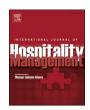


Contents lists available at ScienceDirect

International Journal of Hospitality Management

journal homepage: www.elsevier.com/locate/ijhm





Frontline employee-driven innovation through suggestions in hospitality firms: The role of the employee's creativity, knowledge, and motivation

Tamara González-González, Desiderio J. García-Almeida *

University of Las Palmas de Gran Canaria, Facultad de Economía, Empresa y Turismo, Universidad de Las Palmas de Gran Canaria, Campus de Tafira, 35017, Las Palmas de Gran Canaria, Spain

ARTICLE INFO

Keywords:
Suggestions
Frontline employees
Employee-driven innovation
Creativity
Innovation ability
Motivation to innovate

ABSTRACT

As most hospitality firms turn to informal processes to create knowledge, employee-driven innovation becomes paramount in the sector, especially the one generated from frontline employees' suggestions. The work studied creativity, knowledge and motivation as internal aspects of frontline hospitality employees for making innovative suggestions. The study of these three broad aspects leads to the presentation of six research hypotheses after discussing the potential influence of six specific factors on the generation of innovative suggestions; those factors are creativity, work experience and formal education (knowledge), along with internal motivation, direct rewards, and the perception of the validity of the suggestion system (motivation). Those hypotheses are tested with data from 153 front office employees from hotels in Tenerife (Spain).

Results show the relevance of frontline employees' creativity, work experience and perception that suggestions will be analysed and heeded, along with the positive effect of working in leisure hotels (versus business ones).

1. Introduction

In today's highly competitive environment, the capacity for innovation is paramount for hospitality firms to compete successfully (Martin-Rios and Ciobanu, 2019). Innovation in service companies, and especially in hospitality firms, is more oriented towards informal sources of knowledge (Bogers and Lhuillery, 2006; Den Hertog et al., 2011), such as employee-driven innovation. Service employees in contact with customers often acquire exclusive, valuable and context-specific knowledge, which is often not possessed by managers (Kesting and Ulhøi, 2010). Thus, firms that promote employee-driven innovation will have a higher innovation performance, as it will stimulate cooperation between employees and managers (Hansen et al., 2017). To this end, firms must develop channels of knowledge distribution and exchange, such as suggestion systems, through which employees can share their creative ideas and are motivated to do so (Fairbank and Williams, 2001; Akram et al., 2011).

Presenza et al. (2019) highlight how innovation is gaining attention internationally as a critical issue for contemporary tourism. Kim and Koo (2017) recently found that hotel employees' innovative behaviour influences their job performance. When a company includes innovative and creative competencies in the strategic decision-making approach of

the firm, it becomes the main driver of its success (Presenza and Messeni Petruzzelli, 2019). In fact, innovativeness is positively associated with company performance in the hospitality industry (Tajeddini and Trueman, 2012).

McLeod et al. (2010) defend that knowledge sharing among network members could drive innovation behaviour in hospitality firms. According to Hon (2011), one way to address the current challenges in the hospitality industry is to take into account the creative ideas put forward by employees, as these can contribute to innovation, productivity and the long-term success of hospitality companies. In fact, the study and management of the knowledge exchange between employees and their hospitality firm are considered essential due to the high turnover of employees (Yang, 2004). Employees in hospitality firms often contribute original and valuable ideas to better meet customer needs or better carry out internal tasks, which may involve creating or improving products, services or processes in the organisation (Zhou and Shalley, 2003). Hotel chains are increasingly studying and implementing different suggestion systems to identify innovative contributions by their employees that have an impact on customer satisfaction or the organisational financial performance (Hinojosa, 2014).

Every organisation depends daily on the citizenship behaviour of its employees including acts of cooperation, helpfulness, and suggestions

E-mail addresses: tamara.gonzalez106@alu.ulpgc.es (T. González-González), dj.garcia@ulpgc.es (D.J. García-Almeida).

^{*} Corresponding author.

(Smith et al., 1983). Based on Li and Zhou's work (2019), a suggestion is a behaviour that aims at improving the environment and proposes constructive language to organisations or individuals through changing ways. Employee suggestion is a "technical, organisational or financial improvement that would introduce changes in the practices and solutions applied so far, which would benefit the company" (Szewczyk, 2019: 54). Brem and Voigt (2007) declare that suggestion systems have been used to include employees in the innovation process for decades. Innovative work behaviour is an individual's behaviour "that aims to achieve the initiation and intentional introduction (within a work role, group or organisation) of new and useful ideas, processes, products or procedures" (De Jong and Den Hartog, 2008: 5). Innovative suggestions are a measure of the employee's innovative behaviour (Choi et al., 2016). Thus, an employee's innovative suggestion is an explicit contribution by an individual that provides an improvement in the organisational products, processes or activities through any internal communication mechanism. Hinojosa (2014) documents the efforts of several Spanish hotel chains to 'listen' to employees, especially to those in direct contact with the customer, and obtain their suggestions, such as Meliá Hotels (through employee meetings supervised by a manager or "idea contests") or NH Hotel Group (with the NH Idea programme or corporate blogs). Examples of innovative suggestions in those programmes are invoice standardisation for less complex processing, the creation of a centralised stock system for products consumed in the hotels in search of more efficient management of the same, or the implementation of a certain award system in the customer loyalty programme based on customer expenses or overnights. The leading French chain Accor developed Innovaccor, an online tool to promote innovation among its employees. This tool allows staff to propose ideas, develop creativity and take initiatives in order to apply the best practices in the organisation. During 2011 the Accor Group implemented 2000 ideas suggested by its employees (Hassanien and Dale, 2013).

Axtell et al. (2000) state that making suggestions is more related to the individual characteristics of the employee, while their implementation is undoubtedly linked to the characteristics of the team and the organisation. Amabile provides the theoretical foundations of the individual approach to understand the formulation of suggestions in the work context when she addresses the social psychology of creativity. In that line, this author presents the three elements of creative performance: creativity-relevant skills, domain-relevant skills, and task motivation. Thus, employee creativity, knowledge and motivation are considered relevant factors in making innovative suggestions (Amabile, 1983) and hospitality firms could take advantage of those resources for their innovation strategy. Suggestions are the results of employees' creativity, which leads to innovations driven by them (Lasrado et al., 2016). Not only does creativity play an essential role in generating innovations, but it is also fundamental to consider that individuals are knowledge holders, with their prior knowledge being one of the most important inputs in the processes of creating new knowledge and innovation (Holcomb et al., 2009). Furthermore, it is essential to consider that what drives the individual to act is his/her motivation (Locke and Latham, 2004). Thus, firms use the suggestion system to motivate employees to contribute new and useful ideas for the benefit of the organisation, turning creative ideas into potentially valuable innovations (Dunn and Lloyd, 1997; Fairbank and Williams, 2001).

Despite research conducted on the importance of organisational conditions for the development of frontline employee-driven innovation in service companies (e.g. Sørensen et al., 2013), authors such as Høyrup (2012) consider that what needs to be studied in greater depth in regarding employee-driven innovation is the search for new resources and innovation drivers. Academic research has tended to focus mainly on the generation of ideas and has neglected the study of knowledge exchange between employees and the organisation, especially the fact that employees have the ability and willingness to share their innovative suggestions, which is fundamental for innovation to occur (Axtell et al., 2000). Moreover, Martin-Rios and Ciobanu (2019) empirically find that

the patterns of innovation in hospitality differ from other sectoral activities, and Gomezelj (2016) observes that innovative activities in tourism industries are still quite limited. Employees are a relevant aspect of innovation success in the hospitality sector (Ottenbacher, 2007). For Enz and Siguaw (2003), innovations are significantly affected by outstanding hospitality individuals. In that line, Slåtten and Mehmetoglu (2011) consider that frontline employees in the hospitality industry and their characteristics are paramount in the innovative behaviour of hospitality firms.

Attempting to bridge this research gap in the hospitality industry, and based on the theoretical foundations of the individual factors in the model of creative performance formulated by Amabile (1983), this work aims to analyse the role played by frontline employees' creativity, knowledge and motivation to suggest organisational changes as a basis for employee-driven innovation in hospitality firms. The work studies the employee from an individual perspective as an informal source of innovation in hotel firms and their participation in the company's suggestion system. The potential influence of the frontline employee's creativity, knowledge and motivation on innovative suggestions is discussed, leading to the presentation of six research hypotheses. These hypotheses are tested with data collected from a survey of hotel receptionists.

2. Employee-driven innovation in hospitality services: suggestions as a key element of informal innovation

In the context of services, innovation refers to "the changes affecting one or more elements of one or more vectors of characteristics (both technical and service) or of competences" (Gallouj and Savona, 2009). Changes that add novelty to the service in any dimension lie at the base of service innovation. Most innovations in the service industry tend to be a mixture of major and minor changes and adaptations of existing services/products (Den Hertog, 2000).

