

Value co-destruction: definitions, trends, and theoretical gaps

Codestruição de Valor: definições, tendências e lacunas teóricas

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Abstract

Objective: This work aims to analyze the main scientific productions on the value co-destruction (VCD) concept and verify its evolution over time, presenting its trends and possible gaps, which can help future research. **Methodology:** Literature review and bibliometrics on articles in the Web of Science database guided the development of the work. **Results:** The results indicate that articles about VCD are still developing. More recent works explore VCD in the shared economy environment, study the effect of showrooming on value destruction, and how CDV arises when analyzed from the perspective of service providers. **Practical Implications:** The contribution is a greater understanding of the topic and a direction for new studies that collaborate with researchers and managers to avoid the loss of value during the interaction processes in B2B, B2C, or C2C relationships.

Keywords: value co-destruction, service-dominant logic, interactive value formation, sharing economy, showrooming.

Resumo

Objetivo: O objetivo deste trabalho é analisar as principais produções científicas sobre a codestruição de valor (CDV) e verificar a sua evolução ao longo do tempo, apresentando suas tendências e possíveis lacunas, que possam auxiliar futuras pesquisas. **Metodologia:** O desenvolvimento do trabalho pautou-se em uma revisão da literatura, tendo como auxílio a Bibliometria, com a coleta na base de dados da Web of Science. **Resultados:** Apontam que artigos sobre a CDV ainda são incipientes. Trabalhos mais recentes exploram a CDV no ambiente da economia compartilhada, estudam o efeito do *showrooming* na destruição de valor e como a CDV surge quando analisada pela ótica dos prestadores de serviços. **Implicações Práticas:** A contribuição dada é uma maior compreensão sobre o tema e um direcionamento para novos estudos que colaboram com pesquisadores e gestores para evitar uma perda de valor durante os processos de interação nas relações B2B, B2C ou C2C.

Palavras-chave: codestruição de valor, lógica dominante em serviços, formação de valor interativo, economia compartilhada, *showrooming*.

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1 Introduction

Value co-creation (VCC) is an essential construct for marketing professionals, public/private managers, and researchers. The value, previously created by the company and offered to customers, now has a new characteristic: it can be co-created during the co-



production process of a product (Ranjan & Read, 2014, Prahalad & Ramasvamy, 2004, Vargo & Lusch, 2004). However, other authors add that there will always be chances of errors occurring during the co-production process and it is in this context that VCD occurs (Echeverri & Skálen, 2011, Plé & Cáceres, 2010).

Articles on VCD are more recent when compared to those on VCC. VCC literature is the basis developing the understanding of VCD since VCD is understood as a VCC that showed some defect during its process (Nascimento, Urdan, & Costa, 2018).

Works focusing on VCD are considered equal to those developed for VCC (Echeverri & Skalen, 2011, Daunt & Harris, 2017, Engen et al., 2020). Relevant implications can be of paramount importance for the management of an organization regarding its perpetuation within an increasingly disputed market. This adds more expansive knowledge on the subject, as well as an overview of its most exponential contributions and contributors to research on the theme.

This work aims to analyze the main scientific productions, through a literature review, verifying how the theme has evolved, presenting VCD with trends and possible gaps that can help future research. Studies on VCD are relevant to researchers and managers in exploring the reasons that lead to possible negative results and their consequences.

2 Theoretical reference

VCD is studied with greater interest based on the work of Plé and Cáceres (2010), followed by Echeverri and Skalen (2011). Researchers started studying the VCD more thoroughly after initial criticisms for not considering a negative result for the VCC between customers and companies (Echeverri & Skalen, 2011).

Plé and Cáceres (2010, p.432), understand that VCD occurs during the various processes of interactions between the parties, defining it as: “[...] an interaction process between service systems that result in a decline in at least one of the welfare systems (which, given the nature of a service system, can be individual or organizational) [...]”.

The concern with the negative result is equally important for the company's management, oriented to avoid damage to the brand, product, or service offered to the market, analyzing relevant results that may contribute to a greater understanding (Engen et al., 2020).

In creating value, the company can only offer a value proposition to the customer, and based on their experience, value can be created. The operating resources (skills and knowledge) made available by the actors who interact, form cooperation networks and need to be used efficiently to generate value during this interaction process (Vargo & Lusch, 2008). The misuse of resources continues, which results in VCD (Luo et al., 2019; Plé, 2016).

Resources dispensed by customers on behalf of a company during the interaction process must be well directed by employees, preventing the destruction of the created value. Management must be able to correct possible attitudes of disintegration or non-integration of resources by its employees, who, intentionally or accidentally, contribute to the VCD (Plé, 2016).

Based on customer engagement, making them proactive in the production of a good (tangible or intangible) has a greater chance of creating value together, that is, co-production contributes to VCC. However, there is a need for use by the customer, as it is at the time of experimentation that value is created (or not) and this value is measured in terms of the utility provided to the customer by that good (Ranjan & Read, 2014).

In this interaction, equity problems between the parties contribute to the VCD for one or all involved in the co-production process, where equity refers to the client's empowerment.



