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Organizational innovation in hotel companies

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Abstract - Innovation is a clearly tool to be competitive, even in the tourism sector. Moreover, developing organizational innovativeness is important to achieve a great degree of innovation. The purpose of this paper is to identify some factors, which have relevant effects on organizational innovativeness development in tourism business, in particular in hotel sector. This paper is based on several studies related to organizational innovation. For that, this study investigates innovation, organizational innovation and its antecedents. Also, some organizational innovation antecedents are analysed to extract results. To do the empirical study, a database that has information of Spanish hotel firms, was used. This study used that database to extract results, discuss them and draw conclusions.

Research limitations/implications - The empirical study is limited to the available database. This database collects information about some organizational innovation antecedents. In addition, that database collects information only from hotel companies. Therefore, the results show the situation of hotel companies.

Keywords - innovation, organizational innovation, organizational innovation antecedents, organizational size.

Paper type- Research paper

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1. INTRODUCTION

The purpose of this study is to analyse organizational innovation antecedents in firms, in particular hotel companies. Innovation is a concept that has a leading role today. That is because innovation is considered as a fundamental resource to be competitive in the market. Then, many companies aim to be innovative in order to be competitive.

Due to globalization, competition degree has been increased in many sectors. Companies have to accomplish more challenges and achieve more objectives. That situation creates a considerable competitive pressure in the markets that many companies face. The situation in service industry is not different. Innovation concept is prominence in service industry because it is key for firms to stay competitive. Several researches argue the importance of innovation in the services sector. For example, according to Gallouj and Weinstein (1997), innovation in service industries is an important issue to develop and in his study innovation processes was considered as an extensively reputable concept on the theoretical and the empirical levels. Also, there are some studies about innovation in hotel sector. For example, a study by Jacob et al. (2010) that considers competitive factors of environmental innovation or a research by González and León (2001), which describes environmental innovation determinants.

Moreover, there are some studies about innovation in the Spanish hotel industry. For example, according to (Vila et al., 2012), innovation growth in hotel firms has resulted in increases of occupancy rate. In addition, efforts to introduce innovation in hotel companies permitted them to increase their prices. Besides, that study argues there are several hotels that try to innovate. Of those hotels, some get to apply small ideas to innovate and others get to apply a great idea to achieve differentiation. Furthermore, it is necessary to highlight the importance of customer perception. Innovation serves to add value to the company's products. In firms, that added value has to be appreciated by their customers. If not, the aim to be competitive and achieve differentiation through innovation will not be accomplished (Vila et al., 2012).

That study also mentions the difficulties to innovate in hotel sector. Firstly, it is difficult to develop new ideas with added value to the service and incorporate them into the activity. Moreover, competitors are attentive to the environment by the competitive situation, and then they would probably imitate generated ideas that contribute value to the firm services. Despite the difficulties to innovate in the hotel sector, it is advisable to try it. The development of innovation and skills leads to more innovation and new skills.

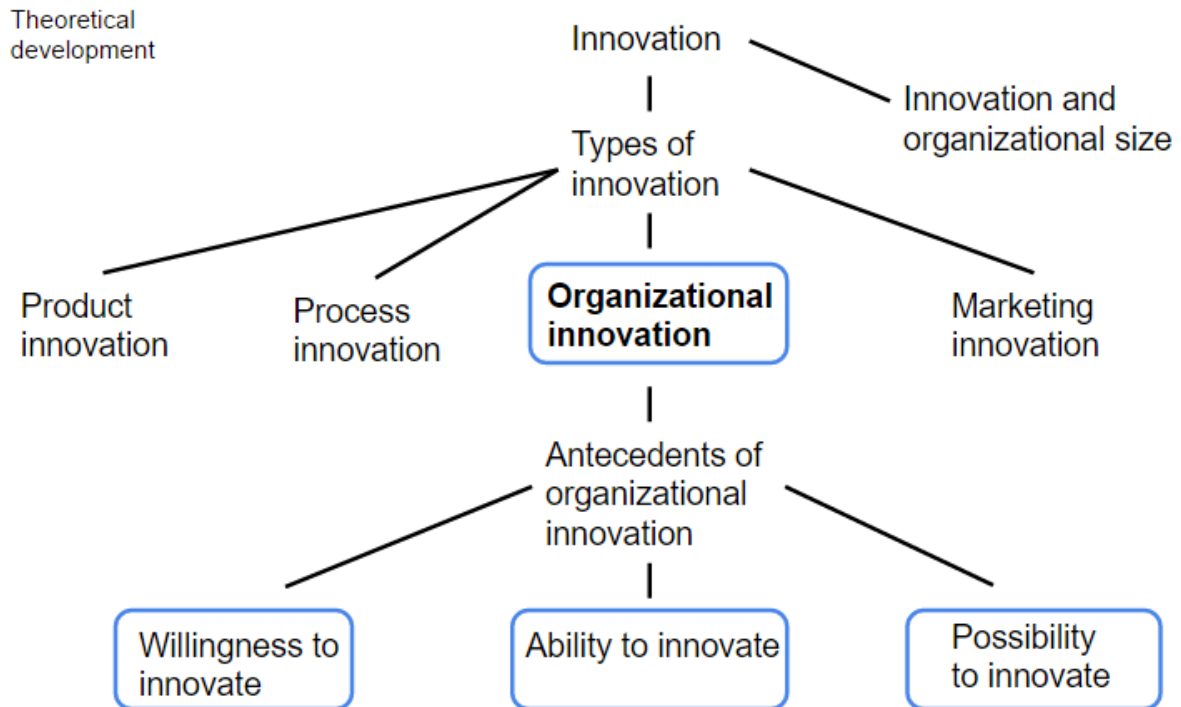
According to (Barney 1991), when firms develop distinctive skills they also can constantly outperform others. Then, to achieve success is interesting organizations gaining a set of superior resources and capabilities (Enz and Harrison 2008). Furthermore, it is important that the new resources acquired satisfy certain requirements. Mahoney and Pandian (1992) identify these requirements. According to them it is fundamental to get resources that have market value, are difficult to replace and are resources that few companies have access to them. In this sense, organizational innovation has to add value to the service and it has to be difficult to imitate by the competitors.

In this study, the first step was to gather definitions about innovation from different authors. That makes easy to have a general view about what innovation means. Also, there are researches that classify innovation. Therefore, different types of innovation are briefly described in the study. Organizational innovation is a type of innovation and this study is focused on it. That type of innovation refers to new organizational methods in external relations, workplace organization, or firm's business practices (OECD, 2005). It needs to be facilitated and there are some antecedents that favour organizational innovation development. This study identifies some organizational innovation antecedents. In addition, some of these antecedents are empirically analysed to discuss the results obtained and provide a final conclusion.

