INNOVATION CAPABILITIES IN SERVICES: A MULTI-CASES APPROACH

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ABSTRACT

Through many years, services was perceived as non-innovative and complementary activities, oriented mainly to produce goods. However, the association between technological advances, the rise of consumer participation in service operations and the emergency of information and communication technology systems (ICT) have allowed a proliferation of intermediate activities in the productive sector along a change in the economic perspective about services. In addition, it is perceived the increased importance of innovation as a source of competitiveness and a way to firms survive through time, which makes the comprehension of the innovation process crucial in order to explain the service economy dynamics. Despite this, innovation in services – including the analysis of firm capabilities – still is a poorly explored subject. Considering the importance of services and innovation for the modern economy and the peculiarities that differentiates services from tangible goods, the present study aims to better understand how innovation takes place on services based on the capabilities approach. This was done based on the related literature, identifying gaps in the capabilities model and seeking new conceptual insights in the field. Results show that the traditional capabilities framework is limited to explain service's innovation, as there is many levels of intangibility and non-linearity in services' offerings. An altered model is suggested based on field's discoveries, and a set of propositions is made for future research.

INTRODUCTION

Through many years the world economy has been linked to goods manufacturing. The very definition of "product" was, for long time, associated with tangible things because past approaches considered services as incapable, by their nature, to create economic value. This perspective still is widely accepted (Kon, 2004), but changes in technological and organizational context have expanded the concept of productive labor and service activities. Once considered as unproductive, services now are seen like having marketable products with measurable value, since changes in technology and use of microelectronics have altered the structure of world business. The transportability of services was enhanced with the increase of

storability and information transmission, leading to a restructuring of the service sector, which brings into question the traditional separation of economic activity as a means of analysis (Miozzo, Soete, 2001).

The association between technological advances, the increase of consumers participation in service operations (self-service) and the rising of information and communication technology (ICT) systems allowed a proliferation of intermediate activities in the productive sector (Miozzo, Soete, 2001; Kon, 2004) along with a change in the economic perspective about the economic importance of services. According to Silva, Kubota, Gottschalk and Moreira (2006), the market growth generates opportunities to labor division and to exploit scale and scope economies with activities that once were performed by manufacturers themselves and now are outsourced and turned into production inputs. In this way, the emergence of so-called "service economy" can be seen as a natural consequence of economic progress.

As evidence of the importance of services to the economy, it's presented the Brazilian case, where the relevance of services activities has grown in recent years, presenting a significant participation in the composition of GDP - Gross Domestic Product (Meirelles, 2006; MDIC, 2014). According to the Brazilian Institute of Geography and Statistics (IBGE) study, the rate of value added by services in GDP increased from 64.7% to 69.4% between 2003 and 2013. In addition, by being human labor intensive - an input characterized by its limitations for increasing productivity, which difficult continuous gains (Silva et. al., 2006) - there is also a solid growth of the participation of services in generating formal jobs. According to the General Register of Employed and Unemployed and Employment of the Brazilian Department of Labor, services were responsible for 76% of the formal jobs created in 2013, encouraging the reduction of informality (MDIC, 2014).

The services sector importance has influenced the academy to study phenomena that occur in this firms' ambience. Therefore, understanding the service economy dynamics and comprehending the innovation process on services becomes crucial, as well as the study of capabilities that leads to innovation. Despite this, innovation in services still is an unexplored subject, and there is a strong tendency to transpose the accumulated knowledge about industry directly to services, without considering its specificities (Vargas, 2006).

Considering the importance of services and innovation for the modern economy and the peculiarities that differentiates services from tangible goods, the present paper aims to better understand how innovation takes place on services based on the capabilities approach. This will be done based on the related literature, identifying gaps in the capabilities model and seeking new conceptual insights in the field. Is expected that the field research can provide evidence that can help the comprehension of a still unexplored theme.

This paper is organized in six sessions, including introduction. The second session presents the main concepts about services, capabilities and innovation on services. The third session describes the methodology used to develop this research. The fourth session presents the results and analysis of this research. Finally, research conclusion and its references are presented.

SERVICES

The economic concepts of productivity and value creation, mostly related to the efficiency and utility generation were originated with economists such as Adam Smith, David Ricardo, Alfred Marshall and Thomas Maltus (Kon, 2004). This perception considers that only industrial activities can generate value, restricting services to non-innovative and complementary activities for producing goods (Meirelles, 2006, Silva, et al., 2006; Morrar, 2014). When offered directly to consumers they were considered as unproductive; they were perceived productive only when designated to goods development (Meirelles, 2006). The traditional perspective also considers services unmarketable because they provide intangible and non-storable products, demanding a continuous involvement between supplier and consumer during the development process and requiring an simultaneity in production/provision and consumption – due to the difficulty of these occur at different times and places (Miozzo, Soete, 2001).

Over time, however, gradual changes on economic and technological dynamics have driven to a new perspective about services, now seen as activities that links different sectors of economy with diverse combinations of inputs (labor, material, information) in order to produce tangible and intangible products (Kon, 2004). Besides, crucial for the expansion of business activities, services has a strong influence on the productive performance of industry since “services are complementary and relevant to the consumer, the latter being the primary goal of production, and therefore essential for productive activity" (Silva et al., 2006, p. 8).

