

# FACTORS WITH A GREATER IMPACT ON THE LEVEL OF INNOVATION IN THE HOTEL INDUSTRY IN SPAIN

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**ABSTRACT**: This paper analyses the relationships between certain determinants in the strategic management process on innovation in hotel organisations in Spain, as well as the influence of the level of innovation on competitive advantage and organisational performance. The theoretical positioning is based on the resource and capability-based approach, within the field of strategic management. An analysis of major hotel chains operating in Spain has shown that certain factors (namely twenty dimensions) of the strategic management process impact on the level of innovation positively, as well as a proper management of innovation influences organizational results, also positively. From the twenty constructors or dimensions analyzed, some factors stand out because of their greater impact on the degree of innovation, which may lead to drawing practical implications that both influence and can be taken into account to improve the sector. As the result, the highest positive coefficients were showed by the following variables: support for creativity, innovation-oriented culture, business structure that facilitates innovation, competitive rivalry, cost leadership and differentiation strategies, and quality management. **Keywords**: innovation, creativity, hospitality sector, Strategic Management

**RESUMEN**: Este artículo analiza las relaciones entre ciertos determinantes en el proceso de gestión estratégica sobre innovación en las organizaciones hosteleras en España, así como la influencia del nivel de innovación sobre la ventaja competitiva y la performance organizacional. El planteamiento teórico se basa en el enfoque de recursos y capacidades en el contexto de la gestión estratégica. Un análisis de las mayores cadenas hosteleras que operan en España demostró que ciertos factores (medidos en veinte dimensiones) del proceso de gestión estratégica tienen impacto positivo, sea a nivel de la innovación, sea a nivel de la gestión de la innovación. De los veinte constructos o dimensiones analizadas, algunos factores destacan por su superior impacto en el grado de innovación, pudiendo tener implicaciones prácticas que deben ser adoptadas por el sector. En resultado, los mayores coeficientes positivos se han patentado en las siguientes variables: apoyo a la creatividad, cultura de innovación, estructura de negocios facilitadora de la innovación, rivalidad competitiva, costo de liderazgo y estrategias de diferenciación y gestión de la calidad. **Palabras clave**: innovación, creatividad, sector de alojamiento, Gestión Estratégica.

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RESUMO: Este artigo analisa as relações entre certos determinantes no processo de gestão estratégica sobre inovação nas organizações hoteleiras em Espanha, bem como a influência do nível de inovação sobre a vantagem competitiva e a performance organizacional. O posicionamento teórico é baseado na abordagem de recursos e capacidades no context da gestão estratégica. Uma análise das maiores cadeias hoteleiras que operam em Espanha mostrou que certos fatores (medidos em vinte dimensões) do processo de gestão estratégica têm impacto positivo, quer ao nível da inovação, quer ao nível da própria gestão da inovação. Dos vinte construtos ou dimensões analisadas, alguns fatores destacam-se pelo seu superior impacto no grau de inovação, podendo ter implicações práticas que devem ser adoptadas pelo setor. Em resultado, os maiores os coeficientes positives foram patenteados nas seguintes variáveis: apoio à criatividade, cultura de inovação, estrutura de negócios facilitadora da inovação, rivalidade competitiva, custo de liderança e estratégias de diferenciação e gestão da qualidade. Palavras chave: inovação, criatividade, setor do alojamento, Gestão Estratégica.

#### INTRODUCTION

The study of the relationship between innovation and strategic management is a field of research in which the business world - both academic and practical - is taking a growing interest. Furthermore, the importance that innovation represents for companies in a state of constant change is undeniable. Since the second half of the 1990s, innovation has become one of the most promising fields of study in terms of explaining competitive differences between companies. As a result, innovation as a strategic capability has been vindicated as the main source of competitive advantage and a device for achieving higher revenue.

The theoretical positioning in the present study is based on a resources and capabilities-based approach within the field of strategic management. On this basis, innovation stands out as a key strategic capability that is generated by activating a series of resources; its management is thus a fundamental element in developing dynamic capabilities conducive to obtaining competitive advantages (Teece et al., 1997; Eisenhardt and Martin, 2000; Zollo and Winter, 2002). Therefore, our benchmark in the literature has been the dynamic capabilities approach; our study examines the theoretical perspectives that influence its characterisation and establishes contact points with other approaches within the resources and capabilities-based theory, in order to form a common basis of study for designing a model and its subsequent testing in an empirical study.

