



## Innovation, sustainable HRM and customer satisfaction

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### ABSTRACT

The purpose of this paper is to explore how sustainable human resource management (HRM) practices impact the innovation-customer satisfaction relationship in Swedish hotels. Responding hotels were profiled into four groups based on their involvement in two sustainable HR practices. The findings indicate the relationship between innovation and customer satisfaction is dependent on sustainable HR practices in the organization. Although innovation and sustainable HR practices impact customer satisfaction positively, their interaction suggests that the one can substitute the other to achieve superior customer satisfaction. The study concludes that sustainable HR practices enhance a hotel's capability to innovate and to have satisfied customers. The relationship between sustainable HR practices and innovation is discussed.

### 1. Introduction

Innovations are identified as an important catalyst for economic survival and growth in the hospitality literature (e.g., Binder et al., 2013; Orfila-Sintes and Mattsson, 2009; Ottenbacher, 2007; Wikhamn et al., 2018). Their positive impact is well recognized. For instance, innovative hotels are reported to perform better in terms of occupancy rate (Mattsson and Orfila-Sintes, 2014) and customer loyalty (Tsai, 2017). Chadee and Mattsson (1996) show that innovative new products and services improve the financial performance and reputation of a hotel. Storey and Easingwood (1998) also identify a positive link between innovation behavior and hotel reputation. Hjalager (2010) and Hall and Williams (2008) argue that innovations have positive impacts on customer preference, service quality, employee productivity, firms' market value and share, and customer retention. Despite its significance, innovation and its relationship with organizational performance is a major challenge facing the hospitality industry globally (Hjalager, 2002; Miralles, 2010; Ottenbacher and Gnoth, 2005). Some research reports indicate that the innovation-performance relationship may depend on organizational factors, such as implemented HRM policies and practices (Wheatley and Doty, 2010).

HRM policies and practices have an impact on customer satisfaction, service quality and hotel performance (Chand, 2010; Dhar, 2015). This is because human interaction in service delivery is critical for customer experience (Tsaour and Lin, 2004). This suggests that although the survival and growth of the service sector relies on innovative services, labor-intensive industries are equally dependent on the performance of the employees (El Masry et al., 2004; Mohamed, 2016).

Sustainable human resource management, described as the

“adoption of HRM strategies and practices that enable the achievement of financial, social and ecological goals, with an impact inside and outside of the organization and over a long-term time horizon while controlling for unintended side effects and negative feedback” (Ehnert et al., 2016, p. 90), has emerged as a new approach to the employment relationship and has gained increased importance in the last decade (Ehnert et al., 2014). Exposed to external pressure, organizations have started to incorporate elements of corporate social responsibility (CSR), including sustainability-directed activities, into their policies and strategies. Moreover, an increasing number of corporations and large firms have started to publish an annual sustainability report (for a comprehensive list, see the sustainability disclosure database), including information on organizational efforts to manage human resources responsibly. Parallel to the developments in practice, growing scholarly attention has been devoted to studying the link between CSR and HRM. For instance, Voegtlin and Greenwood (2016) address the link between an organization's responsibility to act ethically and HRM. Jamali and Karam, (2016, p. 126) highlight HRM as a potentially “promising managerial framework that can support organizational efforts in translating [CSR] strategies into practical managerial actions and outcomes.” Similarly, Voegtlin and Greenwood (2016) argue that HRM plays a major role in how CSR is understood, developed and implemented and that organizations' understandings of social responsibility have implications for how they treat their employees. Although substantial research has been conducted on ecological and social sustainability in recent years, little attention has been devoted in this research to individual and collective human sustainability (Baum et al., 2016; Ehnert, 2009; Ehnert et al., 2014; Ehnert et al., 2016; Järleström et al., 2016; Kramar, 2014; Mariappanadar and Kramar, 2014).

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Customer satisfaction is a prominent theme in the hospitality industry. Satisfied customers have the potential to become loyal customers and to attract new clients to the hotel. It is widely recognized that customer satisfaction is key for improving profitability in the hospitality sector (Chi and Gursoy, 2009). Considering that hotels offer homogeneous services it is understandable that they compete to better satisfy customers (Choi and Chu, 2001).

The purpose of this paper is to explore how sustainable HRM practices in the hospitality sector (particularly, hotels) impact the innovation-customer satisfaction relationship. Specifically, it seeks to answer the following: How does sustainable HRM associate with customer satisfaction? How does the extent of a hotel's innovation involvement relate to customer satisfaction? And is the relationship between innovation and customer satisfaction dependent on a hotel's involvement in sustainable HRM?

The significance of this study is multifold. First, studying HRM is important because the workforce is generally neglected in tourism and hospitality research (Baum, 2018; Baum et al., 2016). Second, the connection between sustainability and the workforce is largely overlooked (Ehnert, 2009; Ehnert et al., 2014; Järnlström et al., 2016; Kramar, 2014; Mariappanadar and Kramar, 2014). How employers translate the employment relationship in practice is a non-trivial part of sustainability work (Hall and Brown, 2006) that organizational leaders refer to in assessing organizational effectiveness (Boudreau and Ramstad, 2005). Third, actors in the tourism and hospitality sector focus mainly on economic rationalism (efficiency and cost reduction), which results in employing low-skilled, low-paid and temporary workforce. This reality is paradoxical for the HR function in the tourism and hospitality sector. HR managers are compelled to cope with the dual responsibilities of providing the organization with the best employees to deliver valued services and hence improved financial performance, and at the same time a legal (and moral) duty to provide a decent work environment where employee well-being and personal development are not ignored. HR policies and practices (e.g., fairness, lack of discrimination, diversity, learning and development) are an essential ingredient in an organization's social sustainability and responsibility profile. On the ground, however, hospitality actors committing themselves to sustainability thinking often prioritize investing financial resources in environmental management (e.g., energy savings, recycling, waste management) rather than in people. Hence, there is a lack of balance in how these actors engage in sustainability work in reality (Hall and Brown, 2006). Fourth, the relationship between innovation and performance is under-researched. The majority of scientific attention has thus far been devoted to understanding how innovation affects financial outcomes (for a review, see Bowen et al., 2010; Rosenbusch et al., 2011). Non-financial indicators, although vital for economic performance (Chand, 2010), have generally not received comparable attention in the innovation discourse. Finally, research investigating the three aspects of sustainable HRM, innovation and customer satisfaction simultaneously within the hospitality context is – to the best of author's knowledge – still unexplored.

