

# TQM and Innovation in the Service Industry: Analysis of common aspects and their implementation.

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#### 1. Introduction. Objective

The increase of competition in local and global market determined the importance of service innovation as a key source support firm's growth and development.

Such a huge economic activity by the service industry involves countless number of organizations, enterprises and firms (education, hospitality, healthcare, retail, social and personal services, financial services, telecommunications, etc.). So sometimes it is difficult to evolve all of them behind the same theory since they have many different features and they deal with many different situations day by day. But what it is common for every company belonging to the service industry (or other one) it's that to compete well and increase their competitive advantage these organizations need to be providing high quality and innovative services.

In this study we will try to build a framework and to link the relationship between TQM practices and Management Innovation. We are aware that the relationship between TQM and innovation is complicated. There are contrary arguments to explain the link existing between them. What it seems clear is that the impact of TQM on innovation depends on both: The type of innovation and the specific quality management elements.

After carrying out a multiple case study in different service companies, we analyse the level of application of both practices TQM and Management Innovation in the service industry and the importance they have in these firms. The results show that in fact companies in the sector are aware of the importance of this aspects and how to implement them to distinguish themselves from competitors.

*Key words: Innovation, Total Quality Management, Management Innovation, Customer Satisfaction, Service Industry.* 

## 2. Literature review and the State of Art

#### Literature review

There are opposite arguments about the connection between TQM and Innovation (Prajogo & Sohal, 2001). One group arguments that philosophy and principles of QM are not compatible with innovation since one of the basis of TQM is the continuous improvement and customer focus. This philosophy can readily lead companies to be focuses only on incremental improvement in their present-day products, process and service activities instead of trying make or invent new solutions or what is the same, the development of new solutions (Wind & Mahajan, 1997).

On the other hand, positive viewpoint contends that organizations assuming TQM practices in their method and culture can proportion a productive environment for

innovation (Mc Adam et al., 1998) depending precisely on the type of innovation considered (radical versus incremental and process versus product). These theories suggest that TQM embodies principles that can correspond with innovation. The principle of customer focus fosters organizations to search consequently for new customers satisfaction of needs and expectations. Therefore it leads organizations to be innovative when trying to develop and introduce new products-or practices- as a continuous adaptation to the ever-changing needs of the market (Juran, 1988).

TQM is an integral part of the extensive theory of management. Based on Deming's theory of management (1983) it is considered as one the effective management systems and methods. There are many definitions to describe the aim of the TQM but the definition stated by Kanji (2002) covers the main elements of the theory: "Total quality management is a management philosophy that fosters an organisational culture committed to customer satisfaction through continuous improvement". The impact of the organic model, explained ahead (see table 3), can be found on the tendency of TQM to see organizations as a system. Accordingly, organizations are made of highly interdependent parts that must work together to achieve the system's overall aim (Abrunhosa & Moura E Sá, 2008). Therefore, to have success, the implementation of TQM must be properly in alignment with the particular organizational strategies, design and environment (Moreno-Luzón & Peris, 1998).

Regarding innovation, the European Commission defines innovation as "the renewal and enlargement of the range of products and services and the associated markets; the establishment of new methods of production, supply and distribution; the introduction of changes in management, work organisation and the working conditions and skills of the work-force" (CEC, 1995, p.688). This definition of innovation clearly includes both inventions and adoptions, in other words, radical and incremental innovation. Thus, we can draw from this definition that innovation is not only the result from large investment on R&D; it is a process with multiple dimensions and sources. This process most of the times is the derivative outcome of interactions among organizations, individuals and their environment.

Saraph et al (1989)	Flynn et al (1995)	Powell (1995)	Samson & Terziovski (1999)	Kaynak (2003)
Top Management Leadership	Top Management Support	Executive commitment	Leadership	Management Leadership
Suppliers' quality management	-Customer relationship -Supplier relat.	Customer & Supplier relationship	Customer focus	Supplier Quality
Employee Relations and Training		Employee empowerment	People Management	Employee relations
	Workforce management		Strategic Planning	
Role Quality Department	Work Attitudes management	Adoption and communication		Employee training
Process Management	Process flow	Process improvement	Process Management	Continuous support Quality system improvement
Quality Data reporting			Information analysis	Information analysis
Design and Control	Statistical control & feedback -Product design	-Zero defect -Measurement -Flexible Manufacturing		Statistical quality techniques use
		Quality training Benchmarking		

Table 1. Main literature theories and authors of TQM practices

Source: Adapted from Kaynak (2003) by Talib Bon and Mustafa (2012)

Pfeifer et al. (1998) propose three subject areas of importance for innovation: customer orientation and service; flexible organizational structures and creative staff, which are in agreement with TQM principles (see table 1). TQM supports customer focus-among others- what can stimulate companies to search for new customer needs and be creative beyond simply conforming to standards. Besides, TQM promotes employee empowerment, involvement and teamwork which is highly linked to workers' autonomy and knowledge transfer. The literature has highlighted the important role of teamwork (Spreitzer, 1995) and knowledge transfer (Molina et al., 2007) in nurturing innovation. All these aspects can create the necessary balance between autonomy, discipline and underlying control, which provides a solid basis for the development of gradual innovations and eventually radical innovations (Santos-Vijande & Álvarez-González, 2007).

#### Table 2- Common aspects between TQM and Innovation

Total Quality Management	Innovation		
<ul> <li>✓ Customer focus</li> <li>✓ Employee Empowerment</li> <li>✓ Involvement &amp; Teamwork</li> </ul>	<ul> <li>✓ Customer Orientation and Service</li> <li>✓ Creative Staff</li> <li>✓ Flexible organization structures</li> </ul>		

#### Source: Author

Due to the debate regarding the relationship between TQM and Innovation (see table 2), the view of the multidimensionality and contingency of TQM has emerged in recent literature as an approach to resolve it. This vision is supported by the fact that TQM is based in a set of practices, principles and techniques (Dean & Bowen, 1994). Spencer (1994) considers that TQM practices are directly related to the organizational models, namely organic, culture and mechanistic but we will be focused on the distinction that some scholars as Rahman (2001) or Prajogo and Sohal (2004) have pointed out. For example, Rahman differed two different kinds of TQM practices: soft and hard. Regarding soft TQM practices, authors consider they are more in relationship with practices on top management. Meanwhile the hard practices would have direct relationship with the numerical and practical quality control tools in organizations focused exclusively on manufacturing. Likewise, Pragojo and Sohal divide TQM in two divisions: organic (leadership and people management, more related with the soft type) and mechanistic (customer focus and process management, more related to hard aspects, although including customer focus in this dimension has been questioned by many scholars). We have created a table (See Table 3) to see the relationship of these aspects of the TQM.

	Hard Practices	Soft Practices
Vision	Mechanistic	Organic
Instruments	<ul> <li>✓ Technics and numerical tools</li> <li>✓ Process Management</li> <li>✓ Quality Information</li> </ul>	<ul> <li>✓ Involvement Management &amp; Employees</li> <li>✓ Training and learning</li> <li>✓ Teamwork</li> </ul>
Performance	Quality Performance	Innovation Performance
Industry focused on	Manufacturing	Services

#### **Table 3- Aspects of Hard and Soft practices**

Source: Author

Regarding our aim in this study, we can extract from the table 3 that implementation of TQM practices and therefore, implementation of innovation, has notable difference between service and manufacturing firms. The main difference is the intangible nature of services, therefore they depend more on customers perception and evaluation. Thus, service organizations must focus their efforts on customer satisfaction, must to invest less efforts on hard aspects of TQM practices (e.g. statistical process control and process management) and rely more on customers' view on the quality of services. While manufacturing firms emphasize more on other stakeholders' relationship like suppliers and contractors. Then, to be innovative in service is more related to the continuous, or incremental, improvement instead of radical changes in the organizations. In this industry, the principle of customer focus encourages organizations to search consistently for new customer needs and expectations and therefore leads organizations to be innovative in terms of developing new products and process as a continual adaptation to the market's changing needs (Juran, 1988).

Hence, there is an important and very high interrelation between the entire meaning of innovation outcome and the continuous improvement outcome. This strong correlation between innovation and continuous improvement overall is not merely an interrelation. This interrelation indicates a causal relationship that will become an increased innovation if the continuous improvement is done over a period of time. Thereby, Baldwin and Johnson (1996) consider that to adopt characteristics or aspects from TQM as a strategy for top management difference ultimately those innovative companies from which they are not. With this research we will confirm this theory through four firms' cases belonging to service industry and we will show the degree and kind of implementation that these companies carry out.

#### State of the art

One of the best ways to achieve a differentiation within the sector may be probably through the implementation of the Total Quality Management. TQM system improves the innovation process in organizations due to TQM is focused on elements as customer focus or continuous improvement (Baldwin & Johnson, 1996).

As we have expose in the previous section, TQM is high related to innovation as both concepts seek the same purposes. The main aim for both of them is to integrate organization objectives and functions to satisfy the customers and increase competitive advantage (kaynak, 2003). They involve all the employees within an organization to be apart from the business and management process. So the relationship between TQM and innovation can determine the organization performance and its development as their most important goals are the continuous improvement, to achieve customer satisfaction and to have an open culture.

Innovation and TQM play an imperative role on service business triumph as both of them affect customer satisfaction which is top targeted goal of service organizations' business (Pekovic & Galia, 2009). However this fact and the fact that service industries paper in economics is turning vital worldwide, most of the studies have been investigating the relation between TQM and innovation carried out in manufacturing or in other case, just taking service organization as a part of the manufacturing companies. The study about the importance between TQM and innovation and its impact in the customer value for the company is still scarce in the field of the service industry.