Due the fact that many of the economic laws are not applicable to services, the distinction between goods and services is not always clear, resulting in a lack of consensus among researchers (Kon, 2004). While goods are a result of labor in process (accumulated labor), services are the labor itself - autonomous economic activities. Services can be performed through human or mechanical work (machines and equipment), so the results can be both tangible and intangible (Meirelles, 2006). Considering this, the concept of services in this research will not be based on the differences of services regarding goods, but on their degree of integration, once is contestable the premise of equivalence or substitutability to meet customer's needs (Vargas, 2006). According to Suciu (2013), the most cited difference among them is related to intangibility, but Hill (1999) questions the association between services and this characteristic, once technological changes and the advent of ICT had changed the nature of services, reducing its intangibility, simultaneity, and rising its storability (Miozzo, Soete 2001; Kon, 2004; Meirelles, 2006). There is now a possibility to storage services on physical medias (paper, hard disks), that are able to be reproduced and transported through physical and electronic ways. Services generate tangible changes on the condition of physical objects (eg. maintenance) or people (eg. haircut), so the association of intangibility with services, "not only obscures the real nature and economic significance of intangibles but also causes confusion about the true characteristics of services" (Hill, 1999, p. 426).

A tangible product can be defined as "a physical object which is appropriable and, therefore, transferable between economic units" (Hill, 1977, p. 317), and an intangible one as "a change in the condition of a person or of a good belonging to some economic unit" (Hill, 1977, p. 318),

been a result of human activity (Say, 1983). Given this, we propose to make a differentiation according to the products' tangibility, as presented on Table 1:

Table 1: Characteristics according to products' tangibility

INTANGIBLE PRODUCTS	TANGIBLE PRODUCTS	RELATED TO
The provision and consumption of intangible products occurs at the same time and location, being impossible to transport and store these products.	Tangible product production, transportation, storage and consumption can occur at different times and locations.	Perishability
Intensive on human labor and information (knowledge exchange).	Intensive on mechanical work (machines and equipment) and physical inputs to production of products.	Operational inputs
Due its immateriality, is not possible to transfer the ownership from supplier to customer.	During the tangible products transaction is possible to transfer the ownership from supplier to customer.	Ownership right
High interaction between provider and client during the development process, because there is an inseparability among provision and consumption	Little interaction between supplier and client during the production process, because it may be manufactured and consumed separately.	Interconnection with the client during the production and development
The combination of immateriality and direct involvement of customer on development process causes high variability of outputs, once products can differ from client to client.	The possibility of manufacture of material products, without clients involvement, results on uniform outputs.	Possibility to achieve a uniform output

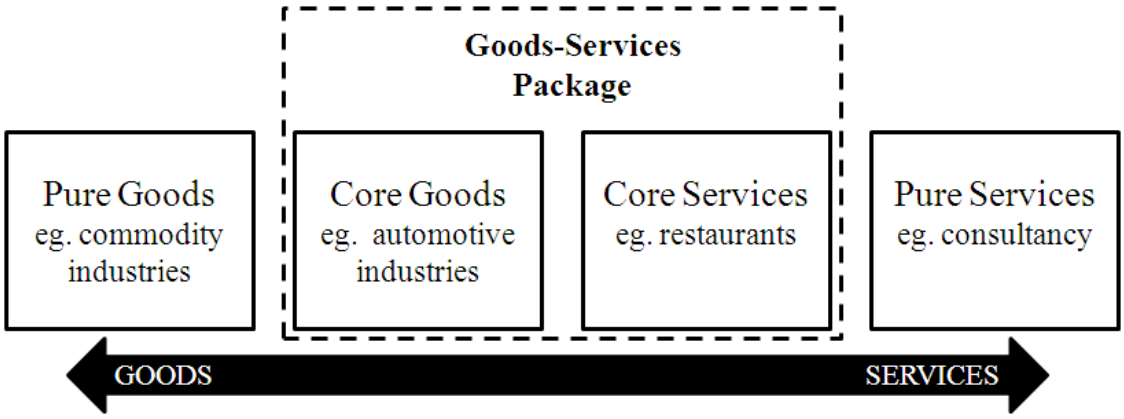
Source: adapted from Hill (1999), Meirelles (2006), Say (1983), Kon (2004); Suciu (2013)

The diversity of concepts and possibilities of combining goods and services leads to a wide variety of classifications. Among these, exists those who classify services according to its function and location on supply chain (Kon, 2004); according to the volume of clients and level of product customization (Silvestro, Fitzgerald, Jonston, Voss, 1992) and relating to its association with goods and relationship with the market (Tinoco, Ribeiro, 2007).

The boundary of tangibility between goods and services is becoming increasingly blurred, with a trend of "tangibilization" of services and "servitization" of goods. While the first one relates to the storage, replication and transport of certain kinds of services; the second one refers to the growing importance of services in the industry. This is a change in business perspective, from the supply of "pure goods" to the offering of "goods-services" packages, where the product is a part of the total supply (Almeida, Miguel, Silva, 2011).

In this way, Johnson and Gustafsson (2003) proposed four generic categories of classification, disposed in a continuum where goods and services can be classified according to the combined solutions package offered to customers (Vargas, 2006), as presented on Figure 1.

Figure 1: The goods-to-services continuum



Source: adapted from Johnson and Gustafsson (2003)

The first category, "pure goods", includes industries that produce and offer tangible products without a direct relationship with customers. The second category, "core goods", includes firms with a tangible products portfolio that offers complementary services. The "core services" category presents firms that complement your main service portfolio by offering complementary goods. Finally, the "pure services" category embraces those firms that develop intangible products through direct interaction with its customers. Based on this continuum is possible to argue that there are many combinations of goods plus services, resulting in many ways of offering services in the market.

Parting from the previous discussion, the next session presents the relation between services, innovation and capabilities, trying to address how capabilities can led to innovation in services.

Innovation in Services

Schumpeter (1997) defines innovation as new input combinations that convert to new goods; a new production arrangement; the uncovering of a new market; finding another source of raw materials; or a new way of organizing an industry that would generate extraordinary profits. Following this approach, Zawislak (1995) states that innovation can be understood by any change, which comprises combining resources and knowledge in order to generate new products, markets, processes, organizational forms within other possibilities, which results in delivering customer value through a problem solution.

