

Orchestrating a Pan-African University Alliance with the help of e-learning

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Abstract

Taking the salient case of an Italian Foundation that started to create a Pan-African university alliance for entrepreneurship education, we conducted a field study based on interviews and observation for a period of seven years. The aim was to understand how to overcome challenges that arise when fostering entrepreneurship education programs (EEP) by orchestrating an inter-organizational network in Africa. Our study revealed that proximity and contextualization play a strategic and crucial role in orchestrating an entrepreneurial eco-system in a context shaped by resource scarcity and solid societal as well as economic problems. We contribute to scholarly and practitioner understandings of how to establish effectively EEPs together with the orchestration of an entrepreneurial eco-system in Africa.

Keywords: Entrepreneurship Education, Network Orchestration, Africa.

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1. Introduction

Over the last decades, entrepreneurship has become an important economic and social topic as well as an often-researched subject (Fayolle and Gailly, 2008) and simultaneously, entrepreneurship education has gained more attention from entrepreneurship scholars (Harris & Gibson, 2008; Matlay, 2006; Mitra & Matlay, 2004). Recently, scholars have started to focus on how to design an effective entrepreneurship education programs (EEP), which primarily embrace studies with respect to competence models in order to understand which skills and actions are required in order to teach entrepreneurship (Gielnik *et al.*, 2015, Nabi *et al.*, 2015). In this scenario, EEPs has been recognized as one of the instruments for fostering entrepreneurial attitudes, intentions, and competences and this view has led to a dramatic rise in the number and status of EPPs in colleges and universities worldwide (Finkle and Deeds

2001; Katz 2003; Kuratko 2005; Matlay 2005). Although, education is widely accepted as a leading instrument for promoting economic growth, it might get stunted and challenged in environments in which the foundational infrastructure for the conduct of business is not sufficient to stimulate business formation and growth (Arrow, 1969; Khanna & Palepu, 1997). Hence, emerging markets – such as Africa as an entire continent – present rich settings for studying both voids in commercial institutions (Hoskisson *et al.*, 2000) and their resulting challenges for entrepreneurship education. By the absence of basic resources and cohesive industrial structure or market infrastructure for new venture creations, entrepreneurs need more support than training and education in theoretical content (George & Prabhu, 2000).

To illuminate those issues and to foster entrepreneurship education, we need to focus on orchestrating entrepreneurial eco-systems. However, recent studies have been limited towards studying single units of

entrepreneurship training instead of looking at entire programs of study and the development of their inter-organizational network. For this reason, we want to catch-up the on-going discussion regarding competence models in entrepreneurship education by extending our perspective towards a complete course of entrepreneurship studies and its orchestration of inter-organizational networks in Africa.

In this paper – by adopting a field study on the basis of personal experience and observation – we aim to contribute to entrepreneurship education literature by explaining how to overcome challenges that arise when fostering EEP by orchestrating an inter-organizational network in Africa.

To this aim, we based our study on the case of a Pan-African university alliance which is composed of seven African universities offering a MBA in Impact Entrepreneurship in collaboration with an Italian foundation. This network of African universities presents a salient case - promising to allow new insights to emerge more sharply.

The paper proceeds as follows: we first introduce extant literature on entrepreneurship education and its focus on competence models and action-based trainings. Second, we provide a detailed description of the studied case and the way we have collected data which has been further analyzed. Third, we present our main findings by advancing a set of recommendations. Finally, we discuss implications as well as limitations of the paper and offer indications for further research.

2. Literature Review

2.1. Entrepreneurship Education in Africa

Education is widely accepted as a leading instrument for promoting economic growth. For Africa – as a continent where growth is essential in order to climb out of poverty - education plays a particularly important role. Recently, higher education is suggested to be a determinant as well as a result of income and it might generate public and private benefits. Furthermore, higher education may stimulate an increase in tax revenues, an increase in savings and investments, and it might lead to a more entrepreneurial society. As Barack Obama outlined during the Global Entrepreneurship Summit (GES) held in Nairobi in 2015

“Entrepreneurship creates new jobs and new businesses, new ways to deliver basic services, new ways of seeing the world – it is the spark of prosperity.”. Thus, it might result in improving a nation’s health, in contributing to reduce population growth, improve technology, and strengthen governance. African countries differ significantly from one another in characteristics that influence how higher education may affect economic growth and the well-being of the society. For instance,

the policy environment, which presents the framework in which higher education is embedded, might shape the outcome and benefits of those activities. The differing political and economic histories and geographical circumstances of African countries have created an array of environments in which higher education institutions operate and they do require different initiatives and activities (World Bank 2004).

In the past, much of Africa’s economic development has been induced either by government investment or by foreign direct investment, mainly through international organizations. Yet, the ability of each country to encourage local entrepreneurship and ultimately strengthen its own emerging and growing indigenous African new ventures has gained more attention. As a consequence, the growth of entrepreneurial activity, as well as the training of new entrepreneurs, play a key role in boosting economic development (White et al., 2014).

