
Munich Personal RePEc Archive

Service innovations and firm performance in the hospitality industry: evidence from tourism driven economies

Stojcic, Nebojsa and Vojvodic, Katija and Butigan, Nikola

University of Dubrovnik, Department of Economics and Business

May 2019

Online at https://mpra.ub.uni-muenchen.de/108648/
MPRA Paper No. 108648, posted 08 Jul 2021 00:03 UTC

NEBOJŠA STOJČIĆ, PhD, Associate Professor
University of Dubrovnik
Department of Economics and Business Economics
Lapadska obala 7, 20000 Dubrovnik, Croatia
nstojcic@unidu.hr

KATIJA VOJVODIĆ, PhD, Associate Professor
University of Dubrovnik
Department of Economics and Business Economics
Lapadska obala 7, 20000 Dubrovnik, Croatia
katija.vojvodic@unidu.hr

NIKOLA BUTUGAN, PhD
Pemo Ltd.
Vukovarska 26, 20000 Dubrovnik, Croatia
nikola.butigan@pemo.hr

SERVICE INNOVATIONS AND FIRM PERFORMANCE IN THE HOSPITALITY INDUSTRY: EVIDENCE FROM TOURISM DRIVEN ECONOMIES

SERVICE INNOVATIONS AND FIRM PERFORMANCE IN THE HOSPITALITY INDUSTRY: EVIDENCE FROM TOURISM DRIVEN ECONOMY

Nebojša Stojčić
Katija Vojvodić
Nikola Butigan

Abstract
Purpose – The purpose of this paper is to identify the impact of service innovations on firm performance in the hospitality industry in Croatia during the 2012-2014 period.
Methodology – The study uses data from the most recent round of Community Innovation Survey, a confidential dataset compiled by Eurostat on innovation activities of firms in the EU member states. With means of the nearest neighbour matching treatment analysis it first explores the determinants behind the ability of firms to introduce service innovations before it explores whether firms that introduce service innovations outperform their rivals.
Findings – The results of investigation suggest that service innovations emerge predominantly through transfer of knowledge and skills between organizations, through intra-firm channels and other spillover mechanisms. In addition, there is little evidence of internal organizational and marketing innovations as drivers of innovation in services.
Contribution –Rising importance of services in world economy suggests that service innovations are important for firm performance and competitiveness. To the best of our knowledge, there has been no attempt to address determinants of innovation in general and service innovations in particular in the hospitality industry in Croatia, whose economy largely depends on tourism, in post crisis period. To this end, our study makes genuine contribution to the existing literature that can translate into concrete policy recommendations.

Keywords hospitality industry, service innovations, firm performance, treatment analysis

INTRODUCTION

Due to the ever-increasing competition within the industry, hospitality firms increasingly depend on the ability to innovate in order to sustain competitive advantage. The term service innovations is generally understood to mean "*changes directly observed by the customer and regarded as new; either in the sense of never seen before, or new to the particular enterprise or destination*" (Hjalager 2010). In addition, Witell *et al.* (2017) define service innovation as a process of accessing the necessary resources, (re)combining them, and converting them into new services. It is common knowledge that the distinctive characteristics of service sector include intangibility, heterogeneity, inseparability and perishability. To develop competitive advantage, hospitality firms are increasingly committed to providing innovative experiential service offerings (Bharwani and Mathews 2016). Chen *et al.* (2017) emphasize the importance of business co-creation while developing new services and the need to apply co-creation approaches with both partners and customers. As stressed by Ottenbacher, Shaw and Lockwood (2006), hospitality services depend heavily on the skills and experiences of the employees that deliver them. In that context, innovation management and customer orientation have

been widely considered crucial factors in enhancing the business performance of hotels (Grissemann, Plank and Brunner-Sperdin 2013). Similarly, Sánchez-Gutiérrez *et al.* (2018) stress the recognition of customer needs and their transformation into marketing innovation are two essential processes in customer value creation.

