

# The ability to innovate in international entrepreneurship

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## RESUMO

### A capacidade de inovar no empreendedorismo internacional

Neste artigo, teve-se o objetivo de analisar a capacidade de inovar no empreendedorismo internacional. Para tanto, um estudo qualitativo de múltiplos casos foi desenvolvido. Os dados foram coletados principalmente por entrevistas semiestruturadas com 30 sujeitos sociais, e o *software* ATLAS.ti apoiou a análise de conteúdo. Observou-se que as ações de inovação dos empreendedores estavam voltadas para o produto e a produção. Com isso, identificou-se que a presença da capacidade de inovar foi intermitente ao longo do processo de internacionalização, com exceção em apenas uma das empresas, na qual ocorreu continuamente.

**Palavras-chave:** empreendedorismo internacional, capacidade de inovar, empreendedorismo.

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## 1. INTRODUCTION

Even though there are several definitions of entrepreneurship, generally, it is associated with the creation of companies and innovation. The manager guides the organization in order to create more opportunity to consolidate the position of the company within the market.

Entrepreneurship is defined as the process in which something new (creative) and different (innovative) is performed, aiming to generate wealth for the individuals and to aggregate value for society (Filion, 1999; Shane & Venkataraman, 2000). This is the classic understanding presented by Schumpeter (1988).

Innovation is also relevant in international entrepreneurship (IE), since it is one of the aspects that characterize IE as an area of study. Therefore, it allows determining the configuration of the supply chain, selects areas to be internationalized, defines unique paths to provide value to the consumer, and contributes to the identification of opportunities in the process of

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internationalization (Zahra & George, 2002). This point of view is also shared by Mtigwe (2006). On the other hand, Oviatt and McDougall (2005) understand innovation as focusing on products and services, since these are determinants of international business.

In Brazilian studies regarding IE, the role of innovation is mainly defined as being attached to the development of software (Sohn, Lenzi, & Kiezel, 2004; Galimberti & Fracasso, 2008). Moreover, creativity, ideas (Silveira & Alperstedt, 2007), and innovative attitudes are part of the construct of innovation associated with entrepreneurship, as well as international entrepreneurship (Freitag Filho & Amal, 2008).

From the initial bibliographical study, it was possible to identify that the ability to innovate is related to different essential dimensions of international entrepreneurship. At the same time that propensity toward risk (Dimitratos & Plakoyiannaki, 2003; Freitag Filho & Amal, 2008) and network relationships promote innovation and the use of technology (Galimbert, 2009; Ferreira, Santos & Serra, 2010), the ability of the entrepreneur to innovate affects the exploration of international opportunities (Dimitratos & Plakoyiannaki, 2003) and the propensity to adaption (Welch & Welch, 2004; Dib, 2008). Therefore, the following research question is proposed: what are the characteristics of the ability to innovate in international entrepreneurship?

Based on the relevance and potentialities of innovation in the actions of the international entrepreneur, the present study analyzes the ability to innovate in international entrepreneurship. It consists of five sections. Following the introduction, a theoretical background regarding the ability to innovate in international entrepreneurship is presented. Then, the methods section highlights that the research was performed based on a qualitative, multiple case study perspective. In addition, the data collection involved the analysis of documents, bibliographical material, and semi-structured interviews. In the results section, the findings are discussed with the presentation of each of the four studied companies, and a cross analysis of the cases, before the study concludes.

## 2. ABILITY TO INNOVATE

The ability to innovate allows entrepreneurship and for an individual to materialize ideas that add value to the company. It belongs to the individual, but also to the company (Schumpeter, 1988; Chandler, 1998). The materialization of ideas in something innovative makes a difference in the conception of a business (Shane & Venkataraman, 2000). A similar idea is expressed by Porter (1999, p. 174): “The companies achieve competitive advantage by innovative initiatives. They involve innovation in its wider meaning, encompassing new technologies and new ways of doing things”.

In the studies conducted in 54 countries by the Global Entrepreneur Monitor, innovation is evaluated in terms of

products and services (Kelley, Bosma, & Amorós, 2010). Hage (1999, p. 599) explains that

[...] organizational innovation has been constantly defined as an adoption of an idea or a behavior that is new to the organization [...]. Innovation can be a new product, a new service, a new technology or a new business practice.

In addition, the fact of entering a new market is also an innovation (Schumpeter, 1988).

The initial proposition of Oviatt and McDougall (1994) presents advances in the field of knowledge regarding IE. It is recognized that organizational opportunities, technology, and innovation facilitate new companies within the international context. Therefore, innovation is identified as a key component in order to understand internationalization.

In approaching innovation as a social system, Fuglsang and Sundbo (2005, p. 335) propose three methods of managing innovation. The first method concerns the entrepreneur, in which innovation depends on the actions of individuals and of the creation of businesses. The second is the functional method, which is related to technology and determines change. The third is the strategic reflexive, whereby “[...] the process of change is based on the interpretation of the environments and of the internal resources that the company obtains or can obtain” (p. 335). These types of innovation management can be studied through international entrepreneurship. It is possible that a hybridism between two or three methods exists. Primarily, it is observed that the actions of the entrepreneurs (first method) and the strategic treatment (third method) more strongly influence innovation in international entrepreneurship, while the functional method may not have much relevance to IE. Technology is important, but is not a condition for the existence of IE.

Innovation is also discussed by Kay (1996), with architecture and reputation being considered sources of differentiation. However, innovation can be linked to technology; in order to achieve a competitive advantage, it needs to unite with another distinctive ability, such as innovation and reputation, or innovation and architecture. Therefore, innovation is suggested as a distinct ability.

The strategic abilities gain status and attention in order to favor the exchange between the external reality and the organization. In this approach, multinationals are motivated to execute an efficient transference of domestic innovations and expertise to operations abroad. The internal environment must be analyzed and explored. Therefore, the Resource Based View (RBV) helps in identifying and developing resources that allow the internationalization of the company (Sharma & Erramilli, 2004).