2. THEORETICAL BACKGROUND

Before the theoretical development, a schematic shows the content of it. That is to facilitate the follow-up of the reading.

Figure 1. Organization of theoretical section



Source: Own elaboration

First, in “Innovation” section, the innovation concept is introduced and then, in the subsection “The concepts of innovation”, several definitions about innovation are shown. Developed innovation and its definitions, the next section, “Types of innovation”, explains the principal types of innovation. The fourth section develops organizational innovation (a type of innovation). Then, the theoretical background gathers information about organizational innovation antecedents, distinguishing 3 large groups. Each group encompasses several variables. Finally, the relationship between innovation and firm size is developed, and it is developed considering the size as a possible antecedent.

2.1 Innovation

Innovation is increasingly important for companies. That is because innovation helps organizations to achieve a better competitive position. It must be kept in mind that environmental conditions are increasingly unstable and unpredictable in service sector. Therefore, through innovation, companies can adapt to the changing environment and

thus be able to remain competitive. The positive relationship between innovation and benefits is supported by many studies. Basically innovation is a source of benefits because it allows organizations to develop differentiation strategies.

In 1911, Schumpeter published his study about the role of innovation in economic development. That study has led to further research related to innovation. Moreover, researches about innovation include several areas such as sociology, business administration, psychology or public management. Therefore, researches about innovation are large and varied. Researches about innovation also encompass multiple levels of analysis (organization, industry, individual, economy, equipment). Innovation at the organizational level, in general, is considered as the adoption or generation of new ideas or processes (Van de Ven et al. 2000; Amabile, 1988; Zaltman et al., 1973). In addition, multiple aspects of innovation have been examined (processes, antecedents, attributes, typologies, consequences). Besides, innovation could contribute to get different results. These results could be new technological advances, practices, products or services. An important condition is these results have to be new to the adopter organization (Klein & Sorra, 1996; Daft, 1978; Damanpour & Wischnevsky, 2006). So, innovation is a well-researched concept encompassed in many fields. Because innovation has been defined several times, it is increasingly difficult to get a superficial understanding of the concept. Also, different authors propose different methods to measure innovation. Researchers often focus on certain aspects of innovation. Some highlights are the types of innovation, innovation processes and innovation consequences (Damanpour and Aravind, 2011).

2.2 Concepts of innovation

As this study has already explained, many authors performed researches about innovation and because of that, innovation have several definitions. In 1934, Joseph Alois Schumpeter (1883-1950), an Austrian economist who was the first one to highlight the technological phenomena importance in economic growth, defined innovation distinguishing 5 types.

- The introduction on the market of a new good, meaning a good which consumers are not yet familiar, or considered as a new class of good.
- The introduction of a new method of production, meaning a method not yet experienced in the branch of the industry concerned, which needs to be based on a new scientific discovery.

- The opening of a new market in a country, whether the market already existed in another country or if it did not exist.
- The conquest of a new source of supply of raw materials or semi-finished products, again without regard to whether this source already exists, or must be created again.
- The introduction of a new structure in a market, such as the creation of a monopoly position.

Sherman Gee on his book “Technology Transfer Innovation and International Competitiveness” (1981) defines innovation as the process in which from an idea, invention or recognition of necessity is developed a product, technique or service useful and accepted commercially. Also, according to Pavón and Goodman (1981), innovation is the set of activities registered in a certain period of time and place which lead organizations to the successful introduction in the market, for the first time, of an idea oriented to achieve new or better products, services or management techniques.

Nelson and Winter (1982) defined innovation as a change that requires a considerable degree of imagination and constitutes a relatively deep break with the established way of how to do something. Moreover, innovation creates new capacities.

Rogers defined innovation as an idea or an object, which is perceived as something new (Rogers, 1995).

OECD (2005) defines innovation as the application of a new significantly improved process, organizational method, product (good or service) or a new marketing method in external relations, workplace organization or business practices.

Exposed several of the many definitions of innovation, this study is based on the definition provided by OECD (2005) because its definition is broad (collecting aspects which are proposed by other authors). It is also a definition oriented towards the types of innovation, including organizational innovation (which is the type of innovation analysed in this study).

2.3 Types of innovation

This study, in order to distinguish types of innovation, is based on OECD (2005). OECD (2005), as well as other sources of recognition, distinguishes various types of innovation. These types of innovation are product innovation, process innovation,

marketing innovation, and organizational innovation. These types of innovation were briefly defined below.

Type of organizational innovation according to OECD (2005):

-Product innovation. Product innovation refers to the new products or services that have improvements in their characteristics or their intended uses. Product innovation includes important improvements in components and materials, technical specifications, user-friendliness, integrated software or other functional characteristics.

-Process innovation. Process innovation refers to new or importantly improved delivery or production methods. This includes important changes in equipment, techniques and/or software.

-Marketing innovation. Marketing innovation refers to new marketing method implying important changes in packaging or product design, product promotion, product placement or pricing.

-Organizational innovation. Organizational innovation refers to new organizational methods in the external relations, workplace organization, or firm's business practices.

2.4 Organizational innovation

After collecting information about innovation concept and its main types, this study focus on organizational innovation.

Organizational innovation concept is varied. Different authors gave their own organizational innovation definition. So there is no single point of view for the term organizational innovation. Nevertheless, organizational innovation definitions are often similar.

Organizational innovation helps firms to achieve a better competitive position through the implementation in the firm of elements such as teamwork, decentralization of planning, quality circles, enrichment and expansion of jobs, continuous improvement, among others (Womack et al.,1990).

Organizational innovation can provide several advantages. It could helps to increase the performance of a company through transaction management costs. It also favours

satisfaction in the workplace, including productivity. Furthermore, it serves to obtain non-tradable assets or reduce costs of supplies (OECD, 2005).

According to OECD (2005), it is important not to confuse organizational innovation with other organizational changes within a company. The organizational method introduced has to be new in the company, in other words, it has to be a method never used before in the organization. That allows us to distinguish an organizational innovation from a simple organizational change. Also, their implementation has to be applied in business activity, workplace organization or external relations. In addition, it has to come from strategic choices taken by administration.

Organizational innovation in business activity refers to the application of new methods for coordinating routines and work process (OECD, 2005).

Organizational innovation in workplace refers to the application of new methods to divide tasks and decision-making among personal staff. It divides work within and between company activities. Also includes new concepts in order to structure the activities (OECD, 2005).

Organizational innovation in external relations refers to the application of new methods to manage relations with public institutions or other companies. For example, companies could make new collaborations with research centres or introduce a new method of integration with their providers (OECD, 2005).

According to a study about "Organizational innovation: The challenge of measuring non-technical innovation in large-scale surveys" (Armbruster et al. 2008), researches about organizational innovation could be separated into different groups.