An innovation is only complete, in Schumpeter´s (1997) perspective, when the invention reaches a business transaction that generates wealth. The author further states that technological innovation creates a disruption in the economic system, eliminating the steady state, creating new productive patterns and leading companies to differentiation.

Most studies that focus on innovation as object of analysis still has a vision mostly facing the industry in delivering an innovative product to market. Even the studies that had focused on innovation in the service sector, until mid-1990, were based on the use of concepts and methods

of innovations verified in industry. In addition, the research in this field was restricted on following diffusion processes of technologies in services (Barras, 1986). Given limitations in this approach of services innovation, efforts are being made in recent years to establish a theory of innovation in services, or to verify convergences that make possible to develop a perspective that encompasses both goods and services, safeguarding their specificities (Vargas, Bohrer, Ferreira; Moreira, 2013).

According to Gallouj and Weinstein (1997), the analysis of innovation in services is a difficult process because the basic theory of innovation was developed from the study of technological innovations in manufacturing activities. Considering the specific characteristics of services, it is difficult to measure and detect innovative changes in them.

The innovation process in the service sector have characteristics that distinguish it from others. Sundbo and Gallouj (1998) formulated a synthesis of the characteristics inherent in the management of innovation in service companies. The first feature detected is flexibility, because it identifies the absence of structures dedicated to innovation, such as departments of Research and Development (R & D), with the innovation activity generally in charge of a marketing department or ad hoc project teams. According to these authors, it is the informal development of a set of people and activities that drives innovation. The second feature is the need for staff skills. Regardless the branch of service, when purchasing a service the costumer expects the best service possible. Therefore, the worker qualification becomes an important element, as well the development of learning mechanisms by the organization. The third and final striking feature is the involvement of external stakeholders, especially customers and suppliers. Although the tendency to perceive that innovation in services is becoming more systematic, integrating the organization's strategy, it is still fairly administered in a contingent way.

Sundbo and Gallouj (1998) shows that innovations in services can occur in four ways: product innovation, process innovation, organizational or managerial innovations and market innovations. The product innovation relates to the provision of a new service, such as a new line of credit on a bank. Process innovation is related to the change in the way the customer is served, service delivery or procedures for the preparation of the service. In turn, organizational or managerial innovations relate to the introduction of new techniques of planning, process management, indicators adoption, among others. Finally, market innovations are in the action of identify new markets, market niches in which it operates, and also changing the organization behavior in the market in which it already operates.

Bohrer (2010) defines that the process of service innovation is stimulated by troubleshooting. In the past, competitive advantage were linked to economies of scale, and minimizing costs and price. Today innovation emerges as a way to develop services that competitive meets demands and the constantly evolving market with increasingly diverse needs.

According to Bohrer (2010, p. 52), "Due to the service relationship that approximate the relationships between actors, innovations in the service sector [...] are closely related to the knowledge and competence of the actors involved in [...] provision and consumption". Sundbo and Gallouj (2000) states that the process of service innovation is defined by external and internal forces. Among the external forces are the trajectory (institutional, technological, professional service, or social) and the actors (companies, people, institutions consumers,

competitors, suppliers, and others). In the domestic sector are the management and strategy of the company, the professionals and the department of innovation and R&D. These forces will influence the direction and success of the business, according to the firm conducting business.

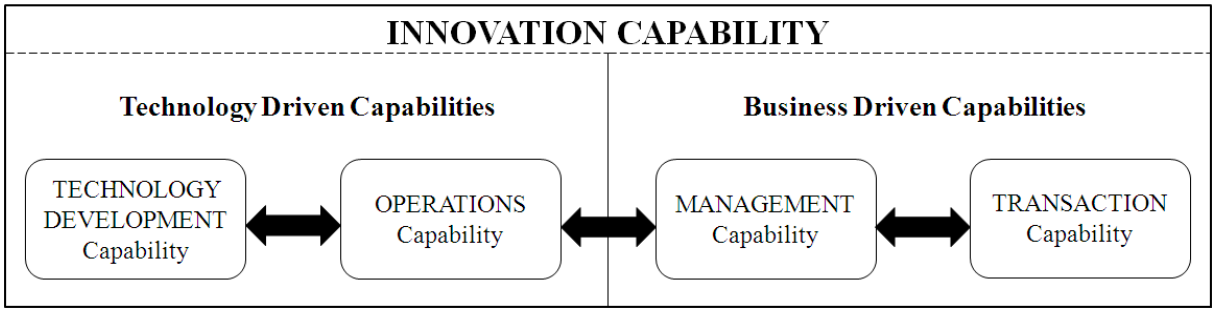
Innovation capabilities on service firms

Among history, studies about firm capabilities have been built inside an industrial logic, as a result of the limited attention given to services. Based on the existing theoretical construction, one of this study goals is to verify the existence of limitations between the concepts associated with capabilities in industrial firms and capabilities in service firms.

In this paper the firm is conceptualized by unifying two different, but complimentary, perspectives: transaction costs economics and Schumpeterian entrepreneurship. The first argues that a firm is an agent who internalizes and coordinates transactions inside an "organization" in a way that its cost are minimized if compared to the same transactions in the open market, operating within an governance structure (Coase, 1937; Williamson, 1991). The second highlights the entrepreneur as the central figure seeking changes and innovation in order to keep operating in the market through the use and development of multiple resource types (Shumpeter, 1942; Dosi, 1988; Nelson; Winter, 1982). Combining these two traditions it's possible to define the firm as having both coordinator and entrepreneur functions, as Zawislak, Alves, Tello-Gamarra, Barbieux and Reichert (2012, p. 15-16) puts it: "the firm is the technological-economic agent that produces goods and services and transacts in the market by operating within a cost-minimizing organizational structure that should change over time by both internal and external forces", or "an economic agent that promotes technological change and innovation in order not only to reduce costs (efficiency), but to increase revenues by making it more efficient than the market".

