

# International and cultural aspects of educational and academic entrepreneurship

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*"It is through education that culture is transmitted. (...) the authentic transmission of Value is from soul to soul, from one mind to another mind."* Edouard Sans, foreword to *The Glass Bead Game*, Hermann Hesse

## Introduction

Academic entrepreneurship activities are defined by Klofsten (1998) as large-scale science projects, contracted research, consulting, patenting, and licensing, spin-off firms, external teaching, sales, and testing. Indeed, entrepreneurship in higher educational institutions can take several forms (Rasmussen, 2004); moreover, the types of agents and types of entrepreneurial projects must be taken into consideration. On the one hand, educational entrepreneurship refers to education businesses that lead to a massive improvement in education (Smith, 2006), where education entrepreneur is the "change agent" who combines business acumen with education expertise (Hess, 2006). On the other hand, academic entrepreneurship involves a university faculty that establishes a new company or institution project. (Hayter, 2017)

According to Eklund and Wanzenried (2020)'s Holistic Conceptual Framework of the seven aspects of educational and academic entrepreneurship (Edupreneurship), there are seven aspects which are required to lead an edupreneur to success: 1) financial, 2) political and economic, 2) social and environmental, 3) international and cultural, 4) individual, 5) intellectual, and 7) technological.

The specificity of international aspects of entrepreneurship has been identified as new and innovative activities that create value and growth in organizations beyond national frontiers. (Oviatt, 2005) Therefore, internationalization in academic entrepreneurship contexts can be related to several actions of opportunity seeking. As identified in the open innovation processes (Gassmann & Enkel, 2004), internationalization aspects of academic entrepreneurship can be included in an *outside-in process of innovation*, enriching a project through the capture of international aspects, an *inside-out process of innovation*, by transferring ideas to the outside environment, or a *coupled process of innovation*, by creating alliances of knowledge and developing new projects with international aspects.

The purpose of this chapter is to analyze the international and cultural aspects that academic entrepreneurs must take into consideration and propose a conceptual framework for analyzing higher educational institutions (HEI) regarding their international settings to support or hinder academic entrepreneurship.

In the remainder of this paper, we will firstly present the international and cultural factors that any entrepreneur must take into consideration in an international business development context (I). Secondly, we will present several settings and management conditions that can support or hinder international and cultural sensitivity in academic contexts (II).

## **I. Internationalization and cultural aspects**

In this section, we present international factors as regarded by strategic management experts (A) before deepening our understanding of cultural aspects in the light of a sociological approach (B).

### **A. The notions of distances**

According to Ghemawat (2001) notion of firms, which can extended to entrepreneurs, one ought not to focus only on geographical dimensions of internationalization. Indeed, the author proposes several dimensions of distance that matter in international business activities.

*Cultural distance* is increased by different languages, different ethnicities, different religions, different social norms, and the lack of connective ethnic or social networks. These elements affect particularly industries with high linguistic content (e.g., TV), activities related to national identity (e.g., food) or containing country-specific quality associations (e.g., wines).

*Administrative and political distance* is increased by the absence of shared monetary or political association, presence of political hostilities, and weak legal and financial institutions. These elements affect particularly industries that foreign governments view as staples (e.g., electricity), as building national reputations (e.g., aerospace), or as vital to national security (e.g., telecommunications).

*Geographic distance* is increased by the lack of common borders, waterway access, adequate transportation, or communication links, physical remoteness and by different climates. These elements affect particularly industries with low value to weight ratio (e.g., cement), industries that are fragile or perishable (e.g., glass, fruit) and industries in which communications are vital (e.g., financial services).

*Economic distance* is increased by different consumer incomes, different costs and quality of natural, financial, and human resources, and different information or knowledge. These elements affect particularly industries for which demand varies by income (e.g., cars), or industries in which labor and other cost differences matter (e.g., garments).

The author recommends analyzing those aspects in relation to the pertinent industries and observes that industries are not equally sensitive to the different distances. These several types of distance are elements of knowledge regarding international projects that must be taken into consideration by any academic entrepreneur as key informational success factors.

