

## **Value Co-Creation and Sustainability: A systematic literature review**

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### **ABSTRACT**

Sustainability and co-creation of value are two current topics for the marketing field. The purpose of this paper is to develop a systematic literature review taken these two topics together to highlight their implications to Sustainable Marketing. A systematic literature review about Sustainability and Value co-creation is performed based on papers published between 2010 and 2020, indexed on Web of Science. Bibliometric results indicate a significant increase in the number of articles, journals and authors for the two fields considered together over the last 10 years (2010-2020). Our research highlights the recent greater visibility of Sustainability and of Value co-creation, and of the relationship between the two fields, particularly in the last 5 years.

We found that those studies are mostly related with Sustainable Development, Innovation in Design and Services, Corporate Social Responsibility, Business Networks, Customer Engagement, Business Models, Dominant Logic in Services and others residual fields (as, for instance Medicine and Health), and the need to complement the literature relating it with Services and with B2B relationships.

We conclude that both sustainability and value co-creation are topics that discuss how firms and customers can interact over time for sustainable development. In addition, this paper shows that the research conciliating the two theoretical areas is scarce, which is an opportunity to develop the literature. Thus, our research highlights that theoretical and empirical research relating sustainability and value co-creation is need in order to develop the literature on Sustainable Marketing.

**Keywords:** Sustainability; value co-creation; sustainable marketing.

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## 1. INTRODUCTION

Sustainability, despite having its origins in the 70s, remains a current topic. It has been widely discussed both at academic conferences and among the marketing professionals, emerging as one of the most researched subjects (Sarkis, 2019; White, Habib & Hardisty, 2019).

Researchers and managers have highlighted its importance and impact on many ecosystems. However, as many benefits as sustainability can provide, its processes of development are complex and involves multiple factors and risks. Generally associated with the environment, its contributions have reached not only the environmental dimension (Biggemann, et al., 2014), but also economic and social aspects (Lubowiecki-Vikuk, 2021; Romero et al., 2006). Thus, sustainability involves natural environment, economic performance, and social dimension (Ortiz-de-Mandojana & Bansal, 2016; Tura, Keränen, & Patala, 2019). These points of view can be analyzed also in the field of sustainable marketing thought the lens of value co-creation.

Researchers over the last decades emphasize the change from a process of creation of value to a process of “co-production” (Ramirez, 1999), and, then to a “co-creation” of value (Vargo & Lusch, 2016, 2008, 2004; Grönroos, 2006;). This discussion has been transforming the traditional orientation of marketing based on a unilateral relationship between company-client to a more complex, collaborative and participative one.

For authors as Vargo and Lusch (2016, 2008, 2004), Grönroos (2006) and Ramirez (1999) value cannot be added to an offer. Value is co-created between several business actors and the buyer, who has a fundamental role in defining what value is (as a co-creator). This means that suppliers cannot offer value but can only suggest ways for a customer to obtain value. This change highlights customer’s participation in the value creation process. Romero et al. (2006) affirm that in a co-creation process, value propositions should emerge from the space of interaction (the experience environment) where individual consumers interact with customer communities, as well as with the extended networks of companies to co-create their own experiences of value, making the business ecosystem

sustainable because of its creation of wealth for all parties involved.

Sustainability requires both consumers and organizations to consider how their activities generate or aggregate negative social and/or environmental impact and, alongside marketers and policy-makers, seek to assist consumers in behaving more responsibly (Kumar & Polonsky, 2017). According to Romero and Molina (2011), in a value co-creation context, strategies and business models are continuously shaped over time in a discovering process of new sources of value and new opportunities and ways for co-creating it by/for the customers and organisations in short and long terms. Thus, to generate competitive advantage and business opportunities (Prahalad & Ramaswamy 2004), many companies decided to adopt a strategy that would facilitate the process of implantation, development and sustainability practices, through co-creation of value. The result of this strategy has extended its field of application to several areas such as engineering, education, health and tourism, among many others.

The contributions and importance of these two practices for the development and growth of the business ecosystem, and the interest aroused in the academic world and by marketing specialists, generated the need to investigate the relationship between co-creation of value and sustainability. This discussion gathers studies to identify how both themes are being perceived and applied in order to serve as a guide for organizations and encourage their applications and expansion. The purpose of this paper is to develop a systematic literature review taken these two topics together to highlight their implications to Sustainable Marketing. Thus, a systematic literature review is performed based on papers indexed on Web of Science. The period of analysis is the last ten years, i.e. the period between 2010 and 2020.

The study was organized according to its stages. First, a brief presentation of the two main concepts and theoretical background is presented, and then the research methodology is defined and justified, followed by a brief description of its execution. Second, the results found through the systematic literature review are presented, as well as the discussion of the results. Finally, we present the conclusions and the contribution of this research, the research limitations and our suggestions for future research.

## **2. THEORETICAL BACKGROUND**

### **2.1 Sustainability**

The concept of sustainability has developed so much that it goes beyond the concern of

using resources to meet the needs without the commitment of current and future generations (Brundtland et al., 1987). Despite being a topic that has been debated for long time (Biggemann et al., 2014), sustainability arouses a lot of interest in organizations and among researchers. Sustainability is a complex process, lacking of knowledge, understanding, namely about its risks, consequences and impacts. Moreover, we need to know more about the processes that hamper its diffusion and practice (Wals & Rodela, 2014; Schoneveld, 2020). As a way of preserving the environment, organizations find, through sustainability, the means to use resources in a more rational way, contributing to a more conscious production and consumption, in order to balance the needs of companies while obtaining profits and the needs of society and nature, through a short and long terms learning process (Wolfson et al., 2015).