The first one is focused on identifying organizational innovation structural characteristics and their effects on the innovations of technical products and processes (Burns and Stalker, 1961; Mintzberg, 1979; Teece, 1998).

The second one analyses and tries to explain how organizations evolve. It tries to understand how organizational change could happen (Greiner, 1967, Hannan and Freeman, 1977, Hannan and Freeman, 1984). Other studies that enter this group are

those that seek to understand possible opposition to organizational change and how to do to facilitate adaptation to changes in technology and environment (Lawrence, 1954, Lewin, 1958).

The third group includes the studies that investigate how organizational innovations arise, evolve and grow within the organization (Argyris and Schön, 1978, Duncan and Weiss, 1979).

There are also studies that grouped and classified organizational innovation in different types (Coriat, 2001, Wengel et al., 2000, Whittington et al., 1999). According to them, organizational innovation could be differentiated into structural organizational innovations and procedural organizational innovations or classified as intra-organizational innovation or inter-organizational innovation.

Structural organizational innovation tries to influence, change and improve responsibilities, information flows and lines of command. It also deals with the total of hierarchic levels, the divisional structure of functions and the separation between the main functions and the support functions (product development, human resources, production, etc.).

Procedural organizational innovations are responsible for processes, routines and operations in the company. Innovations in procedures change or bring new processes to the company. These changes can influence positively the quality of production (quality circles, processes of continuous improvement, etc.) or increase agility and flexibility in production processes (teamwork, just-in-time, etc.).

In addition, organizational innovation could be differentiated between intra-organizational innovation and inter-organizational innovation. The first one refers to organizational innovation that occurs within an organization. Some examples are the management or implementation of teamwork, continuous improvement processes or quality circles.

The second one refers to organizational innovation that occurs between organizations. It is the inclusion of new organizational structures or procedures between organizations. Some examples of inter-organizational innovation would be cooperation

in R & D (research and development) with customers, supply chain management with suppliers, or just-in-time process with clients or organizers of the organization.

Organizational innovation is a concept featuring in different sectors. This fact includes service sector companies such as tourism companies. Tourism companies are not an exception to that development and their structure and way of working could be affected too.

2.5 Organizational innovation antecedents

There are some factors that influence positively develop of organizational innovation. According to the model of organizational innovativeness by Behrends (2009), there are 3 factors that are preconditions for innovation in companies. These 3 factors are willingness to innovate, ability to innovate and possibility to innovate. Different variables are within those 3 factors. The empirical study analyses variables of these 3 factors.

The following figure shows some antecedents of organizational innovation that are analysed in this study.

Figure 2. Organizational innovation antecedents analysed

Factor
Willingness to innovate Management capacity to support change and learning in the company Practices in order to employees know the mission and the objectives of the company
Ability to innovate Ability to identify, acquire and absorb valuable external knowledge Ability to exploit and apply knowledge by developing innovations
Possibility to innovate Opinions and suggestions from employees are valued by management

Source: Own elaboration

2.5.1 Willingness to innovate

The first one group is called willingness to innovate. Willingness to innovate refers to stimulus to include innovative processes and favour acceptance of innovation in the company (Behrends 2009). Appropriate arrangements within the system, such as interdisciplinary project teams, could be a change triggered in organizations.

This factor is important because the introduction of changes to the system may encounter some obstacles. Acceptance of change is a considerable obstacle. It is difficult to effectively implement changes in an organization if its employees are not in favour of those changes. Acceptance of change by personal staff is strongly influenced by their appreciation of that change. If the change is not considered useful or if the change seems difficult to apply then its acceptance will become harder (Davis, 1989).

Furthermore, Rogers (1995), in its theoretical model "Diffusion of Innovation" (DOI), explains that innovative changes entail a diffusion process. The diffusion process of innovation takes place through certain channels within a social society. In particular, this communication occurs between the company's members. Also, the diffusion of the innovation could be faster or slower. The speed of diffusion of the innovation depends on certain factors. These factors are observability, complexity, trialability, compatibility and innovation's relative advantage.

-Observability refers to how visible are the results of applying innovation. Most visible results of applying innovation will favour the acceptance of that change.

-Complexity refers to the difficulty of applying the changes. Complexity occurs when the one who has to adopt the innovation sees difficulties to apply the change or has troubles to understand it.

-Trialability refers to the possibility that the change can be tested on a limited basis.

-Compatibility refers to the compatibility of the change with adopters. In order to measure the degree of compatibility of the change, concepts such as values, experiences, beliefs and the needs of those who adopt the change are taken into account.

-Innovation's relative advantage refers to whether the innovation intended to be adopted, seems to be superior to the currently used innovation.

In the factor willingness to innovate is important the concept critical situation. According to Behrends (2009), critical situations which the expected results are not obtained can favour acceptance of changes within the organization. This includes individual or organizational changes in processes. While the situation is favourable and good results are obtained there is no reason for the company to want to introduce changes in the organization. Therefore a trigger for the inclusion of organizational innovation is the presence of external threats that make the company needs to improve. Then, this

pressure exerted by threats can reduce resistance to change. However, as explained above, acceptance of changes does not come solely from the outside. There are stimuli that could come from within the organization. The company could manage internal systems to encourage acceptance and search for changes in order to improve and innovate (Behrends, 2009).

Also, Miller and Friesen (1982) support threats as a trigger for innovation. They distinguish to type of firm's strategy. According to them firms could be conservative organizations or enterprising organizations. The differentiation is based on the role organizational innovation plays in the firm. Conservative organizations are firms that just try to innovate when they are in challenging or threatening situations. Enterprising organizations are the opposite. They try to innovate constantly. Those kinds of companies have organizational innovation as a fundamental element of strategy. Besides, they react to the environment and even create it too. These firms have proactivity, they try to manage their environment and they do not limit to adjust to it. That attitude promotes innovative spirit. Miles and Snow (1978) also support proactivity; arguing proactivity is an essential component of innovative strategy.

An important element to facilitate acceptance of change in organizations is shared vision. That is a fact supported by several authors, arguing that it facilitates knowledge processes and innovation. Shared vision is based on a common commitment in order to achieve a desired future and also it implies a common sense of the firm's purpose (Senge, 1990; Senge et al., 1994; Maani and Benton, 1999; Wang et al., 2004). According to Clarke (1994), shared vision helps organization staff to understand organizational innovation changes. Furthermore, it helps employees to become more involved in the organizational innovation. However, without shared vision, organization staff tries to solve problems being more committed to their own attitude. Then shared vision facilitates to achieve innovative solutions collectively (Clarke, 1994).