Lusch and Nambisan (2015) indicate that the body of scholarly research on service innovation has grown considerably, probably because service innovation is increasingly observed as the main engine of differentiation and growth (Helkkula et al., 2018). García-Villaverde et al. (2017) add that the study of innovation in the hospitality and tourism industry does not have a long tradition in comparison with manufacturing industries. However, innovation in the hospitality industry has generated a great deal of interest in recent times and has become a fairly broad field of research. As Kallmuenzer (2018) points out, the study of innovation in hospitality firms has so far mainly focused on investigating the role of entrepreneurship (e.g., Jogaratnam and Tse, 2006), innovation as a growth engine for companies (e.g., Ottenbacher, 2007), or the influence of company characteristics and markets on innovation (e.g., Martínez-Ros and Orfila-Sintes, 2012). Kallmuenzer's work (2018) shows that innovation in hospitality companies is driven by four main actors: entrepreneurs and employees are the main innovation drivers as internal company actors, while guests and competitors are the external innovation drivers. In their analysis of the streams of hospitality innovation, Chang et al. (2011) outline the relevance of the human resource management practices to innovation in hospitality firms, and address the study of frontline employees as example of important topic across the three main research streams that they identify: critical procedures to develop innovation, typology of hospitality innovation, and factors to enhance innovation in the sector. According to Babakus et al. (2017) frontline employees in the service sector serve as a critical link between an organization's internal operations and external customers and play a crucial role in analysing customer needs that can lead to innovation initiatives and improved customer relations. This highlights the importance of studying employee-driven innovation. Hospitality literature indicates that with increasing competition, product and service innovations have become priorities and frontline employees are seen as key players in making these innovations happen (Schuckert et al., 2018). In their final remarks, Chang et al. (2011) connect the study of frontline employee's suggestions and innovative ideas with the achievement of hospitality firm innovation and call for more future studies on the topic. Despite the popular research trend on service innovation and the key role of employee contributions in improving service quality, only a few recent studies specifically address frontline employees as innovation drivers in service enterprises (Schuckert et al., 2018). In that line, Slåtten and Mehmetoglu (2011) mention the lack of research related to hospitality innovation on the individual level, and more recently Kallmuenzer (2018) has observed that the study of innovation drivers in hospitality companies has been neglected. Hence, understanding hospitality frontline employees' innovative suggestions is an aspect that needs further academic exploration.

A relevant taxonomy for the development of studies on organisational innovation is the source/method to generate innovation. Small and medium-sized firms tend to carry out their innovative activities without specific financial and managerial resources and, in particular, without formalised procedures (Santarelli and Sterlacchini, 1990). Thus, a distinction can be made between formal or planned innovation and informal or unintentional one. For Galloui and Savona (2009), the changes to generate service innovations can be planned/intentional or unintentional. The planned/intentional approach would be based on managerial systems with clear goals to come up with novel solutions, such as the outputs of formal research and development activities; the unintentional approach has an emerging nature based on an inertial learning process by the agents involved. Santarelli and Sterlacchini (1990) indicate that the concept of informal innovation is based on knowledge generation outside specific research and development departments and focused on design, production and sales activities. Moosa and Panurach (2008) narrow that approach and underline that formal innovation is usually generated by the marketing or R&D department, while frontline employees generate informal innovation. The analysis of the innovation process in the hospitality industry shows the relevance of informal innovation since innovation activities tend to be less formalised, less explicitly managed and less often budgeted as compared to manufacturing sectors (Den Hertog et al., 2011).

The central elements of informal innovation are the employees and their knowledge, outside formal structures created to generate new knowledge such as specific departments or projects, since organisations are increasingly aware that their employees have great potential to develop innovation (Hansen et al., 2017). Kesting and Ulhøi (2010) define employee-driven innovation as the creation and implementation of new ideas, products and processes that originate from an employee or the interaction of a group of employees, who are not entrusted with the task of developing innovation. In this sense, employee-driven innovation consists of employee initiatives that are recognised and supported by managers, and it can be initiated without a clear goal of innovation. Thus, employee-driven innovation is not strictly constrained ex-ante by managerial perspectives. According to Radu and Vasile (2007), employees in the hospitality industry represent a source of value for the innovation process and, therefore, for the creation of competitive advantages.

The management literature has emphasised the relevance of the personal interaction between customers and employees on the frontline of service firms (Bettencourt and Gwinner, 1996). Frontline employees are paramount to delivering and providing quality services, building customer relationships, and increasing customer satisfaction (Singh, 2000). Additionally, these employees are also in a privileged position to detect customer needs, obtain information about competitors, identify potential resources and capabilities that the organisation can develop, and process knowledge to innovate. In fact, Moosa and Panurach (2008) recommend that organisations should encourage decentralised innovation and emphasise the role of frontline employees since it is they who are responsible for delivering products and services and are in direct contact with customers. In particular, employees in the hospitality industry have closer contact with customers than in many other industries (Grissemann et al., 2013). Frontline employees in the sector play a key

role in developing innovation because of the simultaneity of production and consumption and the importance of human factors in service delivery (Ottenbacher and Harrington, 2007). Thus, employees know first-hand the specific demands and preferences of customers, which allows them to create new ideas, processes, products or services to adapt the service to the consumer (Hallin and Marnburg, 2008). According to Chang et al. (2011), the interaction between employees and customers greatly favours service quality and innovation in hotels. Research shows that many innovative ideas in the hospitality industry are produced by employees in contact with the customer, who in turn implement and examine them (e.g. Ottenbacher, 2007; Ottenbacher and Harrington, 2009).

The role of frontline employees in innovation is further emphasised from some streams of recombinatory search literature that defends the need for employing external knowledge sources in the innovation process (Ardito and Messeni Petruzzelli, 2017). This is in line with the central tenets of the open innovation paradigm (Chesbrough, 2003). Thus, the inflow of knowledge from external sources such as customers or competitors can complement internal knowledge creation efforts (Ardito et al., 2018). Moreover, due to the interaction with customers, frontline employees would be in a position to obtain an adequate level of absorptive capacity regarding such external knowledge. As Natalicchio et al. (2018) indicate, the lack of absorptive capacity in the firm's human resources could hamper the innovation process in this context. Moreover, and based on the ideas of Messeni Petruzzelli (2008) the proximity dimensions between frontline employees and customers could foster the effective knowledge inflows in the firm. In the hospitality context the close physical proximity between a frontline employee and a customer is due to the inseparability of production and consumption in some services. At the same time, the more distant knowledge/technological proximity expected between these two agents would be eased due to the nature of the direct service encounter that facilitates the transfer of knowledge via face-to-face interaction since it is a rich communication mechanism (Daft and Lengel, 1986; García-Almeida and Bolívar-Cruz,

The success of employee-driven innovation lies primarily in the development of a fair and transparent process that encourages, captures and reviews the ideas suggested by employees (Hansen et al., 2017). Employee involvement in the development of innovation brings with it the need for good and clear communication between employees and managers. In fact, managers may be involved in employee-driven innovation because they coordinate and systematise the process initiated by employees and because they foster those initiatives by inviting employees to participate (Høyrup, 2012). For Akram et al. (2011), organisations must develop channels of knowledge distribution and exchange through which employees can share their ideas. According to Yang (2010), hotels can boost their organisational effectiveness by promoting knowledge sharing among employees. Kim and Lee (2010) point out that this exchange of knowledge between employees is deeply linked to innovation in hotels as it encourages the development of creative ideas by employees. Likewise, the coordination of employees and their joint creative thinking is essential to increase customer satisfaction and service quality (Bouncken, 2002).

One of the most critical organisational channels in providing employees with the opportunity to share their innovative ideas is the implementation of suggestion systems. According to van Dijk and van den Ende (2002), suggestion systems consist of administrative procedures and infrastructures to collect, judge and compensate ideas that are conceived by the employees of the organisation. Employee suggestion systems play a crucial role for organisations that want to be more innovative and stand out in the marketplace (Buech et al., 2010). Du Plessis et al. (2008) consider suggestion systems as tools that encourage employees to think creatively and innovatively about their work and everything around them, thus generating ideas that are beneficial to the organisation and for which the employee receive recognition. In the case of frontline employees, and according to their literature-based

meta-analysis, Storey et al. (2016) indicate that systems must be in place to manage the knowledge that innovation driven by customer engagement generates. In the hospitality industry, the quality of service depends considerably on the ability of companies to obtain, develop, collect and distribute knowledge assets (Bouncken, 2002). For individual knowledge to be converted into organisational knowledge that forms valuable intangible assets in tourism firms (Yang and Wan, 2004), suggestion systems become relevant. Thus, when hospitality companies identify and leverage their organisational knowledge, they become more dynamic and achieve higher business performance (Baloglu et al., 2010).

3. Ability and motivation as potential determinants of employee-driven innovation

Though it is crucial to outline that there are organisational characteristics which make up the relevant context that may foster or hamper innovation processes (Høyrup, 2012; Sørensen et al., 2013), Axtell et al. (2000) empirically find that the suggestion of innovative ideas is linked to individual factors. Regarding the individual factors that determine the formulation of suggestions, this work is based on the theoretical model presented by Amabile (1983). That model addresses the elements of creative production through three major components: creativity-relevant skills, domain-relevant skills, and task motivation. This author views creativity skills as the capacity to produce work that is considered creative; moreover, domain-relevant skills include knowledge and familiarity with the specific domain for the innovation; and task motivation deals with the attitudes towards the task and perceptions of self-motivation for undertaking the task.