In the tourism industry and the hotel subsector in our case, innovation plays a key role in the production of knowledge and a firm's capability to absorb it, so that it can be used to improve productive efficiency and the product's ultimate competitiveness (Nieto, 2003). In the case of Spain as a tourism product, it is a world-renowned destination whose economy is heavily dependent on tourism services; thus, it is an ideal setting in which to apply our research.

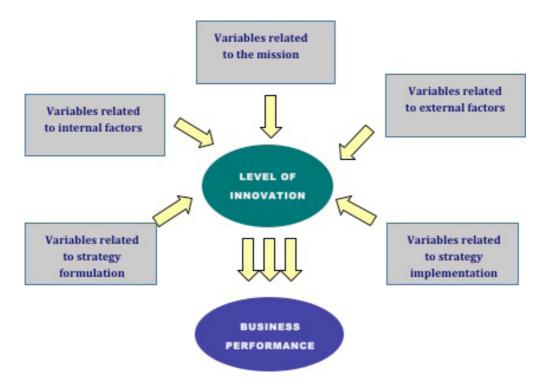
This study focuses on ascertaining the extent to which certain determinants in the strategic management process affect the level of innovation. Therefore, a model was created for this study that was tested along with a series of hypotheses in an empirical study directed to managers from the top Spanish and foreign hotel chains operating in the country, ranked according to turnover.

## CONCEPTUAL FRAMEWORK, DEVELOPMENT OF THE RESEARCH MODEL AND HYPOTHESES

Several studies have highlighted the importance of the innovation strategy as a coherent plan for developing, acquiring and deploying resources and capabilities in order to achieve and sustain better results (Lefebvre et al., 1993; Zahra and George, 2002; Galende, 2006; COTEC, 200; Hjalager, 2010).

Based on the literature and considering this study's context, we propose the model presented in Figure 1, which describes the entire process that may be followed in innovation decisions - in our case, by companies in the Spanish hotel sector — in accordance with the phases or stages of a company's strategic management model. We start with the company's purpose and mission, continue with internal and external factors and conclude with the formulation of strategies and their implementation.

Figure 1. Analysis model for determinants of the level of innovation and their impact on business performance.



To construct each of these variables, a number of different authors and their contributions to this field of research were analysed. This theoretical study gave rise to twenty dimensions or factors that allowed us to test the model in the empirical study through the corresponding hypotheses. Table 1 shows a list of the factors which were adapted to the characteristics of our model.

Table 1. Constructs for analysis of the conceptual model

Construct	Dimensions	
Mission	A firm bet for innovation in an organisation's mission and values	
Internal factors Influence of internal factors on the level of innovation	A corporate structure that facilitates innovation Corporate support for creativity Adoption of adequate measures An innovation-oriented culture Adoption of measures to overcome barriers to innovation	
External factors Influence of external factors on the level of innovation	Competitive rivalry Degree of customer satisfaction and loyalty The dimensions of complexity and dynamism of the environment Suppliers' bargaining power Bargaining power of substitute products The degree of active government commitment	

Strategy formulation Influence of the adoption of certain strategies on the level of innovation	Competitive strategies: competing through seeking cost leadership Competitive strategies: adopting a segmentation strategy Competitive strategies: committing to a differentiation strategy Internationalisation as a growth strategy
Strategy implementation in- fluence on the level of innova- tion of certain factors of imple- mentation strategies	Degree of development of quality management Objectives of increased productivity Degree of sophistication in information systems
Innovation and its impact on business performance	Degree of influence of the level of innovation on business performance

Therefore, the analysis and construction of the model and its respective constructs, supported by the literature, provided all the arguments needed to formulate the hypotheses, which paved the way to achieving the objective of determining the extent to which determinants in the strategic management process influence the level of innovation and their impact on hotel companies' performance.

