

EXPANDED ABSTRACT

Use and efficiency of social media. An analysis from the social economy

Introduction

Co-operative societies have not been untouched by the social and technological phenomenon that has exploded online throughout the beginning of the century, which has connected millions of people and has had an undeniable impact on society. We are, of course, talking about online social networks. Specifically, we focus on the organic products sector, which is also becoming of increasing importance to society, as reflected by the continuous development of the market and that of olive oil, in which Spain holds a position of some importance globally.

Objectives

Thus, the aim of this study is to focus on the analysis of the use of and penetration of these online tools within the organic olive business community, with special focus on the entities in the Social Economy, the vast majority of which are co-operative societies.

Design

The population studied consists of organic entities that are processors and marketers of olive oil in Andalusia, registered in the Sistema de Información de la Producción Ecológica de la Junta de Andalucía (The Autonomous Government of Andalusia Organic Production Information System, SIPEA). A structured telephone survey was carried out on this population, specifically aimed at the management of these 'organic olive oil processing and marketing' entities, where information on the use and commitment of the organisation was collected by the ICTs. Also, a checkpoint was created containing key account metrics of the organisations with accounts in the online social networks Facebook and Twitter. Other detailed statistics are also included in this checkpoint, obtained from analysing these accounts with on-line tools specialised in online social networks such as LikeAlyzer and Twitonomy.

Methodology

To determine the impact and penetration of the ICT, descriptive statistics were utilised, and then, a more comprehensive analysis of online social networks was conducted using the DEA method (Data Envelopment Analysis). DEA methodology, both nonparametric and deterministic, aims to measure the efficiency of a set of homogeneous decision-making units (DMU) using linear programming to compare identical inputs and outputs, to obtain a ranking efficiency (Samoilenko, 2014). Specifically, the

variables that determine the efficiency levels considered as inputs and outputs of the model are the main metrics obtained on the use and success of the organisations in online social networks. In this way, the main activity indicators that reveal the use and development of these tools by the organisations have been used as inputs. The main monitoring indicators, which reflect the popularity of these accounts in online social networks serve as the outputs. The high level of sensitivity of the DEA method to outliers makes this one of the main weaknesses of the method (Wilson, 1995). To solve this problem we have used the super-efficiency method, detecting and removing observations contaminated by noise, which produces more accurate results and a more accurate classification efficiency (Banker and Chang, 2006).

Results

In a first analysis of the use of ICT by organic olive organisations, it is observed that the existing differences between the two types of organisations, SCA and SAT as compared with other legal forms, are not relevant regarding the presence of a website or the use of e-commerce. In relation to the use of virtual social networks, 53.74 percent of organisational leaders confirm they make regular use of these platforms. Discriminating between entities of the social economy and other legal forms shows us that 37.50 percent of co-operative societies and SAT report using these platforms. This is in comparison to 61.62 percent of other legal forms, representing a more than 24 percentage point difference between the two groups.

On the other hand, although capitalist entities make greater use of virtual social networks, on average, they are less efficient in their usage of such platforms, compared with organisations in the Social Economy. Thus, the results obtained after using the DEA method show us that, considering the variable returns to scale (BCC model), 76.92 percent of co-operative societies and SAT are more efficient in online social networks, compared to 23.08 percent of the remaining legal forms. This increased efficiency is also maintained in the CCR model. Therefore, and in line with other investigations, this confirms that co-operative societies and online SATs use online social networks in a way that is more geared towards transactional rather than relational purposes (López et al., 2012; Montegut et al., 2013; Muñoz and Tirado, 2014), although their social nature is advantageous for them on platforms such as online social networks.

Conclusions

The differences between entities belonging to the Social Economy and other legal forms with respect to the use of websites or online stores are not significant. However, it is confirmed that the organic olive co-operative entities and their SAT counterparts clearly lag in the use of online social networks. In general, these platforms are largely undervalued by the business community in this entire sector. The inflexibility of co-operative societies in adapting to the changing environment and, in particular, to technological changes (COGECA, 2010), is considered a clear explanatory factor in these results. This is due to increasing awareness of its importance as the business use of online social networks is a rela-

tively recent phenomenon. According to Bridges et al. (2010), greater market orientation and integration of co-operative societies is necessary, which will stimulate the commitment to online social networks.

Furthermore, the results show that the SCA and SAT are entities that are more efficient in their use of these online platforms. We believe the main supporting factor for this is the aforementioned confluence of values between the Social Economy and Web 2.0. The relevance of communication within co-operative societies (Herranz, 2007) has made the Internet an indispensable yet still underrated tool. In this sense, the singular operational methods and characteristics of these entities (Mozas et al., 2015), makes the use of online social networks, an economic, simple and affordable media, which could be extremely useful for them. Therefore, the social identity that co-operative societies present and transmit gives them an advantage in online media, which results in an extremely efficient method of achieving greater popularity with a lesser degree of effort.

As the main limitation of the study addressed the sectoral nature of the investigation, this makes it difficult to generalise about all entities in the Social Economy. However, given the scarcity of related studies, this research is a clear starting point for extending the analysis to other industries and institutions such as co-operative societies of second degree and above. The timeliness and relevance of the issues addressed highlights the usefulness of this study.

KEYWORDS: Social media, olive oil entities, organic products, Social Economy, DEA.