Alexander Zuñiga-Collazos [1]

Marysol Castillo-Palacio

Raul Andrés Tabarquino-Muñoz

Esperanza Collazos-Zuñiga

PROCESS INNOVATIONS IN TOURIST COMPANIES

Abstract: Colombia is a country that has achieved significant tourism growth in recent years, However there is limited empirical evidence about its tourism development. Process innovations in tourism enterprises are one of the keys to Colombia maintaining positive tourism development. This empirical study analyzes process innovations in 364 Colombia´s tourism companies. The findings show that Acquisition of new both goods and equipment (The internal process to acquisition of goods and equipment of Company) and Coordination of company´s areas (The internal process to coordination of company's areas to improve) have a significant relationship with Process Innovations in Colombia's Tourist Enterprises. Especially, this study shows that the coordination of the areas of the Colombian touristic companies is those that affect with greater intensity the level of innovation in processes. Therefore, these activities should have a high priority for their execution and continuous improvement in the Colombian touristic companies.

Keywords: tourism, innovation, process innovation, Colombia

1. Introduction

Innovation is vital for a firm's sustainability in today's competitive business environment (Ceylan, 2013). To be innovative, firms need to adopt different types of innovation activities pertaining to all aspects of the organization rather than a single innovation activity (Damanpour, 1991 cited by Ceylan, 2013). Most research on innovation has focused on the sectors, namely: manufacturing, technology and finance, but few studies, mainly of an empirical nature, have been carried out in the service sector (Yuan Lu & Jui Tseng, 2010 cited by Damian & Suárez-Barraza, 2015).

According to Schumpeter (1934), innovation contemplates differentiated aspects in new products and processes, new markets, new market positions, new supply and distribution lines and new market structures. In this context, the levels of innovation in destinations and companies in the tourism sector are of great interest and relevance, allowing to improve products, processes, make organizational changes and marketing strategies, helping to generate competitive advantages in companies in the sector and, with this, contributing to the improvement of the destination (OECD & Eurostat, 2005). Thus, for example, taking advantage of the great potential that the Internet offered for the development of innovative and different online promotional and sales strategies, some tourism companies used this type of innovation in their online sales processes for the marketing of destinations, products and services at the beginning of the year 2000, as

---

[1] Corresponding author: Alexander Zuñiga-Collazos
 Email: azuniga01@usbcali.edu.co

a new channel of communication and distribution compared to the traditional media used at that time, allowing to obtain competitive advantages and better results, and thereby helping to improve the competitiveness of destinations (Cruz, 2005).

Tourism development in different countries, especially in developing economies, has positively affected their economies and societies. However, many still face problems of productivity, growth and unwanted levels of competitiveness. As a result, innovation and competitiveness of companies as an engine of growth are destined to be the means to achieve better results (Pechlaner et al., 2006; Sancho, Hall & Williams, 2008; Hjalager, 2002; Keller, 2005). Thus, the development of innovative products and services could help increase the competitiveness of companies and, in the same sense, the destination.

However, the degree to which innovation impacts the results of companies is something that is still under investigation. There are several studies, especially carried out in companies producing goods, which show that innovation has a positive relationship with the performance of organizations (Jiménez-Jiménez & Sanz-Valle, 2011). However, the number of studies in service companies that try to contrast this relationship, especially in companies in the tourism sector, is still limited (Hjalager, 2010). Particularly Pechlaner, Fischer & Hammann (2006) highlight the importance of investigating the impact of the types of innovation in the companies in the tourist destination and knowing specifically their effect on the performance of the same. However, according to Hjalager (2010), the limited studies carried out on this topic in the sector show a great gap between academia and real practice.

In recent years, there has been a greater interest in the development of studies focused on innovation in companies in the tourism sector, taking into account the four types of innovation that are known, a namely:

innovation in processes, product innovation, Innovation in the area of marketing and, finally, innovation directed to organizational management (Hjalager, 2010). In particular, process innovation is a topic of interest to scientific community (Nicolau & Santa-María, 2013). But, tourism companies are opposite challenges of increase and productiveness, in spite of growing dynamism in the tourism sector in differents destinations and countries. Consequently, innovation as a driver of growth is emerging as a popular development solution (Hjalager, 2002; Pechlaner, Fischer & Hammann, 2006).