Hence, TQM systems refers not only to the quality of products, but also includes the quality of the services sector (Samat et. al, 2006). Moreover, according to the study by Mehra et al. (2008) TQM concept should be seen as a consumerorientated concept. It means for the firms that everything starts with the customers and ends with them. Basically, the basis of the TQM and therefore the basis of any company belonging to the service sector, lies in creating value for customers, continuous improvement and quality advancement, accurate and precise measurement of the performance of each business process, as well as the teamwork of human resources (S. Topalovic, 2014).

As we were mentioning before, many studies about TQM have been carried out in the past but most of them focus on manufacturing industry. But the truth is that manufacturing organizations vary from service organizations in process, operation, product features and customer relationships. The main difference is that service depend more on customers review and perception due to its intangibility nature. We should mention that it is obvious that there is just little differences between both industries in some TQM practices such as customer focus, strategic management and top management leadership (S.Topalovic, 2014).

According to Birkinshaw and Mol (2006), to understand the role of innovation in services is essential. The authors state that product innovation alone is relatively easy to copy while combining this with one or more other factors offers an organisation a competitive advantage. Therefore, service firms should consider the service product itself and the service augmentation, this is-as the authors describe- "the whole environment" in which the service is offered and the attitude and approach of those involved. So managers must bring together all the elements within the organization if they want to achieve successful innovation.

As customer orientation is the foundation of TQM system and one of the most important aspects of innovation, we will try to explore in which degree the implementation of both is carried out in some service firms. We will start explaining the process that the companies (service companies) are following in order to achieve a competitive advantage over other companies and if it really works. It means that all business activities in companies should start in researching, identifying and understanding the needs of their customers (current and potential) and have to end implementing the adequate strategies to satisfy the desire and expectations of the customers. It is between the starting and the ending of the business process where the management innovation must take place in order to turn the ideas in innovative actions (new or not to the world). In the aim of explaining this, a research framework is made up, as shown in figure 1.

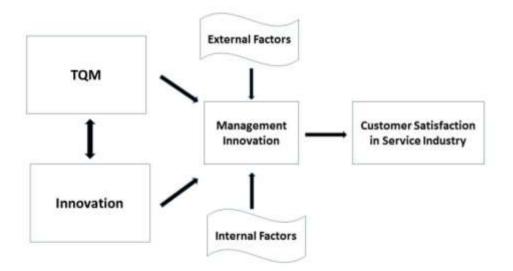


Fig.1- Research Framework (own elaboration)

But this process it is not as easy as it may seem. It evolves many factors that the company have to take into account if they want achieve all the targets proposed. A great importance is the involvement of all the stakeholders in the process of creating products or/and services. One of the most important are the own employees of the company as they need to be trained to develop specific skills to understand the customers' needs. Also the company sometimes will look for knowledge outside their organizational boundaries (Chesbrough, 2003, 2006) to source at least some knowledge of potential value from the broader environment in which they operate (i.e Universities, Consultants, R&D centres).

Therefore, companies will need to deal with all these aspects (internal and external) to make better strategic decisions oriented to the customer value as source of a competitive advantage. So, ultimately, the customer will be understood as an asset that can increase the profitability of the business and to achieve a competitive sustainable advantage in time.

The research will first frame the innovation concept, describing the aim of the innovation. As well as all the types of innovation existing, according the OSLO Manual and other academic literature, and how this phenomenon has evolved over the last six decades.

We will continue explaining the basis of the innovation in services and the implications that the phenomenon has in the business model of the companies belonging to this sector. Also the importance of the innovation in management, its different perspectives and the aspects that fosters the innovation in the service sector will be exposed in the following points. Here it will appear as well the significant concept in the last decades regarding innovation but going beyond the boundaries of the company, it is the Open Innovation.

In the section four and five we will describe the methodology carried out and the findings achieved. In the sixth section the discussion, conclusion, limitations of the study and the window for future research will be presented.

#### 3- Definitions and Objective Statement

At this point of the research, we have already clarified that the impact of TQM on innovation depends on both, the specific quality management and the type of innovation. As well we know the strong link existing between TQM and innovation at all levels within any firm, but in particular, within the service industry. It is therefore we found interesting and attractive for the reader to have a specific section to explain deeply some key aspects which are the base of this impact.

Companies need to know the type of innovation they are launching to apply specific strategies on management. At the same time, depending on the kind of people managing firms the grade of the innovation will be more or less radical.

As our aim is to find out the implementation of common aspects between TQM and innovation in the service industry, we strongly believe that to know about the TQM and innovations' background and how management can influence on the decisions is essential for any firm. Thus in this section, we will explain the types of innovation existing and the process that innovation has followed over the time. Then we will clarify the phases existing when implementing any innovation in a company. We will finish this point explaining the relationship between management and innovation and which are the common variables that foster firms to carry out an innovation process. Also we will know the resources that are helpful for companies to make it happen.

#### **3.1.** Innovation types and models

#### 3.1.1. Concept

We have previously mentioned the definition that the European Commission has about Innovation ("the renewal and enlargement of the range of products and services and the associated markets; the establishment of new methods of production, supply and distribution; the introduction of changes in management, work organisation and the working conditions and skills of the work-force" (CEC, 1995, p.688)). But many different definitions about this topic are included in the literature and most of them agree that innovation is not just an invention "but a process of growing new ideas into practical use" (Bessant & Tidd, 2009).

Probably one of the most recent and correct definitions of innovation, from our point of view is the one expressed by Crossan and Apaydin (2010). The authors state that innovation is adoption or production, assimilation and exploitation of a value-added novelty in economic and social spheres; renewal and enlargement of products, services and markets; development of new methods of production; and establishment of new management systems. It is both, a process and an outcome.

#### 3.1.2. Aim of Innovation

Innovation is widely acknowledged as key to economic development, since it potentially leads to productivity and competitive gains (Abrunhosa & Moura E Sá, 2008). According to the definitions above we can state that Innovation can be considered as the development and introduction of a new idea. Also innovation can be to transform or to improve an idea that already exist, it means, that is not entirely new to the world.

The process of innovation starts when a recognition of a problem is find or when a new idea comes up. Then, the problem will need to be solved creating and introducing a solution in the market. This solution needs to be new to the world or at least to improve a product, process or service that already exists.

Due to increased competition and shifts in demand and customer taste (Daneels, 2002), it seems extremely important for firms to manage innovation in a fast and flexible way in order to overcome competitors and achieve a sustainable competitive advantage (Poolton & Barclay, 1998).

Therefore, and according to Gourville (2005) we can state that innovation is both a strategic factor for firms willing to stay competitive in the long run and one of the least known aspects of business.

# 3.1.3. Types of Innovation

It is essential for firms to understand and to know innovation types existing nowadays. But sometimes it is difficult to see the borderline between some types of innovation. And it is different as well if we talk about innovation in products, process or services. There are lot of studies proposing different types of innovation. We will combine definitions from the Oslo Manual (2005) and the existing literature (See table 4)

## Table 4. Different proposes of Types of innovation

Empirical Studies		Oslo Manual (2005)	
1.	Radical Product	1. Process Innovation	
2.	Incremental Product	2. Product Innovation	
3.	Radical Process	3. Marketing Innovation	
4.	Incremental Process	4. Organizational Innovation	
5.	Administration Innovation		

#### Source: Author

- Product Innovation: According to the Oslo Manual (2005), it is the introduction of a good or service that is new or significantly improved with respect to its characteristics or intended uses. Product innovation can utilise new knowledge or technologies or can be based on new uses or combinations of existing knowledge or technologies. The term "product" is used to cover both, products and services.
- *Process Innovation*: Following the definition done by the OCDE (2005), process innovation is the implementation of a new or significant changes in techniques, equipment and/or software.
- Radical Innovation: New and diverse from prior innovations (Golder, Shachman & Mitra, 2009). To be radical innovation it needs to be novel and unique from current innovations or to have important presence on innovations that will take place in a future. These type of innovations are linked to those that are different from existing products and services, what it is called new to the world.
- Incremental Innovation: According to Golden, Shachman and Mitra (2009), this type of innovation alter existing products. It involves to make some revision or modification to existing products or service. Incremental innovation may include just a change in the shape or the colour of the product or even an addition to the process or service.
- Administrative Innovation: It occurs when a firm try to improve its organizational process applying new ideas. It is associated with internal processes adding value when delivering a service or product.
- *Marketing Innovation*: According once more to the Oslo Manual (2005), it refers to the implementation of a new marketing method involving significant changes

in product design or packaging, product placement, product promotion or pricing. Therefore, marketing innovations goals are to best cover customer needs, opening up new markets and the new positioning of the firms' product on the market.

# 3.1.4. Process Models of Innovation

Since the 1950's many studies and theories have been carried out regarding innovation. All these models have tried to explain the process of innovation over the time within industrial firms and later, including service firms as well. As Simsit, Vayvay and Öztürk (2014) summarize in their study, we will mention the Rothwells' view of the evaluation of innovation models from the 1950's to 1990's. The latest innovation model, open innovation has been explained by Hobday (2005)

- 1<sup>st</sup> Generation (1950-1960): Technology Push. They were simply linear models that treated innovation in a sequential process that took place in modest stages.
- 2<sup>nd</sup> Generation (1960-1970): Demand Pull Models. The mid 1960's were characterized by a 'market shares battle' that induced companies to shift their development focus to a 'need pull'. The central focus became responding to the market and customers' needs. Therefore the role of R&D was to meet market demands.
- 3<sup>rd</sup> Generation (1970-1980): Coupling or Interactive Models. Innovation was characterized by the union of technology, science and marketplace. It involved financial employees, engineers, marketing engineers etc. at each level what improved innovation process and enabled to gain in quality. The reduction of the operational cost was crucial also in the model.
- 4<sup>th</sup> Generation (1980-1990): Integrated Models. These models were combinations of push and pull models. The increasing relation with external agents as suppliers and partners also became important for firms. The focus was then on integrated processes and products to develop total concepts. Typical of this generation was the parallel and integrated nature of development processes.
- 5<sup>th</sup> Generation (1990-2000): Integration and Networking Models. The focus was on rapid development and flexibility. Firms achieved that through the networking and systems integration. Thus the partnership, alliances and joint venture became important to increase the strategic collaborations with customers, suppliers and competitors. The company then started generating, developing and commercializing its own idea.
- 6<sup>th</sup> Generation (2000-present): Open Innovation. Hobday (2005) states that in this last generation, company commercializes both its own idea as well as innovation from other firms. Instead of being only focused on internal idea generation and development, internal and external ideas can be combined to advance the development.