When an individual with authority power decides to be innovative, he/she needs the support of the rest of the organization. If the personal staffs have same vision as the chief, they will help to apply the necessary changes and they will be commitment with the same aim (Slater and Narver, 1995). Moreover, shared vision assists organizational staff to work in the same way, trying to reach common objectives. In addition, according to Dess and Picken (2000), shared vision is a necessary condition (although not a sufficient condition) to become an organization that is able to learn, to change

and respond successfully in a constantly and rapidly changing competitive environment.

In summary, willingness to innovate refers to a great acceptance of change within a organization. An organization with managers able to achieve an internal environment that promote acceptance of changes and innovation and a staff prepared to changes.

In the empirical study, variables of the factor willingness to innovate are analysed. In particular, capacity to support change and learning in the company (related to the management capacity to favour change) and use by the management team of practices in order to employees know the mission and the objectives of the company (related to the introduction of shared vision in the organization).

2.5.2 Ability to innovate

The second factor is the ability to innovate. The ability to innovate refers to the organization's resources. When the available sources in the company could be used to invest in learning processes and innovation projects (being the firm able to manage knowledge and use it to innovate) (Behrends, 2009).

In order to understand the factor ability to innovate and its importance, the resources related to it are defined. Those resources include knowledge, which comes from inside and outside the organization.

Learning process is related to creation and management of knowledge. For companies, in order to be competitive in the market, it is important they take advantage of their knowledge and create new knowledge to utilise. Moreover, during learning process, firms could decide to invest in external learning in order to gain knowledge that is not connected to their current areas of expertise or advance their technology and products using knowledge (Cohen and Levinthal, 1990). These two learning actions can be enhanced by the exploration and exploitation of knowledge. Exploration is when external knowledge is used to create new products and technology. Exploitation occurs when external knowledge is used to refine the organization's current products or to improve its processes (March, 1991).

According to Nonaka (1994), knowledge is a resource that is obtained through combination and exchange. Both, combination and exchange are generic processes to obtain new resources.

According to the OECD report (2003), which develops knowledge management in the business sector, several facts justify the importance of knowledge management. Some of the more related facts are stand out.

- Organizational memory and its application could be useful for innovation and learning processes in organizations.

- Key organizational factors are knowledge assimilation capacities and networking strategies, and external sources of knowledge and innovation.

- The strong relationship, at an organizational level, between the economic actions generated through the application of new ICTs and the development of practices and training in the workplace.

- Proper management of intellectual property is important to prevent it from being dissolved or blurred in the organization.

Moreover, interaction between organizations to obtain innovation is positively valued by the economic literature. Company's efforts to establish links with other actors in the environment are beneficial. That is because it facilitates the attainment of value added and novelty in companies (Nooteboom, 1999).

Regarding the management of knowledge, a key concept is absorptive capacity. Absorption capacity is a concept that comes from macroeconomics. External information and resources can be absorbed and used by an economy. Absorptive capacity refers to this ability to use and absorb external information and resources (Adler, 1965). This macroeconomic concept was adapted to organizations by Cohen and Levinthal (1990). According to Cohen and Levinthal (1990), absorptive capacity is a capacity for commercial purposes. Also, absorptive capacity refers to the ability of the individual or the organization to appreciate the value of new information, understand it, integrate it and give it a use, generating other knowledge and skills. Basically, this ability consists of identifying the value of new and external information and assimilates it. Then the organization could apply it for its commercial purposes. In addition, Cohen and Levinthal value absorptive capacity as a very important element for organization's innovative capabilities.

There are others definitions of the concept. For example, according to Kim (1998), the absorptive capacity refers to the ability to acquire knowledge and solve problems. Another example comes by Zahra and George (2002). In particular, they extended the definition by Cohen and Levinthal (1990). According to them, absorptive capacity serves to produce a dynamic organizational capability. Through the use of routines and organizational processes, the organization achieves achievement, absorption, transformation and successful use of knowledge. In addition, it favours acquisition and maintenance of competitive advantage, through the creation and use of knowledge.

Regarding the importance of external knowledge management, according to Souitaris (2001), companies should not be limited to their own knowledge and capabilities. This is because competition increases steadily and rapid technological changes occur. Companies should then take advantage of the experience and knowledge of outside actors. This is why innovative companies are trying to establish relationships with other players. In this way they gain access to external knowledge. This allows companies to be better prepared to solve complex problems that they might not be able to address with their internal resources. Through the channels of communication the information can be disseminated. There are several channels of communication and the efforts to establish them can be differentiated into 2 types. On the one hand are the efforts to scan external information and on the other the efforts to cooperate with external organizations (Souitaris, 2001).

In summary, ability to innovate refers to the organization's resources and abilities to invest in learning process and innovation projects (being able to manage knowledge and use it to innovate).

In the empirical study variables of the factor ability to innovate are analysed. In particular, company's ability to identify, acquire and absorb valuable external knowledge (related to the ability to use external knowledge) and company's ability to exploit and apply knowledge by developing innovations (related to absorptive capacity and the ability to use knowledge, in order to achieve innovation).

2.5.3 Possibility to innovate

The last one is the possibility to innovate. The possibility to innovate mainly refers to the freedom of actors and subunits to participate in the development and implementation of innovative solutions. The organizational structure will determine that freedom. The possibility to innovate is related to the prevailing institutional conditions and the organizational decision-making structures (Behrends 2009).

Degree of personal staff participation is influenced by freedom they have to act. According to Martins & Terblanche (2003), organizations can influence their degree of innovation supporting and encouraging its employees. The support and encourage could promote personal staff to take first step and explore innovative approaches. Also, according to Stohl and Cheney (2001) there are six key drivers in order to increase participation in organizations. That key drivers are:

1. The desire to support personal staff autonomy and security.
2. A new perception of the human side of enterprising.
3. Putting in use democratic values to work.
4. Bureaucracy reduction.
5. Reactions to employee outsourcing and employee displacement.
6. Globalization effects.

Geary and Sisson (1994) argue the importance about direct participation of the employees in order to innovate. Possibility employees have to innovate depends of management support. Management have to support the introduction of innovative suggestions made by employees. If they do that, the employees are more motivated to search solutions in order to improve organization efficiency. Employees' direct participation in order to innovate is quite related to the concept Employee-driven innovation, which is developed below.

Generally, organizational decision-making structures in firms consist in a specific group inside the organization, which have to make the important innovation decisions. Therefore, most "ordinary" workers are excluded from that kind of activities. In that context, Employee-driven innovation is a relevant concept. Kesting and Parm (2010) defined employee-driven innovation (EDI) as the creation and application of significant new products, processes and ideas that come from employees who are not assigned to innovation tasks. Then innovations could emerge even from "ordinary" employees.

Therefore, EDI means employees could help companies to innovate with their hidden abilities for innovation (Cohen et al., 1972).

