

Sense-making perspectives in entrepreneurial opportunity recognition: Review and agenda for future research

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Introduction

Decision making for opportunity recognition is a challenging task as opportunities are rarely self-evident and information and context-dependent (Dimov, 2007; Shepherd & Griffin, 2006; Shepherd, William & Patzelt, 2015; Ramoglou and Tsang, 2018; Ramoglou & Tsang, 2016; Westhead et al., 2005; Zacharakis and Shepherd, 2001;; Korsgaard and Sassmannshausen, 2017; Ramoglou and Tsang, 2016; Sarasvathy, 2001). The challenging and heterogeneous nature of opportunity recognition has resulted in the majority of studies focusing on several competing approaches such as Equilibrium, Discovery Creation and more recently the Actualization approach. The Equilibrium approach conditions opportunities on price variation of goods, services and raw material, stable enduring capabilities of entrepreneurs and the stock of their knowledge (Khilstorm and Laffont, 1979). The Discovery approach acknowledges opportunities as objectively existing and only alert entrepreneurs as capable of discovering them (Shane and Venkataraman, 2000), and the Creation approach where opportunities are subjectively created by entrepreneurs (Korsgaard, 2011; Sarasvathy, 2001; Wood & McKinley, 2010). In an effort to resolve the apparent overlap and inconsistencies with the aforementioned approaches, many assumptions have either been ignored or retained without a systematic explanation. Absence of systematic justification, while retaining or ignoring any previous assumptions deters our understanding and leading to an ongoing lack of theoretical explanation of decision making for opportunity recognition (See table 1).

Please Insert Table 1

Actualization Approach to Recognize Entrepreneurial Opportunities: Addressing the Limitations and Proposing Refinements

The actualization approach accepts the objective existence of opportunities as un-actualized propensities and acknowledges the objective presence of opportunities but unlike the discovery approach, does not expect to exploit entrepreneurial opportunities right at the moment of their emergence (Ramoglou and Tsang, 2016, 2018). Unlike the creation approach, the actualization approach does not believe in entrepreneurs' capability to subjectively create any opportunities. However, it accepts the subjective imagination and believability of entrepreneurs about an entrepreneurial opportunity, with the possibility of being sidetracked from an objectively existing reality (i.e. objective existence of an entrepreneurial opportunity) (Ramoglou and Tsang, 2016; Ramoglou and Zyglidopoulos, 2015). According to the actualization approach until entrepreneurs have made a profit they cannot determine that opportunities exist (Ramoglou and Tsang, 2016).

We believe that the actualization approach is a promising addition to take the field of entrepreneurship forward, but it is not free of certain limitations. *First*, the actualization approach embraces subjectivity and objectivity of an entrepreneurial opportunity recognition process, but it lacks in the elaboration of the antecedents for imagining and believing an entrepreneurial opportunity. This imagination and believability of an entrepreneurial opportunity is not determined by their own efforts alone, rather it varies among entrepreneurs based on (1) The persistent measures of entrepreneurs' cognitive resources such as their experience (we call them internal factors) and, (2) The dynamic context such as differences in policy and governance (we can call them entrepreneurial ecosystems) (Reuber et al., 2018; Braver and Danneels (2018). *Second*, based on Bhaskar's (2008) critical realism, the actualization approach asserts, entrepreneurs do not always make perfect sense of the world, even if they believe they have, their claim might be meagre, and entrepreneurs might keep

investing their time and effort in a non-opportunity venture (Ramoglou and Tsang, 2016). Due to the absence of causal mechanism, justification of this claim of the actualization approach is under a lot of criticism and is reminiscent of the long-existing question, why few and why others cannot recognize the opportunities? With an objective to address this limitation, we build our proposition on Chater and Lowenstein's (2016) four principles of the sense-making. First, individuals' preference for internal or external sources of information depends on their economic or non-economic objectives (i.e. first proposition). Second, entrepreneurs' tendency to gain market knowledge either formally or informally is contingent on their perception of how much they know and how much more knowledge they need? (i.e. second proposition of the study). Third, devaluation of expectation deviating information saves an individual from contradictory information pain and assures confirmatory information pleasure (i.e. third proposition of the study). Fourth, by valuing only welcomed information over un-welcomed information (even if they are valid), entrepreneurs' build and retain their confidence in a possibly wrong pre-held hypothesis (a perceived opportunity) (i.e. fourth proposition). In the following section, we will briefly give an overview of the proposed conceptual framework and the associated theoretical framework.