Colombia's tourism has experienced significant growth over the decade (2000 – 2010), and the number of visitors has quadrupled according to the Ministry of Commerce, Industry, and Tourism, with 557,280 visitors in 2000 to 2.15 million in 2010. However, the evidence on innovation in tourism companies is scarce, and even more in the Colombian context (Zuñiga-Collazos, Harrill, Escobar-Moreno & Castillo-Palacio, 2015). Consequently, there is a gap in understanding the evolution in Colombia's tourism sector and the enterprises that generate the support of this economic sector. The objective of the study is to analyze Process Innovations in Colombia's Tourist Enterprises (PICTE), specifically, in the small and medium enterprises of the tourist sector. In this way, it is estimated the innovation in processes as dependent variable and, two independent variables, namely: acquisition of new goods and equipment, and coordination of company´s areas.

2. Theoretical Background

The concept of innovation used in the literature is varied, and the definitions described depend on the objectives of the research. Some of the main theoretical contributions to the concept of innovation come from fields such as management, business organization, economic and tourism. However, two definitions stand out as the most cited. The most common concept in

academic publications in the field of tourism research is conceptualized by Kanter (1983: 20) [cited by Hall & Williams (2008: 5) and Hjalager (2010: 2)] which considers that:

"[...] *Innovation refers to the process of providing ideas that can be used to solve any problem. [...] Innovation is the generation, acceptance and implementation of new ideas, processes, products or services.* "

The second is the concept defined in the Oslo Manual, used for the development of consultancy and applied research in innovation, which defines it as:

"[...] *the introduction of a new, or significantly improved, product (good or service), of a process, of a new marketing method or of a new organizational method, in the internal practices of the company, the organization of the place of work or external relations* "(OECD & Eurostat, 2005: 46).

2.1. Research on innovation in tourism

There are articles that review the literature on tourism research topics on this topic. In the case of work by Baaijens et al. (2000), based on a literature review on tourism innovation focused on case studies, the authors conducted an analysis of how tourism business innovation affected tourist income in several areas of the Greek island of Lesbos. On the other hand, the study conducted by Crouch (1995) integrates the empirical findings of 80 studies on the relationship between innovation in tourism and international tourism demand. The study analyzes in the results of the publications, the effect of the variables: "country of origin" and "country of destination", and describes them as determinants of the international tourist demand associated with the level of innovation in destination. Two published literature reviews call special attention. The work carried out by Bowen, Rostami & Steel (2010), which analyzes 158 relations between innovation and the performance of companies, represented in 55 published studies. Although, this work takes into account all types of companies, the authors conclude that the positive relationship between innovation and performance in the companies studied is evident. Likewise, the work carried out by Hjalager (2010) is noteworthy, where a review of the topics that have been investigated in the last two decades related to tourism innovation is described. Among the most noteworthy findings in this review, the author describes a series of gaps in tourism innovation research as scarce research in this topic and the limited empirical evidence of the effect of tourism business innovation on other variables such as organizational performance or the competitiveness of the destination.

On the other hand, Hjalager (2015) identified 100 different types of innovation in companies in the tourism sector and described them through a historical compilation, identifying the first innovation in 1914 with the appearance of the entry passport, until the appearance of the Avatar in this industry in 2012 However, there has been little attempt to systematize how to measure the concept. Them, how the construct Innovation has been measured in some studies on this topic. In the literature there is empirical evidence that allows us to observe the use of a series of variables for the measurement of the innovation construct in companies both in the production of goods and services, although hardly any work has been done in tourism. Hjalager (2009) describes how innovation can be measured in companies in the tourism sector through the Shumpeter (1934) approach, that is, through innovations in: products, processes, administrative and market. On the other hand Kah et al. (2010), Baglieri & Consoli (2009), Korres (2007) measured innovation in companies in the tourism sector based on Rogers' (2003) innovation dissemination model, where innovation is defined as a practical idea or object that it is perceived as new by individual units in the organization, or as a type of implementation to an internal system of the organization, for example, the

implementation of new software for the improvement of production processes.

