ISCTE Business School
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ESTABLISHING A MODEL OF PROACTIVE SPIN-OFFS EFFECTIVENESS ON THE BASIS OF CORPORATE ENTREPRENEURSHIP

(Enterprise Project)

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In a highly diversified company . . . there is a natural tendency to assign a single executive the responsibility for so many diverse businesses that he or she becomes a jack of all trades and a master of none. This is serious, because American business competition no longer permits survival of businesses without managers of special intelligence and competence in their individual fields. Therefore, as a continuing process, we attempt to organize our company [W. R. Grace & Co.] so that the manager for any business or group of businesses is as expert in them as his competition. This is sometimes difficult. As one important aid, we have tried to minimize the number of management levels; we have tried to keep the organization "flat." The more management levels you have, we feel, the more friction, inertia and slack you have to overcome, and the greater the distortion of objectives and the misdirection of attention. In this you must always be on your guard, because levels of management, like tree rings, grow with age. As one company president put it, "If all an executive does is agree with his subordinate executive, you don't need both of them."

Ernest C. Arbuckle, "Diversification," Management for Growth, edited by Gayton E. Germane Stanford University, Graduate School of Business, 1957, pp. 85-86. (Cit. Ansoff, 1957)

Acknowledgments

This thesis marks a new step in my journey. It represents a “final act” on my studying time at INDEG and ISCTE Business School. It was a time that I enjoyed a lot. It shaped in a way my identity as a professional manager, but also as a person. I acquired new skills and knowledge that will help me in the development of my career. I also meet lot of new amazing people that gave me new ways to look at things, work and even life. I would like to thank here all my friends and professors for all the help and encouragement to get here.

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Index

Abstract

Corporate organizations face multiple strategic challenges that imply a paradox in strategic decisions due to an equivalent need to both specialize on the core business and diversify activities. Such apparent contradiction in terms requires innovative answer which we believe lies in proactive spin-offs.

In order to explore this path, this thesis is set to establish a model of proactive spin-offs effectiveness based on corporate entrepreneurship. The rational of the project is founded in the literature review on corporate entrepreneurship, innovation, business unit model organization and corporate spin-offs. The analysis reveals different ways organizations can undertake to growth.

From a project perspective, we explored a specific non-strategic business line potential to emerge within an organization as a successful strategic spin-off promoted by corporate entrepreneurship. The analysis disclosed different ways organizations can undertake to succeed in this growth strategy, from which one can infer a set of context-dependent guidelines for future corporate spin-off policies.

Key words: Corporate Spin-offs; Corporate entrepreneurship; Innovation; Business Organization; Paradox specialization/diversification

JEL code: L26, G32, M13

As Organizações enfrentam múltiplos desafios estratégicos que implicam decisões paradoxais por estarem ligadas a necessidades equivalentes para se especializarem no *core business* organizacional e simultaneamente diversificarem atividades. Esta aparente contradição requere uma resposta inovadora que acreditamos estar nos *spin-offs* proactivos.

De modo a explorar este caminho, esta tese visa o estabelecimento de um modelo de *spin-offs* proactivos com base no empreendedorismo corporativo. O racional deste projeto baseia-se na revisão de literatura sobre empreendedorismo corporativo, inovação, modelos de organização empresarial e *spin-offs* corporativos. A análise revela que as organizações podem escolher diferentes formas de crescimento.

Numa perspetiva de projeto, exploramos o potencial de uma linha de negócios específica não relacionada com o *core-business* da organização de modo a fazê-la emergir como um *spin-off* estratégico de sucesso promovido pelo empreendedorismo corporativo. A análise revela diferentes formas que as organizações podem optar para ter sucesso nesta estratégia de crescimento, sobre os quais se pode inferir um conjunto de orientações para futuras políticas de *spin-offs* corporativos.

Palavras-chave: *Spin-offs* corporativos; Empreendedorismo corporativo; Inovação; Organização Empresarial; Paradoxo especialização /diversificação

JEL: L26, G32, M13

Executive Summary

This research is set to understand different challenges of corporate growth in a complex world taking into consideration critical dimensions such as innovation, business organization and corporate entrepreneurship in order to foresee a successful strategic spin-off of a corporate business line.

In the highway to success, corporations face the need to undertake decisions in order to maximize the organization value for the different stakeholders. These decisions have to be made in a complex environment. The market is today an open source of opportunities where businesses have no boundaries and competitors come from every continent. The need for innovation is permanent in order to diversify and to remain highly competitive. Corporations diversify their portfolio and try to keep their businesses highly specialized. But in that road there is a fundamental paradox in contemporary competition as corporations must invest both in specialization and in diversification, which is a contradiction in terms. So, how to maximally satisfy both needs?

This work will try to give some answers to better deal with this paradox but mostly come up with possible solutions supported in the literature review. We will explore different ways organization can grow such as sponsoring a culture of innovation, growth by merge and acquisitions and finally by corporate spin-offs.

In addition, by taking a specific business case we will analyse these contingencies and try to develop a model in order to understand where is the opportunity cost and how extensive is the growth potential for a Strategic Spin-Off in that company.

We will introduce Healthcare Business Corporation – Hospital (HBC-Hospital) and its specific Hygiene business Healthcare Business Unit – Hygiene (HBU-Hygiene) in Portugal, understand the market where it operates, the competition and its value chain. After understanding the hygiene division strategy in its own market, which is much more different than HBC-Hospital itself, we propose the best way to promote this division

growth within the organization, both preserving the activity specialization and the corporation diversified portfolio. We will find out to which extent this activity, as an independent business from parent company, can be more or less successful and under what conditions.

With a genuine purpose of maximizing value for stakeholders, this project will try to demonstrate, at last, in one hand, that corporate entrepreneurship is vital for modern corporations, especially for those with a desire to become a learning organization. It helps to leverage the business itself and especially to successfully scale new businesses. In the other hand, the fact that corporate strategic spin offs can be an effective strategy to deal with the specialization-diversification paradox faced by organizations.

List of Images

List of Tables

List of Abbreviations

ACSS – Administração Central do Sistema de Saúde, IP

APAH -Associação Portuguesa de Administradores Hospitalares

APIFARMA – Associação Portuguesa da Indústria Farmacêutica

DGS – Direção-Geral da Saúde

HAI – Healthcare acquired infections

HBC-Hospital – Healthcare Business Corporation - Hospital

HBU-Hygiene – Healthcare Business Unit - Hygiene

INFARMED (Instituto Nacional do Medicamento e Produtos de Saúde)

NHS – National Health Service

REACH - Registration, Evaluation, Authorisation and Restriction of Chemicals

PPCIRA - Programa de Prevenção e Controlo de Infeções e de Resistência aos Antimicrobianos

SNS – Serviço Nacional de Saúde

SPMS – Serviços Partilhados do Ministério da Saúde

1 – Introduction

Corporations are bounded to undertake decisions to maximize value for stakeholders. These decisions have to be made taking into consideration environment complexity and boundaryless competition. This context pushes organizations to a permanent investment in innovation to diversify enhancing their competitiveness. As a consequence, corporations diversify their portfolio and endeavor to keep their businesses highly specialized. But in that path organizations have to deal with a fundamental paradox in contemporary competition: they must invest both in specialization and in diversification, which is a contradiction in terms. So, how to maximally satisfy both needs?

A plethora of business strategies and management tools have been documented to cope with these pressures for innovation and competitiveness. Among these, three organizational-level strategies emerge: investing in a culture of innovation, enacting merge and acquisitions, and finally promoting corporate spin-offs.

Fostering innovation in the organization is a common strategy to create value and diversify the company offer. Innovation, knowledge, and capabilities have been central topics of research on the corporate strategy and performance (Knight & Cavusgil, 2004). The capacity to innovate brings also to the company the opportunity to differentiate from competition, diversify their offer in the market and ultimately to create value for the shareholder.

According to Rossi and Volpin (2004: 278) “In a perfect world, corporate assets would be channeled toward their best possible use. Mergers and acquisitions (M&A) help this process by reallocating control over companies”. M&As have been reported for more than 40 years as a way organizations expand and diversify their business. Acquiring is a possibility to become a player on a specific market and start operating in a new business context, within less time than traditional new business creation. Because of that, most large firms search to diversify their operations by acquiring entire companies or even business divisions of other corporation. That grants them direct access to a new market, business or geography (Anand et al., 2005).

Corporate Spin-Offs seem not only to be a frequent, but also relatively successful way of starting a new business (Moncada-Paternò-Castello, 1999). The combined use of the corporate spin-off specific know-how with the parent company experience is a very interesting and powerful combination. It creates dynamism and empowerment into the recent spun-off company to explore both sides of the business: develop independently their expertise with no constraints from other business within the parent company but availing them from parent company know-how and shared resources.

We will introduce HBC-Hospital and its specific Hygiene business in Portugal, understand the market where it operates, the competition and its value chain. After understand the hygiene division strategy in its own market, much more different than HBC-Hospital itself, we will find what is the best way to promote this business unit growth within the organization, both keeping the activity specialization particularity and the corporation diversified portfolio. We will find out if this business, as an independent business from parent company can be more or less successful and under what conditions.

With a genuine purpose of maximize value for the organization stakeholders, this project will try to demonstrate, at last, in one hand, that corporate entrepreneurship is vital for modern corporations, especially for those with a desire to become a learning organization. It helps to leverage the business itself and specially to scale successfully new businesses into the market. In the other hand, the fact that corporate strategic spin offs can be an effective strategy to answer to the paradox faced by organizations that search for diversify, by also keeping highly specialized businesses.

2 – Literature Review

In an economy of knowledge, where creativity is a plus, people are the biggest asset organizations have. The challenge for the managers of those organizations lies on how to foster a type of organization that encourages de development of innovation behaviors able to create value (Tidd & Bessant, 2014).

This occurs in a context increasingly uncertain where organizations deal with the permanent development of new technologies that are boosted by the effect of globalization. New competitors emerge, new markets and new customers with different motivations compel organization to structure their business differently in order to remain competitive. In this context, the need of a very close and united collaboration in and out of the organization is a must. For that reason, organizations tend to develop common characteristics, such as hierarchy reduction, flexible and polyvalent teams, using adaptable communication channels. The creation of new communication channels that creates proximity in and out of the organization is critical in this paradigm (Teixeira, 2011).

To approach this organizational change processes one must realize that corporations are not machines but living organisms. Likewise individuals, organizations can have a collective identity and a fundamental purpose. This is the organizational equivalent to self-knowledge and shared knowledge of what the organization stands for, were is it going, and in what world does it want to live in, and most of all, how to transform that world into a reality. Corporations like Honda, Canon, Matsushita, NEC, Sharp or Kao became famous by their ability to develop new products, create new markets and dominate emergent technologies (Nonaka, 1991). This whole process of knowledge and innovation driven economy supports itself on entrepreneurship, both outside and inside organizational boundaries.

2.1 – Corporate Entrepreneurship

There are many definitions of entrepreneurship and corporate entrepreneurship. Nonetheless, the conceptual idea that an *Entrepreneur* is someone that builds or has build a new business remains common in most definitions of Entrepreneurship. Simply put, entrepreneurship translates into the creation of organizations as what differentiates Entrepreneurs from non-Entrepreneurs is that Entrepreneurs create organization, while non-entrepreneurs do not (Gartner, 1988).

Baumol (1968 cit. Szimkat, 2015:11) reviews the Schumpeter model that considers entrepreneurship as a creative and innovative activity capable of generating new businesses or processes such as new methods of production, introduction to new markets, new ways to provide raw materials or introducing new organizations or even industries. The author clearly differentiates the Entrepreneur from the inventor or the capitalist because he considers the first is unique in putting in practice a new idea in an operation – transforming an idea into a successful activity in the market. Baumol reinforce precisely this concept of the Entrepreneur: *His job is to locate new ideas and put them into effect.*

Cunningham (1991) presents six thoughts about entrepreneur activity: *Great Person School* – here the entrepreneur has an intuition as if it was a sixth sense; *School of psychological characteristics* – when entrepreneurs orientate themselves by a unique sense of values, attitudes and needs; *Classic school* – where innovation is at the center of the entrepreneur's activity; *Management School* – classifies the entrepreneur as an organizer of new corporations, being the one that, besides organizing, is the owner, manager and the risk taker; *Leadership school* – where the entrepreneur is a leader of people. And the *Intra-entrepreneurship school* - where the entrepreneurship skills can be in favor of complex organizations. *Intra-entrepreneurship* is the development of independent units to create markets and expand services.