The theoretical foundations of the use of Amabile's model (1983) in the suggestion context is reinforced with advances in the behavioural performance of actions. Vroom (1964) explained performance in an activity as a function of the employee's ability and motivation. Thus, the two significant aspects concerning the execution of actions whether by individuals, groups, etc., are the ability and willingness to carry out these actions (García-Almeida et al., 2012). Consequently, frontline employees' creativity, constructed knowledge, and motivation could be relevant factors in making innovative suggestions. These factors are explained below.

3.1. Creativity as a process-based ability for innovative suggestions

The successful implementation of new products, services or procedures depends on a person or group having a good idea and developing it. As Amabile et al. (1996) outline, any innovation starts with creative ideas. According to Hargrove and Nietfeld (2015), creativity can be defined as an individual's ability to produce both original and useful work. When employees show creativity at work, they develop new responses that are helpful to face tasks in the organisation (Amabile, 2013). These creative responses may involve the creation of new procedures or processes to carry out tasks or the development of products or services to better meet customer needs (Zhou and Shalley, 2003). According to De Bono (1970), creativity is a basic human capacity. Creative thinking involves the ability to break conventional rules of thinking or to develop new strategies, among others (Fink et al., 2007). Dietrich (2004) explains how creativity results from the factorial combination of several neurological mechanisms: neural computation that generates novelties could occur during two modes of thought (deliberate and spontaneous) and for two types of information (emotional and cognitive).

Suggestions are the result of the creativity of the employees (Madjar, 2005). Kirton (1989) states that not all employees are creative to the same extent, and indeed some employees are likely to think more creatively than others. According to Ford (1996), people who believe they have creative skills tend to be more creative, so employees who believe they have the ability to make suitable suggestions are more

likely to share their ideas with the company. Ideas or suggestions are the results of employees' creativity, and that creativity gives rise to employee-driven innovations (Lasrado et al., 2016).

In the hospitality industry, employee creativity is also relevant. As this sector is labour-intensive and hospitality firms face a highly competitive environment, companies need a more creative workforce to deliver high-quality services and achieve high levels of customer satisfaction (Wong and Pang, 2003; Claver-Cortés et al., 2006; Mohsin and Lockyer, 2010). Therefore, the key to success for the performance of companies in the hospitality industry is to meet the multiple demands of customers by providing creative products and services (Horng et al., 2016). Thus, the creativity of employees favours the achievement of competitive advantages in organisations through innovation (e.g. Shalley, 1995; Kim et al., 2010). Consequently, the first research hypothesis of this work is set:

H1. Employee's creativity influences the creation of innovative suggestions in hospitality firms.

3.2. Knowledge as a content-based ability for innovative suggestions

Individuals' knowledge favours the production of new innovative ideas that allow organisations to achieve a competitive advantage (Urbancova, 2013). Holcomb et al. (2009) determine that prior knowledge is one of the most important contributions in the processes of creating new knowledge and innovation. Thus, this existing knowledge and skills in individuals are essential drivers of their behaviour and preferences (De Clercq and Arenius, 2006). Some studies in the field of hospitality have advocated the importance of employee knowledge management and transfer in optimising innovation, service quality and organisational effectiveness (e.g. Hu et al., 2009; Kim and Lee, 2010). Regarding knowledge sources relevant in the work context, Holcomb et al. (2009) determine that the knowledge constructed by individuals is acquired in three ways: through direct experience, through observation of the actions and consequences of others, and education or codified sources such as books, articles, etc. The academic literature on knowledge management tends to outline the role of work experience and formal education to acquire content knowledge to innovate.

Tesluk and Jacobs (1998) indicate that an individual's past and current life experiences are continuously affecting the development and shape of their knowledge and skills. For Quiñones et al. (1995), work experience is relevant for many human resource functions and refers to events, which are experienced by an individual in relation to the performance of some job, and Ford et al. (1991) observe that most studies used time on the job to measure this concept. Knowledge constructed by individuals in years of experience as professionals allows them to understand customer needs and activities that require improvement and to evaluate the success or failure of possible innovations. Work experience allows individuals to detect innovation needs and new business opportunities, and it influences innovation (Hadjimanolis, 2000). Gabrielsson and Politis (2011) draw on experiential learning theories to explore the extent to which previous work experience is associated with business knowledge that can be used productively in those value creation processes. According to Hallin and Marnburg (2008), much of the specific knowledge of frontline staff in hotel organisations originate from their interactions with customers, colleagues, managers, suppliers, etc. Likewise, the effective management of such valuable knowledge contributes to creating competitive advantages over competitors in the hotel and tourism industry (Bouncken and Pyo, 2002). Carland and Carland (2000) argued that business ideas arise from knowledge and experience and are fostered by creative insight, which helps individuals to identify new opportunities in the organisation. Besides, in their empirical work focused on a food company, Cardoso et al. (2014) find a positive link between employee tenure in the firm and the number of suggestions

Although some authors consider that the importance of education in

the business world has been overestimated or that the link between education and innovation capacity is weak or non-existent (e.g. Hadjimanolis, 2000), other authors such as Guzmán and Santos (2001) maintain that education can have a decisive impact on the ability to understand the market, innovate and foster collaboration. For Romero and Martínez-Román (2012), education is closely related to innovation, since education is a tool that provides techniques and content that allow us to observe things under new paradigms and seek new solutions to traditional ways of doing things. In that line, Orfila-Sintes and Mattsson (2009) find that employees with higher education in the hospitality industry are positive determinants of innovation. Furthermore, Cardoso et al. (2014) report that the employee's schooling is positively associated with the number of suggestions.

The discussion of these ideas on the impact of constructed knowledge allows for setting two additional research hypotheses:

- **H2.** Employee's work experience influences the creation of innovative suggestions in hospitality firms.
- **H3.** Employee's formal education influences the creation of innovative suggestions in hospitality firms.

3.3. Motivation for innovative suggestions

Nelson and Winter (1977) state that the motivation to innovate is a key component in the innovation process. According to Locke and Latham (2004), motivation is made up of internal and external factors that drive the individual to act. Many authors state that both intrinsic and extrinsic motivation of employees influences their innovative behaviour (e.g. Lin, 2007; Aalbers et al., 2013). Though those are general approaches to work motivation, discrete work tasks rather than entire jobs are the most useful level of analysis of differences in work motivation (Stamov-Roßnagel and Biemann, 2012).

Deci (1971) stresses the importance of intrinsic motivation since intrinsically motivated behaviour consists of that activity which the individual performs for the pleasure or satisfaction it brings. Osterloh and Frey (2000) state that intrinsic motivation is of crucial importance, especially in tasks involving creativity and the transfer of tacit knowledge. According to Kreps (1997), intrinsic motivation is the key to the successful completion of these tasks. The reason for the relevance of this type of motivation stems from a desire for self-realisation and growth at a personal and/or professional level (Deci, 1971).

Extrinsic motivation responds to instrumental reasons, and it is stimulated from the outside offering economic incentives, promotions or recognition, among other rewards; behaviour is carried out to achieve an end, and the individual does not get involved by himself (Gagné and Deci, 2005). The literature on the effectiveness of motivation indicates that externally provided incentives have limited success in motivating human behaviour over time (Kohn, 1993; Frey, 1997). However, extrinsic motivation is useful in the short term, but it decreases with the achievement of particular objectives (Morgan et al., 1993). Büschgens et al. (2013) add that the reward system is an effective mechanism for motivating employees to innovate, as it produces positive changes in employee attitudes and behaviour.

The literature on suggestions and their impact on innovation pay attention to another organisational factor with clear connections to suggestions at the individual level: the existence of an effective suggestion system in the firm and how employees perceive it. According to Dunn and Lloyd (1997), the suggestion system is a formal mechanism that encourages employees to contribute new and useful ideas for the benefit of the organisation. For Fairbank and Williams (2001), suggestion systems in organisations motivate employees to think more centrally about organisational change and to share these thoughts with the company. However, the perception that the suggestion system is credible to heed and analyse the proposed suggestions seems to be a relevant motivational factor for the employee. When suggestions are ignored or rejected, and no adequate response is given to the individual, employees

feel that they have not been taken into account and experience a failure that diminishes their confidence and, therefore, their participation in the suggestion system. Lasrado et al. (2016) consider that when employees propose suggestions, it is essential that they are given feedback for two reasons: the lack of it can make employees feel ignored and dissatisfied, and the feedback can help discover errors, and thus employees can further improve the quality of their ideas. Also, Fairbank and Williams (2001) indicate that motivation to make suggestions is greater when employees believe that their performance will be crucial to obtaining valuable results for the company and know that the company will consider their suggestions. Credible suggestion systems are thus paramount.

Focusing on the hospitality industry, Chang and Teng (2017) state that employees' intrinsic and extrinsic motivations reinforce their creativity and work performance. Besides, Chen (2011) states that hospitality management that encourages employees to take risks and rewards their creative ideas can motivate innovative behaviour. Likewise, when hospitality employees perceive that generating innovative ideas in their work environment is considered a valued and rewarded behaviour and management listens and takes into account their input, they are more likely to feel prepared to take risks and motivated to make innovative suggestions (Alzyoud et al., 2017).

