

**FACTORS STIMULATING OPPORTUNITY
RECOGNITION BY THE ENTREPRENEUR: AN
EXPLORATORY STUDY WITH TUNISIAN
ENTREPRENEURS**

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ABSTRACT

This paper aims to provide, through a literature review, an answer to the question "what are the factors stimulating the recognition of opportunities by the entrepreneur?" and verify, by means of an exploratory study conducted on 22 entrepreneurs operating in the sector of Information Technologies and Communication in Tunisia, the existence of positive relationships between the variables selected from the literature review and opportunity recognition. The literature shows that three cognitive factors (self-efficacy, schemas and creativity), an environmental one (information flow) and three social ones (strong ties, weak ties and mentoring) stimulate the recognition of opportunities by the entrepreneur and exploratory study suggests that among these variables, only the strong ties which have no effect on the opportunity recognition by entrepreneurs interviewed. The positive relationship is verified for the other six variables.

Key words: opportunity recognition, cognitive factors, environment, social network, exploratory study.

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Introduction

These years are characterized by an increased interest for the study of opportunity recognition in the study of entrepreneurship in general and work on the recognition of opportunities continues to multiply. Gradually, the recognition of opportunity begins to earn interest in the study of entrepreneurship till it was placed in the center of it and be considered as the sole element of entrepreneurship (Gaglio and Katz, 2001) and entrepreneurs can be described as such only if they come to recognize at least one opportunity (Bygrave and Hofer, 1991). Despite the interest in the study of opportunity recognition, there is still no consensus on the factors stimulating the recognition of opportunities.

This study aims not only to determine the factors stimulating the recognition of opportunities, but also to verify, through an exploratory study, the existence of positive effect between each of the variables considered and opportunity recognition.

To address the issues raised, we will start with a review of the literature in order to determine these factors. We will then verify the existence of the positive relationships, derived from the literature review, between each of the variables considered and the recognition of opportunities by an exploratory study conducted on entrepreneurs operating in the area of Information Technologies and Communication in Tunisia.

1. Factors stimulating opportunity recognition by entrepreneurs

Early work in entrepreneurship has focused on the entrepreneur as a person and its demographic characteristics: it is the trait approach and the demographic approach. The review of these two approaches allowed us to deduce that they can not improve our understanding of the recognition

of opportunities since the first was merely to highlight some recurring traits and failed to provide a profile of the entrepreneur and the second did not predict the entrepreneurial act (Danjou, 2002). Even the economic theories do not provide an answer to the problem posed. As for the French school, which has proposed a meticulous study of the entrepreneur by the work of Richard Cantillon and Jean-Baptiste Say, it did not mention his role of recognizing opportunities.

Three economic theories allow us to improve our understanding of the recognition of opportunities. The Austro-German school, with the work of Schumpeter, who emphasized the importance of actively seeking information for the discovery of opportunities (Ozgen, 2003). The Chicago School, with the work of Knight, who introduced the entrepreneur as someone with the capacity to turn ideas into marketable products. And the Austrian school who had the merit of introducing the study of opportunity directly in the study of entrepreneurship (Corbett, 2002) and “use the term of "alertness" to explain the recognition of opportunities” (Chelly, 2003: 11). This school considers that opportunity recognition is the act of the only entrepreneur and more specifically the result of his alertness (Kirzner, 1979).

These theories could guide us in our research and we conclude that three families of factors can stimulate the recognition of opportunities by the entrepreneur which are: cognitive factors related to the entrepreneur himself and external factors related to his economic environment and his social integration.

1.1 The internal factors stimulating the recognition of opportunities

To identify personal factors stimulating the recognition of opportunities, we will review work done in social cognitive theory, in theory of schemas as well as work on creativity.

1.1.1 The cognitive theory and self-efficacy

The study of self-efficacy was introduced by Bandura in the years of 70^s and 80^s. To introduce his concept of self-efficacy, Bandura (1982) considered that the sense of competence and the belief that the individual is capable of performing the target behavior build the capacity to make decisions. He defined self-efficacy as a judgment that individual makes of his ability to organize and execute lines of pipes required to meet specific property goals.

Bandura (1982) showed in his work that people with a strong sense of self-efficacy perceive situations as feasible. This led Kuratko and Welsch (2001) to incorporate the concept of self-efficacy in the study of the recognition of opportunities.

The study conducted by Ozgen (2003) on 200 entrepreneurs showed that feelings of self-efficacy increases the ability of the entrepreneur to recognize opportunities and Urban (2004) deduced the importance of taking into account the perception of the entrepreneur to understand the recognition of opportunities.