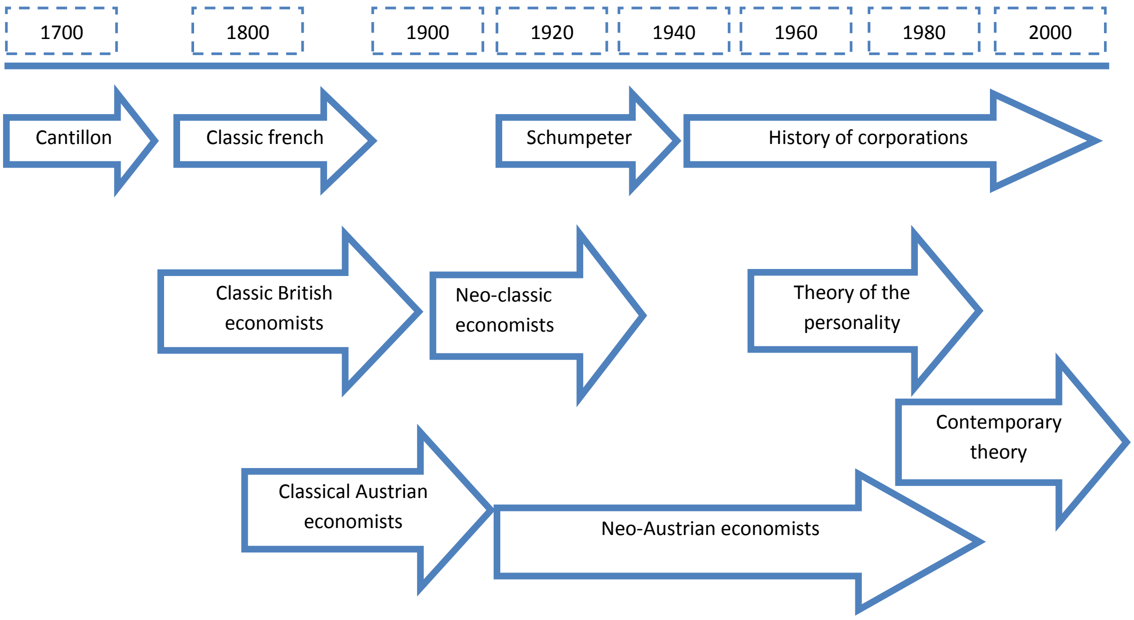


Figure 1. Timeline of the entrepreneurship thinking (Bento, 2013).

Later, Gedeon (2010) classifies the theories of entrepreneurship in four schools of thought. These same theories are assumed by the entrepreneur in its plenitude leading to a new definition of entrepreneurship, taken as a multi-dimensional concept that includes: owning a small business – *Risk theory*, being innovator - *Dynamic theory*, acting as a leader - *Traits School* or creating a new corporation or organization - *Behavioral School*.

Beyond these historical approaches associated with schools of thinking, Bento (2013) summarizes the key ideas about the entrepreneur and entrepreneurship. Literature emphasizes three aspects of the entrepreneur (a manager, a specific economic agent that creates convergence of economic effects and an individual with a certain personality). There is incertitude about the success of the entrepreneur personality. The idea is that the entrepreneurial management differs from the conventional management due to the focus on change rather than on continuity, by exploring new opportunities more than keeping resources and by adopting an orientation to the organization with a transversal approach more than to specific functions. The leadership, the power and motivation are variables interconnected and interdependent that entrepreneurs can use to control and give direction to the risk.

- Leadership is to be able to focus and run de organization. Entrepreneur leadership is about communicating the vision.

- Power is the capacity to influence the course of action in the organization.
- Motivation is the capacity to encourage an individual to take a determined decision or to follow a specific path.

The strong idea of intra-entrepreneurship brought by Cunningham (1991) clearly translated the aspect and behavior of the corporate entrepreneur. Figure 2 shows this dynamic and the core ideas of the entrepreneurial thinking.

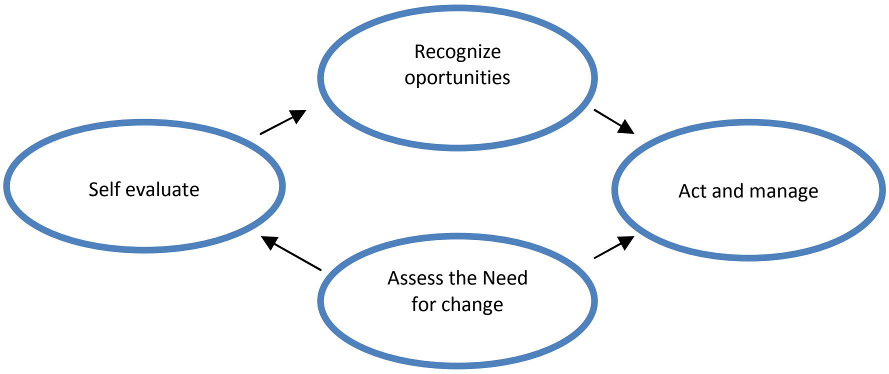


Figure 2. The entrepreneurial process (Cunningham, 1991)

Many authors have studied the impact of entrepreneurship on economic growth. King (1993) established a very close connection between finance, entrepreneurship, and growth. Here, in all its phases of development, entrepreneurship supports itself in the financial activity or control. From the evaluation, conceptualization to the development, there is this relation that gives a crescent importance of entrepreneurship inside and outside the organizations.

An interesting and objective comparative analysis between individual and corporate entrepreneurship was proposed by Wennekers and Thurik (1999) whole keep the notion that the culture of the firm, the sense of business unit creation, mergers and acquisitions, spin-offs and joint ventures tend to appear more in the corporate entrepreneur better aligned inside the organization. Figure 3 structures some positive impacts of entrepreneurship in three dimensions (individual, corporative, and macro) in order to gain competitiveness and economic growth.

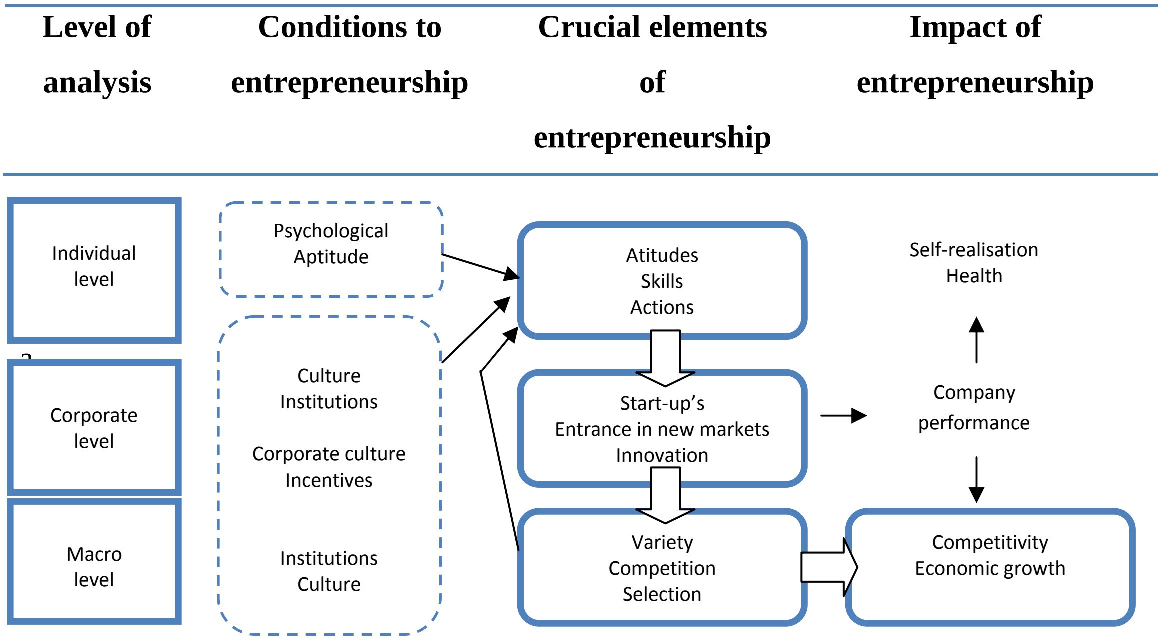


Figure 3. Linking Entrepreneurship to economic growth (Wennekers & Thurik, 1999).

Garlindo and Mendez-Picazo (2013) conclude after a study conducted in developed countries (several European countries, Japan, and USA) that innovation has a central importance in the process of economic growth and the entrepreneur is the vehicle that introduces new technologies to improve the activities of organizations, so it can bring more profits.

In this process of gaining competitive advantages, entrepreneurship will emerge in corporation can create an environment that fosters the detection of opportunities (Stevenson, 2007) and in a sustainable corporate entrepreneurship strategy will drive organizations toward innovation needed to operate in the challenging global economy (Kuratko, 2014).

This strategy will lead to one of two different paths or strategies: specialization or diversification. Both brings added value to corporations and overall, they also bring competitive advantage. In industries with certain characteristics associated with high transaction costs (few players present) diversified corporations have better performance while under opposite circumstances, specialized firms have greater presence and higher results (Santaló, 2006). In the competitive arena, customers look for solutions at the same time: highly specialized solutions, and diversified options. Corporations also try to answer that need by proposing diversified product portfolios and highly specialized solutions. But the truth is that there is an intrinsic tradeoff between specialization and diversification in today technology and market conditions. Differentiation imply a high degree of diversity in the production and marketing activities and lead the firms to give a high level of autonomy to the units devoted to serve specific market segments (Sengenberger, Loveman & Piore, 1990, cit. in Iacobucci, 2005), while highly specialized corporation take more risks when they invest in new technologies as it can represent shifting focus away from their own core competencies diverging also in quality issues. In most cases firms achieve this by creating or acquiring new companies (Iacobucci, 2005).

2.2 – Innovation

Innovation is the specific tool of entrepreneurs, the means by which they exploit change as opportunity for a different business or service. It is capable of being presented as a discipline, capable of being learned, capable of being practiced. Drucker (1985, cit. in Tidd & Bessant, 2013).

The idea of Innovation is very common and accepted. It has become a part of the culture of organizations. In Paul Trott's idea, in order to survive, organizations must be able to adapt and evolve. Innovation is key to differentiate from competitors and being able to change the basis of competition.

Tidd and Bessant (2013) explore the strategic advantages through innovation in organizations. Innovation comes as a) a novelty in a product or a service that offers something that no one else can, b) as a novelty in a process, offering ways other cannot match, c) as a complexity hard to master, d) as legal protection of intellectual property, offering something which others cannot do unless they pay a license or a fee, e) as an extension of competitive factors, f) as the timing of implementation – first mover or fast follower, g) as a continuous improvement of the offering, something that changes the paradigm of its entourage.

Schumpeter was one of the first to write about what has to be considered as the basic of innovation in the industries. He considered that new products would stimulate the economic growth even more than marginal updates of existing product. The impact in economies will be much larger with the launch of new solutions into the market. Marx, Kondratieff and later James Utterback, followed those thoughts sharing the idea that innovation would be associated with waves of growth in economies. Over the years, different frameworks of innovation were designed and three considerations appeared to have an important role in the course of innovation: the generation of new knowledge in the firm, the ability to use this new knowledge in the development of new products or services, and the capacity of market it right in order to bring back value to the firm (Trott, 2005).

Drucker (2009) introduces the concept of Innovation as exploring different sources of opportunities. Most successful innovation exploits change and the art of find areas of change that can represent opportunities for the entrepreneurship is a non-stopping challenge by itself. These *sources of innovation* can appear from very different areas within or outside the company. From the unexpected (successes or failures), from incongruity (about what it is in reality or what "should" it be), innovation is based on process needs, unexpected changes in industry or market structure, demographics, changes in perception, mood and meaning or new knowledge.

In Utterback's (1994) model of innovation dynamics, the author shows that innovations, whether in product or service, go through a certain number of cycles. From the beginning of the product life cycle until the mass-market acceptance, the manager has to consider different strategies. He shows that the amount of new product development or upgrades rises rapidly in the beginning of its launch. Then, as the solution goes to more and more acceptance and passes thru the phase of success, corporation start shifting to production cost reduction. The evidence brought by Utterback reveals the need to consider at least 3 critical management skills to grant success in the innovation path: bringing the idea into life, market it, and explore the maximum efficiencies that bring the most value for all stakeholders – company, customers and the economies.

In order to succeed and to keep succeeding, organizations must re-organize their business and keep them aligned with external environments. The ability to understand and manage different innovation cycles through incremental, architectural or radical innovations is key to enter new markets with existing products as well as creating new markets to introducing new products and technologies. Those cycles follow an understandable evolution, beginning with a technological discontinuity due to the discovery of an invention or a new product usage for instance, to which follows the opening of a new category of product or usages that are incrementally updated in order to maximize its value, until another discontinuity comes to, again, reinvent the product, the need, and the solution. To keep that pace, organizations must be ambidextrous as they have to provide not only answers and solutions to market demands but, in the other hand, create new needs for new products, services or technologies (Tushman, 1997).