The discussion on the potential role of motivation on innovative suggestions leads to the presentation of three research hypotheses:

- **H4.** Employee's intrinsic motivation to innovate influences the creation of innovative suggestions in hospitality firms.
- **H5.** Employee's extrinsic motivation to innovate through direct rewards influences the creation of innovative suggestions in hospitality firms.
- **H6.** Employee's perception of the existence of a motivating suggestion system influences the creation of innovative suggestions in hospitality firms.

3.4. An ability and motivation model of frontline employees' innovative suggestions

As a result of the discussion in the three former subsections, Fig. 1 presents the model to be tested in this research work. That model addresses the ability factors in terms of the employees' creativity and knowledge along with their motivational factors, and it shows six research hypotheses. The employee's knowledge reflects the education and work experience sources. The employee's motivation is observed from three different dimensions: intrinsic motivation, extrinsic motivation, and the perception of the existence of a motivating suggestion system.

4. Methodology

Data were collected through a survey on frontline employees of hotels in the north of Tenerife (Canary Islands, Spain) to meet the goal of this work. According to the Travel and Tourism Competitiveness Report (World Economic Forum, 2019), Spain is the most competitive country in the world regarding travel and tourism. The importance of innovation in tourism and hospitality has been stated by the government of the Canary Islands, which included innovation in tourism to maintain competitiveness as an area of action in its Smart Specialisation Strategy for the period 2014–2020 (Gobierno de Canarias, 2013). Tenerife is one of the eight Canary Islands and a relevant destination in Spain. The tourism activity on the island is concentrated in the north and the south of the island. 6,110,838 international and domestic tourists visited the island in 2019, and 18.20 % of them stayed in hotels in the north (Turismo de Tenerife, 2019). Tenerife is positioned as the island with most hotels (250) in the Canary Islands, followed by Gran Canaria with 179 hotels (ISTAC, 2020). The relevance of innovation for the island is

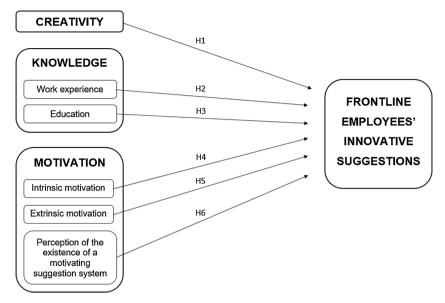


Fig. 1. An ability and motivation model of frontline employees' innovative suggestions.

shown in the tourism strategy formulated by its destination management organisation since the innovation and competitiveness strategy is one of the ten axes in its strategic plan for the period 2017–2020 (Turismo de Tenerife, 2017).

In order to find a homogeneous sample of employees, the category of frontline employees selected was the one of front office employees/receptionists. Front-office receptionists are relevant frontline employees in hotel firms and they have been often selected as representative subjects of study in research work about frontline employees (e.g., Patah et al., 2009; Pinto et al., 2020). Moreover, Engen and Magnusson (2015) empirically find that frontline employees in hotels, including front office receptionists, possess a considerable potential to innovate. The population studied in this research includes the receptionists of 3, 4 and 5-star hotels in the north of the island in 2019. According to the data provided by Tourism of Tenerife (2019) and complemented by accommodation meta-searchers, 77 hotels of 3, 4 and 5-stars are located in the area of the study, encompassing 11,035 rooms. To further define the population, all the hotels were contacted to find out the number of receptionists currently employed. The number of receptionists that make up the population of the study is 484.

The questionnaire was developed by using two primary research approaches. The first one was a literature review. The second one consisted of in-depth interviews with 8 experts to adapt the variables to be used, as well as to measure those for which no support was found in literature. The experts were three hotel receptionists, two hotel managers, two hospitality management university professors, and one hospitality consultant. The questionnaire was prepared in Spanish. All items were formulated with a 7-point scale of the Likert type ranging from 1 (strongly disagree) to 7 (strongly agree), except for the number of suggestions. At the end of the first version, a pre-test was carried out with five receptionists.

Regarding the dependent variable, the total number of suggestions made by the respondent in the last month was weighted by the degree of innovativeness of those suggestions. The degree of innovativeness of the suggestions was inspired by one of the items included in the scale of organisational citizenship behaviour by Smith et al. (1983) and by one of the items encompassed in the scale of off-role behaviour by Somech and Drach-Zahavy (2000). Consequently, the dependent variable consisted of an indicator of the respondent's innovative suggestions.

Concerning the independent variables, the scale of creativity comprised 6 items, and it was taken from García-Almeida and Cabrera-Nuez (2020). The scale of the intrinsic motivation comprised 4

items, and it was also taken from the work by García-Almeida and Cabrera-Nuez (2020) due to its intrinsic approach. Besides, two items measured the employee's extrinsic motivation and the employee's perception of the existence of a motivating suggestion system, respectively; these items were developed after interviewing the experts indicated above. Moreover, respondents had to specify the level of education completed, and the variable was recoded to show if the respondent had earned a university degree. The work experience was measured by using a traditional proxy in management literature: the number of years working in the same professional work. Some additional questions included in the questionnaire were the respondent's gender and age, and the type of hotel segment (business or leisure).

Regarding the fieldwork, questionnaires were left at all the front offices of the hotels in the population. After a presentation of the study with its topic and main goals to the front office manager or senior receptionist in each hotel, collaboration to fill the questionnaires was asked and, in some cases, special authorisation had to be requested. In most hotels, authorisation to leave the questionnaires was granted, but in 12 hotels participation was denied due to confidentiality issues or lack of interest. As a result of the fieldwork, 167 questionnaires were collected, but only 153 were correctly completed and valid, and consequently make up the final sample for this research. This selfselection sample implies a valid response rate of 31.6 % and a maximum margin of error of 6.56 % to a 95 % confidence level. Regarding the characteristics of the sample, 58.2 % of the frontline employees are male. The average age is 35 years old. The current average salary is around 1,060 euros. On average, employees have been working as receptionists for 10 years, but only 7.5 years at the current firm.

5. Results and discussion

The primary variable of interest in this work is the number of innovative suggestions made by hotel receptionists. With the data from the survey, this variable was computed by weighting the total number of suggestions made by the employees by the degree of innovativeness that these employees recognised. The total number of suggestions by employees and the innovative suggestions computed following that conversion is displayed in Table 1. Most respondents made one or two suggestions during the last month, and 15 % did not suggest any at all. Regarding innovative suggestions, some or part of those suggestions could not be considered innovative. However, still the majority of

Table 1 Innovative suggestions in the sample.

	Total number of suggestions					
	0	1-2	3 - 4	>4		
Number of cases	23 (15 %)	88 (57.5 %)	31 (20.3 %)	11 (7.2 %)		
	Number of suggestions weighted by innovativeness					
	0	>0-1	>1-2	>2		
Number of cases	24 (15.7 %)	58 (37.9 %)	48 (31.4 %)	23 (15.0 %)		

respondents could be assigned with some innovative suggestions with a positive value lower than 1.

Due to the direct linear nature of the hypothesised relationships, multiple regression analysis was selected as the statistical tool to test the research hypotheses. Before that analysis, exploratory factor analyses were conducted to reduce the dimensionality of two scales: the one for creativity, and the one for intrinsic motivation. In both analyses, only one factor was extracted.

Table 2 displays bivariate correlation values between the dependent variable and the explanatory ones. Table 3 shows the main results of the multiple regression analysis. In that regression model, three control variables were also included, namely the respondent's gender, age, and if s/he works in a business hotel. The F value shows the existence of explanatory influence, and the adjusted R2 displays the level of that relevance. The analysis of multicollinearity confirms that all VIF values are lower than 10, and no condition index exceeds 30 as recommended in literature (e.g., Belsley, 1991; Hair et al., 2000).

The general overview of the results shows the significant relevance of four independent variables to explain the respondents' innovative suggestions. Three of those significant influences (i.e., employee's creativity, work experience, and extrinsic motivation based on the suggestion system credibility) are related to the research hypotheses, and one refers to a control variable (i.e., the fact that the employee works in a business or a leisure hotel).

The fact that creativity is an individual aspect required for innovation is consolidated in the academic literature in the area of management (e.g., Oldham and Cummings, 1996; Madjar, 2005), since creative employees make sure that new ideas continually appear, and they become valuable staff in contexts where innovation and change are relevant for competitiveness in the hospitality sector. Moreover, work experience seems to serve as a significant input for identifying opportunities for improvement, as well as generating new ideas in the hospitality industry, since knowledge about the task, the business and the environment is constructed in a more extended period that allows for obtaining a deeper understanding of the business reality and being exposed to a broader array of situations, along with a longer development of networks. In addition, and in line with research into employee suggestion systems (Fairbank and Williams, 2001), the positive perception of the suggestion system in the sense that valid suggestions

Table 3Results of the multiple regression analysis.

