

Cognitive Foundation of Corporate Entrepreneurship as a Mean of Sustainable Competitiveness and Growth

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Abstract

Corporate entrepreneurship represents systematic entrepreneurial initiative aiming to revitalize the organization and shape the business through the identification and exploitation of business opportunities. It refers to the creation of new business within the existing one, but also the transformation and revitalization of the organization through a redefinition of its core values. Even though it primarily provides a platform for ensuring long-term growth and sustainable competitive advantage for company, on the broader scale raising entrepreneurial awareness and innovativeness within established companies ultimately results in increased revenue for the governments and represents paramount for new job creation. Achieving growth and reviving shaken economies heavily depends on ability to set in motion entrepreneurial and innovative potential simultaneously on both macro and micro level.

Employees create innovative ideas, overcoming organizational barriers and obtaining necessary resources for implementation. In this paper we analyze the impact of cognitive factors as one of the key determinants affecting employees' willingness to behave in entrepreneurial way, within existing organizational setting. Self image, experience, feelings and affects represent the reflection of ongoing cognitive processes, and consequently influence entrepreneurial intentions and behaviour. In making decision about new venture, corporate entrepreneurs are prone to excessive self-confidence and unfounded optimism, often resulting in numerous cognitive biases. They contemplate and compare personal expectations with perceived outcomes and repercussions, in order to decide whether to start new venture, fully aware of the risks they are taking.

Key words: *New venture, corporate entrepreneurship, innovativeness, cognitive factors, biases*

JEL Classification: *C 19, G13, G 14*

1. Introduction

Corporate entrepreneur brings knowledge, emotions, mental and cognitive capacities into the venture, which helps him to make investment decisions under uncertain circumstances and constant time pressure. The entrepreneurial mindset is the ability to mobilize and exploit personal resources and capabilities, in order to realize business ideas. In developing entrepreneurial mindset, corporate entrepreneurs constantly challenge dominant logic and the way they perceive business opportunities and the market position.

Entrepreneurial behavior is significantly conditioned by individual perceptions of individual, his personal goals and the way others feel about him. The aspirations of the individual to become an entrepreneur will be strongest if there is significant overlap between perception of himself and the perception of the key characteristics of entrepreneurs (Farmer, Yao and Kung-McIntyre, 2011). In other words, one wonders how he fits the prototype of entrepreneurs, in the way he sees it. This hypothetical performance is quite general, but it gets more and more refined through learning by doing process (Krueger, 2003). Finally, the aspirations of the individual to become an entrepreneur result in either starting new venture and taking advantage of opportunities, or by disclosure.

Prior to implementation, corporate entrepreneur analyzes the likely outcome if the idea is successful. They depend on the previous similar experience of the entrepreneur himself or other corporate entrepreneurs. The result of implementation can range from the very successful new products, services or processes, to total failure. Corporate entrepreneurs calculate in advance the loss that are willing to make, both financially and psychologically (Hisrich, Peters and Shepherd, 2008, pp. 29-33). This approach provides a certain freedom to act within the given limits.

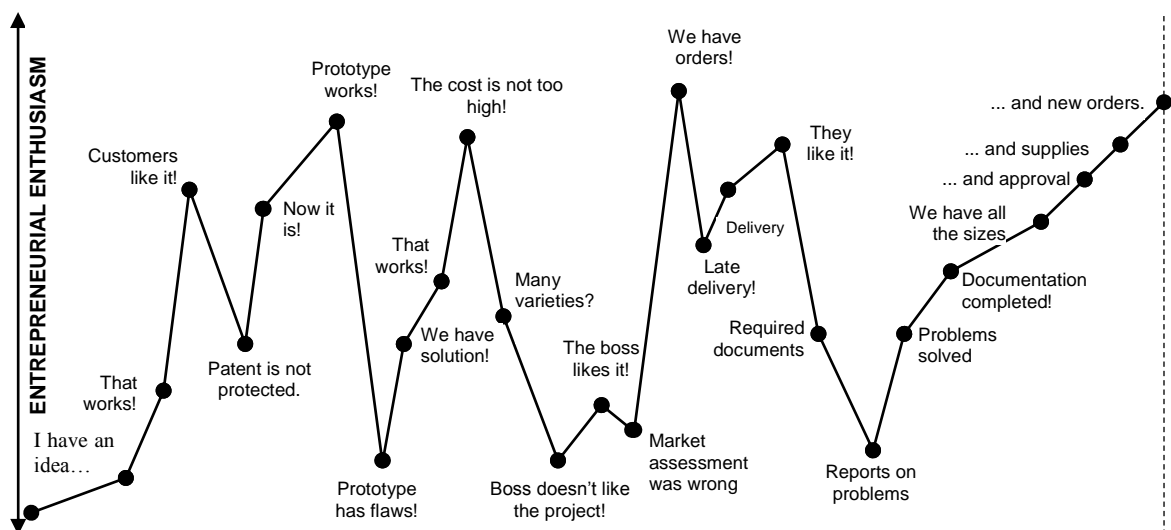
2. Cognitive characteristics of corporate entrepreneurs

