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Customer functional value creation through a sustainable entrepreneurial orientation approach

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ABSTRACT
This paper advances a theoretical model to empirically test firms’ behaviour regarding sustainable entrepreneurship, enhancing what researchers have recently proposed at a solely conceptual level; this entails sustainable entrepreneurship being understood as a discipline that reliably allows organizations to successfully respond to sustainable development and market requirements. The authors suggest an integrated approach of dynamic-capabilities, S-D logic and product-service system views, which highlights the managerial predisposition to adopt a strategic position that fosters value in use (instead of regular property value), according to the current school of thoughts engaged with innovation and sustainable development. In this regard, this paper investigates structural influences (direct and indirect) of sustainable entrepreneurial orientation and customer functional value creation in firm performance. Hypotheses are tested using the partial least squares method on a multisectoral sample of 210 companies randomly stratified with proportional allocation. The findings indicate that a sustainable entrepreneurial orientation not only has a positive and direct relationship with firm performance, but also that this relationship improves when it is mediated by customer functional value creation. Further research pathways are provided.

1. Introduction
The offer of better value to customers, that may ultimately result in the generation of benefits for the firm, has focused much of the research in strategic management. In order to search for a value that flows between the dynamism and the competitiveness of the markets, the firm needs a strategy that is focused on the detection of opportunities and is driven by an optimal management of its essential resources and competences (Khan, Xuehe, Atlas, & Khan, 2019; Lechner & Gudmundsson, 2014), such as
entrepreneurial orientation; this approach is critical for the survival and growth of the firm as well as for the economic and social prosperity of nations (Sánchez, 2011). As pointed out by Ribeiro-Soriano and Kraus (2018), new entrepreneurs face uncertainty in almost all business areas: resources, liabilities, weaker ties with suppliers and customers and last but not least, an overall lack of experience.

Entrepreneurship as an economic engine coupled with the need to focus on growth based on the principles of sustainable development remains an open debate of interest given the scientific and practical implications of its application. Sustainable entrepreneurial orientation (Hernández-Perlines & Ibarra Cisneros, 2018; Kraus, Burtscher, Vallaster, & Angerer, 2018), is one of the recent concepts that, together with business strategy, offers organizational performance research a new direction.

In this regard, there is a research gap in literature mainly due to the newness of the sustainable entrepreneurial orientation concept and the limited number of studies on sustainable entrepreneurship from a value creation perspective. This work attempts to contribute to this line of research by proposing sustainable entrepreneurial orientation as a strategic response to the needs of market profitability and sustainable development postulates. This paper examines the theoretical and empirical relationship between sustainable entrepreneurial orientation and customer value creation (specifically in terms of functional value); furthermore, this work analyses the direct and indirect effects of these variables on firm performance.

After a literature review, authors followed an integrated approach of dynamic-capabilities, S-D logic and product-service system views to address this research question from a theoretical standpoint; authors used a variance-based structural equations system as the empirical analysis method to test the proposed conceptual model.

The relevance of findings highlights the need for researchers and practitioners to consider sustainable entrepreneurial orientation and customer functional value creation as strategic allied assets in the path to enhanced performance yield in companies; this approach reflects current times in which sustainability and value creation are no longer an option, but long-term goals. In this sense, the authors encourage researchers to continue this original line of research with the proposal of new directions.