Innovation is one of the aspects that characterize IE as an area of knowledge. It allows the identification of international opportunities, determines the configuration of the supply chain,

selects the areas to be internationalized, defines the unique paths to provide value to the consumer, and contributes to the identification of opportunities (Zahra & George, 2002; Mtigwe, 2006). This wider proposition is different from Oviatt and McDougall's (2005) definition of innovation which is limited to products and services that are internationally commercialized.

The majority of studies on innovation are focused on the technological aspect, even though there are forms of innovation in managerial practices related to previous and present conditions (Hall, 2001). There are programmed innovations which are planned and occur as a result of research and development of products and services. Other innovations are implemented when organizations are in crisis situation and realize the need to take action.

Thus, innovations can be promoted by the initiatives of the company, or imposed by the external environment. Pressure from the external environment is usually characterized by economic, cultural, competitive and technological forces, among others. Depending on the area of activity, there will be variations in the degree of influence of these forces on innovation.

In addition, it is worth highlighting that innovation is related to strategic competition and the ability to gain above average returns. From this perspective, the potential of innovation is crucial for companies, since it facilitates the production of products and differentiated services when compared with competitors. As a consequence, innovation becomes a vital source of competitive advantage for companies that compete globally (Hage, 1999) and can contribute to strengthening internal processes.

In international entrepreneurship, the ability to innovate depends on the creativity of the entrepreneurs. For this reason, Zahra and George (2002) clarify that creativity can come from any entrepreneur who is part of the managerial team. Butler, Doktor and Lins (2010, p. 129) argue that "[...] creativity is a characteristic of the entrepreneur that integrates and optimizes its cognitive processes to produce success, and that is why it plays an important role in supporting international entrepreneurship". The role of the relationship networks can also influence innovation (Leite & Moraes, 2014).

Based on its relevance, innovation is comprehended as one of the dimensions of IE (Dimitratos & Plakoyiannaki, 2003). It is through innovation that the company becomes competitive to the point of competing internationally, although Welch and Welch (2004) note that developing abilities is how innovation occurs. This is directly linked to the individual engagement of the entrepreneur (Mtigwe, 2006).

Some of the innovative characteristics are also present in the agribusiness enterprise. In a study on an Australian company in this sector, Welch and Welch (2004) observe that the technology used in the production allows managing the quality of the grinding and refinement of sugar. In Brazil, an entrepreneur of a vineyard in the south of the country used technology to

acquire a quality certification. In fact, for Tondolo, Bitencourt and Tondolo (2008), certification is a competitive resource that supports the activity of companies in international scenarios. The results show that in these organizations, in Australia and Brazil, the main issue concerns the use of technology as innovation, which does not require the use of purely new artifacts. Thus, it is possible to identify the following proposition: **the ability to innovate has idiosyncratic characteristics in international entrepreneurship.**

### 3. METHODS

In order to investigate IE, it is relevant to consider the process of internationalization. Thus, this was performed, retrospectively, in a longitudinal method indicated by Coviello and Jones (2004) and Kiss, Danis and Cavusgil (2012) when performing studies regarding IE.

After studying each of the companies, an examination, or cross analysis, of the cases was performed (Stake, 1995; Merriam, 1998). The case study is characterized by deep analysis, which differentiates it from other types of research (Godoy, 1995; Merriam, 1998; Yin, 2001), and several stages of selection can exist (Merriam, 1998). In the present study, four levels were intentionally adopted: region, economic segment, companies, and individuals.

In the first stage, the Brazilian semiarid region was chosen for study due to the following aspects:

- a peculiar geographic area that can generate academic insights;
- of the region's nine states, eight are in the northeast of Brazil, which lacks development in research and technological-scientific resources;
- the present study is part of a group of studies aiming to investigate agribusiness companies in the northeast; and
- the commitment of the authors to the improvement of the semiarid region.

In the second stage, it was observed that, in this region, fruit culture dominates Brazilian exportation. Between January and September 2011, fruit produce accounted for US\$ 206 million in exportation (MDIC, 2011), a significant value for the region. Therefore, based on the economic performance and the natural aptitude of the region for this type of plantation, companies in the horticulture segment were chosen for the present study.

In the third stage, a selection of companies in the fruit culture segment was estimated based on the recommendations of Eisenhardt (1989). Four companies, located in the states of Bahia (BA), Ceará (CE), Pernambuco (PE) and Rio Grande do Norte (RN), were selected. The data collected between January and September 2011 indicated that these states were responsible for approximately 100% of the total fruit exported in the Brazilian semiarid region (MDIC, 2011).

The participants and the cases were selected based on access of information (Merriam, 1998). The following parameters were considered for the identification of the companies: located in cities with higher fruit exportation volume; managerial decision center in one of the cities in the semiarid region; exportation value between US\$ 1 and US\$ 100 million; at least eight years of activity in the foreign market, according to longitudinal analysis; founded in the Brazilian semiarid region; classified by *Serviço Brasileiro de Apoio às Micro e Pequenas Empresas* [SEBRAE] (2011) as a large company, based on the number of employees; and provides access to information.

The year of opening, location, number of workers employed during harvest, range value of the amount exported in 2011, and abbreviations for the selected companies are shown in Figure 1. Special Fruit is the oldest company in the market, while Ara Agrícola has only eight years of activity. Agrícola Famosa has 5.000 employees and Agro Melão has 500; melon is the main export of both companies.

It is worth noting that the representatives of Agrícola Famosa, Special Fruit, and Ara Agrícola authorized the disclosure of the name of the company in the present study by signing an informed consent form. The exporting company from Mossoró/RN is the only exception. Thus, in order to assure the confidentiality required by the manager, the company has been named Agro Melão.