Finally, in the literature there is empirical evidence about the relationship of some types of innovation and its effect on the possible growth of the tourism sector in the context of developing countries and destinations (Zuñiga-Collazos, 2018, Zuñiga-Collazos and Castillo-Palacio, 2016; Zuñiga-Collazos *et al*, 2015), where it is empirically demonstrated that innovation can be a key factor for the adequate tourist development of an emerging destination. But it also suggests the need to continue with research about the possible impacts that different types of innovation may have on the growth of the tourism sector, especially, the interest from the academic perspective, and the private company is focused on try to understand in a better way how to achieve coherent growth not only with the destination but also with its sustainability over time. In addition, the interest from the perspective of the public company is aimed at the adequate development of policies that in some emerging destinations are necessary with the purpose of providing conditions for the sustainable development of the destination.

2.2. Process innovations

The Organization for Economic Co-operation and Development Development (OECD & Eurostat, 2005) raises that four dimensions integrate the innovation: (1) product innovations, refers to the new products generated by the company and to the improvement of existing products, that is, it focuses on the most important changes in the characteristics of services and goods offered by the company; (2) process innovations, refers to the most significant changes regarding the methods of production and distribution of those goods and services offered by the companies; (3) organizational innovations, refers to the application of novel both administrative and organizational methods; and (4) marketing innovations, focused on marketing practices, such as price,

sales and communication strategies. Process innovation is "the implementation of a new or significantly improved production or delivery method. This includes significant changes in techniques, equipment and/or software. Process innovations can be intended to decrease unit costs of production or delivery, to increase quality, or to produce or deliver new or significantly improved products" (OECD & Eurostat, 2005, p. 59-60). Although from an integrative perspective, it is considered that there is a close relationship between product and process innovations, empirical studies in the tourism sector such as that developed by Guisado-González, Guisado-Tato and Rodríguez-Domínguez (2014) in the Spanish context, conclude that the innovations in product and in process in this economic sector, given their particularities, are independent, according to the statistical results. In this sense, Weiermair (2004) cited by Damian and Suárez-Barraza (2015) suggests that companies in the tourism sector should focus mainly on process innovation, because innovation in product has easy imitation as one of its disadvantages.

Process innovation activities may increase flexibility and efficiency of production or delivery processes and lead to cost reductions, and in turn support product development efficiency and product commercialization (Damanpour & Gopalakrishnan, 2001; OECD & Eurostat, 2005). According to Fagerberg, Mowery and Nelson (2004) the emphasis in process innovations is on its cost-cutting nature; that is, a basic objective of process innovations is to reduce costs irrespectively of the expected demand. In this sense, Nicolau and Santa-Maria (2013) describe as Sol Meliá once announced that was going to take part in Endesa's Energy Program to learn how to efficiently use energy in their hotels. Besides, process innovations activities may increase flexibility and efficiency of production or delivery processes and lead to cost reductions, and in turn support product development efficiency and product commercialization (Damanpour &

Gopalakrishnan, 2001; OECD & Eurostat, 2005).

2.3. Acquisition of new goods and equipment

According to the OECD and Eurostat (2005) distinguishes technological innovation as the introduction of technical innovations in products or processes. Technological innovations are directly related to the main activity of the organization, and its introduction is reflected in changes in products, processes and operating systems, or technologies and physical capital for production. This physical capital can clearly be obtained by the organization through the purchase of goods or equipment, but it could also be obtained as a result of innovation or improvement in some company processes, for example, by improvement in the goods production equipment of the company, if it is a manufacturing company or in the quality of the services if it is a company like the organizations that offer products or tourist services in a certain destination. In its study Hjalager (2015) identifies 100 different types of innovation in tourism companies, many of them, are the result of the acquisition of goods or equipment.

In addition, within technological innovation, the most common classifications distinguish two opposite types: one that differentiates product innovation and process innovation (Abernathy & Utterback, 1978) and another that classifies the degree of novelty as incremental or radical innovation (Damanpour, 1991). According to Camison and Monfort-Mir (2012), an incremental innovation would be the case of innovation outcomes related to processes; they can be associated with the development, acquisition or introduction of new goods and / or equipment, an increase in the degree of automation of processes, a redistribution of production processes or the use of new energy sources. In summary, incremental innovation represents, on the other hand, marginal changes with respect to habitual practices and

knowledge (Camison and Monfort-Mir, 2012).