## 2. Theory and previous research

### 2.1. Sustainable HRM

The concept of sustainable development originates from the United Nations' Brundtland Report, which defined it as “development that meets the needs of the present without compromising the ability of future generations to meet their own needs” (Brundtland, 1987, p. 41). Sustainable development demands simultaneous consideration of the environment, economy and society (Strange and Bayley, 2008). The majority of sustainability research has been devoted to environmental sustainability and been linked to organizations' efforts to be involved in CSR. Although some of these efforts have targeted the link between the environment and HRM (for instance, the greening of organizational

culture (Harris and Crane, 2002), the greening of strategic HRM research (Jackson and Seo, 2010), greening people (Wehrmeyer, 1996), and greening the workplace (Stringer, 2010)), the social aspect of sustainability has remained generally neglected.

The term sustainable HRM is relatively new. The field is still in its infancy and this explains the lack of an established definition for the concept. In her work on sustainable HRM, Ehnert (2009) defines it as “the pattern of planned or emerging human resource strategies and practices intended to enable organizational goal achievement while simultaneously reproducing the HR base” (p. 74). Similarly, Kramar (2014, p. 1084) describes sustainable HRM as “the pattern of planned or emerging HR strategies and practices intended to enable the achievement of financial, social and ecological goals while simultaneously reproducing the HR base over a long term.” Ehnert et al. (2014) view sustainable HRM as a design option for the employment relationship and as a contribution to sustainable corporate development. They argue that sustainability goes beyond being economically and environmentally sustainable. It is additionally about other aspects such as employee development, employability, employee health and well-being, employee participation, and justice. More recently, and in a similar vein, Baum (2018) highlights the significance of the term in the tourism industry and expands its connotation beyond organizational level to societal contexts and policies.

Although the social dimension of sustainability is extensively discussed in CSR discourse, a systematic connection to HRM research was not established until recently. A review of literature by Voegtlin and Greenwood (2016) reveals that the existing body of research on the link between CSR and HRM can be categorized into four groups: HRM is part of CSR, CSR is part of HRM, CSR and HRM overlap, and CSR and HRM are presented without overlap. The first two groups dominate scholarly work, with discussions of one contributing to the other.

Attempting to answer what characterizes sustainable HRM, Järnlström et al. (2016) investigated how Finnish top managers construct the meaning of sustainable human resource management (HRM) and its responsibility domains. Their qualitative analysis reveals four dimensions of sustainable HRM: justice and equality, transparent HR practices, profitability, and employee well-being. Four broader responsibility areas were also identified: legal and ethical, managerial, social, and economic. Owners, managers, employees, customers, and employee representatives, as well as their special roles and requirements for sustainable HRM were all identified by top managers as ‘stakeholders’ in the same study.

Sustainable HRM highlights the importance of HR practices for organizational outcomes that go beyond financial performance (Ehnert et al., 2014; Ehnert et al., 2016; Järnlström et al., 2016; Kramar, 2014). Referring to previous research, Hobelsberger (2014) maintains that when organizational effectiveness and goals comprise economic, social and environmental criteria, sustainable HRM tasks are twofold: 1) providing human resource strategies based on a systemic and long-term approach, in order to stimulate and support an organization's sustainability strategy, and 2) contributing to an organization's survival by attracting, retaining and developing employees in order to preserve a quality human resources base. Sustainable HRM evolves around soft issues such as demonstrating sincerity towards the employees, including providing a decent work environment and conditions, providing development opportunities and being attentive to employees' physical and psychosocial well-being at work. Consistently with this view, Ehnert (2009) maintains sustainable HRM entails not only attracting and retaining motivated and talented employees but also providing them with a healthy work environment and opportunities to develop (regenerate). Sustainability for her is “the balance of ‘consuming’ (or deploying) and ‘reproducing’ human resources” (p. 241). In this sense, sustainability is regarded as “corporate self-interest” (p. 69). Drawing on the arguments of Ehnert et al. (2016, p. 90) that sustainable HRM is about “developing mutually beneficial and regenerative relationships between internal and external resource providers (e.g.

employees, their families, education systems, the natural environment),” Baum (2018) describes sustainable HRM as a proactive approach in the employment relationship that can help organizations legitimize their business operations within society. Explaining the impact of sustainability in HRM on organizational performance, Hobelsberger (2014) emphasizes that organizations must show consistency in how they manage employees if they aim to create and retain a good reputation. Sustainability in HRM starts, according to Hobelsberger, with HRM sustaining its own HR base.

