

# Proposal and Validation of an Entrepreneur Competency Profile: Implications for Education

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## Abstract

**Introduction.** This research presents the validated proposal of an entrepreneur competency profile. We analyzed the phases of the entrepreneurial process, and the functions involved in each of them, in order to identify the tasks involved in each function/role and consequently the specific competencies of entrepreneurs.

**Method.** The proposal was validated in two stages, based on judgments from 6 experts (entrepreneurs and scholars). In the first stage, according to the majority assessment of the participating experts, we established the tasks related to each of the functions involved in phases of the entrepreneurial process. In the second stage and using the same criteria, we analyzed the attitudes and skills involved in each of the competencies needed to carry out each task.

**Results.** We present a profile of the competencies of entrepreneurial individuals, in connection with their functions and tasks. Each competency is then described according to its constituent attitudes and skills.

**Conclusion.** The resulting competency profile is a fundamental tool for designing entrepreneurial training, and is in itself a first step in planning such training, since it helps establish educational goals as well as methodological proposals in order to meet them.

**Keywords:** entrepreneurial profile, entrepreneurial process, entrepreneurial attitudes, entrepreneurial competencies, entrepreneurial training.

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## Resumen

**Introducción.** En esta investigación se presenta la propuesta validada de un perfil de competencias de la persona emprendedora. Para ello se ha partido de las fases del proceso emprendedor y de las funciones implicadas en cada una, con el objetivo de identificar las tareas implicadas en cada función y, por ende, las competencias específicas del emprendedor.

**Método.** La propuesta se ha validado a partir del juicio de 6 expertos (emprendedores y académicos) en dos etapas. En la primera se han establecido las tareas vinculadas a cada una de las funciones propias de las fases del proceso emprendedor a través de la valoración de la mayoría de los expertos participantes. En la segunda etapa y con el mismo criterio, se han analizado las actitudes y las habilidades vinculadas a las competencias necesarias para desempeñar cada una de las tareas

**Resultados.** Se presenta un perfil de competencias de la persona emprendedora vinculado a funciones y tareas y se describe cada una de ellas en función de las actitudes y habilidades que las componen.

**Conclusión.** La propuesta de perfil competencial es una herramienta fundamental para el diseño de la formación de emprendedores, a la vez que supone un primer paso en la planificación de dicha formación, ya que facilita el establecimiento de metas educativas y de propuestas metodológicas para su logro.

**Palabras Clave:** perfil emprendedor, proceso emprendedor, actitudes emprendedoras, formación de emprendedores, competencias emprendedoras.

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## Introduction

The figure of the entrepreneur is vital to the implementation of innovative initiatives in society, initiatives that can improve the economic system. Thus, entrepreneurs constitute an endogenous engine for development in our society (*Departamento de Cultura del Gobierno Vasco*, Spain, 2012). It is therefore important to take steps that foster entrepreneurial characteristics in individuals.

In studying the figure of the entrepreneur, three different approaches may be considered: the traits approach, the behaviors approach or the mixed approach (Gartner, 1989). The *traits approach* focuses on identifying traits and personality characteristics that describe the entrepreneur. Results obtained from research with this perspective are not in agreement concerning the figure of the entrepreneur. They are unable to identify the distinctive aspects of this profile as opposed to, for example, that of a general manager; moreover, they do not consider the heterogeneous spheres in which entrepreneurship is possible, nor at what point of the entrepreneurial process this profile can best be analyzed (Gartner, 1989; Moriano, 2005). Consequently, this approach alone is insufficient to explain the phenomenon of entrepreneurial initiative, or to reach a definition thereof (Gartner, 1989).

The *behaviors approach* focuses on the entrepreneurial process and the behaviors and activities that are performed in it. One of the strengths of this approach lies in its conceptualization of the entrepreneurial phenomenon, where entrepreneuring is a process that results in creation of a new business or development of an idea. Its essence lies in the action taken, in what the entrepreneur must be able to do (Drucker, 1986; Gartner, 2001; Nuño, 2005; Vesper, 1982), more than in the traits and psychological characteristics that he or she possesses. This perspective makes it possible to propose the specific competencies that an entrepreneur must have in order to carry out an entrepreneurial process.

The *mixed approach* considers both the static perspective of the traits approach, as well as the process view that characterizes the behaviors approach (Baron & Shane, 2008; Kuratko & Hodgetts, 2007; Pereira, 2007). This perspective makes it possible to identify the different roles and functions that the entrepreneur must adopt over the course of the process,

and the competencies and/or attributes that these require. This is the frame of reference for the research presented here.

Competency can be understood as “a complex know how, resulting from the mobilization, integration and adaptation of knowledge, skills and attitudes, used effectively in different situations” (Yániz & Villardón, 2006, p. 23). It is therefore fundamental to initially study the phases of the entrepreneurial process and the functions and tasks involved in each phase, in order to then determine the specific competencies of the entrepreneur, and to analyze the attitudes and skills involved in performing each task.

### *Entrepreneurial process*

There have been two primary approaches to conceptualizing entrepreneurship (Alda, 2010): the business approach, that focuses its attention on the business sphere, and the broad approach, recognizing that the essence of the concept can be transferred to many spheres of human activity. There are certain aspects common to both approaches; these constitute the essence of the entrepreneurial process.