#### 3.2 Innovation in Services

During the past years efforts have increasingly been made to push the service sector and its peculiarities concerning innovation into the centre of economic policy research. The roles of innovation, technology and know-how in the context of economic development and technological change are in the business enterprises key actors nowadays.

Sundbo (1997) stated that because Service Innovation are easy to copy by competence, a continuous innovation process is necessary, therefore, constant innovation process will impact on the initiation of radical innovation. It means that new concepts have emerged in the last years like new ways of delivering the product or an after sales follow-up. Services are characterised either by very close customer contacts or by the integration of external factors in the production process, thus customer integration leads to play here an important role. On the other hand, for innovation management this implies to adapt every process to the market demands and to invest time and resources explaining to the customer these new processes, products and services.

In the process of innovation both actors, external and internal influence in the adoption of the new strategies, structures, products and/or processes. Regardless of the external or internal origin of the impetus for change, innovation adoption is a means of creating change in the organization to ensure adaptive behaviour and is intended to change some aspects of the organization in order to gain effectiveness and some advantage against the competence.

#### 3.2.1. Phases of the Innovation Process: Development, Adoption and Implementation

In the literature review exists many ways and phases to describe the process that follows an implementation of an innovation. Hage and Aiken (1970) divided the process in evaluation, initiation, implementation and routinization; following Klein and Sorra (1996) the process can be divided in awareness, selection, adoption, implementation and routinization. According to other authors, the process can be grouped in three phases: development or initiation, adoption and implementation (Damanpour & Schneider, 2006).

Development or initiation consists is a set of activities that try to recognize a need or pertain to search a solution for a need that has come up. In this step, members of the organization realize the need to innovate, study if it is convenient and affordable for the company and finally they should inform their colleagues and propose a viable

adoption (Meyer & Goes, 1998). *Adoption* phase is time to evaluate the proposed ideas from all the areas of the organization as the financial, technical or strategical in order of making decisions about to accept or no the idea and to study if the organization is capable to face the new project. In this phase top management and the responsible of the main areas decide to go ahead with the innovation and assign resources to it. Also they have to start letting employees know about the new project, explain them and try to help them to assimilate future changes. *Implementation*, as a last step of the process, is where events and actions are accomplished. In this face management must prepare the organization for the use of the innovation. It implies the definitive acceptance of the innovation by the users and then, to continue with the use of the innovation until it becomes a routine for the whole organization (Duncan, 1996; Meyer & Goes, 1988; Rogers, 1995).

#### 3.2.2. Business Model Innovation

Most of the authors when defining a business model, they agree that a business model articulates a firm's value proposition, its sources of revenue, the resources used to extract rents and the governance mechanism that links firm's stakeholders (Zott & Amitt, 2010). Basically there is a need to refer to customer and value proposition when defining a business model, and even more when it comes to a company in the service sector.

Thus, and following Jaime E. Souto in his article "Business model innovation and business concept innovation as the context of incremental innovation and radical innovation" (2015), business model innovation can be defined as a new configuration of what is done in the company and how it is done in order to provide a new value proposition to the customers. But the system of the activities needs to be new or significantly improved for the generation of a new value proposition. In this study we will try to find out is the companies in the service industry are moving to this step and implementing relevant changes in order to create value to their business.

The understanding of this innovation and its role in the innovation process in the service firms requires a connection between knowledge, technology, and innovation. Innovation is the result of the combination of different kinds of knowledge- technical, non-technical etc. But innovation, according to Souto (2015), also requires creativity. New ideas rise from creativity and a new idea becomes an innovation when it is implemented and when it exploits a market opportunity. Some samples will be shown in this study regarding this ideas. But the nature of the service industry has a difficult added since most of that services offered by the companies are intangible. Fundamentally, experience is a way to increase industry-specific knowledge. So to

innovate in this kind of firms and to develop a business model innovation implies to be much more creative and sometimes any little change (colour, smelling, shape...) may provoke an incremental or even a radical innovation.

A new business model should be used to create new options for applying and exploiting knowledge and technology in different ways that competitors do, providing a platform for internal innovations (incremental and/or radical) in the service industry.

#### **3.3 Management Innovation in Services**

Two perspectives are considered in literature about the degree of novelty in management innovation (Mol & Birkinshaw, 2009): in one hand, what some authors call new to the state of the art, this is, no known before and in the other hand, something new for the organization but not for the world. Therefore, one perspective as another may be accepted as a kind of innovation in management.

Following Mol and Birkinshaw (2009) we can refer to Management Innovation as the adoption or generation of management processes, practices, structures or techniques that are new to the company and affect its performance in terms of innovation, productivity and competitiveness. So, it involves changes in traditional processes, practices, structures and techniques. For companies belonging to the service sector these transformations in the way of carrying out the business can be particularly crucial as they are difficult to replicate.

Some authors point out that Management Innovation has different characteristics from product innovation. For example, Hecker and Ganter (2013) state that management innovation implies a non-technological way, therefore, the role played by managers developing and implementing innovation is the base to achieve good results. Meanwhile, product innovation seems to be focus on meeting external demands.

## 3.3.1. Perspectives on Management Innovation

Following Birkinshaw, Hamel and Mol (2008) we can identify and present 4 perspectives on management innovation. Although these perspectives have been studied over the last three decades for many authors, we will be focused on the perspective of the mentioned authors.

• *Institutional*: It refers to the socioeconomic environment in which management innovation takes place. This perspective aim to measure innovation regarding the particularity and difference existing around ideologies, techniques or specific

practices. This perspective support the idea that what first emerge is innovation. Then, factors are which make possible that industries adopt such innovations. It means that human agency becomes part of the background in the innovation process.

- *Fashion*: It focuses on the active interaction between the managers that put in practice new management aspects in the organization and the fashion actors that set this ideas. The result of such interplay will lead to management innovation (Abrahamson, 1991, 1996). Birkinshaw et al. point out that there is a little aspect about the real origins of this perspective, or why some type of innovations become fashion and some others do not. The fashion perspective encompasses all the levels of analysis, the micro and macro. Most of the industries supply new management ideas but for some behavioural reasons just some individual managers choose to buy into those ideas.
- *Cultural*: It tries to understand how management innovation shapes, taking into account the culture and environment of the firm where innovation is being implemented. In this case, the analysis focus on how individuals interact with the innovations introduced by the management. According to this perspective, the key aspect in implementing innovation management is the insight that individuals involved in the process give about it. Even being difficult in large organization, the perspective tries to give chance to some important changes within the firms, although sometimes can be awkward due to some internal factors.
- *Rational:* This perspective is based on the theory that innovations are introduced just to give solution to a specific problem that a firm may face in a specific time. Hence the aim of the people who introduce changes in the firms is because of the need of working more efficiently.

## 3.3.2. Variables that fosters management innovation

Not too many studies have explained the variables that fosters management innovation. Following Birkinshaw and Mol (2009), we will focus our attention in the firms' size, the education of the workplace, geographical scope, leadership behaviour, and knowledge sources.

*Size* can influence in different ways the introduction of new practices in management. It is obvious that larger companies deal with a wider variety of challenges than smaller companies (i.e., competitors), therefore these firms are more likely to want to take up new practices. Bigger firms have also more resources (i.e., knowledge on management practices or human capital) than smaller so for them it is easier to introduce new practices and to face new challenges. In other words, large companies are under more pressure to bring into the company new practices in order to have a competitive advantage over competitors, but at the same time, more capable in doing so when compared to smaller firms.

The education of the workplace, shaped as the percentage of individuals within the firm that have a degree, represents one of the key innovation resources (Birkinshaw & Mol, 2009). Also, employees with high qualifications and well educated are more likely to move to other place, to be part of professional organizations and their aim most of the times is to promote within their firms (Alvesson, 1995). Thus firms with this kind of employees are more susceptible to have a more extensive or more international workplace group. It is translated into more management innovation opportunities.

*Geographical Scope*, as the authors state, is a significant indicator of the firms' tendency to introduce new practices. The firm will be more likely to exchange knowledge globally if they are completely internationally-focused. Participation in international markets is a crucial source of new ideas for management innovation. Having insights from other companies in different contexts gives to organizations new management opportunities that they never had in their usual market (Kogut & Parkinson, 1993). They can use this opportunity to acquire and develop capabilities. Therefore, organizations operating abroad discover more practices because they observe diverse firms worldwide. They easily can take advantage of these relationship and to imitate some practices from them.

The behaviours of managers should be an important contributor to the introduction of new practices in management. The managers can introduce new aspects through different ways. For instance, managers should be able to bring new ideas from their past experiments and know-how in other organizations or deal with consultants to implement and put in practice new ideas. Also managers can imitate or to have ideas from other practices implemented in other organizations or in other context previously. In any case, managers must be proactive all time, having this innovationfocused behaviour and seeking out best practices to implement a process or product new to the company that can be potentially a competitive edge.