## B. The notions of culture

The definitions of culture are various in academic literature, and in fact, there is no common definition. In this section, we will focus on two specific approaches to culture that can enlighten the academic entrepreneur regarding the diversity and the dimensions of the concept.

### 1. Culture as an invisible distance

According to Hall (1959), “Culture is communication, and communication is culture.” (Hall, 1959, p.186) The author developed the theory of proxemics that explains the types of personal distances maintained by people depending on social settings and cultural backgrounds. (Hall E. T., 1966) According to Hall, the main differences between cultures are related to three dimensions that we summarize in the remainder of this section.

The relation to *context* conditions fundamentally the meaning of the words used and the understanding of the message. The more people exchange words, the stronger their context will be, and the easier the interpretation of the message will be. In a low context situation, the message will require the most explicit information. In a cultural context where people are used to a lot of detailed information, people can feel like not being sufficiently informed by a person used to communicating with more help from contextual knowledge.

The relation to *time* allows Hall to propose two kinds of cultures: monochronic ones where people here, tend to do one thing at a time, and polychronic ones, where people are used to dividing time to manage several activities at a time.

The relation to *space* is based on the principle that everybody disposes of a *situational personality*. This consideration leads to four notions of distance, such as *intimate distance* or interpersonal distance with contact, *personal distance* or interpersonal distance without contact, *social distance* which is the “limit of power on other”, and *public distance*, outside of the circle of individual concern.

Hall (1966) discusses the impact of cultural differences based on proxemics and warns against risks of population inflow to cities all around the world, creating a Melting Pot with unexpected risks based on ignorance of the cultural atoms that compose it.

### 2. Culture as a programming of the mind

According to Hofstede (2001), culture is “the collective programming of the mind that distinguishes the members of one group or category of people from another, where the mind stands for thinking, feeling and acting, with consequences for beliefs, attitudes and skills.” (Hofstede, 2001, p. 5) Hofstede defines culture as a programming of the mind based on five main cultural dimensions. The main aspects of these five dimensions are presented below.

*Power distance* is related to personal acceptance of unequal distribution of power within a group. High power distant people will be reluctant to express disagreement. Low power distant people will easily contradict their superiors.

*Uncertainty avoidance* is related to the way people cope with uncertainty and risk. High uncertainty avoidant people tend to avoid ambiguous situations and prefer structured and predictable environments. Low uncertainty avoidant people are more curious about differences.

*Masculinity vs. femininity* is relative to gender roles. Masculinity is more oriented toward competition, recognition, and challenge. Femininity is more focused on home, children, and people.

*Individualism vs. collectivism* is relative to the relationships between individuals and the group. Individualists are more concerned by themselves and their immediate family. Collectivists are integrated within strong and cohesive groups that protect them in exchange for loyalty.

*Time orientation* is the cultural aspects related to people's concern with the past, present and future. Hofstede distinguishes between short-term people, concerned with the past and the present, and long-term people, oriented and concerned more with the future.

These five dimensions are dichotomies that can be used to distinguish between different cultures.

### **Conclusions of the section**

At a management level, *internationalization success depends on several notions of distance, including cultural distance*. These notions of distance are important in the entrepreneurial journey in terms of opportunity and risk management. At a personal level, common points through the different dimensions of culture come out of the comparison, such as *different cultures relying on different values and culture not being innate but acquired* by subjects.

In the next sections, we will consider the conditions and vectors of internationalization and cultural aspects in the context of academic entrepreneurship.

## **II. Attitude towards international and cultural aspects**

To analyze factors that support or hinder academic entrepreneurship, the following section focuses on the attitudes of both subjects of our study: the entrepreneur and the higher educational institution. We will present the conditions of absorptive capacity of the subjects such as the ability to value, assimilate, and apply new knowledge to improve organizational learning (Cohen, 1990). Hence, the following sections present conditions of entrepreneurs and personal attitudes toward internationalization and cultural aspects (A), before analyzing the organizational side and its absorptive capacity toward internationalization and cultural aspects (B).