The success of service innovation is closely related to creativity. In the context of reinforcing creativity in service innovation, Giannopoulou, Gryszkiewicz and Barlatier (2014) highlight seven relevant capabilities, i.e. attracting, stimulating, combining, providing, breeding, opening up and accepting. Furthermore, emotions have also been explored as an aspect of service innovation processes since they serve as a stimulus for the innovation work (von Koskull, Strandvik and Tronvoll 2016). Bhatnagar and Gopalaswamy (2017) contend that service firms can develop more customer-oriented service innovation configurations by strengthening their service innovation competence dimensions. Moreover, den Hertog, van der Aa and de Jong (2010) identify the six dynamic service innovation capabilities: signalling user needs and technological options; conceptualising; (un-)bundling; co-producing and orchestrating; scaling and stretching; and learning and adapting.

The objective of this paper is to identify the impact of service innovations on firm performance in the Croatian hospitality industry during the 2012-2014 period. To this end, the nearest neighbour matching treatment analysis was used. The paper is structured as follows. After the introduction, the first section gives an overview of service innovations in the hospitality industry. The second section explains methodology and the model of investigation while the third section brings out the research findings. Finally, in the last section some conclusions have been drawn upon.

1. SERVICE INNOVATIONS IN THE HOSPITALITY INDUSTRY

The global hospitality industry can be described as diversified, ranging from small and medium enterprises to large multinational corporations, both in the restaurant and the hotel sector. As observed by Chang, Gong and Shum (2011), innovation are essential for hospitality organizations' success because it allows them to improve the quality of products, increase efficiency, meet the changing needs of customers, increase sales and profits, gain a greater market share and differentiate themselves from competitors. It is also important to understand whether managers face obstacles in implementing innovative ideas and processes (Sanjeev and Bandyopadhyay 2016). As regards service firms, it has been found that managers need to take care of intangible resources, such as human resources and their links with innovation and performance (Carvalho and Sarkar 2014). In that sense, Chang, Gong and Shum (2011) explored selection and training as two specific human resource management practices in the context of promoting innovation in hospitality companies. Their findings suggested that hospitality companies should adopt a "hire for skill and train for skill" approach to obtain superior innovative and market performance. In addition, selection and training were found to have a negative joint impact on incremental but not radical innovation.

It is generally accepted that firm's knowledge base is conducive to innovation activity (Petrou and Daskalopoulou 2013) and that knowledge resources play an important role

in development of innovations (Nieves, Quintana and Osorio 2014). In addition, better knowledge management systems are recognized as a support to innovation in tourism (Moscardo 2008). Moreover, Nieves, Quintana and Osorio (2016) confirm that knowledge and knowledge-based processes are crucial to fostering innovation in the hotel firms. The role of knowledge in initiating innovation within the hotel service subsector has also been stressed (Edghiem and Mouzughi 2018). Furthermore, Nieves and Diaz-Meneses (2016) argue that both the learning capability and marketing innovation favour the financial performance of hotel firms.

Nowadays, the hospitality industry is increasingly focusing on building customer relationship that can result in enhanced customer satisfaction, better performance and competitiveness. In other words, guests dictate the pace and type of service, and satisfactory service is considered the minimum expectation of guests (Crick and Spencer 2011). According to Sarmah and Rahman (2018), hotel managers should co-create with customers to develop new services and to encourage their active participation in new hotel service offerings. Divisekera and Nguyen (2018) emphasize the importance of information and communication technology in the implementation of operational process and organizational innovations. New service concepts can be observed through the synergy effects of IT and relationship marketing strategies (Kuo, Chen and Tseng 2017). In examining co-creation in hotel service innovation, Sarmah, Kamboj and Rahman (2017) indicate that both guests' innovativeness and need for interaction with service staff significantly affect their involvement. In addition, Sarmah, Kamboj and Kandampully (2018) assert that customer innovativeness and attitude toward co-creative service innovation positively influence both co-creation and adoption intention. On the other hand, Gustafsson, Kristensson and Witell (2012) suggest that co-creation and innovation can be combined, but that the choice of methods for co-creation differs depending on whether incremental or radical innovations are developed.

