

eWOM platforms as productivity catalyzers for travel agencies: a two-stage double bootstrap data envelopment analysis

Abstract

The travel industry, and in particular travel agencies, face a severe challenge to increase productivity. In a fast-paced digitalization context, embracing ICTs to tackle this challenge should be part of COVID-19 recovery strategies. Electronic word of mouth (eWOM) could allow better learning processes, improve communication with customers, and serve as a remarkable diffusion channel. However, this channel is not yet fully embraced by the sector. This research, delimited to Spanish travel agencies in the period 2012-2019, applies a two-stage double bootstrap data envelopment analysis to assess whether eWOM and how firms manage eWOM, contributes to achieving higher levels of efficiency. Results show that firms with higher valence and volume of online reviews tend to be closer to the efficiency frontier. Moreover, results show that proactively managing eWOM, by asking customers for their online reviews, answering to negative reviews, doing so promptly, as well as investing in eWOM, positively and significantly contributes to achieving higher levels of efficiency.

INTRODUCTION

Back in 1995, Amazon began letting their users post reviews on their purchases online, which soon became one of the flagships of the e-commerce titan. The helpfulness of electronic word of mouth (eWOM) and user-generated content (UGC) goes without question. 78% of United States' e-commerce customers declared that online reviews of products played a major role in their decisions (Hong & Pittman, 2020). From a demand perspective, learning what other individuals think of a product, service, or company is very valuable in the decision-making process (Senecal & Nantel, 2004). But from a business perspective, receiving feedback on the product, service or operation is essential to raising clients' satisfaction, improving processes, and ultimately, achieving higher levels of productivity.

The objective of this research is, therefore, to examine to what extent eWOM contributes to increasing the productivity of companies, in particular for travel agencies. The main hypothesis is that eWOM contributes to increasing the productivity of firms for two reasons. First, by increasing the trust of consumers in given products, services and/or companies. Second, by giving firms the chance to detect opportunities for improvement and to engage in a deeper relationship with their customers by proactively managing eWOM.

LITERATURE REVIEW

Every day, new user-generated content (UGC) is posted online. Some of this content consists of opinions on products and services and is therefore considered Electronic word of mouth (eWOM). This concept is defined as pronouncement either positive, neutral, or negative, about a product or service made posted online by an individual and shared with other potential customers (Hennig-Thurau et al, 2004). The most structured channel through which eWOM actually takes form is online reviews (ORs).

To this day, most studies on eWOM have focused on customers' behaviour, and in particular, how it influences tourist decision-making processes (Hernández-Ortega et al, 2020). However, fewer studies have analyzed the impact of eWOM on businesses' performance (Schuckert et al, 2015; Phillips et al, 2016). Of the latter, most research in the travel industry has focused almost exclusively on the hospitality sector, overlooking the importance these channels have to the rest of the travel industry players (Sann et al, 2020b).

In regards to the impact of eWOM on businesses performance, previous research has confirmed this is heavily dependent on the category of the product (Lee et al, 2011). For services, since customers have fewer ways of pre-assessing its quality, they find an increased value in using these communication channels as ways to reduce the pre-purchase doubts (Litvin et al, 2008; Pourfakhimi et al, 2020). The existing literature on eWOM has identified that valence (rating of reviews), variance (dispersion of reviews according to the rating) and volume (quantity of reviews) have a direct impact on the customers' decision-making processes, and ultimately, on firms' productivity or performance (Magnani, 2020; Mariani & Borghi, 2020).

There is an increasing number of companies that are realizing the need to join the online conversation on their products and proactively manage eWOM. However, while some companies perceive responding to eWOM better to be done as discreetly and privately as possible, other companies choose to answer publicly so as to engage in a deeper relationship with clients (Park & Allen, 2012). Previous research has identified that the presence of management responses increases reviews' helpfulness (Cox et al, 2009), and has a positive impact on the volume of subsequent content (Chen et al, 2019). What is more, it was identified that management responses tend to positively impact the firms' performance (Xie et al, 2014).

Although most literature recommends companies to include eWOM as a business strategy (Cox et al, 2009; Herrero et al, 2015; Zhang et al, 2020), these recommendations seem to drift from the actual use of eWOM by travel businesses. Only 11,05% of companies identified as part of the Spanish Travel Industry in Trustpilot request their customers to share their experiences with other potential customers. And just 12,37% of firms reply to customers who have shared a negative experience. The travel industry might be missing an opportunity.

METHODS

This work intends to explore whether eWOM platforms may help travel companies increase their productivity in two ways. First, by employing eWOM as a peer trusted diffusion channel. Second, by allowing companies to proactively manage eWOM to improve their processes.

This research applies, as a first-stage, the Data Envelopment Analysis (DEA) to assess travel agencies' efficiency, as well as to analyze the contribution of eWOM and eWOM management to achieving higher levels of efficiency. Here, labour and capital are considered the main inputs, with turnover as the main output. Complementing the DEA, this research employs the method proposed by Simar and Wilson (2007) to double bootstrap DEA scores in a truncated regression, which allows incorporating explanatory variables into the analysis

of efficiency scores. As such, variables as human capital, age, innovation, and foreign ownership were included, together with the eWOM specific variables.

Information on individual firms was obtained through the Orbis database. This dataset was complemented by information scrapped from the UGC platform Trustpilot regarding the online reviews on each firm, as well as on how those companies manage the eWOM.

This research is delimited to Spanish travel agencies in the period 2012-2019.

FINDINGS

Results on the DEA have shown that travel agencies that have a higher valence, or overall qualification, tend to be closer to the efficiency frontier. In line with this, travel agencies that have high volumes of online reviews are also on average twice as efficient as those with few reviews. Regarding how travel agencies manage eWOM, the data envelopment analysis has shown that firms that proactively manage eWOM tend to be considerably closer to the efficiency frontier.

These results were further confirmed by the second stage bootstrapped regression, which revealed a positive and significant impact of asking customers for their ORs on travel agencies' efficiency. Also, answering publicly to negative ORs has a positive and significant impact on firms' efficiency, and firms that do so tend to be, on average, twice as efficient as those that don't engage in eWOM communication. These results are even more evident when travel agencies quickly respond to the negative ORs. Doing so in a prompt manner also contributes positively and significantly to achieving higher levels of efficiency, and firms that do so tend to be almost three times as efficient as those that don't reply quickly to negative ORs. Last, results also showed that firms that decide to invest in eWOM, such as those that pay to access further functionalities in the eWOM platforms, also tend to be considerably closer to the efficiency frontier.

IMPLICATIONS

Since this research has focused on efficiency at the firm level, most implications rely on the managerial level. First and foremost, the data envelopment analysis has shown that there is still great room for optimizing efficiency in the sector. This challenge must be faced by an arsenal of actions, to which eWOM should be a pillar. Understanding client satisfaction, the services' aspects for improvement, as well as detecting the firms' key perceived benefits by customers can be done by proactively managing eWOM. Not only that travel agencies must be vigilant to the ORs as a marketing and diffusion channel, but they should also systematize customer relationship management actions. This includes, but is not limited to, asking users to share their opinions online (whether positive or negative), implementing claim solving processes on eWOM platforms and answering (fast) to negative experiences shared online. This will help capitalise on the learning opportunities raised by eWOM and reach a more extensive audience.

CONCLUSIONS

In a fast-paced digitalization global environment, travel agencies face a severe challenge to optimize their performance. In this context, ICTs can help travel agencies improve their performance by allowing for better learning processes from their customers, as well as by opening new communication channels with them. This research has confirmed that eWOM, and proactively managing it, positively and significantly contribute to achieving higher levels of performance for travel agencies.

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