As referred before sustainability practices and strategies in industry can be based on three components: the natural environment, the economic performance, and the social concern (Ortiz-de-Mandojana & Bansal, 2016; Tura, Keränen, & Patala, 2019; Wolfson et al., 2015). Accordingly, different realities involving these three issues may originate that sustainability can be discussed from different perspectives. For instance, sustainability has been applied in cities and communities also through the sharing economy (Hossain, 2020), as it involves the same dimensions treated in sustainability, as some authors argue (Akande et al., 2019). Despite the shared economy is reducing the impacts that contribute to climate change (Skjelvik et al., 2017), in several research points to a greater concern with the benefits generated by sustainability, fearing that the financial benefit arouses more interest than the social and the environmental (Barnes & Mattsson, 2016; Akande et al., 2020).

Another concern is the gaps found in the literature, which evidence insufficient quantitative studies about the sustainability issues (Akande et al., 2020). If on the one hand sustainability offers diverse risks, on the other hand, it also brings solutions and opportunities. Companies and government can, through their responsibilities, obtain more efficient and effective resources and corporate profits while working to reduce social inequalities, by investing in the consumption and needs of the less favored classes, thus achieving sustainable development (Schoneveld, 2020). However, there are arguments that, despite the initiatives of corporations in their sustainable business models, as they do not focus directly on the cause of social inequalities, this will never end (Scheyvens et al., 2016; Akande et al., 2020), which reinforces the risk it can brings and questions the

durability and maintenance of the sustainability actions and practices.

In services, in order to achieve sustainability, it is essential to work on customer awareness, encourage and motivate their participation in co-creating sustainable value (Davis et al., 2018). Although it defends the social values of society, highlighting the needs of individuals, working conditions, rights and diversity in organizations, sustainability from the point of view of the social dimension, does not have a consensus in its definition. The literature shows its conceptual weakness and development (Rajak & Vinodh, 2015; Lee & Jung, 2019), attracting less attention from academia than environmental sustainability (Ahi & Searcy, 2015). For Aquilane et al. (2016) sustainability can maintain well-being indefinitely and is important in the development of the company. However, sustainability can generate tensions and it brings conflicts to the industry-customer relationship (Tura et al., 2019). Sustainability, when related to the co-creation of value can promote the debate on social and environmental impact, products and services, through sustainable resources and strategies (Hoffmann, 2007). According to Geissdoerfer et al. (2016), sustainable value is generated by environmental, economic, or social effectiveness, efficiency, or resilience”.

According to Sarkar and Searcy (2016), sustainability, qualified as a temporality category (Yadlapalli et al., 2020), is one of the central dimensions of Corporate Social Responsibility, and for both to be achieved in an organization, it is necessary to the interaction between stakeholders in the supply chain (Mani & Gunasekaran, 2018). The attention, effort and commitment of the stakeholders will provide sustainability in the supply chain and value creation (Ahi & Searcy, 2013; Yadlapalli et al., 2020; Arnold, 2017). In this paper, we focus on the process of value creation and value co-creation related to the development of sustainability, as discussed on the next section.

## **2.2 From value creation to value co-creation**

Value is a well-known and venerable concept in business markets (Anderson, 2004). Sometimes it is expressed only in economic terms (Galé, 1994; Smith, 2002), other times it is represented as a set of economic and non-economic aspects, such as market-perceived quality, total savings or satisfaction received (Nagle & Holden, 2002). According to Anderson (2004), each of these constituent components takes our understanding of the concept in a different direction. Nevertheless, it is only through an integrative perception of the term, i.e., by the conjunction of economic and non-economic aspects, that the process of value can be understood (Anderson, 2004).

The concept of value in business relations has been differently understood from separate perspectives. Sometimes it is expressed only in economic terms, other times it is represented as a set of economic and non-economic issues (Anderson, 2004). In spite of these differences, business-to-business research emphasizes the idea that the value creation process occurs through business relationships (Easton & Araujo, 1992; Ford, 1997). According to Johanson and Wedin (2005), the process of value creation has been studied from the value chain perspective (Porter, 1985), to constellations of value (Normann & Ramirez, 1993), to systems of value (Porter, 1996) and to a network perspective (Stabell & Fjeldstad, 1998; Johanson & Wedin, 2005; Amit and Zott, (2001). Moreover, according to Stabell & Fjeldstad (1998), the process of value creation can be seen in three different perspectives: “value chain”, “value shops” and “value in networks”. Stabell and Fjeldstad (1998) agree with the concept that value creation on a value chain perspective (Porter, 1985) occurs when a firm produces standardized offers and costs are the element that has a fundamental role in defining the value. On the other hand, there is a “value shop” when the firm creates value through activities solving specific client problems. In these cases, the main assets of the firm are the capacity of specialization. Stabell and Fjeldstad (1998) also claim that when the critical value of a firm comes from established business relationships in a net that is called value in network. In these cases, value is created by activities in a network of business relationships, mediated by technologies. Both costs and business relationships are factors driving the creation of value. This way, Ramirez (1999), Lovelock and Gummesson (2004), Grönroos (2006), Vargo and Lusch (2016, 2008, 2004) emphasize the change from a process of creation of value to a process of “co-production” (Ramirez, 1999) and “co-creation” of value (Grönroos, 2006; Vargo & Lusch 2004, 2008). This change highlights customer’s participating in the value creation process, in which services have a fundamental role.