From this common perspective, entrepreneurship involves taking action to create or innovate in response to opportunities that have been identified at a determined moment and in a determined environment (Alda, 2010). The process can be pursued either individually or collectively, and involves identifying and mobilizing resources of different types and taking certain risks, in order to create value for individuals or groups. Thus, entrepreneurial activity “is associated with a life attitude marked by applying effort toward different types of goals, in diverse types of contexts and organizations” (Alda, 2010, p. 246-247). However, regardless of the approach taken, the so-called entrepreneurial process can be broken down into different phases or stages, since it involves a sequence of activities that pass from exploring the environment and creating ideas, to realization and management of a new entrepreneurial initiative.

Nonetheless, no consensus has been reached in the conceptualization of the entrepreneurial process, the number of its constituent phases or stages, and how these should be labeled and conceptualized. Carton, Hofer and Meeks (1997) organize the process into the entrepreneurial and management phases. Baron and Shane (2008) specify three groups of variables that influence the development of the entrepreneurial process: *individual*, directly related

to the entrepreneur; *group*, referring to the groups that interact with the entrepreneur during the process; and *social*, referring to aspects of the broader context that facilitate or impede realization of the innovative idea. Gibb and Ritchie (1982), for their part, propose an entrepreneurial process with three primary stages that span its evolution: conception, gestation and infancy, in similar fashion to Gerber (1997) and Nueno (2005). The GEM approach (Global Entrepreneurship Monitor), presented by Amorós, Cortés, Echeopar and Flores (2006), analyzes the entrepreneurial process from a broad, systemic perspective, considering contextual factors that affect the entrepreneurial process and are affected by it. The SEKN perspective (Social Enterprise Knowledge Network, 2006) proposes four stages: start-up, institutionalization, decentralization and social conglomerate.

A detailed analysis of these approaches makes it possible to piece together the essence of the entrepreneurial process and finally draw out three phases: exploratory, realization and managerial (Alda, 2010):

1) The *Exploratory Phase* involves work that is primarily intellectual and conceptual, generating ideas and visions. The objective of this phase is to outline a project, idea or potential business, a starting point for the future entrepreneurial action. The primary function of this phase is to identify needs and/or opportunities in the environment (economic, social, organizational) with an orientation toward generating value for each of the stakeholders involved.

2) The *Realization Phase* involves moving from ideas to action. According to the objectives of this phase, a project, program or business must be structured and implemented. Therefore, the entrepreneur must be capable of carrying out two functions:

- Planning and organizing a project, program, intervention or business that takes advantage of the environmental opportunities and/or needs that were detected and analyzed, and being responsible for the actions taken and their implications.
- Implementing the initiative in accordance with established organizational purposes and criteria, sizing up, assessing and taking on different risks and the necessary personal effort, coping with the difficulties, conflicts and crises that are inherent to an entrepreneurial process.

3) The *Managerial Phase* occurs once the initiative under way can become sustainable and viable; at this time managerial aspects begin to take on greater importance. During this phase, the objectives are twofold: to reach a level of efficiency that sustains growth of the start-up, and to decentralize management by delegating functions.

These phases are dynamic and somewhat circular, making it possible to continuously improve initiatives that are under way, and to generate new initiatives that reinforce each other and become linked together over time.

#### *The entrepreneur's competencies: functions and tasks*

As in the Social Enterprise Knowledge Network (2006), we find it helpful to establish links between the phases, functions and activities of the entrepreneurial process. This makes it possible to configure a set of competencies, attributes and characteristics that must be possessed or developed by the entrepreneur, whether an individual or a team.

Entrepreneurial competencies make it possible to adequately perform the functions and tasks that are required in a determined context and situation. For this reason, analyzing the phases of the entrepreneurial process and the functions and tasks that belong to each phase leads to a competency profile of the entrepreneur, that is, to a concrete expression of competencies that a person must have in order to perform as an entrepreneur.

#### *Attitudes and Skills linked to the entrepreneurial process*

Attitudes and skills, together with knowledge, are competency elements that must be mobilized for successful execution of the actions involved in the entrepreneurial process (Yániz & Villardón, 2006). A set of selected attitudes from the research by Ibáñez (2002) and Krauss (2007) formed the basis for the entrepreneurial attitudes that are analyzed in this study for their relationship to the tasks:

- *Need for Achievement* (McClelland, 1968, 1978; Gibb & Ritchie, 1982; Robinson, 1987). Setting goals and taking action in order to meet them.
- *Internal Perceived Control*. Perceived control over the outcome of actions taken.
- *Self-esteem*. A sense of security; may be defined as confidence in one's own capacities.

- *Innovation*. The importance of this attribute is recognized by authors such as Ayerbe (1995), Drucker (1986), Ibáñez (2002), Gibb (2002), Krauss (2007), Ripsas (1998) and Vesper (1982); it involves the search for new possible combinations, paths and means for doing something.
- *Responsibility*. Willingness to take on and complete relevant tasks and functions, under established timelines and conditions, as well as being accountable for the consequences of actions and decisions made.
- *Risk-taking*. Not feeling uncomfortable in situations that involve change and uncertainty, decisively coping with difficult situations instead of avoiding them, and accepting that risk is a part of life and its opportunities.
- *Effort*. Recognizing that it is necessary to work hard in order to meet goals, and accepting that greater levels of commitment and dedication bring greater probability that things will work or that results will meet one's expectations.
- *Planning*. Recognizing that the planning of work and identification of opportunities make up a key success factor in any sphere of entrepreneuring, and that these require dedicated time.
- *Self-knowledge*. Predisposition toward reflection and critical thinking, bringing awareness of one's own limitations and making it possible to look for opportunities to overcome them.

