

# ENTREPRENEURIAL OPPORTUNITY RECOGNITION, EXPLOITATION AND NEW VENTURE SUCCESS: MODERATING ROLE OF PRIOR MARKET AND TECHNOLOGY KNOWLEDGE

**Sabai Khin, University Sains Malaysia**  
**Tau Hoong Lim, Adnow Company Limited**

## ABSTRACT

*The recognition and exploitation of entrepreneurial opportunity have gained substantial research attention recently in entrepreneurship literature. However, the literature concentrates in the contributing factors of opportunity recognition and exploitation, leaving a gap in understanding their outcome such as entrepreneurs' new venture success. This study addresses this gap by proposing a new conceptual model that is appropriate to test the effect of opportunity recognition and exploitation on venture success and moderating effect of prior knowledge on the effect of new venture success on opportunity recognition and opportunity exploitation. This study offers valuable contributions to entrepreneurship literature.*

**Key words:** Opportunity Recognition, Opportunity Exploitation, New Venture Success, Knowledge.

## INTRODUCTION

The entrepreneurial Opportunity Recognition (OR) and Opportunity Exploitation (OE) have gained substantial attention in entrepreneurship literature in recent decades. Entrepreneurial opportunities are generally understood as “*situations in which new goods, services, raw materials, and organizing methods can be introduced and sold at greater than their cost of production*” (Shane & Venkataraman, 2000). The entrepreneurs need to be able to recognize and exploit the market opportunity to start their new business or launch a new product because their product or service needs to fit the market need and available resources well. Moreover, a business created to meet the new market opportunity is more likely to be successful than the one created out of a product idea that does not fit the market. The best performing companies such as Facebook, Airbnb, Uber, and Alibaba are the examples of how new opportunities are recognized and exploited to create new successful businesses. The founders of these companies realized and discovered the opportunity to use digital platform that connect people around the world and create a market. Therefore, identifying and selecting the right opportunities for new businesses are among the most important abilities of a successful entrepreneur (Stevenson et al., 1989).

Although a few studies on the opportunity concept has given much importance to the outcome, which includes creating new firms (Shane, 2000) and developing new products (Choi & Shepherd, 2004), literature on entrepreneurial opportunity focuses more on influencing factors of OR and OE, ignoring how these factors could affect new venture success or performance (Khalid & Sekiguchi, 2018). Hence, the investigation into the impact of OR and OE on the new venture is still limited, creating a literature gap. This study addresses this gap by presenting a

conceptual framework that links OR and OE to New Venture Success (NVS) from dynamic capability approach, while considering prior knowledge of market and technology as moderating factors. The tenet of the dynamic capability theory is that the competitive advantage of firms stems from dynamic capabilities rooted in high performance routines operating inside the firm (Teece et al., 1997). Teece et al. defined dynamic capabilities as “*the firm's ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments*”. The authors have linked dynamic capability with business opportunity by suggesting that dynamic capabilities denote the firm’s ability to sense and seize opportunities. Hence, dynamic capability approach is instrumental in conceptualizing OR and OE as important factors in achieving the success of the entrepreneurs’ new venture.

George et al. (2016), based on a systematic literature review of entrepreneurial opportunity, suggest that the field of OR is fragmented and empirically underdeveloped. They also contend that previous studies have viewed prior knowledge of the entrepreneur as a cognitive resource and thus, connecting prior knowledge with other factors needs further empirical examination. In addition, Siegel & Renko (2012) suggest that the mechanisms through which knowledge contributes to entrepreneurial opportunity recognition are still unclear. According to Ge et al. (2016), entrepreneurs who discover opportunities analyse marketing information first and then use their professional advantages in marketing and finance to exploit and utilize opportunities existing in market before others. Hence, the absence of contingent factors that could moderate the effect of OR and OE on venture success creates a literature gap. This study fills this gap by conceptualizing prior knowledge of market and technology as moderating factors. This paper contributes to the field of entrepreneurial opportunity in entrepreneurship literature by proposing a new conceptual model that is appropriate to test the effect of OR and OE on venture success and moderating effect of prior knowledge on the link between new venture success and OR as well as OE. This study also adds new knowledge by proposing the new moderating role of prior knowledge that, in the past, had been tested only as direct contributor towards OR and OE, but not as moderator that could enhance effect of OR and OE on new venture success.