Different factors have been taken into account in examining innovation in hospitality firms. As noticed by Ottenbacher (2007), the most important success factors for hospitality innovations are understanding and responding to the market. Increasing firm size and greater competition among tourism enterprises were found to impact on the propensity to innovate (Divisekera and Nguyen 2018). Divisekera and Nguyen (2018) confirm that foreign ownership, degree of competition, and firm size have significant impacts on innovation intensity among firms. Further, Lopez-Fernandez, Serrano-Bedia and Gomez-Lopez (2011) found a positive relationship between hospitality innovation and four internal factors, i.e. large firm size, membership in a business group, willingness to change, and a strong bureaucratic framework to manage any innovations. On the other hand, Backman, Klaesson and Oner (2017) claim that the most important features that explain innovation belong to the firm itself, not the location. Additionally, Wikhamn, Armbrecht and Wikhamn (2018) suggest that hotel's likelihood of innovating depends largely on structural independence (non-chain), having an explicit innovation strategy and investing in non-traditional R&D. As regards drivers of innovation in hospitality family firms, Kallmuenzer (2018) found that the family and employees are internal key drivers for innovation whereas the guests and regional competitors as external drivers provide comprehensive innovation input.

Only a few researchers have addressed the issue of service innovation in Croatia and, in particular, in the hospitality sector. Some initial work was carried out in the early 2000s. Radas (2003) explored whether service firms in Croatia were inclined to adopt modern business tools such as new product development process. The results suggested potential weakness in product development capability since product development in Croatian service firms was driven predominantly by marketing and sales. Further, innovation activity in Croatian hotel sector was analysed by Pivčević and Garbin Praničević (2012). Their results suggest that Croatian hotels were only moderately innovative and with different innovation activity according to innovation type and newness. More recently, Božić and Mohnen (2016) compared Croatian SMEs operating in the manufacturing and services sectors. Their findings indicate that service SMEs rely on acquired knowledge and are less likely to introduce technological innovations.

2. EMPIRICAL STRATEGY

Our analysis utilizes methodology capable to assess the impact of particular policy instrument, firm activity or event on the outcome of interest. Hence, we explore the impact of incremental and radical service innovations on turnovers generated by firms in the Croatian hospitality industry. The model of investigation involves range of control variables. A dummy variable is introduced as a control for small and medium sized firms. Another dichotomous variable controls for firms that are part of the group. We also control for introduction of new or significantly improved logistics, maintenance systems or operations for purchasing, accounting and computing. Two categorical variables control for firms that in three years prior to survey went through merger or dissolution of particular enterprise tasks. In addition, we control for the extent of human capital in firm and the proportion of revenues generated from external markets as a proxy for sophisticated demand.

Among control variables, we specifically control for organizational and marketing innovations since these are likely to provide firms with resources relevant for higher revenues and introduction of service innovations. Three categorical variables control for i) introduction of new business practices such as business reengineering, knowledge management or quality management, ii) introduction of new methods of work organization such as employee responsibility distribution, integration or de-integration of departments and provision of trainings to staff, iii) new methods of organization of external relations such as alliances, sub-contracting or outsourcing. Apart from organizational innovations, we also include four categorical variables for firms that introduce marketing innovations. Specifically, we control for firms that: i) introduced significant changes in design of their services or goods, ii) firms that introduced new forms of promotion such as new advertising media, loyalty cards, brand image etc., iii) new methods of sales channels or presentation and iv) new methods of pricing. Table 1 provides detailed description of variables.

Table 1: **Description of variables**

Variable	Description
Turnover (ln)	Turnover generated in 2014 by firm *i*
radicalinno	1 if firm introduced service innovation new to the market
increminno	1 if firm introduced service innovation new to the firm
sme	1 if firm has less than 250 employees
group	1 if firm is part of an enterprise group
proc	1 if firm introduced new or significantly improved logistics, maintenance systems or operations for purchasing, accounting and computing
enmrg	1 if firm went through merger or takeover in 2012-2014 period
enout	1 if firm sold, closed or contracted out enterprise task or function
orgbup	1 if firm introduced new business practices such as business re-engineering, knowledge management or quality management
orgwkp	1 if firm introduced new methods of work organization and decision making such as new system of employee responsibilities, team work, decentralization, integration of departments and education or training
orgexr	1 if firm introduced new methods of organizing external relations such as alliances, partnerships, outsourcing or subcontracting
mktdgp	1 if firm introduced significant changes to design of its services
mktpdp	1 if firm introduced new media or techniques for promotion such as loyalty cards, brand image or new media
mktpdl	1 if firm introduced new methods of product placement or sales channels
mktpri	1 if firm introduced new methods of pricing
hcap	1 if firm employs more than 25% of staff with tertiary degree
slsout	share of sales coming outside national borders