The above discussion raises two issues. First, although attracting, retaining and developing employees have been emphasized in sustainable HRM research (Baum, 2018; Ehnert, 2009; Ehnert et al., 2013; Ehnert et al., 2016; Kramar, 2014), it is important to take these words critically. The seasonal nature of certain businesses, such as ski resorts and summer cottage villages, leans heavily (and often understandably) on temporary workforces. Seasonal workers, for instance students from various educational backgrounds, are attracted by the nature of temporary work. Although attracted and trained, these individuals may have no intention to make seasonal work a career. Organizations recruiting these temporary workforces often believe they contribute to the employability of these individuals. Thus, discussions about retention in the framework of sustainable HRM can be very challenging. Second, demonstrating consistency as Hobelsberger (2014) suggests requires static practices and processes, which can be at odds with being adaptable and flexible to meet the changing needs of the workforce but also the rapid changes in the business environment.

This study adopts the position that sustainable HRM is one aspect of an organization’s effort to engage in corporate social responsibility (CSR). The concept refers to a set of activities developed by HRM in order to effectively manage people and contribute to the organization’s effectiveness and goals at the same time it (the set of activities) secures individual learning and development as well as individual well-being.

## 2.2. Innovation

Innovation is a commonly used term, in various settings and with different meanings. It is often associated with aspects such as creativity, novelty, value-creation and economic growth. A frequently cited definition of innovation is that stated in the Oslo Manual: “the implementation of a new or significantly improved product (good or service), or process, a new marketing method, or a new organizational method in business practices, workplace organization or external relations” (Eurostat and OECD, 2005, p. 46). The definition classifies innovations as: product, process, marketing and organizational. A *product innovation* is the “introduction of a good or service that is new or significantly improved in terms of its characteristics or intended uses” (p. 48). Examples include significant improvements in technical specifications, components and materials, incorporated software, user-friendliness or other functional characteristics. A *process innovation* is “the implementation of a new or significantly improved production or delivery method” that “includes significant changes in techniques, equipment and/or software” (p. 49). A *marketing innovation* is “the implementation of a new marketing method involving significant changes in product design or packaging, product placement, product promotion or pricing” (p. 49). Finally, an *organizational innovation* is “the implementation of a new organizational method in the firm’s business practices, workplace organization or external relations” (p. 51). The innovation can be new to the world, new to the market, or only new to the firm.

The innovation literature from the hospitality sector leans heavily on literature from the service industry (Hjalager, 2010; Orfila-Sintes and Mattsson, 2009; Sundbo, 1997). Innovations in services are analyzed based on an approach developed from manufacturing studies (Mattsson et al., 2005; Nieves and Segarra-Ciprés, 2015; Orfila-Sintes and Mattsson, 2009). Notably in the literature, most distinction has been made between service and product innovations. Service

innovation has been described as more social in nature (Gallouj, 2002; Mattsson et al., 2005), with emphasis on softer aspects that depend on skills and inter-organizational cooperation practices (Tether, 2005) and practical experience rather than a traditional R&D process (Sundbo, 2009). Notwithstanding these differences, service firms are increasingly becoming aware of the benefits of systematically organizing innovation activities, e.g., creating R&D units, despite rarely engaging in fundamental or long-term research (Mattsson et al., 2005). Service innovations are also increasingly characterized by technical elements as technological developments have greatly influenced the design of service-based business models across industries (McPhee et al., 2015). Consequently, technology may play a significant role in various innovation types.

## 2.3. Sustainable HRM, innovation and customer satisfaction

Employee-customer interaction is crucial for customer experience, and hence customer satisfaction (Chand, 2010; Choi and Chu, 2001). In this regard, research on how innovation and customer satisfaction are related in the hospitality sector is limited. With the exception of few studies that investigate innovation’s relationship with non-financial performance (e.g., Storey and Easingwood, 1998; Tsai, 2017), the majority of the existing research looks into innovation’s relationship with financial and efficiency measures such as future sales and firm value (Nicolau and Santa-María, 2013) and profitability and occupancy (Lin, 2013; Mattsson and Orfila-Sintes, 2014; Orfila-Sintes and Mattsson, 2009).

Customer satisfaction is important to investigate for several reasons. First, customer satisfaction is a reasonable indicator for non-financial performance. Without satisfied customers, hotels will not survive. Second, unlike the financial indicators that are often negatively influenced by heavy investments in innovations, customer satisfaction is not part of a firm’s financial reporting. Third, satisfaction indicators represent an indicator of hotels’ positions in the competition for customers. After all, it is the same population of current and future customers that hotels are competing for. Fourth, a hotel’s customer satisfaction score represents the reputation and image of the hotel compared to competing hotels. Nowadays these scores are important for travelers. Online ratings and reviews are what people generally check before making a booking.

Hotels produce innovations to cope with a changing reality. The existence of a hotel demands a constant flow of customers. Naturally, hotels consider how customers will respond to introduced innovations. A major consideration is that improvements should not influence customer satisfaction negatively.

Orfila-Sintes and Mattsson (2009) maintain that not all innovations necessarily have a direct (and positive) relationship with performance. For example, Lin (2013) reports that service quality mediates the relationship between service innovation and a firm’s financial performance. High performance human resource practices have a positive impact on employees’ feelings of organizational commitment (Dhar, 2015), which in turn has a positive impact on employee innovative behavior. Research in non-hospitality fields suggests this relationship is moderated. For instance, De Clercq et al. (2011) report a stronger positive relationship between innovation and firm performance for higher levels of reported decision autonomy, trust, and organizational commitment. Although many of the introduced innovations in the hospitality sector incorporate technological aspects (e.g., online booking, self-check-in/out desks), the role of the employee is still at the core of the quality of provided service (Chand, 2010; Tsaor and Lin, 2004). The role of employees in service innovation efforts was acknowledged in previous studies (De Brentani, 1991; Ottenbacher and Gnoth, 2005; Ottenbacher et al., 2006; Storey and Easingwood, 1998) but attention to it is still modest considering the highly personalized service offered in hospitality sector (Ottenbacher et al., 2006). Ottenbacher et al. (Ottenbacher et al., 2006; Ottenbacher and Shaw, 2002) maintain that

hotels often offer similar ‘hardware’ leading to employees being the ultimate moderator for differentiating services. In assessing the performance of new services, they argue that HRM is an essential aspect to recognize.