*Knowledge resources,* linked with management behaviour, and understood like the access to new knowledge and how to recombine it with existing knowledge with the final purpose that leads introduce new practices to the firm. As Birkinshaw and Mol (2009) point out, the nature of management innovations dificults knowledge transfer from one organization to other. In order to transfer such knowledge, firms should be capable to establish informal relation with this organizations working outside their boundaries. After some studies it seems that the greater the diversity of sources the firm has access to, the more likely it is that the insights gained from these sources are combinable in creative and valuable ways (Hargadon, 2002)

#### 3.3.3. Helpful resources for the introduction of new processes in management

#### • Internal (Human Capital, Integration Capability)

In one hand, the importance of the human capital and its creativity to add value to the company over the time. Employees with good skills and a high level of knowledge will favour a fair use of information. Also these employees will have a rapid learning skills and will be more effective applying what they have learnt. This aspects will have positive orientation for the firm as in general they will be better receptors in case of sudden changes or new ideas. Some authors enhance the essential role of qualified employees in the development of new management structures, practices and processes as they definitely act out as one of the key management innovation resources within a (service) company. Mol and Birkinshaw (2009) point out that high-skilled employees are more able to perceive questions beyond their work awarded due to their ability to analyse deeper the situations than others. All these aspects increase the chance for a firm of introducing new management practices. In other words, most of the authors agree that management innovation significantly enhances when companies have more employees with university degrees.

We can conclude then that the human capital favours the adoption of new management processes.

On the other hand, the integration of the different kinds of knowledge in an organization becomes an important source for management. It is known as an integration capability. Therefore, integration capability can be considered as the ability to combine and integrate the different individual knowledge within a company. When this combination of diverse knowledge is implemented in the organization it stimulates the transformation of that diverse knowledge from different individuals into a new form of knowledge. This ultimately will encourage the innovative activity. As the management innovation must be analysed not as the will of specific individuals, but as the combination and result of collective action, it becomes essential to incorporate the knowledge of all the individuals within the company as a whole. Thus, it is the organization, the managers, who need to be able to integrate the employees' knowledge. It requires knowing well the abilities and skills of the individuals who are part of the organization. As a management innovation is the sum of the knowledge of many individuals it becomes a key aspects for management to integrate all of them as a collective system. Therefore, the integration capability also favours the introduction of new management processes.

• External (Managers' external relationships): Open Innovation.

Knowledge situated outside the firms boundaries provides organizations with numerous and diverse sources of knowledge. The combination of that knowledge can give place to true innovation (Miller, Fern & Cardinal, 2007). Some authors, as Mol and

Birkinshaw (2009) state that creating knowledge-based external relationships positively influences positively the successful introduction of new management practices. This concept is also known as an Open Innovation and it refers to the increasing propensity of firms to work beyond their traditional boundaries of operation.

In particular, business services are intensive traders of knowledge inputs as they tend to add value by leveraging human capital. The particularly interactive and relational nature of the economic activities they have confirm that the open innovation, the external relationships of a firm in the service sector may be particularly important for them. Mol and Birkinshaw (2009) analyse also other category of sources, what they call market sources, more related to service firms as the manufacturing firms usually use more the science-based sources. The market-base sources include clients or customers, suppliers, consultants, competitors and R&D enterprises.

The intangible nature of the services favours to an unstructured interaction with collaborators, participation in innovation networks, or sharing of un-codified knowhow with other firms. Their interactive nature can give rise to relational solutions through informal arrangements. Therefore it is managers who have to put forward these ideas as their relationships with agents outside the firm definitely will favour management innovation.

It is important for the firm the choice of type of open innovation partner. Customers and suppliers can help to better specify what market requires for innovation in processes, services or goods. It is also a way to expand the cost and risks that innovation process involves. Interaction with customers has been emphasised as the most important channel of information supporting the adoption of an open service innovation model (Chesbrough, 2011). Firms might also prefer to have formal collaborative agreements with universities and research institutions in order to gain access to basic knowledge, either to take advantage of their existing capabilities across marketing, finance or HR domains (Hughes & Kitson, 2012), or to explore new lines for innovation and growth (Veugelers & Cassiman, 2005)

## 4. Methodology

#### 4.1. Research approach and setting: Multiple case study

The study aims to enhance our knowledge about the link or relationship existing between TQM and innovation in companies belonging to the service sector by answering few questions:

- ✓ Have TQM practices any effect or impact on innovation in service firms?
- ✓ Do the service firms use this link existing between innovation and TQM?
- ✓ How management in service organizations implement them?

The study utilises a qualitative study based on a multiple case study following the replication approach introduced by Yin (2003). The advantage of the case research is its deeper understanding of specific instances of a phenomenon. In the case of the multiple case study, the aim is to investigate the phenomenon from multiple perspectives rather than from a single point of view (Yin, 2003). Our study took advantage of the collection of data across various subsectors within the service industry as it helped to compare results and to understand the different ways of implementing TQM and innovation in a wide variety of companies in the same sector. The literature analysis revealed that many studies had been carried out about TQM and innovation, but most of the times focusing on manufacturing firms. Thus we found interesting this study as there were still more research needed on this field in the service industry.

The empirical element of this paper includes four carefully selected case studies of companies across the hotel and hospitality, food and beverage, food retailer and ITC industries. As the service industry involves a huge variety of activities we decided to choose companies for different subsectors. This, however was a complicated task when trying to frame all of them in the same structure of questions we wanted to ask for or when reaching results. Anyway this was one of our challenges and the heterogeneity of the sector is something that makes it unique. Actually the essence and purpose of the companies in this fascinating sector should be the same: the production of services instead of end products in order to satisfy a need or demand from a customer.

The number of selected cases reflects the recommended number of cases for a multiple case study design. As Stake (2006) points out that the study may be limited if fewer than 4 cases are chosen, or more than 10. As the author states, two or three cases do not show enough of the interactivity between the research framework and their situations. Whereas with fifteen cases, for instance, may provide more uniqueness of interactivity than the research team and readers can come to understand. Hence, our election tries to show and observe the concepts raised across different companies in the service sector.

#### 4.2. Data collection and interviews

To carry out the data collection for our investigation we have assumed the triangulation method. This method is characterized by the adoption of different data collection techniques (Saunders, Lewis & Thornhill, 2007), combining in our study both information provided from secondary sources and face-to-face interviews. As Yin (2003) remarks, interviews are one of the most important sources of case study information. Sometimes there is a gap between the literature and the aims of the

information. Sometimes there is a gap between the literature and the aims of the research. The direct interview appears as the key factor to fill that gap with the direct experiences of people who work day by day in representative companies for the

specific study. In our particular case, we opted for the adoption of semi-structured interviews, basing the areas of enquiry on a systematic reviewed of a literature (see the appendix). The aim of the adoption of semi-structured interviews is to combine the advantages of both structured and unstructured interviews. It creates the atmosphere for open discussion as a mix of open-ended questions were raised. This way of interviewing creates a helpful approach to explore interesting areas surrounding the core value of the interview. Therefore, semi-structured interviews are useful tool that represents the compromise between the very formal structured approach and the informal approach. This semi-structured interviews are then particularly appropriated for understanding work activities and for exploring processes within the firm (Barley & Kunda, 2001). Nevertheless, the researcher must ensure that this flexibility does not lead to the omission of central topics (Patton, 1990). On the other hand, we opted for direct interviews, instead of telephone or email interviews, as the direct contact could make the sharing of information easier for all the parts. Besides, throw this way, the interview could lead the discussion to areas that were not considered formerly. Also the face-to-face contact allows to feel more comfortable giving information and exchanging opinions and facts.

The fieldwork was conducted from January to July of 2015 and involved 6 interviews (see table 5). Firms were initially contacted by email or telephone and in the most of the cases the interviewers asked for the questions we were interested of in order to know previously about the topic. Each interview lasted between 60 and 80 minutes and was digitally recorded and transcribed. As the informants had before the protocol of the interview was easy to talk about the topics involved and it let them to explain specific cases or events that may be helpful for our research. Additionally, we collected secondary data such as company reports form their website (e.g. strategic plans, core code of conduct) in order to ask about specific innovation practices or programs carried out by the firms and the way they were working out.

Case	Subsector	Position of Interviewee
A	Hotel, Hospitality & Leisure	Head of Hotel
В	Food & Beverage	Marketing Manager
c	Food Retailer	Marketing Manager Employee Supermarket
D	Information and Communication Technology (ICT)	Head of Sales Communication Manager Inside Sales

Table 5. List	t of pai	rticipants
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We developed four cases studies about four different sectors within the service industry. The intent was to obtain diverse points of view regarding TQM and innovation in the service sector and to find out the degree of implementation of these theories. We conducted a content analysis of each case of study following the interview framework adapted from relevant authors and researchers.

#### 5. Results and findings

The empirical case of this multiple case study will be presented next. After a brief overview of its context, each case study later named Case A, Case B, Case C and Case D will be described in detail in order to give some answers to the main questions proposed in the introduction of the study regarding TQM and innovation and its implementation in the service industry companies.

## **Case A: Luxury Hotel Brand**

The first case presented is about one of the brands belonging to one of the leading hotel and leisure companies in the world with more than 1,200 properties in some 100 countries with more than 180,000 employees. The brand we studied is located in the city of Valencia and it is framed within luxury and upper scale full-services hotels, resorts and residences. They describe their services as innovative and instinctive with unique programs and always having the guests' well-being in mind. Distinguished by lifestyle concepts, design leadership and innovation, these are their competitive advantage and some of their core values.

The hotel was opened in 2006 in a perfectly location in the city centre and since then, the hotel has turned in one of the most glamorous and cosmopolitan places in the area. They do not offer just the stay to their guess. The brand counts with a Health Club Centre and three restaurants where people can enjoy their services at any time even not being a hotel guests.