Ultimately, the firm will prevail if succeeds to fill a market gap over time. To do this it has to develop a specific knowledge or technology, operationalize it, organize it with a managerial corpus and engage in successful market transactions. Thus, the traditional industrial logic considers that every firm has four different complementary capabilities: (1) technology development, (2) operations, (3) management, and (4) transaction. The technology capability is the ability of interpret, absorb and transform a given technology to improve other capabilities in order to reach higher levels of technical-economic efficiency; it's responsible to develop the knowledge necessary to produce firms products. Operations capability is the ability to perform the productive capacity through a set of daily routines (based on knowledge, skills and technical systems); i.e., it's responsible for convert the knowledge in a set of practical procedures to transform technology in products. The management capability is the ability to integrate and coordinate the firm's resources, transforming it into coherent operations and transactions arrangements. Finally, the transaction capability is the ability to reduce sales, communication and related activities costs (Zawislak, et. al., 2012). The integration between these capabilities builds the innovation capability, that can be understood as "both the technological learning process from the firm translated into the technology development and operations capabilities, as well as the managerial and transactional routines represented by the management and transaction capabilities" (Zawislak et. al., 2012, p. 17). This innovation capabilities framework is presented in Figure 2.

Figure 2: Innovation capabilities framework



Source: adapted from Zawislak et al. (2012)

According to this logic, innovation can occur in any of these four capabilities: the firm can develop new technology, new ways of producing, innovative forms of management, and unexplored ways of transacting. Differential performance results from the success to innovate in any of these capabilities over time, enjoying the so called Schumpeterian profits. In a different but complementary way, Teece, Pisano and Shuen (1997) argues that what makes firm successful is their dynamic capabilities, i.e. the abilities to achieve new forms of competitive advantage in a changing business environment. As the authors puts, "the term 'capabilities' emphasizes the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizations skills, resources and functional competences to match the requirements of a changing environment" (Teece et al., 1997, p. 516). It is possible to connect the two approaches, as innovation can occur in any of the four capabilities resulting from new forms of competitive advantage created by firm's strategic management. The previously cited four capabilities can also be distinguished in services companies, but considering that the model shown in Figure 2 was developed inside the industrial linear logic - that almost mirrors the production floor, or the chain of activities internalized by the firm - the direct transposition of models would incur in ignoring the specificity that services holds.

Services characteristics affect the way to develop the knowledge necessary to services production/development, since the clients are directly involved in the process. The client's active participation changes their perception about product's quality, since it's evaluated throughout the development process and not only when finalized. Likewise, the simultaneity between supply and consumption affects both the operation as the supply of services to the market, difficulting the establishment of routines for "mass production". In this sense, Bressant and Nicolaidis (1988, *apud* Vargas, 2006) argue that network organization is the ideal form of organization of services operation, since the simultaneity allows broaden the range of intersectoral relationships and extend customer relationships beyond the trade moment. The services management process is also differentiated, once the processes of development, operation and transaction occurs simultaneously, suffering continuous adjustments from the beginning to the end.

Partying from this perspective, we argue that more intellectual exploration is needed to address innovation in services. That is because the capabilities framework was made in an industrial logic and may have limited explanation power. In the next section, the research procedures used for exploring the relation of capabilities and service's innovation are described.

RESEARCH PROCEDURES

This study is a qualitative exploratory research. Such method is suitable for this research objective because there is a lack of evidence about innovation in a service context. There is substantial amount of conceptual development in innovation but they are, in majority, focused on the industrial sector. Due this theoretical lack, a multi case approach was chosen to further assess the way firm's capabilities combine to create services' innovation.

This research technique seeks to understand a phenomenon that is little explored and occurs in a not controlled ambience. In this kind of study, empirical evidence is collected by observing the reality and/or interviewing subjects that are directly related to the phenomenon in question (Yin, 2003).

The research instrument used was a semi-structured questionnaire acquired from Zawislak, Tello-Gamarra, Alves, Barbieux and Reichert (2014) - presented in appendix - in which authors analyses the characteristics of innovative firms in the Brazilian industrial context, parting from the capabilities framework. A semi-structured questionnaire is a good choice because allows more flexibility for the researcher, as new questions can emerge and be explored in the field.

The field of study was the fitness services market. Specifically, we investigated gyms with diverse offerings and different customer profiles in order to capture significant empirical variability. Five cases were analyzed: four gyms and one personal trainer.

Data collection had three stages: first, data about the company was searched in secondary sources (firm's website); second, semi-structure interviews were conducted from May to August of 2014 with one firm's manager; third, while visiting each firm local data were collected. Confidentiality was maintained by using pseudonyms: the industrial gym, the diversified gym; the family gym; the neighborhood gym, the personal trainer.

RESULTS

The Industrial Gym

The industrial gym started in 2009 as a new business unit of an already established fitness chain and was created to fulfill a market gap detected in Brazilian market. Since then, it opened more than 100 units in three countries. It main activity is to provide high quality fitness equipment and instructor's supervision on an affordable way.

Management is more flat than a traditional business. Knowledge is shared between units, although there is a global director board. They like to think that they have a unique way of managing when compared to other gyms.

The manager interviewed argued that this gym does not have direct competitors. That's because other gyms, in general, add many services that raise the cost of membership. The company's main objective is to provide training on a large scale, and that is related to the low pricing policy which is decided not in the units but for the whole chain. The idea is to be "close to the people", offering a place near everybody's home to exercise with quality and low cost. Therefore, this gym's objective was to revolutionize the market: to offer large scale low cost fitness service.