Innovation entails introducing change. Change requires adjustments that may entail (among other things) competence development, re-skilling, and empowerment and it can be interpreted by the employees as either a threat (e.g., innovations that are intended to replace the workforce) or an opportunity (e.g., innovations that improve the performance of individual employees). Contextual factors, such as the HR practices in the organization, are important for the implementation of change. As articulated by Farquharson and Baum (2002), the role of HRM in change management is indispensable. The authors maintain that treating employees as valuable assets can bring the firm competitive advantage through high-quality skills, adaptability and commitment. For that to happen, employee training, satisfaction and empowerment are crucial.

Thus, it is suggested in this study that the innovation – customer satisfaction relationship varies depending on the profile of the organization concerning sustainable HRM. Specifically, in organizational environments where HRM practices nurture employee well-being and learning and competence development, employees are expected to be more willing to embrace introduced innovations and deliver the intended value for customers. Competence development is one aspect organizations use to empower employees (Spreitzer, 1995) since it prepares and supports them in their work role, and hence enable them to better perform their jobs. In contrast, in organizational environments that lack HRM practices that promote employee well-being and employee development, employees are expected to lack preparedness to carry out tasks associated with the introduced innovations.

Innovations and employees are viewed in this study as ‘complementary assets’ (Teece, 1986) – investment in one influences the other and together they have a synergetic effect on performance. Drawing on the resource-based view (Barney, 2001), physical, human and organizational resources are connected and unique assets. Viewed simultaneously as valuable, rare, imperfectly imitable and non-substitutable, these resources differentiate organizations from each other. So when these resources are effectively utilized they result in competitive advantage and high and sustained levels of organizational performance. Linking this reasoning to dynamic capabilities, Teece et al. (1997) define the term as the firm’s ability to integrate, build, and reconfigure internal and external competences to address rapidly changing environments. Dynamic capability is the capability of an organization to purposefully adapt an organization’s resource base. It involves, among other things, learning. As Teece et al. (1997) explain, the term ‘dynamic’ refers to “the capacity to renew competences so as to achieve congruence with the changing business environment” and the term ‘capabilities’ underlines “the key role of strategic management in appropriately adapting, integrating, and reconfiguring internal and external organizational skills, resources, and functional competences to match the requirements of a changing environment” (p. 515).

### 3. Method

#### 3.1. Participants

An online questionnaire was sent to a sample of hotels registered as members of the Swedish hospitality industry organization (VISITA). In total, 195 managers representing 195 organizations participated in the survey. Since this study focuses on hotels, participating hostels and camping establishments were excluded from the study. Thirty respondents represent hotels that belong to a chain. The average age of the respondents is 50, average industry tenure is 19 years, average organizational tenure is 10.3 years, while average position tenure is 9 years.

#### 3.2. Measures

Respondents’ answers on whether in the previous year the hotel produced service/product innovation, process innovation, marketing innovation and organizational innovation were coded 1 if the hotel produced this specific type of innovation (regardless of whether it was incremental or radical) and 0 if the hotel did not produce this type of innovation. The definition of these types was adapted from the Oslo Manual and included in the questionnaire. Innovation was measured by constructing a new variable ranging from 0 (did not produce any innovation type) to 4 (produced the four types of innovation). This approach has been used previously in hospitality research (Martinez-Ros and Orfila-Sintes, 2012). Hotels that reported at least one missing value on one of the four innovation types lacked a score on the constructed variable and thus were excluded from analyses involving innovation.

To the best of author’s knowledge, there is no validated scale for measuring sustainable HRM practices. So the construct was operationalized using two concepts comprising competence-related practices and employee relations practices. These may not cover the entire scope of sustainable HRM practices as proposed by scholars in the field but they do demonstrate practical examples that enable the organization to achieve its goals while reproducing its HR base (Ehnert, 2009; Ehnert et al., 2014; Ehnert et al., 2016; Hobelsberger, 2014; Kramar, 2014). So these two concepts are consistent with the theoretical underpinnings of sustainable HRM. Employee relations items were adapted from Nasution and Mavondo (2008). Three of the competence items were borrowed from Hurley and Huit (1998) and two from Nasution and Mavondo (2008). The competence measure exemplifies the regeneration discussion in sustainable HRM. The employee relations aspect of sustainable HRM reflects an organization’s concern for employee well-being and its motivation to attract and develop the HR base of the organization. Response options for all multi-item measures in this study were anchored from (1) strongly disagree to (5) strongly agree. Cronbach’s alpha for both measures exceeded 0.70.

Customer satisfaction was measured using average customer ratings from a major online website ([www.hotels.com](http://www.hotels.com)). The matched sample on this variable consists of 135 hotels.

Two other measures were collected to be used in the analyses as control variables. Respondents were asked if the hotel had a restaurant (1–yes, 0–no). Whether the responding hotel belonged to a chain was coded manually (1–yes, 0–no). Unlike independent hotels, chain hotels tend to have highly standardized HR practices to guarantee service standards (Tracey and Hinkin, 2008). Satisfaction with restaurant experience in hotels has a positive impact on overall customer satisfaction (Wu and Liang, 2009). Recent research shows that having a restaurant operation and membership in a chain impact a hotel’s likelihood to innovate (Wikhamn et al., 2018).