From a resource-based view of strategic management, innovations, issued from the combination of different resources from the organization, such as, for example, new products combined with new market approaches, or new combination of skills and capacities for continuous improvement, can contribute to sustainable superior returns (Rugman & Verbeke, 2001).

Some big companies often face important challenges and major threat because once well established in the market, they are unable to find new applications to their products or core businesses. These initial skills that put them once in a leading position seem to be lost when needed to keep the pace of growth. Suddenly, they become venerable in their own market to new entrants or new disruptive technologies to their own (Christensen, 2013).

The context of innovation never ends in the company. There is always new threat from new products, new competitors or new substitute solutions that endangers even big corporations core businesses. That demands a full orientation in different processes and phases of innovation. By creating blueprints for growth and continuous improvement mind-set, companies establish favorable conditions to keep a solid and substantial capacity of innovation. That brings shareholder wealth a differentiation from their competitors (Johnson & Sinfield, 2008).

Today organizations have different strategic choices to keep the pace of success. To promote internal innovation requires a preparation in all different cycles of the innovation and mastering different core skills that corporations might not have, acquire companies or new businesses with emerging potential or use a strategic spin-off model to maximize the potential of their business.

2.3 – Mergers and acquisitions

Large diversified firms have increasingly pursued growth through mergers and acquisitions (M&A). The notion that increasing diversification reduces the firm's overall risk is well accepted in the popular literature. An important reason for the popularity of diversification is that it allows the firm to acquire new technology for its portfolio and enter new markets. Pitts (1977) suggested that internal growth and acquisition are attractive, but Lamont and Anderson (1985) as well as Porter (1987) focus more their growth strategy on M&A. Such growth was found to sometimes leading to negative results by acquiring firms indicating that M&A are a complex process and involve trade-offs (Hitt, 1990).

Usually M&A take place in a specific environment where the acquirers have better investor protection than targeted firms whether the deal occurs in domestic or cross-border markets (Rossi, 2004).

Ahuja and Katila (2001) found that within technological acquisitions, absolute size of the acquired knowledge base has a positive impact on innovation output, while relative size of the acquired knowledge base reduces innovation output. In the case of nontechnological acquisition there is no statistically significant impact on subsequent innovation output.

In this demanding environment with up to a 50% average success rate for cross-border acquisitions, many considerations have to be taken into account as they impact stakeholders in differential ways. Schoenberg (2006) reviews it and found it has immediate wealth effects on capital market investors as soon as the acquisition announcement (King et al., 2004), on the bidding firm with the acquisition’s long-term outcome (Hitt et al., 1998) or employees with anticipated job losses and acculturative stress (Cartwright & Cooper, 1990). This is related with Seth (1990) proposition that value creation depends on the combination of the characteristics of the two merging firms, rather than those of each of the firms considered alone.

Despite popularity of M&As, the high rate of failure of this diversification process may be due to three possible reasons: Executives are undertaking acquisitions driven by non-value maximizing motives; the prescriptions from the academic research have not reached the practitioner community; the research to date is incomplete in some way (Cartwright, 2006).

2.4– Business Organization – Strategic Business Units

Very straightforwardly, Weick (1993) states that the configuration of the organization, its organizational design, is what people believe the organization is. And what the people believe is the base of what they do. And what people do in the organization is indeed the design of the organization.

Both Burns and Stalker (1961) and Mintzberg (1979) explored and structured different forms of organization of corporations. Two important organizational approaches are brought by Burns and Stalker (1961): 1st The mechanistic organization, characterized by a bigger hierarchic differentiation, very common in organization in the industrial sector; and 2nd The organic approach characterized by a bigger horizontal differentiation with more fluid and defined functions and interactions. Mintzberg (1979) summarizes the literature on corporate organizational structures defining the structure of the organization by the sum of the ways that the organization is divided and how it coordinates the workflow among the different activities. Five basic configurations emerge in his study: *The mechanistic bureaucracy*: Strong standardization of the process workflow and direct supervision. Strong hierarchy and centralized strategy; *Professional bureaucracy:* Standardization of qualifications and mutual adjustment. The key of the center of operations and the decision making process is incremental with an orientation for results; *Simple structure*: Coordination by direct supervision with a strategic top and a horizontal or vertical centralization; Divisionary structure: Structure of power located at the medium hierarchic line with a logical and operational decentralization; *Adhocracy*: Based in a mutual adjustment that gathers professionals and technicians capable of give flexibility to the organization and promote a selective decentralization.

The business model developed by Mckinsey & Co. captures the idea that the corporation is a series of functions (ex.: R&D, Production, Marketing, Channels…). The power of redefining the business to gain competitive advantages is an important idea (Porter, 2008).

Karim (2009) studied 1274 new business units finding that 64% of the new business units comes from internal innovation, 35% from mergers and acquisitions, and 1% from Joint Ventures. Concerning business units reorganization, the author found that those created internally are 13%, 53% were acquired, 36% recombined with existing business units and 59% of Joint Ventures suffer reorganization processes. This reorganization promote innovation in the medium term, mostly when there is a recombination of new products or offers to the original solution, which is common in Learning Organizations. Not to neglect that time and investment are important aspects that matter when the search for innovation requires immediate results, which is not the case in new business units reorganization.

Lasserre (2012) makes summarizes the different design's organizations can have (Table 1) while conducting an evaluation of each type of business organization and presenting its potential of application. The table includes information about the responsibility for strategic business units (SBU) located at which level of organizational hierarchy (i.e. if top or medium level) although today, the focus of big corporations is not the internal organization but the development of attitudes, skills and behaviors.

A SBU is a group of business that shares the same strategy as well as important factors such as mission, values, competitors, critical factors of success or business opportunities. The concept of SBU advantage is allowing rationalizing different business in the corporation or group of companies and establishing cohesion in the management of separated business activities that still share the same goals (Teixeira, 2011).

	Global functional model	Geographical model	Single matrix model	Multi-business global product division model	Multi-business geographical model	Multi-business matrix model	International divisions model	Dual complex structure model
Organizational structure	Centralized decision-making , coordination and control	Decentralized decision-making, coordination and control	Both functions and geography are given equal power and responsibilities	Each business divisions is responsible for a product or a service Within the division, organizational design can be matrix or global functional or geographical	Country subsidiaries have full strategic and operational responsibilities for all products in their territories	Emphasizes dual or triple responsibilities which are shared between product divisions and geographical units	Overseas subsidiaries have high autonomy but rely upon home country division for products and technical support	A mixo f diferente designs with global product division and geographical subsidiaries
Supporting line (s)	Functional manager reports to vice-president of director in charge of their functions	Functional manager reports to local national manager	Middle- managers typically have two bosses	Country subsidiary managers report to division heads	Central global functions and product divisions have a 'dotted-line' role	Same as single matrix model	Division executives manage home country businesses and international division executives manage international subsidiaries	Reporting line is complex and depends on the choice of organizational design
Advantages	Efficiencies Economies of scale Rapid transfer of know-how	Flexibility Can incorporate local needs Can quickly adapt to market conditions	Global efficiencies Local responsiveness	Flexibility Global efficiencies Global coordination	Flexibility Adaptive to local conditions Optimization of product and investment portfolio at country level	Refer to the single matrix model	Global efficiencies Local responsiveness	Flexibility
Disadvantages	Inflexibility Local dysfunctionalities Market rejection Bureaucracy Discourages initiatives	Diseconomies of scale Duplication Lack of global coordination means poor at serving global customers	Potential power struggles Role ambiguity Dilution of responsibilities Cost inefficiencies Turf battles Costs of compromise	Duplication of commercial effort Lack of local responsiveness	Sub-optimization of resources allocation Delay in new product introduction Inefficiencies and loss of competitive advantage for industries which require globalization	Refer to the single matrix model	Inflexibility Market rejection	Complexity
Potential application	Single business environment with strong demand for global integration and coordination	Businesses where customer tastes or needs differ significantly across countries	Professional firms such as consulting or engineering	Vast majority of multi-business corporations with relatively high product diversity and significant geographical expansion	Becoming less popular with large global corporations	Decreasing popularity	Other models will be used when international sales become a significant amount of turnover	Companies with sophisticated and diverse offerings

Table 1. Types of organizational design (Lasserre, 2012)

The knowledge associated with new forms of organization and with appropriate management resources can lead do a gain of flexibility and with that a competitive advantage in the market (Mircea, 2015).

A SBU by itself does not grant success nor benefit for its own business or for the corporation. Teixeira (2011), Karim (2012), Lasserre (2012) and Mircea (2015) stressed that the business unit needs in one hand to make efficiencies since it is an independent business from parent company, it should profit from the experience and resources available but also keep the permanent objective of creating value for the customer and company by focusing on its core business, releasing from secondary activities, and in all situation, sharing knowledge and experience (Jonk, 2007).

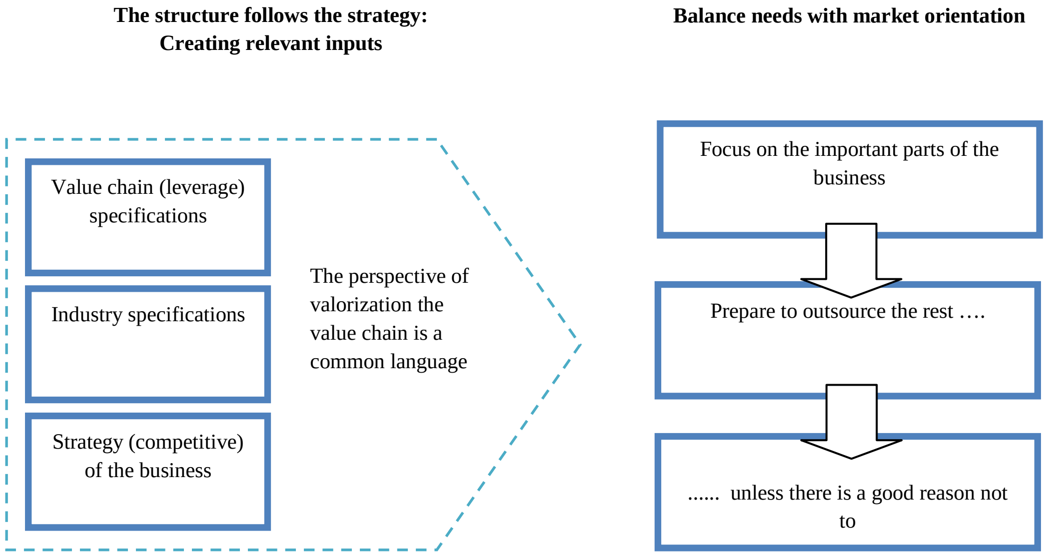


Figure 4. Simple recipe of a balanced organization (Jonk, 2007).

The reorganization in independent business units turn many times into a spin-off. Fryges (2014) classifies different type of spin-offs. They can have origin in Universities, when the students project thru start-ups incubators come to life and separate from the academy. They are bought from the University or from their creators. Spin-offs can also result from the corporate level when the parent company, in a specific context, deploys specific resources in order to create a new independent firm (controlled by the parent company), when specific human resources leave the company to create their own business based in their skills and knowledge, or when there is a buy/sell of a division of the company by their management.

2.5 – Corporate Spin offs

A spin-off occurs when a part of the assets of a corporation is transferred to a new corporation and the stock of the latter is distributed to the shareholders of the former without their surrendering an equivalent amount of stock in the distributing corporation (…) under certain circumstances (…) tax free (Landman, 1952).

Very few articles studied Spin-offs in past and recent history (Tubke, 2005) and the research up to the 1980s is mostly conducted from the legal and financial perspectives. Since then, spin-offs have been specifically studied as a corporate business strategic option to expand new business. The creation of new businesses fostered the economic development of the society and among different ways to create new business, corporate spin-offs contribute to de empower entrepreneurship (Ferraz, 2015).

Tubke (2005) classified spin-offs under five criteria: origin – corporate vs. institutional; motivation – restructuring vs. entrepreneurship-based; nature of creation – formal vs. informal; control – internal, external vs. mixed; consensus – friendly vs. hostile.