The concept of value co-creation has been addressed by authors who emphasize the interactive relationship between the actors that participate in the business ecosystem in order to involve the customer's participation in the process (Ramirez, 1999), through their shared experiences (Vargo & Lusch, 2016, 2008, 2004). However, Lusch and Vargo (2006), through their approach on dominant service logic, argue that the client's participation is not enough, it is necessary that in addition to consumption, there is use. Making use of client’s participation allows both to benefit and allows the company to innovate, differentiate itself in the market and together, generate business opportunities

(Prahalad & Ramaswamy 2004). For other authors, co-creation of value is a collaborative process between organizations and their customers (Romero & Molina, 2011), which allows the customer to make adjustments considering their tastes and preferences (Foray 2004).

The understanding of the co-creation of value can also be understood as a way of sharing and renewing resources, through the interaction between organizations and customers (Zwass, 2010; von Hippel, 2005). Some researchers argue that the term co-creation is not clearly mentioned (Heinonen et al., 2013) by some authors regarding the client's participation in the value creation process.

The initial marketing discussion of sustainability define it concerned green consumer behaviour, an area that has continued to grow within the literature. Green consumer behaviour is a multidisciplinary research domain that has been explored across a diverse range of issues and contexts, with researchers dispersed globally, ensuring that sustainability continues to be an area of interest within the consumer domain (Guyader et al., 2019; Kumar & Polonsky, 2017). Pro-environmental behaviour has been defined by Peattie (2001) as “the purchasing and non-purchasing decisions made by consumers, based at least partly on environmental or social criteria”. Tilikidou (2008) understood pro-environmental behaviour as purchasing behaviour based at least partly on various environmental criteria and expressed by several choices, including primarily purchasing products that consumers consider environmentally friendly and avoiding buying products that are considered ecologically harmful.

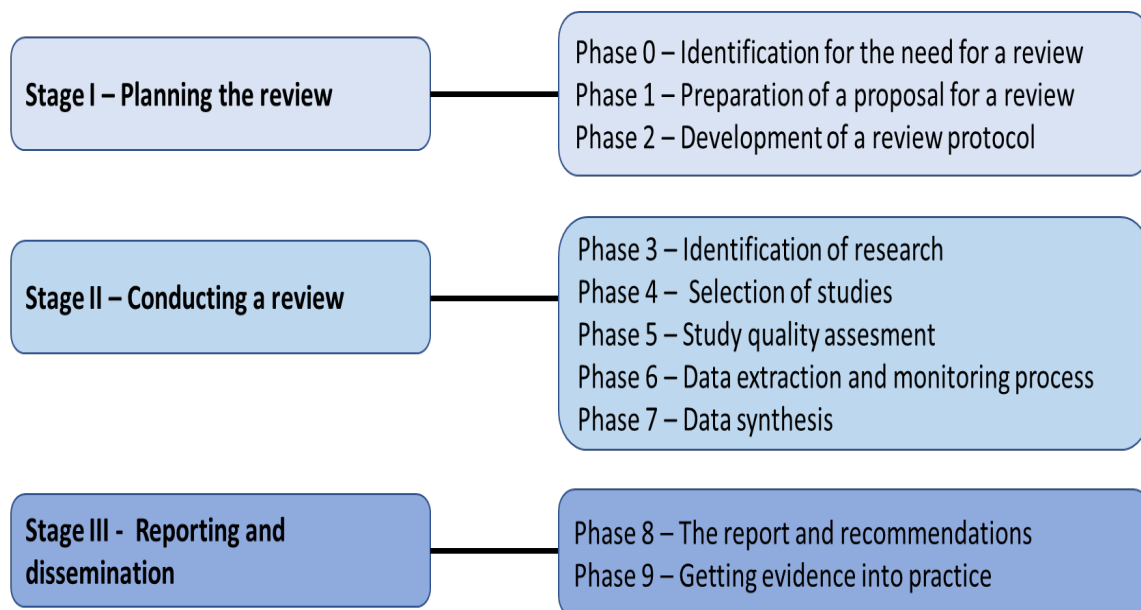
Lundblad and Davies (2016) emphasize that intentions to purchase sustainable products are based on subjective correlates of actual consumer behaviour and the target product's attributes, that is, consumer motives relevant to the product domain and consumer's perceptions of the product's attributes. Moreover, it is assumed that consumers align their perceptions of the target product's attributes with their domain-specific motives when forming intentions to purchase. This mental matching process should be closely related to consumer's purchasing decisions. Based on research in the field of sustainable consumption (Pickett-Baker & Ozaki, 2008), environment-related motives are expected to affect mental matching processes strongly and thus to substantially influence consumer's purchasing decisions.

In this sense, we argue that value co-creation and sustainability can be both analyzed by business-to-business (B2B) and business-to-consumer (B2C) lens. Taken together, these

two concepts can highlight the improvement of sustainable marketing in a complementary way of analysis. The next section describes the methods used to develop a systematic literature review taken these two topics together, in order to achieve the purpose of this paper.

### 3. RESEARCH METHODS

The study was conducted through a systematic review of the literature, bringing together existing research that relate co-creation of value and sustainability. The choice of the method was influenced by allowing to concentrate and detail available knowledge through a synthesis of relevant studies of the research topics and their main discussions of the literature carried out by reviewers (Tranfield et al., 2003; Khan et al., 2003; Rousseau et al., 2008; Fink, 2019). The review was based on the theory of Tranfield et al. (2003) associated with the meta-analysis (Glass, 1976), in which it suggests that planning is necessary, that the review process is conducted and that the results are disseminated. In Figure 1, it is possible to observe how the stages of a systematic review are arranged according to Tranfield et al., (2003).