Removing him from inaction and encouraging him to participate in the processes of the company's production (Laud et al., 2019) and the relationship between customers and companies should be based on the availability of clarifications for everyone involved in the VCC process (Ranjan & Read, 2014).

As described by Camilleri and Neuhofer (2017), the misuse of resources is one of the motivators for VCD, incurring a decrease in the well-being of one of the parties involved in the process (Laud et al., 2019). Vafeas, Hughes, and Hilton (2016) recognize that in addition to the misuse of resources (accidental or intentional), the lack of resources also contributes to the loss of value for one or all of those involved in this interaction process, leading to undesirable reactions, such as negative word-of-mouth, supplier switching, or feedback with complaints.

Luo et al., (2019) studied how C2C relationships are affected by sharing users' experiences regarding the quality of theme park services, directly influencing a company's brand and gaining the interest of new customers. This information sharing becomes more worrisome when done in the virtual environment due to its scope. Negative evaluations can influence the decision-making of potential consumers, causing financial losses for companies (Sthapit & Björk, 2020). The exchange of experiences between consumers, such as information, complaints, or praise, is a fertile ground that can contribute to destroying a company's image, facilitated by the agility of the virtual environment (Muntinga, Moorman, & Smit, 2011), resulting in VCC or VCD.

3 Method

The research is exploratory since “exploratory research is conducted in an area in which there is little accumulated and systematized knowledge. [...]” (Vergara, 2006, p.45). This corroborates what Daunt and Harris (2017) confirmed, noting that the VCD still needs further clarification due to there being only a few works on the subject which, with the aid of Bibliometrics, provides characteristics about the publications.

As for the approach, the literature review is proposed, representing: “[...] a critical compilation of works that discuss a theme [...]”, recognizing its importance, as it explains the field studied on a given theme, providing subsidies for researchers in the area (Brizola & Fantin, 2016, p.27).

Bibliometrics employs three pillars that support it. The first, developed by Lotka in 1926, seeks to quantify the authors' production concerning the publication of articles, indicating the most prominent contributors to a particular area of research. Second is Bradford's Law of 1934 that identifies the area in which publications are presented, checking which journals are more focused on certain subjects. Finally, is Zipf's Law of 1935, which bases its investigations on the frequencies in which certain words or terms appear in the works (Santos & Kobashi, 2009).

For the bibliometric analysis, we used the Web of Science (WOS) database, locating 70 articles, which had the term “value co-destruction” in the title, abstract and/or keywords, and its variations: “value co-destruction”, “co-destruction of value”, or “co-destruction of value”.

4 Results

Among the 70 articles published, the first is from 2010. From 2010 to 2014, a single article was published in each of the years, except for 2012, which did not present any. From



2015, the trend is for growth, not drastic until 2019 with the publication of 14 articles and in the following year, with 26 articles published.