Muegge (20014) identifies four theories explaining spin-off creation: *Resource base theory* – when the firm can gain sustainable advantage when it has and explores its strategic resources (human, physical and organizational capital resources); value to bring to market and capitalize new solutions created within the parent *company; Resource dependence theory* – when the survival and performance of a firm depends on that firm's ability to acquire and maintain resources through reciprocal resource exchange relationships; *Game theory* – when decisions are taken based on each individual or organization motivations whether is self- interest, competitive motivation or collective cooperation; *Organizational Ecology* - perspective investigates the evolutionary trends of organizations. To these four theories, Muegge adds two new theoretical constructs: *the decision environment* - defined as the totality of circumstances and conditions that surround the decision-making entrepreneur, characterizing the environment in which an entrepreneur makes decisions, irrespective of their particular evaluation criteria and decision-making process; and *the resource environment* defined as the set of all possible resources that an entrepreneur has available, including money, time, people, reputation, support and established relationships. The decision-making entrepreneur employs these resources to assist with decision-making and deploys these resources to execute their decisions. The resource based theory have been enriched by Campbell (2014) when to the three features of this theory (value to customers, rarity, and hard to copy, he adds what he calls the *liability features* (detracting value, rarity, and hard to eliminate). The resource based theory including these liability features could help explain the decision to spin-off because it helps to identify not only the advantage but also the liabilities in the process of spin-off that can help explaining its successes or failures.

Fryges and Wright (2014) highlight the interaction between the environmental context from which a spin-off emanates and the mode of the spin-off venture. They distinguish a profit resulting from corporation and non-profit resulting from universities. Either from university or commercial context spin-offs differ from other start-ups by receiving a transfer of knowledge from their parent firm. The formation of a corporate spin-off involves the transfer of knowledge, the transition of entrepreneurs from the parent firm to the newly founded spin-off. Citing Fryges (2014), Lejpras (2011) and Czarnitzki et al. (2014), this transfer of essential ideas coheres with superior innovation activities of corporate spin-offs. Entrepreneurial innovativeness is a factor that influences spin-off performance in that it demands different degrees of overlap between the networks exploited in the incubation and emergence phases (Furlan & Grandinetti, 2014).

		Environmental context	
		University context	**Commercial context**
Firm level – spin-off mode	**New firm**	QUADRANT 1 Alumni start-up Academic spin-off (pure) Academic spin-off (hybrid)	QUADRANT 2 Corporate spin-off (use of intellectual property/assets) Employee spin-off (no direct use of intellectual property/assets)
	Existing activity	QUADRANT 3 Privatization buyout/buy-in of university research agency/station	QUADRANT 4 Management buyout of division Management buying of division

Table2: Typology of spin-offs Fryges and Wright (2014)

Corporate spin-off is an agile answer to the need of exploring new ideas and also, due to its smaller structure than the parent company, the previous experience acquired by its elements and it's more centered focus, represent a faster growth and an aggregated higher value for the parent company (Clarysse et al., 2011).

One interesting finding in a literature review from Adams et al. (2014) is that Spin-offs heavily rely on their networks and connectivity, which is necessary in an open innovation paradigm, where connectivity and links are essential. Sapienza et al. (2004) suggest that ventures with diverse knowledge bases may expect to learn from one another through collaboration so long as there is some knowledge overlap, and such learning may result in such tangible outcomes as sales growth.

Corporate spin-offs not only help the focus on its business bus also it allows the parent company to concentrate better on its own core business. There is a positive effect to spin-off when the involved firms (parent and potential spin-off) operate in different industries, increasing focus in both firms (Block, 2009).

Corporate spin-off strategy is officially recognized by the European Commission has an important source of industrial reinvigoration and competitive advantage. They create growth and innovation opportunities. It finds in Europe a fertile ground to succeed: It is estimated to be responsible of 12,9% of new firm creation, 8% of employment combined with a 15% very low failure rate (they display above average growth and low failure rates), producing a higher number of innovations than New Technology-Based Firms, unleashing entrepreneurial potential, both by creating new, dynamic enterprises but also by creating leaner, competitive and more focused parent companies. They have a long-term potential, benefiting from the parent company and help the parent company restructure its value chain and reducing its costs. By concentrating more on local and regional suppliers and customer relations, they foster regional competitiveness and create new markets which in turn increases European competitiveness. This is not an automatically successful process - enterprises spun-off in order to dispose of unprofitable businesses or to create short-term profit maximization generally turn into failed examples, however the positive effects of Corporate Spin-Offs on competitiveness seem to clearly outweigh the negative ones (Moncada-Paternò-Castello et al., 1999).

2.5.1 Corporate spin-Offs as strategic solution to the problem

Literature review presents many different strategic options that corporations can undertake to solve this problem and scale different business in order to maximize value. A corporate innovation culture issued from corporate entrepreneurship is key and has a central importance in the process of economic growth of the firm. It is a vehicle that introduces new technologies improving the activities in the organization bringing more profits (Garlindo & Mendez-Picazo, 2013). A corporate culture of innovation will explore different sources of opportunities for the firm (Drucker, 2009) and these are chances to explore new products, services, solutions, geographies or markets that can bring back success and value.

Many corporations achieve a condition of diversification thru a strategy of mergers and acquisition (Iacobucci, 2005). "Buying the way in" is a solution that enables the organization to have access to new markets and to new technologies that otherwise wouldn't be easy to have or explore since in order to differentiate it would necessary mean an unrelated business. It represent a interesting way to be able to play both in many different markets and industries sometimes with also specialized and value added solutions for customers. Despite seeming a winning strategy for corporation, there remains a high rate of failures in M&A strategies that can due to the fact that in this complex process there is not a real culture of M&A in the acquirer firm in order to maximize the potential of both firms (Cartwright 2006).

Internal organization enables the firm to re-arrange different business or functions and align them around the corporation values and objectives. The organization in strategic business units allows firms to rationalize different business, establish cohesion in the management of separate activities both pursuing the organization goals (Teixeira, 2011). By itself this internal organization is not a guarantee for success but it should help to profit from the experience and resources available keeping in mind to create value for the customers and for the company (Jonk, 2007).

Strategic business units often become corporate spin-offs (Fryges, 2014). In this context corporate spin-off is also a very powerful strategy in order to respond to the challenges of both specialization and diversification in an economic of boundaryless competition. Corporate entrepreneurs prefer to create new companies than new business units within the because of the advantages possible in the development and management of the new venture. There are also positive aspects linked to the legal autonomy of the spin-off as it is easier to assess performance both financially and operationally, they adapt also to marketing policy and relationships with suppliers It fits in one hand the exploitation of specialized market niche or regional markets and on the other hand they rely on network of suppliers and customers, can raise external capital for the new company or for specific investments (Iacobucci, 2005). For the parent company it is a way to diversify their portfolio in a much more objective and clear way, unleashing the activity entrepreneurial potential (Moncada-Paternò-Castello et al., 1999).

In the different strategies that corporations have to both answer the problem of diversification and specialization, corporate spin-off seems to be a strategy that fits most these purposes, from the parent company view but also from the view of the corporate entrepreneur. The corporations looks for diversify their portfolio, differentiation and diversification that create value for shareholders and represent a competitive advantage in the market. Corporate entrepreneurs are independent and enjoy that independence. They fosters innovation, search to create new businesses, look for new challenges and constantly work for create value to the firm. In this context we will try to build an effective model of a proactive spin-off by focusing on a specific case in order to understand where is the opportunity cost and how extensive is the growth potential for a strategic spin-off for the parent company.

3 – Methodology

The purpose of the following business case is to generate the model for proactive corporate spin-offs on the basis of a specific business that operates within a multinational corporation and how it would represent a competitive advantage for both the corporate spin-off and parent company. This specific business line is non-core and non-related business to the parent company, and for that in some literature it is a positive aspect when it concerns aspects of diversification (Cartwright 2006). After an internal and external diagnosis, we focus on the competitive advantages that the corporate spin-off brings to that same activity and we will try draw the main guidelines for future proactive corporate spin-off model design.

As the purpose of this study is mostly that of extracting a meaningful set of ideas that, as a configuration, build plausible conditions for a successful organizational change, we opted for an inductive approach (Hyde, 2000). This mostly requires qualitative techniques both for data collection, mainly documental analysis, explorative interviewing and content analysis. Due to an imposition of full confidentiality we cannot show evidence of documents or any other identity related information that would break this compromise. Notwithstanding this limitation, we believe the case is most informative due to the direct knowledge in the industry.

For parsimony sake we shall identify the parent corporation as “Healthcare-based-Corporation” or “HBC” and the unit under analysis (the one with potential for corporate spin-off) as the “Hygiene-base-Unit” or HBU.

4 – The business case: the Portuguese HBU activity

4.1 Background

HBC group is world leader in gases for industry, health and to the environment that operates in several key areas: Large industries business operating in aeronautics, chemistry, beverages and aerospace activity; in Electronics, proposing solution in markets of semiconductors, photovoltaic energy or electronic compounds; in Engineering and constructions with intervention in the conceptualization of innovation projects; in Welding and diving presenting reference products; In Science partnering with laboratories and R&D centers. The group is also present in Healthcare, promoting solutions in diversified areas such as hospital, home healthcare and hygiene.

The Portuguese branch started in early 1900 growing today to employ more than 400 workers, and covering three main activities allocated to same number of independent companies: one industrial (HBC-Industrial), another one for home healthcare (HBC-HomeHealthcare) and the third one for hospital (HBC-Hospital). This study focuses on this last company.

The central activity of HBC-Hospital is related to the production and selling of medical gases and related services, which is its core business. The company operates in the hospital market having almost half the market share, working under the latest safety international regulations. In its product portfolio there is oxygen, nitrogen and gas mixtures related to therapy and all engineering related with the distribution and administration of those medical gases to the patient at the hospital. HBC-Hospital also markets and sells Hospital Hygiene solutions. This Hygiene activity is the focus of this business case.

The HBU-Hygiene was launched in early 2000 and ever since developed in a logic of providing solutions for hospitals by promoting the reduction of hospital infection (HAIs – Healthcare Associated Infections) through the fight of pathogenic microorganisms, with a complete portfolio of products and equipment including instrumental, hands and surface cleaning and disinfection. The company buys the products to a supplier with whom they keep a close relationship.

Today, the activity has four full time employees, based in the company facilities. The company also shares a space for warehousing where in a monthly base different products are received from the supplier, kept and forwarded every day to the end customers (public and private hospitals and clinics) representing around 8% of the company turnover.

With €1 million turnover, the Hygiene activity has an 18% market share in a very competitive and mature market. Competitors come from different origins as they can be other multinational corporations or local firms with also many different strategies: mono to multi-products and high-end or low-cost offers.

Since its inception and over the years, HBU-Hygiene activity has adapted its way of doing business within a multinational environment but with a high degree of local presence and follow-up thanks to a very strong, motivated and dedicated team and with the support of HBC-Hospital management.

4.2 Business Identity of HBU-Hygiene activity

4.2.1 Vision, Mission and strategic objectives

HBU-Hygiene, as an activity of HBC-Hospital, is oriented by the company own mission and values. *"HBC-Hospital has the ambition of being a strong corporate group in the healthcare sector in Portugal, following the HBC group development dynamic in the 5 continents. This dynamic is a part of the company principles of action, which follows its Mission, Values and compromises, common to all its companies. HBC Mission: We compromise in create value to our customers worldwide, presenting them innovating technologies, products and services in the business of industrial and medical gases, as well as in all the related activities. We are compromised in foster the development of our collaborators, preserve the environment and health, offering to our shareholders lasting performances. HBC Values: Safety, Respect, Integrity, Transparency, Innovation and rigor. HBC strategies are developed by World Business Lines based in common acting lines: Presence in a solid basis, Conquer new territories and Innovation, technology and Services."*

4.2.2 Organizational culture

HBU-Hygiene activity is totally aligned with the mission and values of HBC. This culture of the activity, although being obviously totally align with the company's culture, mission and value, has also a generic DNA and is own way of operate in the market as they promote an active fight against HAIs which demands a different and more pro-active approach. There is a constant search for excellence in the daily work in pursuit of continuous improvement and pushing to the market as much innovative products proposed by the company supplier.

4.3 What the business solves in the market

4.3.1 The issue - Hospital infections

HAIs represent today an important international problem with 6% of all patients in hospital infected with at least one HAI. In Portugal, this problem takes a dimension much more serious as it hits almost twice that ratio. It is a real and worrying threat to patients, Hospitals and to the national authorities (ECDPC, 2012).

Several studies have clearly demonstrated, not only the clinical impact of HAI in terms or mortality bas also in the economic impact in the increase of drugs consumption and the length of stay in the hospital. With a clear objective to reduce those figures, the Portuguese National Health Authorities created the Infection and Antimicrobial Resistance Prevention Control Program (Programa de Prevenção e Controlo da Infeção e Resistência aos Antimicrobianos) with the strategy and orientations to reduce HAIs.