#### 3.3. Translation

All items were translated from English to Swedish. A researcher back translated the questionnaire. Modifications were made to adapt the items to the hospitality industry.

#### 3.4. Analysis

Before analyzing the data, responses were checked for outliers using the Mahalanobis distance test. The chi-square test with the threshold of  $p < .001$  was set as a criterion for identifying a case as an outlier. None of the cases qualified as outliers.

Mean values were calculated for the two multi-item concepts and used as single indicators in SPSS analysis. Prior to this step, confirmatory factor analysis was carried out. The measurement model with two latent variables and 9 items (5 loading on competence and 4 on employee relations, Table 1) has good fit ( $\chi^2 = 39.24$ ,  $df = 26$ ,  $CMIN/DF = 1.51$ ,  $CFI = 0.96$ ,  $RMSEA = 0.06$ ,  $p < .05$ ). The explorative

**Table 1**  
Sustainable HRM items.

Items	Loading
<b>Sustainable HR practices: Competence development (AVE = 0.51, CR = 0.76)</b>	
1. Employees in this organization are provided with clear career paths.	0.66
2. The hotel provides opportunities for individual development other than formal training (e.g., work assignments and job rotation).	0.68
3. The hotel encourages employees to attend formal developmental activities such as training, professional seminars, symposia, etc.	0.75
4. Career management is a shared responsibility of both employee and manager.	0.75
5. Extensive training programs are provided for individuals in our organization.	0.72
<b>Sustainable HR practices: Employee relations (AVE = 0.51, CR = 0.81)</b>	
1. We treat our employees as the most valuable resources within our organization.	0.76
2. Our hotel emphasizes the importance of having satisfied employees.	0.80
3. The hotel seeks to maintain a high level of employee motivation.	0.73
4. Employees receive effective feedback on their performance.	0.55

technique of two-step cluster analysis was first used to identify the structure within the data provided by the respondents. The aim of this step was to group the hotels into four profiles based on their responses to sustainable HRM items: low competence – low employee relations; high competence – low employee relations; high competence – high employee relations; and, low competence – high employee relations. Cluster membership was saved as a variable and used in consequent analyses. Various analyses of variance (GLM) were used to answer the stated research questions.

**4. Results**

Fig. 1 shows the four groups resulting from the two-step cluster analysis where hotels were grouped based on their engagement in sustainable HRM practices of competence and employee relations. Table 2 reports the mean and standard deviation of innovation and customer satisfaction in the four profiles.

Comparison of mean values for innovation and customer ratings between the four clusters was conducted using ANOVA. Levene’s statistics showed the assumption of homogeneity of variances was violated ( $p < .05$ ) so Welch’s test results were interpreted. The main effect of cluster affiliation on customer ratings was not significant ( $F[3, 52.56] = 2.07, p > .05$ ). These results were supported even after controlling for hotel membership in a chain and having a restaurant operation. In this univariate general linear model (GLM) analysis, cluster affiliation and the two control variables were inserted as fixed factors and customer ratings as the dependent variable. The F-test was not significant ( $F[3, 129] = 2.08, p > .05$ ), supporting no main effect of cluster affiliation on customer ratings. However, parameter estimates and mean comparisons indicate a significant difference between cluster 1 ( $M = 4.11$ ) and cluster 4 ( $M = 3.74$ ) at  $p < .05$ . This model,

**Table 2**  
Innovation and customer ratings in the four clusters.

	Cluster 1		Cluster 2		Cluster 3		Cluster 4	
	M	SD	M	SD	M	SD	M	SD
Innovation	2.76	1.46	2.46	1.67	1.66	1.65	1.56	1.59
Customer satisfaction	4.11	0.33	3.95	0.57	4.00	0.54	3.74	0.69

Note: N = 130 for innovation and N = 135 for customer satisfaction. The lower and upper bounds of the 95% confidence interval for the mean did not include a zero for any of the variables.

however, is not statistically significant ( $F[5, 129] = 1.32, p > .05$ ) and explains only 5% of the variance in customer satisfaction ( $R^2 = 0.05$ ).

The next step was to investigate if innovation has an impact on customer ratings. In this analysis, the same steps were followed but the cluster affiliation variable was replaced by innovation in the model (the two control variables were maintained). The main effect of innovation on customer ratings was significant ( $F[1, 126] = 4.68, p < .05$ ). However, this model was not statistically significant ( $F[3, 126] = 1.71, p > .05$ ) and it explained only 4% of the variance in customer satisfaction.

Although not stipulated as a research question in this study, the thought of testing if the clusters representing different profiles of engagement in sustainable HRM practices influence the extent to which hotels engage in innovation was intriguing. A new GLM univariate analysis of variance was conducted. Innovation was inserted as the dependent variable and cluster affiliation was inserted as the independent variable. Membership in a branded chain and the existence of a restaurant operation were added as control variables. The main effect of cluster affiliation was significant ( $F[3, 124] = 4.07, p < .01$ ) as was the main effect of chain affiliation ( $F = [1, 124] = 9.39, p < .01$ ) and having a restaurant operation ( $F[1, 124] = 7.29, p < .01$ ). Statistically significant differences ( $p < .05$ ) exist between cluster 1 ( $M = 1.97$ ) and cluster 3 ( $M = 1.07$ ), and between cluster 1 and cluster 4 ( $M = 0.60$ ). The estimated mean for cluster 2 ( $M = 1.61$ ) is also higher than the estimated mean of cluster 4 ( $p < .05$ ). No significant mean difference was found between cluster 1 and cluster 2. Hotels in cluster 1 (and cluster 2) have higher innovation involvement compared to clusters 3 and 4. The profiles of these two clusters are characterized by high competence development. Independent hotels (not members in a chain) and hotels with restaurants are more innovative than chain hotels and hotels without a restaurant operation ( $p < .01$ ). This model is statistically significant ( $F[5, 124] = 6.62, p < .001$ ) and explains 21% of the variance in innovation.