The participants who had information about the competitive dynamics of the semiarid region, regarding the segment in which they act over investment decisions and implementation of international strategies, were considered. The number of interviewed subjects was defined when the categories reached an adequate saturation point to respond to the objectives of the study (Paiva Júnior, Leão, & Mello, 2011). In total, there were 30 participants.

Since the present study has a qualitative nature, according to the phenomenon studied, different techniques for collecting

data were used, among them, semi-structured interviews, analysis of documents, and bibliographical analysis (Taylor & Bogdan, 1984).

The interviews were recorded and transcribed; 1.242 minutes, in total, with a mean duration of 40 minutes for each interviewed subject. By using this technique, each of the 30 respondents was interviewed once. Only the commercial manager of Agrícola Famosa was interviewed twice.

Figure 2 shows the detailed information regarding each stage in which each subject participated, the code of the interviewed subject (refers to the order of data collection), the description (indicating the company and occupation), education (level of education), time in the organization, the identity in ATLAS.ti (code generated by the system), and date of data collection and duration of the interview. Between June and October 2012, the interviews took place in Mossoró/RN, in farms located between the border of Rio Grande do Norte and Ceará and in the cities of Petrolina/PE, Juazeiro/BA, and Recife/PE. The majority of the participants were interviewed individually, except for two group interviews. P6 was performed with the participation of interviewees 6, 7, and 8, and P16 with the respondents 18 and 19.

A documental research is also appropriate for this kind of study. The secondary data (Godoy, 1995), printed and digital, were obtained from the participants, during the interviews, as well as governmental, institutional and company websites.

The bibliographical investigation was based on theses, dissertations, and papers related to the Mossoró/RN, Icapuí/CE and Juazeiro/BA, Petrolina/PE poles. The digitally available material was analyzed using ATLAS.ti and classified by the system as documents P30 to P45 (codes automatically generated by the software when it receives the data).

Prior to the data collection, a pilot study was conducted at Brazil Melon, located in Mossoró/RN, which has similar structure to Agro Melão. The business manager was interviewed

Characteristics	Companies			
	Agrícola Famosa	Agro Melão	Special Fruit	Ara Agrícola
Opening	1995	1997	1982	2004
Location	Icapuí/CE	Mossoró/RN	Juazeiro/BA	Petrolina/PE
Number of employees (harvest)	5.000	500	1.700	1.000
Range value exported in 2011	Between US\$ 50 and US\$ 100 million	Between US\$ 1 and US\$ 10 million	Between US\$ 10 and US\$ 50 million	Between US\$ 10 and US\$ 50 million
Main exported products	Melon	Melon	Grape and mango	Seedless grape
Abbreviation adopted in the present study	AF	AM	SF	ARA

Figure 1: Synthetic Presentation of the Selected Cases

Stage	Code of the Interviewed	Description	Education	Time in the Co.	Id. Atlas	Date	Duration
First Round	Interviewed RNandCE 1	SEBRAE Mossoró – Project Manager	Agronomist	-----	P1	06/04/2012	31 min
	Interviewed RNandCE 2	Agrícola Famosa – Commercial Exportation Manager	Economist	2007-now	P2	06/11/2012	68 min
	Interviewed RNandCE 3	Former Employee of Agrícola Famosa (Exportation Sector)	Business Adm. Undergraduate	2007-2009	P3	06/18/2012	66 min
	Interviewed RNandCE 4	Agrônomo de Agro Melão (Technical Manager)	Agronomist	2003-now	P4	06/20/2012	33 min
	Interviewed RNandCE 5	Representative of the group of Japanese	Agronomist	2002-now	P5	06/21/2012	40 min
	Interviewed RNandCE 6	Administrative Agro Melão	Business Adm. Undergraduate	2008-now	P6	06/21/2012	48 min
	Interviewed RNandCE 7	Administrative Agro Melão	Accountant	2010-now			
	Interviewed RNandCE 8	Administrative Agro Melão	Accountant	2010-now			
	Interviewed RNandCE 9	President of COEX	Lawyer	2002-now	P7	06/26/2012	46 min
	Interviewed RNandCE 10	Agrícola Famosa – Importation and Exportation Analyst	Business Administrator Undergraduate	2008-now	P8	06/26/2012	28 min
	Interviewed RNandCE 11	Agrícola Famosa – Partner-Founder	Laywer	1995-now	P9	06/27/2012	31 min
	Interviewed RNandCE 12	Agrícola Famosa – New partner	Agronomist	2009-now	P10	06/27/2012	11 min
	Interviewed RNandCE 13	Agro Melão – Exportation Manager	Graduated	2005-now	P11	06/28/2012	33 min
	Interviewed RNandCE 14	Agro Melão – Owner	Agronomist	1997-now	P12	07/03/2012	23 min
	Interviewed RNandCE 15	Agrícola Famosa – Partner-Founder	High School	1995-now	P13	07/04/2012	37 min
	Interviewed PEandBA 16	ARA Agrícola – Administrative Manager	Computer Science	2010-now	P14	07/09/2012	59 min
	Interviewed PEandBA 17	ARA Agrícola – Field Manager	Agronomist	2009-now	P15	07/09/2012	25 min
	Interviewed PEandBA 18	EMBRAPA Semiarid	Masters	-----	P16	07/09/2012	43 min
	Interviewed PEandBA 19	EMBRAPA Semiarid	Post-Doctorate	-----			
	Interviewed PEandBA 20	SEBRAE Unidade de Negócios Sertão do São Francisco	Specialist	2006-now	P17	07/10/2012	58 min
	Interviewed PEandBA 21	SEBRAE Unidade de Negócios Sertão do São Francisco	Business Administrator	----- ---	P18	07/10/2012	23 min
	Interviewed PEandBA 22	VALEXPORT	Graduate	2003-now	P19	07/10/2012	52 min
	Interviewed PEandBA 23	EMBRAPA Semiarid	Ph.D.	----- ---	P20	07/11/2012	50 min
	Interviewed PEandBA 24	Special Fruit – Commercial Exportation Manager	Specialist	2001-now	P21	07/11/2012	71 min