Corporate entrepreneur is different from other employees in the company, but also from the other independent entrepreneurs, because not only that he is willing to constantly work on his idea until it reaches a form suitable for market launching, but he must be prepared for persuasion and providing support to management, overcoming the resistance and the struggling for the implementation of the idea. He transmits enthusiasm and faith in the new venture, provoking ruling organizational values and assumptions. Because of the many obstacles they face, it is less likely for corporate entrepreneur to start a new venture and insist on its implementation, compared with an independent entrepreneur (Corbett and Hmieleski, 2007).

The entrepreneur primarily passes through the initial phase of daydream, which includes the elaboration of alternative scenarios "what would have happened if", he analyzes the various options and mentally reviews the potential barriers. The entrepreneur uses the process

of effectuation, meaning that firstly, he considers resources that can be counted, and then defines desired outcomes with what is at his disposal (Hisrich et al., 2008, pp. 29-33). The emphasis is on creating something new by using available resources, rather than developing new ways to achieve old goals (Sarasvathy, 2001). The entrepreneur creates a team that will work on the implementation of ideas, transcending the lines of authority and organizational structure. Corporate entrepreneurial activities disturb the established business practice, someone in the hierarchy sooner or later feels threatened, so the entrepreneur must avoid conflicts and demonstrate diplomatic skills during a series of endless questioning of the justification of venture and inexhaustible skepticism of some colleagues (Hellriegel, Jackson, and Slocum, 2005 pp. 143-145). In Figure 7 it can be seen how the process of entrepreneurship is nonlinear, burdened by ups and downs, which requires the construction of psychological defense mechanisms, resistance and perseverance of entrepreneurs in their efforts to implement the idea.

Figure 1: The ups and downs of corporate entrepreneurs



Source: Mueller, S., Volery, T., and von Siemens, B. (2012). What do entrepreneurs actually do? An observational study of entrepreneurs' everyday behavior in the start-up and growth stages. *Entrepreneurship: Theory and Practice*. 36(5), 995-1017.

Many believe that entrepreneurs have a "sixth sense" that allows them to spot opportunities that others do not see. This ability is called entrepreneurial alertness and involves spotting opportunities without consciously intended search for them (Barringer and Ireland, 2006, p. 36). It is a skill that can be improved, especially on the basis of the use of knowledge and experience in a particular field. The decision to become an entrepreneur is an interaction of personal characteristics, personal goals, personal environment, the business environment and the nature of innovative ideas (Morris, Kuratko and Covin 2008, pp. 148-149).

It is not sufficient for the employee to be creative to make corporate entrepreneur. He has to think and acts like an entrepreneur, i.e. to take responsibility for starting entrepreneurial ventures. The most controversial issue in the field of entrepreneurship that has remained until today is: *who is the entrepreneur?* Studied of psychological and sociological characteristics of entrepreneurs, burdened with numerous methodological discrepancy led to contradictory results. There is however agreement on several key characteristics of entrepreneurs (Morris et al., 2008, pp. 145-148). One of them is personal motivation. Entrepreneurs are motivated by challenge, chance, opportunity, rather than status, power or profit. Internal motivation represents the impulse that the entrepreneur feels, interest, involvement, satisfaction and a sense of challenge, while external motivation is based on the evaluation, rewarding and power (Hitt, Ireland, Camp, and Sexton, 2002, p. 141). The entrepreneur has an internal locus of control, which means that he is the agent of change who believes that with enough time and effort he can do something significant and that it only depends on him. He takes calculated risks, through activities that may result in expensive failure, i.e. significant negative deviation in relation to the anticipated positive outcomes. The entrepreneur has a tolerance to uncertainty, he moves towards unexplored and unbeaten paths, which often leads to a situation where entrepreneurial venture is redirected, compared to the initial idea.

There is still no adequate response to the question of why some individuals are more able than others to detect and exploit perceived business opportunities? It is believed that there are two groups of factors influencing the process of identifying opportunities: the possession of the necessary information and cognitive predispositions necessary for its exploitation (Shane and Venkataraman, 2000).