Innovation promote by employees is a new way to innovate and tends to be ignored (Høyrup, 2010). That kind of innovation is not related to R&D but that doesn't mean it is an unusual situation (UNU-MERIT, 2008). Moreover, according to EU report (UNU-MERIT, 2008), in many companies and countries innovation develop none related to R&D occurs. That kind of innovation includes innovation promoted by employees.

In addition, another interesting element in possibility to innovate group is top managers. According to Damanpour and Schneider (2006), top managers affect organizational outcomes. They could influence by establishing organizational climate, organizational culture and improve capacity to search innovation.

Besides, according to Amabile (1998), top managers could assist to mould work contexts that helps organizational innovation. Subordinates' creativity has a positive association between participative, considerate and democratic leader behaviours (Hage and Dewar, 1973). Also, Redmond et al. (1993) found that subordinates showed higher degree of creativity when managers supported subordinates' self-efficacy and constructive problem solving. Besides, subordinate's innovative behaviour can be positively influenced by the role expectations of a supervisor (Scott and Bruce, 1994).

Leaders of organizations also could adopt different types of leadership. One of them is participative leadership, which is related to high-performing companies and innovation culture (Ogbonna and Harris, 2000). Something similar to participative leadership is transformational leadership. According to Bass and Avolio (1997) with transformational leadership vision-based and longer-term motivational processes are emphasized. Transformational leadership encourage employee's participation to innovate. It stimulates personal staff to search new ways to solve problems and to challenge their beliefs, traditions and own values (Hater and Bass, 1988).

According to several authors, structure could influence significantly to innovation development in firms. Flexible structures, which decentralization in decision-making process could be seen are beneficial to search and generate knowledge (Teece, 2000). Flexible structures speed up decision-making processes, encourage creativity and experimentation, increase the range of possible responses to different problems, and make easier a higher interaction between diverse perspectives (Hage and Aiken, 1967;

Mintzberg, 1979). It should be emphasized that when the degree of formalization is lower the problems can be assessed by more points of view (Burns and Stalker, 1961).

Then, an organic structure in companies could be better in order to improve creativity and innovation because it makes work's organization more flexible and makes easier development of new ideas (Damanpour, 1991). Moreover, in organic structures, units and subunits of the organization acquires more freedom to contribute in innovation develop.

In summary, possibility to innovate refers to the possibility that actors and subunits have in the organization to contribute in the company's innovation. The freedom personal staffs have in the organization to participate in the innovation process. That freedom depends largely of the organization structure.

In the empirical study a variable related to possibility to innovate antecedents is analysed. That variable is the valuation by management about opinions and suggestions made by employees. Employees' participation to develop innovation is quite related to the valuation managers has about it. Therefore, that variable is related to the degree of participation that employees could have in order to develop innovation in the organization.

2.6 Innovation and their relationship with firm size

This study investigates the relationship between organizational innovation and firm size. In particular, firm size is analysed as an organizational innovation antecedent.

There are several searches related to firm size and their relationship with innovation. Some researches argue that firm size has a positive effect to innovation in companies. Some authors who support that positive relation are Sullivan and Kang (1999) y Damanpour (1992). However, there are also some authors who argue the opposed. They consider firm size and innovation have a negative relation. The larger an organization size becomes, the more difficult will be innovative (Aldrich and Auster, 1986). Moreover, there is even the conclusion that level of innovation has no relation with organization's size (Aiken et al. 1980).

According to Camisón (2001), there are different definitions, which may not be about the same construct. In his research, size variables shown signs of its potential moderating effect in relationship between size and innovation. In addition, according to Nord and Tucker (1987), large companies could adopt or introduce more innovations because they have a higher technical knowledge compare to small business. Moreover, according to Damanpour and Evan (1984), large companies have resources and abilities more complex and diversified than small enterprises. That higher complexity and diversity are commonly found in the organizational professional team. Another fact to keep in mind is that larger companies have more resources, so, they could take greater risks. When large companies introduce new innovations and these innovations bring bad results, they will support better economic losses than smaller firms (Damanpour, 1992).

Firm size method used to measure organization size is a crucial question. Findings about that issue could be influenced significantly by the conceptualization and the method used to measure firm size. According to Kimberly (1976), conceptualization and the method used to measure organizational size have a considerably effect in the relationship seen between organizational size and others organizational characteristics. Other authors defends too the importance of the method used to measure firm size. According to them, the method used has considerably effects in results extracted about organizational size and firm productivity (Camisón 2001; Szymanski et al. 1993; Gooding and Wagner 1985). There are several methods proposed to measure firm size, but in this study are commented superficially just some, which are the most common. Some authors propose to count number of employees in order to establish company size (Blau and McKinley, 1979; Kim, 1980; Etlie, 1998). Other method proposed is to measure output's company (Sharma and Kesner 1996). For example, establish the firm size according to its sales volume. Another method, proposed by Damanpour (1987), is to consider financial resources of the company.

Kimberly and Evanisko (1981) provided an interesting point of view. According to them, firm size effect could be higher or minor according to the type of innovation affected. They also argue that large firms could adopt easily innovations. That is because large firms are accustomed to higher levels of work, so they could face easily results that come up by the innovation applied.

However, not all the researches support positive relation between firm size and innovation.

There are some researches that support the opposite. For example, according to Damanpour (1996), small and medium-sized companies have an important advantage that larger companies don't have. That advantage is organizational flexibility. Flexibility make easy to companies adopt changes. According to Volberda (1997), organizational flexibility and production flexibility make easy companies to have a certain degree of control in changeable environments. On one hand, flexible structure is related to organic structures. According to Burns and Stalker (1961), structures that have capacity to adopt changes in instable environments, are organic structures. On the other hand, production flexibility is an ability that companies need in changeable environments in order to develop productive resources efficiently (Duguay et al.1997). Instead, according to Hitt et al. (1990), a bureaucratic and formalise structure has negative effects in order to encourage innovation. In large firms, flexibility is less frequent in the organization. Large firms tend to have a formalized structure in their organization. Therefore, those firms commonly have bureaucratic procedures, which make harder develop innovation (Damanpour, 1996). Nevertheless, according to another research by Damanpour (1992), through the creation of smaller divisions, large companies could achieve the autonomy and flexibility necessary to innovate.

An interesting contribution to the relationship between size of the organization and degree of innovation is provided by Acs and Audretsch (1991). According to them, small companies have more innovations for employee than large companies, meaning small companies have a higher R & D productivity for employee than large companies. Therefore, as the size of the company grows, its R & D productivity decreases.