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First Round	Interviewed PEandBA 25	Special Fruit - Owner	Under-graduate	1982-now	P22	07/11/2012	73 min
	Interviewed PEandBA 26	CODEVASF	Master	2005-now	P23	07/11/2012	67 min
	Interviewed PEandBA 27	ARA Agrícola – Director (Son of the Owner)	Civil Engineer	2004-now	P24	07/12/2012	68 min
	Interviewed PEandBA 28	ARA Agrícola – Infrastructure Manager	Electrical Engineer	2008-now	P25	07/12/2012	26 min
Second Round	Interviewed PEandBA 29	Ad Diper (Vice-President)	Master	2007-now	P26	09/20/2012	58 min
	Interviewed PEandBA 30	ARA Agrícola	Civil Engineer	2004-now	P27	10/02/2012	18 min
	Interviewed RNandCE 31	Coopyfrutas	Agronomist	2010-now	P28	10/11/2012	39 min
	Interviewed RNandCE 32	Agrícola Famosa- Commercial Exportation Manager	Economist	2007-now	P29	10/18/2012	11 min

**Figure 2: Presentation of the Interviewed Participants**

for the purpose of improving the interview script – based on the theoretical background of the area – and to obtain valuable experience that could help improve the dialogue in order to facilitate data collection from the participants (Merriam, 1998). Performing the pilot study was important since it allowed: correcting and reformulating some questions; identifying the main competitors in the sector and themes that were not contemplated; and gathering information that contributed to the construction of the script of the interview with representatives of the organizations related to the sector.

Lastly, the notes regarding the pilot study and the primary data collection (interviews) were digitally registered in a field diary as a Microsoft Word® archive. Doubts, discrepancies of information, thoughts, people's contacts, and other data were all registered, helping in the organization and indicating gaps to be filled regarding the phenomenon (Merriam, 1998).

The analysis of content (Bardin, 2011) was adopted to identify connections, codes, and existing categories in the transcriptions of the interviews. The software ATLAS.ti supported this stage of the research. An analysis stage occurred simultaneously to the collection of data, since it is essential for qualitative studies (Taylor & Bogdan, 1984).

Finally, in order to reach scientific merit, some validation and reliability criteria were adopted, such as: triangulation, construction of the research *corpus*, clear, rich, and detailed description, feedback to the participants (communicative validation), surprise, and reflexivity (Paiva Júnior *et al.*, 2011).

## 4. RESULTS

The results are presented in two stages. The first shows the relevance of the ability to innovate in each of the four companies, and the second presents the cross analysis of the cases.

### 4.1. Analysis of the companies

- **Agrícola Famosa (AF)**

Agrícola Famosa is the largest international melon exporter, registered in the city of Icapuí/CE. Produce is harvested from 20.807 hectares: the company owns five farms, totaling 14.999 hectares, and eight leased farms, totaling 5.808 hectares (Agrícola Famosa, 2012).

It is a born global company (Rennie, 1993) founded to export melon in 1995. This strategic positioning was inherited from the experience of one of the partners-founders at the time he managed his trading company.

The ability to innovate is expressed in commercial, production and product (variety, research, and development – R&D and visits), and distribution (Figure 3). The knowledge inherited from the trading company is present in all stages of internationalization of Agrícola Famosa, a finding that strengthens the assumptions of Oviatt and McDougall (2005), and reveals itself to be a propelling element toward innovative actions within commercial and distribution scope.

Commercially, there is the example of advanced payment by importers, a model practiced by the company, transposed and adjusted from the time in which one of the partners left his parents' home to work in a market in São Paulo, at the age of 17. The experience and international relationships also influenced the entrance, in the region, of specific cargo ship operators to transport the fruit containers to the buyers' countries.

Regarding product and production, there are investments in R&D and fruit varieties to develop products that are differentiated and have quality. The seedless watermelon and the square watermelon are some of the results of this

