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Key Competencies for Entrepreneurship

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Abstract

Nowadays the entrepreneurship capacity determines the competitiveness of an organization. Therefore entrepreneurs are considered as a vital resource. The objective of this study is to establish which are the key individual competencies that determine whether or not a person is an entrepreneur. We have conducted a review of the literature dealing with entrepreneurship to obtain a set of entrepreneurship related individual competencies. Then using the Delphi method we have obtained reliable consensus from a selection of entrepreneurs about the importance of each individual competence that is considered to be linked to entrepreneurship. The study shows the key competencies at individual level that should be developed for becoming an entrepreneur. Competencies that enable the employees to become an entrepreneur have been identified. It can be useful for any company committed to entrepreneurship and it can also be useful for any educational institution committed to the development of entrepreneurship competencies among its students.

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1. Introduction

Nobody argues today about the importance of entrepreneurship. The development of a culture of entrepreneurship in society is a basic tool for the economic and social development which improves the competitiveness of a country. It has been widely demonstrated that entrepreneurship is one of the axes of the economic process. Entrepreneurs, through the creation of new activities, promote the development of the economy. Hence entrepreneurs are strategic resources for organizations.

It is possible to train and develop the entrepreneurial attitude. There are many competencies related with

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entrepreneurship and these competencies can be acquired and developed through learning (Tan & Ng, 2006; Gibb & Hannon, 2005; Borjas, 2003; Kirby, 2004; Lans et al., 2014). Entrepreneurial competencies affect company performance (Man et al., 2002; Camuffo et al., 2012) and it is important to identify the entrepreneur’s competencies so that both organizations and institutions of higher education can work in developing them. This way the quality of entrepreneurship in an economy could be increased.

2. Conceptual framework

Entrepreneurship and entrepreneurial competencies has been extensively studied (Mitchelmore & Rowley, 2010). Entrepreneurial behaviour is the result of a motivation to achieve a goal and the competencies necessary to achieve it. This paper is focused on those competencies that characterize the entrepreneur. Table 1 presents a summary of the literature review, illustrating the 20 competencies that are considered important and influential for achieving entrepreneurship effectiveness.

Table 1. Entrepreneurship competencies

Competencies	Definition	References
Risk assumption	Ability to tolerate ambiguity and uncertain situations and make sound decisions in this situation, while being able to control own emotions.	
Autonomy / self-determination	Capacity for making independent decisions based on a clear understanding of the possibilities and the responsibility that it entails.	Pereira (2007) Borjas (2003)
Search and analysis of information	Ability to find and share useful business information for problem-solving using the full potential of the company.	Sarasvanthy (2001) Kirby (2004)
Quality of work	Ability to work intensively and tenaciously to achieve the objectives, seeking continuous improvement.	Gibb & Hannon (2006)
Communication	Ability to listen, ask questions, express ideas and concepts effectively	Vainrub (2004)
Self- confidence	Ability to address new challenges with an attitude of confidence in their own possibilities, decisions or views.	Shumpeter (1934) Begley & Boyd (1988)
Develop social networks/ generation of support networks	Ability to create and maintain a network of contacts with agents that are or will be useful in achieving the goals	Pleitner (1986) Shapero (1982)
Dynamism	Ability to work hard and continuously in changing situations, with many different partners.	
Change management	Ability to adapt to different contexts, situations, people and media quickly and appropriately.	
Initiative	Willingness to take action, create opportunities and improve outcomes without an external requirement.	
Innovation	Ability to produce an original, unexpected and appropriate (timely, useful) new work according to the needs of the context.	
Integrity	Ability to act in accordance with what is said or considered important.	
Leadership	Ability to guide the action of human groups in a certain direction by creating an atmosphere of energy and commitment, setting goals, following up these goals and giving feedback that integrates the views of others.	
Self-control	Ability to regulate themselves and know their own limitations.	
Results orientation	Ability to promote, guide and select behaviour in order to achieve the goals.	
Entrepreneurship competencies (continued)		
Social mobility	Ability to raise or lower position in the scale of economic well-being.	
Negotiation	Ability to lead or control a discussion creating an environment for collaboration and making lasting commitments to strengthen the relationship.	
Troubleshooting	Ability to flexibly assume boundary situations and overcome them and ability to handle contradictions.	

