



Customer engagement in service innovation: effects on tourism firms' recovery from Covid-19 crisis

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Abstract

Purpose of the paper: To recover from the Covid-19 crisis, tourism firms had to quickly introduce effective service innovations to accommodate their customers' changed attitudes and behaviours and to adapt to the changed scenario. Drawing on these premises, this study examines the effects that customer involvement in service innovation had on tourism business performance in the context of the Covid-19 pandemic crisis. In detail, this work suggests a model which explains the direct and indirect mechanisms through which customer involvement in service innovation positively impacts tourism firms' recovery.

Methodology: Data were collected through a questionnaire-based survey among a sample of Italian agritourism firms. Data were then analysed through Partial Least Squares Structural Equation Modeling (PLS-SEM) to provide a prediction-oriented model assessment.

Main Findings: The findings highlight that firms that more intensely involved their customers in service innovation were able to better recover from the Covid-19 crisis. The findings also clarify that this positive effect is partially mediated by mutual affective commitment between the firm and its customers.

Practical implications: This study suggests the importance of customer involvement to develop successful innovations in tourism firms' offerings to recover from the Covid-19 crisis. It also indicates that customer involvement strengthens the emotional bond between the firm its customers, thus emphasizing the positive effects on firm performance.

Originality/value: This study provides new evidence to enrich the literature about the role of customer involvement in service innovation and relates it to firm's performance in recovering from the Covid-19 crisis.

Type of paper: Research paper

Keywords: Customer engagement, emotional engagement, involvement, service innovation, performance, Covid-19

1. Introduction

The Covid-19 pandemic has caused significant disruptions in the tourism industry. The most recent estimations of the United Nations World Tourism Organization indicate that between January and May 2021 international tourism arrivals were still 85% below 2019 levels and that 49% of tourism experts think that they will return to the pre-pandemic levels in 2024 or later (UNWTO, 2021). While many tourists have reoriented their preferences from foreign destinations to domestic destinations, the quicker recovery of domestic tourism can only partially compensate for the huge drop in international arrivals. For example, a recent analysis about the Spanish tourism industry predicts that domestic tourism and the reorientation of outbound tourism could contribute to generate approximately 35.6% of the overall pre-crisis overnight stays (Arbulú *et al.*, 2021).

The impacts of this crisis on tourism businesses have been dramatic, because of the low demand combined with high fixed costs. Available studies among hospitality businesses demonstrate that when revenues drop by 60%, 25% of these businesses experience financial distress (Crespí-Cladera *et al.*, 2021). To face the crisis, tourism businesses have introduced multiple changes in their strategies, including organizational, marketing, technological and service delivery innovations. For example, in the hotel industry, product-process, organizational, and marketing innovation have shown positive effects (Sharma *et al.*, 2021). The list of interventions adopted by tourism firms encompasses for example cutting costs, providing new services, implementing sanitary actions, reorientating the focus to the national market, introducing customization strategies, reducing prices and many others (Hidalgo *et al.*, 2021).

Available evidence shows that in 2020 tourism businesses prioritize more customer loyalty than economic performance and that organizational changes and marketing measures had positive effects on customer loyalty. On the contrary, cost cutting interventions –such as discontinuing some services or cancelling expansion plans– did not have any effect on customer loyalty but were negatively associated with economic performance (Magno and Cassia, 2021). Retaining customers during the crisis was extremely important but challenging (Yu *et al.*, 2021). In particular, customer expectations, perceptions and behaviours significantly changed and continued to evolve during the crisis and tourism businesses had to deeply understand them and adapt their service offering and service provision consequently (Hu *et al.*, 2021).

A solution to better understand evolving customers' needs is to involve customers in service innovations. Available studies suggest that such open innovation practices are not yet widespread in the hospitality industry but they can be valuable during 'normal times' and can be even more valuable during 'times of crisis' (Breier *et al.*, 2021). However, prior research has not yet studied the effects of customer involvement in service innovation on tourism businesses' performance in times of crisis, specifically in the context of the Covid-19 crisis. In this study, we address this gap by presenting and testing a model that links customer involvement in service innovation to service innovation outcomes and tourism businesses' performance.

In the following paragraph we outline an overview of the theoretical background and introduce the research model and hypotheses. Then, the methods will be explained and the results will be described. Finally, the research implications will be discussed and the conclusions will be drawn.