It is well known that innovation is increasingly important in a service sector such as hotel and hospitality, where the offer is huge and each niche of customer ask for a selected needs and services. To face this process the hotel counts with an Operations and Innovation Department located in Madrid from where four hotels of the brand are managed in order to solve problems and to study every step regarding innovation and quality. The department is based in three pillars: The Six Sigma Method, LIN Analysis and Customer Satisfaction. Six Sigma (SS) method was traditionally related to manufacturing firms as it is a quality method program for eliminating defects. The brand was one of the pioneers companies implementing this system in their hotels since SS was focused also in improving customer experience, to low the costs and build better leaders. This program is based in five elements that evolve the role of the quality management and the Six Sigma: 1) Management's involvement in performing SS functions, 2) Improvement specialists are trained or hired at different SS competency level, 3) SS programs have performance metrics and measurements based on cost, quality and schedules, 4) SS implementation uses a systematic five step DMAIC (Define-Measure-Analyse-Improve-Control) methodology, and 5) Project selection and prioritization. In the other hand, LIN is a nomenclature the company use to name their analysis process. Regarding the customer satisfaction, they mean how to answer quickly the needs of the customer. They obtain that from everyday surveys that are sent random to the current hotel customers. Every day in the morning the managers of all the areas (HR, Marketing, Administration...) meet in order to discuss the results and to improve those negative aspects.

Next, we will follow the interviews structured used and shown in the previous section (table X) to find and understand the implementation of TQM and innovation carried out by the hotel and the results that are being done over the time.

One of the most important aspects that link TQM and innovation are those related to internal aspects of the organization such as the relation of the company with employees or the management's behaviour. With regards to the degree of employees' autonomy, the hotel managers give to them almost plenty of autonomy to react against situations or problems that can arise every day in the work floor as the supervisors cannot be there to supervise everything at all time. Obviously they know their field of action and how far they can go. As they are in a continuous training the employees know their possibilities and how to face certain situations. Always they can ask to the supervisor in order to discuss the best solution. As the communication flows between managers, employees and departments in a vertical and horizontal way it is easier to know how works the hotel as a whole. Every day there are meetings between the managers of each section or department and then they have to transmit the news or possible changes to their staff. But always the communication from employees to top management is easy as it is a managers' role also to detect possible personal or professional problems among the staff. Actually, they remark this aspect, the behaviour of the managers, as a fundamental role to detect and solve problems, besides as a generators of good communication at all the levels of the company. In addition, to create this good atmosphere among the staff, twice per year a party is organized for all the employees to enjoy and to share points of view in an informal way. Regarding the degree to which the organization listen to its employees (consultation), twice per year is carried out a survey where the employees answer questions about their work, the company and how they feel. Also there is a personal side for each employee that will be analysed together with their direct supervisor in order to know about the employee concerns and her or his aspirations within the company. For instance, one of the most important questions for management to cover this aspect is: "Did you really seen an improvement in your concerns since the last survey?"

With regards to the skills and training for the employees, both of them, as mentioned before, are one of the main aspects for the company. As they say, the training and education of the employees is continuous. The company differentiate between technic training, which means particular in each department and it is carried out by the manager of the department, and generic training which is just to remember to the employees the important aspects about health, safety and values.

The human capital as a factor analysis about management innovation is a key aspect for the organization. As the general manager explained, since their opening in 2006 they always look for the best high-skilled employees. Moreover, when they open this resort it was with workers form other hotels of the brand, who moved there in order to share their experience and knowledge with the new staff. Also they hired people from the competence which they were experts in particular jobs and areas. The most important thing, as they mentioned, it is to maintain these creative and skilled people. To educate and to train an employee is expensive for the company because to know well an organization is not easy so to keep the workers, always behind good conditions, is one of the main aspects to look after. With regards to management innovation practices, the hotel also introduced 10 years ago the figure of the revenue management. It is the application of disciplined analytics that predict consumer behaviour at the micro-market level and optimize product availability and price to maximize revenue growth. Now this figure is quite common in service companies but in the past they were pioneering this practices and of course it helped to grow strategically and economically.

In order to retain customers (customer lock-in) the company counts with a program for the clients. This program has voted during 7 years in USA as the Best Client Loyalty Program. Every year the program includes improvements to adapt better the needs of the customers. According to the customer's loyalty to the service that the form offers around the world, they get bonus that can be exchangeable for discounts, extra services etc., with no blackout days. There is an app for the phones where you can manage all your bookings and bonus, very easy and comfortable for the customer as they can request a booking any day at any time. Also, to increase the customer efficiency the hotel has two people attending phone calls from the customers to make reservations. Although nowadays most of the bookings are done via internet, there are a segment of customer who still prefer this traditional manner. Otherwise, for them who prefer to book on internet, the hotel website always will show the best rate in order to avoid the bookings throw other websites. Hence, the best deals to enjoy the services of the hotel are in the own website. It is an easy way as well to reach the loyal customer. It is then, creating an emotional experience throw this tools how the hotel achieve a customer engagement.

About the outsourcing of some activities, the hotel counts with two collaborations with partners. One is with a Japan company with who has built up a fusion between

Mediterranean and Japanese food. Despite the catering of the hotel is managed totally by the hotel, this new concept was created just few years ago to offer a new concept of cuisine. As they were not experts in this kind of business they decided to establish a relationship with a specialist, but always behind the hotel's brand. It means that all the employees of the restaurant are committed with the values of the hotel and the way it works. The other service outsourced to a partner is the Health Club. As they wanted to give the best service to their guests they decided to create this agreement with a partner in order to offer the best experience. Both managers, from the restaurant and the Health Club attend every day the meetings as they are part of the hotel and they are integrated within the firm.

Finally, based in the aspects we were interested on (innovation, TQM and their implementation) we asked the general manager about in which degree they were satisfied with the results applying this theories to the business. He did not hesitate confirming the good consequences of the application of these practices in service industries. It is obvious that in a multinational group there are specific common things for all the divisions. It is positive if these values are focus on promoting innovation in all levels, not just seeking radical innovation in products or quality as in manufacturing industry. Moreover, if each country or division has their own competences to perform, always thinking in continuous improvement, customers and innovation, it seems that the business can go ahead with its propositions. Hence to achieve constant incremental innovation in services or processes over the time could turn in radical innovations for the sector.

#### **Case B: Multinational food and Beverage Company**

The second case is about a multinational company aiming to be leader in Nutrition, Health and Wellness worldwide as they produce for all this stages of the alimentation, also from kids to elder people, even for pets. We actually interviewed the marketing manager of the ice-creams division. She gave us a global general vision of the company and a particular vision from its division. The core values have been settled down over the time from the same point of view for both, the whole company and each division. Therefore, the company tries to cohesive a set of strategic priorities, same for the entire firm, to accelerate the achievement of their objectives. These objectives are, among others, to build for the future and short-term entrepreneurial actions, delivering the necessary level of performance. Their operational pillars are innovation, quality, operational performance and interactive relationships with consumers and other stakeholders and differentiation from their competitors as they work in a very hard competitive environment. We contact the marketing department of the ice-cream division as we thought that it was the most representative service part of the firm. Also, the summer time was about to start so it was a good time to evaluate all the actions prepared to face the busiest time of the year for the division.

The unique objective of the whole firm is to grow every year a 5%, independently of the economic situations. It means that each division in each country has to adapt their sources to face the demand having into account external factors like the economy. They achieve that every day doing a deep study of the market and taking more stringent principles as required by law. They consider the company as a traditional company for some aspects like culture or values but not of curs regarding to innovation and new technologies. Thanks to innovation in every step of the value chain, they can achieve the main objective of growing a 5% the business every year. They pay attention and remark as well the importance of employees, consumers and suppliers to accomplish all their goals.

We asked to the marketing manager about the relationship with employees and the kind of authority they had within the firm. She ensured that the employees are the base of the business and it is demonstrable just showing the average labour time of the employees in the company. It is superior to their competitors and it is around 35 years. Obviously there is a percentage of employees' rotation but it is minimum. To keep the employees for that long time is not easy but as it is one of the main objectives they make efforts training them and giving them some authority to feel as an important part within the firm. Each employee works in a team but at the same time they have plenty autonomy in their areas to make decisions and always promoting and sharing knowledge and innovation at all levels. Also the internal communication is fluid and the organizational structures are quite flat. It is necessary to have a manager and a superior in each department in order to organize and provide guidelines but apparently to catch them it is easy for employees at all levels. To know about the satisfaction of the workers, twice per years a questionnaire is carried out at all levels of the division. The employees value the department, the managers and they express also how they would like to develop their careers and which are their inspirations. The results are shared between the managers and their teams and it is reviewed six month later in order to check if the employee's evolution has been positive. Also the feedbacks are constantly among the team through internal inbox, suggestions etc. As we were explaining before one of the parts of that questionnaire ask the employees for their aspiration and where they would feel better within the organization. It is a kind of Quality Flexibility and Supportive People Management aspects. They use a developing program named DGP where they plan work for the employees depending on their lacks and priorities. Also they have a program based in learning by doing. It means when they need to make big changes in the organization, one of the employees of each department is moved for a few months to the headquarters in Switzerland in order to learn deeply about the issue. After this time, the employee is back to the department in order to share all the knowledge with her or his colleagues. It is happening right now with the Digital Era. The changes are massive continuously so they have to use this method to keep all the organization aware of the news in this field. Therefore, it means a continuous investment in employees' training at all levels (pre-sales, agents, managers, executives...)