Determination of skills was based on the Hall-Tonna Model (Hall, 1994), where four types of skills are identified: instrumental, interpersonal, imaginative and systemic:

- 1) *Instrumental skills*: a particular combination of intelligence and manual skills that allow a person to feel competent (Hall, 1994). These skills encourage task orientation and the performance of operational tasks, and are therefore indispensable for the entrepreneur.
- 2) *Interpersonal skills*: related to behavior towards others (Hall, 1994), and therefore key to establishing ties and relationships between people.
- 3) *Imaginative skills*: a particular mixture of imagination and feelings that make it possible to express new ideas (Hall, 1994). These skills are carried through language, and create synergy that enhances other skills, thereby becoming fundamen-



tal to personal growth (Ayerbe, 1995). They are considered to be especially important in the different phases of the entrepreneurial process, since they are related to creativity and innovation.

- 4) *Systemic skills*: a mixture of imagination, sensitivity and skill that allows one to visualize how the different parts of a system relate to the whole (Hall, 1994). Such skills bring a wholistic view of reality, and the ability to break it down, to fragment it and then integrate and relate its parts to one another, finding places of intersection and interrelation.

### *Research objectives*

The objective of this research was to design and validate a competency profile of the entrepreneur, based on the functions and tasks that make up the different phases of the entrepreneurial process, and to identify the characteristics of this entrepreneurial profile by identifying the elements of the competencies, to include attitudes and skills as well as the specific knowledge required to take entrepreneurial action (Yániz & Villardón, 2006). Specifically:

- 1) To design and validate a competency profile of the entrepreneur, through identifying the tasks involved in the different phases of the entrepreneurial process.
- 2) To identify the competency elements (skills and attitudes) that are needed in order to perform each of the tasks in the entrepreneurial process.

## **Method**

### *Participants*

For validation of the entrepreneurial profile, as addressed through the above objectives, six experts in entrepreneurship and competency development participated (3 entrepreneurs and 3 university professors). Three entrepreneurs were identified who had successfully carried out their innovative ideas, as well as three university professors that were experts in competency-based training, and well known for their publications in this regard and for their training and consulting activities with universities. There were 3 men and 3 women, with a mean age of 48.

### *Procedure*

The experts were contacted in order to explain the objectives and characteristics of the research, and to request their voluntary collaboration. Information was collected over two phases.

In the first phase, using the different phases of the entrepreneurial process (exploratory, realization and managerial) as a basis, as well as the functions involved in each phase, the experts were asked to give their judgment of the tasks that were required to carry out those functions. Thus, given a list of tasks, the experts were to assess the relevance of each task within each function. For each task there were three possible responses: not important at all, somewhat important and very important to this function. Once the tasks were established, in a second research phase, the experts were to select the skills and attitudes that were important for execution of those tasks. Toward this end, a two-axis table was designed for each phase of the entrepreneurial process, attitudes and skills being charted against tasks. The experts were to mark attitudes and skills that they felt were necessary to effectively carry out each task.

### *Information analysis*

Based on the experts' judgments in the first research phase, tasks were considered valid for the model if they were rated as very relevant by at least 5 of the 6 experts. In the second phase, attitudes and skills were selected for the profile if 5 of the 6 experts marked them as competency elements that enabled proper execution of the tasks.

## **Results**

Figure 1 shows the results obtained in this investigation regarding the phases of the entrepreneurial process and the functions and tasks that are required in order to carry out each of the phases.