2. Sustainable entrepreneurial orientation in customer functional value creation

2.1. Sustainable entrepreneurial orientation (SEO)

Following the recommendation of some authors about the appropriateness of adopting a multiple strategic orientation with the objective of improving business performance and facing the environment (Grinstein, 2008; Matsuno, Mentzer, & Oszomer, 2002), this research integrates entrepreneurial orientation (EO) and sustainability orientation (SO), in a multiple strategic orientation, sustainable entrepreneurial orientation (SEO), prone to business growth under the principles of sustainable development and framed within sustainable entrepreneurship as a research discipline. Among the theories proposed in the literature to address the integration of entrepreneurship and sustainability, the argument to adjust multiple orientations finds support within the logic of the dynamic capabilities approach, which states that the superior
performance can come from the strategic configuration, complementarity and the combination of existing business skills (Eisenhardt & Martin, 2000). Thus, according to the works of Aragón-Correa and Sharma (2003) and Menguc, Auh, and Ozanne (2010), SEO is conceived as a dynamic capability, whose nature is characterized by a capability for higher order (Ponce, Cancio, & Sánchez, 2018; Winter, 2003), innovative (Ambrosini, Bowman, & Collier, 2009), adaptive (Chakravarthy, 1982; Wang & Ahmed, 2004) and externally oriented (Day, 1994). Therefore, based on EO and SO definitions provided in the literature, SEO is proposed as a general strategic orientation at the firm level (Engelen, Kube, Schmidt, & Flatten, 2014) which shows the organization’s willingness to accept processes (Doric & Dimovski, 2018; Matsuno et al., 2002) towards the achievement of sustainable development (Katsikis & Kyrgidou, 2008), through the conscious integration of social and environmental aspects in the business model (Bos-Brouwers, 2010a) and the identification and exploitation of opportunities that produce economic prosperity, social cohesion and familiar (Shields, Welsh, & Shelleman, 2018), and environmental protection (Kuckertz & Wagner, 2010).

The SEO of an organization, as an entrepreneurial process geared towards sustainable development, can result in different results (production and introduction of new products, services, processes, etc.) and in the creation of value for the different stakeholders related to the organization (Spence, Gherib, & Biwol, 2011). Establishing, therefore, the type of value created that derives from a sustainable entrepreneurial practice can be in defining strategic orientation, as well as describing the relationship between SEO and the results of business management.

2.2. Customer functional value creation (CFVC)

Numerous studies agree that the entrepreneurial ability to create value for the customer is decisive in the long-term success of the organization (Voss, Voss, & Moorman, 2005), since it is the source of its competitive advantage (Barney, 1991). According to organizational theory based on customer value proposed by Slater (1997), customer value is the concept and objective of greater relevance in business management, since it allows the firm to obtain superior performance. The interest of this proposal is mainly that customer-perceived value, beyond the traditional perspectives of quality management and satisfaction management, integrates not only current customers but also non-customers and potential customers (Dumond, 2000), among which the coming generations can be considered from the point of view of sustainable development (Hunt, 2011). In addition, customer value becomes a key instrument for understanding customer perceptions and expectations (Desarbo et al., 2001) and for their subsequent inclusion in the organizational strategy; in turn, this approach implements some perfected mechanisms and processes for the creation and delivery of customer value (Dumond, 2000). These two aspects are modelled by the firm’s strategic orientation or orientations, such as SEO. This highlights, therefore, that customer value is a key strategic variable (Patterson & Spreng, 1997).

Among the value propositions for the customer present in the literature, we consider that the one that best understands the amplitude of the concept is the one...
proposed by Woodall (2003). The author identifies what are the benefits to the customer that derive from the related experience of consumption and is prior to any feeling of sacrifice. Some of these benefits (functional benefits, use function, aesthetic function and utility, among others) refer to the functional value for the customer, which is also considered as a type of value defining the nature of the derivative value for the customer in the work of Woodall (2003), i.e. as a sub-form of value for the customer. In this line, functional value, also called instrumental value, is a type of value common to most of the classifications performed by the authors (e.g., Sheth, Newman, & Gross, 1991; Smith & Colgate, 2007). This value refers to the level of presence of characteristics, utility and function sought in the product or service (Smith & Colgate, 2007).

2.3. An integrated approach of dynamic-capabilities, S-D logic and product-service system views

The process of utility creation (inherent quality of a functional value) underlies the postulates of the service-dominant logic (S-D logic) devised by Vargo and Lusch (2004), with which they propose a change towards the primacy of use value in the process of value creation. To do this, these authors focus on the concepts of operand resources and operant resources. According to the dominant logic of goods, the creation of value is derived from the operand resources that a firm has; these resources, being tangible, are finite and therefore cannot be considered a source of long-term value. In fact, this is one of the main problems that companies and society in general are facing in terms of natural resource finiteness (Varadarajan, 2014). However, what the dominant logic of service proposes is that resources are not only tangible, but also intangible and dynamic, that is, ‘resources are not, rather they become’ (Vargo & Lusch, 2004: 2). These types of resources (i.e. operants) tend to be dynamic and infinite and are an opportunity to create value by multiplying the value of tangible resources, such as natural resources. Dynamic capabilities, such as some of the operative resources contemplated in the service-dominant logic (Vargo & Lusch, 2004), are those that explore the possibilities offered by the changing environment (Winter, 2003) facilitating the process of value creation (Mele & Della Corte, 2013). This convergence between the two theoretical approaches is of great interest in the area of strategic management. Although it is possible to differentiate that, in the approach of dynamic capabilities, the logic focuses on the obtaining of a competitive advantage on the part of the firm and, in the service-dominant logic, the logic is based on the creation of value in the market (Mele & Della Corte, 2013). The first will not be obtained without the second. Thus, the objective is to identify, develop and position resources, capabilities and processes as value propositions that offer a potential competitive advantage (Vargo & Lusch, 2004).