Figure 1 - Number of publications per year

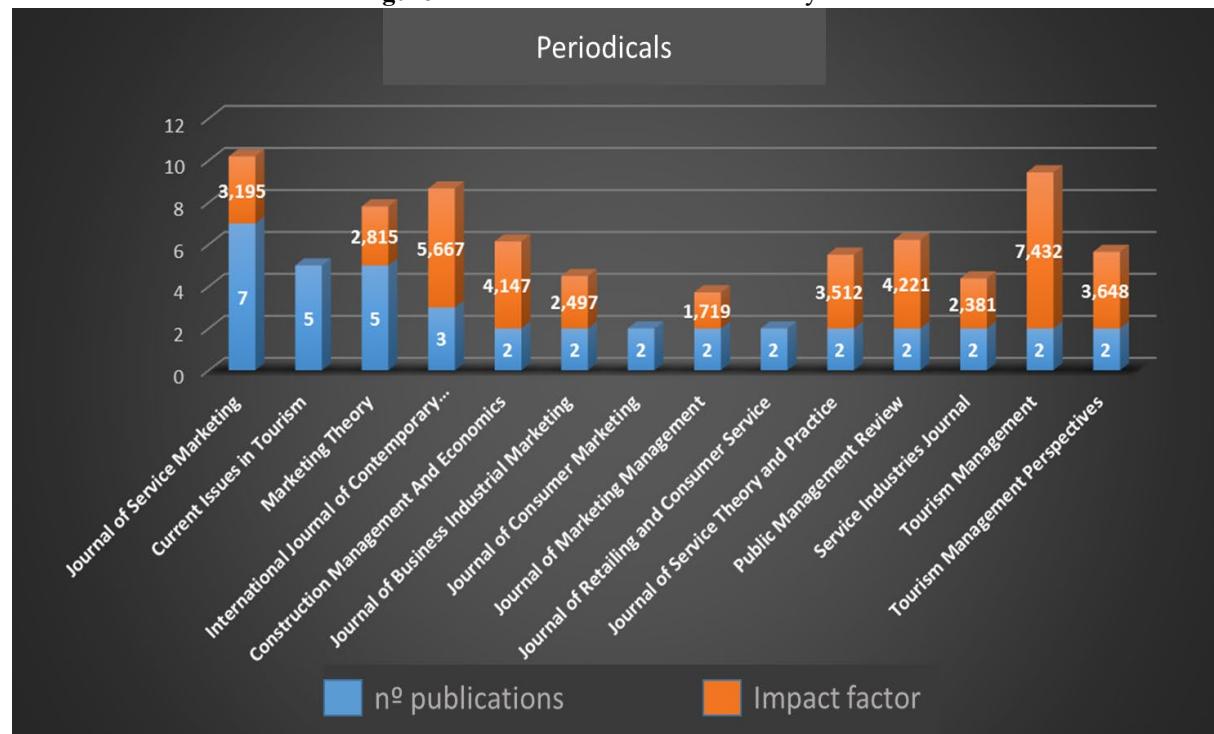


Source: WOS (2020)

Studies on VCD are further explored in 2019 and 2020, confirming this growing result in recent years, with the authors who have published the most in the period. Sthapit contributes five publications, three in 2019 and two in 2020, followed by Björk, with three publications in total, all in partnership with Sthapit. These authors are co-authors of two articles published in 2020 (*Interactive value formation: drivers and outcomes from Airbnb guests' perspectives* and *Towards a better understanding of interactive value formation: Three value outcomes perspective*) and one in 2019 (*Sources of value co-destruction: Uber customer perspectives*). The five publications by Erose Sthapit focus on periodicals in the area of Tourism.

Figure 2 presents the publications in descending order of journals, with a minimum of two publications plus the impact factor.

Figure 2 - Periodicals and Publications by Year



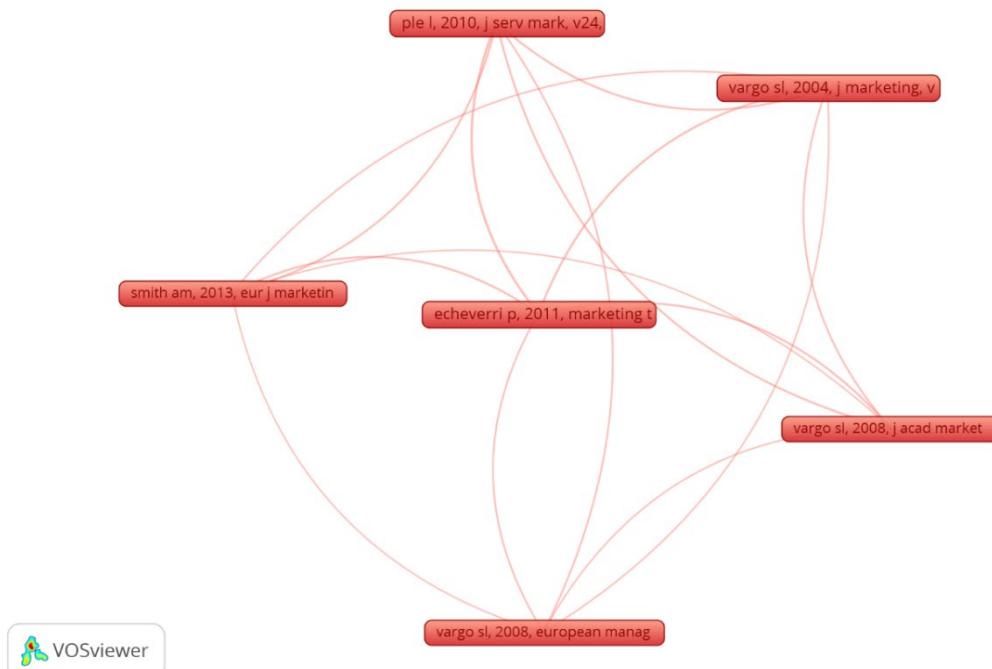
Source: WOS (2020)

The greatest concentration is in Marketing, with five periodicals, followed by tourism, with four magazines. Although Marketing has a larger number of magazines and has 16 articles, it is in the tourism area that we find the journal with the greatest impact (Tourism Management Perspectives), with two articles published in 2019 and 2020. Current Issues in Tourism contains

the most recent articles with three publications in 2020, however, without indication of the impact factor on the date of data collection.

Using the Vosviewer software, we describe the main results, removing one of the articles since it does not provide the bibliographic reference in the WOS database, on the date of collection (Jan/2021), resulting in 69 total articles. Figure 3 shows the most significant formative structure of the articles due to their joint citation (co-citation of works) in their bibliographic references (GRÁCIO, 2016), that is, this analysis provides knowledge on the most relevant themes that supported these articles.

Figure 3 - Co-citation of Works



Source: WOS using Vosviewer (2020)

The most cited is the seminal work, a theoretical study, by Plé and Cáceres (2010), “*Not always co-creation: introducing interactional co-destruction of value in Service-Dominant Logic. Keywords*”. The article appears in co-citation with other works 54 times, followed by the article by Echeverri and Skälen (2011), with 52 co-citations.