## **HYPOTHESES & CONCEPTUAL MODEL DEVELOPMENT**

### **Opportunity Recognition (OR) and New Venture Success (NVS)**

The recognition of entrepreneurial opportunities is a necessary step on the path to commercializing science and technologies (Siegel et al., 2003). An opportunity is the chance to meet a market need, interest or want through a creative combination of resources to deliver superior value (Schumpeter, 1934; Casson, 1982). According to the definition that researchers consider opportunity to be laying at the heart of the entrepreneurial process, an entrepreneur is an individual who is able to identify, evaluate and exploit opportunities (Shane, 2000; Venkataraman, 1997). Researchers have conceptualized OR using similar terms such as opportunity discovery or identification. Gaglio (2004) explains that recognizing an entrepreneurial opportunity perceives a possibility to introduce innovative goods or services to a marketplace by founding a new venture. Opportunity recognition appears to include three distinct processes: (1) sensing or perceiving market needs and/or underemployed resources, (2) recognizing or discovering a “*fit*” between particular market needs and resources, and (3) creating a new “*fit*” between separate needs and resources (Hills, 1995; De Koning & Muzyka, 1999).

Although a substantial body of research has examined the contributing factors of OR and OE (Sardeshmukh & Corbett, 2011; Tang et al., 2012), only a dearth of study has tested the effect of OR on firms' performance. Guo et al. (2017) found the positive relationship between opportunity recognition and SME performance. Likewise, Gras & Mendoza-Abarca et al. (2014) argue that performance is largely dependent upon the extent to which firms focus on market-based opportunities. Hence, there is a pressing need to look into the outcome of OR and OE such as venture success. Notwithstanding the research findings, Shane & Venkataraman (2000) contend that although an opportunity for profit might exist, an individual can earn this profit only if he recognizes that the opportunity exists and has value. Based on research findings, we argue that an entrepreneur who recognizes that he has the major resources to create a potential product that would suit the market need would be able to generate both financial return and market success. In view of this rationale and dynamic capability theory, we hypothesize as follow.

*H1: Opportunity recognition has a significant positive effect on new venture success.*

### **Opportunity Exploitation (OE) and New Venture Success (NVS)**

While the recognition of opportunities is a necessary condition for entrepreneurship, it is not sufficient. Subsequent to the discovery of an opportunity, a potential entrepreneur must decide to exploit the opportunity (Shane & Venkataraman, 2000). At some point, entrepreneurs must shift their focus from assessing the viability of the various resource combinations that ultimately comprise opportunities to determining how exactly to exploit those opportunities (Choi et al., 2008). As mentioned in earlier section, there exists a literature gap with regards to the outcome of OR and OE. Among the very few studies, Shamudeen et al. (2017) suggest that if entrepreneurial opportunity is being recognised, the exploitation of such opportunity will lead to entrepreneurial success. This study fills this literature gap by examining the effect of OR and OE on new venture success. Drawing upon dynamic capability theory, we argue that OE is an important capability of entrepreneurs to convert business opportunity into a successful business. Without proper exploitation, entrepreneurs may not be able to generate financial or non-financial benefits out of the business opportunity. Therefore, OE could be an important factor in entrepreneurial process of establishing a new venture and also in achieving venture success. Based on this argument and dynamic capability theory, we offer hypothesis below.

*H2: Opportunity exploitation has a significant positive effect on new venture success.*

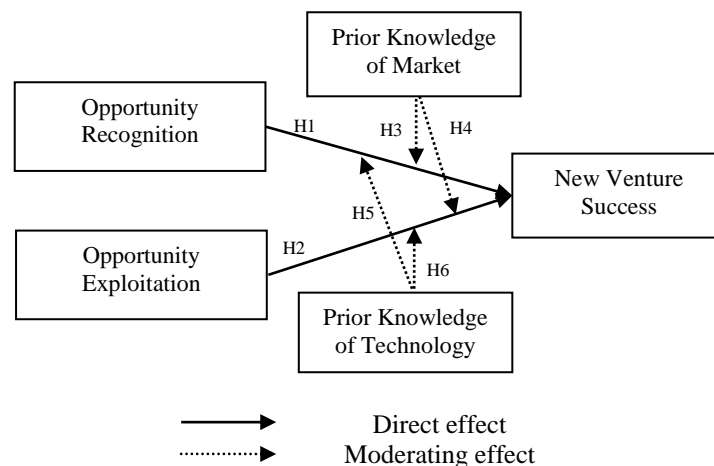
### **Moderating Role of Prior Knowledge in Marketing & Technology**