Thus, there is a strong need to integrate entrepreneurship training in formal education to offer a strategic fundament for new venture creation.

Though, there are some key challenges confronting management and entrepreneurship education in Africa that can be differentiated between challenges related to the external environment or internal issues. First, challenges related to the external environment of African business schools are basically dominated by concerns over offering adequate resources within business schools; pressures evoked by the dynamics of globalization;

relatively weak relations between African business schools and the respective business sector; need to strengthen secondary education; relations with governments; and geographical difficulties generated by the size and scale of African countries. Second, the main internal challenges are reflected by a lack of access and equality in management education; the development of teaching and learning processes; governance issues; and the quality of research in business schools (Thomas et al. 2016).

Consequently, there is a need to integrate entrepreneurship education in the programs as well as to understand how to design those programs efficiently so that entrepreneurial activities might get stimulated.

2.2. Entrepreneurship Education – Competence Model

Recently, entrepreneurship education has become more popular among scholars and thus the focus has shifted towards looking at how to design EEP. In this vein, the scholars Béchard and Grégoire (2005) identify three principle teaching models in higher education: the supply model, the demand model and the competence model. The supply model focuses on pedagogical

methods highlighting a behaviorist orientation, in terms of the “transmission and reproduction of knowledge and application of procedures” (Bécharde & Grégoire, 2005: 111). The demand model focuses on pedagogical methods representing a subjectivist paradigm, including personalized meaning through participation in terms of “exploration, discussion and experimentation” (Bécharde & Grégoire, 2005: 111). Whereas the competence model focuses on pedagogical methods showing an interactionist theoretical approach. It refers to active problem-solving in real-life situations (Kirkwood, Dwyer & Gray, 2014; Burrows & Wragg, 2013). In this case “teaching is conceived as a strategic intervention to allow for – and influence – how students organize the resources at their disposal into competences that can be mobilized for action (Bécharde & Grégoire, 2005: 115-116). Important attributes of this approach are teaching the training content in form of action principles and active learning (learning-by-doing). Thus, students do not learn abstract theoretical knowledge but guidelines how they might be able to deal with various entrepreneurial tasks. Specifically, scholars have argued that entrepreneurial action is central factor for business creation (Baron, 2007; McMullen & Shepherd, 2006) and that action-based entrepreneurship trainings seem to be particularly effective in supporting and catalyzing entrepreneurial action (Barr et al., 2009). Action principles can be compared to “rules of thumb”, which outline principle knowledge that can be easily implemented. This knowledge presents a relevant antecedent of taking action (Frese & Zapf, 1994) and they are derived from theory and scientific evidence about how to be successful in entrepreneurship. It focuses on methods emphasizing “communication and discussion” and knowledge production as this approach assumes that learning involves actively participating in the construction of new understanding. For instance, a real-life entrepreneurial situation would indicate a competence model (Nabi et al., 2016) as it is based on experiential and realistic entrepreneurial exercise (Gondim & Mutti, 2011; Chang & Rieple, 2013).

2.3. Orchestrating Entrepreneurial Eco-Systems

Entrepreneurial ecosystems have become a widely accepted tool in the study of the geography of high-growth entrepreneurship. Ecosystems represent the group of localized cultural outlooks, universities, social networks, investment capital, and active economic policies that create environments supportive of innovation-based ventures (Spigel, 2015; Acs et al., 2014). Yet, research on ecosystem is still in its infancy as it represents more of a conceptual umbrella encompassing a variety of different perspectives on the geography of entrepreneurship rather than a coherent

theory about the development of sustainable communities of entrepreneurs.

Entrepreneurial ecosystems are combinations of social, political, economic, and cultural elements within a region that stimulate the creation and growth of new ventures. Moreover, they encourage nascent entrepreneurs and other various actors to take the risks of starting, funding, and assisting high-risk ventures. Dubini (1989) originally described ecosystems as the presence of family businesses and role models, a diverse economy, a strong business infrastructure, available investment capital, a supportive entrepreneurial culture, and public policies that incentivize venture creation. Normally, such emergent inter-organizational networks can be seen as pervasive and stable when gains for the different players are sought (Agrawal & Cockburn, 2003; Burt, 2000; Dhanaraj & Parkhe, 2006). Network orchestration can be defined as the set of deliberate, purposeful actions undertaken by the key player as it seeks to create value - expand the pie - and extract value - gain a larger slice of the pie.