The second most cited, “*Co-creation and Co-destruction: A practice Theory-Based Study of Interactive Value Formation*”, is an empirical work. Through interviews applied to public transport users, this work investigates the reasons leading to VCD during the process of interaction between users and employees of bus companies. The article is relevant even though it is limited to a certain segment, showing in which parts of the processes the destruction of value can occur, serving as a guide for managers who work within the segment (Echeverri & Skälen, 2011).

With 32 quotes, the third most cited article, “*The value co-destruction process: a customer resource perspective*”, investigates the misuse of resources made available by customers during the integration process, causing damage to the feeling of well-being of these

users. Depending on the customer's reaction to the damage, attempts to recover or repair may result in losses for organizations (Smith, 2013).

Vargo is the most prominent author, contributing with three works. The first, “*Evolving to a New Dominant Logic*”, from 2004, in partnership with Lusch, has 41 co-citations in the references. By associating VCC and service-dominant logic (SDL), they discuss the proposal that it is not the goods (tangible/intangible) that will co-create value, but the service that would be linked to these goods in the consumer's view, or the utility that a good can provide for the user, directly impacting their well-being (Vargo & Lusch, 2004).

Vargo's second work, also co-authored with Lusch, “*Service-dominant logic: continuing the evolution*” (2008), with 36 co-citations, discusses the evolution of SDL, including suggestions and criticisms presented by other authors since the publication of their work in 2004. According to the article, SDL cannot be considered as a theory, because, along with new additions being possible for its explanation, the possibilities of other changes and/or additions in the listed premises are possible, indicating that SDL still has vast terrain to be explored by researchers (Vargo & Lusch, 2008).

Vargo's third and last work, “*On Value and Value Co-Creation: A Service Systems and Service Logic Perspective*”, published by the European Management Journal, in co-authorship with Maglio and Akaka, has 26 co-citations. The article involves the study of VCC within Service Systems and SDL, describing that it is through the intrinsic resources in these systems, which are formed by the participating individuals, the available information, and the technology used, that the relational exchange takes place, enabling the VCC. From the application of knowledge and skills to favor one of the parties, in return is the recognition of the value generated during the process. The study emphasizes that the simple exchange between actors must be replaced by the integration of resources of the parties involved since during this interaction, the use of available resources would generate services that would add value (Vargo, Maglio, & Akaka, 2008).

The bibliographic coupling indicates that the greater the use of equal references, the more similar the texts will be in relation to the subject or theoretical foundation (Oliveira Lucas, Garcia-Zorita & Sanz-Casado, 2013).

Figure 4 - Bibliographic Coupling between works

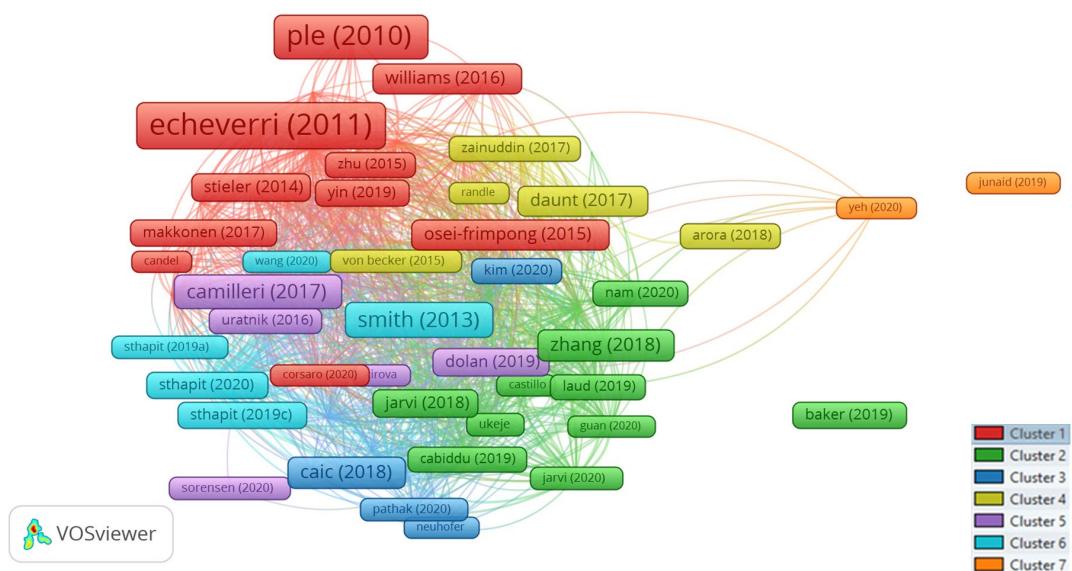


Figure 4 presents seven clusters according to the similarity in their bibliographies, according to a caption added to facilitate viewing.

The red cluster represents the group that has the largest number of articles with a total of 22. It contains articles from 2010 to 2020 and the WOS classifies the vast majority in “Business & Economics”. Only four works are classified in different areas. One article “(Co)Contamination as the Dark Side of Co-production: public value failures in co-production processes” by Williams, Kang, and Johnson (2016), is classified in two areas: “Business & Economics” and “Public Administration”. The article explores VCD events in public services, naming as “co-contamination” the phenomenon of destroying the value of public services provided, through co-production involving the public sector, users, and contractors.