Proposed Conceptual Framework and Associated Theoretical Framework

To elucidate the sense-making process of entrepreneurs for opportunity recognition, we adopt two theoretical lenses (see figure 1 for details). First, the main theoretical lens of our study is the actualization approach (Ramoglou and Tsang, 2016) which elaborates that entrepreneurial objectively existing opportunities are subjectively imagined and believed by the entrepreneurs. We call this process of imagining and believing these opportunities a sense-making process (Davidsson, 2015; Keating and McLoughlin, 2010; Mitchell and Shepherd, 2010). Actualization approach, therefore, dovetails objectivity of discovery approach and subjectivity creation approach. Second, we entail the drive of the sense-making process (Chater and

Loewenstein, 2016) which offers the principles of the sense-making process around previously disparate concepts. These principles of the drive of the sense-making process (Chater and Loewenstein, 2016) draw our attention to the following seldom answered questions in the field of entrepreneurship:

How do entrepreneurs decide on to internal or external factors for their sense-making process and what role do their objectives play in this decision? How do entrepreneurs consider their knowledge modicum (loss aversion) to understand the market (formal or informal market orientation) for their venture? How despite contradictory information pain entrepreneurs' confirmation bias retains their strong belief in an opportunity? While answering these questions we are not treating entrepreneurs as alert super humans (opposite to Discovery approach) those who can discover any opportunity ex-ante. We acknowledge that opportunities objectively exist in the market (like Discovery approach and opposite to Creation approach) and entrepreneurs make subjective sense (like Creation approach) of such opportunities which could also be side tracked (Actualization approach).

Please Insert Figure 1
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Imagining an Entrepreneurial Opportunity

It is even more significant to understand the process that proceeds to action and an absence of certain knowledge of an outcome paves the ground for imagination (Loasby, 2011). Imagining an entrepreneurial opportunity is a cognitive process and carries an initial imagination of meeting entrepreneurial objectives after engaging in an entrepreneurial activity (Korsgaard et al., 2016). As an illustration, in his own words, Elon Musk (CEO of Tesla, PayPal, and SpaceX) never expected to revolutionize the world and it was not his long –fulfilled expectation rather it was an abstract of an area that would possibly influence the future of humanity (Khan Academy, 2013).

Experiential Knowledge: Past Entrepreneurial Failure and Success

Though entrepreneurial opportunities exist in the market, one cannot exclusively rely on implicit market demands. Entrepreneurs link their past entrepreneurial experiences to the recognition of new entrepreneurial opportunities (Baron and Ensley, 2006). According to Ucbasaran et al. (2009), entrepreneurs relate their prior business experience to future opportunity identification. Scholars of entrepreneurship have elaborated upon the notion of entrepreneurial experience in several ways. “Failure is a necessary and unavoidable state of the world when venturing into the domain of non-opportunity matter how hard one might try (Ramoglou and Tsang, 2016, p. 421). Our conceptualisation of entrepreneurial failure includes: Total failure, economically failing firm and entrepreneur’s persistence, persistence with entrepreneur’s disappointment, economic and psychological failure, exit caused by new venture economic failure, entrepreneur’s disappointment, and to avoid failure (Khelil, 2016). Entrepreneurial success or zero failure is an entrepreneurial context where an entrepreneurial venture is capable of economic growth and generates sufficient economic returns to meet an entrepreneur’s expectations (Khelil, 2016).

Entrepreneurial Eco-systems:

Entrepreneurial Ecosystem (EES) helps to explain the cultural, material and social context of entrepreneurship. According to Shepherd et al. (2015) entrepreneurial opportunities are highly context-specific and an opportunity might be suitable in one context might not fit in another. According to Spigel (2017), EES influences the entrepreneurial engagements such as starting a new venture or recognizing entrepreneurial opportunities through the combination of cultural, social and material attributes of a region. As an illustration, based on the global entrepreneurship index, The Global Entrepreneurship and Development Institute (GEDI) (2018) ranks Australia at number 5 among 137 countries, where individuals start their ventures due to prevailing social and economic infrastructure (GEDI, 2018).