It is therefore clear that self-efficacy has a positive effect on the recognition of opportunities by the entrepreneur and we can issue our first hypothesis:

Hypothesis 1: Self-efficacy has a positive impact on the recognition of opportunities by the entrepreneur.

1.1.2 The theory of schemas

The theory of schemas suggests that individuals interpret the world differently according to their cognitive framework that is "organized knowledge about a given concept or type of stimulus" (Fiske and Taylor, 1984: 140).

The schema is defined as a cognitive structure related to mental frameworks that allow individuals to perceive connections between life events and knowledge gained (Baron, 2003b).

It represents knowledge about a concept, object, etc., and helps us to interpret the world (Ozgen, 2003).

Work on the relationship between schemas and opportunity recognition have shown that entrepreneurs have specific thinking processes they use to interpret specific information (Busenitz and Lau, 1996) and that schemas are what differentiate entrepreneurs from other people (Le Roux, 2005). These schemas facilitate the discovery of opportunities for entrepreneurs by allowing them to notice and retain certain types of information and facilitating the exchange of information (Ozgen, 2003).

Thus, the schema, which is constructed from prior knowledge, allows the entrepreneur to categorize different stimuli and to interpret the new knowledge which leads us to state our second hypothesis:

Hypothesis 2: The schemas influence positively the recognition of opportunities by the entrepreneur.

1.1.3 Creativity

The opportunity recognition is strongly associated with the possession of the entrepreneur to creative abilities. Several authors combine creativity with the ability to identify opportunities (Smith and Carter, 2006). Indeed, opportunities are created or constructed using ideas and entrepreneurial creativity (Dellabarca, 2002) and creativity reveals more “the constructed character of opportunity” (Verstraete and Fayolle, 2005: 35). The study of creativity in the study of recognition of business opportunities has attracted the interest of several researchers which has led to several studies in which creativity is recognized as an important element of the entrepreneurial process (Carrier, Cadieux and Tremblay, 2006) or even as a factor stimulating the recognition of opportunities by the entrepreneur (Detienne and Chandler, 2004). We can

therefore infer the existence of a positive relationship between creativity and recognition of opportunities which lead us to the third hypothesis:

Hypothesis 3: Creativity has a positive impact on the recognition of opportunities by the entrepreneur.

1.2 The external factors stimulating the recognition of opportunities

The opportunity results from imperfect information and market disequilibrium (Kirzner, 1979) and the entrepreneur breaks a balance or declare the existence of an imbalance with his alertness and create in either case a new balance in his favor (Santi, 1998) by using information not possessed by other agents on the market (Kirzner, 1979). The recognition of opportunities requires that the entrepreneur has the maximum of information about his environment. There are two main sources of information: a formal information from the economic environment and informal information which is provided by the social network of the entrepreneur.

1.2.1 Information flow from the environment: environmental factor stimulating the recognition of opportunities

The economic environment is a very important dimension to be included in the study of entrepreneurship in general and opportunity recognition in particular. Several authors have realized this importance and have proposed models that take into account the importance of environment especially in the initial phase of business development. We can cite as examples the models of Long and McMullan (1984) or Bird (1992).

The environment is a variable encouraging or binding the company by creating threats and opportunities (Dayal, 1999). This environment has not neither the same constraints nor the same opportunities for all market actors (Dayal, 1999).

The importance of the environment lies in the fact that it provides the entrepreneur with information needed to recognize opportunities and work which focused on information showed that entrepreneurs who seek information on their environment are more likely to recognize opportunities than those who do not (Hambrick, 1982).

Researchers showed the existence of a positive relationship between information possession and the recognition of opportunities (Ozgen, 2003; Park, 2005). We can therefore state our fourth hypothesis as follows:

Hypothesis 4: The flow of information from the environment influences positively the recognition of opportunities by the entrepreneur.

1.2.2 The strong ties and recognition of opportunities

The network of strong ties is made by relatives and intimate relationships that develops the person with the people he encounters (Singh, 2000). Granovetter (1973) defined it as all family members, relatives, close friends, and people who interact frequently over a long period of time. This person can "have a greater motivation to provide help and are generally more readily available" (Granovetter, 1973: 113).

The existence of strong links between people is important because it builds trust between partners. The persons with whom the entrepreneur has relationships of strong ties can probably devote more time, give the council and provide information (Singh, 2000) and the entrepreneur can rely on his strong ties as the confidence placed in the family and relatives let him contact them without facing problems of opportunism (Chabaud and Ngijol, 2004).

Empirical studies which have been conducted to investigate the effect of strong ties on the work of the entrepreneur have generally shown that strong ties have a positive effect on the recognition of opportunities by the entrepreneur (Chelly, 2008; Nkakleu, 2007).