Our empirical strategy rests on framework that consists of the control and treated groups. Such techniques aim to assess the outcome for treated group that would happen had treatment not taken place. The challenge in such process comes from the fact that only the outcome of the treated group is observed. To overcome the problem, a control group needs to be established that bears resemblance on covariates important for selection into treatment and for the potential outcome. Hence, treatment techniques aim to find a control group with high degree of similarity to the group of treated firms. The most commonly used treatment estimator is the nearest neighbor matching procedure where probability of receiving a treatment is first estimated through means of probit or logit model and the difference in potential outcome means between control and treated groups is calculated subsequently resulting in average treatment effect (ATE) given as.

$$ATE_{nnm} = \frac{1}{N}\sum_{i=1}^{N}(Y_i(1) - Y_i(0))$$

The above-described procedure is applied to data on firms from the hospitality industry in Croatia collected within the Community Innovation Survey, a large comprehensive survey of innovation activities of firms in the European Union and its candidate countries. The data is confidential and can be accessed only through means of secure server or Eurostat safe room. The richness of dataset adds particular value to research since there are no comparable databases available for European firms. In the last version of survey covering the 2012-2014 period and released in 2017 in the Croatian hospitality industry 231 firms were surveyed, of which about 10% have declared to introduce either incremental or radical service innovation. While we had access to data on other countries in majority of them, including nearly all Mediterranean tourism destinations the hospitality industry, data are not provided. For this reason, we limit our analysis to Croatia. The cross-sectional nature of our dataset may raise concerns about the relevance of reported findings. While we agree that longer time span of analysis might provide better insight in investigated topic we also note the fact that such data do not exist and we are dealing with the best possible source of information on innovation behaviour of firms in Europe. Bearing this in mind we next turn to the interpretation of findings.

3. RESULTS OF INVESTIGATION

The starting point of our analysis is the investigation of determinants behind the ability of firm to introduce either incremental or radical service innovation. This part of analysis is undertaken with means of probit econometric technique. Results of investigation are presented in Table 2.

Table 2: **Probability of incremental and radical innovations**

	Incremental innovations	**Radical innovations**
sme	-0.54	-0.47
group	0.69**	-0.07
proc	1.86***	-0.77**
enmrg	-0.23	0.95**
enout	-1.51*	0.40
orgbup	0.43	0.67*
orgwkp	-0.37	0.22
orgexr	0.54	0.82**
mktdgp	-0.05	0.88***
mktpdp	0.52	0.06
mktpdl	-0.05	0.51
mktpri	0.45	0.25
hcap	-1.31**	0.54
slsout	-0.001	0.002
LR test	103***	60***
Number of observations	231	231

***,** and * denote statistical significance at 1%, 5% and 10% levels respectively.

Results of probit analysis reveal different drivers behind introduction of incremental and radical innovations. Incremental innovations, often referred to in the literature as imitation, emerge as a result of intra-firm knowledge flows and improvements in systems such as purchasing, accounting or computing. None of organizational or marketing innovation variables seems to matter for such kind of innovations. It is also interesting that outsourcing and higher quality of human capital reduce the probability of introduction of such innovations. Different findings hold for introduction of radical, new to the market, innovations. Here too intra-firm knowledge flows, but this time through mergers and takeovers, matter for the ability of firms to innovate. We also identify several organizational and marketing innovations that matter for such market changing behaviour. Specifically, the probability of radical innovations is higher in firms that introduce new methods of organizing external relations such as alliances, strategic partnerships, outsourcing or subcontracting. Similar effect comes from new business practices such as business re-engineering, knowledge management or quality management. Finally, strong positive impulse to introduction of radical innovations comes from changes to design of services and products.

The next step of analysis is matching procedure between control and treatment groups. Successful matching procedure should result in sizeable reduction in standardized differences and variance ratios between treatment and control groups. Table 3 provides both measures for all control variables in our sample. As it can be seen from there, standardized differences are considerably reduced in all cases and variance ratios are very close to 1 for all control variables once matching procedure is completed.