**Figure1.** Systematic review stages

Source: adapted from Tranfield et al. (2003, p. 207)

The first stage started with an exploratory research on all the existing literature relating the topics co-creation of value and sustainability in order to assess its approach and relevance.



The academic bibliographic database used was the Web of Science, for being recognized worldwide and highly sought after by renowned researchers and editors, due to its wide and qualified database. The research indicated the need to review how topics are approached and applied by researchers and organizations through marketing professionals in order to serve as a guide for expanding the field of their application, pointing out as keywords for the investigation, "co-creation of value" and "sustainability".

In the second stage, a basic search was performed using the keywords "Value co-creation" and "Sustainability", through the combinations "Co-creat \* value", AND, "Sustainab \*" applied to the database filter. The use of the \* symbol was applied to allow the inclusion of variations of the searched term in the data search. It was determined that the search for data would be restricted to articles published between the years 2010 to 2020, due to the low number of publications made in the period before this one, and therefore considered not relevant for the investigation. In addition, the 10-year period was considered sufficient to observe and explore the significant evolution or trend of the topics studied. To support the systematic review, a protocol form (Tranfield et al., 2003) was prepared in an Excel document, where the articles found in the research were added up and stored forming a database. The form was filled out according to the title of the article, author's name, publication period, year of publication, methodology, theory that the article addressed, findings and limitations, which will assist in the synthesis and help to valid results of the results.

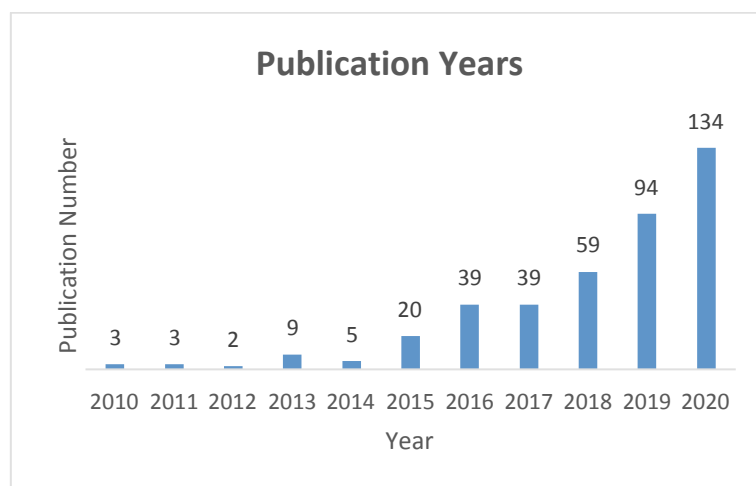
To guarantee the quality of the data, inclusion or exclusion criteria (Davies & Crombie, 1998) of articles were applied, which was considered their contribution to the scope of the study, research objective, methodology, theory, concept, design, field of research, category, area of study, year of publication, language and type of document, considering only articles and reviews and documents in English, in order to identify relevant studies and evaluate the quality of studies (Blaxter, 1996; Greenhaigh & Taylor, 1997; Mays et al., 2000; Popay, Rogers & Williams, 1998). Subsequently, the extracted data were categorized according to their theoretical approach, to assist in the identification of the research area.

In the third stage, the evaluations of the articles were carried out, which were selected after the inclusion and exclusion criteria, the dissemination of the results based on the evidence found and analyzed through descriptive and thematic analysis (Tranfield et al., 2003), as well as the discussion, conclusions, and recommendations for future research.

#### 4. RESULTS

As result of our research 508 documents were found at the Web of Science database. However, considering our inclusion/exclusion criteria we reduced our analysis to 407 documents. First, we have selected the documents published between 2010 and 2020, the period selected to do the research, and accordingly only 496 were selected. Second, we have considered as inclusion/exclusion criteria the document type and selected only the "articles" or "reviews" documents. Only 409 documents belonged to this classification, of which 373 were article and 36 reviews. Finally, we used the document language as criterion, which have resulted in 2 additional exclusions because those studies were not published in English. Thus, our final database has resulted in 407 studies to be analyzed.

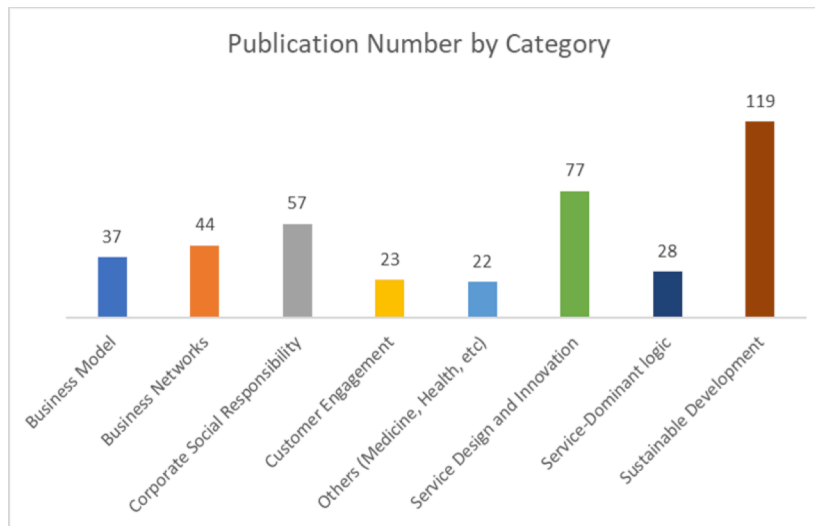
Figure 2 shows that the number of publications/per year have increased considerably during the last ten years, and particularly after 2015. Also, Figure 2 demonstrates that the documents have started to be published slowly at the Web of Science database after 2010 (2 in 2010, other 2 in 2011 and 3 in 2012), which reinforces the justification to consider the period of research over the last 10 years, and to start the research in 2010. Finally, we highlight that the association of the two subjects in analysis in this paper has gained prominence only in the last 5 years, particularly over the last 3 years (between 2018 and 2020), which suggests and indicates that the study of its application has been gaining space and remains on the rise.