2.4. Coordination of company´s areas

This topic is understood as the internal organizational process directly associated with the adequate coordination or management of the key areas of the company that offers tourist products or services in the destination, and whose main purpose is to improve variables such as efficiency or effectiveness of the processes. In addition, there may be cases where the results of innovation in the processes can be originated from a radical innovation (Damanpour, 1991) which can produce fundamental changes in the dominant practices within the organization, as well as in the processes of knowledge management available in the company or industry (Camison & Monfort-Mir, 2012). In other words, the knowledge accumulated by the organizations in the internal process of coordination of the areas of the company with the purpose of improving could be positively affected by the innovation.

Finally, the rational logic allows us to think that an adequate management of knowledge in terms of innovating in internal processes associated with the development of new or improved management models or coordination of the areas that are considered key for the tourism company should be correlated in a form direct and positive with organizational performance.

3. Methodology

Regression analysis is a statistic technique very useful because, first, allows analyzing the behavior of a variable after the influence of other variables, and second, allows explain the relation between variables (Cohen & Cohen, 1983; Hair, Anderson, Tatham & Black, 1995)

Therefore, this statistical technique is best suited for this study in determining the factors

that explain the development level of process innovations in Colombia tourism enterprises. Many studies have shown the relevance of the use of linear regression in business (Frees, 1996). Of course, regression analysis is also common in tourism research (Hossain, Aimin & Begum, 2012; Naudé & Saayman, 2005), where the technique has been used to assess different tourism contexts and determinants (Turaev, 2010).

For this research, in particular, the regression technique allows to explain the relationship between the independent variables (acquisition of new goods and equipment, and coordination of company´s areas) and the Process Innovations in Colombia's Tourist Enterprises –PICTE (dependent variable). In addition, this technique can estimate the influence of these independent variables on the behavior of the dependent variable. Consequently, shows the model estimated for the study:

$$PICTE = \beta_0 + \beta_1 \bullet Inn\text{-}Proc_1 + \beta_2 \bullet Inn\text{-}Proc_2$$

Where: PICTE = Process Innovations in Colombia's Tourist Enterprises; β_0 = Constant. The independent variables are Inn-Proc$_1$, Inn-Proc$_2$. Inn-Proc$_1$= Acquisition of new goods and equipment (Abernathy & Utterback, 1978; Camison & Monfort-Mir, 2012; Damanpour, 1991), could influence the PICTE in the extent that Colombian tourism enterprises make or introduce new process methods within the firm to improve its operational practices as the way to do acquisition of goods and equipment of Company. Inn-Proc$_2$= Coordination of company´s areas (Camison & Monfort-Mir, 2012; Nicolau & Santa-María, 2013), could influence the PICTE in the extent that Colombian tourism enterprises make or introduce new process or methods to improve its operational practices to coordination of company's areas in order to improve.

3.1. Sampling

The number of valid surveys was 364,
directed to the managers of tourist companies of four Colombian cities, namely: Medellin, Popayan, Calarca and Santander de Quilichao. The target population are small and medium-sized tourism companies (SMEs), taking into account that as stipulated by the Ministry of Commerce, Industry and Tourism of Colombia, the micro-enterprise have between 0 to 10 workers, small companies are those that comprise of 11 to 50 workers, while the medium companies include between 51 to 200 workers. Thus, in the present study, 82.7% of the companies participating in the sample correspond to micro-enterprises, followed by small companies (15.39%) and finally, medium-sized companies represented 1.61%. In terms of the economic activity, the percentage of participation of the companies estimated in the studio, is distributed as follows: the 54.77% are restaurants, followed by the hotels with a participation of 20.33%, the 6.59% correspond to companies providing hosting services, 3.58% correspond to the participation of travel agencies, and finally, other types of tourism businesses are represented by the 13.46%.

3.2. Analysis

The variables *acquisition of new goods and equipment* (InnProc1) and *coordination of company´s areas* (InnPrc2) have a both significant and positive relationship respecting to the variable PICTE, as shown in the correlation matrix (See Table 1). In this sense, InnPrc2 is the variable that present the highest correlation coefficient, is that independent variable that contributes most to the model. In addition, is emphasized that the model has a high significance (F = 545,918; ρ = 0,000), and that the Durbin-Watson indicator is 2,072.