One of the approaches that also stresses the utility to the consumer of the use of the service rather than the product itself is the so-called service-product system (SPS) (Mont, 2002). This approach also creates an adjustment, according to Senge and Carstedt (2001), between a purely economic approach and one that also integrates environmental aspects, coinciding with one of the SPS premises, namely contributing to sustainability (Roy, 2000). Thus, the SPS model proposes a shift from an industrial
economy (centred on the exchange of consumer products) to a service-oriented economy (or functional economy) to achieve sustainable development (Stahel, 1994). Therefore, considering the functional or utility aspect of both the SPS and the service-dominant logic, it can be held that the SPS is an adequate strategy for the creation of functional value for the customer from a service-dominant logic and also based on sustainable development guidelines (Sjödin & Parida, 2014). The creation of functional value for the customer is also related to the entrepreneurial and innovative character of a firm. In fact, Smith and Colgate (2007) emphasize that the most enterprising and innovative firms, such as start-ups, often compete in creating functional value over other types of value. In their paper, O’Neill, Hershauer, and Golden (2006) explore sustainable entrepreneurship from a value creation perspective by focusing on what they call a ‘holistic value proposition’ created by an entrepreneurial firm.

In summary, considering all the arguments presented so far, the following hypothesis is proposed:

H1. Sustainable entrepreneurial orientation (SEO) positively affects customer functional value creation (CFVC).

3. Effects on firm performance

3.1. A multiple strategic orientation approach in SEO-firm performance relationship

From a simple strategic orientation approach, the relationship between EO and firm performance has been addressed innumerable times in the literature, as highlighted by reviews of empirical work by Rauch, Wiklund, Lumpkin, and Frese (2009), Rosenbusch, Rauch, and Bausch (2013) and Saeed, Yousafzai, and Engelen (2014). As a result of these studies, the conclusions of the academics about the relationship between the two variables are varied and divergent, from a non-significant (e.g., Messersmith & Wales, 2013) or significant relationship (e.g. Anderson & Eshima, 2013), to a direct (e.g., Gagnon, Michael, Elser, & Gyory, 2013), moderated (e.g., Engelen, Gupta, Strenger, & Brettel, 2015), mediated (e.g., Alegre & Chiva, 2013) or U and/or inverted U relationship (e.g., Kreiser, Marino, Kuratko, & Weaver, 2013). This variety of results in EO’s relationship to performance may depend on the indicators used to assess performance (Lumpkin & Dess, 1996), as well as whether the approach to EO has been from a one-dimensional approach (e.g., Matsuno et al., 2002) or multidimensional (e.g., Lumpkin & Dess, 1996). A large majority of studies agree that EO has a positive influence on performance as it is associated with moving ahead of competitors and taking advantage of emerging opportunities (Engelen et al., 2014) in order to obtain improvements in the firm (e.g., Hughes & Morgan, 2007), and thus resulting in increased sales (Covin, Green, & Slevin, 2006) or the adaptation of new products (Chang, Lin, Chang, & Chen, 2007), for example.

Furthermore, from a simple strategic orientation approach, the relationship between SO and performance has been addressed in the academic literature (e.g., Gagnon et al., 2013), although in a much smaller proportion, given the recent nature of this orientation in studies by academics. However, the number of works dedicated
to the relationship between the sustainability of a firm and its performance effects are numerous, particularly if the environmental dimension of sustainability (Banerjee, 2002, Benítez-Amado & Walczuch, 2012) is considered. Nonetheless, they hardly agree on the nature of this relationship (Fraj, Martínez, & Matute, 2013b). On the one hand, several studies point to a relationship between sustainable practices and negative performance (e.g., López-Gamero, Molina-Azorín, & Claver-Cortes, 2009) or non-significance (e.g. Van De Velde, Vermeir, & Corten, 2005). On the other hand, in the opinion of many authors (Schrettle, Hinz, Scherrer-Rathje, & Friedli, 2014), sustainability is not only a threat to companies, but also an opportunity to promote their competitiveness. In fact, Gagnon et al. (2013), indirectly indicate that the SO-performance relationship is positive.