The second work also classified into two areas, “Environmental Sciences & Ecology” and “Transportation”, addresses urban mobility and investigates how the interaction of resources can impact both VCC and VCD in the shared economy. This article analyzes users’ virtual messages of bicycles, with the title: “From value co-creation to value co-destruction? The case of dockless bike-sharing in China” (Yin, Qian, & Shen, 2019).

The third article, “The Effect of Value Co-Creation on Social Enterprise Growth: Moderating Mechanism of Environment Dynamics”, from 2019, explores two main focuses. The first aims to elucidate the joint formation of value (VCC) between the stakeholders and the companies, which, through the interaction process, would facilitate the engagement between the interested parties for this VCC. Second, it investigates the difficulties presented by the environment and how it can contribute negatively and lead to VCD (Ge, Xu, & Pellegrini, 2019). This article was also classified into two distinct areas: “Science & Technology - Other Topics”; “Environmental Sciences & Ecology”.

The last article, published by the journal European Sport Management Quarterly, “The Effect of Value Co-Creation on Social Enterprise Growth: Moderating Mechanism of Environment Dynamics”, uses SDL as a premise for the exploratory study, investigating how VCD is processed in the sporting environment, in which it analyzes the motivators of the VCC and VCD. The same attribute that could contribute to the VCC for some fans could be the motivator of the VCD for others (Stieler, Weismann & Germelmann, 2014), as fans have differences in their expectations regarding the perceived value. The article was classified in Science & Technology - Other Topics; Environmental Sciences & Ecology.

With 22 articles, this cluster is the largest of all and among the similarities, it is clear that the studies are more focused on the understanding of VCD from the studies on VCC and SDL. The dispersion found in this first cluster can be explained by presenting initial works by Plé and Cáceres (2010) and Echeverri and Skálen (2011), possibly starting works that explore other variables in association with VCD.

In the results of some of the studies based on the VCC, the possibility of VCD is perceived when the participants’ resources are misused during the interaction process. An example is the article “Front-end value co-creation in housing development projects”, studying how value propositions can be co-created or co-destroyed with the introduction of innovation for projects that promote housing development, involving conflicts arising from the interaction between governance local and developers (Candel, Karrbom Gustavsson, & Erikson, 2020).

Through interviews with farmers, the article “Co-creation of value in use through big data technology - a B2B agricultural perspective”, investigates how VCC is created and how it can be translated into monetary and non-monetary values, highlighting that co-destruction can negatively affect this process (Jayashankar et al., 2019).



In this group, the articles have a greater focus on the VCD itself, also using the SDL, which defines that the creation of value is not in the products offered, but in the services added to those who use it, as this logic argues that the value will be generated in the interaction between the parties to co-produce and in the value in use (Ranjan & Read, 2014, Vargo & Lusch, 2004).

Articles such as Corsaro's (2020) study how VCD can affect commercial companies, exploring the appropriation of value when co-destruction occurs, causing an imbalance between the appropriate values during interaction processes and the loss of value (co-destruction). Identifying two dimensions related to VCD, named "value awareness" and "context awareness", it describes four groups of reasons for this destruction of value, which ends up generating imbalance between the parties.

In the green cluster, among the 13 works that form it, two are from 2018, the others have their publications in 2019 (3 articles) and 2020 (8 articles). With a concentration of more current works, the highlight is the study of VCD focused on the term employees (Table 1).

Table 1 - Articles related to the term "employees"

Title	Authors	Period/Year	Goal	Results
Toxic Collaborations: Co-Destroying Value in the B2B Context	Cabiddu, Moreno and Sebastiano.	Journal of Service Research (2019)	Within the B2B environment, the study explores how VCD occurs through the actions or behavior of service providers.	They point out that both co-creation and VCD can be generated simultaneously within this context (B2B).
Eye for an eye? Frontline service employee reactions to customer incivility	Frey-Cordes, Eilert and Buettgen.	Journal of Services Marketing (2020)	Investigate the response of frontline employees through aggressive attitudes.	It indicates that aggressive attitudes generate greater discomfort, reaching the ego of these employees, who end up responding to these actions in a negative way.
Scale development of value co-destruction behavior in tourism	Guan, Gong, Xie and Huan.	Tourism Management Perspectives (2020)	In the tourism segment, it analyzes the relationship between employees and customers, seeking the premises that most contribute to VCD.	The results suggest that the difficulty of communication between the actors (clients and collaborators) support the explanation about the VCD.
When value co-creation fails: Reasons that lead to value co-destruction	Jarvi, Kahkonen and Torvinen.	Scandinavian Journal of Management (2018)	In the public sphere, it investigates how interactions between employees and users occur, occurring in the VCD.	The findings indicate that VCD can occur before or after the interaction process, with information about the stages and which reasons would be more related.
Value co-destruction: a typology of resource misintegration manifestations	Laud et al.	Journal of Services Marketing (2019)	It focuses on understanding the misuse of resources and impacts on the well-being of the actors involved.	It defines that an inappropriate use of resources has a negative effect on the harmed party's well-being.