Regarding the second block focused on Management Innovation, we detect that the efforts to be more efficient in this aspect are fairly important. As we were mentioning before and according the vision of the manager we interviewed, the human capital is always a core aspect. They try to have the best team in the communication and development department as they believe it is a crucial team to face the innovation challenges as these people are a source of creativity and new ideas. Otherwise, management is always aware who is the best doing what so they try to relocate the people where better perform their task, always with the employees' approval and following the necessary training. Since some years ago they have been also introducing organizational changes as the decentralization. Unlike its competitors, they have for instance, a department of marketing in each country what gives more freedom taking specific decisions for specific projects. Also the department reconstructing is constant as they have to adapt to market needs, the best sample is the adjustment to the new digital era that they are carrying out. On the other hand, they have introduced new management practices. In the past they used to have face-to-face meetings with other departments or divisions, it was expensive and sometimes difficult to adjust all the agendas. Nowadays most of these meeting are done in streaming, then, all the managers worldwide may be present at any time. Other new methodology in meetings that they have introduced is a way where these meetings are short, quick, with colourful graphics and they end with a decision made. This is more common between same departments in order to accelerate the decision-making process, avoiding bureaucracy.

With regards to the consumer, the way they reach them has changed almost drastically in the last ten years. In the past, most of the advertising campaigns were focused almost 100% on TV and few of them on billboards or ads in the magazines and newspapers. In the present, that percentage has changed, almost 35% of the advertising is done in digital media so just the 65% is still focus on TV. It has meant to be updated in all the media generation and to make new partnerships in order to launch new campaigns in these new media sectors. The contact with advertising and communication companies is constant, having weekly meeting to value the impact of the campaigns and how it is channelled by the consumer. As they say their customers choose them because of the quality and the deep study of each target they are focused on. The firm has the best R&D centres worldwide, owned by the firm, in order to prove the tasting and quality of the products, taking into account environmental and local factors. It is a brand known worldwide so, every detail needs to be looked after to the fullest. But for instance a way to create a customer loyalty also they use the new technologies. The company has an application where the consumer can scan the products they get from the firm and to exchange the bonus for prices or to have discounts etc. In order to make customers access to products very easy, in the case of the ice-cream division, the

firm counts with people around the country where they operate taking care of the places where the product is sold (bars, restaurants, ice-cream shops, supermarkets etc.). These employees show and train their clients how to use efficiently the products in order to give the best service to the final client, always following the principles of the brand. As concerns the customer engagement through emotional involvements they use again the new technologies and social network to create their campaigns each season. The communication team study deeply all the social networks, looking for insight and checking what customers are saying about the brand in each moment. They use this to create adverts and campaigns with emotional background. Also they remark their engagement with the environmental sustainability as a part of their core code, with constant efforts in their factories and places where they operate.

What concerns the open innovation despite they try to have their own centres for example, for R&D, the company also relies in some partners for particular projects or questions. In this new era of digitalization to train their employees in some levels they have delegated in important consultancy firms as they are experts in specific fields. Also, when they want to carry out a strong campaign worldwide or they want to make changes in the social network, the firm hires services from leaders companies as Google or Facebook in order to create a project adapted to the firm needs.

Finally, based in the common aspects that link TQM and innovation, the company was asked to evaluate in general the degree of satisfaction of making this aspects as the basis of their business. Even being a traditional firm in some aspects, it is obvious that in the last 10 years since the financial crisis started and the digital era finally was settled down the firm has put more efforts in innovative organizational aspects and not just focusing on innovation for quality. Every year almost each division worldwide accomplish the final target of growing 5% percent the business in general. It is possible applying in a greater or lesser extent these theories that evolve employees, customers and management in the same degree.

#### **Case C: Food Distribution Company**

The Company C is nowadays the biggest cooperative in its region and one of the leaders in the food retail industry. The organization was found 40 years ago and since then the expansion has been constant and its commercial network has not stopped, increasing every year. They had important changes in 2004, when they were totally disassociated from the company with which they were associated in the 90s. That fact did consolidate the business that the firm is today.

We interviewed one of the managers in the marketing department. They are a heterogenic area which involves different teams as Communication, Merchandising, Studies and Organization, Fidelity Programs, Quality or Customer Service. Due to the fact of this departmental segregation, we realised that the structure in the departments in general was quite flexible and innovative as well

as with fluent communication between them. The manager was explaining the relationship they had with the employees and their degree of autonomy making decisions. Employees know that sometimes due to the lack of time or the urgency, they have to make decisions without consulting anyone. For the company the possible mistake an employee may have it is an important part of the learning process: the management considers it is a way to keep aware everyone within the team, avoiding any kind of accommodation by employees. As there are different teams in each department focusing in different aspects of the business, the communication needs to be fluent. The cooperation and coordination between departments is then a fundamental factor since most of the projects are carried out together by several teams. Hence, the accessibility to the top managers must be easy for the employees and vice versa. It is worth to name the system that the Company C uses when promoting people. All the employees, from the offices to the staff in the supermarkets know about the essence of the business and how they can promote within the company. Always the managers give first the opportunity to the current employees to develop their career in the firm. This always accompanied with continuous trainings at all operational levels and giving support and opportunities to the workers by the management. As our interviewer was pointing out, it seems common today to use the internal promotion for the employees but apparently in the past this practice was unusual in the service companies so they consider themselves as pioneers in this aspect at least in the region where they operate.

What concerns to the management innovation introduced in the Company C in the last years, they emphasize that the most important thing for the firm are the adaptable and flexible structures they are based on. It means that due to the constant changes (financial, economic, social etc.) in the environment, the best solution is to have a flat structure where any change is welcome without disturbing the whole organization. When a department needs to be created for a project or for a new division of the firm, they can manage these situations easier with this kind of structure. Besides they have introduced the intensive day timetable for the employees (as the European method) where all people can reconcile work and family life and at the same time, to be more productive. Also employees have plenty flexibility with the starting and ending hours in order to combine other personal or professional daily activities.

In regards to the consumer, the Company C seems very proud about all the investment they make on them as it is having such a good results. First of all, they explained the loyalty program they have developed with the purpose of retaining the customers. It was in 2005 when they started using what they call "The fidelity program". By that time the Company did not have large financial resources but with great ideas and effort they developed this program where the consumer is awarded every month with discounts and bonus to exchange for products like cookware or even bedding, depending on the promotion. Over the time the program has been improved. Nowadays the offers and discounts that the customer

receives at home, with a little magazine, are almost personalized based on the spending habits of the consumer. It means to invest constantly in technology as there are every month around 500.000 of different combinations of offers. Also the Company has a customer care service very powerful which has improved dramatically in the last years. It is very valuable for the customers as any doubt or query they may have they will be responded immediately via phone or internet. In order to know is a new product or packaging may be successful or attractive in the shelves of the supermarket, the firm usually carries out group meetings, interviews, surveys even shopping with the consumer. It is a way to know what they thing and how they perceive the changes in products or even in the layout of the supermarket. Other method they use is what they call *test image*. It consists in a simulation of an implementation of a product and the customer is tested to know about her or his reaction against the possible changes. Depending on these reactions the changes will be implemented or not. Other way of customer engagement is to emphasize in sustainability and social responsibility to increase the positive perception of the brand. All the supermarkets feature LED technology and also closed refrigeration cabinets to reduce the power consumption. Also they collaborate actively with NGOs and food banks.

Regarding open innovation and the propensity of a firm to work across their boundaries of operation, Company C has different partners to cover needs in different aspects. In one hand, they use the knowledge of some quality or image agencies to carry out all the projects regarding simulation processes. Always the company tries to have this kind of collaboration with the leading companies in the sector. On the other hand, they collaborate with universities through agreements like corporate-sponsored professorships (*cátedras de colaboración*), teaching in seminars or giving to the student the chance of doing practices in the logistics or marketing departments. Also, the company collaborates in radio programs weekly giving advice about health, beauty or good eating habits. Focusing on children the company has developed learning programs just designed for them. The aim of the programs is to teach the kind good habits in nutrition from the school.

As usually, the company was asked about the benefits of carrying out an innovation model in a service sector, particularly in the food retailer, or otherwise if the company worked better with other kind of organizational models. The manager with his experience and results just have good attributes about TQM practices and innovation. Not just because of the increase of the benefits also because throw this practises they have settle down a strong business in the last years, a new image of the brand has been built up around the innovation model in all the divisions of the company such as management, marketing, logistics, R&D...

#### **Case D: ITC Solutions Company**

The last company exposed in the paper provides ITC solutions since 1973. It is one of the most important firms in its sector in the country. They started supplying technological solutions to some commercial banks but early the expansion started to others sectors such as finance, insurance, services, telecommunication or utilities. The evolution of the company has been constant to adapt the business to the drastic changes that the sector has faced in the last 40 years and to adapt its services to the customer requirements. They complete their offer with technologic solutions like Enterprise Resource Planning (ERP), Customer Resource Management (CRM), Management Enterprise Systems (MES) Social Business, Business Intelligence or Cloud Computing among others. Moreover, the company develops innovation as a core competence advantage which is fundamental in the growth of any business project they are involved with. In an innovative company services such this one, our aim was to find out if this innovation was carried out in other aspects in the company such as management or employees. It seems obvious that a market leader must apply all kind of innovation in its business but sometimes these actions differentiate top companies from followers. It is because of that we found interesting to study deeply this sector and in which degree the TQM and innovation was applied on.

We interviewed first the communications manager of the industry division. Later we had access to the sales manager of the Business Solutions department (Industry is included in this department) and finally we had an informal chat with an Inside Sales who was part of the industry division team.