The review of the literature on the relationship between EO and SO with firm performance, indicates that there is no clear position among researchers. Cadogan (2012) points out that this may be because strategic orientations are limited in their conceptual domains and, therefore, there are limits to potential performance results. He proposes the use of multiple strategic orientations as more appropriate in the evaluation of this complex relationship. This is due to the fact that multiple strategic orientations are of a higher order and act as an umbrella concept for their dimensions, such as SEO for EO and SO respectively. Furthermore, Engelen et al. (2014) note that dynamic capabilities play a key role in converting strategy into improved performance. This reasoning, consistent with the dynamic capabilities approach, is based on the importance of the firm’s resources and capabilities to provide a basis for business performance (Barney, 1991). Following from this, SEO, as a multiple strategic orientation, can lead to better results by allowing the firm to convert its internal and external resources into financial performance (Rosenbusch et al., 2013).

Therefore, under these considerations, the following hypothesis is proposed:

H2. The orientation to sustainable entrepreneurship (SEO) has a positive effect on firm performance (PERF).

3.2. CFVC-mediated effect on SEO-firm performance relationship

In recent years, some scholars have pointed out that the relationship between SO and firm performance is mediated by other factors (Alegre & Chiva, 2013; Liu, Takeda, & Ko, 2014; McCarthy, Puffer, & Lamin, 2018). This relationship of mediation is characteristic of the configurational approach, which is presented in the literature as the verification of the existence of configurations formed by elements of the environment, the strategy, the structure, the capacities and the process that will help explain the relationships between the firm and its environment (Ruiz-Ortega, García-Villaverde, Jiménez-Moreno, & Parra-Requena, 2007). In this sense, companies seem increasingly convinced that the effectiveness of sustainable development strategies depends largely on the firm’s ability to transform the principles of sustainable development into customer value creation (Barthel & Ivanaj, 2007). This position is decisive in obtaining a competitive advantage that leads to a superior performance and, therefore, to business success (Voss et al., 2005) both from organizational (Slater, 1997) and marketing (Day, 1994) approaches. Considering that the creation of functional value for the
customer is identified with the functional benefits derived from the value perceived by the customer, based on the proposal by Woodall (2003), and that, according to the authors, the creation of value is directly related to the business results obtained (Hitt, Ireland, Sirmon, & Trahms, 2011), the third hypothesis in this work is defined as:

H3. Customer functional value creation (CFVC) mediates the effect of sustainable entrepreneurial orientation (SEO) in firm performance (PERF).

Figure 1 shows the proposed conceptual model and the hypotheses.

4. Method

4.1. Sample selection

To contrast the model and the hypotheses raised, a study was carried out on directors and managers of the 26,635 companies in the city of Valencia and 20,587 in its metropolitan area. Stratified random sampling with proportional allocation according to the productive sector (agriculture-livestock, industry, construction and services) yielded a sample of 210 companies -126 from Valencia and 84 from Valencia’s metropolitan area-, with a reliability of 95.45% and a sampling error of 7%.

4.2. Measurement scales

The measurement scales come from the existing literature and have been adapted to the particularities of the context and the objectives of the study to assure the validity
the content. For all the constructs, multi-item scales of classification by categories of five points have been used (ranging from 1 ‘strongly disagree’ to 5 ‘strongly agree’). SEO has been measured using the proposal by Criado-Gomis, Iniesta-Bonillo, and Cervera-Taulet (2018), which is based on two scales, following the recommendations of Miles, Munilla, and Darroch (2009): one that measures EO - based on the scale proposed by Matsuno et al. (2002)-, and another measuring SO - based on Bos-Brouwers’s measurement (2010 b) (See Appendix)-. The CFVC has been evaluated based on the conceptual proposal of Smith and Colgate (2007), and the firm performance with an adaptation of the multidimensional scales of García-Rodríguez, Álvarez, and Santos Vijande (2010) and Santos-Vijande, González-Mieres, and Ángel (2013).