The idea of the existence of *universal entrepreneurial profile* has failed, so it has lead to a vacuum in the literature on entrepreneurship. Lately *cognitive psychology* has received sudden popularity and importance, which offers psychological basis as a starting point for understanding the behavior of entrepreneurs. Everything that a man thinks, does or says is a reflection of complex neurochemical or cognitive processes that occur in the brain (Baron and Shane, 2005, pp. 56-60). Cognitive processes are the basis for generating new ideas, creativity and identify business opportunities. Raw unprocessed information are stored in the cognitive structures of the individual and are the result of the entire life experience.

Research on the impact of cognitive abilities on entrepreneurial behavior and decision-making has been moving in several directions until now: a) the use of *logic based on heuristics* (Simon Houghton and Aquino, 2000; Baron, 1998; Busenitz and Barney, 1997; Busenitz, 1992; Kahneman and Tversky, 1979); b) *approach based on entrepreneurial preparedness* (Gaglio and Katz, 2001; Hills, Lumpkin, and Singh, 1997); c) *approach based on entrepreneurial expertise* (Mitchell, Busenitz, Lant, McDougall, Morse, and Brock Smith,

2004; Mitchell, Busenitz, Lant, McDougall, Morse, and Brock Smith, 2002); d) *the process of effectuation* (Sarasvathy, 2001).

Social cognitive theory (Bandura, 1986) argues that personal characteristics, including the degree of optimism, are predetermined by the interaction of behavioral and environmental factors. The theory advocates the existence of cognitive structures or mental models (cognitive schemes), whose constellation allows an individual to optimize behavior in every situation (Mitchell et al., 2002). Using the scheme, as a set of knowledge and assumptions about what the world is and how one experiences it, entrepreneur combines the information and performs tasks. In other words, there is the connection between mental processes and entrepreneurial behavior. Even the Kahneman and Tversky (1979) argued that individuals perceive the same opportunity differently depending on whether they perceive profit in it or not.

The term entrepreneurial cognitive ability was first used in the mid-nineties and since then it is constantly gaining in importance (Mitchell, Busenitz, Lant, McDougall, Morse, and Brock Smith, 2002). The first studies were related to cognitive biases and heuristics (Busenitz and Barney, 1997; Busenitz, 1992), as well as to the desirability and feasibility of entrepreneurial opportunities (Krueger, 1993). The next wave of research was led by Baron (1998), examining the cognitive mechanisms such as the hypothetical thinking (remorse for missed opportunities), the influence of affect, the search for causes, overestimation of personal abilities and justification of the wrong moves. Simon Houghton and Aquino (2000) analyzed how cognitive errors, such as the illusion of control, over-confidence and fallacy related to the law of small numbers (adoption of ambitious conclusions based on the few details) shape the value of entrepreneurial options (McGrath, 1999). Entrepreneurial cognitive ability describes how an entrepreneur thinks and behaves. These are "cognitive structure that individuals use to evaluate, discern and decide on the utilization of business opportunities, new venture creation and growth" (Mitchell et al., 2002). In other words, the aim is to understand how entrepreneurs use simplified mental schemes to merge unrelated information into a mosaic, which help them to identify new business ideas and provide the necessary resources for their implementation. There is another type of mental framework, and refers to prejudice, abstract, idealized picture of the essence of a category or object. Prejudices are mental shortcuts for reasoning. Schemes and prejudice are important for entrepreneurship because they can facilitate it, and cannot disable it.

Due to the existence of organizational contexts in which there are corporate entrepreneurs, they will develop schemes of roles (standards of expected behavior) that deviate from those that independent entrepreneurs have. The organizational context influences entrepreneurs to be more directed to prevention (patents, competitive defensive strategies) than to promoting (new products, markets, etc.), which further facilitates the availability and

control of resources (Corbett and Hmieleski, 2007). In order to understand entrepreneurial behavior, it is necessary to analyze entrepreneurial intentions. Potential entrepreneurs who are in the stage of scanning options and considering new project has so called *promotional focus*, which, however, during implementation, when resources and time are being invested, turns into *preventive* (Fitzsimmons and Douglas, 2011), whose key determinant is protection against possible failures and losses.

Corporate entrepreneur has to develop cognitive flexibility. Cognitive flexibility is reflected in entrepreneurial meta-cognitive awareness, or the ability of reflection, understanding and controlling one's own thinking and learning. Metacognition refers to the process of higher order which serves to organize the way one individual sees himself and perceives the world around him, in order to accommodate cognitive functioning in relation to the feedback from the dynamic environment (Schraw and Dennison, 1994). It is possible to increase cognitive flexibility by asking questions related to the understanding of the environment, creation of stimulating comparison of the current situation with similar or different previously resolved problems, developing potential strategies, as well as their own reasoning and emotions that evolve as the entrepreneurial process happens (Hisrich et al. 2008, pp. 33-38).