2. Theoretical background and research model

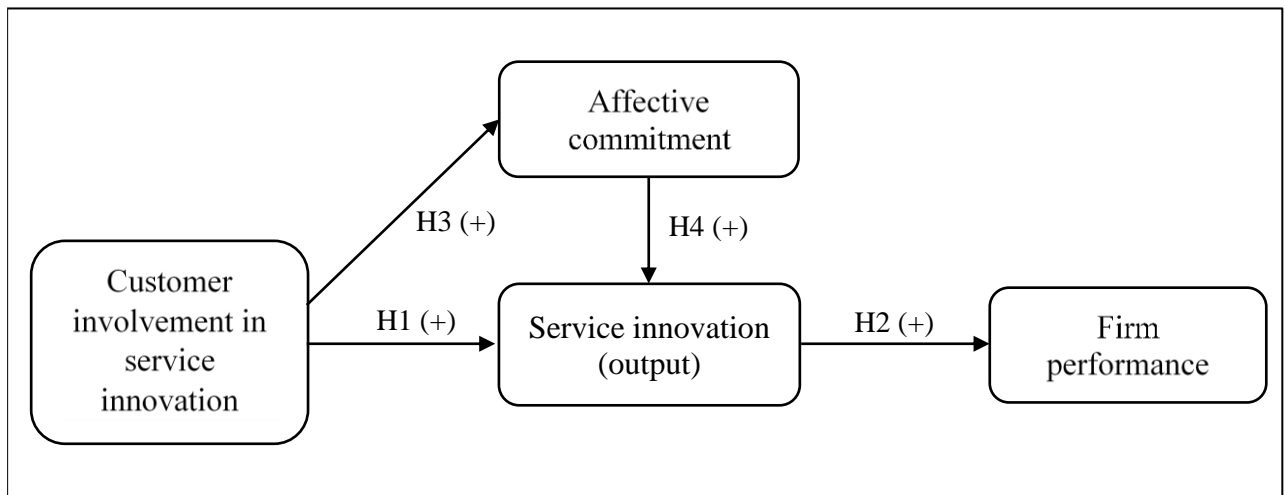
In tourism research, innovation is commonly defined as ‘everything that differs from business as usual or which represents a discontinuance of previous practice in some sense for the innovating firm’ while service innovation is conceptualized as ‘changes directly observed by the customer and regarded as new; either in the sense of never seen before, or new to the particular enterprise or destination’ (Hjalager, 2010, p. 2). There is also established awareness that innovation is a strong driver of tourism firms’ performance (Tajeddini, 2010). Several studies have investigated the knowledge sources which contribute to innovation in tourism and hospitality firms, emphasizing the role of customers, employees and suppliers. These contributions have been conceptualized through the open innovation paradigm, according to which the firm collects and incorporates external inputs through outside-in processes (de Larrea *et al.*, 2021).

In this study, we specifically focus on customer involvement in the service innovation of tourism firms to recover from the Covid-19 crisis. Customer involvement is a distinct concept from value co-creation. Specifically, it refers to customer participation to ‘design, definition, creation, completion [...] of firm output’ and is relatively optional to value co-creation (Vargo and Lusch, 2016, p. 8). In other words, value co-creation does not necessarily require customer involvement.

Recent work suggests that incorporating guests’ inputs can be particularly valuable during crises to keep up with rapidly changing external conditions (Breier *et al.*, 2021; Chesbrough, 2020). However, prior research has not yet examined the impacts of customer involvement in service innovation on tourism firms’ recovery from the Covid-19 crisis.

In this work we address this gap and we also consider the use of social media to support outside-in flows of inputs and suggestions from customers. In fact, customer involvement in service innovation processes requires the establishment of effective channels of communication and social media can successfully play such a role in the tourism context (Iglesias-Sánchez *et al.*, 2020). The model (Figure 1) clarifies the mechanisms linking customer involvement in service innovation to firm performance.

Fig. 1 - The research model



Source: our elaboration.

First, customer involvement directly enhances service innovation output by providing inputs and ideas to the firm (hypothesis 1) and, in turn, service innovation increases firm performance (hypothesis 2). Additionally, customer involvement acts through psychological mechanisms fostering customer affective commitment to the firm. Affective commitment indicates an emotion-based predisposition between the firm and its customers (Claffey and Brady, 2019). Based on such commitment the parties care about reciprocal wellbeing. Hence customers are likely to put more efforts to provide useful inputs for service innovation. Therefore, customer involvement will positively affect affective commitment (hypothesis 3) which will enhance service innovation outputs (hypothesis 4). In other words, we suggest that affective commitment will partially mediate the relationship between customer involvement in service innovation and firm performance.