Please Insert Table 2

In the following section, we will discuss that how entrepreneurs decide to avoid or prefer one source of information over another (e.g. preference of internal sources over external).

Entrepreneurial Objectives

Entrepreneurs engage in an entrepreneurial venture and pursue an entrepreneurial opportunity not just to meet their economic objectives but to meet their non-economic objectives like improved quality of life (Hessles et al., 2008), social status (Carsud and Brannback, 2011), and work and family life balance (Shane et al., 2003). A study by Chen et al. (2009), investigated 126 MBA, executive MBA students, and 55 investors and found that despite the failure of a venture entrepreneurs are driven by their self-motivation-intrinsic motivation, passion and perseverance- to keep moving with a failed venture. As an illustration, if you are hungry and want to take lunch. Your decision about taking lunch either in a fancy restaurant or a cheap restaurant depends on two things. First, either to enjoy the tasty food in a fancy restaurant by paying extra. Second to sate your hunger in a cheap restaurant by saving your money. This decision depends on your objective either to save money or to enjoy the best food. We propose:

P1: For the sense-making process, entrepreneurs' preference of economic objectives leads them to rely on external sources of information, while their preference of non-economic objectives lead them to rely on internal sources of information.

Market Orientation

According to Kirzner (1989), entrepreneurs carry difference in their market knowledge and sense making for opportunities. Market orientation is a “behavioural intention and attempt to understand the market and competitors’ ability to differentiate and seek new opportunities” (Hulbert et al., 2015, p. 619). Stronger market orientation (i.e. market intelligence generation, market intelligence dissemination, and market intelligence responsiveness) is invaluable for a quick response to market needs and preferences and reflects on orientation towards customers

and competitors. According to Chater and Lowenstein (2016), believability on how much required knowledge someone has helps in determining the required effort for the sense-making of a situation. They define this believability of an individual as loss aversion. In the following section, we will discuss the notion of loss aversion in more detail.

Loss Aversion

To obtain psychological loss aversion through avoiding additional information, individuals deliberately decide either to get more information or not. This deliberate attempt to avoiding any additional information saves an individual from a perception of losing an opportunity or adverse deviations from an opportunity (Baumeister, 2001). Loss aversion is defined as “people will be especially strongly motivated to engage in sense-making when they perceive a gap between how much sense-making they have achieved and how much they believe could be achieved” (Chater and Loewenstein, 2016, p. 145). A study by Karlsson et al. (2009) on Scandinavian and American investors revealed that these investors have a tendency to keep their heads down in the sand like an ostrich to avoid any unpleasant information about the stock market. Additionally, they found that this tendency is especially present among investors when the stock market is running flat or against their expectations. According to Wood et al. (2014), entrepreneurs better understand and pay more attention to those opportunities that are consonant with their knowledge. On the other hand, when entrepreneurs tend to think that they know everything, and they possess all the relevant knowledge thus they stop recognising the ever existence of uncertainty and existence of a possible gap between what they know and how much more they need to know? Based on this we propose: ***P2: Entrepreneurs tendency to gain the market orientation for their imagined state of an entrepreneurial opportunity is contingent on their perception of how much they know and how much more they need to know?***

Pain and pleasure

“It is difficult to conceive what life would be if pleasure and pain were stricken out..... Pleasure and pain are not the whole of life; but leave them out, and life and the universe no longer have meaning” (Nichols, 1892, p. 403). In terms of making sense for an opportunity, believing that an entrepreneur has made the perfect sense of the opportunity but then finding out that he has not, after receiving deviating information from expectation, leads him to pain. Similarly, receiving such information that contradicts the sense an individual has made, but then having such information devalued might minimize the pain but could also leave one worse off (Chater and Loewenstein, 2016). This seeing and seeking only positive information is generally called a confirmatory information search or in other words a selective exposure to desired information (Hart et al., 2009). Therefore when preferably seeking only supportive information through the lens of one’s own wishful thinking and neglecting non-supportive information is called selective exposure (Golman et al., 2017). According to Bains (2016), despite the continuous warning and clear information from financial experts, Lehman Brothers investors welcomed only that information that was promising profitability, while systematically ignored the information about potential risks. In a nutshell, individuals, including entrepreneurs prefer the feeling of being validated over being correct. Therefore, we propose: ***P3: Formal market orientation leads entrepreneurs to the pain of being incorrect while informal market orientation leads them to the pleasure of being valid.***