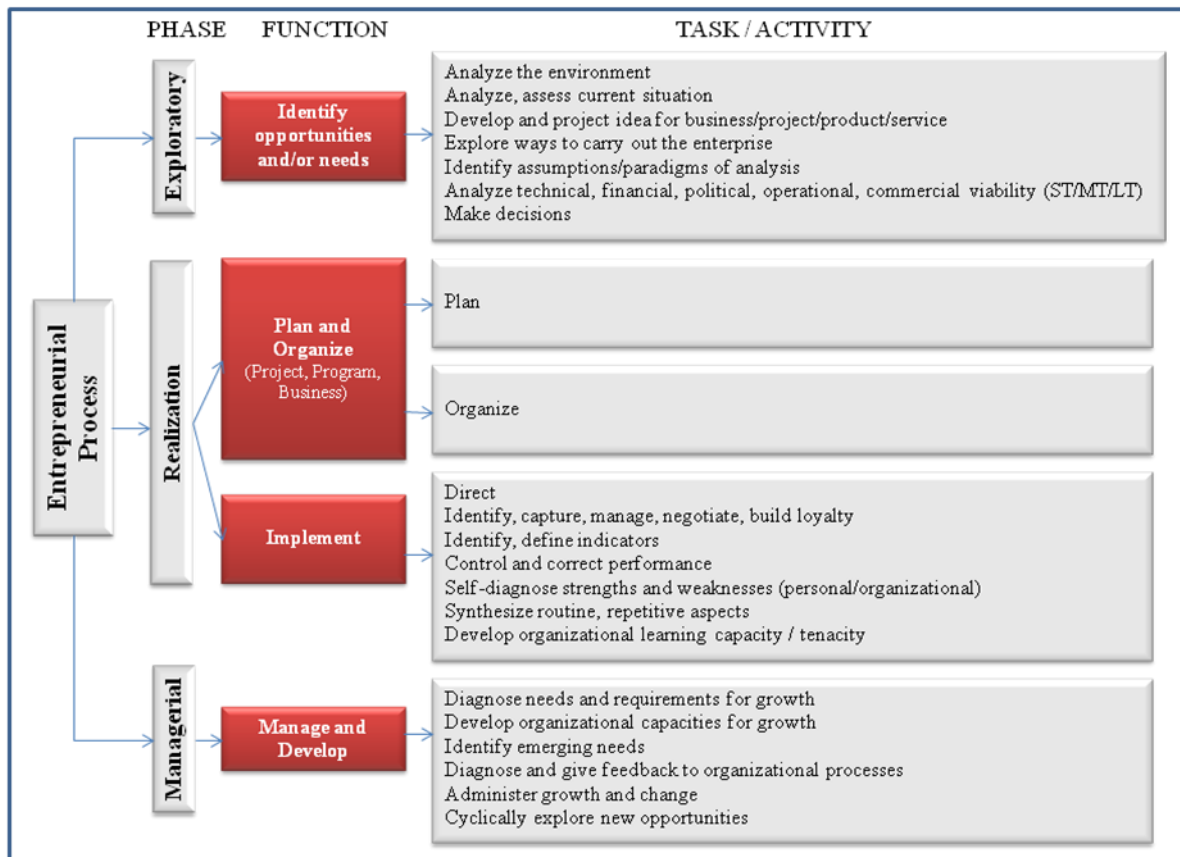


Figure 1. Tasks belonging to the functions in each phase (Alda, 2010. p.282)

In the *Exploratory Phase*, responses from the participating experts indicated that the entrepreneur should be capable of the following, in order to fulfill the function of identifying opportunities or needs in the environment:

- Proactively and prospectively analyze the environment, from a systemic thinking perspective, selecting significant information, identifying intervening variables, relationships and levels of influence; identifying necessary customers/users/groups, sizing up expected results and satisfaction; identifying opportunities and/or needs.
- Analyze, assess and diagnose the current situation, identifying key success factors, types and levels of risk involved in gestation of the initiative, discerning one's level of control over certain contextual variables and conditions.
- Develop and project a business idea, project, intervention, product and/or service, using imagination, creativity, innovation and confidence in one's means, exploring different ways to carry out one's initiative.

- Identify the assumptions and paradigms that underlie one's own analysis, and that may affect and/or distort one's view of the entrepreneurship in gestation.
- Global, preliminary analysis of the technical, financial, political, operational and commercial viability of the enterprise, in the short, medium and long term.
- Make decisions about continuing or terminating the entrepreneurial process as a function of the opportunities and/or needs detected, and analysis and assessments performed, taking responsibility for one's actions and their consequences.

In the *Realization Phase*, the participating experts indicate that the entrepreneur should be able to carry out the following tasks, or have the following specific competencies, in order to fulfill the functions of planning and implementing the initiative:

- Put together a long term vision for the entrepreneurial work in progress, supported by innovation and proper understanding of one's personal capacities and limitations, or those of the entrepreneurial team.
- Verify and assess opportunities and threats to the enterprise.
- Identify, measure, and project over time the needs and types of resources that are involved (financial, human, information, technological, etc.), and the quality standards that must be met in all dimensions of the enterprise.
- Identify functional aids and subsidies (business-related, government-related, from foundations, educational and training-related) for the enterprise.
- Establish and assess the strengths and weaknesses of the enterprise.
- Search out, evaluate and select resource sources based on their contribution to the efficiency and effectiveness of the enterprise.
- Identify the central aspects of the initiative, place them in a structure and communicate them clearly to different groups of interest.
- Identify the organizational competencies that need to be developed.
- Define the strategy on which the business/organization/project will base its action.

- Establish strategic partnerships (networks) with significant social-organizational stakeholders.
- Evaluate the technical, financial, commercial, social, political and operational viability of the enterprise.
- Make the decision to continue or discontinue the entrepreneurial work.
- Define values, principles, objectives, programs, policies, procedures, rules and systems that enable proper functioning of the enterprise.
- Define the organizational and functional structure, taking into consideration needs for flexibility, change and adaptation that may appear during implementation of the initiative.
- Form a working team in keeping with the entrepreneurial purposes, values and organizational culture that the initiative is expected to maintain.
- Collectively and cooperatively build a vision, shared by the work team, in order to increase their level of commitment.

This capacity for taking action, typical of entrepreneurship, should be conceived as a “reflective practice” that requires capabilities such as:

- Persevering, making an effort and concentrating on proposed goals and achievements.
- Directing, leading, inspiring, involving, and harnessing commitment from the members of the work team.
- Identifying, capturing, managing and negotiating with customers or users.
- Identifying and defining a set of key indicators that make it possible to review performance.
- Supervising/monitoring and correcting organizational performance.
- Diagnosing personal strengths and weaknesses – as well as those of the team and organization – that affect management efficiency, and finding options for continuous improvement and learning at the individual, group and organizational levels.