5. Data analysis and results

5.1. Statistical method

This work uses the partial least squares (PLS) technique, through the statistical software tool of SmartPLS® (v.3.2.4) (Ringle et al., 2015), given its consideration in the literature as more rigorous tests for reliability, convergent validity and discriminant validity over the construct (Jarvis, Mackenzie, & Podsakoff, 2003); furthermore, this approach is increasingly being used in EO and sustainability studies (Fraj et al., 2013a). The model (Figure 1) is analysed and interpreted in two stages: the measurement model and the structural model.

5.2. Measurement model

The presence of multidimensional constructs of a second and third order with formative and reflective indicators requires that the measurement model be treated in stages, following the stepwise approach (Wright, Campbell, Thatcher, & Nicholas, 2012). First, for the measurement model of the first-order variables, the reliability assessment of the reflective items indicates that, although most have a value of 0.707 or higher (Carmines & Zeller, 1979), there are three whose loads are inferior. However, since their loads are not less than 0.50 (Hair, Ringle, & Sarstedt, 2011), they are all significant at a 99.9% confidence level and show a convergent validity greater than 0.5 (Fornell & Larcker, 1981); no item is eliminated to avoid subtracting information that is useful in estimating the latent variable (Chin, 1998). The composite reliability (Fornell & Larcker, 1981) is superior to 0.8 in all constructs, surpassing the most demanding threshold proposed by Nunnally (1978). Through the mean extracted variance (AVE), the convergent validity is measured, which is higher than 0.5 (Fornell & Larcker, 1981). The discriminant validity, measured from the Fornell-Larcker Criterion, the cross-load matrix and the HTMT Criterion, is guaranteed for all constructs. Second, the evaluation of the measurement model of the second-order variables, i.e. EO and PERF, indicates that the load of the innovativeness dimension (EMPRINN) of EO is 0.618, below the threshold of 0.707 (Carmines & Zeller, 1979). Although there are authors who defend the acceptance of values of 0.5 or 0.6 in the initial stages of scale development (Chin, 1998), this is not the case for EO, since it is based on the consolidated and validated scale of Miller (1983) and Covin and Slevin
(1989). However, given its importance at the conceptual level, its weight (0.367), placed well above zero (Chin, 1998) and its significance at a confidence level of 99.9% (Hair et al., 2011), does not warrant elimination. The composite reliability is higher than 0.7 in all constructs and the AVE is higher than 0.5. Likewise, discriminant validity is established according to the criteria mentioned above. Finally, the analysis of the measurement model of the third order variable (in this case, SEO), being a formative construct, cannot be performed with the traditional evaluation (Bagozzi, 1994). After establishing the theoretical validity of the construct (Diamantopoulos & Winklhofer, 2001) set forth herein, the next step was the evaluation performed at the construct level (external validity, nomological and discriminant) and indicator (multi-collinearity analysis, weight assessment and significance) (Table 1). In this case, EO and SO are relevant for the construction of SEO formative variable, with the contribution (weight) in this case of EO being higher (Table 1).

Table 1. Total sample measurement model: reliability and convergent validity for first- and second-order indicators, collinearity, weights and significance for the third-order indicator.