The entrepreneurs' prior knowledge has been accepted as one the effective factors in the process of opportunity recognition (Marvel & Lumpkin, 2007; Venkataraman, 1997) and opportunity exploitation (Foss et al., 2013). While there is a consensus that prior knowledge facilitates the process of recognizing the opportunity, researchers have conceptualised it only as antecedent of OR and OE. According to Ardichvili & Cardozo (2000), prior knowledge arises from work experience, personal experience, non-work-related experience, events or market training as one of the key factors in opportunity recognition. On the other hand, some studies have examined the effect of prior knowledge in both market and technology on OR and OE (Li et al., 2015; Hajizadeh & Zali, 2016). Corbett (2007) suggests that individuals with higher shares of specific human capital (including knowledge related to the industry, technology and market) are more likely to recognize entrepreneurial opportunities. Moreover, Grégoire & Shephard

(2012) found that relationship between structural similarity and opportunity beliefs is positive when participants have “*high*” levels of prior knowledge of technologies and market.

Although it has been well-proven that prior knowledge is one of the contributing factors in recognizing and exploiting the business opportunity, it is still questionable whether these factors will enhance the contribution of OR and OE on new venture success. George et al. (2016) has called for future studies to further develop the understanding of prior knowledge construct rather than merely looking at it as a moderator in opportunity process. Given this suggestion, this study conceptualizes prior knowledge as a contingent factor that would accentuate the contribution of OR and OE on new venture success. It is arguable that entrepreneurs with a sound knowledge of the market that they are going in and the technologies for product development should be better able to achieve success by recognizing and exploiting the opportunity of the market need. Moreover, those with knowledge and expertise about industry and trends have the upper hand in grabbing the niche opportunities to create new business. Based on these arguments, we hypothesize as follows:

- H3: The entrepreneurs’ prior knowledge of market enhances the effect of OR on NVS.*
- H4: The entrepreneurs’ prior knowledge of market enhances the effect of OE on NVS.*
- H5: The entrepreneurs’ prior knowledge of technology enhances the effect of OR on NVS.*
- H6: The entrepreneurs’ prior knowledge of technology enhances the effect of OE on NVS.*



**FIGURE 1**  
**CONCEPTUAL MODEL**

## CONCLUSION

The objective of this paper is to propose a theoretical framework that sits on the notion that entrepreneurs’ ability to recognize and exploit business opportunity contribute to the success of their new venture and also that the impact of that ability could be enhanced by entrepreneurs’ prior knowledge of market and technology. This study offers valuable contributions to entrepreneurship and business opportunity literature. First, by pointing out the importance of

entrepreneurial capability to recognize and exploit opportunities to new venture success, the present study proposes a conceptual model which, if tested empirically, may provide new empirical evidence and insights of the mechanism through which new venture success could be achieved. Second, this study adds new research direction to entrepreneurship literature by conceptualizing OR and OE as important factors of new venture success from dynamic capability approach, taking account of prior knowledge as important resources. To the best of our knowledge, no study has offered the same conceptual model. As for future research direction, this study calls for more empirical studies that examine the other moderating factors and outcomes of OR and OE such as innovation outcome, product success, and market success beside performance-related outcomes.