Outputs for ANOVA analysis shows that the significance level for the F test of the regression is 0,000, which is lower than 0,05 as the minimum level of significance expected; therefore, the hypothesis H0 is rejected, and must be at least $\beta \neq 0$, and thus

at least some of the independent variables explain the behavior of the dependent variable PICTE. Subsequently, the significance of the parameters is evaluated individually. For this the t test is evaluated in the coefficient matrix, taking into account the hypotheses H0: $\beta j = 0$ and H1: $\beta j \neq 0$.

Table 1. Correlation Matrix (N=364)

	PICTE	**Inn-Proc$_1$**	**Inn-Proc$_2$**
PICTE			
Person Correlation	1		
Inn-Proc$_1$:			
Person Correlation	0.335*	1	
Sig. (Unilaterally)	0.000	0.000	
Inn-Proc$_2$:			
Person Correlation	0.853*	0.212*	1
Sig. (Unilaterally)	0.000	0.000	0.000

Source: Own elaboration.
*Correlation is significant at the 0,000 level (unilateral)

According to the analysis, none of the analyzed data shows a statistically significant Mahalanobis distance ($p < 0,001$) to infer the existence of an outlier. For each of the variables their tolerance indicator is not less than 0,10, as suggested by the theory of Menard 1995 (cited by Aldás, 2008), there are no challenges of multicollinearity.

On the other hand, observe that Inn-Prc1 and Inn-Prc2 have a significant individual significance within the model (see Table 2). The model is explaining 75% ($R^2 = 0,750$) of the information with the variables Inn-Prc1 *(acquisition of new goods and equipment)* and Inn-Prc2 *(coordination of company´s areas)*. While 25% of the information can be explained by other variables that are not present in the present model.

Table 2. Matrix of Coefficients

Model	Unstandardized Coefficients		Typified Coefficients	t	Sig.	Statistical Collinearity	
	B	**Typ. Error**	**Beta**			**Tolerance**	**FIV**
(Constant)	0.548	0.107		5.123	0.000		
Inn-Proc$_1$	0.135	0.023	0.161	5.990	0.000	0.955	1.047
Inn-Proc$_2$	0.712	0.023	0.818	30.482	0.000	0.955	1.047

Source: Own elaboration.
Dependent Variable: CTEPI. *F* = 545,918; ρ = 0,000

Once the model is estimated and diagnoses that confirm the validity of the results, the regression line obtained from the coefficient matrix (see Table 2) is:

PICTE = 0,548 + 0,135 • Inn-Proc$_1$+ 0,712 • Inn-Proc$_2$

With this model, it will be possible to predict the level of process innovations of a particular company, as long as its perceptions are identified. Also allows identifying the relative importance of the independent variables in the behavior of the variable dependent *Process Innovations in Colombia's Tourist Enterprises*. In this context is clear that the

variable Inn-Proc2 is the most important (0,712). The study results are summarized in Table 3.

Table 3. Regression Results

Model	B	SE	B
(Constant)	0.548	0.107	
Inn-Proc$_1$	0.135	0.023	0.161*
Inn-Proc$_2$	0.712	0.023	0.818*

Source: Own elaboration.
$R^2 = 0,750$; *$\rho < 0.001$

4. Results and Discussion

The companies of the tourism industry in Colombia, are in an emergent stage respect to the development and implementation of process innovations. However, countries such as Colombia that have tourist destinations in full development stage, could be affected their competitiveness because the growth dynamics require in the same way to understand in a better way what could be the activities of the management of the companies that offer products and services tourism in the destination, are correlated with innovation processes, and with this concentrate the efforts to achieve sustainable competitive advantages. From the present study, it has been identified that the Colombian tourism companies that implement this type of innovations spend relatively few efforts. Inn-Proc1, which is innovation understood as the way of directing and managing company, had an average score of 3,42 out of 5,0 by managers, thus indicating that the level of changes or improvements in its operational practices as internal process to acquisition of goods and equipment of Company for all companies surveyed.

Not all the companies have the same level of intent to innovate from the acquisition of new goods and equipment. There are companies that are characterized by low efforts focused on this perspective, while others have shown greater concern to respect, for which they have implemented this type of innovations.