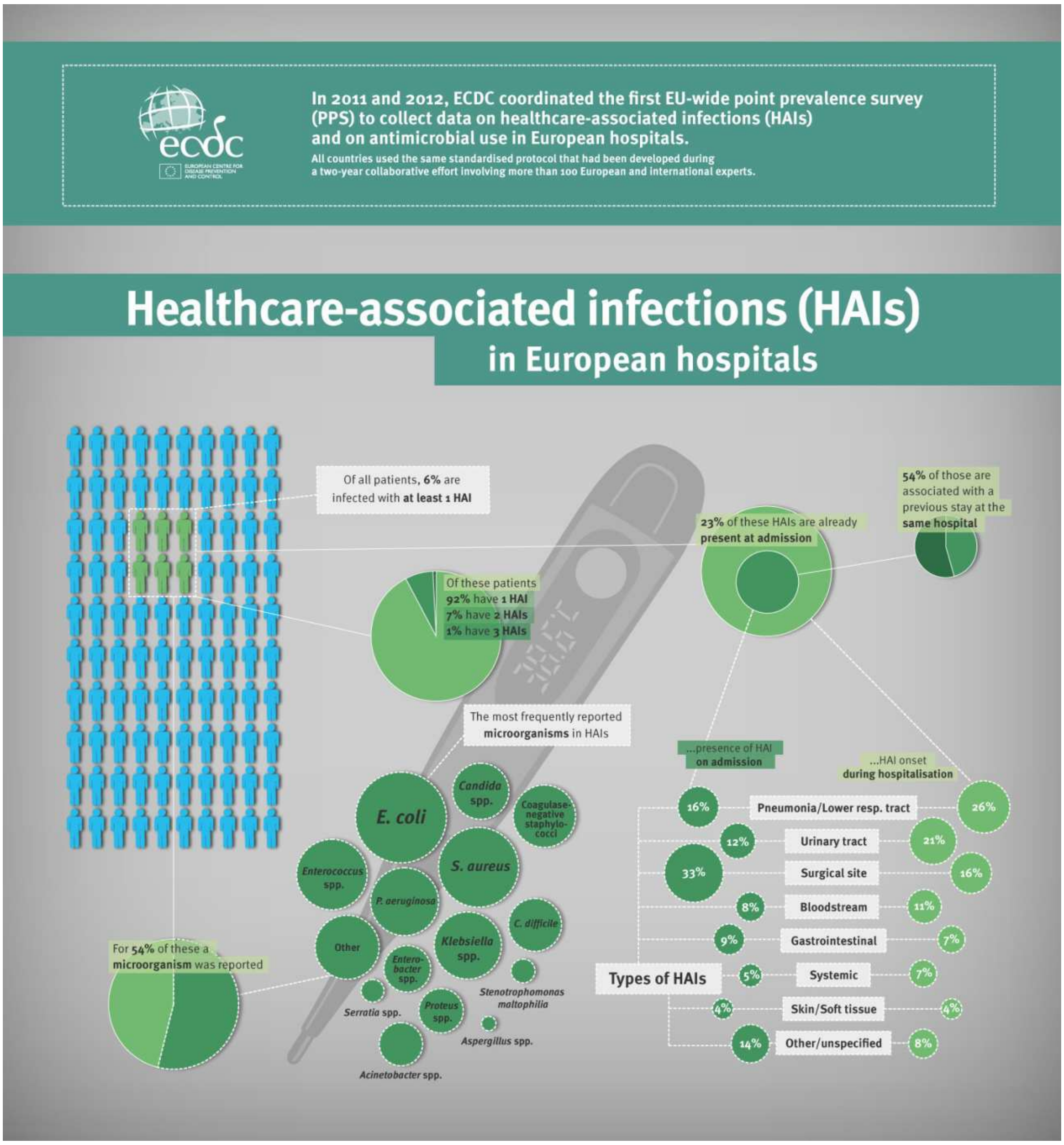


Figure 5 - HAIs in Europe (ECDPC, 2012).

The international scientific community that follows that problem defined a group of bacteria that represents increased worries in what concerns antimicrobial resistance. The acronym ESKAPE means the combination of the initials names of the most worrying microorganism (*Vancomycin resistant enterococcus, Methicillin-resistant Staphylococcus aureus, Klebsiella production of extended-spectrum β-lactamases, Imipenem-resistant Acinetobacter, Imipenem resistant pseudomonas, 3rd generation cephalosporins-resistant Enterobacter* and recently added *Clostridium difficile*). In accordance to Infection and antimicrobial resistance prevention Control Program, Portugal is in the European average rate of antimicrobial resistance, except in what concerns the *Staphylococcus aureus* and *Enterococcus* which represents higher rates that the European average (DGS, 2014).

Punctual actions, efficiency projects or objective steps orientated by the Health authorities have the clear purpose to reduce the number of HAIs. In 2009 a high adherence to the hand hygiene campaign was registered. Since that time, the campaign repeats every year in the majority of the Portuguese hospitals to foster regular hand washing and disinfection and today it is very common to find alcohol-based solution in all hospitals and healthcare facilities representing a general consciousness in health professionals of the importance of this habit to reduce HAIs.

The cost of HAIs treatment and prevention in healthcare is very high. In 2002, UK NHS spent £1,06 billion and US national health service $6,7 billion with hospital infection (Graves, 2004). In general, the cost to treat a patient with a HAI is 2,5 more expensive than a patient that with no HAI and in a medium-sized Portuguese hospital these costs are also aligned with figures representing an increment of 2000€ per patient due to lengthier staying time in the hospital, more drugs spending as well as more tests than patient with no HAI (Martins, 2007).

4.3.2 Solutions offered by the business

HBU-Hygiene activity proposes solutions to reduce HAIs in the hospital. For that purpose, the unit developed a portfolio of products and equipment that aims specifically the fight microorganisms in the hospital by promoting a clean and healthy environment as well as best practices of personal hygiene. These solutions reduce cross-infections in hospitals in different scenarios and are present in multiple situations. The portfolio covers hand, instruments, surfaces and environmental cleaning and disinfection solutions for all services inside healthcare facilities. From the operating room to the sterilization service, HBU-Hygiene activity seeks to answer the demand and need of cleaning and disinfection and also invest in new solutions to simplify these sometimes complex tasks of maintaining the best and healthy environment possible to patients and professionals.

The products cover alcoholic and non-alcoholic based solutions to preserve hand and skin cleaned and disinfected, as well as detergents and high level disinfectants for medical instruments, devices and endoscopic material. Other specific detergent and disinfectant for surfaces contact hygiene and total environmental air-based disinfectant equipment.

4.4 External analysis

4.4.1 PESTEL analysis

In the Political and Legal context, the Portuguese National Health Service (SNS – Serviço Nacional de Saúde) was founded in 1979 under the Law nº. 56/79 issued at 15th September and created a network of institutions and global health providers to all population, financed by State taxes, where the country grants health protection. SNS has administrative and financial autonomy since 1982 and manages the revenues received every year by the Government (SNS, 2016). The Portuguese Health Ministry counts on two important entities that manage and implement national guidelines regarding drugs and other health related issues. The entity that regulates drugs, medical devices and cosmetics is INFARMED (Instituto Nacional do Medicamento e Produtos de Saúde) and entity that regulates, offers orientations and coordinates the health promotion and actuation is General Health Direction (DGS – Direção-Geral da Saúde) within the Health Ministry (DGS, 2016).

DGS has a specific program that coordinates the prevention and control of HAIs and Antimicrobial resistance. (PPCIRA - Programa de Prevenção e Controlo de Infeções e de Resistência aos Antimicrobianos). This program is in constant communication with local groups within the hospitals that put in place strategies to mitigate HAI risks and survey each hospital performance in these issues. Due to the growth of the importance of HAIs, specifically concerning the incrementing their costs related to patient management, hospitals empowered these local groups to actively put in place the PPCIRA guidelines and recommendation in their facilities. This happens not only in public but also in the private sectors.

A favorable economic factor that validates the importance of HAIs and HAIs management is the appearance of other programs and initiatives to reduce hospital infections even in the private sector such as the program *Stop Infeção Hospitalar!* With the purpose of promoting innovative approaches to reduce HAI by 50% within 3 years (stopinfecaohospitalar, 2016). Other initiatives also focus on to the importance of indirect costs of HAI such as APAH (Associação Portuguesa de Administradores Hospitalares - Hospital Administrators association) (APAH, 2014) and (APIFARMA, 2016). The fact that every year Hospitals spend on hygiene products and disinfectants may be taken as a positive indicator of awareness to the problem of HAI and that they actively search for market solutions and even innovations in order to reduce HAI rates.

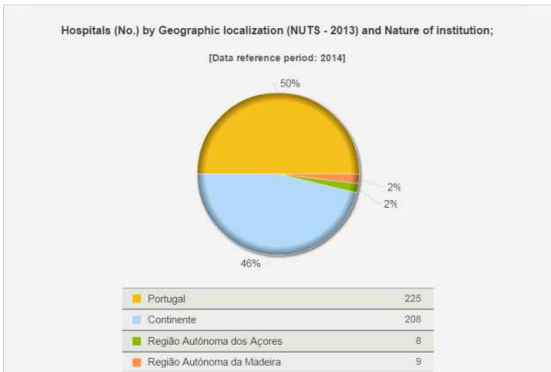
Due to the high information in media concerning HAI and recent much known cases like Avian flu, Ebola hemorrhagic fever or recent cases of Legionary disease, the society at large is more and more aware on it and the problems that cross-contamination can represent to everybody. Many efforts from DGS to promote hand hygiene for example in hospitals also contribute for the consciousness not only in hospital environment but also in the society. This concern is even more felt in hospital and healthcare professional communities because HAIs is a very specific issue thus raising awareness about the importance of following protocols and be up-to-date regarding solutions that can prevent and fight HAIs.

The HAIs related technologic challenges in hospitals come mostly from Private Corporation as they propose advanced solutions to fight HAIs focusing on hands, surfaces and hospital environment. Hospitals look for technologies also to help better identify HAI prevalence and to identify services where higher rates of infection are observed so to better manage different risks. In general, Hospitals welcome all innovations regarding hygiene that improves existing protocols both in time consuming procedures or higher levels of disinfection.

The regulation on environmental concerns follows the European REACH regulation which is adopted to improve the protection of human health and the environment from the risks that can be posed by chemicals, while enhancing the competitiveness of the EU chemicals industry. It also promotes alternative methods for the hazard assessment of substances in order to reduce the number of tests on animals (REACH, 2016). Medical devices are under the authority of INFARMED regulations. All chemical products classified as biocides or medical devices must comply respectively with REACH regulations and DGS supervision or medical devices regulations under INFARMED policy.

4.4.2 Market

HBU-Hygiene activity operates within healthcare markets and related health services. The presence extends in public and private hospitals, clinics and emergency transportation.



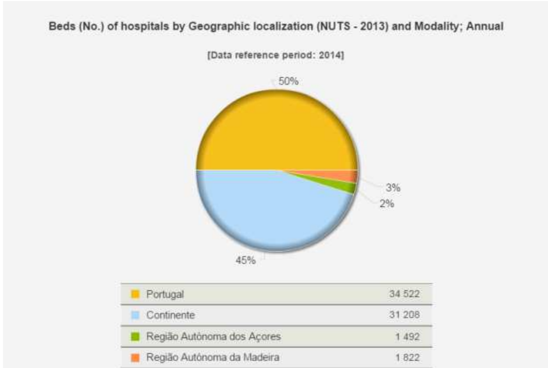


Figure 6 – Number and type of Hospitals (INE, 2016)

Figure 7 – Number and location of hospital beds (INE, 2016)

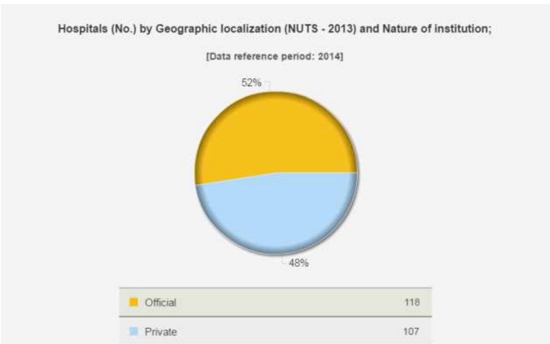


Figure 8 – Distribution of types of hospitals (INE, 2016)

The hospital market comprehends both the public and private sectors. Although there is a very similar distribution in the number of hospitals between public and private sectors (Figure 8), with a recent big increment of new private hospitals and despite reducing the total number of beds over the years (Pordata, 2016) public hospitals have the majority of installed beds, approximately 21000 beds in public hospitals and 9000 in private sector (Público, 2014).