Responsibility	Ability to maintain consistency between actions, behaviours and words, taking responsibility for their own mistakes.
Teamwork	Ability to actively participate in the achievement of a common goal, subordinating personal interests to team objectives.

The aim of this paper is to conduct an exploratory study in order to detect the competencies that are relevant for effective entrepreneurship. We corroborate this proposed list using entrepreneurs' perceptions.

3. Methodology

From the literature review, key competencies to be developed in order to become an entrepreneur were identified. The Delphi method was then used to collect data. The Delphi method is a systematic and consensus-building qualitative method that collects information from a group of individuals with expertise in cases where information judgments are indispensable (Okoli & Pawlowski, 2004). There is another study similar to the one presented in this paper which was developed by Correa et al. (2013). However, they consider higher education lecturers as experts. In this study a random sample of 10 entrepreneurs were involved. According to Ziglio (1996), if the group consists of experts with similar characteristics, an analysis with a small panel of 10 to 15 individuals will be sufficient to obtain consistent results.

Considering that the period between the first and the last round of data gathering should not be excessive in a Delphi study and in order to keep other factors from distorting the accuracy of the data, we developed the Delphi study in March 2014.

A questionnaire was used to collect the data. The list of competencies in Table I was used to develop a template for data collection from entrepreneurs. The results were categorized using a Likert scale from 1 to 5 (from 1-not important to 5- essential). The next section shows the results obtained after two rounds. Hence we obtain a consensus proposal of competencies that affect entrepreneurship effectiveness.

4. Results

Table 2 shows the results obtained using the Delphi methodology. As may be noted, consensus among experts has been achieved in relation to 9 of the 20 competencies considered initially. Furthermore, there is a moderate consensus in another 8 competencies.

Table 2. Results of Delphi study

Competencies	Mean	Moda	Median	Consensus		MIN	MAX	Deviation
Risk assumption	4.7	5	5	0.75	yes	4	5	0.48
Initiative	4.7	5	5	0.75	yes	4	5	0.48
Leadership	4.6	5	5	1	moderate	4	5	0.52
Teamwork	4.6	5	5	1	moderate	4	5	0.52
Responsibility	4.6	5	5	0.75	yes	4	5	0.70
Autonomy / self-determination	4.4	5	4.5	1	moderate	3	5	0.70
Results of Delphi study (continued)								
Self-confidence	4.4	5	4.5	1	moderate	4	5	0.70
Integrity	4.2	5	4.5	1	moderate	2	5	1.03
Negotiation	4.3	4	4	1	moderate	3	5	0.67
Dynamism	4.2	4	4	0.75	yes	4	5	0.63
Communication	4.2	4	4	1	moderate	3	5	0.79

Troubleshooting	4	4	4	0.75	yes	2	5	0.94
Innovation	4	4	4	1	moderate	1	5	1.25
Search and analysis of information	3.9	4	4	0.75	yes	3	5	0.74
Develop social networks/ generation of support networks	3.9	3	4	1.75	no	3	5	0.88
Results orientation	3.9	4	4	0	yes	2	5	0.88
Self-control	3.9	4	4	1.5	no	2	5	0.99
Change management	3.8	4	4	0	yes	2	4	0.79
Quality of work	3.8	4	4	0.75	yes	2	5	0.92
Social mobility	3	2	3	2	no	1	5	1.25

5. Conclusions

As a result of this exploratory study, we obtained a consensus proposal about the competencies that affect entrepreneurship effectiveness. The set of competencies proposed by the literature was delimited by entrepreneurs.

According to the literature, 20 competencies were commonly cited in relation with entrepreneurship. In this exploratory study, the experts agree that the relevant competencies for entrepreneurship are: risk assumption, initiative, responsibility, dynamism, troubleshooting, search and analysis of information, results orientation, change management and quality of work.

However, no consensus has been obtained for some entrepreneur competencies that are frequently cited in the literature: social networks development, self-control and social mobility.