To meet the objective of being valid, entrepreneurs seek the support of their confirmation bias. In the following section, we will discuss the concept and implication of confirmation bias.

Confirmation Bias

confirmatory bias leads to overconfidence, in the sense that people on average believe more strongly than they should in their favoured hypotheses.....an agent who suffers from

confirmatory bias may come to believe in a hypothesis that is probably wrong (Rabin and Shrag, 1999, p. 38). While making sense of an opportunity, entrepreneurs may hold a false belief, or they may give more weight to only those information that validate their held beliefs. This insight is quite significant to understand how individuals consider fewer information while discard others, in an uncertain decision-making situation. Please see picture 1, for an illustration of confirmation bias. In an influential paper Rabin and Shrag (1999), proposed a model for confirmation bias. They characterise the confirmation bias as a cognitive state where individuals misinterpret new information to support their pre-held hypothesis. As we discussed earlier, the tendency of avoiding and misinterpreting new information is natural to humans and even experienced investors are prone to it. Continuous prevalence of such an attitude becomes more detrimental at a point where an individual start considering wrong signals as right, or even supportive of his conviction. (Rabin and Shrag, 1999). Surprisingly, in the field of entrepreneurship and more specifically to understand the opportunity recognition process, confirmation bias has rarely been studied (Zhang and Cueto, 2017). Avoidance of confirmation bias begs us, are we treating entrepreneurs as super humans? And do entrepreneurs possess all the information to ex-ante discover any opportunities?

Please Insert Figure 3

Opportunity Confidence

Entrepreneurs' decide on the basis of their confidence either to take action or not to exploit an entrepreneurial opportunity. Opportunity Confidence (OC) states a "particular actor's subjective evaluation of the attractiveness—or lack thereof—of a stimulus (External Enablers or New Venture Idea) as the basis for entrepreneurial activity" (Davidsson, 2015, p. 675).

The separation of subjectivity from the objectivity helps us to understand that individuals extract different meanings from the same reality due to their lived experiences (Davidsson,

2015). In a similar vein, we can recall an interesting story of “The Blind Men and the Elephant”. In this story, blind men never came across an elephant and by touching it want to learn that what it is. These blind men then described the elephant based on the limited feel of the body parts of an elephant that they touched. The person who was holding the tail of the elephant described it as a rope, who was holding its leg perceived it as a tree, one who touched its tusk called it a spear and the person who held its trunk related it to a snake. Despite the fact that blind men knew that every one of them experienced a different body part therefore, telling the truth, they deliberately rejected each other’s claim. While concluding the moral of the “Elephant and Blind Men” story Popple (2010), posit that to justify their own subjective experience individuals tend to ignore and devalue the subjective experience of others even if that is equally true. We propose that other than extracting an automatic subjective lesson through lived experiences, individuals deliberately give value to welcomed over unwelcomed information. Based on this discussion we propose: ***P4: By choosing only confirmatory information, entrepreneurs are able to display greater confidence in an opportunity than they might otherwise feel, thereby enabling them to exploit an opportunity.***

Discussion and Conclusion

Our study promises the significant implications for practitioners. For nascent entrepreneurs, our study is imperative to highlight the unrealistic presupposition such as only seeking and looking for favourable information while making sense of an entrepreneurial opportunity. This situation might even lead to an escalation of resource commitment, financial dead ends and continuous efforts in the wrong direction (Ramoglou and Tsang, 2016). Through in-depth interviews (Ghauri, 2010), future studies can empirically explore our proposed framework on experienced entrepreneur who are primary creators and individually run a venture (Wennberg et al., 2010).