| Item/Construct/Dimension | Loading | Weight | Composite reliability | AVE | TOL | VIF | t-value |
|--------------------------|---------|--------|-----------------------|-----|-----|-----|---------|
| SEO                      | EO      | 0.720  | 0.795                 | 0.567    | 0.87 | 1.155 | 5.587*** |
| Innovativeness           | 0.618   | 0.367  | 0.865                 | 0.763    |       |       | 4.696*** |
| EMPRINN1                 | 0.852   |        |                       |          |       |       | 18.000*** |
| EMPRINN2                 | 0.894   |        |                       |          |       |       | 25.363*** |
| Risk taking              | 0.763   | 0.859  | 0.675                 |          |       |       | 7.575*** |
| EMPRISK3                 | 0.658   |        |                       |          |       |       | 6.666*** |
| EMPRISK4                 | 0.861   |        |                       |          |       |       | 22.005*** |
| EMPRISK5                 | 0.922   |        |                       |          |       |       | 43.710*** |
| Proactiveness           | 0.859   | 0.860  | 0.754                 |          |       |       | 15.756*** |
| EMPROAC6                 | 0.888   |        |                       |          |       |       | 13.711*** |
| EMPROAC7                 | 0.848   |        |                       |          |       |       | 2.991**  |
| SO                       |         | 0.479  | 0.910                 | 0.719    | 0.87 | 1.155 | 35.162*** |
| ORSOS1                   | 0.894   |        |                       |          |       |       | 7.427*** |
| ORSOS2                   | 0.656   |        |                       |          |       |       | 39.301*** |
| ORSOS3                   | 0.916   |        |                       |          |       |       | 25.144*** |
| ORSOS4                   | 0.900   |        |                       |          |       |       |         |
| CFVC                     |         | 0.933  | 0.670                 |          |       |       |         |
| CVF1                     | 0.849   |        |                       |          |       |       | 29.568*** |
| CVF2                     | 0.700   |        |                       |          |       |       | 16.154*** |
| CVF3                     | 0.883   |        |                       |          |       |       | 31.153*** |
| CVF4                     | 0.884   |        |                       |          |       |       | 36.552*** |
| CVF5                     | 0.891   |        |                       |          |       |       | 32.670*** |
| CVF6                     | 0.557   |        |                       |          |       |       | 7.633*** |
| CVF7                     | 0.901   |        |                       |          |       |       | 46.017*** |
| PERF                     | Customer performance | 0.942 | 0.917                 | 0.787    |       |       | 35.941*** |
| PERFCL1                  | 0.905   |        |                       |          |       |       | 34.224*** |
| PERFCL2                  | 0.894   |        |                       |          |       |       | 21.695*** |
| PERFCL3                  | 0.862   |        |                       |          |       |       | 20.435*** |
| Business performance     | 0.885   | 0.969  | 0.796                 |          |       |       | 19.744*** |
| PERFIRM4                 | 0.857   |        |                       |          |       |       | 14.854*** |
| PERFIRM5                 | 0.900   |        |                       |          |       |       | 40.406*** |
| PERFIRM6                 | 0.882   |        |                       |          |       |       | 33.898*** |
| PERFIRM7                 | 0.882   |        |                       |          |       |       | 36.917*** |
| PERFIRM8                 | 0.910   |        |                       |          |       |       | 44.687*** |
| PERFIRM9                 | 0.919   |        |                       |          |       |       | 46.534*** |
| PERFIRM10                | 0.876   |        |                       |          |       |       | 13.879*** |
| PERFIRM11                | 0.910   |        |                       |          |       |       | 37.902*** |

*p < 0.05; **p < 0.01; ***p < 0.001 (based on t (4999), two-tailed test).
5.3. Structural model

The assessment of the structural model includes the measurement of the relationships between the constructs as well as the predictive relevance of the model through the estimation of path coefficients, their significance via bootstrapping, $R^2$ values, $Q^2$ and $f^2$ tests. This analysis shown in Table 2 indicates that the multicollinearity of the constructs is discarded from a VIF and tolerance test (Hair, Sarstedt, Hopkins, & G. Kuppelwieser, 2014). The dependent variables achieve $R^2$ values higher than or equal to 0.1 (Falk & Miller, 1992). Furthermore, the size of the effect on a latent variable upon another is measured with $f^2$, which shows a medium level in the SEO-CFVC relationship and a small one in the respective SEO-PERF and SEO-CFVC-PERF relationships (Cohen, 1988).

Through a bootstrapping process, the test for hypotheses is significant for the three postulated ones. For H1 (SEO-CFVC) at the 99.9% confidence interval ($t$-value = 6.462) and for H2 (SEO-PERF) at 95%. The main paths are significant, noting that SEO-PERF path is less than desirable at 0.2 but has a $t$-value greater than 2 (Table 2 and Figure 2). By a blindfolding process, the Stone-Geisser Test ($Q^2$) shows that the structural model has positive predictive relevance for the two endogenous variables (CFVC and PERF).

The contrast of the mediation hypothesis (H3) is based on the analytic approach described by Preacher and Hayes (2008). The total, direct and indirect, effects, as well as the confidence interval for the mediating variable (CFVC), are calculated by using three different bootstrap procedures (percentile, bias-corrected and bias-corrected and accelerated) (Real, Roldán, & Leal, 2014). The result indicates that, since none of the confidence intervals contains zero, the mediated relationship is confirmed with a 99.9% confidence level, and so, H3 (SEO-CFVC-PERF) is supported. The VAF statistic, which is used to estimate the size of the indirect effect (Hair et al., 2014), shows that 40.4% of the total effect in the SEO-PERF relationship is explained by the mediation of CFVC and, therefore, there is a partial mediation.