Table 2. Working hypotheses and expected outcomes

H1	The explicit inclusion of innovation in an organisation's mission and values has a positive impact on the level of innovation.	+
Н2	Certain internal factors have a positive impact on the level of innovation.	+
Н3	Certain external factors have a positive impact on the level of innovation.	+
H4	Formulating competitive and growth strategies has a positive impact on the level of innovation.	+
Н5	Implementing strategies has a positive impact on the level of innovation.	+
Н6	The level of innovation, driven by the explicit management thereof, has a positive impact on business performance.	+

#### RESEARCH DESIGN

The population universe in this study consisted in senior managers from the top 150 Spanish and foreign hotel chains operating in Spain ranked in order of revenue. Data was collected in October and November 2009 from a survey of directors from the above mentioned group of informants. The questionnaire was completed by 48 executives in these hotel chains, which represents a response rate of 32%. No significant differences between the composition of the population and the sample were found, as observed in other studies on innovation or tourism analysed in the literature: Jacob et al. (2003), Orfila et al. (2005), and Ottenbacher (2007). Several technical features of the sample's composition are shown in the following table:

Table 3. Technical file on the composition of the sample.

Data collection method	Online and telephone survey
Types of questions	Questions with a Likert and semantic differential scales (104 items)
Target population	Top 150 Spanish and foreign hotel chains ranked by revenue
Scope	Spain
Date of data collection	October and November, 2009
Sample obtained	48 questionnaires
Response rate	32%

Table 4 shows a list of the constructs and items which were adapted to the characteristics of our model, after debugging with a pre-test conducted by academics experts and industry professionals in closely related fields. Afterwards, this questionnaire was given its final form.

Table 4: Constructs and items referred to in devising the questionnaire.

Construct / dimensions	Items
Mission (9 items)	Clearly defined strategic thinking model; innovation with similar importance as other areas (3); introduction of innovation in values; description of innovation objectives (2); description of action plans for innovation (2)
Internal factors (23 items)	
Corporate structure (4 items)	Organisational structure that facilitates innovation; arrangements between departments on innovation management; employee contributions taken into account; innovations for improving working conditions taken into account
Culture (6 items)	Pervasive innovation-oriented thinking; stimulates the process of generating new ideas; contributes to risk-taking; freedom of initiative for middle management; a certain "error tolerance" in relation to innovation; willingness to change and learn
Support for creativity (3 items)	Generation of an appropriate environment for creativity; importance of removing barriers to creativity; explicit internal communication to provide ideas or improvements
Innovation barriers (4 items)	Programmes for overcoming resistance to changes in implementing innovation; training courses for overcoming barriers to innovation; innovation inventory control; multi-disciplinary teams that facilitate learning and the introduction of innovations
Appropriability Measures (6 items)	Internal development of innovative products or processes; development in collaboration with other entities; acquisition from other entities or companies; adoption of legal measures of protection (2); planned protection of innovations
External factors (24 items)	
Competitor rivalry (5 items)	Innovation barrier to entry of potential competitors; increased economies of scale involving cost disadvantages; allows better competition with existing competitors; stiff competition can be an incentive for innovation; importance of taking control of competitors' innovations
Supplier bargaining power (4 items)	Influence of innovation on distributors; optimisation of supplier delivery times; fluent communication; power to negotiate contracts
Customer satisfaction (4 items)	Allows customers to perceive a better level of service; innovations for customer's unmet needs; consultation with customers origin of sources of innovation; better position in customer contracts
Substitution products (4 items)	Causes changes in tastes and fashion and shortens product life cycle; improves product presentation and image; increases range of products; imitates competitors' products by incorporating improvements
Dynamic environment (5 items)	Innovation in highly volatile tourism markets; uncertainty about future conditions of demand; purchasing power of customer country of origin; economic development of the country of investment; complex, dynamic environments
Governmental commitment (2 items)	Degree of cooperation with the government; commitment to financial aid (subsidies; tax breaks; low interest loans)