In summary, there are researches, which argue higher firm size, is better to innovate and there are researches that argue minor firm size is better to innovate. There are also researches that argue firm size and degree of innovation in companies have no relation (Aiken et al. 1980). In addition, Damanpour (1992) studied the relation between firm size and innovation. His research was a meta-analysis review. According to his research, organizational size and innovation have a positive relationship. Also, the effect of size in business innovation is not the same in all companies. In some firms, size will affect innovation more positively. Specifically, according to his research, innovation in profit-making and manufacturing organizations is more positively influenced by size than non-profit and service organizations. In the empirical study, firm size factor is analysed to extract conclusions about its impact in organizational innovation.

3. METHODOLOGY

3.1 Data collection

In the empirical study, a database was used to extract the results. That database compiles information about Spanish hotel firms. The information of that database was obtained from a survey carried out through personal interviews with the firm's most senior managers. The survey was conducted from March to July 2010. A total of 1019 companies replied to the survey. In that survey, 200 survey respondents were hotel organizations. The survey contains several questions related to organizational innovation. Some of the questions are direct related and others are indirect related. The research group of Montserrat Boronat Navarro has given me access to that database. This is because the difficulties to get a sample for the study are very high. Low response of hotels makes it difficult to obtain data.

3.2 Measurement variables

This study analyses organizational innovation antecedents. In order to extract correlations between organizational innovation and its antecedents it is necessary to measure organizational innovation in the hotel firms. Degree of organizational innovation was measured using 4 questions of the survey, which are direct related to organizational innovation. Those questions are as follows:

- Degree of introduction in the company of new or improved management systems.

According to OECD (2005), organizational innovation consists in the adoption by the company of new organizational methods. These new organizational methods are applied in the business activity or in the organization of the workplace. Besides, the new organizational methods are also applied in the relations with the outside that the company maintains (for example the relations with their clients).

OECD (2005) also clarifies that the introduction of new methods in order to organize routine tasks or procedures for the development of the business activity are considered organizational innovation.

- Degree of introduction in the company of significant changes in relations with customers and suppliers.

As mentioned earlier, part of the activities that are considered activities related to organizational innovation are also activities aimed at improving external relations. External relationships include supplier relationships and customer relationships. Significant changes in customer and supplier relationships stem from strategic decisions taken by management. There are several organizational methods to establish relations with external actors. Some ways are to establish collaborations (for example, with research organizations or clients), subcontract activities of the company or introduce methods of integration with their suppliers (OECD, 2005).

- Degree of introduction in the company of new methods of learning, training or creation of knowledge.

In order to organise routines and procedures organizational methods could be introduced. The introduction of new methods in business activity to organise procedures and routines are organizational innovation practices. These include, for example, new practices to learn and share knowledge in the firm's organization. In particular, it could be new methods to codify knowledge. Another example could be the implementation of new supply chain management system (OECD, 2005).

- Degree of introduction in the company of new methods in the work organization. If the firm uses new methods to administer responsibilities among employees or if the firm uses new methods to administer decision-making responsibilities. The distribution of task could be within and between company's activities. It also covers the integration of new business activities. An example of that could be the introduction in the company of a new organizational model to give more autonomy to the employees and promote employees to share their ideas. That could be made through decentralisation of group activity or the creation of work teams (formal or informal) that gives more flexibility to employees (OECD, 2005).

To answer the questions, those items could have values between 1 and 7.

There are several ways to measure innovation activities at the enterprise level. This study, in order to measure organizational innovation in hotels, is based on measures proposed by the Community Innovation Survey (CIS), in particular, CIS 2006.

According to Armbruster et al. (2008), the European Union's main statistical tool is the Community Innovation Survey (CIS). In addition, OECD (2005) provides the methodological base used by Community Innovation Survey. At the beginning, the CIS

emerged to research innovation in processes and products but its scope was extended. Now their researches also encompass innovations in marketing, organization and services. So, it measures organizational innovation at an aggregate level. Also, CIS asks questions about the implementation of new forms of work organization or management systems.

CIS 2006 tested new organizational innovation indicators. The new questions introduced were related to The introduction of new business practices for the organization of procedures and work; The introduction of new knowledge management systems in order to improve the exchange of knowledge, information and skills use within the company or to interpret or collect information from outside the company; The introduction of new methods of organizing the workplace in order to share decisions and make decisions; Introduction of new organizational methods to improve external relations with other public institutions or companies.

To measure the degree of organizational innovation in the hotels the results of the 4 items that measure organizational innovation characteristics are summed and divided between 4, to obtain a new item. This new item combined the items to measure organizational innovation. This new item is used to extract correlation coefficients between organizational innovation and its antecedents.

The database used also contains items that allow measure organizational innovation antecedents. Therefore, impact of organizational innovation antecedents in hotel firms could be analysed. Not all the organizational innovation antecedents are analysed, just the antecedents that could be measure with the available database.

The following is a description of measurement organizational innovation antecedents and their classification in the 3 groups of organizational innovation antecedents proposed by Behrends (2009).

- Willingness to innovation

The survey question used to measure “management capacity to support change and learning” in the company was the following:

Value the competitive strength of your company in relation to the competition, considering a scale of 1 to 7: Where 1 means nil, 2 means quite low, 3 means low, 4 means medium, 5 means high, 6 means quite high and 7 means very high.

-Management capacity to support change and learning in the company. This variable measures management capacity to favour innovation in the organization.

The survey question used to measure “practices in order to employees know the mission and the objectives of the company” was the following:

Indicate the degree of use by your company of the following management practices in the last 3 years (scale 1 to 7).

-Practices in order to employees know the mission and the objectives of the company. This variable measures organization efforts to achieve a shared vision.

- Ability to innovate

The survey questions used to measure “ability to identify, acquire and absorb valuable external knowledge” and “ability to exploit and apply knowledge by developing innovations” were the following:

Value the competitive strength of your company in relation to the competition, considering a scale of 1 to 7: Where 1 means nil, 2 means quite low, 3 means low, 4 means medium, 5 means high, 6 means quite high and 7 means very high.

-Ability to identify acquires, and absorbs valuable external knowledge. This variable measures absorptive capacity of external knowledge.

-Ability to exploit and apply knowledge by developing innovations. This variable measures the ability to exploit knowledge in order to achieve innovation.

- Possibility to innovate

The survey question used to measure “opinions and suggestions from employees are valued by management” was the following:

Indicate the degree of use by your company of the following management practices in the last 3 years (scale 1 to 7).

-Management values opinions and suggestions of employees. This variable measures employees’ possibility to participate in innovation process.

Correlation coefficients are extracted to discuss and obtain conclusions. To extract the correlation coefficients Pearson's correlation coefficients was used. Also this study extract mean, standard deviation and coefficient of determination. Correlation coefficients, in factor analysis, could help to identify how much a factor explains a variable factor. In this case, correlation coefficients represent how much organizational innovation antecedents explain degree of organization innovation in the firms. Correlation coefficients values are between -1 and 1.