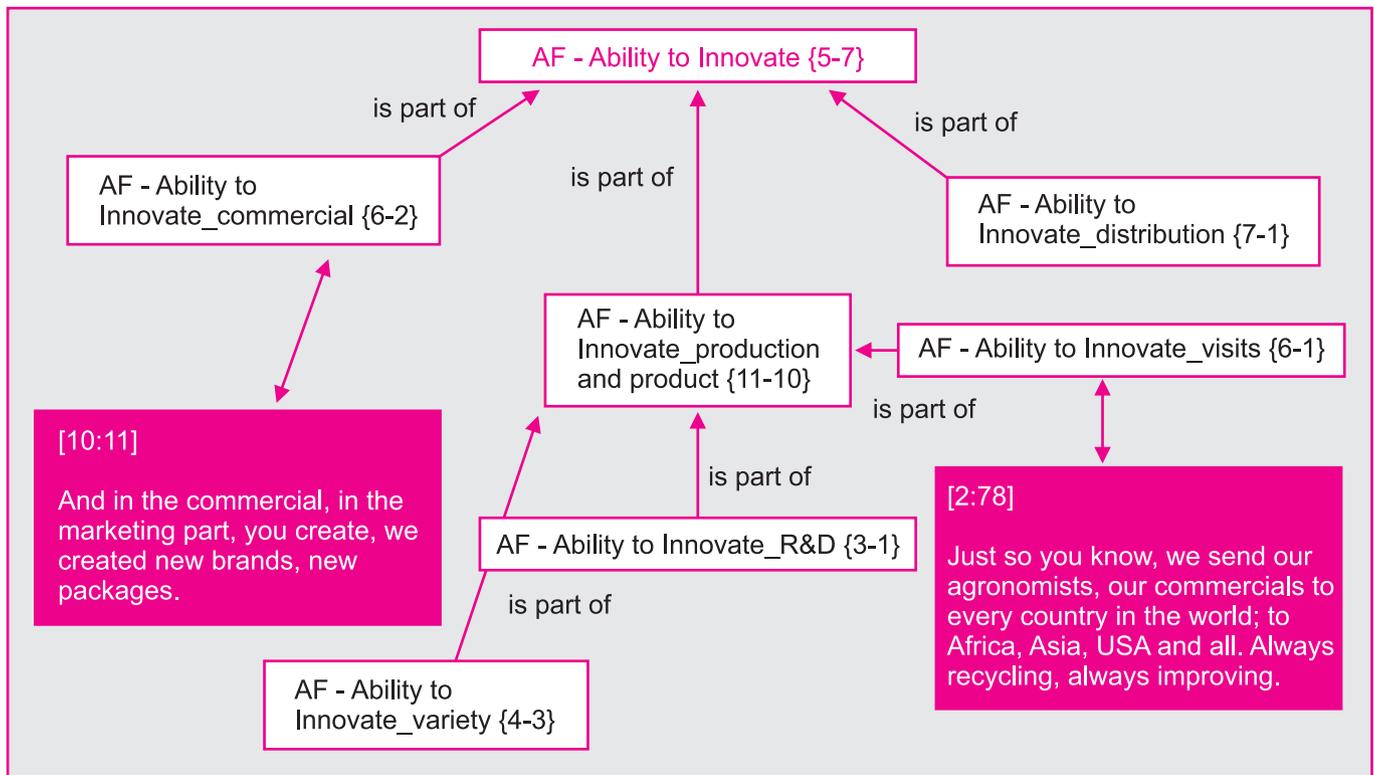


Figure 3: Properties of the Ability to Innovate (Agrícola Famosa)

ability to innovate. The focus on innovation of the product appears as an essential activity in entrepreneurship (Shane & Venkataraman, 2000). Therefore, the visits made by the partners and their team to farms located in different countries are some of the practices that aid in obtaining new technology and developing innovative actions.

• **Agro Melão (AM)**

Agro Melão is the second largest melon producer in the region, with 1.000 hectares. Founded in September 1997, its address, management office, and part of the farm are situated in the city of Mossoró/RN, and in the state of Ceará there is another producing unit.

The company was built to export, with its internationalization positioning being influenced by the experience and professional formation of the founder of the company. It is a born global that has exported since its first year of activity (Rennie, 1993). At the beginning, internationalization occurred indirectly through supply to Del Monte, in the fifth year, together with an association, and in the eight year, acting alone.

The ability to innovate is completely based on production and product, in which visits to farms located in Brazil and abroad supported the dimension of international entrepreneurship (Figure 4). In the sector, visiting and receiving competitors is a practice that strengthens the

network relationships and helps to understand new actions performed by the producers.

In comparison with Agrícola Famosa, which innovates in the commercial area, production, and product, Agro Melão focuses only on production and product. Such a finding in Agro Melão (product innovation) is similar to the research performed by Kelley *et al.* (2010), who highlight product innovation as essential to entrepreneurship.

• **Special Fruit (SF)**

Special fruit is recognized as a successful company with more than 1.700 employees and 600 hectares dedicated to mango and grapes (Special Fruit, 2012). Even though its initial aim was not internationalization, the company can be characterized as a born global (Rennie, 1993), since it rapidly consolidated its place in the foreign market.

The ability to innovate is one of the characteristics of this entrepreneur. At the beginning, without many resources, curiosity motivated the search for new techniques and mechanisms to perform a differentiated job (Figure 5). The founder of the company did not know the characteristics of the region at the time, demanding much dedication and creativity to overcome barriers.

In this company, it is notable the research and development (R&D), varieties and visits, all associated with product and production, similar to the findings in Agro Melão. The