Table 3: **Balancing of covariates**

Variables	**Standardized differences**		**Variance ratio**	
	Raw	Matched	Raw	Matched
sme	-0.20	-0.01	1.84	1.03
group	-0.003	-0.06	1.02	1.15
proc	0.15	-0.02	1.30	0.90
enmrg	0.22	-0.06	1.98	0.91
enout	0.24	0.00	4.05	1.00
orgbup	0.74	0.00	2.74	1.00
orgwkp	0.96	-0.03	2.03	0.96
orgexr	0.78	0.00	6.50	1.00
mktdgp	1.04	0.09	2.38	1.02
mktpdp	0.94	0.06	1.71	1.07
mktpdl	0.88	0.04	2.83	1.09
mktpri	0.74	0.08	1.81	1.04
hcap	0.03	0.09	1.06	1.11
slsout	0.91	0.26	1.50	1.03

The final part of our investigation is the assessment of the relationship between introduction of service innovations and firm performance. Using nearest neighbor matching procedure we estimate average treatment effects (ATE) for both types of innovation. Results from this part of analysis are presented in Table 4.

Table 4: **Impact of service innovations on firm performance**

	ATE
Incremental innovations	1.05***
Radical innovations	0.65***

***,** and * denote statistical significance at 1%, 5% and 10% levels respectively.

The results from Table 4 reveal positive impact of service innovations on firm performance. The effect of incremental innovations is about twice as large as the one of radical, new to the market, innovations. How can one interpret such findings? Greater importance of incremental innovations is typical for sectors with long life cycles and those at upper middle or high segment of their development. The Croatian hospitality industry certainly bears many similarities with such description. Its framework had been set up several decades ago and has remained rather unchanged ever since. In such setting, firms compete through incremental improvements in their activities that create competitive advantage over short to medium run. It is also encouraging to see the link between radical innovations and firm performance even though the effect of such innovations seems to be weaker. This is understandable given the competitive profile of the Croatian hospitality industry that is mostly price competitive and standardized.

CONCLUSION

Innovations are at heart of firm performance and ability to compete with rivals. Ever since the work of Schumpeter (1942) scholars have sought to understand how innovations take place and what preconditions have to be met for them to translate into higher performance and competitiveness. However, majority of work undertaken has been concerned with innovations in manufacturing sector. Rising importance of services and particularly tourism makes it relevant to investigate innovation process in particular industries within tourism system such as hospitality industry. In Croatia, country largely dependent on tourism and standing on a cross-road between standardized price-competitive tourism forms and those patterns where innovations and market differentiation form the ability to compete this task is even more relevant. Studies on innovations in the Croatian tourism sector are generally scarce and do not employ advanced analytical methods. This presented motivation for our research to attempt to fill part of mentioned gap.

Our findings suggest that service innovations emerge predominantly through transfer of knowledge and skills between organizations, through intra-firm channels and other spillover mechanisms. We identified little evidence of internal organizational and marketing innovations as drivers of innovation in services. It seems that only internal mechanisms relevant are new practices of knowledge and quality management, changes in design and introduction of novel practices for organization of external relations with other firms, universities etc. These findings further support thesis that external sources of knowledge and indigenous absorptive capacity for appropriation of such sources are

principal drivers of firm innovation efforts. Future policies intended on transformation of the Croatian hospitality industry should therefore align mezzo and macro level policies with measures for facilitation of market knowledge flows and building of indigenous firm capabilities for absorption of external knowledge.

REFERENCES

Backman, M., Klaesson, J. and Oner, O. (2017), "Innovation in the hospitality industry: Firm or location?", *Tourism Economics*, Vol. 23, No. 8, pp. 1591-1614. doi: 10.1177/1354816617715159

Bharwani, S. and Mathews, D. (2016), "Customer service innovations in the Indian hospitality industry", *Worldwide Hospitality and Tourism Themes*, Vol. 8, No. 4, pp. 416-431. doi: 10.1108/WHATT-04-2016-0020

Bhatnagar, N. and Gopalaswamy, A. K. (2017), "The role of a firm's innovation competence on customer adoption of service innovation", *Management Research Review*, Vol. 40, No. 4, pp. 378-409. doi: 10.1108/MRR-11-2015-0280

Božić, Lj. and Mohnen, P. (2016), "Determinants of Innovation in Croatian SMEs – Comparison of Service and Manufacturing Firms", *Market*, Vol. 28, No. 1, pp. 7-27.