Table 2. Structural model analysis: multicollinearity, path coefficients, predictive relevance, indirect effects for mediation model and hypotheses testing.

| Hypotheses | VIF | TOL | Path | Indirect Effect | Total Effect | $R^2$ | $F^2$ |
|------------|-----|-----|------|----------------|-------------|-------|-------|
| H1: SEO -> CFVC | 1.000 | 1.000 | 0.397*** | 0.397*** | 0.158 | 0.19 (medium) |
| H2: SEO -> PERF | 1.187 | 0.842 | 0.158* | 0.266*** | 0.132 | 0.02 (small) |
| H3: SEO -> CFVC -> PERF | 1.187 | 0.842 | 0.270*** | 0.270*** | 0.132 | 0.07 (small) |

| Hypotheses | $Q^2$ | $q^2$ | $t$ value | $p$ value | Correlations | % Explained Variance | Supported |
|------------|-------|-------|-----------|-----------|--------------|---------------------|----------|
| H1: SEO -> CFVC | 0.151 | 0.18 (medium) | 6.462 | 0.000 | 0.397 | 0.158 | ✓ |
| H2: SEO -> PERF | 0.105 | 0 (null) | 2.171 | 0.015 | 0.158 | 0.042 | ✓ |
| H3: SEO -> CFVC -> PERF | 0.105 | 0.06 (small) | 3.949 | 0.000 | 0.270 | 0.090 | ✓ |

$p < 0.1; *p < 0.05; **p < 0.01; ***p < 0.001$ (based on $t(4999)$, one-tailed test).
6. Discussion and future research lines

According to the results obtained and with other authors’ (e.g., Rauch et al., 2009), this work shows that companies can have a SEO and thereby achieve a positive impact on their performance, even taking limited financial resources and an unstable environment. In addition, our research shows that the SEO and firm performance relationship is preferably indirect (Kreiser et al., 2013) through CFVC. It follows then that SEO can be considered not only as a strategic resource-consuming orientation but also as a resource builder (Shepherd & Patzelt, 2011) both for internal and external stakeholders; it entails the creation of value for the customer according to the postulates of a service-dominant logic and a product-service system (Mele & Della Corte, 2013).

The fact that findings show that effect size of the latent variables in the other variables is small or medium makes sense, since the dependent variables CFVC and PERF are explained by more than a single independent variable related to the internal and external activity of the organization (as SEO in this case).

Taking into account the limitations of this work, a great majority due to the choice between the theoretical alternatives proposed in the literature (Rauch et al., 2009), we suggest a review of the items of the EO’s innovativeness dimension, since it influences the composite reliability of the construct, which is acceptable but very close nonetheless to the accepted limit. We also believe that the introduction of a multidimensional scale of value creation in future research can broaden the understanding of the effects of SEO on each type of value.

Other future research routes may involve approaching SEO from different points of view, which can contribute to the consolidation of its conceptualization at a theoretical level, the inclusion of large companies in the empirical study or the introduction of environmental and social performance measures that can add information about the real sustainable behaviour of the companies.

![Figure 2. Structural model results.](Image)

\[p < 0.1; *p < 0.05; **p < 0.01; ***p < 0.001\text{ (based on} t(4999), \text{ one-tailed test)}\]
7. Conclusion

At the theoretical-empirical level, this paper attempts to contribute to the consolidation of sustainable entrepreneurship research and the advancement and strengthening of the perspective of dynamic capabilities in the study of topics of growing academic interest. Thus, in the convergence of the disciplines of strategy, entrepreneurship and sustainability, strategic management, with a relevant role in the identification and use of the resources and capabilities necessary to achieve a competitive advantage, tends to improve the use of SEO. Conceived as a dynamic strategic capability, in the exploration and exploitation of opportunities in an environment that is often complicated for the continuity of companies, especially when it comes to SMEs.