**Figure 2.** Publication years

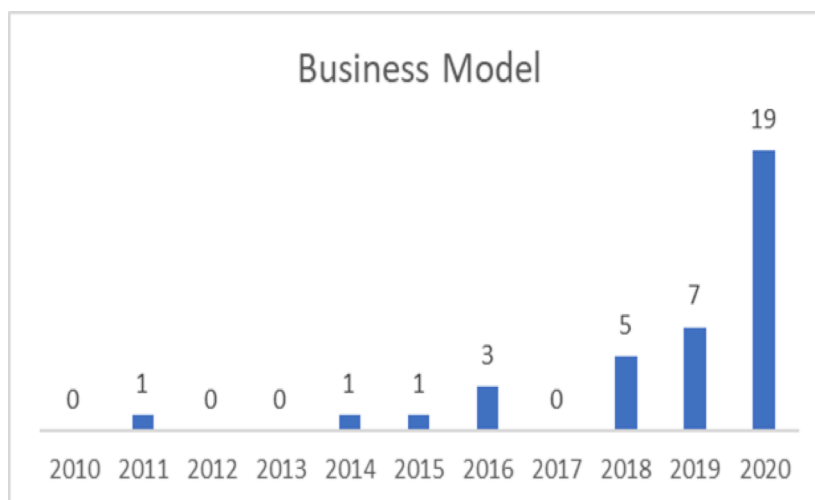
The categorization of documents according to their theoretical basis, shown in Figure 3, determines that in the last 10 years (2010 - 2020), 37 studies addressed Business Model,

44 discussed Business Networks, 57 highlighted Corporate Social Responsibility, 23 discussed Customer Engagement, 22 analyzed other subjects that due to their diversity, were grouped in a generic classification described as “Others”, 77 dealt with Service Design and Innovation, 28 focused on Service-Dominant Logic and 119 examined Sustainable Development.



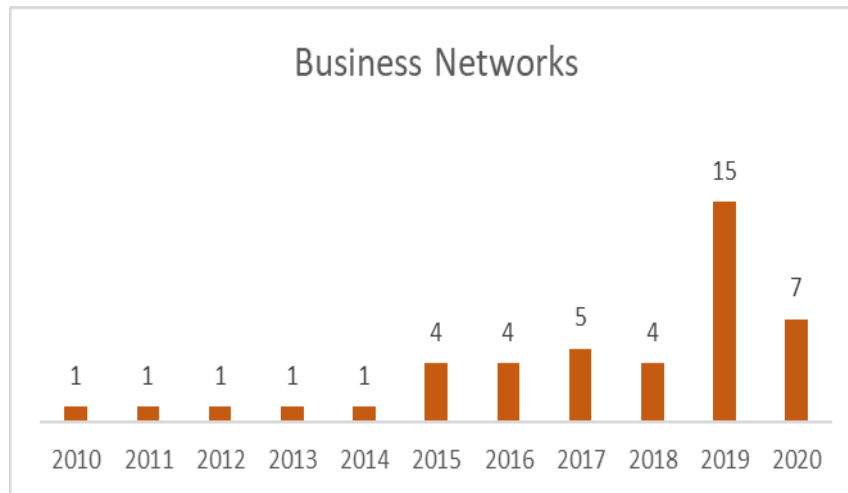
**Figure 3.** Number of publications by category

According to Figure 4, the extracted data inform that the interest of researchers in exploring Business Model, related to the co-creation of value and sustainability, has been growing timidly, having a considerable growth in 2020, demonstrating that there is interest in your study.

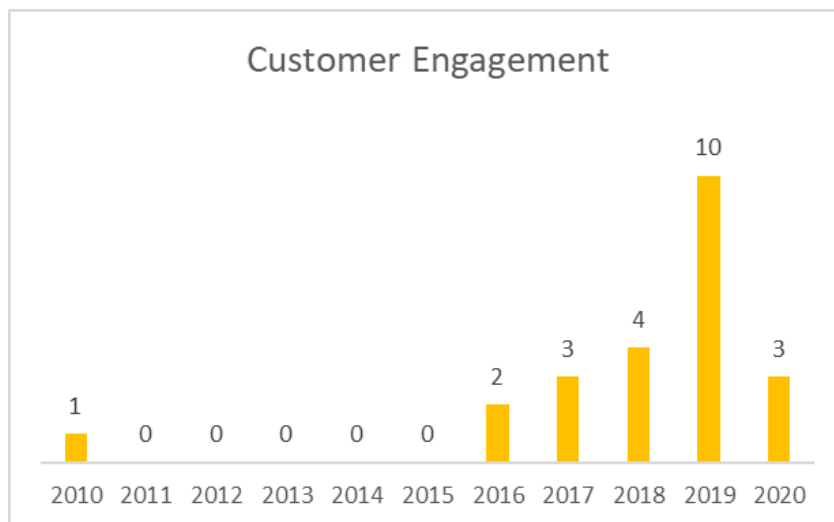


**Figure 4.** Number of publications on business model per year

Figures 5 and 6 show that Business Network and Customer Engagement are little explored approaches by researchers, relating the co-creation of value and sustainability, having an unexpected growth in 2019, when compared to what had been published in the last 10 years. However, this has been changing in the last 5 years, showing a certain interest from researchers.