Source: adapted by the authors from data extracted from WOS (2020)

In the tourism and hospitality environment, four articles explore the VCD through user posts and inappropriate sharing of their experiences regarding the use of language (Backer &



Kim, 2019), influencing unacceptable behaviors of new users and affecting the group of actors involved (Plé & Demangeot, 2020, Baker & Kim, 2019).

Articles centered on the perception of service providers reveal that the posture and commitment of leadership are relevant premises for VCD (Ukeje et al., 2020) and how attitudes outside the context of the relationship between customers and companies can negatively affect the relationship (Järvi et al., 2020). This result indicates a possible trend in studies on VCD, changing the analysis focus of the party involved in the interaction processes (service providers).

The third cluster, with nine articles, in turquoise blue (Figure 4), is composed of three works that study projects aimed at increasing the well-being of users of public services, inserting the intention together with the possible unanticipated effects that generate the VCD (Finsterwalder & Kuppelwieser, 2020). In the sports environment, one of the articles investigates how the multidimensional structures related to VCC during integration processes directly influence the well-being of athletes, who with the interaction of resources, can reach VCC or VCD results (Mulcahy & Luck, 2020).

Studies identified how the interaction between actors involved in a B2B system can trigger both VCC and VCD through behaviors considered opportunistic by one of the parties, leading to the breakdown of these relationships (Pathak & Ashok; TAN, 2020).

This cluster has two articles published in 2018 and the remaining seven are from the year 2020. Four articles within this cluster have their studies in the area of health and/or public policies, two are focused on the sports segment and one explores co-creation and VCD in the context of the shared economy, in a total of nine articles. Shared economy is understood as “[...] sharing of goods, allowing the optimization of their uses, as well as a lower level of idleness and less waste of resources, including allowing better and more efficient use of resources and, with that, greater environmental preservation” (Trindade, 2020, p.9).

Neuhofner, Magnus, and Celuch (2020) analyze how the interaction between users of technology services linked to Artificial Intelligence end up generating or destroying value, considering the event segment and what impacts are verified within this interaction between humans and machines.

Kaartemo and Känsäkoski (2018) study how the organization's posture influences the VCC or VCD in health services. The knowledge made available to patients empowers these users, and the organization should provide information that contributes to increasing the well-being of patients and their families, preventing the value from being destroyed due to lack of trust.

In the yellow cluster, with eight articles, two articles have greater proximity because they deal with consumer behavior and Showrooming, focusing on VCD (Arora & Sahney, 2018) and may represent a gap or trend in academic research.

Daunt and Harris (2017) research how consumers get involved in this process with the intention of private gains and advantages over other participants who offer their resources: “Showrooming represents a modern challenge for managers because this change in behavior means a change in the rules of exchange” (Daunt & Harris, 2017, p. 2), as the physical company provides the resources, however, consumers will create value with the virtual companies.

Due to consumer behavior (identified as showroomer), the customer benefits from physical stores to learn about products and then purchase them online, creating maximum value for themselves, therefore, co-creating value with the virtual company in which they purchased the product in detriment of the one that offered the facilities and personnel face-to-face assistance. The article's authors add that: “the showroomer consciously takes value from

channel members but does not reciprocate with the company(ies) from which they intentionally derive value" (Daunt & Harris, 2017, p. 2).

In the purple cluster, with eight articles, seven of them perform their research in the area of tourism and the similarity involving social media. The articles discuss how posts made by guests end up influencing new users through the content of posts, positive or negative, contributing to leverage or discourage visitation to certain tourist spots (Gkritzali, Mavragani, & Gritzalis, 2019; Camilleri & Neuhofer, 2017).

Services linked to tourism generate both VCC and VCD, as described by one of the articles in this cluster. The formation of interactive value is developed during the entire engagement process between the parties until the contracted service is experienced. Intermediate services that do not meet the expectations of users during the interactive process cause VCD, which, through social media, provide an environment for easy dissemination of information (Dolan, Seo, & Kemper, 2019).

The articles are divided into four published in 2020, two in 2019, one in 2017, and one in 2016. The latter analyzes how social media facilitates interaction, exploring the structure that supports the relationship between users and services through social networks (Uratnik, 2016).

Dolan et al., (2019) discussed Satisfaction surveys, exploring how social media can quickly disseminate users' opinions about tourism-oriented services. In this environment, there is a need for training on the part of service providers to effectively address tourist complaints, preventing value from being destroyed rather than created. The interactive value formation process can suffer from unmet expectations during the use of services, leading dissatisfied users to share negative experiences with others, highlighting the need for adequate responses by the company, thus avoiding VCD (Dolan et al., 2019).

(Dis)satisfaction is also acknowledged by Fan (2020), giving as an example of the cities of Venice and Hong Kong, which, due to the excessive number of tourists looking for certain regions, end up displeasing the residents of these cities. The lack of an ideal infrastructure to serve visitors, contributes to the generation of tensions in resident-tourist relations, thus causing the VCD. Some of the complaints reported range from inappropriate behavior to cultural differences, which end up revealing unpreparedness, including from the public sector, leading residents to abrupt attitudes such as intimidation or even physical confrontation.