3. Methods

A cross-section research design was adopted and data were collected through a questionnaire-based survey among a sample of Italian agritourism firms. According to the Italian law, agritourism is defined as (Santeramo and Morelli, 2014, p. 34) “accommodation and hospitality activities carried out by farmers [...] through the utilization of their own farm in connection with the activities of cultivation of the land, of silviculture, and of the raising of animals”. The questionnaire was sent to a sample of 737 agritourism firms in October-November 2020, when the 2020 summer season was ended. The sampling list was created by applying a geographical criterium to the population of slightly less than 25,000 Italian agritourism firms, of which 10,689 are located in the North of Italy, 9,108 in the Centre, 4,779 in the South (including Sardinia and Sicily) (Istat, 2020). Overall, 164 usable answers were received. Table 1 provides an overview of the sample.

Table 1 – Sample description

Variables	Frequencies (n = 164)
Year of establishment	
2016-2020	24
2010-2015	44
2000-2009	59
1990-1999	27
<1990	10
Firm size (in hectares)	
< 2	5
2 – 2.99	6
3 – 4.99	16
5 – 9.99	38
10 – 19.99	31
20+	68
Number of agritourism firms offering the following services:	
Accommodation	137
Restaurants services	88
Educational activities	37

Source: our elaboration.

All the constructs were measured reflectively, drawing on existing conceptualizations and scales (Alonso-Almeida *et al.*, 2015; Buhalis and Sinarta, 2019; Chen *et al.*, 2017; Claffey and Brady, 2019; Tu *et al.*, 2018). The questions were specifically referred to agritourism firms' actions, perceptions and performance during the Covid-19 crisis. Customer involvement in service innovation was measured through seven items reflecting agritourism firms' listening to, and search for ideas and inputs from customers through social media, encompassing the co-design in the adaptation/customization of existing services and in the creation of new services. Service innovation output was measured by five items covering the introduction of new services, sales and communication channels, ways of providing and customizing services. The three items measuring affective commitment described the emergence of intimacy and concern for reciprocal wellbeing in firm-customer relationships supported by social media. Finally, for performance, respondents reported a comparison of their firms' 2020 sales, growth and profits compared to 2019. For all constructs, 5-point agreement-disagreement scales were used, with the exception of performance for which the extremes of the scale were 1 = very poor; 5 = outstanding.

The analysis focused on predictive model assessment. In other words, beyond understanding the significance and relevance of the structural relationships, we were interested in evaluating the model's out-of-sample predictive power, that is its ability to predict data not included in the model estimation. Therefore we relied on Partial Least Squares Structural Equation Modeling (PLS-SEM) (Hair *et al.*, 2020; Shmueli *et al.*, 2019).

4. Results

The measurement models of the constructs were first examined by considering indicator loadings, internal consistency reliability, convergent validity and discriminant validity (Hair *et al.*, 2019). All outer loadings were greater than 0.70, with the exception of two loadings which were nonetheless well above 0.60 (they were equal to 0.67 and 0.68, respectively). Internal consistency reliability was also satisfactory because all constructs' Cronbach's alpha values,

composite reliability values and exact reliability values ρ_A were greater than 0.70. In addition, the average variances extracted (AVEs) were greater than 0.50 and the heterotrait-monotrait ratios of the correlations (HTMT) were below 0.85 and significantly different from 1. Therefore, convergent and discriminant validity were met, as well (Hair *et al.*, 2020).

The assessment of the structural model was based on the bootstrapping routine (5,000 subsamples, bias-corrected and accelerated bootstrap, two-tailed test). Table 2 provides the detailed results of the estimations of the direct effects and Figure 2 summarizes the model estimations.