3. Cognitive processes

The central and most important cognitive process is *memory*, without which human life would be unthinkable. There is a difference between *working memory*, responsible for short-term memory and exploitation of information, as opposed to *long-term memory*, which allows a person to record in mind large amount of information to be used as needed (Baron and Shane, 2005, pp. 56-60). There is no evidence that there are any restrictions in terms of the amount of information one can memorize or a number of skills that can be acquired. It is possible to save different types of information, such as factual facts which can easily be expressed, but also procedural, which are much harder to articulate verbally. A successful entrepreneur is unlikely to explain the way in which he selects a business idea to be implemented, because his selection process became automated, with years of experience. Human memory is predominantly based precisely on this, subconscious information.

Experience enables storage of large amount of information in memory, which can later be used to create something new. Everyone's experience is unique, as well as information available on the basis of it, so that's the key reason why some ideas occur to some people and not others. It is more likely for experienced entrepreneurs to recognize a business opportunity in the respective field. Previous experience in starting business generates positive effects (Davidson and Honig, 2003; Delmar and Davidsson, 2000). It enables learning from previous

mistakes and avoiding them in further entrepreneurial efforts. Experience enhances aspirations and willingness of an individual to become an entrepreneur (Farmer et al., 2011).

Optimism is the cognitive process that has great influence on the entrepreneur. This is a characteristic that distinguishes entrepreneurs compared to the general population. Optimism represents the belief that an individual is not likely to be exposed to negative events, and that it is much more likely for them to be exposed to positive events, compared with other people (Helweg-Larsen and Shepperd, 2001). There are conflicting views about the relation of entrepreneurial experience and optimism. There are some entrepreneurs who realize that they initially were too optimistic and euphoric, so they take a more realistic attitude in further operations. Others, on the contrary, perceive their experience as a basis for creating biases of their own knowledge and abilities, so the level of their optimism continues to grow (Ucbasaran, Westhead, Wright, and Flores, 2010).

The interdependence between entrepreneurs' optimism and the nature of previous experience is heavily neglected by researchers. The nature of past experience affects the way in which the entrepreneur adapts to further operations. Experienced entrepreneurs, who did not have large business failures, are more prone to optimism than the inexperienced ones, and conversely, those who have had negative experiences are generally more pessimistic than beginners (Ucbasaran et al., 2010). Entrepreneurs who have experienced a collapse of business represent a heterogeneous group, due to the different abilities to interpret the causes of failure, and the willingness to learn from failure.

There is some confusion and theoretical disagreement about the questions of how optimism affects the achievement of business performance. Hmieleski and Baron (2009) argue that the level of entrepreneur's optimism is negatively correlated with the performance of entrepreneurial ventures. Previous experience in starting an entrepreneurial venture has an impact on the relationship between the level of optimism and the performance of new ventures. Namely, the more experience the entrepreneur has, the observed relationship is increasingly negative. Although at first glance it seems illogical, there is an argument that experienced entrepreneurs strive for generalization based on their limited experience, which leads to excessive self-confidence and consequently has a negative impact on business.

There is a lack of motivation among individuals who have low levels of optimism and they believe that failure is inevitable no matter how hard they try. They all focus on negative information, in which they find justification and excuse, and the level of performance, that they achieve, is generally below average. Moderate optimists set challenging but realistic and achievable goals, establish a balance between positive and negative events, which often results as above-average performance. Extreme optimists are focused on achieving abnormally challenging goals; they have excessive self-confidence and ignore the negative hints, which results in average performance (Hmieleski and Baron, 2009).

It is interesting that entrepreneurs often assess the chances for success of their venture much better than changes for success of someone else's similar ventures (Cooper, Woo, and Dunkelberg, 1988). Some researchers suggest that there is no evidence that excessive optimism is a decisive factor in launching the enterprise, but it affects the entrepreneur to persist longer in the implementation of unsuccessful business ideas (Lowe and Ziedonis, 2006). It is more difficult for new entrepreneurs to commercialize innovation, in comparison to existing organizations, and they need a long time to give up the unsuccessful idea (Lowe and Ziedonis, 2006).

The level of *self-confidence* varies depending on the nature and repercussions of past experience. It represents the trigger for positive emotions that facilitate learning from mistakes and overcoming the fear of the establishment of new ventures. Entrepreneurs with more confidence will possess a greater cognitive and emotional flexibility, ie. they will be willing to overcome the emotional loss and fear that something similar could happen again in the future. Although excessive self-confidence can lead to large errors in reasoning in decision-making, it also has its positive side, which is reflected in the creation of positive *affect* (Hayward, Forster, Sarasvathy, and Fredrickson, 2010).