The results presented in this study are similar to those presented by Correa et al. (2013). However, in this case, the entrepreneurs have not reached consensus on the importance of building support networks and self-control.

It is noteworthy that innovation is not among the most important competencies for experts, when it is frequently cited in the literature as an important factor related to entrepreneurship. Probably this is because from the point of view of the experts it may seem not so easy to acquire and develop this competence through learning.

From these findings higher education institution could improve their education processes to enhance the development of certain specific competencies. This exploratory study points out competencies that, if they were commonly developed, would improve entrepreneurship behaviour and therefore the competitiveness of the organization or even the whole economic system. Although the information gathered provides interesting information about entrepreneurship competencies and gives a good qualitative approach to the subject, more data needs to be collected in order to have a more complete picture.

References

- Begley, T. M., & Boyd, D. P. (1988). Psychological characteristics associated with performance in entrepreneurial firms and smaller businesses. *Journal of business venturing*, 2, 79-93.
- Borjas, L. (2003). Espíritu empresarial, creatividad empresarial. Un nuevo reto. *Anales de la Universidad Metropolitana*, 3(2), 133-156.
- Camuffo A., Gerli F. & Gubitta P. (2012) Competencies matter. Modeling effective entrepreneurship in northeast of Italy small firms. *Cross Cultural Management*, 19(1), 48-66.
- Correa, Z. C., Hurtado, C. D., y Cardona, Y. A. C. (2013). Formación en emprendimiento en estudiantes de la carrera de administración de empresas en la Universidad Pública de Popayán= Entrepreneurial formation of business administration students of a Public Institution in Popayan, Colombia. *Revista EAN*, 71, 40-51.
- Gibb, A., y Hannon, P. (2006). Towards the entrepreneurial university. *International Journal of Entrepreneurship Education*, 4(1), 73-110.
- Kirby, D. A. (2004). Entrepreneurship education: can business schools meet the challenge?. *Education and Training*, 46(8/9), 510-519.
- Lans, T., Blok, V., & Wesselink, R. (2014). Learning apart and together: towards an integrated competence framework for sustainable entrepreneurship in higher education. *Journal of Cleaner Production*, 62, 37-47.
- Man T.W.Y. , Lau T. & Chan D. F. (2002) The competitiveness of small and medium enterprises: A conceptualization with focus on entrepreneurial competencies. *Journal of Business Venturing*, 17(2), 123-142.
- Mitchelmore S. & Rowley J. (2010) Entrepreneurial competencies. A literature review and development agenda. *International Journal of Entrepreneurial Behaviour and Research*, 16, 92-111.

- Okoli, C., & Pawlowski, S. D. (2004). The delphi method as a research tool: An example, design considerations and applications. *Information & Management*, 42(1), 15-29.
- Pereira, F. (2007). La evolución del espíritu empresarial como campo del conocimiento. Hacia una visión sistémica y humanista. *Cuadernos de Administración*, 20(34), 11-37.
- Pleitner, H. J. (1986). Entrepreneurs and new venture creation: some reflections of a conceptual nature. *Journal of Small Business & Entrepreneurship*, 4(1), 34-43.
- San Tan, S., & Ng, C. F. (2006). A problem-based learning approach to entrepreneurship education. *Education+ Training*, 48(6), 416-428.
- Sarasvathy, S. D. (2001). What makes entrepreneurs entrepreneurial. *Harvard Business Review*, 21, 1-9.
- Schumpeter, J. A. (1934). *The theory of economic development: An inquiry into profits, capital, credit, interest, and the business cycle* (Vol. 55). Transaction Publishers.
- Shapiro, A., & Sokol, L. (1982). The social dimensions of entrepreneurship. *Encyclopedia of entrepreneurship*, 72-90.
- Vainrub, R. (2004). ¿Cómo es el emprendedor venezolano?. *Debates IESA*, 10(1), 64-66.
- Ziglio, E. (1996). The Delphi Method and its contribution to decision-making. In: M. Adler. & E. Ziglio (Eds.), *Gazing into the oracle: the Delphi Method and its application to social policy and public health* (pp. 3-33). Jessica Kingsley Publishers.