Table 2 – Bootstrapping results

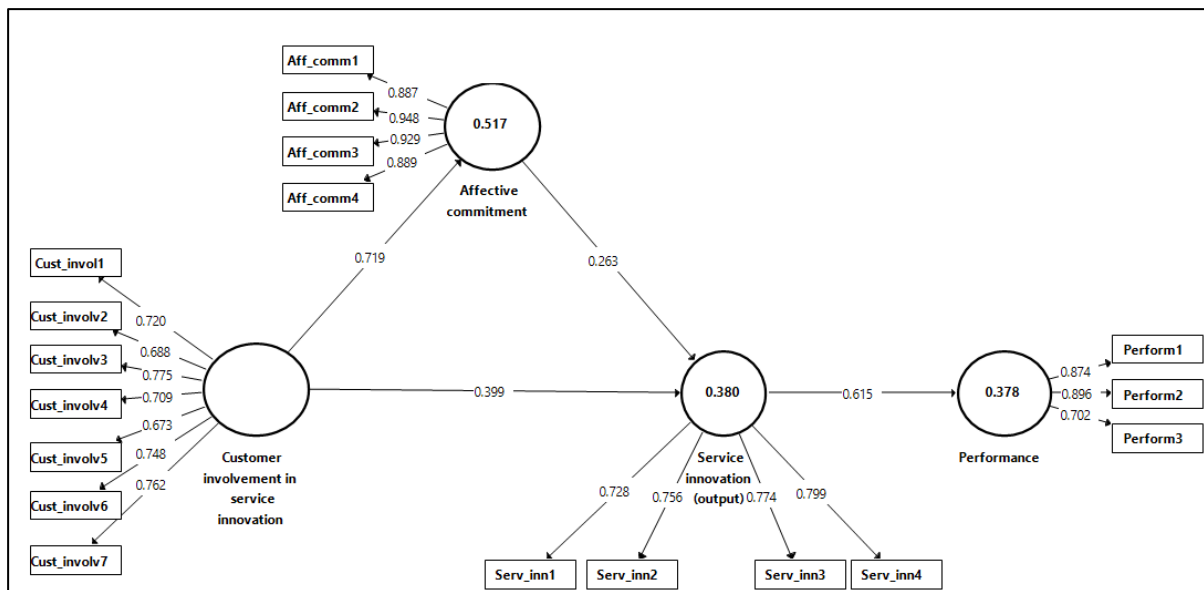
	Original Sample (O)	Sample Mean (M)	Standard Deviation (STDEV)	T Statistics (O /STDEV)	P Values
Affective commitment -> Service innovation (output)	0.263	0.262	0.095	2.767	0.006
Customer involvement in service innovation -> Affective commitment	0.719	0.723	0.027	26.990	0.000
Customer involvement in service innovation -> Service innovation (output)	0.399	0.399	0.090	4.449	0.000
Service innovation (output) -> Performance	0.615	0.618	0.044	14.090	0.000

Source: our elaboration.

Before examining the structural paths, we checked that the Variance Inflation Factor values for the predictor constructs in the structural model were below the level of 5. After that, we evaluated the structural model relationships. As shown in Table 2, all the paths were statistically significant at the $p < 0.01$ level and positive, thus revealing that all the hypothesized effects (Figure 1) were supported by data. In addition, to evaluate the suggested mediating effect of affective relationship we considered the specific indirect effect linking customer involvement to performance through affective commitment and service innovation output. The bootstrapping results indicated that this effect was significant (t value = 2.529 and p value < 0.05), thus confirming that affective commitment acted as a partial mediator.

We continued the analysis of the structural model by assessing the in-sample predictive power. The R^2 values for service innovation and performance were respectively 0.38 and 0.37, highlighting good in-sample predictive power. The out-of-sample predictive power was judged on the basis of the Q^2 values using the blindfolding procedure. All Q^2 values were largely above 0, confirming that the model had good out-of-sample predictive power.

Fig. 2 – Model estimations



Source: our elaboration.

5. Discussion and conclusions

The findings of this study showed that agritourism firms that were able to involve their customers more intensely in service innovation were able to obtain higher performance during the Covid-19 crisis. Therefore, customer involvement in innovating the services offered by agritourism firms worked as a valuable solution to recover from the Covid-19 crisis. In particular, the paper considered social media as the communication channel through which such involvement was implemented.

The analysis also clarified the mechanisms through which customer involvement in service innovation affected firm performance. In detail, both direct and indirect effects were identified. The direct effect indicates that the stronger the customer involvement in service innovation the better the output in service innovation. In other words, higher customer involvement led to more ideas and inputs to innovate the existing offering, which positively influenced the overall firm performance. The indirect effect sheds light on different, psychological effects. In this case, stronger customer involvement stimulates customers' affective reactions. The resulting emotional bond between the firm and its customers stimulates both parties' concern for the mutual well-being. Therefore, customers are more willing to provide more ideas and inputs, which results in higher service innovation and, in turn, in higher firm performance. Therefore, as highlighted by the partial mediation effect found in the study, the direct and the indirect mechanisms are complementary.

Despite the validity of the findings, some limitations and unanswered questions should be remarked. This study only considered agritourism firms which, differently from other types of tourism firms, could also draw on large spaces and open-air activities to innovate their offering. In addition, in many cases agritourism firms rely on a significant percentage of local and loyal customers, which may have facilitated successful customer involvement in service innovation as well as the overall recovery from the Covid-19 crisis. Therefore, extending the same study to other types of tourism firms may be valuable to enrich our understanding of the impacts of customer involvement in service innovation. Moreover, this study is based on data collected only from firms. Future studies could also evaluate customers' perceptions about their

involvement in service innovation. Finally, it may be interesting to understand how (and with what outcomes) customer involvement in service innovation could be institutionalized by agritourism firms also after the Covid-19 crisis.

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