We adhere to these studies and we formulate our fifth hypothesis as follow:

Hypothesis 5: strong ties have a positive impact on the recognition of opportunities by the entrepreneur.

1.2.3 The role of weak ties in the recognition of opportunities

The network of weak ties is made up of casual encounters between people who are rarely in contact and whose reports are more casual than intimate (Ozgen, 2003).

Granovetter (1973) defines weak ties as episodic relationships that provide access to information. In fact, these contacts are an important source of information and these links can possibly turn into business contacts (De Koning, 1999). Granovetter (1973) has emphasized the role of weak ties in entrepreneurial activities claiming that these weak links give the entrepreneur access to unique information not necessarily contained in the network of strong ties. Granovetter (1973) subsequently showed their important role in communicating fresh and unique information to the entrepreneur that strong ties do not give. The network of weak ties is therefore especially useful for finding information essential for opportunity recognition (De Koning, 1999).

The positive role of weak ties in recognition of opportunities by the entrepreneur has been shown by several authors in several works, both theoretical (Marchisio and Ravasi 2001; Reynolds, 1991) and empirical (Ozgen, 2003; Singh, 2000). We will again join the hypothesis of the existence of a positive relationship which leads us to our sixth hypothesis:

Hypothesis 6: weak ties have a positive impact on recognition of opportunities by the entrepreneur.

1.2.4 Mentoring: a strategy to facilitate the recognition of opportunities

One of the aids given by the mentor to his mentee is to ask him in order to help him to improve understanding of the problems he faces (SADC, 2007). This will lead the mentee to identify the best solutions and to apply them effectively (SADC, 2007).

Having already gained experience in doing business allowing him to get a clear idea about the possible opportunities and difficulties faced by a young entrepreneur, a mentor can help the mentee to focus on opportunities that will go best with his profile, his skills and the resources he can mobilize and to prevent or even overcome the difficulties that may hinder the achievement of career goals (SADC, 2007).

We state our last hypothesis as follows:

Hypothesis 7: Mentoring has a positive impact on the recognition of opportunities by the entrepreneur.

2. Results of the exploratory study

The first part of this communication has enabled us to make hypothesis about the existence of positive relationships between seven variables and opportunity recognition. We interviewed 22 entrepreneurs operating in the area of Information Technologies and Communication in Tunisia about the elements that help them to recognize opportunities in order to verify that the variables selected from the literature are indeed those that stimulate the recognition of opportunities by entrepreneurs. We will initially explain the significance of this exploratory study and in a second time we will present the results found.

2.1 Methodology

Our theoretical research has enabled us to make assumptions about seven factors stimulating the recognition of opportunities and opportunity recognition. The second step should be to test the hypotheses generated from the literature against the reality faced by these entrepreneurs. But before engaging a quantitative study, we started with an exploratory qualitative study because this type of studies allows the researcher to define in advance the terms of response (Baumard Donand, Ibert, Xuereb, 2003). Another argument in favor of conducting a qualitative study before embarking on a quantitative study lies on the fact that Charriere and Durieux (2003) argue that we can simultaneously use a qualitative approach and quantitative for testing a model. Jointly pursue the two approaches ensures the validity of results (Baumard and Ibert, 2003). The purpose of this qualitative study is not only to verify the opportunity to study the variables used in the context of Tunisia, but also to identify other important variables not yet studied in the literature. In this case, a return to the literature is essential before embarking on the empirical study to take into account the new variables.

Our exploratory study consisted of semi-structured interviews lasting between 60 and 90 minutes with 22 entrepreneurs operating in the ICT sector in Tunisia. The choice of this sector is justified by the fact that investment in it is encouraged by the Tunisian State. This encouragement is evident not only by the adaptation of the legislative and regulatory measures but also by measures undertaken (such as the creation of cluster technology, business incubators and adoption of the Incentive Plan for Innovation in the field of Information Technology: RITI (Agency for Promotion of Foreign Investment, 2009)) to facilitate investment. The State has also encouraged investment by setting up an infrastructure that can meet industry requirements (Ministry of Communication Technologies, 2009). These investment incentives have increased

the number of domestic and foreign firms operating in this sector, which has intensified the competition between the rivals and pushed these companies to innovate constantly. Similarly, because of the rapidly changing situation in this sector, there are always opportunities to seize on it. Entrepreneurs operating in this sector need more than any other entrepreneur to recognize the opportunity for continuously ensure the survival of their businesses.