### **A. Personal attitudes toward internationalization**

To be able to take advantage of the potential for internationalization and cultural aspects of internationalization, entrepreneurs, and higher educational institutions must be aware of several degrees of knowledge transfer. To give some direc-

tion to measuring this degree of knowledge, the next section is dedicated to intercultural sensitivity (1), and cultural awareness (2).

### 1. Intercultural sensitivity

Landis & Bhagat (1996) argue that intercultural sensitivity is crucial to enabling people to live and work with others from different cultural backgrounds. This consideration is particularly important in the context of coupled processes of innovation.

According to Bennett (1993), the development of intercultural sensitivity follows several steps from ethnocentric stages of resistance to ethnorelative stages of openness.

The ethnocentric stages of resistance are 1) *denial*, the lowest degree of openness to cultural differences; 2) *defense*, with a development of sensitivity relative to the denial stage, with a sentiment of threat emerging in the perception of cultural differences; 3) *minimalization* which is the last stage of resistance with the attempt to preserve the centrality of one's own world view.

With a new way of seeing cultural difference, the ethnorelative stages of openness begin: the *acceptation* stage is important because it characterizes the subjectivization of cultural aspects, allowing relativization of differences and the capacity to imagine other frames of reference than our own; *adaptation* is the stage when by accepting differences, we can change our behaviors and our way of thinking; finally, *integration* is the last stage of openness when a person is capable of adapting to several cultures after a long time living in various locations.

### 2. Cultural awareness

Numerous studies have measured international sensibility through the concept of cultural awareness (Howell, 1982). Indeed, Howell (1982) applied these learning steps to cultural consciousness. *Cultural awareness* is defined as "learning to work with people from diverse cultural backgrounds, using interpersonal communication, relationship skills, and behavioral flexibility." (Rew, 2003, p.250) This awareness includes 4 stages:

*Unconsciousness of incompetence*, when the individual does not understand the deficit of knowledge from which he suffers, and therefore is not aware of misinterpreting a foreign behavior.

*Awareness of incompetence*, when the individual understands that he lacks a competence to complete a task, and therefore is aware of misinterpreting a foreign behavior but knows nothing about it.

*Competence awareness*, when the individual understands and knows how to complete a task and can perform it in a strongly conscious way; he reflects on his behavior and consciously tries to modify it to increase efficiency.

*Unconsciousness of competence*, when an individual can perform a task easily without being aware of it, like second nature, he/she has practiced and integrated effective communication behaviors.

To take advantage of international and cultural aspects, entrepreneurs must develop cultural sensitivity and cultural awareness at least at the levels of ethnorelativism with competence awareness. Personal absorptive capacities of international and cultural aspects, such as cultural sensitivity and cultural awareness, must be supported by higher educational institutions. The next section will discuss the characteristics of the conditions of absorptive capacity of academic organizations.

## **B. Organizational attitudes toward internationalization**

*Organizational learning* theory (Cangelosi, 1965) purports that to be competitive in a changing environment, companies must adapt their actions to achieve their goals and optimize the degree of alignment between expected and achieved results. For learning to occur, companies must *make a conscious decision to change* in response to circumstances, to consciously *link the action to the result* and to *remember the result*.

According to Cangelosi (1965), initial learning takes place at the individual level. However, it becomes organizational learning once the information is shared, formalized, and stored in the organization to be transmitted and used.

According to Dill (1999), *organizational learning* refers to an organization that maximizes learning opportunities toward organizational changes, and the *learning organization* is based on the process of learning in the organizational context.

In the academic context, Dill (1999) describes the way universities become “learning organizations” to improve their skills of knowledge creation to enhance teaching and learning, and to modify their behavior to reflect this new knowledge. The author analyzed the framework proposed by Garvin (1993) regarding learning organizations in academic contexts and proposes *five elements of architecture of the academic learning organization*.