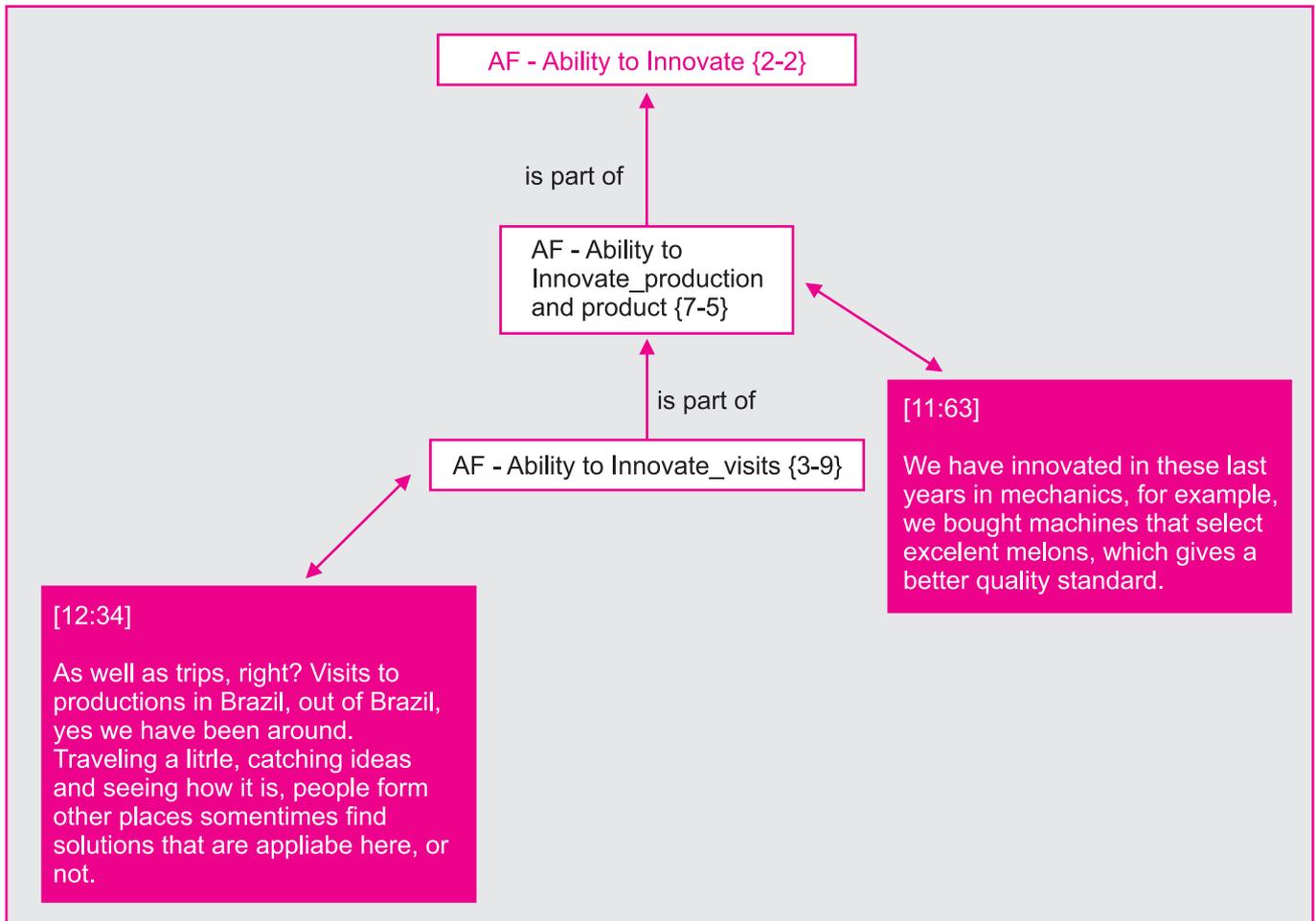


Figure 4: Properties of the Ability to Innovate (Agro Melão)

focus on the innovation of the product is also identified in the research by Andersson (2000), corroborating the literature on IE.

• **Ara Agrícola (ARA)**

Among the four analyzed companies, Ara Agrícola distinguishes itself as the youngest and for being a strategic unit in the business of a family corporation (Barney, 2002). The farm location of the company was acquired in 2004 with the aim of exporting seedless grapes (born global – Rennie, 1993), the only produce cultivated since its foundation. For the harvest, the company employs approximately 1.000 workers (Interviewed-PEandBA\_16, 14:27; 14:54).

The patriarch of the family was an agribusiness entrepreneur cultivating cotton in the city of Limoeiro/PE. The history of Ara Enterprises can be traced back to the time the owner was a civil engineering undergraduate and started his first business providing services in the construction of apartments (Interviewed-PEandBA\_30, 27:8). With

the evolution of the company, it secured its position in several sectors: development of real estate projects, industrial manufacturing, agribusiness, and energy (Ara Empreendimentos, 2012).

The present study focused only on the unit located in Petrolina/PE, Ara Agrícola, acknowledged as one of the largest exporters in the region (Interviewed-PEandBA\_17, 15:21).

The results of the ability to innovate, aligned to the findings of Agro Melão and Special Fruit, are concentrated on production and product. The entrepreneur from Ara Agrícola innovates through development and providing adequate varieties. For this, he invests in visits to several countries around the globe (Figure 6).

The strategic positioning adopted by the company does not give priority to being the first in the industry (Porter, 1986); this initial investment is left for the competition. The entrepreneur prefers to observe how the changes in competition occur; in case of success, Ara Agrícola implements them.