Few data regarding the hospital expenditure in cleaning and disinfection processes are available. In 1999 a community-teaching hospital with 450 beds spent around 20000€ per year in hand wash and alcohol based disinfectant (Boyce, 2001) that would make around 45€ cost per bed. Considering equivalent cost on instrument cleaning and disinfection, to surface products and again de same amount to complementary costs in general cleaning and disinfection, we can come up to a 180€ per bed and a 5,4M€ market. In a second thought if there is an increment of 2180€ per patient with a HAI and considering a 10% HAIs rate in Portugal, on the 1,2 million admissions with stay in the hospital, 10% (HAI rate in Portugal) would represent an extra cost to treat HAI of 261,6M€ for the SNS. If we consider 2% of that amount invested in disinfectants, it would represent 5,2M€. Of course these are simple consideration but it can give a rough estimation of the Portuguese situation.

4.4.3 Competition

Two types of companies operating in the Portuguese Healthcare Hygiene Market can be identified: Multinational corporations and local players. Few firms offer transversal solutions for hospital hygiene including (hands, surfaces, instruments and environment disinfection) as HBU-Hygiene division. They rather offer specific products for one or two of those areas.

Large corporations such as Paul Hartman, B. Braun or Air Liquide offer a full range of products to hands, surfaces and instrument cleaning and disinfection. Others such as J&J, Ecolab, Inibsa, Dr. Weigert, Franklab offer specific partial solutions for instruments and surfaces, acting sometimes only in a niche market. There is a much wider single-product or single-segment local firms or distributors such as Vygon, Medinfar, Aviquimica, placing products for hands, instrument or surfaces, usually in only one of those segments.

Specifically in the surfaces range of products there are more than 20 firms promoting single detergents for floors or surfaces and more than 50 small firms that have a large hospital portfolio products that try to include detergents and disinfectants.

Michael Porter's five forces competition analysis

Being a very interesting market with few barriers – if the product is in compliance to EU regulations, companies need only to register in the DGS and Infarmed - there are considerable threats of <u>new entrants</u> as when a business model is successful, companies tend to replicate it. If we add the problem of long term pay, the threat gets of course even more important.

In this specific context and adding the pressure in the sector that comes from the SNS to find efficiencies in all segments of healthcare, buyers have a strong bargain power. SNS has a central and national administration that has the objective to optimize resources and generate efficiencies (ACSS, 2016) and a centralized negotiation organism that organizes and targets maximum prices for the principal acquisition of drugs, medical devices and biocides for all the healthcare public sector (SPMS, 2016). Furthermore, each hospital can also with some ceiling values buy themselves. In the private sectors, big group of hospitals have also this model in terms of central acquisition departments.

Whether corporations act directly in the market or as a distributor of a brand or a range of products, Portuguese market is very mature and competitive, and thus firms have to deal with price pressure if they want to remain as active players, making the power of suppliers very moderate as they have to be implicated in the process.

This same market pressure and organization favors the entrance of substitute lower-priced lower-quality products or very basic offers. Normally more complex products that allegedly ensure extra guarantee of effectiveness against bacteria and other microorganisms tend to be more expensive but are considered to play an important role in the mid and long term fighting HAIs. As in most cases, low cost solutions give immediate economic answer to buyers, but not without trade-offs.

Among existing competitors there is two degrees of rivalry: The first one is quality-based solutions presented to the customer, where different customers value different active principles (due to e.g. less contact time disinfection, less ecological impact, more efficiency on a broader range of microorganisms). The other one is price-based typically with single-product or single range of product firms. Both are very competitive in their own way.

4.5 Business Model

Osterwalter and Pigneur (2010) business model canvas defines nine fundamental approaches that help understand the foundation of any business model. The usage of their model will also easily help to understand HBU-Hygiene business model.

4.5.1 HBU-Hygiene Business Model Canvas (Customers, Value proposal, Channels, Income, Key resources, Key activities, Key Partnerships, Cost matrix)

<table>
<tr><td rowspan="2">Key partners
Product portfolio supplier;
Supply chain provider;
internal shared services</td><td>Key activities
Marketing and daily promotion; in-time delivery; Innovative and competitive solutions.</td><td rowspan="2">Value proposition
Hygiene and disinfection products for healthcare market to reduce risks of HAIs.</td><td>Customer relationships
Direct and dedicated contact between sales force and customers.</td><td rowspan="2">Customer segments
Diversified customer segmentation: Private and public hospitals. Clinics and Healthcare complement services.</td></tr>
<tr><td>Key resources
Sales teams, Disinfectant brand and quality recognition, Stock and WCR, website.</td><td>Channels
Direct channels with sales force and after sales direct support.
Direct acquisition or through public tenders.
Internet website.</td></tr>
<tr><td colspan="3">Cost structure
Variable costs related to internal supply chain;
Costs related to shared services within company.
Costs of sales force</td><td colspan="2">Revenues streams
Sales of Hygiene products and equipment</td></tr>
</table>

Table 3 – Osterwalder and Pigneur’s (2010) Business Model Canvas

4.5.2 Marketing mix coherence

Mix	**Coherence**
Product	Products proposed are very well accepted in the hospital market. Some are considered top of mind in their finality.
Price	Price is competitive for high quality products and equipment. Most times prices end fixed by customers with a tender.
Promotion	Direct promotion with a team of sales reps visiting key opinion leaders and key users in hospitals. Participation in local activities promoting the fight against HAIs with products presentations. Passive promotion in the company website
Distribution	Products are kept in a central Warehouse. Distribution is Outsourced daily - B2C.
People	Direct contact to users, buyers, deciders and key opinion leaders
Processes	Products are sold directly to customers, usually after a tender. Maintenance is done with teams within the company or outsourced
Places	Product is only available in the company that has a central warehouse.

Table 4 – Marketing mix coherence

4.5.3 SWOT

Strengths	**Weaknesses**
• Complete solution for reducing HAIs • Innovative products • Strong presence in the market • Close relation with customers and with supplier • Dedicated sales force	• Marketing dependent on company structure and on supplier • Low cost offers • Price stretch • Time-to-market • After sales service • Operational costs • On-line and social media very poor
Opportunities	**Threats**
• Private sector growth • Potential to expand to new markets • New product and push innovation to the market	• Short term public and private tender • Aggressive competition from single products firms • Unknown low-cost new entrants • Change strategies from parent company or supplier

Table 5 – SWOT analysis

4.5.4 Bottlenecks

HBU-Hygiene activity operates within the company as a non-core business. Due to its specificity, it has a certain level of operational independence, but in general, it works fully in compliance with HBC-Hospital. That certain level of operational independence may be the explanation for the constant growth over the years of its activity. The liberty to find the best solution in terms of sales-force, warehousing continuous improvement and direct negotiation with the supplier supported a very competitive business with an interesting market share. This continuous growth of the activity in terms of sales and operation requires a different strategy that enables to keep scaling and be prepared to future challenges.

Perspectives	Bottlenecks
Marketing	• Brand management – difficult to merge brands or to evidence the activity brand when parent company has a complete different image and brand policy. • Business identity – The activity business being completely different that parent company can find inside-competitive identification. • Time to market – The launch of new products or equipment find difficulties and inside barriers due to big corporation rules and policies. • Web approach linked to company standards • No social media
Finance and account	• Highly bureaucratic reports for the activity to be in compliance to parent company standards in terms of finance and account management.
Operations	• In-house solution requires high costs with different players for international transport of goods and national distribution as well as warehousing management. • After-sales support very linked to core-business may face problems when dealing with different response timings in other different and non-core activities.
Management	• Different businesses require different perspectives, but a non-core activity needs a high degree of independence in order to scale. • The growth of the activity is linked to the DNA of the management. If the management is conservative, non-conservative measures around the activity will not be taken and vice-versa.
Regulatory	• When the activity has different regulation policy from parent company, one of 2 scenarios is applied: the activity demands less regulation than the parent company but it still has to adapt to parent company regulations or the inverse when the activity demands more regulatory efforts the parent company. In both scenarios this will be a cost demanding issue

Table 6 – Bottlenecks analysis

4.5.5 TOWS matrix

		Internal factors	
External factors		**Strengths**	**Weaknesses**
	Opportunities	Explore hospital private market and possible expansion to other markets; Reinforce relationship with customers; Embrace actively challenges that include the launch of new products and services;	A reinforced/renewed relationship with supplier would help to prepare strategies to fight low-cost and a specific pricing task; It would easy all processes regarding to marketing and time-to-market as the process would be easier; Outsourcing activities such as logistics or after-sales would bring efficiencies and improve service level;
	Threats	Search to negotiate with customers long term agreements; Involve supplier to the reality of low-cost solutions in order to find together answers; Find strong and formal agreement with supplier; Explore other business partnerships or corporate organizations;	Pricing issues have to be addressed to supplier to find solutions together, case by case with a case by case or customer by customer solution; Flexibility on regulatory issues concerning time-to-market ; Invest in communication on social media and web content;

Table 7 – Tows matrix

At this point, HBC-Hospital faces the typical diversification-specialization pressure to comply with competing demands. To solve this, the strategic choice for the future can develop through two different scenario paths. The first scenario corresponds to keeping the same strategy as a business unit. In this scenario, some constraints will remain unsolved since most are linked to the parent company due to stronger regulations and a core-business orientation. Within this scenario, the activity can keep its growing but probably at a slower pace or eventually stagnating because game changing measures have to be taken to overcome blocking barriers and bottlenecks that prevent sustainable growth. This means the diversification risks for HBC-Hospital are minimal but its specialization cost of opportunity is kept high.

The second scenario corresponds to choosing a game changing path. It may arguably be positive both for the parent company (by allowing its activity to reach its full potential and bring back more value for its shareholders) and for the HBU-Hygiene itself (by keeping a sustainable pace of growth due to reinforcing its image in the marked and its position, finding efficiencies in its day-to-day work to become structurally lighter with total focus on its core business and competencies). Eventually, this would provide a competitive advantage.

With a competitive advantage one must expect value added to the activity or what it can become: the company and its shareholders.

Following, we will attempt to anticipate what this game-changing model would be like.

5. Moving forward – the Corporate Spin off solution to face future challenges

Over the years, HBU-Hygiene activity grew consistently by promoting actively its portfolio to the market and by keeping a strong relationship with customers. From the organizational point of view, its position can be explained by this unit being able to fully explore all the resources made available by HBC-Hospital (namely dedicated sales team, warehousing, installations and all means necessary to work), by sharing also its culture and workflows and by being allowed to have a certain amount of independence.

In parallel, the HAIs market has also grown in size and concomitantly in exigencies. Different challenges emerge as regards overcoming new threats and seizing opportunities. For HBU-Hygiene the challenge of specialization is one of the most important. The more advanced portfolio solution the activity can propose - with dedicated specialist teams and with an efficient organization - the more recognized its activity will be as a major player in the market. The challenge of differentiation with a strong and powerful brand, consistent with the portfolio and with high standards of quality and capacity is critical to answer complex problems in this specific and demanding market. For HBC-Hospital itself, the challenge of diversification is clearly the most important. In this highly effective and mature company, this is both a challenge and an opportunity to scale this specific and specialized activity into a major player in the market replicating what HBC-Hospital did in its own market.

So, in one hand, this offer HBC-Hospital the opportunity to scale an interesting and specific activity unrelated to its core-business into a major player in the market. On the other hand HBU-Hygiene activity faces the challenge to consolidate the brand it represents but also its position in the market, emerging as a market leader.

The solution proposed is the creation of a Strategic Corporate Spin-off. The evolution of HBU-Hygiene activity into a Corporate Spin-off would be a strategic move to prepare for next challenges that the company face. A corporate spin-off of HBU-Hygiene activity would open a chain of possibilities to deal with some bottleneck pointed earlier in terms of Marketing, Finance, Operations, Regulatory and Management. Reaching a point where the activity faces some development issues that weakens its performance and its business, this strategic transformation would benefit both the created spin-off (that has more room to prepare its growth by embracing challenges that otherwise would be need to invest energy and money in overcoming the organizational momentum) as well as the parent company (that would foster the position of the new spin-off in its market freeing resources to focus on its core-business and competencies).

5.1 The Corporate spin-off equity structure

Many choices for the equity capital structure of the spin-off can be made, each with pros and cons: 100% capital belonging to parent company; a mixed structure of capitals from parent company and the spin-off management or a tripartite capital structure between parent company, management, and supplier. In each of these three stakeholders, in order to keep the rational of optimizing the diversification-specialization relation, the capital structure option parent company must keep its control, but each stakeholders can relate to different levels of risk and ambition.