	Standardized coefficients Beta	t	Sig.
Creativity	0.306	3.209	0.002***
Work experience	0.349	1.887	0.061*
Education: university degree	0.044	0.500	0.618
Intrinsic motivation	-0.096	-0.947	0.345
Extrinsic motivation: direct rewards	0.051	0.618	0.537
Extrinsic motivation: heeded suggestions	0.160	1.909	0.058*
Gender (female)	0.037	0.469	0.640
Age	-0.146	-0.791	0.430
Business hotel	-0.132	-1.723	0.087*
F = 3.975 (0,000)***			
$R^2 = 0.201$			
Adjusted $R^2 = 0.151$			

^{*} p < 0.10. *** p < 0.01.

will be implemented is a significant motivational factor for employees in the front office of hotel firms, based on the idea that the rigorous consideration of their ideas acts as a catalyst factor to take the time to put the idea forward.

Regarding the unexpected results of this work, the potential influence of the employee's knowledge on innovative suggestions was addressed from a double perspective that not only considered work experience but also higher education. Based on the results obtained, the employee's higher education does not seem to exert any influence on suggestion creation. Consequently, the third hypothesis cannot be accepted. The lack of significance for the influence of a high level of education on innovative suggestions can be explained by overeducation. Many non-managerial jobs in the hospitality sector are occupied by employees with university degrees, and in many cases of frontline jobs, such high qualifications are not required. Such a mismatch can generate problems of employee frustration. Agut et al. (2009) find that over-education is negatively associated with job content innovation. In that line, over-educated employees may feel that they receive inequitable rewards in terms of career development opportunities or salaries and consequently refrain from engaging in extra-role behaviours (Kulkarni et al., 2015). Thus, an implication for this idea to research innovation in the hospitality sector would be the need to consider the match between education and job requirements as relevant for innovation. In general, a higher level of education than the one required to perform one's job seems to be negatively linked to extra-role behaviours.

The third group of explanatory factors referred to the potential influence of the employee's motivation to innovate on the creation of innovative suggestions in hospitality firms; two of them do not exert a

Table 2
Correlation matrix for dependent and explanatory variables in the model

Variables	1	2	3	4	5	6	7
Innovative suggestions	1						
2. Creativity	0.287***	1					
3. Work experience	0.276***	0.124	1				
4. Higher education	-0.080	-0.032	-0.379***	1			
5. Intrinsic motivation	0.128	0.557***	-0.025	0.257***	1		
6. Extrinsic motivation: direct rewards	0.119	0.131	-0.077	-0.046	0.121	1	
7. Extrinsic motivation: heeded suggestions	0.240***	0.056	0.220***	-0.160**	0.152*	0.309***	1

^{*} p < 0.10.

^{**} p < 0.05.

^{***} p < 0.01.

significant influence on innovative suggestions. Hence, H4 related to intrinsic motivation and H5 related to extrinsic motivation are not confirmed. Though the important role of intrinsic motivation is vigorously defended in the academic literature, this can be required to make general suggestions to change and correct problems. However, if those suggestions are not generated by creative individuals and/or with a knowledge base that targets innovative developments, the unique nature of those suggestions do not seem sustained. In addition, the cognitive evaluation theory of motivation suggests that the presence of a salient external constraint could induce a change in the perceived locus of causality from internal to external, resulting in reduced intrinsic motivation (Ryan, 1982). External factors such as an intense workload or a defective suggestion system could act as such constraints and limit the suggestion of innovative ideas despite a high intrinsic motivation for these tasks. This would open up the possibility of the existence of barriers for the effectiveness of intrinsic motivation to increasing the number of innovative suggestions in hospitality firms.

Moreover, extrinsic motivation related to direct rewards is not revealed as being a determinant factor for making innovative suggestions. Shalley et al. (2004) indicate that there is little agreement among scholars concerning the likely direction of the effects of contingent rewards on the individual's expressed creativity. The findings of this work are in line with those by Yoon et al. (2015) who outline the lack of the direct effect of extrinsic rewards on creative performance. These authors indicate that the function of extrinsic motivation may be contingent on personal characteristics and/or other organisational contextual factors.

The fact that the employee works for a business hotel or a leisure one is also significant. The negative sign of the relationship of this variable with the dependent one indicates that front office employees working in leisure hotels tend to significantly put forward more innovative suggestions than their counterparts working in business hotels. This implies that frontline employees in hotels targeting the business segment are in a position characterised by greater difficulties or barriers to create suggestions leading to innovation than frontline employees working in hotels oriented to the leisure segment. A potential explanation of this unexpected finding could lie in the tourist's behaviour, since leisure tourists could spend, on average, more time interacting with front office staff than business tourists. This longer time in the service encounter could translate into more inflowing information of needs, wishes, and detected problems that the receptionist obtains and uses as a knowledge input for novel suggestions.

6. Conclusions

This work analyses the impact of the employee's ability and willingness to innovate in hospitality firms. Since innovation in the hospitality industry is mostly associated with informal innovation due to the lack of formal R&D departments in most firms in the sector, the analysis of employee-driven innovation sheds light on understanding and fostering innovation in many firms in the industry. Strategic actors in the innovation process of hospitality firms are employees in direct contact with tourists since they are situated in the centre of a valuable information network and witness customers' reactions and needs. The empirical part of this study has focused on the innovative suggestions that employees in the reception department make, along with the ability- and willingness- related factors to make them. The significant results of this work have shown that the employee's creativity, work experience and positive perception of a working suggestion system increase the number of their innovative suggestions in the context of hotel front offices.

The findings of this work allow indicating some recommendations for the hospitality industry to increase employee-driven innovation. Madjar (2005) defends that human resource professionals can play critical roles in increasing employee creativity. By encouraging creativity through courses or seminars on how to stimulate creative thinking or advising on how to channel employee creativity, human resource

specialists can increase the creative ideas suggested by employees. Moreover, creativity efforts and activities can be strongly constrained by an organisational culture that values risk avoidance and punishes behaviours that are out of the usual paths. Nybakk and Jenssen (2012) emphasise trust and openness as essential in modelling the climate for innovation, and supervisors and managers should support an atmosphere characterised by the freedom to suggest new ideas and test new things if they are aligned to the organisational strategy or face new challenges. In that sense, the role of the general manager is key in enhancing the generation of new ideas. Another initiative to support these creative activities is based on the assumption that creativity requires social interaction (Perry-Smith and Shalley, 2003). Thus, the organisation of meetings and seminars with colleagues oriented to problem resolution or potential improvements could stimulate joint creativity.

Regarding work experience, the primary recommendation is to push forward the experienced employees' knowledge. In that line, Rasca (2018) advocates for taking advantage of retaining experienced employees. An initial recommendation is to foster mentorship programmes in the hospitality firm where long-tenured employees or other employees who have worked in the sector for many years assist and explain hotel tasks and dynamics to newly hired employees. The organisation of meetings where experienced-employees take the leading role in analysing situations and showing potential areas of improvement could be another line of action; in this case, employees with shorter periods of work in the tourism industry could understand the challenges and suggest new ideas based on their diversity and creative orientation.

The most relevant motivation factor that this study has highlighted is the positive perception of a working suggestion system in the firm. To increase those positive perceptions among employees, hotel general managers should emphasise the role and usefulness of the suggestion system for the desired innovation performance of the company. For Marx (1995), management commitment is an essential cornerstone for the success of the suggestion system. Thus, the general manager should communicate how suggestions will be communicated, analysed, and, if positively evaluated, heeded. Lower-level managers should also reinforce those messages and assure that they would give credit to employees who suggest novel ideas.

As this work has also found that there are fewer novel suggestions in business hotels, hotel management working in this segment faces an additional challenge to foster employee-driven innovation. An interesting recommendation would be that managers regularly provide information about trends, needs and problems that the business tourist segment is facing. This way, the relative lack of direct information exchanges with frontline employees could be corrected to a certain extent, and employees could have another knowledge input oriented to the generation of novel suggestions.

It is also important to outline the main limitations of this work. The fact that knowledge has been addressed with two sources could also be a limitation. In that sense, employees can also construct knowledge from other sources such as personal networks, institutions or codified sources like the Internet or books (Calero-Lemes and García-Almeida, 2020), though the tradition in academic literature is to refer to education and work experience as reflected in this work. The use of a questionnaire to collect data on the independent variables may limit the understanding of the phenomena studied, since the variable measurement could not capture nuances and particular aspects in the responses. However, certain aspects have been mitigated by the methodological design. Moreover, the sampling method of self-selection may pose some representativeness obstacles in the study, but it does comprise a relatively high response rate. Besides, the study has been carried out only in hotels, and specifically in their front-office department, which limits the extrapolation of results to other hospitality firms. The geographical extrapolation of the results must be also done with caution, because the context of the research may affect innovation dynamics that are not present in other geographical areas.