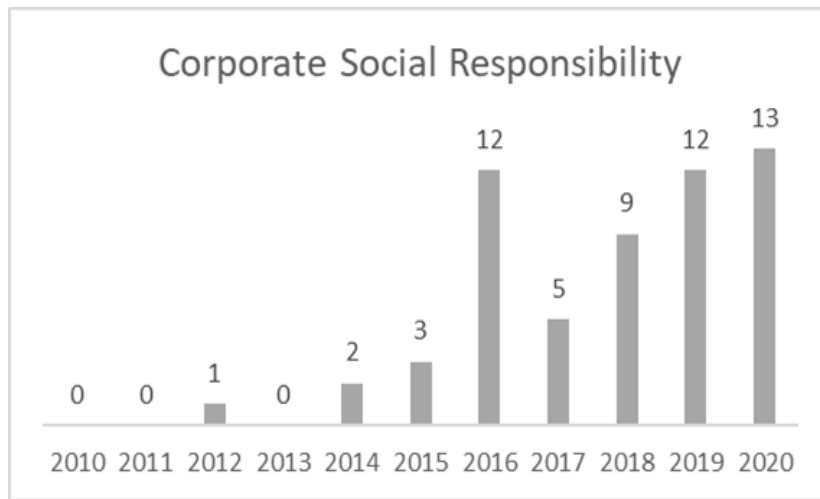
**Figure 5.** Number of publications on business network per year



**Figure 6.** Number of publications on customer engagement per year

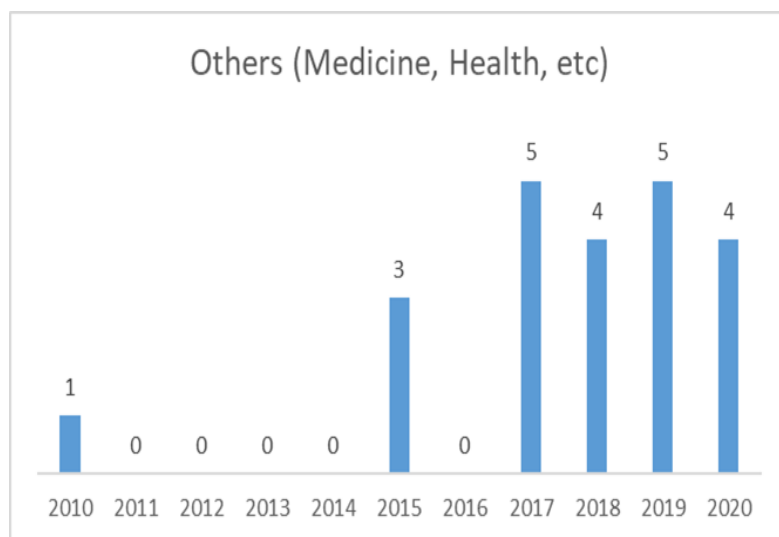
Corporate Social Responsibility, the third most discussed category found, as shown in Figure 7, had a higher index of publications in 2016 and 2019, which despite having decreased significantly in 2017 and 2018, underwent a turnaround, returning to attract the

attention of scholars with a slight growth in 2019 and 2020.



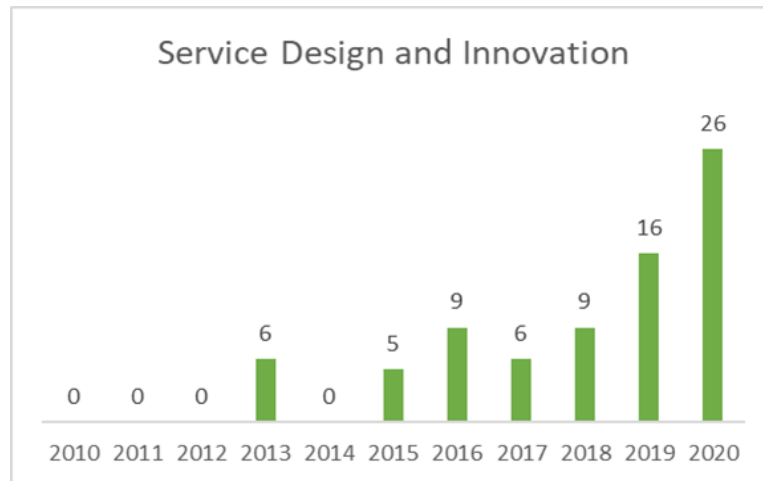
**Figure 7.** Number of publications on corporate social responsibility per year.

Figure 8 shows the numbers of publications in other fields, which were less explored by researchers, but no less important, indicating an insufficient basis in the literature.



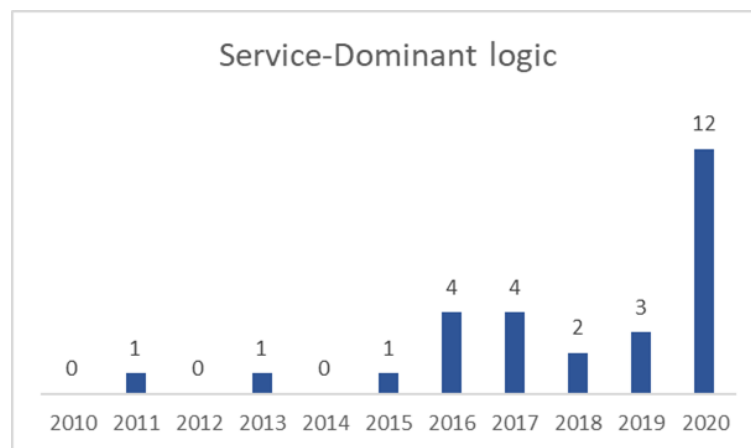
**Figure 8.** Number of publications on others (Medicine, Health, etc.) per year

Despite being the second most discussed category in research, Service Design and Innovation, with its literature addressing the co-creation of value related to sustainability since 2013, only in the last 2 years it has been showing greater visibility before the authors, as shown in Figure 9.