Carvalho, L.M.C. and Sarkar, S. (2014), "Market structures, strategy and innovation in tourism sector", *International Journal of Culture, Tourism and Hospitality Research*, Vol. 8, No. 2, pp. 153-172. doi: 10.1108/IJCTHR-05-2013-0031

Chang, S., Gong, Y. and Shum, C. (2011),"Promoting innovation in hospitality companies through human resource management practices", *International Journal of Hospitality Management*, Vol. 30, No. 4, pp. 812-818. doi: 10.1016/j.ijhm.2011.01.001

Chen, J.-S., Kerr, D., Chou, C. Y. and Ang, C. (2017), "Business co-creation for service innovation in the hospitality and tourism industry", *International Journal of Contemporary Hospitality Management*, Vol. 29, No. 6, pp. 1522-1540. doi: 10.1108/IJCHM-06-2015-0308

Crick, A. P. and Spencer, A. (2011), "Hospitality quality: new directions and new challenges", International *Journal of Contemporary Hospitality Management*, Vol. 23, No. 4, pp. 463-478. doi: 10.1108/09596111111129986

den Hertog, P., van der Aa, W. and de Jong, M. W. (2010), "Capabilities for managing service innovation: towards a conceptual framework", *Journal of Service Management*, Vol. 21, No. 4, pp. 490-514. doi: 10.1108/09564231011066123

Divisekera, S. and Nguyen, V. K. (2018), "Drivers of innovation in tourism: An econometric study", *Tourism Economics*, Vol. 24, No. 8, pp. 998-1014. doi: 10.1177/1354816618794708

Edghiem, F. and Mouzughi, Y. (2018), "Knowledge-advanced innovative behaviour: a hospitality service perspective", *International Journal of Contemporary Hospitality Management*, Vol. 30, No. 1, pp. 197-216. doi: 10.1108/IJCHM-04-2016-0200

Giannopoulou, E., Gryszkiewicz, L. and Barlatier, P.-J. (2014), "Creativity for service innovation: a practice-based perspective", *Managing Service Quality: An International Journal*, Vol. 24, No. 1, pp. 23-44, https://doi.org/10.1108/MSQ-03-2013-0044

Grissemann, U., Plank, A. and Brunner-Sperdin, A. (2013), "Enhancing business performance of hotels: The role of innovation and customer orientation", *International Journal of Hospitality Management*, Vol. 33, pp. 347-356. doi: 10.1016/j.ijhm.2012.10.005

Gustafsson, A., Kristensson, P. and Witell, L. (2012), "Customer co-creation in service innovation: a matter of communication?", *Journal of Service Management*, Vol. 23, No. 3, pp. 311-327. doi: 10.1108/09564231211248426

Hjalager, A.-M. (2010), "A review of innovation research in tourism", Tourism Management, Vol. 31, No. 1, pp. 1-12. doi: 10.1016/j.tourman.2009.08.012

López-Fernández, M. C., Serrano-Bedia, A. M. and Gómez-López, R. (2011), "Factors Encouraging Innovation in Spanish Hospitality Firms", *Cornell Hospitality Quarterly*, Vol. 52, No. 2, pp. 144-152. doi: 10.1177/1938965510393723

Kallmuenzer, A. (2018), "Exploring drivers of innovation in hospitality family firms", International Journal of Contemporary Hospitality Management, Vol. 30, No. 3, pp. 1978-1995. doi: 10.1108/IJCHM-04-2017-0242

Kuo, C.-M., Chen, L.-C. and Tseng, C.-Y. (2017), "Investigating an innovative service with hospitality robots", *International Journal of Contemporary Hospitality Management*, Vol. 29, No. 5, pp.1305-1321. doi: 10.1108/IJCHM-08-2015-0414

Moscardo, G. (2008), "Sustainable Tourism Innovation: Challenging Basic Assumptions", *Tourism and Hospitality Research*, Vol. 8, No. 1, pp. 4-13. doi: 10.1057/thr.2008.7