The *culture of evidence* is a core element in the problem-solving process of improving teaching and learning. Dill (1999) proposes to publicly define and defend measures of student learning upon which academic units can base their teaching processes.

The *improved coordination of teaching units* is based on the observation that successful problem-solving also requires improved coordination, communication, and accountability structures among faculty members, e.g., curriculum coordinators, faculty committees dedicated to the coordination of teaching and learning within academic units.

*Learning from others* is the action of seeking out knowledge from others, e.g., organizing study tours as a means of identifying curricular innovations or benchmarking professional curricula against international standards.

*University-wide coordination of “learnings”* proposes the development of a pan-university level of coordination and support structures, responsible for the allocation of funds supporting experiments and innovation in teaching and learning.

*Transfer of knowledge* was the least conspicuous element among the case studies and refers to processes and structures encouraging internal transfer of knowledge to improve core processes.

According to Dill (1999), those architectural elements allow universities to better adapt their capacities to new environments.

### **Conclusion of the section**

As exposed in this section, the quality of the internationalization process, which is the basis of knowledge improvement, relies on the attitudes of agents. On the one hand, academic entrepreneurs, such as students and staffs, should adopt an ethnorelative attitude, with at least the third level of cultural awareness -a share of knowledge of cultural differences. On the other hand, higher educational institutions must adopt architectural elements to develop absorptive capacities to enrich their organizational learning process and then to provide entrepreneurs an ever-enhancing and suitable environment to encourage academic entrepreneurship.

### **General conclusions**

In this chapter we firstly presented the international and cultural factors that any entrepreneur must take into consideration in an international business development context. At a management level, we saw that *internationalization success depends on several notions of distance, including cultural distance*. At a personal level, we saw that *different cultures rely on different values and that culture is not innate but acquired* by the subjects.

In the second section, we discussed settings and conditions that support or hinder the international and cultural sensitivity of entrepreneurs in academic contexts. We saw that the quality of the internationalization process depends on the attitudes of agents. Academic entrepreneurs, such as students and staffs, should adopt an ethnorelative attitude, with at least the third level of cultural awareness. Higher educational institutions must adopt architectural elements to develop absorptive capacities and provide entrepreneurs a continuously improving and suitable environment to promote academic entrepreneurship.

Finally, Edupreneurship success toward international and cultural aspects depend on the personal attitudes of entrepreneurs and on the devices that HEIs set up to promote intercultural sensitivity among students and staffs.

### **Summary**

The purpose of this chapter was to analyze international and cultural aspects that academic entrepreneurs must take into consideration to support or hinder academic entrepreneurship. We elaborated on international and cultural aspects to be taken into consideration to successfully undertake an academic entrepreneurship journey, such as cultural, administrative, geographical, and economic distance. We deepened understanding of cultural distance by summarizing the most used sociological approaches. Finally, we discussed the personal and institutional factors that can support or hinder entrepreneurship success, such as cultural sensitivity, cultural awareness, and the concept of academic learning organizations.

### Questions

- Why are international and cultural aspects important for academic entrepreneurship?
- What are the settings of cultural sensitivity that an academic institution can manage?
- What are the characteristics of an academic learning organization?

### Further readings

Further readings about the theory of planned behavior:

- Voda, A. I., Florea, N. (2019). Impact of Personality Traits and Entrepreneurship Education on Entrepreneurial Intentions of Business and Engineering Students. *Sustainability*, 11, 1192.
- Van Auken, H.; Fry, F.; Stephens, P. (2006). The Influence of Role Models on Entrepreneurial Intentions. *J. Dev. Entrep.* 11, 157–167.

Further readings about internationalization factors at the industry level:

- Ghemawat, P., Mallick, R. (2003). The Industry-Level Structure of International Trade Networks: A Gravity-Based Approach. Harvard Business School working paper

Further readings about the analysis of effects of internationalization settings on cultural sensitivity:

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