- Systematizing repetitive, routine aspects in order to devote more attention to aspects that are inherent to quality and value creation.
- Establishing conditions to encourage individual and organizational learning as a way of coping with complications and difficulties that appear in the course of the entrepreneurial process.

In the *Management Phase*, in order to carry out managerial functions and take the enterprise further, the entrepreneur must effectively carry out the follow tasks, as indicated by the experts:

- Diagnose individual and organizational needs and requirements that will dictate growth in the level of activity or size of the enterprise.
- Develop conditions in the organization that encourage personal and team growth.
- Identify emerging needs through processes of dialogue, reflection and joint thinking.
- Diagnose and give feedback to organizational processes.
- Administer change and growth in the enterprise, delegating tasks and responsibilities, and developing the capacities of team members.
- On a cyclical basis, explore new entrepreneurial opportunities at the economic, social and organizational levels.

The capacity to fulfill the above tasks provides content for the specific competencies of the entrepreneurial profile. Furthermore, defining these tasks makes it easier to identify the attitudes and skills that the entrepreneur must possess and that mobilize him or her toward adequate performance. See Appendix I for proposed content of the Exploratory, Realization and Managerial phases, respectively.

Detailed observation of the tables will reveal the importance of the proposed attitudes and skills in order to competently perform the tasks in the different phases of the entrepreneurial process. In the exploratory phase, imaginative and systemic skills take on special importance. In the realization phase, in order to properly fulfill the planning function, instrumental and systemic skills are also important, whereas fulfilling the implementation function relies heavily on interpersonal skills. In the managerial phase, the importance of imaginative skills stands out.

As for attitudes, the need to assign value and dedicate effort to planning is especially notable in the exploratory and managerial phases, while in the realization phase, risk-taking and achievement orientation are important.

## **Discussion and conclusions**

It is difficult to reach a consensus on the definition of the entrepreneurial individual, since it depends largely on one's initial paradigm (Howorth, Tempest & Coupland, 2005); however, results from the present research allow us to draw up a competency profile of the entrepreneurial person based on delimiting the functions and tasks that belong to the entrepreneurial process. Likewise, this research confirms the importance of a set of skills (imaginative and systemic skills, in particular) that are closely tied to entrepreneurial activity, as well as attitudes underlying the competencies, such as innovation, achievement orientation, risk taking, etc. Research performed by the Spanish Basque Government's *Departamento de Cultura* (2012) includes the following characteristics as personal resources; these concur with some that are presented in the present research as attitudes and skills: proactivity, autonomy, self-confidence, assertiveness, creativity, optimism, boldness or risk taking, and competitiveness. In a study carried out by Raposo, do Paço and Ferreira (2008), aspects such as self-confidence and leadership ability differentiated entrepreneurial university students from other students. Elsewhere, Idris (2008) confirmed that creativity and innovation were characteristics of entrepreneurial women in Malaysia.

The study from the Basque Government indicated that young Basque entrepreneurs gave special importance to the competency of developing a business idea (88% considered *having a business idea* to be rather important or very important to entrepreneurship), and the competency of identifying sources of financing (84% value this factor as rather important or very important to the entrepreneurial process).

Findings indicate that almost 30% of the young people in the Basque Region, and approximately 25% in the European Union (European Commission, 2010) prefer to work for themselves, representing a significant entrepreneurial potential. According to data collected, this disposition, together with previous entrepreneurial experience, positively influenced the perceived possibility of launching one's own business in the following five years. This confirms that the attitude known as risk taking, as well as education, are important for entrepreneurship. For their part, Segal, Borgia and Schoenfeld (2005) confirmed in one investigation

that intentions of self-employment in university students were predicted by their preference to work for themselves, tolerance of risk, and perceived viability.

The breadth and complexity of the competencies established, as well as the elements that support them, make specific training in entrepreneurship a necessity (Gutiérrez, 2008). A specification of competencies (and their constituent elements) that characterize the entrepreneurial process, such as presented here, encourages setting educational goals for entrepreneurial training, as well as designing formative action steps for meeting these goals.

The training of entrepreneurs, in order to be consistent with what is being taught, must be student-centered, where learning is active and involves risk taking within controlled, supervised situations, and error becomes a launchpad for learning. Tasks must be open-ended, without predetermined solutions, in order to foster creativity and innovation.

Moreover, it is worth emphasizing that, from the theoretical viewpoint, a close connection can be established between the constituent aspects of the entrepreneur's profile and the elements that form the foundation for organizational learning. In other words, in order to undertake entrepreneurship, it is necessary to acquire competencies or disciplines that, according to Senge (1990) and Senge *et al.* (1999), foster organizational learning; these competencies can then be incorporated into the genesis and development of entrepreneurial projects. Likewise, entrepreneurial competencies should pave the way for reflective practice, that is, action that is sustained by ongoing analysis, assessment and introspection, whether at the individual, group or organizational level.

This study should preferably be followed with an empirical validation of the proposed profile, by applying it to entrepreneurial individuals. For this purpose, instruments would need to be developed in order to assess the profile competencies. Progress of this nature would make it possible to assess training aimed at developing the entrepreneurial profile, and thus encourage the design and development of increasingly effective training proposals. In summary, this investigation is an important step towards planning entrepreneurial training, since its results can be applied to establishing educational goals that are connected to the entrepreneurial process.