Competitive strategies (5 items)	Undercutting competitors' prices and innovation; more efficient processes; optimisation of cost management; market shares competing in costs; investment in technology to lower costs	
Differentiation strategy (5 items)	Differentiation and investment in innovation; higher quality services per- ceived by customers; improved brand image; securing customer loyalty and innovation; marketing methods and techniques	
Segmentation strategy (3 items)	Segmented or specialised product/service and innovation; products in high price market segments; flexible and efficient organisational structure	
Internationalisation (7 items)	Growth in new international markets; franchising, management or joint venture contracts abroad (3); innovations in products and processes; innovative management methods; innovation and intention to exploit international markets	
Strategy implementation (17 it	ems)	
Quality management (7 items)	Use of quality management models; innovation and quality management plans; ongoing quality improvement models; implementation and certification of advanced quality systems (2); explicit value management process; human resource scorecard	
Information systems (5 items)	Product innovation and new technologies; new technologies and innovative processes; new technologies and organisational innovation; information systems and competitive advantage; mechanisms for incentivising employees to share information and knowledge	
Productivity (5 items)	Improved processes and lower costs; percentage of sales; flexibility; productivity targets achieved; increased outputs and decreased inputs	
R&D expenditure generated within the company; outside the company acquisition of machinery, equipment and advanced software or hard (2); market innovations; global effort; impact on sales of new produstrices or improvements in existing products or services (2); new processes; new forms of commercialisation (2); secondary financial sort percentage of growth in revenue and financial ratios		

#### **RESULTS**

The properties of the metrics used were checked before proceeding with the different analyses that led to the tests of each hypothesis. This ensured each variable's capacity to measure the concept it represented. In our case, the scale reliability and validity properties were analysed.

As for the first property, the internal reliability of the questionnaire's 104 items analysed separately in each section gave very positive Cronbach alpha values, all of which were higher than 0.8. Concerning validity testing, a factorial analysis of

the main components was performed with a varimax rotation to validate the different metric scales for each section of the study. Two statistics were used to assess the appropriateness of this type of analysis: the Bartlett test of sphericity and the Kaiser-Meyer-Olkin (KMO) measure of sampling adequacy. The results of the two tests, applied to all the items in the global model, gave a high value in the KMO test of close to 1 (0.879); the Bartlett test of sphericity rejected the null hypothesis that the correlation matrix is an identity matrix ( $\square^2 = 1932.29$  and significant with p=0.000), which allowed us to accept the data's fit to a factorial analysis model.

The following results from our study model were obtained by applying the analysis of the main components to the global scale of the 104-item model that allowed the different factors of the strategic management models that affect the level of innovation to be related: 1) we corroborated the existence of twenty factors or dimensions that explained 87.991% of the total variance. This result is highly satisfactory (Hair et al., 1998); 2) the correlations between the different factors and its corresponding items expressed through the factor loading were quite high, because almost all the values were higher than 0.70; 3) the proportions of variance explained for each item, expressed through communalities, were very high, since they account for a percentage of variability in the responses of more than 0.80 in most cases.

Therefore, in relation to the convergent validity analysis - which indicates whether the different items used to measure the concept actually correlate with each other - the magnitude of the factor loading, which was not only greater than 0.4 (Hair et al., 1998) but greater 0.6 in all cases, ensures this validity. Lastly, with respect to discriminant validity, the grouping of items in each factor ensured the unidimensionality of the different constructs', confirming each one's unequivocal capacity to measure the intended concept.

Once the reliability and validity of the scale items were obtained, a correlations analysis was conducted to test the hypotheses considered. To do so, Pearson's r test was used to determine the existence of correlation, as described below. Overall, at the glo-

bal level, none of the six hypotheses proposed were rejected; the only correlation that could not be demonstrated was concerning one of the external factors, in the correlations between level of innovation and the environment dimensions of complexity and dynamism are not statistically positive.

Table 5 shows the summary of the results of these correlations, with the global sign given for each hypothesis and the sign for each factor or dimension that belongs to each section in the strategic management model, as well as the support or rejection obtained.

Table 5. Summary of the tests of hypotheses.