Employees have some targets in terms of service quality, but not in sales. The focus is to welcome customers and do administrative tasks. Technology is in important for purposes of facilitating the customer service: it is possible to subscribe and pay on the internet or on self-service totems. There is virtual classes that clients can attend, and modern padronized fitness equipment.

Innovation is a concern in the company. The cost-benefit model was the first in Brazil, and a consequence of the expansion plans of the original franchise. This model was an innovation for the company and for the Brazilian market. The manager stated that innovation is a constant theme in the company's strategic plans.

An interesting statement was that, imagining firm's capabilities, the four of them are equally important: "it's a flat model; the four are side by side". This opens way for new insights into the capabilities framework.

Yet the gym's fitness service still has some intangibility, the way this company operates is more close to an industrial business than a pure service one - this is why we call this case as the "industrial gym". There is a high degree of padronization in the gym's processes, and there is no customized customer experience besides training prescription. The value creation is centered on a low cost high scale perspective. If the service itself may not be the best, by the customer perspective, it has high capillarity in the market, with plans for further expansion.

The Diversified Gym

This gym was established in 2010 but the brand exists in Brazil for more than 30 years. The gym is part of a larger group that has a corporate board. It is mandatory to the gym's existence to have a local shareholder, who is the manager and will be in charge of giving an identity to the business. The board's objective is to develop the chain's strategic management, focusing on innovations, equipment, techniques, and modern solutions.

Each team evaluate if the new acquisition or technique will be valued by its customers. The management's concerned with "what the customer want, what the gym's public is searching for", seeking a gym's own personality with its clients.

Customer's profile is different from the traditional urban citizen. The neighborhood has a unique energy due to a lake that exist in the area. Therefore, the gym's radius encompass people that more inclined to activities in open air than in closed spaces. That is why management has to be careful to design activities that will be compatible with this lifestyle.

Gym's board want to be ahead in terms of technology. They developed a software that helps trainers to design personalized activities to its clients. This software has many features, for example, it blocks certain types of exercises if an injury is reported. The objective is to provide a personalized experience and show that the gym is caring about its customer's health.

The fitness room has up to seven instructors working at the same time. The trainers try to know the customer by name, creating a closer bond and avoiding a feeling of "I am just another one".

Besides the fitness room, the gym offers more than 140 diversified activities sessions monthly - dancing classes, martial arts, sports, gymnastics for kids to elderly. That is because they aim to provide an array of activities related to welfare, not just the traditional weight lifting exercise.

The gym has a specific way of stimulating innovation in the business: it rewards employees who create a new technique, process, activities and so on. The innovator employee than competes with other innovators from different units for an annual reward. There is an annual meeting for discussing innovation in the whole chain as well, with management and instructors.

The intangibility is present in the gym's relationship with its customers, concerned with compatibilizing its activities with client's lifestyle. Innovation can occur in any of business's capabilities, as the manager stated. But this gym has some industrial traces, as it offers many kinds of activities in the same way factories offer many lines of goods. We called this case the "diversified gym" to highlight gym's characteristic of mixing pure services with services that reminds industrial diversification.

The Family Gym

The gym was established in 1986 as a swimming school. Later on, in the 1990's it started to offer gymnastics and weightlifting training. Since then, the gym expanded its services and now have an array of activities like swimming (kids and adults), fitness room, Pilates, running club, personal trainers, and dancing, with about 600 active members.

All the activities are coordinated by a general manager who is the business owner. He started as an employee in 2004 and saw a chance of acquiring the gym on the year 2007. He stated that the change in ownership happened because the older investor lose interest in the business. Since then, the gym had important changes in the way of conducting its activities.

The new owner altered the consumer retention strategy: the focus changed from monthly to annual and biannual subscribing plans. The main objective was to fidelize the client and create a closer bond. Moreover, it positioning change to a diversified gym who can embrace all family members, from children to elderly. Thats because they can offer, besides a good array of physical activities, a closer contact with its clients: teachers and other employees are stimulated to engage in friendly informal conversations with clients. That is possible by maintaining a not too crowded ambience, and a medium fitness room, not the usual huge floors with loads of people and equipment.

This new positioning was able to avoid direct competitors, since they can't combine diversified fitness activities with a "user friendly" approach. The manager said that, indeed, retention rate raised substantially following the strategy changing. However, the gym has many indirect competitors, like the classic fitness gyms, leisure clubs, and low-cost "do it yourself" franchise gyms.

All the pricing is determined internally and the only activity which is fixed considering market prices is Pilates, because the competition locally is very high. In fact, there is no sound knowledge about the competition.

Technology is not focused in the gym. But there is a policy of always trying to add good fitness equipment and keep everything functional, minding the limited space (which doubled in the last four years).

It became clear that what creates value is the capacity of creating a family environment which was, traditionally, a place of individuality. Usually, gyms are not capable of turning customers into friends, even less capturing whole family members. Creating bonds in this gym is the rule and the lonely weight lifter is the exception. It seems that even the importance of fitness equipment can be put aside since the feeling of being cared is granted. We called this case as the "family gym" because this distinct way of fidelizing its clients.

The intangibility here plays an important and central role: company's position on the goods-service continuum is more left than right sided. This "intangible innovation" comes from a mix of the way of doing and transacting with customers, guided by a central manager and assisted by some technology (equipment). In our analyses, it is a consequence of an overlapping of capabilities, yet the transaction one is preponderant.