Dissatisfaction caused by altered routines or attitudes that are incompatible with what is expected by local residents are strong reasons for the public sector to promote investments to meet tourist demands. The development of joint efforts between residents-tourists is necessary to align their expectations and achieve positive social contact (Fan, 2020).

The light blue cluster, with seven articles, has similarity, possibly since it has five articles by the same author (Erose Sthapit), and is the one with the largest number of publications on VCD according to WOS. Three of the articles involve shared economy, two of them in the tourism area and the third in the transport segment, more specifically on services provided by drivers associated with the Uber company.

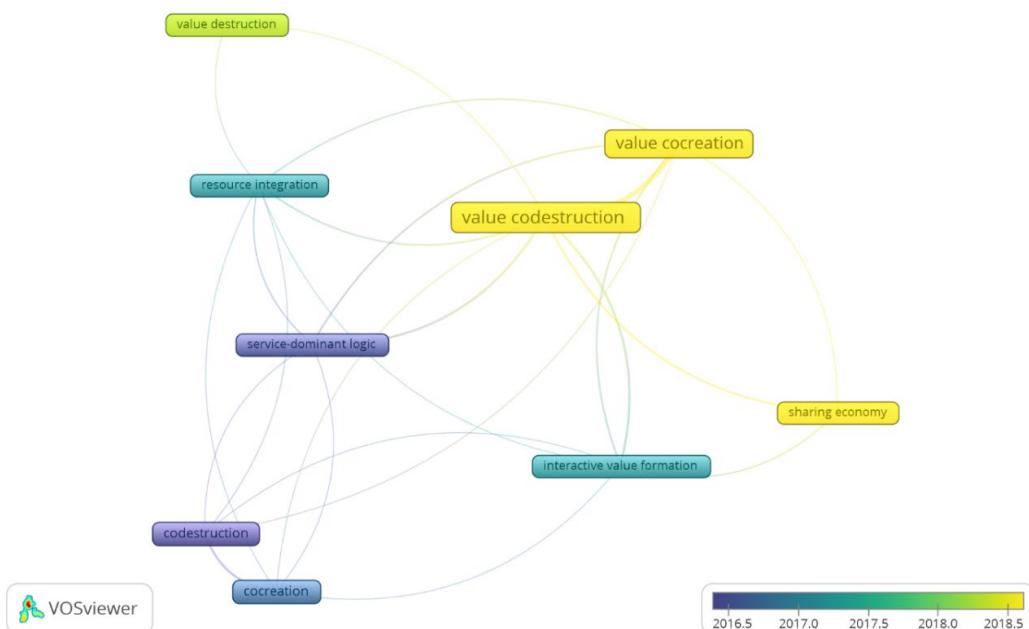
Another subject explored by author Sthapit is the "interactive value formation" related to the other two works. The article "*Source of value co-destruction: Uber customer perspectives*" intertwines the two subjects, researching what aspects would involve VCD, analyzing 75 negative user comments. The results indicated that during interactions, the drivers' inappropriate postures implied value losses, suggesting that managers need to clarify which responsibilities and obligations service providers must meet to minimize this negative return (Sthapit & Björk, 2019).



Only two articles are included in the last cluster (orange), and the spatial arrangements suggest that the similarity between them is only the study on VCD. The article “*Reviving consumer-alienation in the discourse of consumers' negativity*” studies how alienation from a brand influences the behavior of customers who experience some deficiency in this relationship, generating negative feelings, but without due manifestation, leading to a loss of value (Junaid, Hou, & Hussain, 2019). The second work, entitled “*Exploring the value co-destruction model for online deviant behaviors of hotel customers*”, proposes a model for VCD, considering the intention of recovery and the desire for revenge. The intention to recover the relationship between customers and hotel services is less influential when there is a feeling of revenge, through posted comments. When the desire for revenge arises, users post their negative messages intending to harm the company (Yeh et al., 2020).

As a final analysis of the 69 articles to verify the evolution on the subject, we determined the keywords indicated by the authors and Figure 5 illustrates the evolution of the subjects. The period indicated as the most relevant is between 2016 and 2018, as extracted using the Vosviewer software.

Figure 5 – Keywords – evolution over time



Source: WOS with the help of Vosviewer software (2020)

In Figure 5, studies on VCD are linked to SDL, describing the shift in focus from products to services. The product becomes the means to create value after experimentation by users (Vargo & Lusch, 2004), followed by studies that involve the interaction of resources between the various actors participating in the integrative process (Plé, 2016).

When unsuccessful, this integration of resources can lead to losses for companies when users try to recover the benefits not achieved and leave to affront the organization. This result is described in the work of Smith (2013), where the improper use of resources generates a negative impact on the well-being of users. The work of Plé (2016) explores how employees' attitudes during the integration of customer resources, result in co-creation or VCD.