While a spin-off with 100% capital owned by the parent company offers total control in all terms, the DNA and culture of a spin-off would be very close to its parent company. This option presents lesser risks from the managerial and control point of view but it also imply that the spin-off could end up facing the same bottlenecks that it had before thus facing the same limits to its full potential. The mixed structure of capital between parent company and the management could bring some interesting benefits as the management is also owner of the new company. The involvement of the manager as a co-owner is very different because its motivations and implication in the business would be total and for that the focus in results would be much more effective. This is particularly effective in overcoming problems previewed in the Agency Theory (Jensen, 1994) where managers may opt for strategies that favor their personal and professional gain but may compromise the organizational long-term interest. As co-owner, such rationale is no arguably applicable. The fact that the company abdicates from a part of its equity for the manager or managing team, is largely compensated by the fact that the risk is also shared with the manager or managing team. They both have to loose in the equation and therefore the effort, focus and dedication would be with higher probability more careful and assertive.

The value added by a tripartite capital equity structure between parent company, management and main supplier may bring extra security with regards to long-term relationship, immediate extra know-how and fast time-to-market possibilities. This more robust equity repartition would benefit from the co-owner management commitment to the business, the strong culture and financial stability of parent company and direct connection to the innovation possibilities of the supplier. In this equity structure, risk is compensated largely by the range of opportunities that the corporate spin-off can access, by the stability that it acquires from both parent company and supplier and the motivation and involvement from the management.

5.2 Vision, Mission and Strategic objectives

The new identity of the corporate spin-off can be concomitant with the definition of its vision, mission and strategic objectives. This statement would create the founding and the purpose of the business. <u>The vision</u> of this company would propose its aspiration as a company in the market where it is inserted and how it desires to be recognized or viewed by its customers. “We propose to be leading the protection of valuable health, industrial and community environments “.

<u>The mission</u> of the new firm would enhance its transversal challenges putting in evidence its purposes as a company and as a partner to its customers. “We promote high quality integral solutions to fight pathogens safely in respect for people and for the environment. Challenging the *status quo*, we provide answers and value proposals to make a difference in terms of Hygiene for our customers. Learning from them we find a safer place together to breath, work and eat healthier”.

Taking into consideration that the *raison-d´être* of the creation of a corporate spin-off is to clear the way by overcoming limiting barriers of being a non-core activity in a big and specialized corporation in order to keep the path of success and sustainable growth, the new firm should target ambitious and measurable strategic objectives aligned with the parent company motivation and the supplier support. For example, “We aim to duplicate our revenues in the next 5 year period of activity by reinforcing our position in healthcare and related market as well as entering new and challenging ones such as the food and beverage, the pharmaceutical and cosmetic production cleaning and disinfection processes, and veterinary. We target to be by 2021 a leading partner in different hygiene market segments as we promote innovative integral solutions to our customers offering them value both in terms of microorganism-free as well as saving resources in their daily activities.

5.3 Marketing, strategy, Business model

The corporate spin-off issued from HBU-Hygiene activity must be organized around its core business and competencies, which are the marketing and promotion of its portfolio, exploring the most of its current and potential market.

From the marketing perspective, the new company will search to be reference in the market of Hygiene, in the healthcare but also in new potential markets such as pharmaceutical, food and beverage, and veterinary. The DNA of the company must be the professional of hygiene global solutions. The strategy of expansion to new markets should be supported in the experience of the sales teams originated from the parent company and by a strong support from the supplier. By diversifying the company expertise on hygiene, new opportunities would emerge in healthcare and in these new markets.

Considering a spin-off with a capital tripartite structure, the possibility to be playing in different price scenarios becomes more realistic, and for that it may become more competitive. The same applies to an easier access to those markets, which is not so achievable when operating as a healthcare-DNA business activity.

All non-core support activities to the spin-off would be externalized as in Portuguese market solutions for outsourcing accounting, supply chain management and after-sales services are easy to find and highly competitive.

The company should increase its visibility and widen communication channels by exploring e.g. the internet and social media (Facebook, Twitter, Pinterest, Linkedin, Instagram) in order to be as easy as possible to get in touch with and to reach the highest number of leads and business opportunities. Likewise, the company should build its reputation on top of the parent company reputation assuming a brand that explicitly states its branching nature (e.g. BRAND – A HBC Group Company).

<table>
<tr><td rowspan="3">Key partners
Product portfolio supplier;
Supply chain, Finance and accounting and after-sales external providers</td><td>Key activities
Marketing and daily sales force promotion; in-time delivery; active promotion</td><td rowspan="2">Value proposition
Hygiene Global Solutions</td><td>Customer relationships
Direct and dedicated contact between sales force and customers.</td><td rowspan="2">Customer segments
Diversified customer segmentation:
Private and public hospitals.
Clinics and Healthcare complement services.
Pharmaceutical and cosmetics
Food and beverage</td></tr>
<tr><td>Key resources
Sales teams, Disinfectants brand and quality recognition.
Extend and complete portfolio</td><td>Channels
Direct channels with sales force and after sales direct support.
Direct selling or thru public tenders.
Internet website and social media</td></tr>
<tr><td colspan="2">Cost structure
Variable costs related to supply chain, account and after sales services.
Costs of sales force and products</td><td colspan="2">Revenues streams
Hygiene products and equipment sales issued from different segments</td></tr>
</table>

Table 3 – Osterwalder and Pigneur's (2010) Business Model Canvas

Key partners: The ideal partners of a new corporate spin-off should be the supplier of the company portfolio, the management, as well as the outsourced companies that will provide services of accounting, after-sales support and global logistics and supply chain. A tripartite partnership covers most issues pertaining unleashing value to the parent company, assuring the supplier anchoring, and aligning management goals with the short and long run goals of the parent company.

Key activities: Promoting actively and being noticed is central to the activity as the inception will need to leverage on creating more trust relations with the customers. While sales-force in the field would grant constant access and presence in different markets, on-line pro-active communication would reinforce notoriety.

Key resources: Departing from the well accept motto that the most important in the business are people, the spin-off should anchor on the sales teams, as they will be the voice, eyes and ears of the company. The strong and clear brand association to a complete portfolio will also create an image of stability and confidence to customers.

Cost structure: The cost partially comes from the sales force and operational assets as fixed cost and a much variable cost structure that includes inventory, supply chain management and after-sales services.

Value proposition: The extended and complete portfolio and the know-how from supplier open the scope of the company to promote a wider concept of Hygiene that can cover different markets with different solutions. It goes from the healthcare Hygiene to a global hygiene solution supplier.

Customer relationships: The contact with customers should be mostly anchored on top of already proven approaches in the parent company and innovative whenever there is indication from past experience of suboptimal results. In this case the contact should be direct as relationships are fundamental to this line of business within this country. The objective is to be considered a reference in the market of hygiene and the more contact with customers there is, the more trustful relations are to be build. It is especially important to reinforce the notion in current customers that the change was made into a proactive mindset expressing a strategy of improving product and service to the market and not as a phasing out of the business.

Channels: Different approaches must be made in parallel of private healthcare tenders such as direct sales in private healthcare customers and related services, and in new market as well. To fully realize the goal of extending the market on-line sales may be instrumental to reach smaller customers and new geographies, and a wide communication plan may offer the chance of promoting global solutions and be active in the problem of hygiene in different situation.

Customer segments: Healthcare and related services should be the base of operation while the new company endeavors to grow into new segments such as pharmaceutical and cosmetic manufacturers, food and beverage industries, and veterinaries.

Revenue streams: Revenues from the sales of portfolio hygiene products and equipment from different customer segments will be the source of income to the company.

5.4 Corporate spin-off internal organization

The environment where the corporate spin-off takes place and will operate has to be seen as a continuity and evolution of the business when it was an activity or business unit of the parent company. After the equity decision, major market oriented functions must be operating. The management team and the sales team previously existing should be assigned or invited to consider taking part in the corporate spin-off. This might not come easy as employees may ask why the current situation is not enough and if this is risky for them. Assigning employees to a spin-off must ensure motivation is not pinched by worries about employee professional future and resources. So, some assurance from the parent company and shareholders must be given to prevent such counter-motivation issues. Likewise it is necessary to explain and demonstrate why the spin-off is an opportunity to every stakeholder and how it will further benefit everybody from it. With a probable shared feeling of lost opportunities due to parent company regulations, priorities, and structure, it is quite probable that a spin-off will offer renewed positive insights about possibilities with current and potential customers.

The fact that the new company is market oriented stresses even more the criticality of the managerial and sales teams. All other support activity would be outsourced. As a starting-up company, the essential for the business should be assured and as far as the activity grows over the time, different key activities should be developed.

Operation	Description	Type of cost	People
Management	Runs the strategic planning and execution. Puts in place marketing actions and organizes the regulatory issues.	Constant	1
Salesforce	Customers visit and follow-up	Constant	2
After-sales support	For maintenance or equipment	Variable	Outsourced
Supply-chain	Global logistics and invoicing	Variable	Outsourced
IT maintenance	IT support for company	Variable	Outsourced
Accounting	For monthly follow up and interface with finance with parent company	Constant	Outsourced
External services	All sort of services needed to keep the company operating	Constant	Outsourced

Table 8 – Corporate spin-off internal organization and functions

The minimal internal organization is a priority as it may prevent from over costs and will contribute to the sustainability of the spin-off since its creation. Activities such as marketing and advertising would be for instance developed by the manager in the beginning, building on the parent company knowledge and networks. The manager of the spin-off would preferably be the manager of the activity before the spin-off with the condition of being motivated and totally identified with the project as well as having the necessary skills and autonomy to operate on self-driven motives. Being the most qualified person for the job and (having the possibility of belonging to the administration of the new firm depending of the capital equity structure) the manager has all the reasons to make the company work and assume in the beginning all what the company needs to be stabilized within the less time possible after the spin-off creation. The expectation in the first two years for the spin-off is in first place that the businesses is kept with no customer or productivity losses and additionally create stability to develop outside its core business and diversifying its portfolio.

Implementing outsourced activities such as the all after-sales service, accounting, IT and supply chain from the early beginning of the creation of the company would help immediately, once these activities are passed to outsourced partners, to focus on the company core competencies which are related to marketing and promotion of its Hygiene solutions. Bottlenecks related to account, operation, management and regulatory within HBU-Hygiene activity would be relatively easy overcome from the beginning of the spin-off creation as some of the decisions may be much easy and fast to decide, undertake and put in place. The same happens concerning overcoming some marketing limitations and brand management confusion. The corporate spin-off would also help to resolve issues related to brand management as the business identity would be very clear and undoubtedly related to its core business and highlighting the portfolio brand.

5.5 Critical success factors

Critical factor #1

The fact that the new firm has the knowledge and know-how acquired over the years by the teams that already worked in the parent company helps to overcome difficulties mostly related to the core competencies such as customer relationship, sales force organization and market access. This identifies one critical factor which is the transfer of people related to the core business of the spin-off. These persons are the heart of the business and probably they will be the principal factors to assure the success of the new firm in terms of sales and customer relationship.

Critical factor #2

The support from parent company in the first 2 years is determinant. A strong commitment will help the spin-off to overcome critical barriers that can appear in the creation and first steps of the new firms. The legal support for the creation and first challenges in the market is very important to confer stability to the firm and releasing management resources and time to focus on advancing with core strategic activities. A support in negotiating external services and raw materials, as well as in the implementation of outsourced solutions to the spin-off supply chain and accounting services is critical. This support should be more demanding in the first year of the new firm. The more the firm begins to work independently the more this support will fade and corporate spin-off will be able to sustain itself in the market.

Critical factor #3

The supplier of the product portfolio plays an important role especially if it takes part in the corporate spin-off equity. Critical areas demand an active position from the supplier because the brand represents in first place the central image of the new company.
Efforts related to price, brand and marketing in order to give more visibility to the brand and to get more customers will have to be made from the supplier. The more involved the supplier (owning or not part of the spin-off equity) in a daily basis with the new company, more understanding of the market it will have and more important and strategic solutions it will bring to the game.

Critical factor#4

The creation of a strategic corporate spin-off will face many difficulties an even possible failure if the business is not strong enough to stand on its own. If the purpose of the spin-off is indeed to develop a business unit independently from its parent company and exploring solutions to resolve difficulties that the business within the company has to fully explore its potential and to maximize its value, the strategy is right. Corporate Spin-off is a powerful strategy. But if the business within the parent company faces already systemic difficulties, the spin-off will be not more than a financial mechanism to clean this business costs into a new firm, improve parent company immediate results, clear its balance sheet and it will result as the bankruptcy of the new firm within one or two years.