The Neighborhood Gym

Founded in 1965 and acquired by the current owner in 1970, the neighborhood's gym (NG) is the oldest in operation in the state of Rio Grande do Sul. Initially focused on bodybuilding, the gym changed its focus since the 1990's due to market demands, specializing itself in weight training for health welfare. Its clients includes from 16 years old teenagers to elderly, of both genders. This is a small business that has a team of three professionals (the owner plus two employees) and attends approximately 200 clients per month in three shifts. Each team member is responsible for one shift and its activities includes client's assistance, controlling signups, payments and gym's entrance. To facilitate these administrative processes, the gym uses a well-known software for gyms, which also allows registering monthly evaluations and checking the client's progress with customized trainings, developed by instructors according to client's demands and constraints. The training's execution is customer's responsibility and the instructor plays an assistant role.

The knowledge's origin at the time of the gym's foundation came from the owner's experience as a gym client and from international specialized magazines - information about bodybuilding was restricted. Today college's curriculum has changed and knowledge comes from continuous search for new techniques by employee's experience and expertise, as well from the student's demand during training.

The management is held by the owner, who makes decisions predominantly on tactical and operational levels and has a very particular understanding of company's position in the market. Despites considering competition a good thing - because it pushes companies to evolve -, the owner believes that "there is enough market for everyone" and doesn't perform any competition analysis. Regarding strategy, owner's vision is that "the academy only exists because of the clients" and by believing that the gym has a sufficient capacity to maintain a family atmosphere, he hasn't intention to expand the business. His goal is keep the gym running through modernization of equipment and techniques, but without expanding the range of activities, since "by doing many things at the same time you didn't do everything with quality."

The services pricing is cost-based and takes into account the socioeconomic profile of clients. In order to maintain a more affordable price, the gym negotiates with local suppliers, and buy customized equipment that, according to the interviewed, are cheaper and has similar quality in relation to those sold on specialized stores. The price varies according to the number of training days, and the gym offers only monthly packages - not semiannual or annual packages - because it considers most advantageous to both parts. This system allows controlling the real number of regular clients, and customers may sign out at any time without major financial losses. As a form of customer loyalty, it has a program renewable every year, which offers monthly discounts to clients who maintain their attendance for 12 consecutive months (discounting one month for holidays).

The gym attempts to maintain a close relationship with its clients, like a family. According to the owner, gym isn't a place to achieve physical health only, but is also a kind of therapy, a moment to interact with other people. He believes that large gyms cannot offer this proximity because there is a distance between people and the owner: "today, if customers wants to complain or talk, they come straight to me". This proximity generates a loyalty that runs through generations of clients, and customer's satisfaction, associated with virtual communication channels (website and social media), the main tools for promoting the company.

The company is open to receive suggestions from customers and employees, and the clients are consulted before any changes. The owner states that the most significant change that occurred in the business was the change in gym's focus in the 1990's - from bodybuilding to weight training focused on health care, and the expansion of the physical space in 2012. While the first one may be considered, at the time, a sector's innovation, which resulted in the expansion of its market niche, the second one was an innovation at the firm level. Focusing on health care increased demand in 50% and expanding gym's room augmented its capacity to 250 clients.

Compared to the other cases, again is highlighted the intangible nature of the product offered. Although the gym uses some technology to manage the administrative processes, updated the equipment and has its own training models, it appears that customer relationship is the main driver that allows company's perpetuation. Clients are, usually, friends and they know its colleagues by name. They all live in gym's proximity and share the feeling of neighborhood/community. That is why we called this case as the "neighborhood gym".

The Personal Trainer

This personal trainer operates in the market since 1999. He was part of a group of eight personal trainers with broad experience. The main interface between this professional and its customer is established since the first contact - the majority of clients are referred.

This trainer stated that has some clients for more than six years and it is important to create a really close bond. The objective is not to give attention only to physical aspects but to psychological ones. He accumulated knowledge with many courses, a post-graduation in exercise physiology, functional training, and management seminars. He is part of a fitness study group (eight to ten people), with monthly sessions. Several scientific articles in major journals are selected to foster discussion among professional's meeting. The aim is to share knowledge and techniques that will be applied on the field.

Many aspects demand attention in this job. First one is assiduity, which is central. Then he has to gradually create a bond with its pupil, and motivate him. The message that the trainer tries to convey is that physical activity is important to people's lives and essential for sustained future health. Is always necessary, however, to combine the needs and objectives of clients to design a personalized plan of activities.

Another important issue is the close relationship that the professional has with its customers. To sustain it, besides training, it needs to be aware of what is happening in the society: politics, economics, and social issues, in Brazil and worldwide. That is way he has always to be up to date, listening to radio, surfing the net, reading the newspaper and so on. Also, knowing certain preferences of its customers will help to establish conversations. For example, if the client likes sailing he will try to understand a little about that in order to engage in interesting chats. This attitude will help to establish a good trainer-pupil relationship and it's the core of loyalty. Some pricing policy exists to maintain retain rates stable: every renewal of the semiannual plan customers get one month free of charge.

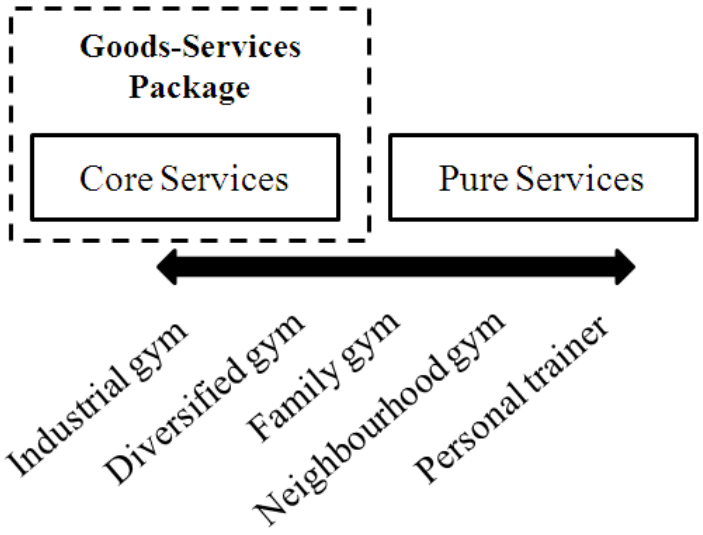
He tries to make a strategy to motivate people in exercising themselves. Sometimes it is difficult to find an activity that it suitable because client's inherent condition or disability. In this scenario knowledge is crucial, and training must be highly personalized. Anyway, the objective will be always long term welfare.