Hypothesis	Result (sign)	Support obtained
H1: The explicit inclusion of innovation in an organisation's mission and values has a positive impact on the level of innovation.	Global (+)	Positive test
H2: Certain internal factors have a positive impact on the level of innovation.	Global (+) - Business structure (+) - Culture (+) - Creativity (+) - Barriers to innovation (+) - Appropriability (+)	Positive test (*)
H3: Certain external factors have a positive impact on the level of innovation.	Global (+) - Competitor rivalry (+) - Supplier power (+) - Customer satisfaction (+) - Dynamic environment (-) - Government (+)	Positive test (**)
H4: Formulating competitive and growth strategies has a positive impact on the level of innovation.	Global (+) - Cost leader (+) - Differentiation (+) - Segmentation (+) - Internationalisation (+)	Positive test (***)
H5: Implementing strategies has a positive impact on the level of innovation.	Global (+) - Quality management (+) - Information systems (+) - Productivity (+)	Positive test (****)
H6: The level of innovation, driven by the explicit management thereof, has a positive impact on business performance.	Global (+)	Positive test

<sup>(\*)</sup> The highest positive coefficients were showed by the following variables: creativity, innovation-oriented culture and business structure that facilitates innovation.

<sup>(\*\*)</sup> Competitive rivalry gave the highest positive correlation. The correlations between level of innovation and the environment dimensions of complexity and dynamism are not statistically positive.

<sup>(\*\*\*)</sup> The highest correlation coefficients are given by cost leadership and differentiation strategies.

<sup>(\*\*\*\*\*)</sup> Quality management is the item which correlates the most with the level of innovation.

#### REGRESSION ANALYSIS TO TEST THE MODEL AS A WHOLE

After the hypotheses of each dimension studied individually were tested, we attempted to find and analyse these variables together, in keeping with the model that shows the correlation between factors in the different phases of the strategic management process and their impact on the level of innovation in the Spanish hotel sector. To do so, a multiple linear regression analysis was used. In our case, the level or degree of innovation variable was the model's dependent variable and it was correlated to the five groups of variables from the strategic management process, which are the model's independent or explanatory variables.

To be able to use this type of analysis, we first examined whether several conditions were met the verification of the non-existence of collinearity and if the data obtained met the assumption of normality.

The correlation analysis showed the non-existence of strong indications of the presence of multicollinearity. A very low degree of collinearity could only be seen among some variables, but this did not seriously affect the subsequent application of the linear regression analysis technique. This low degree of correlation could be seen between the external and internal factor variables (r = 0.476, with a p-value <0.05) and to a lesser extent, between the external factor and strategy formulation variables (r = 0.416, p = 0.041). The variance inflations factor analysis (VIF) and tolerance (T) showed also the non-existence of strong indications of the presence of multicollinearity (values VIF between 1.407 and 5.435; T > 0.6).

After applying the multicollinearity analysis, we aimed to ascertain whether the empirical data satisfied the assumption of normality. To do so, the Kolmogorov-Smirnov test was performed and satisfactory data obtained, especially on the independent variables, as shown in the following significance levels: mission, p=0.034; internal factors, p=0.017; external factors, p=0.023; strategy formulation, p=0.005; strategy implementation, p=0.009, and level of innovation, p=0.045. Therefore, the normality of the data was accepted (for a significance level of 5%).

After all these previous verifications, the proposed model was tested through a multiple linear regression analysis. The regression obtained the correlation between the independent variables and the dependent variable, seeking to explain the variations in the degree or level of innovation of hotel chains in Spain.

Table 6. Results of the regression analysis of the determinants of innovation in the hotel sector.

	Innovat	ion Level
Variables	Coefficient B	Sig.
Constant	1.417	0.000
Mission	0.124	0.083
Internal Factors	0.234	0.041
External Factors	-0.447	0.035
Formulation Strategy	0.481	0.015
Implementation Strategy	0.589	0.000
F	15.012	
$\mathbb{R}^2$	0.623	
p	0.000	

As for the quality of the regression model, i.e., the degree of fit (similarity) between the predictions of the regression equation and corporate level of innovation, we must look to the corrected R<sup>2</sup>. Accordingly, the five independent variables in the analysis taken together explain 62.3% of the variance of the dependent variable (corrected  $R^2 = 0.623$ ). The F statistic tests the null hypothesis that the R<sup>2</sup> population value (multiple correlation coefficient) is zero and therefore, it allowed us to decide whether there is a significant linear correlation between the dependent variable and all the independent variables considered or taken together. In our case, this statistic gave a value of 15.012, having been assigned a critical (sig.) level of less than 0.05, indicating that a significant linear correlation does indeed exist. These results enable us to support the model that correlates the factors in the various phases of the strategic management process with the level of innovation in the Spanish hotel sector.