## REFERENCES

- Ardichvili, A., & Cardozo, R. N. (2000). A model of the entrepreneurial opportunity recognition process. *Journal of Enterprising Culture*, 8(02), 103-119.
- Casson, M., 1982. *The entrepreneur*. Barnes and Noble Books, Totowa, NJ.
- Choi, Y. R., & Shepherd, D. A. (2004). Entrepreneurs' decisions to exploit opportunities. *Journal of Management*, 30(3), 377-395.
- Choi, Y. R., Lévesque, M., & Shepherd, D. A. (2008). When should entrepreneurs expedite or delay opportunity exploitation? *Journal of Business Venturing*, 23(3), 333-355.
- Corbett, A. C. (2007). Learning asymmetries and the discovery of entrepreneurial opportunities. *Journal of Business Venturing*, 22(1), 97-118.
- De Koning, A., & Muzyka, D. (1999). *Conceptualizing opportunity recognition as a socio-cognitive process*. Centre for Advanced Studies in Leadership, Stockholm.
- Foss, N. J., Lyngsie, J., & Zahra, S. A. (2013). The role of external knowledge sources and organizational design in the process of opportunity exploitation. *Strategic Management Journal*, 34(12), 1453-1471.
- Gaglio, C.M. (2004). The role of mental simulations and counterfactual thinking in the opportunity identification process. *Entrepreneurship Theory and Practice*, 28(6), 533-552.
- Ge, B., Sun, Y., Chen, Y., & Gao, Y. (2016). Opportunity exploitation and resource exploitation: An integrative growth model for entrepreneurship. *Internet Research*, 26(2), 498-528.
- George, N. M., Parida, V., Lahti, T., & Wincent, J. (2016). A systematic literature review of entrepreneurial opportunity recognition: Insights on influencing factors. *International Entrepreneurship and Management Journal*, 12(2), 309-350
- Gras, D., & Mendoza-Abarca, K. I. (2014). Risky business? The survival implications of exploiting commercial opportunities by nonprofits. *Journal of Business Venturing*, 29(3), 392-404.
- Grégoire, D. A., & Shepherd, D. A. (2012). Technology-market combinations and the identification of entrepreneurial opportunities: An investigation of the opportunity-individual nexus. *Academy of Management Journal*, 55(4), 753-785.
- Guo, H., Tang, J., Su, Z., & Katz, J. A. (2017). Opportunity recognition and SME performance: The mediating effect of business model innovation. *R&D Management*, 47(3), 431-442.
- Hajizadeh, A., & Zali, M. (2016). Prior knowledge, cognitive characteristics and opportunity recognition. *International Journal of Entrepreneurial Behaviour & Research*, 22(1), 63-83.
- Hills, G. E. (1995). Opportunity recognition by successful entrepreneurs: A pilot study. *Frontiers of Entrepreneurship Research*, 15, 105-117.
- Khalid, S., & Sekiguchi, T. (2018). The role of empathy in entrepreneurial opportunity recognition: An experimental study in Japan and Pakistan. *Journal of Business Venturing Insights*, 9, 1-9.
- Li, Y., Wang, P., & Liang, Y.J. (2015). Influence of entrepreneurial experience, alertness, and prior knowledge on opportunity recognition. *Social Behavior and Personality: An International Journal*, 43(9), 1575-1583.
- Marvel, M.R., & Lumpkin, G.T. (2007). Technology entrepreneurs' human capital and its effects on innovation radicalness. *Entrepreneurship Theory and Practice*, 31(6), 807-828.
- Sardeshmukh, S.R., & Corbett, A.C. (2011). The duality of internal and external development of successors: opportunity recognition in family firms. *Family Business Review*, 24(2), 111-125.
- Schumpeter, J. (1934). *Capitalism, socialism, and democracy*. Harper & Row, New York.

- Shamsudeen, K., Keat, O.Y., & Hassan, H. (2017). Entrepreneurial Success within the Process of Opportunity Recognition and Exploitation: An expansion of Entrepreneurial Opportunity Recognition Model. *International Review of Management and Marketing*, 7(1), 107-111.
- Shane, S. (2000). Prior knowledge and the discovery of entrepreneurial opportunities. *Organization Science*, 11(4), 448-469.
- Shane, S., & Venkataraman, S. (2000). The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Siegel, D.S., Waldman, D., & Link, A. (2003). Assessing the impact of organizational practices on the relative productivity of university technology transfer offices: an exploratory study. *Research Policy*, 32(1), 27-48.
- Siegel, D.S., & Renko, M. (2012). The role of market and technological knowledge in recognizing entrepreneurial opportunities. *Management Decision*, 50(5), 797-816.
- Stevenson, H.H., Roberts, M.J., & Grousbeck, H.I. (1989). *Business ventures and the entrepreneur*. Irwin, Homewood, IL.
- Tang, J., Kacmar, K.M.M., & Busenitz, L. (2012). Entrepreneurial alertness in the pursuit of new opportunities. *Journal of Business Venturing*, 27(1), 77-94.
- Teece, D.J., Pisano, G., & Shuen, A. (1997). Dynamic capabilities and strategic management. *Strategic Management Journal*, 18(7), 509-533.
- Venkataraman, S. (1997). The distinctive domain of entrepreneurship research. *Advances in Entrepreneurship, Firm Emergence and Growth*, 3(1), 119-138.