Fitness equipment is not that important since many clients workout in parks and such. This professional has to be aware of the diverse objectives, mood, and preferred client's way of exercising. He has to be prepared, as well, to hear a "no" and change the training session on the fly. The degree of intimacy is higher than in usual gyms, so there is a high intangibility present in the relation instructor-client. This is the main value created and innovation is an effort that comes only from the professional, which is not an easy task. Much research is needed to create a unique type of activity which will keep and attract new customers, and there is always the possibility of being imitated.

ANALYSIS AND DISCUSSION

There was significant differentiation among the cases, with several levels of intangibility detected. The industrial gym shows many traces of the traditional specialized high scale production lines. The diversified gym has a mix of pure service and services that reminds goods in some way. The family gym, while still have some diversification, presents high intangibility with its bond with clients. The neighborhood gym is less diversified and has a high spirit of community that keeps the gym running even with its low reach. Finally the personal trainer has the highest intangibility level in its activities because he has to train its clients even without specific fitness equipment. With this diverse tangibility levels in mind it is possible to sort the cases using the services continuum (Johnson; Gustafsson 2003). This classification is important to show that, first, services has many offering ways and, second, the cases captured this diversity. This can be visualized in Figure 3:

Figure 3: Services continuum of the analyzed cases



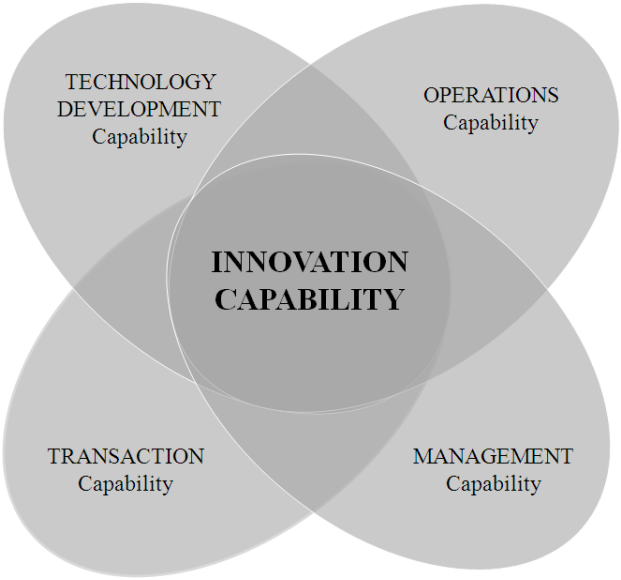
Source: elaborated by the authors.

In terms of capabilities, case's description shows that the four capabilities are present in the firms, as defined by Zawislak et al. (2014). Therefore we share the proposition that every firm has technology, operations, management and transaction capability.

Yet the four capabilities are present, the way it relates to each other shows significant differences when compared to Zawislak et al.'s (2014) model. That is because services has a distinct way of offering, as discussed in the related literature. Case's shows that is not possible to think capabilities in a service context on a linear fashion. We propose that capabilities are overlapped and the results shows that is a more accurate way of describing services dynamics.

Starting from the basic innovation capabilities framework of Zawislak et al. (2012), we propose a different framework, considering the form of integrating the capabilities in services. Instead of linking the four capabilities in a linear way, we argue that its capabilities will overlap in the creation of value, and innovation comes within this association. So, the distinct feature is that, although the four capabilities will always exist in some way, they are overlapped and impossible to break or put in a linear way. This will occur, basically, because of the mid to high degree of intangibility present in services. This can be visualized in Figure 4:

Figure 4: Innovation capabilities framework for services



Source: elaborated by the authors

Cases shows that the intersection is the place for creating value and innovation. Innovation can emerge from any capability but will be perceived only if it is merged with the other capabilities. Even that one capability is preponderant, and probably will, this model advances in the comprehension of services innovation dynamics: without the superposition of capabilities innovation is not possible. This is a striking difference between the proposed model and Zawislak and colleagues' (2012): while the first has an industrial mindset, the second tries to captures the specificities of services' offering. This dynamic can be detected in some managers' statements when they argue that all of capabilities are important for companies' innovation success. The intangibility in services' providing and the simultaneity between consumption and offering compels firm's capabilities to have a synergy, even than one can be most preponderant at time.

Based on this analysis we propose our set of propositions for the capabilities framework in services.

Proposition 1: Every firm has all four capabilities. None of them are null.

We share the same proposition of Zawislak et al. (2012) because the cases showed that, indeed, it is not possible to think firm's functioning without any of them. In addition, because offering and consumption occurs in the same moment, the four capabilities will be present at the same time. This dynamic was presented in figure 4, with the intersection of capabilities.

Cases description shows that one capabilities can be more important than others, respecting the kind of service offered. So, the second proposition is presented.

Proposition 2: To be innovative, at least one of the firm's capabilities must be predominant, but not independent.

This proposition it is similar with Zawislak's (2012), but with an addition: probably one capability will be predominant and has more potential for creating innovation, but it will be successful only if it is well merged with other capabilities as well. Again, the non-linearity is central in services provision and innovation.

It is possible to argue that, due the specifities in services offering, firm's capabilities can behave in diverse ways when meeting customers' needs. This was observed in the different way capabilities related to each other in the cases analyzed, leading to the next proposition.