At the level of management implications, knowing the positive effects of sustainable entrepreneurship on performance and creating value for the customer, can contribute to companies joining the change towards sustainable development (Mikušová, 2017), in accordance with the Sustainable Development Objectives of the UN (2015). Companies are unequivocally related to individuals through their customer role, which is why they can be instrumental in raising the awareness process on sustainable (environmental and social) issues at an individual level (Sheth & Uslay, 2007). Recent approaches such functional economics (Barthel & Ivanaj, 2007) and open innovation (Sjödin & Parida, 2014) can be considered as appropriate tools for this sustainable thinking in its application to different areas of knowledge.

Thus, as organizations with a SEO have shown to create functional value for customers, by shifting the emphasis from exchange value to use value, they play an important role in the journey of sustainable sufficiency (Cohen, Smith, & Mitchell, 2008) and they become community-based organizations that greatly facilitate the dissemination of the benefits and purposes of sustainable development (Shepherd & Patzelt, 2011), while simultaneously developing win-win corporate governance strategies for long-term survival, social legitimacy (Goldsby, Kreiser, Kuratko, Bishop, & Hornsby, 2018), and reputation (Gedajlovic, Honig, Moore, Payne, & Wright, 2013; Höflinger, Nagel, & Sandner, 2018; Moisescu, 2018).

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# Appendix

## Measurement scales

| Construct/Dimension | Item | Source |
|---------------------|------|--------|
| **SEO**             |      |        |
| Innovativeness      | EMPRINN1. When it comes to problem solving, in this firm we value creative new solutions more than the conventional solutions. | Based on Matsuno et al. (2002, p. 29–30) |
|                     | EMPRINN2. The development of innovative marketing strategies is promoted, knowing that some could fail. |       |
| Risk taking         | EMPRISK3. Initiatives that avoid risk are more valued than initiatives seeking for change. |       |
|                     | EMPRISK4. We like to ‘play it safe’ |       |
|                     | EMPRISK5. We like to implement plans only if we are certain that they will work |       |
| Proactiveness       | EMPROAC6. We strongly believe that a change in the market creates a positive opportunity for us. |       |
|                     | EMPROAC7. Members in this firm tend to talk more about opportunities rather than problems. |       |
| **SO**              |      |        |
|                     | The company considers sustainability as an opportunity for profit. | Adapted from Bos-Brouwers (2010b, p.180) |
|                     | ORSOS2. a duty, a normal part of the business. |       |
|                     | ORSOS3. an investment for the company. |       |
|                     | ORSOS4. something that is relevant to the company. |       |
| **CFVC**            | CVF1. The firm competes by offering products/services adapted to the needs of the market. | Adapted from Smith y Colgate (2007, p. 22) |
|                     | CVF2. It competes offering products/services with superior results to the competition. |       |
|                     | CVF3. It has a reputation for making useful products/services. |       |
|                     | CVF4. It has a reputation for making quality products/services. |       |
|                     | CVF5. Competes primarily by offering useful products/services to its customers. |       |
|                     | CVF6. It is known for its technological innovation. |       |
|                     | CVF7. The products/services offered by the company sell well because they work. |       |
| **PERF**            | Customer performance | Adapted from García-Rodríguez et al. (2010, p. 75) and Santos-Vijande et al. (2013, p. 101) |
|                     | PERFCL1. Our customer satisfaction levels are higher than those of my main competitor. |       |
|                     | PERFCL2. Our levels of value provision to our customers are higher than those of my main competitor. |       |
|                     | PERFCL3. Our retention of valued customers is superior to that of my main competitor. |       |
| Business performance | PERFIRM4. Our market share growth is superior to that of my main competitor. |       |
|                     | PERFIRM5. Our sales revenue growth outpaces that of my largest competitor. |       |
|                     | PERFIRM6. The acquisition of new customers is superior to my main competitor. |       |
|                     | PERFIRM7. The increase in sales to existing customers is greater than that of my main competitor. |       |
|                     | PERFIRM8. The company has outperformed my main competitor. |       |
|                     | PERFIRM9. The Return on Investment (ROI = Return on Investment/Invested Capital) has been higher than that of my main competitor. |       |
|                     | PERFIRM10. The Return on Sales (ROS = Profits/Sales) has been higher than that of my main competitor. |       |
|                     | PERFIRM11. The achievement of financial goals has been superior to that of my main competitor. |       |

**Understanding that sustainability is the voluntary incorporation of environmental, social and economic aspects into the core of its operations, taking into account the concerns of its different stakeholders (employees, managers, suppliers, customers, authorities, community, etc.) in its business decisions to improve business performance in the short and long term …**.