The distinction between the current affect and affect as personality trait must be made. Current affect represents a sudden change of mood generated by an external event as the trigger. In contrast, affective person has a constant tendency to exhibit turbulent emotional reactions to different situations. Both types of affect operate simultaneously in many situations and they produce parallel effects (Lyubomirsky, King, and Diener, 2005). The affect is related to mood, which is a trait of personality and is not focused on any type of object (eg, euphoria, depression), but also to the emotions, which are variable and targeted to a particular object (eg, anger, sadness, joy). The affect is believed to have a particularly strong effect in the field of entrepreneurship, and this for two reasons (Baron, 2008; Mitchell, Busenitz, Bird, Gaglio, McMullen, Moors, and Smith, 2007). First, the reason why the affect is important for entrepreneurship and how this mechanism affects new venture creation can be best realized when making decisions under uncertainty, when emotions are high and previously established mental templates are not of much use. In these conditions, affects inevitably affect decision making. Secondly, affects are associated with starting a business venture, because a positive affect enhances creativity and facilitates the identification of business opportunities.

There are two basic mechanisms that influence the establishment of relation between affect and cognitive skills (Baron, 2008). One of them is the storage of certain information, depending on the current mood, so that the various associations represent the trigger for the particular memorized feelings. This means that the positive affect evokes thoughts like

happiness and hope, and negative affect evokes opposite emotions such as fear and anger. The listed feelings influence the perception of risk, which means that they affect the cognitive abilities of entrepreneurs (Foo, 2011). The second relates to the fact that the affect has an impact on heuristics, or the tendency of an individual to shorten the process of reasoning and decision making using mental "shortcuts" that result from reactions to certain stimuli (mechanism "*affect as information*").

One of the ways that affect influences cognitive abilities is through the *perception of the external world*. People characterized by positive affect will tend to evaluate other people and phenomena more positively than those characterized by negative or neutral affect (Garcia-Marques, Mackie, Claypool, and Garcia-Marques, 2004). It contributes to the optimistic and affirmative interpretation of others' motives, and vice versa (Baron, 2008). Positive affect directs preferences to effective decision-making strategies and coping with stress, such as efforts to identify and solve the problem, while negative affect increases the tendency towards less efficient strategies such as avoidance, denial and reaching for stimulating substances. Among the entrepreneurs, positive emotions are directly correlated with creativity, which consequently has a positive impact on the degree of innovation in organization (Baron and Tang, 2009). Positive affect increases the level of dopamine in the brain, a neurotransmitter that stimulates the brain regions responsible for complex cognitive activities. Dopamine facilitates the activation of multiple cognitive sets, as well as the unusual association. The impact of negative affect on creativity is not sufficiently clarified. Evidence exist that fear or anxiety are restraining factors (Baas, De Dreu, and Nijstad, 2008). The influence of affects on individuals' innovativeness represents a complex issue, which requires special attention and a sophisticated multidimensional research (Hitt, Beamish, Jackson, and Mathieu, 2007).

The most intense emotions trigger for entrepreneurship is a passion or *commitment*, which starts a chain reaction of entrepreneurial behavior. Passion is regarded as the energy that gives the individual a sense of satisfaction and hope and encourages them to stand up for what they love with all their heart (Cardon, Wincent, Singh, and Drnovsek, 2009). One study (Cohen, 2005) has shown that there is an interaction between affects and cognitive abilities, even at a very basic level of functioning of the nervous system, and that there are two parallel systems for processing information in the brain. One refers to the logical reasoning, and the other on the affects. These processes can best be analyzed on a case called "*ultimatum paradigm*" (Sanfey, Rilling, Aronson, Nystrom, and Cohen, 2003). Two persons have a duty to share 1000 dinars. One person decides how the division will be made, and the other can accept or reject the offer. It is obvious that any division will result in a certain gain for another person, and therefore the principle of rationality requires it to accept any proposed solution. Research has shown, however, that most people refuse to accept less than 300 dinars, and many do not accept the amount below 500 dinars. By monitoring their reactions on MRI, it was found that,

when a man gets an unfair offer, brain sections responsible for reasoning and emotions are activated. The higher the level of activity in the regions for processing emotion is, the greater is the probability that an individual will reject the offer, ie. it will behave in a manner contrary to their own economic interests. Emotions are an integral part of the assessment of fairness (Barsky, Kaplan, and Beal, 2011). Thus, affects have an influence on cognitive abilities even in the most elementary of brain activity, and they often manage to overcome rational considerations.