## References

- Alda, R. F. (2010). *Perfil Emprendedor de los Estudiantes de la Facultad de Economía y Administración, de la Universidad Católica del Norte, Antofagasta, Chile*. [Entrepreneurial Profile of Students in the Faculty of Economics and Administration, *Universidad Católica del Norte*, Antofagasta, Chile.] Doctoral thesis, Universidad de Deusto, Facultad de CC.EE. y Empresariales, Bilbao.
- Amorós, J. E., Cortés, P., Echecopar, G. & Flores, T. (2006). *Global Entrepreneurship Monitor; Reporte Nacional de Chile 2005*. [National Report on Chile 2005] Reporte Nacional, Global Entrepreneurship Monitor, Santiago.
- Ayerbe, M. (1995). *Los Valores en el Desarrollo del Directivo: Una aproximación al conocimiento de los valores de los directivos de empresa de la C.A.P.V.* [Values in the development of the business leader: An approach to understanding the values of business leaders at the C.A.P.V.] San Sebastian: Universidad de Deusto.
- Baron, R. A. & Shane, S. A. (2008). *Entrepreneurship: A process perspective* (2<sup>nd</sup> Ed.). United States of America: Thomson South-Western.
- Carton, R. B., Hofer, C. W. & Meeks, M. D. (1997). The entrepreneur and entrepreneurship: operational definitions of their role in society. *USASBE National Conference Proceedings*, (p. 12). San Francisco, California.
- Departamento del Cultura*, Basque Government (2012). El emprendimiento juvenil en la CAPV. [Youth entrepreneurship in the CAPV.] Vitoria-Gasteiz: Servicio Central de Publicaciones del Gobierno Vasco.
- Drucker, P. F. (1986). *La innovación y el empresariado innovador: la práctica y los principios* [Innovation and innovative entrepreneurship: practice and principles.] (First Ed.). Barcelona: Edhasa.
- European Commission (2010). Entrepreneurship in the UE and Beyond. A Survey in the EU, EFTA Countries, Croatia, Turkey, the US, Japan, South Korea and China. Analytical report. The Gallup organization. Flash Eurobarometer; 283. [http://ec.europa.eu/public\\_opinion/flash/fl\\_283\\_en.pdf](http://ec.europa.eu/public_opinion/flash/fl_283_en.pdf) [Retrieved: 06/06/2012].
- Gartner, W. B. (1989). Who is an Entrepreneur? is the Wrong Question. *Entrepreneurship: Theory & Practice*, 13, 4, 47-68.
- Gartner, W. B. (2001). Natural-born entrepreneurs: Can anybody start a company? (A. S. Premier (EBSCO), Ed.) *State of Small Business*, 23 (7), 74-75.

- Gerber, M. E. (1997). *El Mito del Emprendedor: Por qué no funcionan las pequeñas empresas y que hacer para que funcionen*. [The Myth of the Entrepreneur: why small companies do not work and what to do to make them work.] Barcelona: Paidós.
- Gibb, A. (2002). In pursuit of a new 'enterprise' and 'entrepreneurship' paradigm for learning: creative destruction, new values, new ways of doing things and new combinations of knowledge. *International Journal of Management Reviews*, 4, 3, 213, 19.
- Gibb, A. & Ritchie, J. (1982). Understanding the Process of Starting Small Businesses. *International Small Business Journal*, 1, (1), 26-45.
- Gutiérrez, R. (29 April 2008). Del "cole" a la creación de nuevas empresas. [From elementary school to creating new companies.] *El Economista*, p. 41.
- Hall, B. P. (1994). *Values Shift: A Guide to Personal & Organizational Transformation*. California: Twin Lights Publishing.
- Howorth, C., Tempest, S., & Coupland, C. (2005). Rethinking entrepreneurship methodology and definitions of the entrepreneur. *Journal of Small Business and Enterprise Development*, 12 (1), 24 - 40
- Ibáñez, M. A. (2002). *Actitudes emprendedoras de los estudiantes universitarios: medición y propuestas de actuación*. [Entrepreneurial attitudes in university students: measurement and action proposals.] Bilbao: Mensajero.
- Idris, A. (2008). A profile of innovative women entrepreneurs. *International Business Research*, 1 (2), 3-10
- Krauss, C. (2007). *Las Actitudes Emprendedoras de los Estudiantes de la Universidad Católica del Uruguay*. [Entrepreneurial attitudes in students at the *Universidad Católica del Uruguay*.] Doctoral thesis, Universidad de Deusto, ESTE Facultad de CC.EE. y Empresariales, San Sebastian.
- Kuratko, D. F., & Hodgetts, R. M. (2007). *Entrepreneurship: Theory, Process, and Practice* (Seventh Ed.). United States of America: Thomson South-Western.
- McClelland, D. C. (1968). *La sociedad ambiciosa: factores psicológicos en el desarrollo económico*. [The ambitious society: psychological factors in economic development.] Madrid: Guadarrama. In Moriano, J. A. (2005), *El Perfil Psicosocial del Emprendedor* (First ed.). Madrid: Consejo Económico y Social (CES).
- Moriano, J. A. (2005). *El Perfil Psicosocial del Emprendedor* [The psychosocial profile of the entrepreneur.] (First ed.). Madrid, Spain: Consejo Económico y Social (CES).
- Nueno, P. (2005). *Emprendiendo Hacia el 2010: Una renovada perspectiva global del arte de crear empresas y sus artistas*. [Entrepreneuring towards 2010: a renewed global per-