Moreover, Inn-Proc2 which is process innovations understood as the way to do internal process to coordination of company's areas to improve, had a mean score of 3.38 out of 5.0 on the part of employers, suggesting that the level of innovation on internal process to coordination of company's areas to improve are not estimated as a priority in the surveyed ventures. In this sense, according to the minimum and maximum rating obtained, not all the companies have the same level of intent to improve or obtain new forms of commercialize and sales.

Some companies do not make concentrated efforts to innovate in the process, while others have considered it. In this way, it is perceived that Colombian companies in the tourism sector do not have the same level of research and development in this type of innovation. This behavior identified in the study could occur because apparently in the collective imagination of entrepreneurs, especially SMEs in the country studied in this study consider that innovation has a high cost, and therefore, they have a low predisposition for assume it, which is a clear need to socialize the advantages and disadvantages of innovation in processes clearly in this type of companies, However, it is also clear that in order to obtain higher indices of innovation in processes in tourism companies in destination , it would also require the support of public institutions through the development of policies that generate the adequate conditions for the effective development of this type of innovations such as the extension of tax taxes

for those organizations that demonstrate the realization and implementation of innovations, and that over time achieve an innovative culture in this industry.

5. Conclusions

The results allow a better understanding the relationship of process innovations in Colombian tourism sector and we can say that this type of innovation is an important key to tourism growth in this country. They also provide important empirical evidence supporting the theoretical conceptualization described by Nicolau and Santa-María, (2013), Ceylan (2013), Abernathy and Utterback (1978), Damanpour (1991) and, Camison and Monfort-Mir (2012), and this empirical study contributes important, and so far scarce results, in less developed countries, contexts that differ significantly from developed regions or mature destinations. This could justify the difference correlation between Inn-Proc1, Inn-Proc2 with PICTE. These findings are described below. For less developed countries, Process innovations should be addressed as a major determining factor in continued tourism success.

The findings of the present study show that there is a significant relationship with respect to the PICTE with the variables Inn-Proc2 (0.712), Inn-Proc1 (0.135). In summary, the study shows a positive linear relationship between the dependent variable PICTE with the independent variables and Inn-Proc2 (Coordination of areas of the company) is the variable that contributes most to the model. In other words, in this study, he was able to empirically prove that the coordination of the company's areas and the acquisition of new goods and equipment for the Colombian touristic companies are directly and positively affecting the innovation process of the Colombian tourism companies. Which, in turn, allows us to think that this type of activity is very relevant for the proper development of the destination, and, in the same sense, it could be said that the managers of this type of economy should concentrate

their efforts in this type of activity, since they could have better possibilities to increase their organizational competitiveness based on the generation of competitive advantages.

In terms of predicting the degree of process innovation in tourism companies in Colombia, the regression coefficients allow us to identify the relative importance of the individual variables to predict. It is clear that the variable and Inn-Proc2 is the most important (0.712), followed by Inn-Proc1 (0.135). That is, the coordination of the areas of Colombian tourism companies is those that most affect the level of innovation in the processes. Therefore, these activities must have a high priority for their execution and continuous improvement in Colombian tourism companies. However, although the acquisition of new goods and equipment according to this study has a lower relative weight, this does not mean that it should not be taken into account, because this variable is also correlated and has a positive effect on the Level of innovation in processes of Colombian tourism companies.

Given the limits of this study, it was not possible to expand the sample to other tourist cities of the country, it is advisable that in future studies the sample can be extended to other cities that present good levels of tourist development in this country, on the other hand, it is It is necessary to carry out more research to find empirical evidence on the relationship between other variables of great interest to understand in a lesser way the growth of the sector in destinations in development. These variables are: business performance related to other types of innovation such as (marketing innovation, organizational innovation or product innovation). Finally, in order to continue with the validation of these types of relationships, it is necessary to continue the investigation of this type of variables in other destinations, with similar characteristics, that is, in countries that present important developments in the tourism sector but that meet in stages emerging.

References:

Abernathy, W. J., & Utterback, J. M. (1978). Patterns of industrial innovation. *Technology Review*, *80*, 40-47.