Furthermore, in this study an empirical study to see the relation between organizational innovation and firm size is made. This study used the method proposed by Kim (1980) to measure firm size. According to Kim (1980), number of employees could be measure to establish firm size. It is a method commonly used and stand up for other authors (Blau and McKinley, 1979; Ettlie, 1998). According to the number of employees, 4 groups are differentiated. Companies, according to their firm size could be classified as large (more than 250 employees), medium (51-250 employees), small (10-50 employees) or microenterprise (fewer than 10 employees). The mean of organizational innovation in these groups are analysed to extract conclusions.

4. RESULTS

The first results obtained are about the degree of organizational innovation in hotels.

Table 1 shows results about the situation of organizational innovation in the hotels. The results extracted are mean and standard deviation. The first one concept is "Degree of organizational innovation", which measures the level of organizational innovation based on certain characteristics (the following concepts in the table are the characteristics evaluated to determine the degree of organizational innovation in the companies). The minimum punctuation of Degree of organizational innovation is 1 and the maximum punctuation is 7. Also, standard deviation shows very similar values between the analysed elements too. Table 1 shows standard deviation values between 1'6 - 1'7.

All the used characteristics of the database to measure degree of organizational innovation could have 1 as minimum value and 7 as maximum value.

Table 1. Organizational innovation average

Concept	Mean	SD	Min	Max
Degree of organizational innovation	3'906	1'604	1	7
Introduction in the company of new or improved management systems	3'965	1'718	1	7
Introduction in the company of significant changes in relations with customers and suppliers	3,942	1'734	1	7
Introduction in the company of new methods of learning, training or creation of knowledge	3'890	1'669	1	7
Introduction in the company of new methods in the work organization	3'867	1'662	1	7

Source: Own elaboration

To analyse antecedents of organizational innovation and their impact in organizational innovation this study extract correlation coefficients among other statistics. The correlation coefficients extracted are between degree of organizational innovation values and the organizational innovation antecedents selected in this study. Table 2 shows these results. In particular shows the averages, standard deviations, coefficient of determinations, correlation coefficients and p-values (two-sided) extracted. At first sight, correlations between the analysed antecedents and organizational innovation in hotel companies are positive and acquire considerable values.

All the analysed antecedents of the database could have 1 as minimum value and 7 as maximum value. The means obtained are all higher than 4 and fewer than 5, except “management capacity to support change and learning in the company”.

Table 2. Statistics of organizational innovation antecedents

Factors	Mean	SD	Coefficient determination	Coefficient determination	P-values (two-sided)
Willingness to innovate					
Management capacity to support change and learning in the company	5'146	0'948	0'118	0'344**	<0'0001
Practices in order to employees know the mission and the objectives of the company	4'874	1'679	0'181	0'426**	<0'0001
Ability to innovate					
Ability to identify, acquire and absorb valuable external knowledge	4'365	1'256	0'347	0'589**	<0'0001
Ability to exploit and apply knowledge by developing innovations	4'337	1'191	0'234	0'484**	<0'0001
Possibility to innovate					
Opinions and suggestions from employees are valued by management	4'565	1'813	0'099	0'315**	<0'0001
**Correlation is significant at the 0'01 level (2-tailed)					

Source: Own elaboration

The most remarkable results are those obtained from the variables related to manage of knowledge. “Ability to identify, acquire and absorb valuable external knowledge” has

a correlation level of 0'5890875 and “ability to exploit and apply knowledge by developing innovations” has 0'484.

Also, the antecedents of organizational innovation related to willingness to innovate analysed have interesting results too. Stands out practices in order to employees know the mission and the objectives of the company. The correlation coefficient extracted of that antecedent has a value of 0'426. Also, the other antecedent related to willingness to innovate, has a considerable correlation coefficient value too.

Finally, the antecedent related to possibility to innovate, opinions and suggestions from employees are valued by management has the lower correlation coefficient value with 0'315 in compare to others variables analysed. Even so, the result indicates a considerable positive correlation.

All p-values extracted are minor than 0'01 and that means the variables analysed and organizational innovation has a statistically significant linear relationship between them.

In summary, results show positive and significant correlation between the variables analysed and the degree of organizational innovation. The empirical study does not extracted results of others variables because of database limitation.

To analyse the effect of firm size in organizational innovation, companies are classified in 4 groups according to their size. Companies are classified according to their size in large (more than 250 employees), medium (51-250 employees), small (10-50 employees) or microenterprise (fewer than 10 employees) firms. The organizational innovation average for each group is extracted and Table 3 shows that results. The item “degree of organizational innovation” (item obtained from other 4 items used to measure organizational innovation) is used in the empirical study to measure organizational innovation average according to the firm size. Moreover, table 3 contains standard deviation (SD) and sample size (n) of each group.

Table 3. Firm size average and standard deviation

Firm size	Mean	SD	n
More than 250 employees	4'346	1'239	13
51-250 employees	4'081	1'648	62
10-50 employees	3'780	1'604	75
Fewer than 10 employees	3'657	1'648	19

Source: Own elaboration

According to the results extracted, large companies have the higher organizational innovation mean with a value of 4'346 and microenterprises have the fewer organizational innovation mean with a value of 3'657. Standard deviation is approximately 1'6 except to large firms, which has a value of 1'23.

Analysis of variance (ANOVA) could be useful in this empirical study in order to identify if organizational innovation averages differ significantly among microenterprises, small companies, medium-sized enterprises and larger firms. However, due to the lack of normality in the distribution of the data, the empirical study used a non-parametric method. Kruskal-Wallis test is the non-parametric equivalent of One-Way ANOVA. Kruskal-Wallis test is used to compare two or more independent samples.

First of all, to apply Kruskal-Wallis test, a null and alternative hypothesis have to be defined. In this case, the null hypothesis is that there is no significant difference between the mean of organizational innovation in the different groups analysed (firm size groups).

The alternative hypothesis assumes that at least one of the firm size groups has a mean of organizational innovation significantly different compared to the others firm size groups. Step two is to state the alpha level. In this case, the empirical study used an alpha level of 0'05. Next step is to state our decision rule. If the p-value obtained is higher than the alpha level stated (0'05), the null hypothesis couldn't be rejected. As shown in table 4, p-value is 0'399 and it is higher than 0'05, so, according to the results, the null hypothesis cannot be rejected and there is no significant difference among organizational innovation averages of the 4 groups. Even with alpha level of 0'1 we cannot reject null hypothesis.