This work also opens up opportunities for further research on the understanding of employee-driven innovation in hospitality firms. Thus, qualitative and longitudinal approaches would provide a thorough analysis of the individual view adopted in this study. In addition, the analysis of the external factors influencing innovative suggestions would complement the individual perspective. Another line of future research is to address models where the individual factors considered here interact among them and with external factors. In line with Singh et al. (2003), the replication of the study in the same industrial context (i.e. the hospitality sector) but in a different geographical scope would rise research validity and would also allow interesting conclusions to be drawn for comparison. It would also be of great interest to study other functional areas in hospitality firms, especially those departments with less interaction with the client, in order to find out their approach to innovative suggestions in their context. The creation of innovative suggestions in different types of hotel and non-hotel accommodation (e. g. low-end hotels, accommodation in the sharing economy, etc.) and even in restaurants and other F&B alternatives would contribute to increasing the academic knowledge of innovation in the hospitality sector from a global perspective.

References

- Aalbers, R., Dolfsma, W., Koppius, O., 2013. Individual connectedness in innovation networks: on the role of individual motivation. Res. Policy 42 (3), 624–634.
- Agut, S., Peiró, J.M., Grau, R., 2009. The effect of overeducation on job content innovation and career-enhancing strategies among young Spanish employees. J. Career Dev. 36 (2), 159–182.
- Akram, K., Siddiqui, S.H., Nawaz, M.A., Ghauri, T.A., Cheema, A.K.H., 2011. Role of knowledge management to bring innovation: an integrated approach. Int. Bull. Bus. Adm. 11, 121–134.
- Alzyoud, S., Partington, S., Mitchell, C., 2017. Employee Innovation in the Hospitality Industry: The Mediating Role of Psychological Safety. Manchester Metropolitan University, School of Tourism, Events & Hospitality Management.
- Amabile, T.M., 1983. The social psychology of creativity: a componential conceptualization. J. Pers. Soc. Psychol. 45 (2), 357–376.
- Amabile, T.M., 2013. Componential theory of creativity. In: Kessler, E.H. (Ed.), Encyclopedia of Management Theory. Sage Publications, London, pp. 134–139.
- Amabile, T.M., Conti, R., Coon, H., Lazenby, J., Herron, M., 1996. Assessing the work environment for creativity. Acad. Manag. J. 39 (5), 1154–1184.
- Ardito, L., Messeni Petruzzelli, A., 2017. Breadth of external knowledge sourcing and product innovation: the moderating role of strategic human resource practices. Eur. Manag. J. 35 (2), 261–272.
- Ardito, L., Messeni Petruzzelli, A., Dezi, L., Castellano, S., 2018. The influence of inbound open innovation on ambidexterity performance: does it pay to source knowledge from supply chain stakeholders? J. Bus. Res. 119, 321–329.
- Axtell, C.M., Holman, D.J., Unsworth, K.L., Wall, T.D., Waterson, P.E., Harrington, E., 2000. Shopfloor innovation: facilitating the suggestion and implementation of ideas. J. Occup. Organ. Psychol. 73 (3), 265–285.
- Babakus, E., Yavas, U., Karatepe, O.M., 2017. Work engagement and turnover intentions. Int. J. Contemp. Hosp. Manage. 29 (6), 1580–1598.
- Baloglu, S., Erdem, M., Brewer, P., Mayer, K., Sainaghi, R., 2010. Hotel performance:
 state of the art. Int. J. Contemp. Hosp. Manage. 22 (7), 920–952.
 Belsley, D. 1991. Conditioning Diagnostics: Collinearity and Weak Data in Regression
- Belsley, D., 1991. Conditioning Diagnostics: Collinearity and Weak Data in Regression. Wiley, New York.
- Bettencourt, L.A., Gwinner, K., 1996. Customization of the service experience: the role of the frontline employee. Int. J. Serv. Ind. Manag. 7 (2), 3–20.
- Bogers, M., Lhuillery, S., 2006. Measuring Informal Innovation: From Non-R&D to On-Line Knowledge Production. École Plytechnique Fédérale de Lausanne.
- Bouncken, R.B., 2002. Knowledge management for quality improvements in hotels. J. Qual. Assur. Hosp. Tour. 3 (3-4), 25–59.
- Bouncken, R.B., Pyo, S., 2002. Achieving competitiveness through knowledge management. J. Qual. Assur. Hosp. Tour. 3 (3-4), 1–4.
- Brem, A., Voigt, K.I., 2007. Innovation management in emerging technology ventures—the concept of an integrated idea management. Int. J. Technol. Policy Manag. 7 (3), 304–321.
- Buech, V.I.D., Michel, A., Sonntag, K., 2010. Suggestion systems in organizations: what motivates employees to submit suggestions? Eur. J. Innov. Manag. 13 (4), 507–525.
- Büschgens, T., Bausch, A., Balkin, D.B., 2013. Organizational culture and innovation: a meta-analytic review. J. Prod. Innov. Manage. 30 (4), 763–781.
- Calero-Lemes, P., García-Almeida, D.J., 2020. Immigrant entrepreneur knowledge in the tourism industry of island destinations. Tour. Geogr. 1–25.
- Cardoso, F.R., Achcar, J.A., Piratelli, C.L., Hermosilla, J.L.G., Barbosa, J.C., 2014. Bayesian analysis of employee suggestions in a food company. Int. J. Adv. Manuf. Technol. 70 (9–12), 2059–2070.
- Carland, J.C., Carland, J.W., 2000. New venture creation model. J. Small Bus. Entrep. Dev. 12 (3), 29–49.

- Chang, J.H., Teng, C.C., 2017. Intrinsic or extrinsic motivations for hospitality employees' creativity: the moderating role of organization-level regulatory focus. Int. J. Hosp. Manag. 60, 133–141.
- Chang, S., Gong, Y., Shum, C., 2011. Promoting innovation in hospitality companies through human resource management practices. Int. J. Hosp. Manag. 30 (4), 812–818.
- Chen, W.J., 2011. Innovation in hotel services: culture and personality. Int. J. Hosp. Manag. 30 (1), 64–72.
- Chesbrough, H.W., 2003. Open Innovation: The New Imperative for Creating and Profiting from Technology. Harvard Business Press, Boston.
- Choi, S.B., Kim, K., Ullah, S.E., Kang, S.W., 2016. How transformational leadership facilitates innovative behavior of Korean workers. Pers. Rev. 45 (3), 459–479
- Claver-Cortés, E., Molina-Azorín, J.F., Pereira-Moliner, J., 2006. Strategic groups in the hospitality industry: intergroup and intragroup performance differences in Alicante, Spain. Tour. Manag. 27 (6), 1101–1116.
- Daft, R.L., Lengel, R.H., 1986. Organizational information requirements, media richness and structural design. Manage. Sci. 32 (5), 554–571.
- De Bono, E., 1970. Lateral Thinking: A Textbook of Creativity. Ward Lock Educational, London.
- De Clercq, D., Arenius, P., 2006. The role of knowledge in business start-up activity. Int. Small Bus. J. 24 (4), 339–358.
- De Jong, J.P., Den Hartog, D.N., 2008. Innovative work behavior: measurement and validation. EIM Bus. Policy Res. 8 (1), 1–27.
- Deci, E.L., 1971. Effects of externally mediated rewards on intrinsic motivation. J. Pers. Soc. Psychol. 18 (1), 105–115.
- Den Hertog, P., 2000. Knowledge-intensive business services as co-producers of innovation. Int. J. Innov. Manag. 4 (4), 491–528.
- Den Hertog, P., Gallouj, F., Segers, J., 2011. Measuring innovation in a 'low-tech' service industry: the case of the Dutch hospitality industry. Serv. Ind. J. 31 (9), 1429–1449.
- Dietrich, A., 2004. The cognitive neuroscience of creativity. Psychon. Bull. Rev. 11 (6), 1011–1026.
- Du Plessis, A.J., Marx, A.E., Wilson, G., 2008. Generating ideas and managing suggestion systems in organisations: some empirical evidence. Int. J. Knowl. Cult. Change Manag. 8 (4), 133–140.
- Dunn, A., Lloyd, G., 1997. Suggestion Schemes The Management Tools for the 90's. MBA Publishing. London.
- Engen, M., Magnusson, P., 2015. Exploring the role of front-line employees as innovators. Serv. Ind. J. 35 (6), 303–324.
- Enz, C., Siguaw, J., 2003. Revisiting the best of the best: innovations in hotel practice. Cornell Hotel Restaur. Adm. O. 44 (5/6), 115–123.
- Fairbank, J.F., Williams, S.D., 2001. Motivating creativity and enhancing innovation through employee suggestion system technology. Creat. Innov. Manag. 10 (2), 68–74.
- Fink, A., Benedek, M., Grabner, R.H., Staudt, B., Neubauer, A.C., 2007. Creativity meets neuroscience: experimental tasks for the neuroscientific study of creative thinking. Methods 42 (1), 68–76.
- Ford, C.M., 1996. A theory of individual creative action in multiple social domains. Acad. Manag. Rev. 21 (4), 1112–1142.
- Ford, J.K., Sego, D., Quinones, M., Speer, J., 1991. The construct of experience: a review of the literature and needed research directions. In: Sixth Annual Conference of the Society for Industrial and Organizational Psychology. St. Louis, MO.
- Frey, B.S., 1997. Not Just for the Money. An Economic Theory of Personal Motivation. Edward Elgar, Cheltenham, UK.
- Gabrielsson, J., Politis, D., 2011. Entrepreneurial learning and innovation: building entrepreneurial knowledge from career experience for the creation of new ventures.
 In: Nobre, F.S., Walker, D.S., Harris, R.J. (Eds.), Technological, Managerial and Organizational Core Competencies: Dynamic Innovation and Sustainable Development. IGI Global, USA, pp. 245–263.
- Gagné, M., Deci, E.L., 2005. Self-determination theory and work motivation. J. Organ. Behav. 26 (4), 331–362.
- Gallouj, F., Savona, M., 2009. Innovation in services: a review of the debate and a research agenda. J. Evol. Econ. 19 (2), 149–172.
- García-Almeida, D.J., Bolívar-Cruz, A., 2020. Successful replication of knowledge in the growth of service organizations: evidence from Spanish hotel chains. J. Knowl. Manag. 24 (9), 2217–2241.
- García-Almeida, D.J., Hernández-López, L., Ballesteros, J.L., De Saá-Pérez, P., 2012. Motivation and prior knowledge as determinants of knowledge assimilation: explaining the academic results of tourism students. J. Hosp. Leis. Sport Tour. 11 (2), 151–160.
- García-Almeida, D.J., Cabrera-Nuez, M.T., 2020. The influence of knowledge recipients' proactivity on knowledge construction in cooperative learning experiences. Act. Learn. High. Educ. 21 (1), 79–92.
- García-Villaverde, P.M., Elche, D., Martínez-Pérez, Á., Ruiz-Ortega, M.J., 2017.
 Determinants of radical innovation in clustered firms of the hospitality and tourism industry. Int. J. Hosp. Manag. 61, 45–58.
- Gobierno de Canarias, 2013. Estrategia de Especialización Inteligente de Canarias 2014–2020. Retrieved October 2, 2020, from. http://www.famp.es/export/sites/f amp/.galleries/documentos-europa2020/DOC-3.8.pdf.
- Gomezelj, D.O., 2016. A systematic review of research on innovation in hospitality and tourism. Int. J. Contemp. Hosp. Manage. 28 (3), 516–558.
- Grissemann, U.S., Pikkemaat, B., Weger, C., 2013. Antecedents of innovation activities in tourism: an empirical investigation of the Alpine hospitality industry. Turizam: međunarodni znanstveno-stručni časopis 61 (1), 7–27.
- Guzmán, J., Santos, F.J., 2001. The booster function and the entrepreneurial quality: an application to the province of Seville. Entrep. Reg. Dev. 13 (3), 211–228.