#### **CONCLUSIONS**

Major implications, both practical and academic, for the study of innovation, can be drawn from the results obtained in this study. From a practical standpoint, the main conclusions are related to the way in which the hotel industry should manage innovation so that it has a positive impact on competitive advantage. From the twenty constructors or dimensions analyzed, some factors stand out because of their greater impact on the degree of innovation as we shall see, which may lead to drawing practical implications to be taken into account to improve the sector.

As a result, in the internal factors of the model, the highest positive coefficients were showed by the following variables: creativity, innovation-oriented culture and business structure that facilitates innovation. In this sense, the empirical study follows that an organisational system exists that facilitates innovation management among all departments, which encourages the involvement of multidisciplinary teams in innovation activities and allows the knowledge acquired during their development to be explicitly incorporated into the company. There is also a widespread way of thinking that an innovation-oriented culture and a willingness to change and learn prevails in organisations as a result. And the third factor, the hotel sector is tapping the potential of generating an appropriate environment for creativity as a way of improving the optimisation of the processes and quality of service provided. So much so, that in many companies there is internal communication that aims to capitalise on the ideas or improvements employees may provide.

With regard to the phase of the model that analyze the external factors, competitive rivalry gave the highest positive correlation. About this dimension, it has been noted how directors are well aware of the importance of innovation in competing better and of how innovation can be a barrier for current and potential competitors. Hoteliers understand that they develop innovations for their customers' unmet needs and in doing so, the customer perceives improved service level through this innovation. Direc-

tors are aware that innovation improves product image and even brings about changes in tastes and fashions. This means they must be very attentive to market innovations, since they shorten a product's life cycle. In a nutshell, higher levels of rivalry lead to higher levels of innovation.

Regarding the competitive strategic factor, which also offers us a very high correlation, most of the decision-makers in these large firms perceive the importance of innovation to the point where they understand that innovation should be treated as a strategy in itself. In this sense, the highest correlation coefficients are given by cost leadership and differentiation strategies. Directors understand that competing by undercutting competitors' prices means higher investment in innovation, while they argue that innovation allows them to make processes more efficient, optimise cost control and encourage investment in technology in order to cut costs. Furthermore, there is a widely-held opinion that choosing differentiation as a competitive strategy entails higher investments in innovation. The directors' opinions on how innovation enables an organisation to provide the highest quality services perceived by customers and how innovation can improve brand image also scored positively. Therefore, customers continue to be a crucial part of innovation to the point that hoteliers appreciate that securing customer loyalty requires raising the level of innovation along with improving marketing techniques and methods.

In the implantation strategy, quality management is the item which correlates the most with the level of innovation. The empirical study shows that many hotel chains in Spain use quality management models and models for ongoing quality improvement and there is awareness of the importance of incorporating innovation into management quality plans.

Thus, the results of our study show that hotel directors clearly distinguish the strategic value of innovation as a critical factor in competing and understand that among other benefits, it establishes entry barriers, allows product differentiation, ensures a competitive pricing policy, affects customers' and suppliers' bar-

gaining power, helps build a good brand image and secures customer loyalty.

Innovation must be planned carefully and above all, perhaps as the main conclusion of our study, innovation must be treated as a strategy in itself, a strategy for competing and thus a growth strategy.

From a methodological point of view, we have proposed a methodology to measure the various determinants of the level of innovation from which a number of highly differentiated dimensions were obtained; this methodology allowed us to examine the impact of innovation on business results. In this sense, this study may be of interest to directors of hotel chains, since a detailed view of many factors that are part of innovation management is offered by both the theoretical research and its empirical analysis; the latter offers conclusions on what competing managers provide in relation to these multiple factors, which interact with innovation and directly affect business performance and the achievement of competitive advantages.