To investigate a possible interaction effect between sustainable HR practices and innovation on customer satisfaction, a different GLM model was produced. The cluster affiliation variable, innovation, and the two control variables were included in the model. Additionally, an interaction term between cluster affiliation and innovation was requested. Main effects for cluster affiliation ( $F[3, 120] = 5.83, p < .001$ ) and innovation ( $F[1, 120] = 6.34, p < .05$ ) were

Cluster 1 (30%) High Competence – High Employee Relations N=40	Cluster 2 (29%) High Competence – Low employee Relations N=39
Cluster 3 (29%) Low Competence – High Employee Relations N=39	Cluster 4 (13%) Low Competence – Low Employee Relations N=17

N=135

**Fig. 1.** Four profiles.

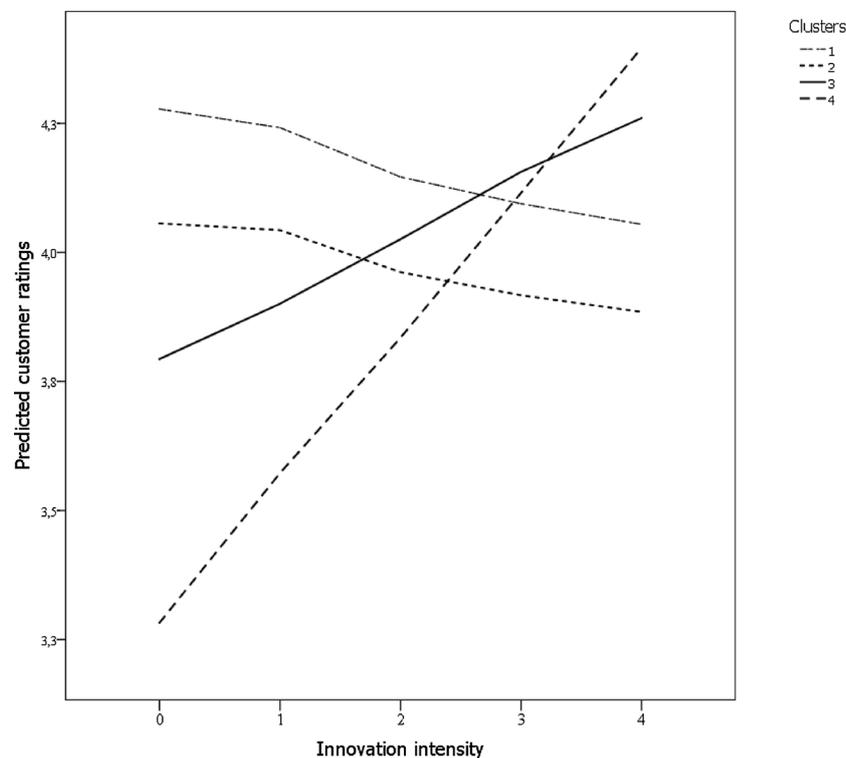


Fig. 2. Innovation and customer satisfaction in the four clusters.

significant. So was the interaction term of both ( $F[3, 120] = 5.59$ ,  $p < .01$ ). Membership in a branded chain and operating a restaurant were not statistically significant. Fig. 2 illustrates the innovation-customer satisfaction relationship as a function of the four sustainable HR practices profiles. The Y-axis represents the model's saved predicted values for customer satisfaction, the X-axis represents innovation, while the lines represent the four profiles. This model is statistically significant ( $F[9, 120] = 3.05$ ,  $p < .01$ ) and explains 19% of the variance in customer satisfaction.

Focusing on organizations with less involvement in innovation, the findings suggest that hotels with high focus on sustainable HR practices are likely to have more satisfied customers than hotels that have little focus on sustainable HR practices. To test if these differences are significant, mean values of customer satisfaction for the four clusters were compared for those hotels that produced 2 or fewer innovation types (approximately 50% of the respondents fall into this category). Results from ANOVA analysis support significant differences between the clusters for those hotels ( $F[3, 63] = 4.40$ ,  $p < .01$ ). Because sample sizes are not equal, the Games-Howell post-hoc test was used to investigate these differences. A significant difference between cluster 1 ( $M = 4.21$ ) and cluster 3 ( $M = 3.82$ ) was found at  $p < .05$ . Cluster 2 has a lower mean value than cluster 1, cluster 3 has a lower mean value than cluster 2, and cluster 4 has the lowest value of all. These differences are, however, not statistically significant according to Games-Howell comparison. For hotels that engaged in three or four innovation types, the four clusters do not differ from each other ( $F_{\text{Welch}}[3, 15.57] = 2.02$ ,  $p > .05$ ).