- Hadjimanolis, A., 2000. A resource-based view of innovativeness in small firms. Technol. Anal. Strateg. Manag. 12 (2), 263–281.
- Hair, J.F., Anderson, R.E., Tatham, R.L., Black, W.C., 2000. Análisis Multivariante, 5ª ed. Prentice Hall, Madrid.
- Hallin, C.A., Marnburg, E., 2008. Knowledge management in the hospitality industry: a review of empirical research. Tour. Manag. 29 (2), 366–381.
- Hansen, K., Amundsen, O., Aasen, T.M.B., Gressgård, L.J., 2017. Management practices for promoting employee-driven innovation. In: Oeij, P., Rus, D., Pot, F.D. (Eds.), Workplace Innovation: Theory, Research and Practice. Springer International Publishing, Cham, pp. 321–338.
- Hargrove, R.A., Nietfeld, J.L., 2015. The impact of metacognitive instruction on creative problem solving. J. Exp. Educ. 83 (3), 291–318.
- Hassanien, A., Dale, C. (Eds.), 2013. Facilities Management and Development for Tourism, Hospitality and Events. Cabi, Wallingford.
- Helkkula, A., Kowalkowski, C., Tronvoll, B., 2018. Archetypes of service innovation: implications for value cocreation. J. Serv. Res. 21 (3), 284–301.
- Hinojosa, V., 2014. La innovación hotelera, en manos de sus trabajadores. Hosteltur 240.
 Høyrup, S., 2012. Employee-driven innovation: a new phenomenon, concept and mode of innovation. In: Høyrup, S., Bonnafous-Boucher, M., Hasse, C., Lotz, M., Møller, K. (Eds.), Employee-Driven Innovation. Palgrave Macmillan, London, pp. 3–33.
- Holcomb, T.R., Ireland, R.D., Holmes Jr., R.M., Hitt, M., 2009. Architecture of entrepreneurial learning: exploring the link among heuristics, knowledge, and action. Entrep. Theory Pract. 33 (1), 167–192.
- Hon, A.H., 2011. Enhancing employee creativity in the Chinese context: the mediating role of employee self-concordance. Int. J. Hosp. Manag. 30 (2), 375–384.
- Horng, J.S., Tsai, C.Y., Yang, T.C., Liu, C.H., Hu, D.C., 2016. Exploring the relationship between proactive personality, work environment and employee creativity among tourism and hospitality employees. Int. J. Hosp. Manag. 54, 25–34.
- Hu, M.L.M., Horng, J.S., Sun, Y.H.C., 2009. Hospitality teams: knowledge sharing and service innovation performance. Tour. Manag. 30 (1), 41–50.
- ISTAC, 2020. Establecimientos hoteleros abiertos, plazas ofertadas y habitaciones disponibles según categorías por municipios de alojamiento de Canarias y periodos. Retrieved October 2, 2020 from. http://www.gobiernodecanarias.org/istac/jaxi-ista c/tabla.do?uripx=urn:uuid:81e038c5-6045-42bb-8253-bb2a7fba83a5&uripub=urn:uuid:ad002616-6e9f-4e4a-8e7a-7c393a69fce0.
- Jogaratnam, G., Tse, E.C.Y., 2006. Entrepreneurial orientation and the structuring of organizations: performance evidence from the Asian hotel industry. Int. J. Contemp. Hosp. Manage, 18 (6), 454–468.
- Kallmuenzer, A., 2018. Exploring drivers of innovation in hospitality family firms. Int. J. Contemp. Hosp. Manage. 30 (3), 1978–1995.
- Kesting, P., Ulhøi, J.P., 2010. Employee-driven innovation: extending the license to foster innovation. Manage. Decis. 48 (1), 65–84.
- Kim, M.S., Koo, D.W., 2017. Linking LMX, engagement, innovative behavior, and job performance in hotel employees. Int. J. Contemp. Hosp. Manage. 29 (12), 3044–3062.
- Kim, T., Lee, G., 2010. Examining social capital and knowledge sharing as antecedents of service innovativeness and business performance in the hotel industry: an application of the resource-based view (RBV) theory. J. Tour. Sci. 34 (7), 13–36.
- Kim, T.Y., Hon, A.H., Lee, D.R., 2010. Proactive personality and employee creativity: the effects of job creativity requirement and supervisor support for creativity. Creat. Res. J. 22 (1), 37–45.
- Kirton, M.J., 1989. Adaptors and Innovators: Styles of Creativity and Problem-Solving. Routledge, London.
- Kohn, A., 1993. Why incentive plans cannot work. Harv. Bus. Rev. 71, 54-63.
- Kreps, D., 1997. Intrinsic motivation and extrinsic incentives. Am. Econ. Rev. 87 (2), 359–364.
- Kulkarni, M., Lengnick-Hall, M.L., Martinez, P.G., 2015. Overqualification, mismatched qualification, and hiring decisions. Pers. Rev. 44 (4), 529–549.
- Lasrado, F., Arif, M., Rizvi, A., Urdzik, C., 2016. Critical success factors for employee suggestion schemes: a literature review. Int. J. Organ. Anal. 24 (2), 315–339.
- Li, Y., Zhou, X., 2019. An analysis of the influencing factors of the hotel staff's suggestion behavior. In: 2019 International Conference on Economic Management and Model Engineering (ICEMME). IEEE, pp. 337–340.
- Lin, H.F., 2007. Effects of extrinsic and intrinsic motivation on employee knowledge sharing intentions. J. Inf. Sci. 33 (2), 135–149.
- Locke, E.A., Latham, G.P., 2004. What should we do about motivation theory? Six recommendations for the twenty-first century. Acad. Manag. Rev. 29 (3), 388–403.
- Lusch, R.F., Nambisan, S., 2015. Service innovation: a service-dominant logic perspective. MIS Q. 39 (1), 155–176.
- Madjar, N., 2005. The contributions of different groups of individuals to employees' creativity. Adv. Dev. Hum. Resour. 7 (2), 182–206.
- Martínez-Ros, E., Orfila-Sintes, F., 2012. Training plans, manager's characteristics and innovation in the accommodation industry. Int. J. Hosp. Manag. 31 (3), 686–694.
- Martin-Rios, C., Ciobanu, T., 2019. Hospitality innovation strategies: an analysis of success factors and challenges. Tour. Manag. 70, 218–229.
- Marx, A.E., 1995. Management commitment for successful suggestion systems. Work Study.
- McLeod, M.T., Vaughan, D.R., Edwards, J., 2010. Knowledge networks in the tourism sector of the Bournemouth, Poole, and Christchurch conurbation: preliminary analysis. Serv. Ind. J. 30 (10), 1651–1667.
- Messeni Petruzzelli, A., 2008. Proximity and knowledge gatekeepers: the case of the Polytechnic University of Turin. J. Knowl. Manag. 12 (5), 34–51.
- Mohsin, A., Lockyer, T., 2010. Customer perceptions of service quality in luxury hotels in New Delhi, India: an exploratory study. Int. J. Contemp. Hosp. Manage. 22 (2–3), 160–173.