Baaijens, S., & Nijkamp, P. (2000). Meta-Analytic Methods for Comparative and Exploratory Policy Research: An Application to the Assessment of Regional Tourist Multipliers. *Journal of Policy Modeling*, *22*(7), 82-858. doi: https://doi.org/10.1016/S0161-8938(98)00022-2

Baglieri, D., & Consoli, R. (2009). Collaborative innovation in tourism: managing virtual communities. *The TQM Journal*, *21*(4), 353-364.

Bowen, F. E., Rostami, M., & Steel, P. (2010). Timing is everything: A meta-analysis of the relationships between organizational performance and innovation. *Journal of Business Research*, *63*(11), 1179-1185. doi: https://doi.org/10.1016/j.jbusres.2009.10.014.

Camison, C., & Monfort-Mir, V. M. (2012). Measuring innovation in tourism from the Schumpeterian and the dynamic-capabilities perspectives. *Tourism management*, *33*(4), 776-789.

Ceylan, C. (2013). Commitment-based HR practices, different types of innovation activities and firm innovation performance. *The International Journal of Human Resource Management*, *24*(1), 208-226. doi: https://doi.org/10.1080/09585192.2012.680601.

Cohen, J., & Cohen, P. (1983). *Applied multiple regression/correlation analysis for the behavioral sciences* (2a Ed.). Hillsdale, NJ: Lawrence Erlbaum.

Crouch, G. I. (1995). A meta-analysis of tourism demand. *Annals of Tourism Research*, *22*(1), 103-118. doi: https://doi.org/10.1016/0160-7383(94)00054-V.

Cruz, G. (2005). *Promoción de destinos turísticos en la web: Estrategias e indicadores para destinos turísticos brasileños*. Tesis de Doctorado Turismo y Sustentabilidad de la Universidad de Las Palmas de Gran Canaria – España.

Damanpour, F., & Gopalakrishnan, S. (2001). The Dynamics of the Adoption of Product and Process Innovations in Organizations. *Journal of Management Studies*, *38*, 45-65. doi: https://doi.org/10.1111/1467-6486.00227.

Damanpour, F. (1991). Organizational Innovation: A Meta-Analysis of Effects of Determinants and Moderators. *The Academy of Management Journal*, *34*, 555-590. doi: 10.2307/256406.

Damian, I. E., & Suárez-Barraza, M. F. (2015). Innovación de procesos en la gestión turística: Una revisión de la literatura. *Intangible Capital*, *11*(1), 147-165. doi: http://hdl.handle.net/2117/80135.

Fagerberg, J., Mowery, D. C. & Nelson, R. R. (2004). *The Oxford Handbook of Innovation*. Oxford: Oxford University Press.

Frees, E. W. (1996). *Data analysis using regression models. The business perspective*. Upper Saddle River, NJ: Prentice Hall.

Guisado-González, M., Guisado-Tato, M., & Rodríguez-Domínguez, M. (2014). Testing the relationship between product innovation and process innovation: a comparative analysis of tourism and manufacturing sectors. *European Journal of Tourism Research*, *8*(1), 66-82.

Hair, J. F., Anderson, R. E., Tatham, R. L., & Black, W. (1995). *Multivariate data analysis*. Englewood Cliffs, NJ: Prentice Hall.

Hall, C. M. & Williams, (2008). *A. M. Tourism and innovation*. London: Routledge.

Hjalager, A. M. (2002). Repairing innovative defectiveness in tourism. *Tourism Management, 23*(5), 465-474. doi:https://doi.org/10.1016/S0261-5177(02)00013-4.

Hjalager, A. M. (2009). Cultural tourism innovation systems–the Roskilde festival". *Scandinavian Journal of Hospitality and Tourism*, 9(2-3), 266-287. doi:https://doi.org/10.1080/15022250903034406.

Hjalager, A. M. (2010). A review of innovation research in tourism. *Tourism Management, 31*(1), 1-12. doi:https://doi.org/10.1016/j.tourman.2009.08.012.

Hjalager, A. M. (2015). 100 innovations that transformed tourism. *Journal of Travel Research*, 54(1), 3-21. doi:https://doi.org/10.1177/0047287513516390.

Hossain, M., Aimin, W. & Begum, S. (2012). Investigating the impact of marketing mix elements on tourists' satisfaction: An empirical study on East Lake. *European Journal of Business and Management*, *4*(7), 273-282.