4. Cognitive errors

Limited capacity for processing information at a given time is an important aspect of human cognitive abilities. So, one can store far more information than they can currently analyze. The result of the limited ability of processing information is the creation of mental shortcuts, which are essentially a tactic to overcome this limitation, but at the same time can lead to large errors in reasoning. In other words, the cognitive processes are far from rationality, they are under the influence of numerous biases and errors. The tendency to rely on shortcuts is strongest when cognitive system is strained, as is the case in situations when you need to make a decision quickly, based on insufficient information. Busenitz and Barney (1997) point out that, unlike managers whose decisions are based on historical trends and data, entrepreneurs are forced to rely on heuristics and their own beliefs, since they are often forced to react promptly, with the limited information available on the market. Entrepreneurs often find themselves in precarious, emotional and stressful situations, and thus they are particularly susceptible to various kinds of cognitive errors and misconceptions (Baron, 1998).

Heuristics refers to the creation of simple rules for fast rendering of complex decision or drawing conclusions. *The availability heuristic* is particularly significant. It represents a mental rule which implies that if it is easier to remember certain information, the entrepreneur believes it is more reliable, and its impact on decision-making is higher. This seems logical, but can lead to large errors, especially because it is easier for entrepreneur to remember typical or unusual information, which, however, are often not the most relevant for decision making. The outcomes that are difficult to imagine or understand are seen as unlikely. *Representativeness heuristics* means that decisions are based on comparisons with similar situations in the past. There is also the *anchoring heuristic*, the tendency of unreasonable reliance on a reference point that has been reached in the phase of defining the problem (Casson, Yeung, Basu, and Wadson, 2006, pp. 91-99).

In addition, errors may arise from the excessive optimism, the tendency to expect a positive outcome even when there is no real basis for it. The tendency of excessive optimism can be a reason why someone chooses to become an entrepreneur. Entrepreneur draws

ambitious conclusions based on limited information, reasons incorrectly, builds self-sufficiency, which does not contribute to the success of future operations (Brailey, Vasterling, and Franks, 2001). Strong emotional reactions can cause implementation on underdeveloped business ideas and increase susceptibility to various entrepreneurs' cognitive fallacies. In psychology, it is known that the decision-maker has a tendency to exaggerate the attractiveness of the selected option, as in the case of entrepreneurs can be partly explained by the need for animating others and providing support.

Excessive optimism is often followed by a new cognitive problem, embodied in *excessive self-esteem*. Entrepreneurs with experience, young entrepreneurs, as well as those who run small enterprises demonstrate greater confidence (Forbes, 2005). People generally tend to over-rely on their own beliefs and make confirmation errors. *Confirmation error* implies a tendency to observe, remember and process mainly the information that are consistent own convictions. This is called "*echo chamber*", which receives only the information that supports existing attitudes. It is obvious that it is dangerous for entrepreneurs to ignore unfavorable information, particularly those relating to market, customer preferences or competition. *The illusion of control* stems from an internal locus of control and represents the belief that fate can be controlled to a greater extent than is realistically possible. This belief may affect the individual to be more prone to the commencement of entrepreneurial ventures and easier to underestimate the factors that are objectively beyond his control, such as the economic environment, standard of living, monetary and macroeconomic policies and so on. (Baron and Shane, 2005, pp. 56-60). The illusion of control is based on the fact that it is difficult to assess whether an event is a result of luck or control, as well as on the aspirations of entrepreneurs to control the environment in order to reduce the risk.

Drawing conclusions based on *the law of small numbers* is also a mistake, which is reflected in the overestimation of small sample of information and drawing assumptions that one can perform a valid general conclusion based on them (Kahneman and Tversky, 1979). Entrepreneurs are particularly prone to making these mistakes because of the limited availability of resources and lack of all the necessary information (Casson et al., 2006, pp. 91-99). Therefore, they often overestimate the offer, because conclusions about the number of potential buyers are drawn on the basis of small and biased sample from their close environment.

Planning fallacy is a tendency of underestimating the time necessary to perform the task, and it is particularly evident in uncertain situations. It is the result of insufficient mental capacity of decomposition of complex tasks to subtasks, and it decreases as soon as the implementation starts. *Self-justification* is the tendency to justify own decisions, even when they have a negative outcome. A sense of personal responsibility leads to the need for justification, in order to prove competence and rationality to yourself (psychological self-

justification) and to others (social self-justification). This could lead to an even greater mistake concerning the excessive commitment to ventures that do not have an objective perspective.