- Moosa, N., Panurach, P., 2008. Encouraging front-line employees to rise to the innovation challenge. Strategy Leadersh. 36 (4), 4–9.
- Morgan, C.T., King, R.A., Weisz, J.R., Schopler, J., 1993. Introduction to Psychology. Tata McGraw-Hill, New York.
- Natalicchio, A., Messeni Petruzzelli, A., Cardinali, S., Savino, T., 2018. Open innovation and the human resource dimension. Manage. Decis. 56 (6), 1271–1284.
- Nelson, R.R., Winter, S.G., 1977. In search of useful theory of innovation. Res. Policy 6 (1), 36–76.
- Nybakk, E., Jenssen, J.I., 2012. Innovation strategy, working climate, and financial performance in traditional manufacturing firms: an empirical analysis. Int. J. Innov. Manag. 16 (2), 1–30.
- Oldham, G.R., Cummings, A., 1996. Employee creativity: personal and contextual factors at work. Acad. Manag. J. 39 (3), 607–634.
- Orfila-Sintes, F., Mattsson, J., 2009. Innovation behavior in the hotel industry. Omega 37 (2), 380–394.
- Osterloh, M., Frey, B.S., 2000. Motivation, knowledge transfer, and organizational forms. Organ. Sci. 11 (5), 538–550.
- Ottenbacher, M.C., 2007. Innovation management in the hospitality industry: different strategies for achieving success. J. Hosp. Tour. Res. 31 (4), 431–454.
- Ottenbacher, M., Harrington, R.J., 2007. The innovation development process of Michelin-starred chefs. Int. J. Contemp. Hosp. Manage. 19, 444–460.
- Ottenbacher, M.C., Harrington, R.J., 2009. The product innovation process of quickservice restaurant chains. Int. J. Contemp. Hosp. Manage. 21, 523–541.
- Patah, A., Rashdi, M.O., Zain, R.A., Abdullah, D., Mohd Radzi, S., 2009. An empirical investigation into the influences of psychological empowerment and overall job satisfaction on employee loyalty: the case of Malaysian front office receptionists. J. Tour. Hosp. Culinary Arts 1 (3), 1–20.
- Perry-Smith, J.E., Shalley, C.E., 2003. The social side of creativity: a static and dynamic social network perspective. Acad. Manag. Rev. 28 (1), 89–106.
- Pinto, L.H., Vieira, B.P., Fernandes, T.M., 2020. 'Service with a piercing': does it (really) influence guests' perceptions of attraction, confidence and competence of hospitality receptionists? Int. J. Hosp. Manag. 86, 102365.
- Presenza, A., Messeni Petruzzelli, A., 2019. Investigating business model innovation in Haute Cuisine. Role and behavior of chef-entrepreneurs. Int. J. Hosp. Manag. 82, 101–111.
- Presenza, A., Messeni Petruzzelli, A., Sheehan, L., 2019. Innovation through tradition in hospitality. The Italian case of Albergo Diffuso. Tour. Manag. 72, 192–201.
- Quiñones, M.A., Ford, J.K., Teachout, M.S., 1995. The relationship between work experience and job performance: a conceptual and meta-analytic review. Pers. Psychol. 48 (4), 887–910.
- Radu, E., Vasile, D.C., 2007. Innovation in the Hospitality Industry. Academy of Economic Studies. Bucharest.
- Rasca, L., 2018. Employee experience an answer to the deficit of talents, in the fourth industrial revolution. Calitatea 19 (S3), 9–14.
- Romero, I., Martínez-Román, J.A., 2012. Self-employment and innovation. Exploring the determinants of innovative behavior in small businesses. Res. Policy 41 (1), 178–189.
- Ryan, R.M., 1982. Control and information in the intrapersonal sphere: an extension of cognitive evaluation theory. J. Pers. Soc. Psychol. 43 (3), 450–461.
 Santarelli, E., Sterlacchini, A., 1990. Innovation, formal vs. informal R&D, and firm size:
- Santarelli, E., Sterlacchini, A., 1990. Innovation, formal vs. informal R&D, and firm size: some evidence from Italian manufacturing firms. Small Bus. Econ. 2 (3), 223–228.
- Schuckert, M., Kim, T.T., Paek, S., Lee, G., 2018. Motivate to innovate: how authentic and transformational leaders influence employees' psychological capital and service innovation behavior. Int. J. Contemp. Hosp. Manage. 30 (2), 776–796.
- Shalley, C.E., 1995. Effects of coaction, expected evaluation, and goal setting on creativity and productivity. Acad. Manag. J. 38 (2), 483–503.
- Shalley, C.E., Zhou, J., Oldham, G.R., 2004. The effects of personal and contextual characteristics on creativity: where should we go from here? J. Manage. 30 (6), 933–958.
- Singh, J., 2000. Performance productivity and quality of frontline employees in service organizations. J. Mark. 64 (2), 15–34.
- Singh, K., Ang, S.H., Leong, S.M., 2003. Increasing replication for knowledge accumulation in strategy research. J. Manage. 29 (4), 533–549.
- Slåtten, T., Mehmetoglu, M., 2011. What are the drivers for innovative behavior in frontline jobs? A study of the hospitality industry in Norway. J. Hum. Resour. Hosp. Tour. 10 (3), 254–272.
- Smith, C.A., Organ, D.W., Near, J.P., 1983. Organizational citizenship behavior: its nature and antecedents. J. Appl. Psychol. 68 (4), 653–666.
- Sørensen, F., Sundbo, J., Mattsson, J., 2013. Organisational conditions for service encounter-based innovation. Res. Policy 42 (8), 1446–1456.
- Somech, A., Drach-Zahavy, A., 2000. Understanding extra-role behavior in schools: the relationships between job satisfaction, sense of efficacy, and teachers' extra-role behavior. Teach. Teach. Educ. 16 (5–6), 649–659.
- Stamov-Roßnagel, C., Biemann, T., 2012. Ageing and work motivation: a task-level perspective. J. Manag. Psychol. 27 (5), 459–478.
- Storey, C., Cankurtaran, P., Papastathopoulou, P., Hultink, E.J., 2016. Success factors for service innovation: a meta-analysis. J. Prod. Innov. Manage. 33 (5), 527–548.
- Szewczyk, K., 2019. Self-assessment of an organisation according to the polish quality award model on the example of an automotive company-self-assessment process, selected improvement actions. Manag. Sci. Nauki o Zarządzaniu 24 (1), 48–57.
- Tajeddini, K., Trueman, M., 2012. Managing Swiss Hospitality: how cultural antecedents of innovation and customer-oriented value systems can influence performance in the hotel industry. Int. J. Hosp. Manag. 31 (4), 1119–1129.
- Tesluk, P.E., Jacobs, R.R., 1998. Toward an integrated model of work experience. Pers. Psychol. 51 (2), 321–355.

- Turismo de Tenerife, 2017. Tenerife Tourism Strategy 2017-2020/2030. Turismo de Tenerife, Tenerife.
- Turismo de Tenerife, 2019. Situación turística de Tenerife. Retrieved on April 13, 2020, from. https://www.webtenerife.com/es/investigacion/situacion-turistica/informe s-situacion-turistica/documents/is201903.pdf.
- Urbancova, H., 2013. Competitive advantage achievement through innovation and knowledge. J. Compet. 5 (1), 82–96.
- Van Dijk, C., van den Ende, J., 2002. Suggestion systems: transferring employee creativity into practicable ideas. R&D Manage. 32 (5), 387–395.
- Vroom, V.H., 1964. Work and Motivation. Wiley, New York.
- Wong, S., Pang, L., 2003. Motivators to creativity in the hotel industry-perspectives of managers and supervisors. Tour. Manag. 24 (5), 551–559.
- World Economic Forum, 2019. Travel and Tourism Competitiveness Report. World Economic Forum, Geneva.

- Yang, J.T., 2004. Job-related knowledge sharing: comparative case studies. J. Knowl. Manag. 8 (3), 118–126.
- Yang, J.T., 2010. Antecedents and consequences of job satisfaction in the hotel industry. Int. J. Hosp. Manag. 29 (4), 609–619.
- Yang, J.T., Wan, C.S., 2004. Advancing organizational effectiveness and knowledge management implementation. Tour. Manag. 25 (5), 593–601.
- Yoon, H.J., Sung, S.Y., Choi, J.N., 2015. Mechanisms underlying creative performance: employee perceptions of intrinsic and extrinsic rewards for creativity. Soc. Behav. Personal. Int. J. 43 (7), 1161–1179.
- Zhou, J., Shalley, C.E., 2003. Research on employee creativity: a critical review and directions for future research. In: Martocchio, J. (Ed.), Research in Personel and Human Resources Management. JAI Press, Greenwich, CT, pp. 165–217.