertise. *Journal of Private Equity*, 9, 45–62.

Read, S., Dew, N., Sarasvathy, S. D., Song, M., & Wiltbank, R. (2009). Marketing under uncertainty: the logic of an effectual approach. *Journal of Marketing*, 73(3), 1–18.

Read, S., Sarasvathy, S. D., Dew, N., & Wiltbank, R. (2016). Response to Arend, Sarooghi, and Burkemper (2015): Co-creating effectual entrepreneurship research. *Academy of Management Review*, 41(3), 528–536.

Reymen, I., Andries, P., Berends, H., Mauer, R., Stephan, U., & van Burg, E. (2015). Understanding dynamics of strategic decision-making in venture creation: a process study of effectuation and causation. *Strategic Entrepreneurship Journal*, 9(4), 351–379.

Reynolds, P. D., W. D. Bygrave, E. Autio, L. Cox, & M. Hay (2002). *Global Entrepreneurship Monitor: 2002, Executive Report*. Kansas City, MO: Kauffman Center for Entrepreneurial Leadership.

Sarasvathy, S.D. (2001). Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review* 26(2): 243–263.

Sarasvathy, S.D. (2003). Entrepreneurship as a science of the artificial. *Journal of Economic Psychology*, 24, 203–220.

Sarasvathy, S. D., & Dew, N. (2005). Entrepreneurial logics for a technology of foolishness. *Scandinavian Journal of Management*, 21, 385–406.

Sarasvathy, S. D. (2008). *Effectuation: elements of entrepreneurial expertise*. Sciences New York (Vol. 2010). Cheltenham: Edward Elgar Publishing.

Sarasvathy, S., & Dew, N. (2008). Effectuation and over-trust: debating Goel and Karri. *Entrepreneurship Theory and Practice*, 32, 727–737.

Sarasvathy, S.D., & Venkataraman, S. (2011). Entrepreneurship as method: open questions for an entrepreneurial future. *Entrepreneurship Theory and Practice*, 35(1), 113–135.

Scott, W.R. (2003). Organizations: Rational, natural, and open systems. Englewood Cliffs, NJ: Prentice-Hall.

Shane, S., Locke, E. A., & Collins, C. J. (2003). Entrepreneurial motivation. *Human Resource Management Review*, 13, 257-279.

Shepherd, D., Patzelt, H., & Baron, R. (2013). “I care about nature, but ...”: Disengaging values in assessing opportunities that cause harm. *Academy of Management Journal*, 56(5), 1251–1273.

Shepherd, D.A., Williams, T.A., & Patzelt, H. (2014). Thinking about entrepreneurial decision-making: review and research agenda. *Journal of Management*, 41(1), 1-36.

Shepherd, D.A., & Patzelt, H. (2017). Researching Entrepreneurial Decision-making Trailblazing in Entrepreneurship (pp. 257-285): Springer.

Simon, H.A. (1964). On the concept of organizational goal. *Administrative science quarterly*, 9: 1–22.

Simon, H.A. (1997). Administrative Behavior: A study of decision-making process in administrative organizations. 4<sup>th</sup> ed, New York: Free Press.

Sitoh, M.K., Pan, S.L., & Yu, C.Y. (2014). Business models and tactics in new product creation: The interplay of effectuation and causation processes. *IEEE Transactions on Engineering Management*, 61, 213–224.

Smolka, K.M., Verheul, I., Burmeister-Lamp, K., & Heugens, P.P.M.A.R. (2016). Get it together! Synergistic effects of causal and effectual decision-making logics on venture performance. *Entrepreneurship Theory and Practice*. 40, 1-34.

Stroe, S., Parida, V., & Wincent, J. (2018). Effectuation or causation: An fsQCA analysis of entrepreneurial passion, risk perception, and self-efficacy. *Journal of Business Research*. 89, 265-272.

Tan, W., Williams, J., & Tan, T., (2005). Defining the ‘social’ in ‘social entrepreneurship’: Altruism and entrepreneurship. *International Entrepreneurship and Management Journal*, 353-365.

Tseng E.W.K. (1998). Can guanxi be a source of sustained competitive advantage for doing business in China? *Academy of Management Executive*, 12(2), 64-73.

Townsend, D.M., Busenitz, L.W., & Arthurs, J.D., (2010). To start or not to start: Outcome and ability expectations in the decision to start a new venture. *Journal of Business Venturing*, 25(2), 192-202.

VanSandt, C.V., Sud, M., & Marme, C., (2009). Enabling the Original Intent: Catalysts for Social Entrepreneurship. *Journal of Business Ethics*, 90, 419-428.

Villani, E., Linder, C., & Grimaldi, R. (2018). Effectuation and causation in science-based new venture creation: A configurational approach. *Journal of Business Research*, 83, 173-185.

Welter, C., Mauer, R., & Wuebker, R. J. (2016). Bridging behavioral models and theoretical concepts: effectuation and bricolage in the opportunity creation framework. *Strategic entrepreneurship journal*, 10(1), 5-20.

Wennberg, K., Wiklund, J., DeTienne, D.R., Cardon, M.S., (2010). Reconceptualizing entrepreneurial exit: Divergent exit routes and their drivers. *Journal of Business Venturing*, 25, 361-375.

Williams, D. W., & Grégoire, D. A. (2014). Seeking commonalities or avoiding differences? Re-conceptualizing distance and its effects on internationalization decisions. *Journal of International Business Studies*, 46(3), 253–284.

Yin, R. K. (2009). *Case study research: design and methods* (4th ed.). Thousand Oaks: SAGE Publications, Inc.

York, J. G., O'Neil, I., & Sarasvathy, S. D. (2016). Exploring environmental entrepreneurship: identity coupling, venture goals, and stakeholder incentives. *Journal of Management Studies*, 53(5), 695-737.

Wood R.E., & Bandura A. (1989). Impact of Conceptions of Ability on Self-regulatory Mechanisms and Complex Decision Making. *Journal of Personality and Social Psychology* 56, 407-415.

Zhao H., Seibert, S.E., & Lumpkin, G.T., (2010). The Relationship of Personality to Entrepreneurial Intentions and Performance: A Meta-Analytic Review. *Journal of Management*, 36(2), 381-404.