Nieves, J., Quintana, A. and Osorio, J. (2014), "Knowledge-based resources and innovation in the hotel industry", *International Journal of Hospitality Management*, Vol. 38, pp. 65-73. doi: 10.1016/j.ijhm.2014.01.001

Nieves, J. and Diaz-Meneses, G. (2016), "Antecedents and outcomes of marketing innovation: An empirical analysis in the hotel industry", *International Journal of Contemporary Hospitality Management*, Vol. 28, No. 8, pp. 1554-1576. doi: 10.1108/IJCHM-11-2014-0589

Nieves, J., Quintana, A. and Osorio, J. (2016), "Organizational knowledge, dynamic capabilities and innovation in the hotel industry", *Tourism and Hospitality Research*, Vol. 16, No. 2, pp. 158-171. doi: 10.1177/1467358415600208

Ottenbacher, M., Shaw, V. and Lockwood, A. (2006), "An Investigation of the Factors Affecting Innovation Performance in Chain and Independent Hotels", *Journal of Quality Assurance in Hospitality & Tourism*, Vol. 6, No. 3-4, pp. 113-128. doi: 10.1300/J162v06n03_07

Ottenbacher, M. C. (2007), "Innovation management in the hospitality industry: Different strategies for achieving success", *Journal of Hospitality & Tourism Research*, Vol. 31, No. 4, pp. 431-454. doi: 10.1177/1096348007302352

Petrou, A. and Daskalopoulou, I. (2013), "Social capital and innovation in the services sector", *European Journal of Innovation Management*, Vol. 16, No. 1, pp. 50-69. doi: 10.1108/14601061311292850

Pivčević, S. and Garbin Praničević, D. (2012),"Innovation activity in the hotel sector – The case of Croatia", Vol.25, SE 1, pp. 337-363.

Radas, S. (2003),"Razlike u inoviranju između uslužnih i proizvodnih poduzeća u Hrvatskoj", Ekonomski pregled, Vol. 54, No. 9-10, pp. 809-822

Sánchez-Gutiérrez, J., Cabanelas, P., Lampoons, J.F. and González-Alvarado, T.E. (2018), "The impact on competitiveness of customer value creation through relationship capabilities and marketing innovation", *Journal of Business & Industrial Marketing*. doi: 10.1108/JBIM-03-2017-0081

Sanjeev, G. M. and Bandyopadhyay, R. (2016), "Innovations in the Indian hospitality industry: an overview", *Worldwide Hospitality and Tourism Themes*, Vol. 8, No. 4, pp. 408-415. doi: 10.1108/WHATT-05-2016-0026

Sarmah, B., Kamboj, S. and Rahman, Z. (2017), "Co-creation in hotel service innovation using smart phone apps: an empirical study", *International Journal of Contemporary Hospitality Management*, Vol. 29, No. 10, pp. 2647-2667. doi: 10.1108/IJCHM-12-2015-0681

Sarmah, B., Kamboj, S. and Kandampully, J. (2018), "Social media and co-creative service innovation: an empirical study", *Online Information Review*, Vol. 42, No. 7, pp. 1146-1179. doi: 10.1108/OIR-03-2017-0079

Sarmah, B. and Rahman, Z. (2018), "Customer co-creation in hotel service innovation: An interpretive structural modeling and MICMAC analysis approach", *Benchmarking: An International Journal*, Vol. 25, No. 1, pp. 297-318. doi: 10.1108/BIJ-09-2016-0145

Schumpeter, J. A. (1942), *Capitalism, socialism and democracy*, Harpers & Bro, New York

von Koskull, C., Strandvik, T. and Tronvoll, B. (2016), "Emotional strategizing in service innovation", *Management Decision*, Vol. 54, No. 2, pp. 270-287. doi: 10.1108/MD-06-2014-0339

Wikhamn, W., Armbrecht, J. and Wikhamn, B. R. (2018), "Innovation in Swedish hotels", *International Journal of Contemporary Hospitality Management*, Vol. 30, No. 6, pp. 2481-2498. doi: 10.1108/IJCHM-06-2017-0323

Witell, L., Gebauer, H., Jaakkola, E., Hammedi, W., Patricio, L. and Perks, H. (2017), "A bricolage perspective on service innovation", Journal of Business Research, Vol. 79, pp. 290-298. doi: 10.1016/j.jbusres.2017.03.021