5. Conclusions and Recommendations

An organization's ability to develop corporate entrepreneurship is subject to the influence of internal potentials and to what extent organizational preconditions for encouraging entrepreneurial behavior is fulfilled, respectively. Implementation of corporate entrepreneurship is resulting in advanced organizational performances in the long run, contributing to strengthening of the company competitive position. Bearing in mind that the corporate entrepreneurship is a mean for achieving and sustaining competitive advantage in the long run, it is important to identify and analyze organizational factors that influence organizational capacity to encourage employees' entrepreneurial behavior.

References

- Baas, M., De Dreu, C. K. W., Nijstad, B. A., 2008, A meta-analysis of 25 years of mood-creativity research: hedonic tone, activation, or regulatory focus? *Psychological Bulletin*, 134, 779-806.
- Bandura, A., 1986, *Social foundations of thought and action: A social cognitive theory*. Englewood Cliffs, NJ:Prentice-Hall.
- Baron, A. R., and Shane, A. S., 2005, *Entrepreneurship: A process perspective*, South-Western, Thomson Corporation.
- 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., and Tang, J., 2009, The role of entrepreneurs in firm-level innovation: Joint effects of positive affect, creativity and environmental dynamism. *Journal of Business Venturing*, 26, 49-60.
- Barringer, B. R., and Ireland, R. D., 2006, *Entrepreneurship: Successfully launching new ventures*, Pearson Education, Inc., Upper Saddle River, New York.
- Barsky, A., Kaplan, S. A., and Beal, D. J., 2011, Just feelings? The role of affect in the formation of organizational fairness judgement. *Journal of Management*, 37(1), 248-279.
- Brailey, K., Vasterling, J. J., and Franks, J. J., 2001, Memory of psychodiagnostic information: biases and effects of expertise. *American Journal of Psychology*, 114(1), 55-92.
- Busenitz, L. W., 1992, *Cognitive biases in strategic decision-making: Heuristic as a differentiator between managers in large organizations and entrepreneurs*, Ph.D. Dissertation, Texas A&M University.

- Busenitz, L. W., and Barney, J. B., 1997, Differences between entrepreneurs and managers in large organizations: Biases and heuristic in strategic decision-making. *Journal of Business Venturing*, 12(1), 9-30.
- Cardon, M. R., Wincent, J., Singh, J. and Drnovsek, M., 2009, The nature and experience of entrepreneurial passion. *Academy of Management Review*, 34(3), 511-532.
- Casson, M., Yeung, B., Basu, A., and Wadeson, N., 2006, *The Oxford Handbok of Entrepreneurship*, Oxford, Oxford University Press.
- Cohen, J.D., 2005, The vulcanization of the human brain: A neural perspective on interactions between cognition and emotion. *Journal of Economic Perspectives*, 19, 3-24.
- Cooper, A. C., Woo, C. Y., and Dunkelberg, W.C., 1988, Entrepreneurs perceived chances for success. *Journal of Business Venturing*, 3(2), 97-108.
- Corbet, A. C., and Hmieleski, K. M., 2007, The conflicting cognitions of corporate entrepreneurs. *Entrepreneurship Theory and Practice*, 22(1), 103-121.
- Corbet, A. C., Neck, H. M. and Dawn, D. R., 2007, How corporate entrepreneurs learn from fledgling innovation initiatives: Cognition and the Development of a Termination Script. *Entrepreneurship Theory and Practice*, 31(6), 829-852.
- Delmar, F. and Davidson, P., 2000, Where do they come from? Prevalence and characteristics of nascent entrepreneurs. *Entrepreneurship and regional development*, 12, 1-23.
- Davidsson, P. and Honig, B. L., 2003, The role of social and human capital among nascent entrepreneurs. *Journal of Business Venturing*, 18 (3), 301-331.
- Farmer, S. M., Yao, X., and Kung-Mcintyre, K., 2011, The bihevioral impact on entrepreneurial identity aspiration and prior entrepreneurial experience. *Entrepreneurship Theory and Practice*, 35(2), 245-273.
- Fitzsimmons J. R., and Douglas, E. J., 2011, Interaction between feasibility and desirability in the formation of entrepreneurial intentions. *Journal of Business Venturing*, 26, 431-440.
- Foo, M., 2011, Emotions and entrepreneurial opportunity evaluation. *Entrepreneurship Theory and Practice*, 35(2), 375-393.
- Forbes, D. P., 2005, Are some entrepreneurs more overconfident than others? *Journal of Business Venturing*, 20, 623-640.
- Gaglio, C. M. and Katz, J. A., 2001, the psychological basis of opportunity identification: Entrepreneurial alertness. *Small Business Economics*, 16 (2), 95-111.
- Garcia-Marques, T., Mackie, D. M., Claypool, H. M., and Garcia-Marques, L., 2004, Positivity can cue familiarity. *Personality and Social Psychology Bulletin*, 30, 585-593.
- Hayward, M. L. A., Forster, W. R., Sarasvathy, S. D., and Fredrickson, B. L., 2010, Beyond hubris: How highly confident entrepreneurs rebound to venture again. *Journal of Business Venturing*, 25, 569-578.