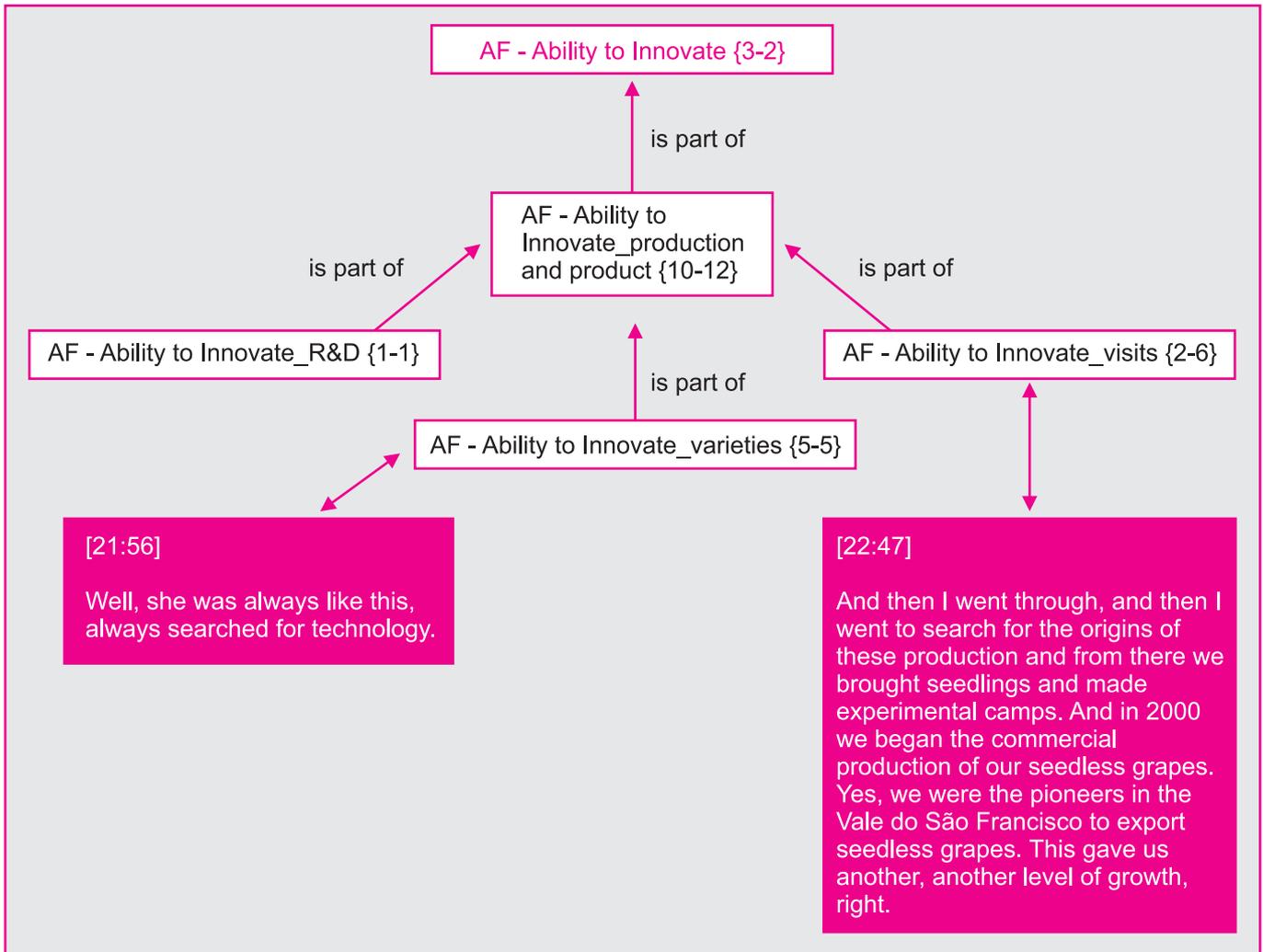


Figure 5: Properties of the Ability to Innovate (Special Fruit)

4.2. Ability to innovate: cross analysis of the cases

The ability to innovate is directed toward production and product, and its subcategories: varieties, visits, and R&D (Figure 7). The entrepreneur focuses on innovating and aggregating value directly to the item that the client acquires – the product. Therefore, tests for new varieties, research and development in genetics, as in the example of Agrícola Famosa’s square melon, and the increase in sugar rates (brix), the main demand of foreigners, are some aspects of innovation.

Visits to Brazilian and foreign farms are common in all analyzed companies. Chile, the United States, countries in Europe, and Mexico are the most visited by mango and grape producers, while Israel, Spain, Honduras, and Costa Rica receive melon entrepreneurs who aim to obtain information in order to improve and to innovate in their enterprises. The entrepreneurs learn from the international competition and

process, and then adapt and perform innovations (Dimitratos & Plakoyiannaki, 2003).

Therefore, technology is considered primordial in production and, as a consequence, in the internationalization of these companies. In order to enter the sector, quality requirements through international certification form a barrier (Porter, 1986) in the international fruit market. To attend to the requirements of certification, it is necessary to use advanced technology that is restricted to capitalized entrepreneurs.

It is possible to observe an alignment between the empirical evidence and the arguments of Oviatt and McDougall (2005), who emphasize that technology accelerates the internationalization of a company. On the one hand, Ara Agrícola entered the industry in a planned way, with information and studies about the production of seedless grapes, building a structure to fulfill all requirements and to secure its position within the international market. As a result, more than 90% of the first harvest was exported. On the other hand, the owner of