Jiménez-Jiménez, D., & Sanz-Valle, R. (2011). Innovation, organizational learning, and performance. *Journal of Business Research*, *64*, 408-417. doi:https://doi.org/10.1016/j.jbusres.2010.09.010.

Kah, J. A., Lee, C. K. & Chung, N. (2010). Evaluating travel website motivational communication using a structural equation modelling approach. *International Journal of Tourism Research*, *12*(6), 787-802. doi:https://doi.org/10.1002/jtr.796.

Kanter, R. M. (1983). *The change masters*. New York: Simon & Schuster.

Keller, P. (2005). *Towards an innovation oriented tourism policy: A new agenda*? Workshop on Innovation and Product Development in Tourism, Innsbruck (January 25).

Korres, G. M. (2007). The role of innovation activities in tourism and regional growth in Europe. *Tourismos: an International Multidisciplinary Journal of Tourism*, *3*(1), 135-152. doi:https://mpra.ub.uni-muenchen.de/id/eprint/25380.

Lu, I. Y., & Tseng, C. J. (2010). A study of the service innovation activities of tourist hotels in Taiwan. *International Journal of Organizational Innovation*, *3*(1), 156.

Naudé W., & Saayman A. (2005). Determinants of tourist arrivals in Africa: a panel data regression analysis. *Tourism Economics*, *11*(3), 365-391. doi:https://doi.org/10.5367/000000005774352962.

Nicolau, J. L., & Santa-María, M. J. (2013). The effect of innovation on hotel market value. *International Journal of Hospitality Management*, *32*, 71-79. doi:https://doi.org/10.1016/j.ijhm.2012.04.005.

OECD & Eurostat (2005). Manual de Oslo: Guía para la recogida e interpretación de datos sobre innovación. Retrieved from: http://www.uis.unesco.org/Library/Documents/OECDOslo Manual05_spa.pdf

Pechlaner, H., Fischer, E., & Hammann, E. M. (2006). Leadership and innovation processes—Development of products and services based on core competencies. *Journal of Quality Assurance in Hospitality & Tourism*, *6*(3), 31-57.

Rogers, E. (2003). *Diffusion of Innovations* (5th ed.). Free Press: New York.

Schumpeter, J. A. (1934). *The Theory of Economic Development*. New York, Oxford University Press.

Turaev, B. (2010). The impact of organizational and economic factors on tourism development. *Perspectives of Innovations, Economics & Business, 6*(3), 77-79. doi:http://dx.doi.org/10.15208/pieb.2010.85.

Weiermair, K. (2004). *Product improvement or innovation: what is the key to success in tourism? Innovations in tourism UNWTO conference*, June 2014.

Zuñiga-Collazos, A., & Castillo-Palacio, M. (2016). Impact of Image and Satisfaction on Marketing Innovation. *Journal of Technology Management & Innovation*, *11*(2), 70-75. doi:http://dx.doi.org/10.4067/S0718-27242016000200007.

Zuñiga-Collazos, A. (2018). Analysis of factors determining Colombia's tourist enterprises organizational innovations. *Tourism and Hospitality Research*, *18*(2), 254-259. doi:https://doi.org/10.1177/1467358416642008.

Zuñiga-Collazos, A., Harrill, R., Escobar-Moreno, N. R., & Castillo-Palacio, M. (2015). Evaluation of the Determinant Factors of Innovation in Colombia's Tourist Product. *Tourism Analysis*, *20*(1), 117-122. doi:https://doi.org/10.3727/108354215X14205687167789.

Alexander Zuñiga-Collazos
Universidad de San Buenaventura
Carrera 122 # 6-65,
Cali
Colombia
azuniga01@usbcali.edu.co

Marysol Castillo-Palacio
Universidad de San Buenaventura
Carrera 122 # 6-65,
Cali
Colombia
mcastillop@usbcali.edu.co

Raul Andrés Tabarquino Muñoz
Universidad del Valle,
Cl 4b #36b36, Edificio 124,
Departamento de Administración y Organizaciones
Cali
Colombia
raul.tabarquino@correounivalle.edu.co

Esperanza Collazos-Zuñiga
Fundación Universitaria de Popayán
Calle 5 No. 8-58 Popayán, Cauca,
Popayán
Colombia
maria.collazos@fup.edu.co