5.6 Risks and mitigations

Numerous risks can be pointed out in the process of creating a corporate spin-off. They relate to different phases of the new firm: from its conception, its internal and external environment and its performance until it can be autonomous and sustainable. We try to enumerate some and present some possible ways to mitigate them.

Type of risk	Nature of risk	Mitigations or observations
Deal with a bi or tri-partite equity ownership	Equity	The risk associated to this type of equity structure is associated to the fact that the parent company by losing equity is also loosing part of its revenues or its investment. Although this tripartite equity structure is no mandatory, it can actually promote additional stability structure by relieve the force and pressure of the supplier in the performance of the corporate spin-off. To allow the participation of the supplier in the equity of the spin-off has to be seen as a strategic and investment option rather than a simple loss of asset.
Volatile earnings	Finance	This problem is related to the activity in general whether it remains an activity or business unit of the parent company or it becomes a corporate spin-off. Believing in the positive outcomes of the creation of the new firm, this risk will be less important after the creation of the Spin-off.
Greater administrative costs	Strategic	These are not to be seen necessary as costs but instead as part of the investment in the new spin-off. A good planning of the process will identify all administrative costs associated to the creation of the spin-off.
Changes in the market demand	Market	Again all external changes are not directly under control of the company. The fact that the corporate spin-off can be more adapted to the market compared with an activity within the parent company gives also the ability to better anticipate and adapt to these changes.
Irreversibility of the process	Strategic	The decision to move towards a corporate spin-off has to be evaluated from different perspectives. Namely if this is the best strategy to the parent company, based on its resources, and the possibility to maximize value to the stockholders.
Spin-off can be bought like any other company	Finance	The fact that the new firm can be bought (or sold) like any other company can be seen both as a risk but also as an opportunity. Having a well established firm with its own financial reports and is own market value that will easily follow its performance over the years makes the spin-off more transparent and easy to deal in a moment of sell/buy of the spin-off.

Unseparated Management	Manage-ment	The result of this situation is that the corporate spin-off might not benefit by keeping the same culture of the parent company as it is seen that if the new firm needs a different identity and culture in order to grow as a firm and as a business, this issue has to be resolved by passing independent management the Corporate Spin-off.
Low separation process	Operatio-nal	This is important issue as the more time the parent company takes to put in place the corporate spin-off, the more can be the negative impact on its image. Prior to the announcement or to a official communication on the go for the creation of the new company, all tasks have to be planned and scheduled with the ok and necessary validation from involved sectors of the corporation.
Difficulties transferring human resources into the spin-off	Operatio-nal	Choosing appropriate people to be part of the corporate spin-off have to be carefully planned in order to keep the teams that will be transferred very motivated in the project. As soon as this issue is clear to the company and to people involved, less problems it will bring in the future for both organizations. Dealing also with people that do not want to move can be critical because the parent company have to replace unwilling persons to "join the adventure" by new people even if it have to go to the market to find the right person to fill the gap.
Loss of synergies	Organi-zational	This is a risk and also a possible consequence of the process. The synergies between the parent company and its new firm will tend to vanish as the corporate spin-off becomes more independent in terms of its own working habits and its own culture becomes its DNA as key advantage for the new firm. Big corporation usually can mitigate that risk thru their mechanisms of identify within the group and its different subsidiaries best practices in order to replicate when it is possible in other contexts or subsidiaries.
Possible competitor	Strategic	This possibility is more likely to occur if the nature of the corporate spin-off is related the core-business or competencies of the parent company. In the case of the division and spin-off of a non-related business, this wouldn't be so obvious, unless parent company chooses to lunch another similar activity, for example with different key partners and suppliers. Either way, it has to be seen as a normal situation resulting from the normal market functioning.

Table 9 – Risk analysis and mitigation

6. Key advantages and drawbacks from the new spin off corporation

The creation of a corporate spin-off transforming the internal HBU-Hygiene activity in fully new independent corporation has many positive aspects and advantages and some drawbacks. The common objective in this strategic decision is to find the best way to create value for the corporation and its shareholders. Operating independently of the parent company's structure enables the corporate spin-off to become a <u>more flexible</u> organization itself. Adjusted teams, establish closer relationships between people, design easier and simpler processes to turn the company more efficient and with higher productivity rates. This strategy allows the new company to <u>reduce time to market</u> needed for new product and services, which is critical to keep an active process of bringing constant innovation into the market to stand ahead as a first-mover rather than a follower. A <u>stronger commitment</u> and <u>business focus</u> are also positive outcomes of this strategy that result in exploring the full potential of the new firm with a strong culture, clear image, mission and positioning in the market that translates in higher results and <u>reinforced market value recognition</u>. The separation from parent company also enhances the sense of independence which allows to better <u>assess its real value</u> in the market as volatile earnings occur separated from the parent company helping to capture new investments, in case of success or otherwise in divestment.

While many of these potential benefits of a corporate spin-off can be seen, other significant costs must be evaluated. Important impacts to both the parent company and the spin-off will plausibly occur, such as new administrative costs, financial reporting, hard negotiations, communication and corporate governance changes have to be expected and prepared in corporate equity separation. Some synergies may be lost as a consequence of the separation with repercussions in human resources, accounting and information systems. Most of these have more impact in the new firm rather than in the parent company, which will not feel some of impacts as their synergies will be kept.

Between these advantages and drawbacks the preparation of a spin-off is seen as a greater good for the sake of both parent and its new firm as both may concentrate more in their core business and competencies maximizing their potential and value.

7. Conclusions and limitations

The internal organization of the company based in its core business forecloses potentiating sustainable and independent new business, and restraints diversification. For that reason, dynamics that support innovations are always imperative (Wojcik, 2015). In this context corporate entrepreneurship is surely an added value in organizations. An entrepreneur mentality fosters innovation which is a pillar and an actual objective that can promote differentiation within firms in their business, becoming more competitive (Javalgi & Cavusgil, 2014).

Despite the good performance of the corporation presented in this study, the shared use of assets, the shared services the corporate spin-off solution of its HBU-Hygiene activity would bring more value for the parent company and to the corporate spin-off itself. Besides the independence, the possibility to create its own culture, the spin-off can promote in a sustainable way its own core-business profiting business opportunities that can even bring new deals that, has an internal activity of a big and bureaucratized structure would be much more difficult.

From previous evidence pointed in the literature review on different corporate strategies to business organization in order to find answers about the conceptual paradox between the need corporation face to diversify their portfolio keeping at the same time highly specialized businesses, we have tried to understand different strategies corporate have at their disposition to maximally satisfy both needs of diversification and specialization.

One clear idea is that corporate entrepreneurship foments innovation, and innovation is a key factor in modern organizations to create value and bring to the market competitive advantages and consequent growth. Following this process and in order to develop and scale innovation within the corporation three strategies have been analysed to understand what of those can bring more value to meet our purpose: <u>Mergers and Acquisition</u> are a strategy very popular in large and diversified firms used to enter in a new market or business by buying or merging with other firms that operates within this specific market or business. Although the popularity of this strategy and the ability to diversify the portfolio, corporation face a high rate of failure; <u>Strategic Business Unit</u> organization reflects the value of organizing the business into strategic units. This internal organization helps each unit to focus on its markets, portfolio and objectives working well both in related and non-related to the corporation core-business. Part of the success of this strategy is liked to its degree of independence to the organization and ultimately, SBUs turn into spin-offs or other forms of equity separation from the parent company; and strategic corporate spin-off; From a corporate entrepreneurship point of view, we try to demonstrate that the Strategic Corporate Spin-off is a valid and powerful growth strategy that when planned and implemented right can bring a strong competitive advantage for both the parent company and the new firm created, if not the most powerful of the tree approached in this thesis. By analyzing a highly specialized business non-related to the core-business of a big corporation we intent to fit the strategy of creating a Corporate Spin-off in order to bring solutions to some limitation that the business had, adapting some features learned from the literature review exploring how this strategy could work in this specific case and how it would also succeed under a certain number of predictors, processes and undertaking.

The Corporate Spin-off becomes a strategic solution in order to maximize the potential of a business if in its genesis the business that is under scrutiny is strong enough to stand on its own. This marks an important difference and will determine whether it is a valid strategic choice or a financial maneuver to clean parent company balance sheet. The coverage of the creation of a strategic spin-off has to consider a deep analysis to external and internal environment of the business in order to determine the potential of the market and the business, the advantages and drawbacks of the business and how and what the spin-off will improve the business. A financial analysis with an historical overview of the business unit or the activity and an outlook for the future as a corporate spin-off is fundamental to understand past, present and future of the business. The structure of equity of the spin-off has to be studied in the financial and strategic views, as in this particular case we could understand that a bi or tri partite structure might also be positive to the stability and empowerment of the structure. The human resources movement and managerial aspects of the spin-off has to be also considered. In the case presented, a previous analysis for the outsourcing activities such as the supply chain and accounting has to be considered also to ensure its operational and financial impacts. A risk analysis is also welcomed as it will help to anticipate some risks of the project and how to mitigate them. The process has to be monitored during its implementation. In the case analyzed in this paper, we considered two fiscal years which we considered appropriate to assure the stability of the new firm, its total independence from its parent company and its alignment to the purpose it has been created for. which are the maximization of value to the firm, the parent company, its shareholders and critical stakeholders (namely B2B customers).

To sum up, as non-core business activity develops, there is a moment when the parent company structure hinders its further development and creates a ceiling effect. This is mostly due to the differentiation-specialization dilemma that favors either one or the other with considerable costs of opportunity. If indeed suboptimal business is unacceptable, and if we are to turn such dilemma into a paradox (where both options are equally valid) then a corporate spin-off may answer the need. This “may” implies that boundary conditions apply and thus, it is necessary to meet a set of conditions to improve chances of success. This set of conditions compose a model which, albeit exploratory in nature, may offer some guidelines for future consideration.

According to our case study, the main guidelines for the corporate spin-off model should be: a) Demonstrating economic and financial viability of the potential new HBU, b) having a clear and strong support from the parent company decision makers, c) assuring the commitment of unit management and sales team to the success of the spin-off, d) assuring the strategic alignment with parent company, but independence of decision making and cultural differentiation, d) Reinforce the corporate image as a new stronger player in the market and extend portfolio to cover new market segments; e) Establishing a deadline to judge on viability as well as goal setting.

This guidelines, at the tactical and operational levels may translate into:

Building a business case for the spin-off against alternatives and find reasonable indication of added value.

Counting on firm decision making and explicit patronage of the spin-off by the parent company so to create a shared meaning and a positive attitude towards it. Prevent any negative connotation such as “clearing balance sheet” or “disinvesting”.

Committing the HBU management by opening equity, basically replicating large professional companies that grade up top management turning them into partners. Persuading the sales force of additional advantages and removing fears from failure (build a safe net for former employees joining the project).

Articulate goals, approaches and commercial moves to cross-sell and avoid incompatible moves in the market between parent and HBU. Create a communication platform where both company decision makers can efficiently align priorities with a reasonable degree of independence.

Favor a renewal of corporate culture in the HBU with lighter control processes, breaking old habits and target a market-driven, innovation-driven attitude in employees. Pass this culture to the stakeholders, especially customers, by means of renewed front-office and management behavior.

Consider the spin-off as a timed project where maturity must be achieved within two years, maximum, so to judge on its cost effectiveness. Create an attitude of "easy discard" in case of failure.

In consideration to some results of the analysis in particular for the determination of the creation of the spin-off, we are aware of some limits that we faced. The first limit was the impossibility to perform a financial analysis to historic and outlook figures due to confidentiality constraints. The importance of this analysis reinforced in the conclusion of this paper would have shown important impacts expected in terms of revenues and financial performance of the corporate spin-off and the importance to determine its market value.

Another limit is the comparison between a corporate spin-off and other equity separation processes such as Equity Carve-Outs, when a portion of the created company is offered for sale to the general public in order to inject money to the parent company without the loss of control or Tracking Stocks which is a more financial option consisting in issuing common stock of the firm but linked to the performance of the new firm. This comparison would have showed if there is a real alternative to the corporate spin-off although both those strategies are more focus on financial aspects rather than business orientation purposes.

Several questions related to the creation of corporate spin-offs were raised in this analysis and would need to be more researched on theoretical empirical and analytical levels. The first is to understand what is the involvement of the corporate entrepreneurs in the process of creation of the spin-off and what is the impact of their involvement.

Another important question is to know the rate of success or failure of a corporate spin-off in the EU and to understand what are the main reasons for failure of this strategy.

Despite limitations, we believe the case under analysis provided some insights on some conditions required to build up a model of proactive corporate spin-offs and thus help solving the differentiation-specialization conundrum.

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