## 5. Discussion

The purpose of this paper is to explore how sustainable HRM practices impact the relationship between innovation production and customer satisfaction. Various analyses of variance show the model that explains the variance in customer satisfaction is the interactional one. Results based on responses from hotel managers suggest that both sustainable HR practices and innovation have direct and positive effects

on customer satisfaction. These findings are consistent with previous research in the hotel sector emphasizing the impact of HRM (Chand, 2010; Choi and Chu, 2001; Dhar, 2015; Mohamed, 2016; Tsaour and Lin, 2004) and innovation (Hall and Williams, 2008; Hjalager, 2010; Tsai, 2017) on non-financial organizational performance. The study also reports evidence of a positive role of sustainable HRM in a hotel's involvement in innovation. Surprisingly, the interaction between sustainable HR practices and innovation indicates that hotels can achieve superior customer satisfaction through two approaches: emphasis on sustainable HR practices or emphasis on innovation production. These findings are unexpected: instead of complementing each other with an overall synergic effect, sustainable HR practices and innovation seem to substitute each other in explaining customer satisfaction. How can this be explained?

The study shows the impact of sustainable management of employees is most beneficial for less innovative hotels. For accommodation firms involved in between zero and two innovation types, most satisfied customers are those staying at hotels belonging to cluster 1 (high competence, high employee relations) and cluster 2 (high competence, low employee relations). Hotels in cluster 3 (low competence, high employee relations) receive a lower score of customer satisfaction while organizations in cluster 4 (low competence, low employee relations) have the lowest satisfaction score. In line with Teece et al. (1997), learning (described in this study as competence development at the individual level) is a process that improves performance. Cluster 1 and cluster 2 have hotels that score high on competence development. Using Teece et al. (1997) framework of dynamic capabilities, through repetition, experimentation and the identification of new opportunities, employees will be more able to do tasks better and more quickly. Organizational knowledge will be translated into routines (i.e., patterns of interactions that have proved successful). Also, consistent with the resource-based view (Barney, 2001), the findings show that employees are an important resource for achieving organizational goals and gaining organizational success.

Organizations that are involved in three or four types of innovation seem to have satisfied customers, irrespective of their sustainable HRM

orientation. This is interesting as it may imply that, for highly innovative hotels, the interaction between innovation and sustainable HR suppresses customer satisfaction variability, suggesting the two are independent. These results may also suggest that certain innovation types may reduce the need for sustainable HR practices (e.g., training).<sup>1</sup> Among hotels involved in more than two innovations, process and organizational innovations are very common in clusters 3 and 4 (low competence development focus).

The results bring a major question to the forefront: why should hotels innovate in the first place if they can achieve equally superior customer satisfaction via investments in people (and vice versa)? Innovation in the hospitality sector is important for economic survival and growth (e.g., Binder et al., 2013; Orfila-Sintes and Mattsson, 2009; Ottenbacher, 2007). Considering the increased competition from various internal (within the hotel sector) and external (e.g., Airbnb, HomeToGo, HomeAway, etc.) hospitality actors, and the changing business environment (customer preferences, IT development, and institutional demands) it is imperative for hotels to innovate. Sustainable HR practices are also crucial. The positive association between sustainable HR practices and innovation indicates the former is important for the latter. Results from this study support previous research emphasizing the role of HRM in producing organizational innovation (Lin and Sanders, 2017; Ottenbacher and Gnoth, 2005; Ottenbacher et al., 2006; Shipton et al., 2017). It is crucial to point out that although HRM and innovation are both positively related to customer satisfaction, prior research indicates that innovation has a direct impact on financial performance (Lin, 2013; Mattsson and Orfila-Sintes, 2014; Nicolau and Santa-María, 2013; Orfila-Sintes and Mattsson, 2009). This direct impact of innovation is beyond that generated by non-financial performance (see for example Chen et al., 2009). So, firms striving after innovation need to invest in people. The discussion is not either/or.

Sustainable HR practices impact customer satisfaction. The implemented HRM practices shape employee-customer interactions, especially in the service sector where employees have a direct encounter with the clients. Perceived as a unique resource, employees are the ‘doers’ in organizations, they are the ones carrying out stated strategies to achieve organizational goals. More importantly, unlike other resources, employees (and how they interact with customers) are one resource that competitors find difficult to copy. In other words, viewed as such, employees are a competitive advantage (Ottenbacher, 2007).

Drawing on HRM’s key role in innovation production, investing in regenerating employees’ competence and caring about their well-being is certainly not a waste of financial resources. Such a decision may constitute a dilemma for hotel managers because the hospitality sector has a high employee turnover rate (Davidson et al., 2010; Iverson and Deery, 1997). However, employees are the most critical aspect of innovation in hospitality (Farquharson and Baum, 2002; Ottenbacher and Shaw, 2002). They are the ones shaping customer experiences (Tsaor and Lin, 2004).

Investing in employees’ competence and well-being is one aspect of adapting and reconfiguring an organization’s resource base to align with the changing environment (Teece et al., 1997). Equally important, it constitutes one part of integrating sustainability work in practice. Having sustainable HR practices is important for a hotel’s stakeholders (customers, communities, employees, interest groups, etc.) and its image as a socially responsible actor (Jamali and Dirani, 2013; Järnlström et al., 2016). Achieving organizational sustainability goals entails working with the social aspect of sustainability as well.