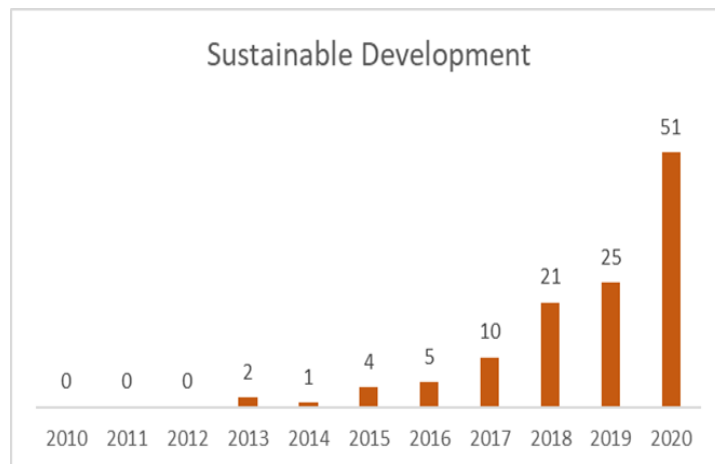
**Figure 9.** Number of publications on service design and innovation per year

The Service-Dominant Logic, shown in Figure 10, indicates a growth trend although it has been little addressed in the last 10 years (2010-2020), and despite indicating a bigger relevance in the last year (2020). The literature shows insufficient data and needs to be expanded to further clarify its concept and application.



**Figure 10.** Number of publications on Service-Dominant Logic per year

According to Figure 11, the extracted data show that exploring the Sustainable Development related to the Co-creation of Value and Sustainability has been of the greatest interest of the researchers, resulting in about 30% of all the analyzed documents. We should highlight the greater visibility of this subject over the last three years, despite started in 2013 (with the first publications) and in 2014 (another one), followed by a great increase of publications and a high concentration over the last year (2020). Moreover, this category is also the one that has been most discussed by the three periodicals considered most relevant.



**Figure 11.** Number of publications on sustainable development per year

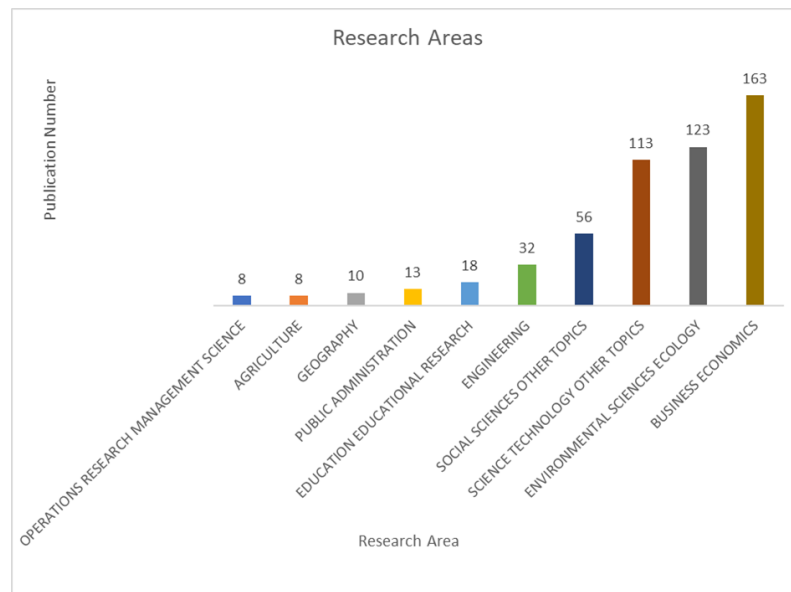
As for the authors who contributed to the literature, the largest number of publications (4) are by Grimaldi, who approached Corporate Social Responsibility in 2018 and 2019, and Service Design and Innovation twice in 2020, which the most recent being published at the Journal that most published on the relationship between co-creation of value and sustainability: The Sustainability Journal. Sigala also had four publications, which addressed Corporate Social Responsibility in 2016 and 2019, Customer Engagement in 2017, and Sustainable Development in 2020.