#### LIMITATIONS AND FUTURE LINES OF RESEARCH

The first limitation to note is the study's cross-sectional nature, since it does not allow the evolution of innovation strategies and their effect on the variations in some of the determinants therein to be verified over time. In addition, this cross-sectional nature may mean that some effects that are important in generating income and competitive advantages in a dynamic sense are not covered that, since they are differed over time. Therefore, conducting longitudinal studies that monitor the evolution of different innovation strategies and the factors that determine them over several time periods would be of interest, in order to capture trajectories or behaviour patterns and their impact on the results.

Developing a methodology that uses a type of segmentation other than directors, involving middle management, department heads and even workers, would also be of considerable interest for future research (triangulating the information gathered). This could entail all the employees that intervene directly in innovations that make up the activities that are a source of competitive advantage and of improved results. This effort involves applying a model whose factors can be divided into departmental functions or tasks, for which each of the factors would need to be analysed in different sub-activities to be disaggregated and a network of variables created that would allow the scope of each in relation to innovation to be ascertained.

Among the factors studied, the correlative relationship between corporate strategy and innovation should be studied in more depth. Although this section was addressed in one of the main blocks of our study, its results may serve as the basis for considering new research projects. Especially useful would be examining in more depth innovation by type of competitive strategy (cost, differentiation, and segmentation) or by type of growth strategies, such as the relationship between innovation and growth in privately-owned hotel firms, contract management or franchising.

It would be of interest to improve the conceptual model presented in this paper with other empirical investigations. In this sense, it might be possible to replicate the research in other subsectors or include new types of establishments in the starting population, which would increase the population universe under study and thus, could serve to expand the sample analysed. It would also be of interest to conduct qualitative research in more depth, using other available techniques, such as case studies. These methodologies would complement the results achieved here and help obtain a deeper interpretation of them in terms of the type of analysis. Another option would be to apply the study model and this technique to comparing the most important tourism firms or different companies in different sectors within the services industry.

#### REFERENCES

Cotec (2008). Informe COTEC 2007. Tecnología e Innovación en España. Madrid: Fundación COTEC para la Innovación Tecnológica.

Eisenhardt, K.M. And Martin, J.A. (2000). Dynamic Capabilities: What are they?, Strategic Management Journal, 21, (10-11), 1105-1121.

Galende, J. (2006). Analysis of technological innovation from business economics and management, Technovation, 26 (3), 300-311.

Hair, J.F., Anderson, R.E., Tatham, R.L., and Black, W. (1998). Multivariate data analysis. (5th ed.). Upper Saddle River, NJ: Prentice Hall.

Hjalager, A.M. (2010). A review of innovation in tourism, Tourism Management, 31 (1), 1-12.

Jacob, M., Tintoré, J., Aguiló, E., Bravo, A., And Mulet, J. (2003). Innovation in the tourism sector: results from a pilot study in the Balearic Islands. Tourism Economics, 9 (3), 279-295.

Lefebvre, E., Lefebvre, L., And Harvey, J. (1993). Competing Internationally Through Multiple Innovation Efforts. R&D Management, 23 (3), 227-237.

Nieto, M. (2003). From R&D Management to Knowledge Management. An Overview of Studies of Innovation Management. Technological Forecasting and Social Change, 70, 135-161.

Orfila, F., Crespi, R., And Martinez, E. (2005). Innovation activity in the hotel industry: evidence from Balearic hotels, Tourism management, 26 (6), 851-865.

Ottenbacher, M.C. (2007). Innovation management in the hospitality industry: Different strategies for achieving success, Journal of Hospitality and Tourism Research, 31 (4), 431-454.

Teece, D.J., Pisano, G., And Shuen, A. (1997). Dynamic Capabilities and Strategic Management, Strategic Management Journal, 18 (7), 509-533.

Zahra, S.A. And George, G. (2002). Absorptive Capacity: A Review, Reconceptualization and Extension, Academy of Management Review, 27, 185-203.

Zollo, M. And Winter, S.G. (2002). Deliberate Learning and the Evolution of Dynamic Capabilities, Organization Science, 13 (3), 339-351.

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