Proposition 3: The more intangible the service is, more transaction capability will be central.

The analysis shows that as we move in direction of pure services continuum, more transactional skills are needed to service's performance. The close relationship between trainer and pupil is highly important for value perception. While the industrial gym does not focus on personalized experience, the personal trainer has to, in the limit, make a different class every time. Moreover, every time the pure service is provided customer will evaluate the offering in terms of cost-benefit and the wide range of alternatives existing in the market. Again, the transactional capability will not work independently from the other ones as, for example, knowledge has to be present to be converted in new ways of training.

CONCLUSION

Service innovation still lacks of solid scientific literature despites its growing importance on world's economy. The aim of this exploratory research was to advance in the comprehension of innovation in services, focusing on the capabilities, departing from the related literature and seeking for new insights.

An exploratory research was conducted to fulfill this study's objective. The field of study was gyms who has diverse ways doing business. The search for gyms with different business approaches had the purpose of identifying dissimilarities in it's innovation capabilities.

About the capabilities, results indicate that the four capabilities exist in both industrial and services business. However, it's not possible to think capabilities in a service context on a linear fashion as in Zawislack et al. (2014), that focused on the industrial sector. We propose that capabilities are overlapped and this study shows that is a more accurate way of describing services' dynamics.

Intangibility plays a key role in services and service's innovation. Again, results indicate that is not possible to think innovation in services without an intersection of capabilities. This is a central difference between services and industry that Zawislak et al. (2014) does not point. Thus, we identified the same capabilitites as Zawislak et al. (2014), and verified that one will be always more central. Moreover, intagibility makes firms that are in a pure service context more transactional. more transactional as it moves to a pure service context. We argue that our model advances the comprehension of the innovation, capabilities and services relation.

Nevertheless, to consolidate our proposition and even expand them more research is necessary, with a greater array of service types and more diverse firms.

We suggest that more exploratory research should be conducted in diverse services' sectors to fine tune the model presented. Then a quantitative approach would be possible to assess the relationship between the preponderant's capabilities and innovation. Another study can try to understand how internal capabilities and external forces adapt, integrate and reconfigure firm's resources and functional competences to firm's perpetuation over time.

Since this is an exploratory research, any kind of generalization is not possible. Future research should try to work with samples that can make inference about the way capabilities work in services and its relation to firms' success. More research has to be done to identify limitations and propose more details in the model. As the service sector is very diverse, we suggest more field research to see if our proposed model makes sense in other activities besides fitness.

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APPENDIX

Research Instrument

1. MAKE A BRIEF DESCRIPTION OF THE COMPANY'S IMPORTANT FACTS IN ITS HISTORY.

2. WHERE DOES THE COMPANY'S KNOWLEDGE COME FROM?

3. HOW DID THE COMPANY DEVELOP THE KNOWLEDGE AND THE TECHNIQUES TO DO WHAT IT DOES?

4. HOW IS THE COMPANY'S KNOWLEDGE LEVEL COMPARED TO ITS COMPETITORS?

5. MAKE A BRIEF DESCRIPTION OF THE COMPANY'S COMMERCIAL STRATEGY.

6. MAKE A BRIEF DESCRIPTION OF THE RELATIONSHIP WITH SUPPLIERS AND PURCHASING.

7. MAKE A BRIEF DESCRIPTION OF THE RELATIONSHIP WITH COSTUMERS AND SALES.

8. WHAT MAKES COSTUMERS BUY FROM YOU?

9. HOW IS THE PRICE DETERMINED?

10. WHAT IS THE COMPANY'S COMMERCIAL POSITION COMPARED TO ITS COMPETITORS?

11. MAKE A BRIEF DESCRIPTION OF THE COMPANY'S STRATEGY.

12. MAKE A BRIEF DESCRIPTION OF THE COMPANY'S ADMINISTRATIVE PROCESSES.

13. HOW ARE THE COMPANY'S COSTS COMPARED TO ITS COMPETITORS?

14. MAKE A BRIEF DESCRIPTION OF THE COMPANY'S PRODUCTIVE STRATEGY.

15. MAKE A BRIEF DESCRIPTION OF THE COMPANY'S PRODUCTIVE PROCESS.

16. HOW IS THE PRODUCTIVE EFFICIENCY LEVEL COMPARED TO THE COMPANY'S COMPETITORS?

17. MAKE A BRIEF DESCRIPTION OF THE DEVELOPMENT STRATEGY AND DECISION.

18. MAKE A BRIEF DESCRIPTION OF THE TECHNOLOGY DEVELOPMENT PROCESS.

19. HOW IS THE COMPANY'S DEVELOPMENT ACTIVITIES LEVEL COMPARED TO ITS COMPETITORS?

20. GIVE THREE EXAMPLES OF CHANGES TO THE COMPANY.

21. GIVE THREE EXAMPLES OF INNOVATION IN THE COMPANY, REFERRING IF THEY WERE NEW FOR THE COMPANY, FOR THE SECTOR, FOR THE COUNTRY OR FOR THE WORLD.

22. WHAT KIND OF OUTCOMES DO THE INNOVATIONS GENERATE FOR THE COMPANY?

23. WHAT IS THE COMPANY'S DIFFERENTIAL ADVANTAGE TO KEEP COMPETITIVE IN THE MARKET?

24. WHAT ARE THE LEGAL-INSTITUTIONAL INCENTIVES OR CONSTRAINTS FOR THE COMPANY TO INNOVATE?

25. LIST IN ORDER OF IMPORTANCE TO INNOVATION THE FOLLOWING AREAS OF THE COMPANY: TECHNOLOGY, OPERATION, MANAGEMENT AND COMMERCIAL. JUSTIFY.