- spective on the art of creating businesses, and the artists who do so.] Barcelona: Ediciones Deusto.
- Pereira, L. F. (2007). La evolución del espíritu empresarial como campo del conocimiento: Hacia una visión sistémica y humanista. [Evolution of the entrepreneurial spirit as a field of knowledge: towards a systemic, humanistic view.] *Cuadernos de Administración*, 20, 34, 11-37.
- Raposo, M., do Paço, A. & Ferreira, J. (2008). Entrepreneur's profile: a taxonomy of attributes and motivations of university students. *Journal of Small Business and Enterprise Development*, 15 (2), 405 – 418.
- Ripsas, S. (1998). Towards an interdisciplinary theory of entrepreneurship. *Small Business Economics*, 10, 103-115.
- Robinson, P. (1987). *Prediction of entrepreneurship based on an attitude consistency model*. Doctoral thesis. University of Brigham Young. Provo, Utah.
- Segal, G., Borgia, D. & Schoenfeld, J. (2005). The motivation to become an entrepreneur. *International Journal of Entrepreneurial Behaviour & Research*, 11 (1), 42 – 57.
- Senge, P. (1990). *La Quinta Disciplina: Cómo impulsar el aprendizaje en la organización inteligente*. [The Fifth Discipline: The Art and Practice of the Learning Organization.] Barcelona: Ediciones Juan Granica S.A.
- Senge, P., Kleiner, A., Roberts, C., Ross, R., Roth, G. & Smith, B. (1999). *La Danza del Cambio: El reto de avanzar en las organizaciones que aprenden*. [The Dance of Change: The Challenges to Sustaining Momentum in Learning Organizations.] Barcelona: Ediciones Gestión 2000 S.A.
- Social Enterprise Knowledge Network. (2006). *Gestión Efectiva de Emprendimientos Sociales: Lecciones extraídas de empresas y organizaciones de la sociedad civil en Iberoamérica*. [Effective Management of Social Enterprises: lessons drawn from business and organizations in the Iberoamerican civil society.] Washington: Inter-American Development Bank.
- Vesper, K. H. (1982). *Introduction and summary of entrepreneurship research*. In C. A. Kent, D. L. Sexton, K. H. Vesper, & N. J. Englewood Cliffs (Ed.), *Encyclopedia of entrepreneurship* (p. 425). Prentice-Hall.
- Yániz, C., & Villardón, L. (2006). *Cuadernos Monográficos del ICE; Planificar desde competencias para promover el aprendizaje: El reto de la sociedad del conocimiento para el profesorado universitario* [Monographs of the ICE; competency-based plan-

ning for promoting learning: the challenge of the knowledge society for university professors.] (Vol. 12). Bilbao: Publicaciones de la Universidad de Deusto.

**Appendix I.1. Attitudes and Skills connected with tasks from the Exploratory Phase of the entrepreneurial process (Alda, 2010. p.298)**

Domain I: Exploration: Identify opportunities and/or needs in the relevant environment (economic, social, organizational), oriented toward creating value for each of the stakeholders in the process.	Attitudes							Skills																					
	Achievement	Self-esteem	Innovation	Responsibility	Risk-taking	Effort	Planning	Self-knowledge	Instr		Interpers				Imaginative						Systemic								
									Thinking	Integrating	goals	calm	Empathizing	Understanding values	Synthesizing	Generating capacities	Creativity	Using helps	Imagining	Developing ideas	Different points of view	Seeing beyond	Managing Complexity	Drafting a plan	Separating parts	Motivating others	opportunity	Assigning responsibility	meaning of data
Proactively analyze the environment	X				X		X		X	X						X				X		X	X		X		X		
Analyze, assess and diagnose the current situation, identifying key success factors, types and levels of risk					X		X		X	X						X					X	X	X		X		X		X
Develop and project a business idea, project, intervention, product and/or service	X	X	X	X		X	X		X		X		X		X	X	X	X	X	X		X		X		X			
Identify the assumptions and paradigms that underlie one's analysis, and that may affect and/or distort one's view of the enterprise in gestation.								X						X	X					X	X								X
Global, preliminary analysis, in the short, medium and long term.							X		X									X		X	X	X		X					
Make decisions about continuation or termination of the entrepreneurial process	X	X	X	X	X		X		X									X	X	X	X			X	X			X	

**Appendix I.2. Attitudes and Skills connected with tasks from the Realization Phase of the entrepreneurial process (Alda, 2010, pp. 299-300)**