One of the basic questions in research orchestration is about how do those key players, so-called hub firms (Jarillo, 1988; Knoke, 1994), coordinate, lead, control, and manage the other network members? More specifically, managers influence firm performance by structuring the firm’s resource portfolio, bundling resources, and leveraging those resources in the market (Ireland, Hitt, and Sirmon, 2003). Network orchestrators have been characterized by “acting as a broker to plan and coordinate the activities of the network as a whole” (Kilduff & Tsai, 2003, p. 89). Bringing together previously unconnected actors, network orchestrators can act as relational brokers (Obstfeld, 2005) or gatekeepers (Foster, Borgatti & Jones, 2011) to unite ideas, resources and people around a collective goal (Capaldo, 2007).

The main objective of a hub firm is to create value and extract it from the network (Kogut 2000); to effectively create and extract value on certain deliberate, purposeful actions. This process can be clustered into three main tasks. First, knowledge mobility refers to the simplicity with which knowledge is shared, acquired, and deployed within the network. Significant value cannot be created and the output of the network will be minimal if the specialized knowledge of each network member stays mostly closed within its organizational boundaries (Dhanaraj, Parkhe, 2006). Such a knowledge mobility is important as it creates the “logic of confidence and good faith” (Meyer & Rowan, 1977) and provides the “cohesive force” (Orton & Weick, 1990) that are imperative for creating an environment for knowledge flow. Second, managing innovation appropriability (Pisano, 1990; Teece, 2000) which focuses on the reduction of potential for unauthorized imitation and appropriability might be strengthened, through instruments such as patents, copyrights, and trademarks (Teece, 2000). A hub firm must ensure that it is privy to the relevant knowledge development activities of network

members within a broad, agreed upon framework and that there is no attempt to cheat by partners. Third, network stability refers to dynamic stability, which aims for a nonnegative growth rate while allowing for entry and exit of network members.

Challenges a hub-firm might face are described by establishing the legitimacy of a new set of organizational activities and the surrounding labels and categories. This is a critical factor for their viability which sometimes is also labeled as moral legitimacy (Suchman, 1995) and it refers to sharing common social values. Whereas pragmatic legitimacy derives from the utility of an activity for a particular set of constituents (Hsu & Hannan, 2005).

3. Methodology

3.1. Case Selection & Data collection

In 2005 the Congregation for the Evangelization of Peoples (Propaganda Fide) of the Roman Catholic Church, in the person of Cardinal Crescenzo Sepe, desired to offer a formation program which could contribute to the economic development of the African continent. The idea was to offer in Castel Gandolfo, Italy a residential master for Africa's future Catholic business managers, destined to play a significant role in the African Church and society. The new venture was successful, but after a few years two major problems became evident: 1) the economic crisis made it increasingly difficult to finance scholarships and, above all; 2) many young Africans, while carefully selected for their dedication to their native countries, often attempted to create a career for themselves in Europe, contributing to rather than inhibiting the continent's brain drain.

Consequently, the program changed to no African students in Italy, but the Master in Africa and three key decisions were made: 1) Not to operate in isolation, but to partner with a local university, who would eventually become the protagonist of the program; 2) Not a traditional MBA, but a program for entrepreneurs who were concerned with both the economic and social impact of their business ("Not for job seekers, but for job creators", became the program's motto); 3) Not targeted to the elite, but accessible to the new emerging middle class combining high quality and an affordable price. The experiment thus began in 2010 in partnership with Tangaza College, a constituent college of the Catholic University of East Africa in Nairobi, Kenya.

The first two editions represented a learning process. Working side by side with the Kenyan partner an innovative design emerged: an executive formula with only 40 days in the classroom to allow the entrepreneur to continue working; distance learning modules which take advantage of the growing penetration of the internet in

Africa; a full time, on staff, business coach who provides individual guidance to each entrepreneur. The participants of the program are either established entrepreneurs working to structure and grow their business or people with a start-up idea who are looking to launch their business in the near future.

The effectiveness of the new formula led to interest from other African Universities. In a short period of time and without actively promoting the program, the MBA is now offered in Ghana, Uganda, Sierra Leone Ivory Coast and Senegal.

The innovative experience of the project of the Italian foundation and the Pan-African university alliance lies within the set-up and orchestration of networks and partnerships. A single initiative replicated in multiple universities to stimulate entrepreneurial activities in African countries. More specifically, the project focuses on building up a local entrepreneurial eco-system to complement the master program and training of the entrepreneurs. Based on the outlined facts, this project represents a salient case which provides new insights to emerge more sharply to contribute to our research question.

We had multiple data sources, such as personal experience, observations and interviews, which we have collected in multiple rounds of data collection in the period between 2010 until 2017. Due to the complexity and variety of data, we have just finished a first round of data analysis and we are planning to finish it entirely by the end of 2017. We integrate qualitative analysis of interview and observational data with structural analysis of the developing network. This enables us to explore the actions of the network orchestrator, namely the Italian foundation, how these actions were adjusted in response to the outlined dilemmas, and with what consequences for the network's evolution. After the first round of data analysis, we have started to design the foundation's actions and network outcomes by different developmental network phases based on the framework of the scholars Paquin and Howard-Grenville (2013).