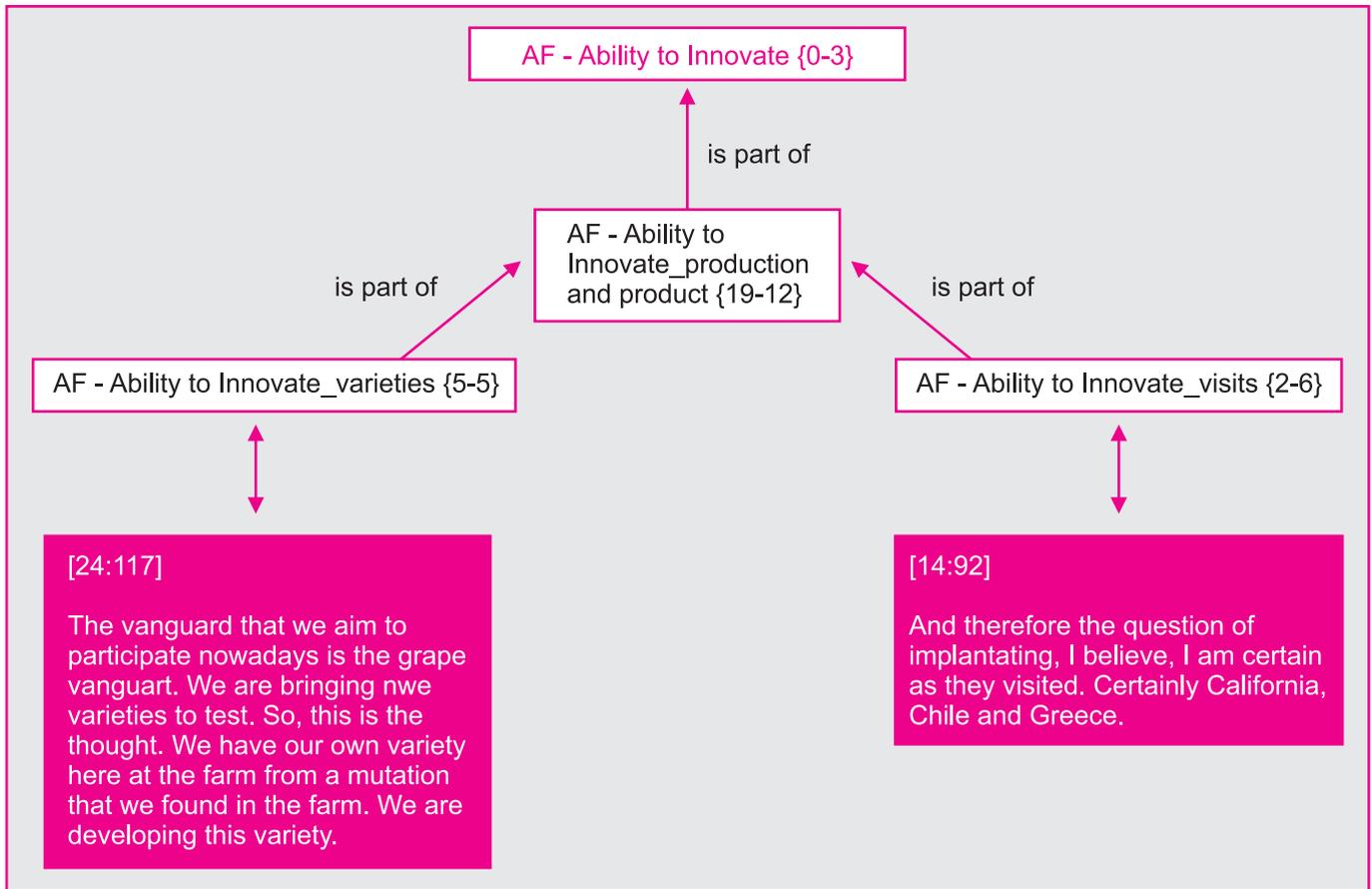


Figure 6: Properties of the Ability to Innovate (Ara Agrícola)

Properties (Ability to Innovate)	Characteristics	Agrícola Famosa	Agro Melão	Special Fruit	Ara Agrícola
Commercial	-----	✓			
Distribution	-----	✓			
Production and Product	Varieties	✓		✓	✓
	Visits	✓	✓	✓	✓
	R&D	✓		✓	

Figure 7: Definition of the Properties of the Ability to Innovate

Special Fruit arrived in the Vale do São Francisco as a family farmer to focus on the internal market. The conditions of his agricultural production were elementary, and, therefore, in the studied cases, it was the company which retarded exportation the most, since it was not an initial strategic goal.

In the first studies on international entrepreneurship, innovation was viewed as one of the requisites for the existence of this phenomenon in the company (Oviatt & McDougall, 1994). This is the understanding of the present study, and requires adequate interpretation, in order to avoid the

perpetuation of studies which concentrate only on companies that are directly related to technology (Sohn *et al.*, 2004; Galimbert & Fracasso, 2008). According to the results, it is possible to observe that ability to innovate is not limited to technology companies; it is also evident in agribusiness, the medical industry, and clothing, among others.

Finally, the data reveal, as shown in Figure 8, a counterintuitive characteristic of the phenomenon. Only in Ara Agrícola is the ability to innovate continuously present in internationalization. On the other hand, it is important to

Dimension	Agrícola Famosa	Agro Melão	Special Fruit	Ara Agrícola	Nature
Ability to innovate	Intermittent	Intermittent	Intermittent	Continuous	Intermittent

**Figure 8: Nature of the Dimensions of International Entrepreneurship**

note that intermittence, in the other companies, was configured in the absence of the ability to innovate in marking events for internationalization that do not directly depend on the actions of the entrepreneur, such as variations in monetary exchange. Therefore, it can be considered that Ara Agrícola, the company with less time of action, can influence this result, since it has not been affected by critical moments in the economy and politics.

However, throughout internationalization, the ability to innovate was expressed in an intermittent way by the majority of the analyzed companies. External and internal factors influence the innovation actions performed by the entrepreneurs. Therefore, innovation depends on marking the events of internationalization.

## 5. CONCLUSIONS

In the agribusiness context, the entrepreneur's ability to innovate focuses on the production and the product, aiming to achieve excellence in quality and product differentiation. Such results are coherent, since the product is the primary asset to be negotiated with the clients. In addition, the initial proposition in which the ability to innovate has characteristics of international entrepreneurship is confirmed.

The exportation of dry fruit requires international certification, which involves adjustments in the company, while under the risk of compromising international strategies. Therefore, it is observed that in order to achieve such certification, the entrepreneurs act to modify production and product in an innovative way.

One important aspect is the presence of networks which exercise innovation. The exchange of knowledge and experience with competitors acts as a source of inspiration for innovative actions in product and production. It is evident that there is a need for production techniques to be constantly updated.

Based on the analysis of the data, it is considered that innovation, in addition to being an essential element of traditional entrepreneurship, is also fundamental to IE. It is treated as one of the dimensions of international entrepreneurship. Therefore, the need to pay more attention to the development of technologies to production and innovations on the product is observed.

Thus, for future studies, it is necessary to study the nature of the ability to innovate, the intermittence and continuity of the dimension in internationalization. When identifying whether a preponderance of internal factors exist, which are detrimental to the external, and the other way around, entrepreneurs can prepare to confront the challenges of internationalization, in order to mitigate risks. ♦

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## ABSTRACT

**The ability to innovate in international entrepreneurship**

In this article, the purpose was to analyze the ability to innovate in international entrepreneurship. Thus, a qualitative study of multiple cases was developed. Data was collected mainly by semi-structured interviews with 30 social subjects, and ATLAS.ti software supported content analysis. We observed that the entrepreneurs' innovative actions were focused on the product and production. As a result, it was found that the presence of the ability to innovate was intermittent throughout the internationalization process, except in only one of the companies, where it occurred continuously.

**Keywords:** international entrepreneurship, ability to innovate, entrepreneurship.

## RESUMEN

**La capacidad de innovación en la iniciativa empresarial internacional**

El objetivo en este artículo es analizar la capacidad de innovación en la iniciativa empresarial internacional. Para ello, se desarrolló un estudio cualitativo de casos múltiples. Los datos fueron recolectados por medio de entrevistas semiestructuradas con 30 sujetos sociales, y se utilizó el software ATLAS.ti en el análisis de contenido. Se observó que las acciones de innovación de los emprendedores estaban centradas en el producto y la producción. Con esto, se identificó que la presencia de la capacidad de innovar fue intermitente a lo largo del proceso de internacionalización y que sólo en una de las empresas se produjo de forma continua.

**Palabras clave:** iniciativa empresarial internacional, capacidad de innovar, iniciativa emprendedora.

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