- Hellriegel, D., Jackson, S. E., and Slocum, J. W. Jr., 2005, *Management: A competency based approach*, South-Western, Thomson Learning, Mason, Ohio.
- Helweg-Larsen, M., and Shepperd, J., 2001, Do moderators of the optimistic bias affect personal or target risk estimates?. *Personality and Social Psychology Review*, 5(1), 74-95.
- Hills, G. E., Lumpkin, G. T., and Singh, R., 1997, Opportunity recognition: perceptions and behaviors of entrepreneurs. *Frontiers of Entrepreneurship Research*, 168-172.
- Hisrich, R. D., Peters, M. P., and Shepherd, D. A., 2008, *Entrepreneurship*, McGraw-Hill, New York.
- Hitt, M. A., Beamish, P. W., Jackson, S. E., and Mathieu, J. E., 2007, Building theoretical and empirical bridges across level: Multilevel research in management. *Academy of Management Journal*, 50(6), 1385-1399.
- Hitt, M. A., Ireland, R. D., Camp, S. M., and Sexton, D.L., 2002, *Strategic entrepreneurship: Creating a new mindset*. Oxford, UK: Blackwell Publishing.
- Hmieleski, K. M., and Baron, R. A., 2009, Entrepreneurs' optimism and new venture performance: A social cognitive perspective. *Academy of Management Journal*, 52(3), 473-488.
- Kahneman, D. and Tversky, A., 1979, Prospect theory: An analysis of decisions under risk. *Econometrica*, 47, 263-291.
- Krueger, N., 1993, The impact of prior entrepreneurial exposure on perceptions of new venture feasibility and desirability. *Entrepreneurship Theory and Practice*, 18(1), 5-21.
- Lowe, R. A., and Ziedonis, A.A., 2006, Overoptimism and the performance of entrepreneurial firms. *Management Science*, 52(2), 173-186.
- Lyubomirsky, S., King, L., and Diener, E., 2005, The benefits of frequent positive affect: does happiness lead to success? *Psychological Bulletin*, 131, 803-855.
- McGrath, R. G., 1999, Falling forward: Real options reasoning and entrepreneurial failure. *Academy of Management Review*, 24(1), 13-30.
- Mitchel, R. K., Busenitz, L., Bird, B., Gaglio, C. M., McMullen, J. S., Moore, E. A., and Smith, J. B., 2007, The central question in entrepreneurial cognition research. *Entrepreneurship Theory and Practice*, 31, 1-27.
- Mitchell, R. K., Busenitz, L., Lant, T., McDougall, P. P., Morse, E. A. and Brock Smith, J., 2002, Toward a theory of entrepreneurial cognition: rethinking the people side of entrepreneurship research. *Entrepreneurship Theory and Practice*, 27(2), 93-104.
- Morris, M.H., Kuratko, D. F., and Covin, J.G., 2008, *Corporate entrepreneurship and innovation*, Thomson South-Western, Mason, USA.
- Mueller, S., Volery, T., and Von Siemens, B., 2012, What do entrepreneurs actually do? An observational study of entrepreneurs' everyday behavior in the start-up and growth stages. *Entrepreneurship Theory and Practice*, 36 (5), 995-1017.

- Sarasvathy, S. D., 2001, Causation and effectuation: Toward a theoretical shift from economic inevitability to entrepreneurial contingency. *Academy of Management Review*, 26 (2), 243–288.
- Sanfey, A. G., Rilling, J. K., Aronson, J. A., Nystrom, L. E., and Cohen, J. D., 2003, The neural basis of economic decision making in the ultimatum game. *Science*, 300, 1755-1757.
- Schraw, G., and Dennison, R., 1994, Assessing metacognitive awareness. *Contemporary Educational Psycsology*, 19(4), 460-475.
- Shane, S., and Venkataraman, S., 2000, The promise of entrepreneurship as a field of research. *Academy of Management Review*, 25(1), 217-226.
- Simon, M., Houghton, S.M., and Aquino, K., 2000, Cognitive biases, risk perception, and venture formation: How individuals decide to start companies. *Journal of Business Venturing*, 15(2), 113-134.
- Ucbasaran, D., Westhead, P., Wright, M., and Flores, M., 2010, The nature of entrepreneurial experience, business failure and comparative optimism. *Journal of Business Venturing*, 25(2010), 541-555.