Table 4. Kruskal-Wallis test with 4 firm size groups

Statistics	Results
Chi Squared	2'946
Df	3
P-value	0'399

Source: Own elaboration

To test once again the relationship between size and organizational innovation the empirical study divides 2 groups according to size instead of 4. Initially, two groups were distinguished to extract results again using Kruskal-Wallis test. One group would represent micro-enterprises, small enterprises and medium-sized enterprises (SMEs)

and the other group would be large enterprises. However, if the study distinguishes those two groups, SMEs group would have many observations and large enterprises group would have very few observations. Therefore, two other groups were distinguished. One group would represent micro-enterprises and small enterprises and other group would represent middle-sized companies and larger companies. In this way, sample sizes in each group become more balanced (75 observations in the first group and 94 observations in the second group, instead of 156 observations in one group and 13 in the other one). Table 5 shows the results extracted with the new groups.

Table 5. Kruskal-Wallis test with 2 firm size groups

Statistics	Results
Chi squared	0'615
Df	1
P-value	0'432

Source: Own elaboration

In this case, the null and the alternative hypotheses are the same. The alpha level is 0'05 and the decision rule is the same. The p-value extracted is 0'4326 and it is higher than the alpha level stated. Therefore, the null hypotheses cannot be rejected and there is no significant difference among organizational innovation averages of the 2 groups.

Mann-Whitney U Test is used to complement the empirical analysis about firm size and organizational innovation. Mann-Whitney U Test is another non-parametric test. It could be used to determine if there are significant differences between the averages of two groups.

Once the groups were established to perform the Mann-Whitney U Test, the null and alternative hypotheses could be determined. The null hypothesis is that there is no significant difference between the averages of organizational innovation in the different groups analysed. The alternative hypothesis assumes that difference between the averages of organizational innovation of the groups analysed is significant. In this case, the empirical study used an alpha level of 0'05.

Graphic 4 shows the results extracted using Mann-Whitney U Test.

Table 6. Mann-Whitney U Test

Statistics	Results
U	3772
P-value	0'433

Source: Own elaboration

The p-value is 0'433, and it is bigger than 0'05 (our alpha level used). Therefore, at a significance level of 0'05, we do not reject the null hypothesis. According to the results extracted, the difference between the sample means is not convincing enough to consider that the average number of organizational innovation between the first group (micro-enterprises and small firms) and the second group (middle-sized companies and larger companies) differ significantly.

The empirical study extracts similar results with both tests, Kruskal-Wallis Test and Mann-Whitney U Test. Therefore, according to the results extracted, organizational innovation average not differ significantly among the analysed groups.

5. DISCUSSIONS AND CONCLUSIONS

There are many researches about innovation, being innovation a concept developed by several areas of research. It is a concept related to many others and it is the origin of others. So, much information is extracted through innovation, investigation and different conclusions are drawn about it. Moreover, it is still a topic of interest and further information could be extracted about it.

The principal purpose of this study is to find antecedents to achieve organizational innovation. In the theoretical study some organizational innovation antecedents were identified. This study is based on organizational innovation model provided by (Behrends, 2009), which distinguish antecedent factors of organizational innovation in 3 categories. The 3 groups are important and have positive effects in order to achieve organizational innovation. Those 3 groups are willingness to innovate, ability to innovate and possibility to innovate. In the empirical study, some antecedents related to each group were identified and analysed to test their impact in organizational innovation.

Two variables related to "willingness to innovate" are analysed. The first one is "management capacity to support change and learning in the company, which is

related to acceptance of change and the introduction of innovation effectively". The second one is "practices in order to employees know the mission and the objectives of the company", which is related to shared vision. That kind of practices favours the search for common goals and makes easier the introduction of innovation in organizations.

According to the extracted results, correlation of those variables is significant at 0'01 level, so their impact on organizational innovation is considerable. They have a moderate positive correlation, so, that variables could help companies in order to achieve organizational innovation.

Moreover, variables of ability to innovate, which are related to knowledge management were analysed too. The variable "ability to identify, acquire and absorb valuable external knowledge" is an antecedent related to absorptive capacity. Therefore, it is fundamental in order to progress through knowledge. The other variable, "ability to exploit and apply knowledge by developing innovations", is an important antecedent too. Companies could have a significant level of knowledge and do not be able to achieve competitive advantage in using it. Companies need to know how to use properly their resources, including knowledge resources.

In accordance with the results obtained, both variables have a considerably positive effect in organizational innovation. The ability to identify, acquire and absorb valuable external knowledge has a strong correlation with organizational innovation. The ability to exploit and apply knowledge by developing innovations has a medium-strong level of correlation. As in the previous group (willingness to innovate), the variables have a statistically significant linear relationship with organizational innovation. It is logical reasoning to link knowledge management with organizational innovation, but it is still interesting to obtain empirical support for this reasoning.

With regard to the possibility to innovate antecedent analysed, that variable is the one with the lowest result of the empirical study. The correlation is positive, but with a relatively low value, compared to the others analysed variables. Even so, the correlation strength is medium and has a statistically significant linear relationship.

In summary, the antecedents analysed show favourable results and that supports the theoretical background extracted. Therefore, the study concludes that organizational innovation in hotel firms could be favour by the antecedents analysed in this study.

Those that have a better impact on organizational innovation, according to the results obtained, are the ones related to ability to innovate (ability to manage knowledge and use it to innovate).

With regard to the size of the organization (measured by the number of employees), the following conclusions were reached about the relationship between firm size and organizational innovation. At first sight, looking to the averages of organizational innovation, according to their firm size (large, medium, small and micro), the higher the number of employees, the higher the level of organizational innovation. However, after use in the empirical study the Kruskal-Wallis test and the Mann-Whitney U Test, we conclude that the differences between organizational innovation averages are not significant enough to consider that the size of the organization significantly influences the degree of organizational innovation. Therefore, it is observed that in small companies there is also organizational innovation. So, the number of employees may positively affect the level of organizational innovation in companies, but it has not a significant impact. Then, organizational innovation could exist in companies of any size, even in small ones. It is important stress that firm size effect could be higher or minor according to the type of innovation affected (Kimberly and Evanisko, 1981). Moreover, as many authors explained, the method used to measure firm size could has considerably effects in the results extracted (Camisón 2001; Szymanski et al. 1993; Gooding and Wagner 1985). In this case the empirical study counted the number of employees to measure the firm size. Also, Spanish hotel firm's data were used to extract the results and draw conclusions. According to Damanpour (1992) the effect of size in business innovation is not the same in all companies. Innovation in profit-making and manufacturing organizations is more positively influenced by size than non-profit and service organizations.

6. LIMITATIONS AND FUTURE LINES OF RESEARCH

Empirical study of this paper is limited to the available database. The database used has enabled extract results about some organizational innovation antecedents. As future lines of research, others antecedents mentioned in the theoretical background could be analysed. Also, this study is based on Behrends (2009) organizational innovation model, but others models could be used to research that issue. Besides, the database used provides data of Spanish hotel firms, therefore, others activity sectors or foreign companies could be analysed in future research.

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