4. Main Findings

The findings reveal identified different stages of the evolution of a Pan-African university alliance in collaboration with an Italian foundation. Our main findings suggest that the development can be divided into three key phases based on the framework of Paquin and Howard-Grenville (2013). To begin with an initial phase of EEP launch in Kenya, followed by a phase of matching the EEP with the local context which leads to the final phase of strategic growth. An overview of the key findings is provided in Table 1.

Table 1. Key Developmental Network Phase (based on Paquin & Howard-Grenville, 2013)

	Phase 1: Early Assembly	Phase 2: Capturing Value	Phase 3: Strategic Growth
E4impact's key dilemmas by phase	<ul style="list-style-type: none"> Lack of experience and knowledge of the setting Understanding the needs of local entrepreneurs 	<ul style="list-style-type: none"> Setting-up an org. structure & org. culture Lack of local key players such as: incubators and accelerators 	<ul style="list-style-type: none"> Control & Coordination of increasing network members Quality management
Orchestrator's Approach and Resources			
Main actions	<ul style="list-style-type: none"> Partnership between E4impact & Tangaza College Launch of Master Program 	<ul style="list-style-type: none"> Redesign of Master Program & internal structure Set-up partnerships with local organizations 	<ul style="list-style-type: none"> Strengthen partnerships with local organizations Launch of multiple products
Resources available to leverage for network assembly	<ul style="list-style-type: none"> Qualified professors & employees from Italy Support of Catholic Church to increase awareness 	<ul style="list-style-type: none"> Local Business Coach Local manager to build up the master program & local partnerships 	<ul style="list-style-type: none"> Local professors and coaches Experience & know-how
Network Value			
Perception of network value by participants	<ul style="list-style-type: none"> E4impact: Integration into the setting Tangaza College: Prestige due to cooperation Students: High Quality Master Program 	<ul style="list-style-type: none"> E4impact: Gain in expertise & experience African Partner Universities & Students: Access to high-quality training, incubators & accelerators 	<ul style="list-style-type: none"> E4impact: high credibility as orchestrator African Partner Universities & Students: access to key resources, inter. partners & expertise
Outcomes			
Changes in network structure	<ul style="list-style-type: none"> First formalized partnership 	<ul style="list-style-type: none"> Increase in the number of network members 	<ul style="list-style-type: none"> Clear role of network members

			<ul style="list-style-type: none"> • Interest of Italian firms
Results that trigger shift to next phase	<ul style="list-style-type: none"> • Misfit of student’s needs & program structure • Cultural discrepancies between participants 	<ul style="list-style-type: none"> • Identification of a scalable master program • Acceptation of E4impact as key relational broker 	<ul style="list-style-type: none"> • Accumulation or orchestrator’s resources & expertise • Growing Interest of European firms to connect

One of the main challenges during the launch of the EEP in Kenya was the activation and awareness of entrepreneurs to participate in the program as it required to attend the courses in Nairobi even though they might come from abroad. This challenge leads to the second phase of matching the design of the program to the local context. Central issues have been adding the role of a business coach for students, reducing attendance in class by increasing intense boot camps and online courses and opening up to local stakeholders such as associations and investors. Strategic growth is divided into two principle directions. First, the foundation is focused on growing by increasing the number of students per academic year in Kenya. Second, strategic growth might be also achieved by expanding to various African countries, such as Ghana, Sierra Leone and Uganda where it might be necessary to start or continue the development of orchestrating an entrepreneurial eco-system.

5. Conclusion & Future Research

By providing a rare examination of the discussed case, we extend entrepreneurship education research by looking not only at a single program but by analyzing the orchestration of an entrepreneurial eco-system in Africa based on the establishment of a Pan-African university alliance. In particular, we found that a one of the main challenges lies within the contextualization of the program. As cultural difference among African countries and more specifically among different tribes in one country are relatively strong, the program needs to be adapted to each context. Our analysis shows that based on experience and know-how it was possible to set-up successively the program in different African countries as it was necessary to understand in detail how to adopt to the specific context.

Moreover, the study outlines how to orchestrate gradually an entrepreneurial eco-system from scratch in an environment shaped by resource scarcity and solid societal as well as economic problems. We have highlighted the relevance of collaborating closely with local organizations and being physically present in order to understand together how to support entrepreneurs. The idea of proximity is a key principle when it comes to the orchestration of an entrepreneurial eco-systems that in the end supports local entrepreneurs on a long-term perspective.

In conclusion, we contribute to entrepreneurship education research by illustrating answers to the initial research question of how to overcome challenges that arise when fostering EEP by orchestrating an inter-organizational network in Africa to facilitate positive economic development.

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