Domain II Realization: Planning and Organization Planning and organizing a project, program, intervention or business that addresses the opportunities and/or needs (as detected and analyzed) in the relevant environment, assuming responsibility for any steps taken and their implications.	Attitudes							Skills																					
								Instr		Interpers			Imaginative								Systemic								
	Achievement	Self-esteem	Innovation	Responsibility	Risk-taking	Effort	Planning	Self-knowledge	Thinking	Integrating	goals	calm	Empathizing	Understanding values	Synthesizing	Generating capacities	Creativity	Using helps	Imagining	Developing ideas	Different points of view	Seeing beyond	Managing Complexity	Drafting a plan	Separating parts	Motivating others	opportunity	Assigning responsibility	meaning of data
Put together a long term vision for the enterprise in progress	X	X		X	X		X	X	X		X			X				X	X				X	X			X		
Verify and assess opportunities for and threats to the entrepreneurial effort.				X	X			X	X					X			X			X	X			X					
Identify, measure, and project over time the needs and types of resources that are involved			X	X	X		X		X					X						X	X		X	X					
Identify functional aids and subsidies for the entrepreneurial work.			X				X		X										X	X		X							
Determine and assess the strengths and weaknesses.				X	X		X	X						X	X		X		X	X		X	X			X			
Search out, assess and select sources of resources.				X		X		X											X	X	X		X						
Identify the central aspects of the initiative, place them in a structure and communicate them clearly to different groups of interest.	X				X		X					X				X			X	X					X				
Identify the organizational competencies that need to be developed.	X			X		X		X						X	X		X		X				X	X					
Define the strategy from which the business/organization/project will operate.	X			X	X	X	X	X	X					X		X		X	X	X	X		X						X
Establish strategic partnerships (networks).		X	X		X	X	X					X				X	X		X	X				X					
Evaluate the technical, financial, commercial, social, political and operational viability of the enterprise.				X		X														X	X			X					X
Make the decision to continue or discontinue the enterprise.	X	X		X	X		X	X	X					X			X			X	X							X	X
Define values, principles, objectives, programs, policies, procedures, rules and systems that enable proper functioning of the enterprise			X				X	X	X							X			X				X						
Define the organizational and functional structure			X				X		X							X		X	X	X	X	X	X	X	X			X	
Form a work team	X	X	X		X	X	X	X	X		X		X	X	X		X				X	X	X	X	X	X		X	
Build a vision shared by the work team	X	X	X	X		X		X			X		X	X			X						X		X				X

**Anexo I.2 (cont.). Attitudes and Skills connected with tasks from the Realization Phase of the entrepreneurial process (Alda, 2010. p.301)**

Domain II Realization: Implementation Implement the initiative according to established organizational purposes and criteria, sizing up, assessing, and assuming the different risks and personal effort that are involved. Coping with the normal difficulties, conflicts and crises of an entrepreneurial process.	Attitudes							Skills																					
								Instr		Interpers			Imaginative							Systemic									
	Achievement	Self-esteem	Innovation	Responsibility	Risk-taking	Effort	Planning	Self-knowledge	Thinking	Integrating	goals	calm	Empathizing	Understanding values	Synthesizing	Generating capacities	Creativity	Using helps	Imagining	Developing ideas	Different points of view	Seeing beyond	Managing Complexity	Drafting a plan	Separating parts	Motivating others	opportunity	Assigning re-sponsibility	meaning of data
Persevering, making an effort and concentrating on proposed goals and achievements.	X	X				X				X	X	X	X				X									X		X	
Directing, leading, inspiring, involving, and harnessing commitment from the members of the work team.	X	X				X				X	X	X	X									X				X		X	
Identifying, capturing, managing, negotiating with and gaining loyalty from customers/users and suppliers.							X					X	X	X	X		X		X	X	X	X	X						
Identifying and defining a set of key indicators that make it possible to review organizational performance.	X						X	X								X						X	X	X	X		X	X	X
Monitoring and correcting organizational performance.	X			X				X	X					X							X	X	X		X		X		X
Diagnosing personal strengths and weaknesses, as well as those of the team and organization, that affect management efficiency				X			X	X					X	X							X	X	X		X		X		X
Systematizing repetitive, routine aspects	X							X	X					X									X		X		X		X
Develop individual and organizational learning capacity			X			X		X	X		X			X	X		X		X	X	X	X	X				X		X

**Appendix I.2. Attitudes and Skills connected with tasks from the Managerial Phase of the entrepreneurial process (Alda, 2010. p.302)**

Domain III Managerial Managing and taking the enterprise further	Attitudes							Skills																							
	Achievement	Self-esteem	Innovation	Responsibility	Risk-taking	Effort	Planning	Self-knowledge	Instr		Interpers			Imaginative							Systemic										
									Thinking	Integrating	goals	calm	Empathizing	Understanding values	Synthesizing	Generating abilities	Creativity	Using helps	Imagining	Developing ideas	Different points of view	Seeing beyond	Managing Complexity	Drafting a plan	Separating parts	Motivating others	opportunity	Assigning responsibility	meaning of data		
Diagnose individual and organizational needs and requirements						X	X	X	X						X					X			X		X						X
Develop organizational capacity for a growth environment.	X	X				X		X	X						X	X						X	X	X	X	X	X				
Identify new emerging needs			X						X	X			X		X				X	X	X	X	X	X	X	X	X		X		X
Diagnose and provide feedback to organizational processes.			X						X	X					X		X	X	X	X	X	X	X	X		X					
Manage change and growth of the enterprise	X	X				X	X				X	X	X		X	X	X		X	X		X		X		X			X		
Explore new opportunities for entrepreneuring at the economic, social and organizational levels.				X		X		X	X						X		X		X	X	X	X		X							X