The company is divided in different areas and divisions and each division is formed by different teams. As the managers were explaining as well as the employee, the autonomy of this latter and the teams in general seems quite important. They work in teams following the directions of a team leader but they manage their time and the way they do the job. All the weeks they report the work and results to the manager in order to have a meeting on Monday to discuss all the achievements and challenges for the weeks coming. Therefore all the kinds of communication, it is intradepartmental, vertical and transversal, need to be fluent. Apparently they achieve that good fluency having good communication via mail, phone or with the weekly meetings between them. The feedbacks from both, employees and managers seem constant in an informal way. Every week all the teams talk about perceptions and the ways they can improve their weaknesses or the company's lack. As they have different offices across the country, twice per year or even three times per year all the teams meet in some place in the country. The target of this meetings are to improve their skills and to attend trainings and new aspects about the way of working or possible changes in the organization. It helps as well to feel more comfortable with all the members of the division, as they have informal dinners and activities. It is apparently a perfect time to exchange ideas and thoughts. The managers remarked that these initiatives are carried out for a long time ago. It lets to keep the managers and employees updated with the news within the business.

Regarding the human capital, the company tries to hire and to keep the best employees as they are in a constant full expansion of the business. They ask for employees with high skills, creatives and capable to add value to the business throw new ideas and innovation. Management will be always willing to listen and to apply new ideas or methods proposed by employees if the results are going to be positive for the division where they are working for. So management seems aware about the specialized skills and specific jobs of the employee, also in the other way around (from employees to top management).

What concerns to the management innovation practices introduced by the firm, Company D is always leading and encouraging this kind of actions. Managers were explaining the investment they do every year in these actions in order to carry out a constant improvement of their services. Any member in the organization can raise improvement plans during the year. It is evaluated together with the team leader or manager and a formal document is created showing the plan to follow when the implementation will start. Also in the document appears when is predicted the process will be ended or improved. One of the most important plans implemented is what they call New Commercial Methodology. The aim of this project (started in 2011 and finally implemented in 2013, but every year with substantial improvements), as the sales manager was explaining, was "to increase the sales and to develop high qualified consultants through the implementation of procedures, tools and a continuous monitoring of its application". All the employees of each department work with this tool where the activities of all the team, quality and results are interconnected. So it is easier to access to any data or sales project in particular. The forecast for the project was to increase 20% the volume of sales and to consider the sales not like an event but like a process instead. The managers were proud to say that all the goals were achieved during this period and now their aim was to keep improving the project year by year. Other practice introduced in the last years was the transformation of the Quality System. "Its aim was to decentralize the quality management department and to move it to each business' units in order to have complete autonomy, ability to act, and responsibility in terms of selecting quality models, continuous improvement and certification policies", pointed out the sales general manager. Its implementation has enhanced the quality processes and it has added quantifiable value to the firm.

In regards to the clients, the Company D makes big efforts in order to maintain and to improve the relationship with them. From the marketing department the firm has developed a project that is running since 2011. The project, named Compas, came up as an initiative to innovate their relationship with their clients and customers. They created a virtual space where the clients can access to relevant information, interact with the project members and to follow up all their projects. The main goal of the project, which is always carrying out constant improvements, is to enhance the clients' satisfaction, taking advantage of the company's capabilities. To keep the customer efficiency and its engagement with the company, the firm also has a strong after sales service. For instance, when a client implements a new software in the company, they have a project tracking of the implementation. Also the technical employees of Company C will be always available in order to solve any problem or to explain properly how it works. Also, the Company D sends to its clients periodic mails and videos about news in the firm or new products that may fit their needs to keep them informed. Any doubt or query the clients may have can contact the service sales at any time to solve it out. Besides, even the activity developed by the company does not imply a high environmental impact, this is one of their values. The company has, for instance, agreements with other firms or organizations where they have developed projects to preview torrential rains or to know about the traffic jam and his impact environmentally.

Therefore it seems obvious that the company cooperates beyond his traditional boundaries. Actually open innovation is an important part of the business. They have partnerships with some of the most important public and private companies in the country and even abroad. As the manager was explaining, the aim of these alliances "are to drive innovation and competitiveness; look for the best applications of the technology; take care of the impact in the environment; to create jobs; encourage the creation and dissemination of knowledge; cooperate with innovation agents". In addition of this they collaborate with some universities giving technological support and guiding them about ITC aspects.

Again similarly to the other companies, when we asked about the role of innovation and its results within the company, the answer was positive. Besides, in this case, the company belongs to this subsector so to innovate (not just radically in products such as software) is a core value for the firm and a part of their business. The firm is in constant expansion so they do not hesitate that part of the success is due to the fact they innovate in all the aspects and it is going to be a must for them.

#### 6- Discussion, Conclusion, Limitations and Further research

#### Discussion

The aim of this paper was to support and clarify the links existing between TQM and Innovation by answering three questions:

- ✓ Have TQM practices any impact on innovation in service organizations?
- ✓ Do the service firms use this relationship between TQM and innovation?
- ✓ How management in service organizations implement them?

In general, the results prove that all 4 case study have implemented some kind of innovation in management in order to satisfy their clients and to gain competitive advantage against their direct competitors (See Annex 2). The results clearly show that the implementation of the aspects regarding TQM and Innovation are mandatory for the companies in the service sector to keep growing and improving their relation with customers and stakeholders in general.

First paper goal was to identify whether TQM practices have any impact on innovation in the companies belonging to the service company as for many years these studies were focused basically on the manufacturing organizations. The findings have revealed that effectively, TQM aspects as customer focus, continuous improvement and employee empowerment are used by companies to provide gradual innovation and eventually radical innovations. The above results give support to Santos-Vijande and Álvarez-González (2007) who point out that these aspects can create the necessary balance between autonomy, discipline and underlying control if they are well implemented by the enterprises.

In regards with the second research question, the results show that all 4 case firms understand and perfectly implement the common aspects between TQM and Innovation. The common ground for the four companies and the main goal to accomplish by them is the satisfaction of the customers through the continuous improvement of their business. To achieve that it seems essential to develop their strategies around investing in the staff, the integration of all the members and the possibility of agreements with partners.

Regarding the human capital, the autonomy of the employees seems very important in the four companies studied. The discretion and control the employees have over their job-related decisions has turned fundamental for these companies. But to achieve that the firms have had to invest time and money training their staff. This is the best way if you want your employees to know the core values of the company and how they should work properly. The companies are aware that to develop employees' knowledge and skills through their training will be worthy even investing monetary resources by them. Moreover, investing resources in human capital is the only way to make the employees involved in the firm at any level if management want to gain competitive advantage in its sector and as a final goal, to achieve full customer satisfaction. The fact that employees have this high degree of autonomy can be related with the flexible structures and internal communication that all the firms have. It is also common for almost all the study cases the flexibility of their structures as soon as they need some changes. For instance, they need this flexibility in order to adjust the skills of the employees to match the task required by its workload or when they have to adjust their needs to important changes such as the new digital era. Apparently the internal communication among the departments in all the cases is quite fluent. Also the vertical or hierarchical communications between top management and employees has turned more common in firms nowadays. Therefore, the interdepartmental and intradepartmental communication is necessary to put together the strategies of the different departments in order to improve the decision making. Also it reduces bureaucracy and misunderstandings between departments. Otherwise, the autonomy of employees gives them the possibility of developing their creativity, vital in the innovative process as each employee is able to add value to the company. It is therefore that companies would hire the highest skilled and brightest people in order to develop new ideas and knowledge within the firm.

As regards the third question, we have observed in all cases that managerial implication is essential to develop a culture that provides opportunities to innovate at all levels within the organizations. As Birkinshaw and Mol (2006) state factors that will foster the appropriate culture include encouraging diversity, matching the right people to projects, providing appropriate and timely management, giving space and time for discussion, encouraging support from across the whole organization, and providing the right resources (both, internal and external). And of course, always having on mind and consideration customers' expectations. After the study research of these four case study it seems clear that management have this aspects quite impregnated in their behaviour when implementing innovation. Otherwise it would be difficult to achieve the results they are seeking and apparently, they achieve every year. In almost all cases (mainly cases B, C and D) the firms create constantly opportunities for individuals and teams to share knowledge through constant trainings or specific programs for employees. Also management is aware of the importance of choosing a group that best fits with the overall needs of the organization such as the new departments created by case B and C depending on the needs of the specific moment.

As the final goal is the customer satisfaction, all companies have special programs for their customers such as the Six Sigma Project (Case A), The Fidelity Programs (Case C) or a system designed exclusively to enhance the relationship with clients and customers (Case D). Moreover, firms look constantly for knowledge outside their organisational boundaries to support and enhance the business. As Miotti and Sachwald point out, the choice of partners for collaboration depend on the firms potential to provide additional complementary inputs. The cases studied try to satisfy their clients' expectations giving some extra services such as the case of the leisure and hotel firm. The firm has collaborative arrangements with a restaurant and a Health Club in order to give the best service to its customers. In other cases instead, the firms have alliances with R&D centres or with other companies to perform specific jobs.

The findings also reveal aspects that we exposed in the first section of the study. Due to the intangibility of services, this industry is more related to soft practices than hard practices which are historically related to manufacturing firms. Hence, the instruments used by the four cases are the instruments typical used by the organic vision. This instruments include involvement of management and employees, constant training and learning of the staff and teamwork. During the research we found that effectively these companies focus more on customer satisfaction and rely more on customers' judgement on the quality of services. Due to this fact, we have

tested that firms employ all their efforts in enhancing their relationship with customers and clients through TQM and innovation practices.

#### Conclusions

This study provides three contributions to academic literature. First, it deepens the existing knowledge about the difference in implementing innovation between manufacturing and service firms. Although most of the studies carried out linking TQM and innovation have been conducted in manufacturing firms. The results obtained confirm that service firms depend more on customers' perception and evaluation. Therefore these firms use more people management practices rather than practical and numerical quality control tools, the latter related to manufacturing organizations. Second, this study also illustrates the nature of the incremental innovation in service firms instead of an implementation of radical innovation. Service firms look for a continual adaptation to the market's needs. Also innovation in services seem much more difficult to replicate due to their intangibility. In the case of radical innovation in physical things as occurs in manufacturing companies probably are easier to calk. Besides, the introduction of continuous improvements over the time will lead to incremental innovation and may conclude in radical innovation.