The theoretical contributions of this study are multifold. First, it contributes to the emerging field of sustainable human resource management (Ehnert et al., 2014; Järnlström et al., 2016; Kramar, 2014; Mariappanadar and Kramar, 2014) by exploring how this notion can

function in a labor-intensive sector. It also addresses the neglected link in research between CSR and HRM (Hall and Brown, 2006; Voegtlin and Greenwood, 2016). Second, the vast majority of research on the relationship between innovation and organizational performance suggests that innovative organizations perform better. This study shows that, at least in the hotel industry, this relationship is not as simple. The notion of ‘complementary assets’ (Teece, 1986) in this context is worth further scholarly attention. Indications that resources can substitute each other (or compensate for the lack of ‘the other’) to achieve superior non-financial performance are found in this study. Third, the study raises an overlooked tension between tangible and intangible resources leading to organizational competitive advantage (Barney, 2001). Hotels, like other organizations, have limited financial resources and the decision to invest in for instance machines, networks, or people is driven by economic rationalism. This study presents evidence supporting previous arguments from non-hospitality research (e.g., Branco and Rodrigues, 2006) making a business case for engaging in CSR activities, such as investment in employees and their well-being.

For hotel managers, the findings show that investing in employees and their well-being is key for both innovation and customer satisfaction. A firm’s competitive advantage hinges on its ability to meet the expectations of its stakeholders, including involvement in CSR initiatives. Investing in employee learning and well-being is one approach to show the firm’s response to stakeholders’ expectations. It is beneficial for employer branding. By focusing on employee well-being and competence development, hotels expand their sustainability work beyond ecological and economic concerns and contribute to the balance needed to achieve sustainability goals. Finally, innovation demands a stock of knowledge. Employees are a valuable knowledge resource.

As with any research, this study has limitations. First, convenience sampling approach was used to approach study participants. Convenience sampling is useful for exploring potential realities but its research findings cannot be used for generalization. Second, the question about innovation targeted the “previous year”. The employed time span can be short. Nonetheless, introducing innovations is commonly a continuous process in a rapidly changing business environment. The elapse of a year without introducing at least one improvement in any of the four innovation types (services/products, processes, organizational methods, and marketing) does indicate low innovativeness. Third, mean value comparisons between groups are based on unequal sample sizes (especially cluster 4). Attempts have been made to adjust for this shortcoming using the Games-Howell post-hoc approach. Fourth, a single score reflected customer satisfaction. This concept is multi-dimensional (customers can be satisfied with various aspects of the experience). Nonetheless, being obtained from a second source (i.e., not the manager’s own subjective judgment on behalf of customers) is a strength that outweighs this shortcoming. Finally, sustainable HRM is an emerging construct and there is no validated scale for measuring it. The selection of competence development and employee relations as two aspects is motivated by the theoretical framework. Admittedly, though, the construct encompasses other aspects that the study did not touch upon.

The findings of this study raise several questions for future research. First, in practice sustainable HR practices may differ from one industry to another. Specific comparative studies are thus encouraged in order to advance the field. What sustainable HRM practices do industries have in common? Second, how can people management in the hospitality sector be more sustainable? Specifically, how do the social and economic consequences in the tourism industry relate to each other? It is noteworthy to study how structural issues such as temporary, part-time and ‘low-skilled’ labor can manifest themselves in sustainable HRM studies, particularly the resulting tension between societal and economic aspects. Third, the Swedish context has unique institutional regulations that generally promote workforce competence development and health. In line with previous scholarly work linking sustainable HRM in tourism with societal contexts and policies (Baum, 2018), it is

<sup>1</sup> Special thanks to an anonymous reviewer for this idea.

of great interest to study whether, and the extent to which, national laws and regulations influence sustainable HRM in this sector. Finally, this study investigates the stated questions from the employer's perspective. Future research is encouraged to investigate if sustainable HR practices perceived by employees are similar to those reported in this study.

**6. Conclusion**

Customer satisfaction, innovations and sustainable HRM are all important aspects in the service sector. By investing in employee

competence and well-being (as two dimensions in sustainable HRM) hotels make a business case for engaging in CSR and increase own chances to be innovative and responsive to customer needs.

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**Appendix A. Innovation measure**

*Innovation measure*

An innovation is the introduction of a new or significantly improved product, process, organizational method, or marketing method by your enterprise. An innovation need only be new or significantly improved for your enterprise. It could have been originally developed or used by other enterprises.

A **product innovation** is the market introduction of a new or significantly improved good or service with respect to its capabilities, user-friendliness, components or sub-systems. Product innovations (new or improved) must be new to your enterprise, but they do not need to be new to your market. Product innovations could have been originally developed by your enterprise or by other enterprises or institutions.

A good is usually a tangible object such as a smartphone, furniture, or packaged software, but downloadable software, music and film are also goods. A service is usually intangible, such as retailing, insurance, educational courses, air travel, consulting, etc.

A **process innovation** is the implementation of a new or significantly improved production process, distribution method, or supporting activity.

An **organizational innovation** is a new organizational method in your enterprise's business practices (i.e. supply chain management, business reengineering, knowledge management, lean production, quality management, etc.), workplace organization (i.e. first use of a new system of employee responsibilities, team work, decentralization, integration or de-integration of departments, education/training systems, etc.) or external relations (i.e. first use of alliances, partnerships, outsourcing or sub-contracting, etc.) that has not been previously used by your enterprise. It must be the result of strategic decisions taken by management. Exclude mergers or acquisitions, even if for the first time.

A **marketing innovation** is the implementation of a new marketing concept or strategy that differs significantly from your enterprise's existing marketing methods and which has not been used before. It requires significant changes in product design or packaging, product placement, product promotion or pricing. Exclude seasonal, regular and other routine changes in marketing methods.

Please tick the box in each column to indicate "Yes".

	a) ... New or significantly improved to your market? The hotel was first in the hospitality market before competitors (it may have already been available in other markets)?	b) ... New or significantly improved only to the hotel (existed in the hotel market)?	c) None
Were any of hotel's service/product innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were any of hotel's process innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were any of hotel's organizational innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
Were any of hotel's marketing innovations	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

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