**Figure 12.** Graph of the 10 authors with the highest number of publications

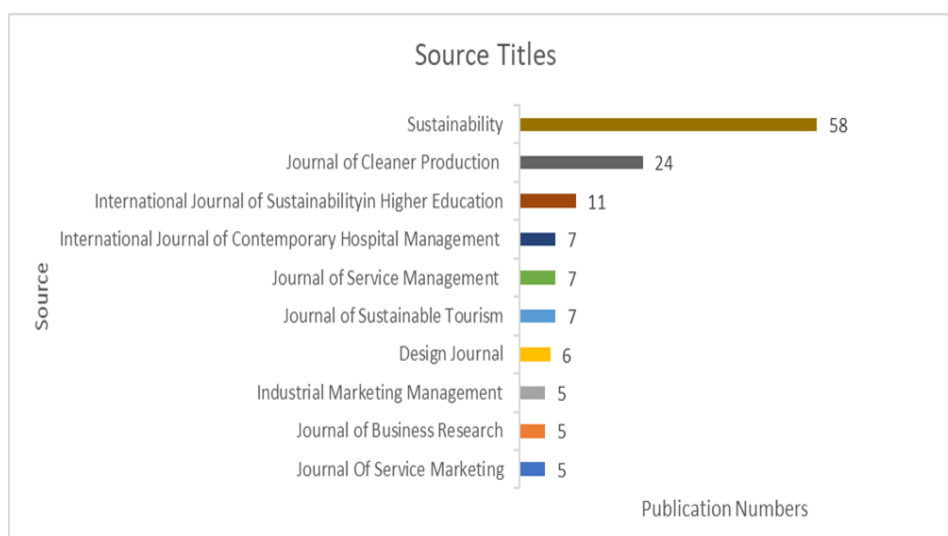
The 10 most investigated areas are shown in Figure 13. It is possible to observe and highlight Business Economics, as the most researched area with around 25% of the total of

the papers published. In addition, it can be observed a concentration in the areas Environmental Sciences Ecology and Science Technology Other Topics. These three areas together represent about of 78% of the research published on the subject.



**Figure 13.** Graph of the 10 most investigated research areas in the publications by the authors

Figure 14 shows the 10 sources that most published the documents relating the Co-creation of Value and Sustainability between 2010 and 2020, of the type "article" and "review", in the English language. We highlight the following journals: Sustainability, Journal of Cleaner Production, and the International Journal of Sustainability in Higher Education, which represent more the 2/3 of the total.



**Figure.14.** Graph of the 10 source that most published documents



One of the studies that drew attention was Arnold (2017), who addressed the challenges encountered, highlighting “Sustainability co-creation processes have to focus on the whole value chain to guarantee long-term sustainability progress”.

## **5. DISCUSSION**

Our bibliometric analysis shows a significant increase in the number of articles over the last 10 years, both in journals and authors for the two fields taken together. Our research shows that over the last 10 years (2010-2020), the studies have addressed these two fields with a focus on Sustainable Development, Service Design and Innovation, Corporate Social Responsibility, Business Networks, Customer Engagement, Business Model, Dominant Service Logic and a residual category (including others as Medicine, Health, etc.). Moreover, our findings highlight the importance of sustainability in the ecosystem, revealing that it is a timeless subject as well as the role and participation of all those involved in its scope and application.

In addition, in the last 10 years (2010-2020), although slowly, the relationship between co-creation of value and sustainability has shown many benefits and has been widely explored by marketing experts and academic researchers, being expanded and implemented in several areas of research and field of study, as noted in the graphs. However, in the last three years, the categories that contributed most to the literature were Sustainable Development, Design and Service Innovation, Corporate Social Responsibility, Business Network and Business Model.

The studies also confirmed that research is more focused on sustainable development, but there is still an opportunity for research because it is a topic that remains current and that brings many contributions not only to the academic world, but also to business.

Most of the studies analyzed were qualitative and addressed concepts or applied a case study, as for example the research of the three authors who contributed a lot to the literature (Grimaldi, Sigala and Cavicchi).

The categories found in the study encompass the various ways that sustainability has been promoted and discussed in the literature through the co-creation of value, highlighting not only the importance of the participation of each actor who participates in the process, as well as the role of each one. Among the alternatives suggested by the authors are several theories and approaches: customer and stakeholder engagement, sharing economy, circular

economy, shared value, service, business model, technology, service design and innovation.

## 6. CONCLUSIONS

The objective of developing a systematic review of the literature, relating the themes of sustainability and co-creation of value to highlight its implications for Sustainable Marketing has been successfully achieved. Bibliometric results indicate that over the last 10 years (2010-2020), the studies have addressed these two fields with a focus on studies related with Sustainable Development, Innovation in Design and Services, Corporate Social Responsibility, Business Networks, Customer Engagement, Business Models, Service-Dominant Logic and others residual fields (as, for instance Medicine and Health). However, research conciliating the two theoretical areas is until under development which is an opportunity to develop the literature.

Both sustainability and co-creation of value are topics that discuss how companies and customers can interact over time for sustainable development, highlighting the relationship as an indispensable factor to achieve it. The literature highlights the importance of focusing on the value chain for long-term sustainability. However, the sustainability approach linked to the value co-creation in the last ten years (2010-2020) has been more directed towards B2C relationships, presenting an insufficient theoretical basis regarding the B2B relationships. Thus, our research highlights that theoretical and empirical research relating sustainability and value co-creation on B2B relationships is need in order to develop the literature on Sustainable Marketing.

Some limitations were detected in the study. The use of only two keywords in the systematic review of the literature may have compromised the data found and, thus may have impacted on results. Accordingly, future searches may including other additional keywords such as, for instance, "green" or "green service", among others possibilities. Some limitations related to covid-19 pandemic also could be taken in account, as data from year 2020 was analyzed and the pandemic may have impacted on the quantity of publications and the quality of studies.

Then, as a suggestion for future research, it is to deepen and explore the application in services, process and concept through the Service-Dominant logic or to concentrate more studies by researchers that can better clarify the concept, to allow more foundation to their practice. Another suggestion is in the business model, which is growing, but needs to be

more widespread due to its great contribution power. The focused and detailed study of social impacts would also have a lot to contribute, as we know that there are impacts that affect various spheres. However, considering the co-creation of value highlights collective relationships, to explore research to collaborate in understanding and deepening or opportunities generated by the business-to-business relationships could be interesting. Finally, publication in renowned newspapers and more focused on the research area can also add support and contribute to the field and to the data validation.

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