Finally, the importance of managerial implication is crucial in the innovation process. Management may personally drive innovation in an organisation, it is essential to develop a culture that supports innovation and establish an environment where teams can work together to be creative (Birkinshaw and Mol, 2006). Managers face various challenges, they have to decide by themselves which projects are worth for the firm and then. After that, they have to choose the best group of people that best meet the needs of the organization. Also each innovation process involves a level of uncertainty, management must have clear objectives against which decisions are made in order to do not waste time and resources. In summary, we have proved what most of the theories confirm, that to have an innovation culture within the business is a key aspect to keep growing in this competence environment where the companies are. Again following Birkinshaw and Mol (2006) we can confirm after this study that without motivated, skilled employees and a suitable organization with a creative atmosphere, companies will not be innovative.

#### Limitations and future research

Our work obviously has some limitations because it is focus on a limited set of companies. In any case, as the investigated companies belong to different subsectors within the service industry it has allowed us to provide a broader view of the case study in the sector. The future research could validate these findings by interviewing more companies of the sector to check whether there are significant changes implementing TQM and innovation within the firms of the same sector. Moreover,

similar analysis could be conducted on small-medium companies in service sector as they are the most of the companies within the industry in the country. Almost all the cases studied (Case, A, B and D) belong to multinational companies or they are part of a big company, so the methods used innovating sometimes come from the main headquarter, although all of them have shown to have autonomy and independence. It is because of this that would be interesting to have more extended investigations in small-medium companies belonging to the same country, with the same institutional environment.

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# Annex 1: Areas of Enquiries

**Block 1-Proposed TQM enablers for Innovation:** (Adapted from A. Abrunhosa, P.Moura E Sá, 2008 from the article "Are TQM principles supporting innovation in the Portuguese footwear?")

Autonomy: It relates to the degree to which employees have some discretion and control over job-related decisions.
 A1: Authority to take immediate corrective actions once problem arise
 A2: Support from the supervisors to the decisions made
 A3: Active role in task planning and scheduling
 A4: Control over the quality of the work

- Internal Communication: It reflects the extent of communication among organizational units or groups.
   CO1: Degree of vertical (hierarchical) communication
   CO2: Degree of intradepartmental communication (among co-workers that belong to the same area)
   CO3: Degree of transversal (interdepartmental) communication
   CO4: Accessibility of upper manager to shop floor workers
- **Consultation:** It relates to the degree to which the organisation listens to its employees.
  - **C1:** Employees' feedback collection through the use of questionnaires
  - **C2:** Existence of system to collect employees' suggestions
  - C3: Disclosure of the results of the questionnaires
  - C4: Workers' involvement in strategy decision making
- Qualitative flexibility: It concerns the firms' ability to adjust and deploy the skills of its employees to match the tasks required by its changing workload.
   QF1: Selection of workers based on generic abilities (internal education and training gives them the competencies to perform specific tasks)
- Supportive people management practices: It relates to people management practices that are supportive of the introduction of TQM principles.
   SPMP1: Continuous education and training
   SPMP2: Performance appraisal schemes

**Block 2- Factor Analysis about Management Innovation** (Adapted from J.Nieves, M. Segarra-Ciprés, 2014, from the article "Management innovation in the hotel industry")

# Human Capital

If employees are high skilled - widely considered the best in the industry – are creative and bright – are experts in their particular jobs and functions – develop new ideas and knowledge

# • Integration Capability

- Employee's individual contributions are channelled through their work group

- Members of the firm have a global understanding of each other's tasks and responsibilities

- Management is fully aware of who in the firm has specialized skills and knowledge relevant to the work

- Management carefully interrelate actions between members of the firm to meet changing conditions.

- Members of the firm manage to successfully interconnect their activities

### • Management Innovation,

- Management frequently introduce organizational changes to improve the division of responsibilities and decision making (e.g., decentralization, department restructuring, etc.)

- Management frequently introduce new methods for managing external relationships with other firms or public institutions (e.g., alliances, new forms of cooperation etc.)

- Management often introduce new practices in work organization or firm procedures (e.g. new QM practices, new information and knowledge-management systems etc.)

- The new organizational methods that management has incorporated have been pioneering in the sector.

*Block 3- Classification of Business model innovations along design themes* (Adapted from A.Sorescu et.al. 2011 from the article "Innovation in retail Business Model")

- ✓ Value appropriation: -Customer Lock-in
- ✓ Value Creation: Customer efficiency

### - Customer engagement

 Customer Lock-in: intended to decrease customers' propensity to search and switch after an initial investment. How you retain customers, create a customer loyalty? Incentives for customers to return to the company? How to endure customer relationships?

- 2. Customer efficiency: Involves making customers access to products as easy as possible. Offering more service support? Internet? New selling formats (internet, tour operators)? Do you consider any of them as innovative within the company?
- **3. Customer engagement:** It involves the degree to which the hotel is able to design customer experiences that evoke emotional involvement that goes "beyond purchase". Which methods do you use to make the customer to have a defined perception of the brand? Through unique service assortment?

As well, it is important the emphasis in sustainability in this aspect to increase loyalty and positive associations.

Other ways to engage customer is by selling not just a product or service but the entire experience.

**Block 4- Open Innovation** (Adapted from A.Mina, E. Bascavusoglu-Moreau, A.Hughes article "Open service innovation and the firm's search for external knowledge")

The concept of open innovation captures the increasing propensity of firms to work across their traditional boundaries of operation (Universities, R&D, Consultant Companies, cooperation with customers and suppliers, agreements (e.g. catering companies in order to improve the service given by the company ...)

Service innovation tends to imply greater emphasis on organisational and human capital factors. Service firms rely more on information and communication technologies and non-R&D innovation expenditures. They use more external knowledge than manufacturing sector.

Open Innovation Practices	Informal(non-contractual)	Formal (contractual)	
	activitiesmore engaged to	activities	
	Service Business		
	<ul> <li>Engaging directly with lead users and early adopters</li> <li>Participating in open source software development</li> <li>Exchanging ideas through submission websites, idea competition</li> <li>Participating in or setting up innovation networks/hubs with other firms</li> <li>Sharing facilities with other organizations, inventors, researchers etc.</li> </ul>	-Joint R&D -Joint purchasing of materials or inputs -Joint production of goods or services -Joint marketing/co-branding -Participating in research consortia -Joint university research -Licensing in externally developed technologies -Outsourcing or contracting out R&D projects -Providing contract research to others -Joint ventures, acquisitions and incubations	

OI in Business Services	Science-Based	Market-Based	
-Sources of	-Scientific/Technical Knowledge (Manufacturing)	-Market Knowledge	
-Based on	-Universities and public research institutes as they can extract more value from R&D activities	-Customers and Suppliers (In addition: collaborative arrangements with univ. and research institutions to better exploit their existing capabilities including HR, Finance, MK or to explore new avenues for innovation and grow)	

Annex 2: Resume of	Case A: Hotel and	Case B: Food &	Case C: Food retail	Case D: ITC
Main Findings	Leisure	Beverage		
Block 1: TQM enablers for Innovation <ul> <li>Autonomy</li> <li>Internal Commun</li> <li>Consultation</li> <li>Qualitative Flexibility</li> <li>Supportive people</li> </ul>	Autonomy of the employees, Fluent internal communication, consultation through surveys twice per year.	Autonomy of employees, fluid communication but it is necessary a team leader and managers. Surveys twice per year Some traditional culture aspects.	Importance of employees: internal promotions. Fluent communication and plenty autonomy of employees.	Autonomy of employees. Fluent internal communication. Supportive people.
<ul> <li>Block 2: Management Innov</li> <li>Human Capital</li> <li>Integration Capability</li> <li>Manager Innovation</li> <li>Other innovation structures</li> </ul>	Management Innovation through the Six Sigma Project.	Constant trainings. Take into account employees aspirations. (DGP program) Best employees for each department. Short meetings as new practice.	Innovation in organization: flat structures, flexible. Flexible schedule for employees.	Integration capability. Big efforts in Management innovation, resulted for instance, in the "New Commercial Methodology" or the new Quality System.
<ul> <li>Block 3: Classification of</li> <li>Business Innovation Mng <ul> <li>Customer lock in</li> <li>Customer efficiency</li> <li>Customer engagement</li> </ul> </li> </ul>	Six Sigma Project: focusing on enhancing customer experience.	They needed to adapt the strategy in the Digital Era to reach better the customer. Social Responsibility	Innovative loyalty program for customers: "The Fidelity Program". Strong customer care service. Sustainability and Social Responsibility.	The firm has developed projects as Compas, a virtual space to interact with clients. Strong environmental commitment.
Block 4: Open Innovation	Two partnerships: Japanese Restaurant and Health Club	New partnerships with advertising companies and consultancy firms to be adapted to the Digital Era	Partnerships with quality firms, image test firms, universities, schools etc.	Alliances and partnerships with companies in the public and private sector to promote innovation.
Regarding common aspects between TQM and Innovation, mainly focused on:	<ul> <li>✓ Customer focus</li> <li>✓ Continuous</li> <li>Improvement</li> </ul>	<ul> <li>✓ Customer focus</li> <li>✓ Creative Staff</li> <li>✓ Continuous improvement</li> </ul>	<ul> <li>✓ Employee Empowerment</li> <li>✓ Customer Focus</li> <li>✓ Flexible organization structures</li> </ul>	<ul> <li>✓ Involvement &amp; Teamwork</li> <li>✓ Customer orientation &amp; service</li> <li>✓ Continuous improvement</li> </ul>