2.2 Results and Discussion

No sample size was set and we have respected the principle of data saturation (Thiétart, 1999). In fact, thematic saturation is reached when no additional information is provided during the last four interviews (Glaser and Strauss, 1967). The size of the sample, determined retrospectively, was 22 interviews. So, our sample is composed of 22 Tunisian entrepreneurs who established their businesses in the area of Information Technologies and Communication. Nineteen of them are located in the Technology Center El Gazela and three in Tunis. The entrepreneurs surveyed are in the majority young people aged between 25 and 35 years (18 entrepreneurs). Only four entrepreneurs had an age between 36 and 45 years. There are nine women among the entrepreneurs and 13 men. All respondents had a university level.

2.2.1 The effect of self-efficacy, schemas and creativity on opportunity recognition

All those interviewed agree on the fact that self-efficacy promotes the recognition of opportunities for entrepreneurs. Indeed, they all say that a good dose of confidence and boldness is essential to be able to transform ideas into marketable products.

The creativity plays also an important role for the majority of our entrepreneurs (20 entrepreneurs) because it allows the company to get ahead compared to its competitors and bring products to market before others do. These 20 entrepreneurs say that it is the creativity that

guarantees the permanence of opportunity recognition. The other two think that it is not necessary for the entrepreneur to be creative because, for the former, Tunisian firms are not really innovating in this field (goods or services) but they practice ready ideas which have been tested abroad and sell them on the Tunisian market. For the former, he admits that although he is not creative, this did not prevent him from succeeding in his endeavors and recognizing opportunities and he fills this lack of creativity with a social network highly developed.

As for schemas, all the entrepreneurs believe that entrepreneurship in a sector such as ITC requires a minimum level of knowledge especially after academic training. Experience is also important to understand the functioning of this sector. These entrepreneurs believe that the more the person has prior information about the company and its industry, the easier it is for them to find new product ideas.

These interviews suggest the existence of a positive effect between the cognitive factors identified in the literature (self-efficacy, schemas and creativity) and the recognition of these opportunities by Tunisian entrepreneurs.

2.2.2 The effect of the flow of information from the environmental and social factors on the recognition of opportunities

21 entrepreneurs think that the environment is a source of inspiration. Indeed, to find ideas for new products, these entrepreneurs are always looking for information from their environment.

These entrepreneurs look to be present in various seminars and professional meetings. They frequently visit the site of the Ministry of ITC to be continuously informed about any news about regulation, infrastructure and professional meetings.

Again, the positive role played by the flow of information in improving the recognition of these opportunities by Tunisian entrepreneurs is verified.

By asking our entrepreneurs on the possible role that social factors may play in the recognition of opportunities, we found that all respondents stated that strong ties have no effect on the recognition of opportunities because this network can not provide them s with relevant information to find new ideas for products or services. The positive relationship between strong ties and recognition of opportunities is not verified.

These entrepreneurs tend to think that meetings with clients and foreign businessmen or professional seminars are sources of inspiration and they even think of them as the inspiration which is the most important. They think it is the casual encounters with men operating in their field which help them to design new products and services to meet demand in the domestic market. The discussion with these people gives them a clear idea about the chances of success of their products or services.

In their questioning about the help that can make a person experienced in the recognition of opportunities, they argue that such person has acquired a degree of vigilance in the recognition of opportunities and certain sensitivity toward opportunities and can improve their ability to recognize opportunities by directions they give them and the advices they provide. This person can see hidden opportunities and they can pass this option if they want. These entrepreneurs complain that they can not enjoy the benefits of mentoring, as 20 of them believe that this practice is not applied in Tunisia.

The positive relationship between mentoring and recognition of opportunities is verified.

Conclusion

This exploratory study suggests the existence of a positive effect between the personal factors (self-efficacy, schemas and creativity) and the environmental factor (information flow) deduced from the literature on the recognition of opportunities.

As for social factors, we confirmed the positive role played by weak ties (which is in line with results found by Granovetter (1973) on the strength of weak ties) and mentors, but no role is given to strong ties in fostering the recognition of opportunities by Tunisian entrepreneurs operating in the sector of Information Technologies and Communication in Tunisia interviewed for this study.

This can be explained by the specific sector. Indeed, it is considered by these entrepreneurs that it is essential to have specific knowledge in the Technologies of Information and Communication in order to enter the field of Information Technologies and Communication, to understand its functioning and to talk about.

The fact that this study did not confirm positive relationship between weak ties and the recognition of opportunities do not justify the removal of this variable from our model because of the small sample size. This study has not suggested that other variables, other than those deduced from the literature, can stimulate the recognition of opportunities by entrepreneurs. Following this study, a larger quantitative empirical study was launched to test the seven hypotheses stated throughout the first part of this paper.

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