Engagement among stakeholders can produce value throughout the interaction process, resulting in the formation of integrative value (Dolan et al., 2019, Ge et al., 2019). The engagement of users in an online environment affects this user's satisfaction, indicating that the feeling of appreciation can be perceived by the customer through organizational actions, such as the request for evaluation of the services provided, or even through the positive interaction of a posture of promptness and cordiality of employees (Zhang et al., 2018).

The most recent theme pointed out in Figure 5 indicates studies on the shared economy, a fact that corroborates the previous findings of this work on publications in tourism magazines. This analysis provides an insight into the current panorama of publications on VCD and provides evidence of trends in research on VCD (Table 2).

Table 2 - Keyword frequency

Termo	Ocorrência (frequência)
Value co-destruction	40
Value co-creation	31
Co-creation	10
Co-destruction	8
Service-dominant logic	7
Interactive value formation	6
Resource integration	5
Sharing Economy	5
Value destruction	5

Source: WOS (2020)

Three terms emerged: "Service-dominant logic", "Interactive value formation", and "Sharing Economy". As for the first term, SDL, this result corroborates the findings in the research of Vargo, who is the author with the greatest contribution in this bibliometric survey.

To identify that errors that occur during an integration process for the VCC (interactive value formation) lead to losses for customers, several articles, such as Smith (2013), use SDL. The author recognizes as a limitation the small sample for the development of her work with interviews applied to 120 participants. However, we recognize the contribution on value (in the customer's view) and processes that will result in co-creation or VCD.

Another article that adopts the SDL is the "*Co-destruction of value by spectators: the case of silent protests*", published by the European Sport Management Quarterly. This article interviews fans in football matches, indicating that both the VCC and the VCD are dependent on the expectations of these spectators (Stieler et al., 2014).

More recent articles also employ SDL, such as "*Co-creation of value and the project context: Towards application on the case of Hinkley Point C Nuclear Power Station*", which through a case study, verifies how decision making influences the results of projects for the VCC. The results indicated that, in most decisions, two items are predominant: cost and time and highlight those issues relevant to value formation are discarded in a long-term view (Smyth, Lecouevre, & Vaesken, 2018).

"*Co-creation of value-in-use through big data technology: B2B agricultural perspective*" explores how VCC arises between the interaction of farmers and new, digital agriculture. The co-created values can be obtained through interactions, direct or indirect, during the experimentation process and these are expressed both in monetary and non-monetary values, explained by the SDL. However, even with the benefits generated, there may still be VCD, since this digital agriculture also entails concerns about the privacy of data of those involved (Jayashankar et al., 2019).

On the formation of interactive value, the article by Echeverri and Skälen (2011) explores the public transport segment, describing how value can be co-created or co-destroyed, with the identification of five practices related to the created value by interaction (informing, greeting, delivering, charging, and helping) and how divergent postures destroy this value.

Another example is the article “*Interactive value formation: drivers and outcomes from Airbnb guests' perspectives*”, in which the authors investigate how value formation occurs during interactions and, in the case of VCD, how the destroyed value can be recovered (Sthapit & Björk, 2020b). With the collection of negative posts made by users on the Airbnb website, identifying that the types of behavior and service provided to customers are the most impactful for VCD.

Within the hotel sector, studies such as the one by Buhalis, Andreu, and Gnoth (2020) analyze how the shared economy affects users, communities, and the public sphere. Due to this type of modality (sharing), the speed with which tourist growth happens cannot be accompanied by the infrastructure to meet these new demands, contributing to VCD, as they directly impact the well-being of the actors involved.

In the context of the shared economy, studies show that negative comments shared between users online can negatively influence other users of the same service, generating a VCD (Yin, Qian, & Shen, 2019, Camilleri & Neuhofer, 2017). This value destruction can be caused by the unsuccessful interaction between guests and hosts, which even accidental, still end up destroying value instead of creating it (Camilleri & Neuhofer, 2017).

5 Conclusions

The objective of this research was to verify how the studies on VCD and its evolution over time are found, through a literature review supported by bibliometric analysis.

Publications are concentrated in Marketing magazines, followed by magazines in the area of Tourism, this area has the periodical with the greatest impact (Tourism Management Perspectives). The magazine “Current Issues in Tourism” has three publications in 2020 and concentrates the most recent articles about the VCD.

The interest in the subject starts with Plé and Cáceres (2010), which are the most cited article in the sample, followed by Echeverri and Skälen (2011). For the co-citation of works, the author Vargo contributes with three articles, with two of them in partnership with Lusch and this suggests that several of the articles in the sample on VCD adopt the SDL.

Studies on the Formation of Interactive Value is one of the trends verified, where the studies explore how value is co-created during the interaction between the parties and how VCD happens with the misuse of the actors' resources. Showrooming also appears as a focus in some works, where the value is shifted from one actor to another, as the customer uses the resources of a certain company (physical) and ends up buying the product with another (virtual). This implies that not everyone involved in the interaction between companies and customers will receive a return on the value co-created in this process.

Shared Economy based on the analysis of the evolution of articles on VCD, appears with greater emphasis from 2018 onwards, indicating the targeting of the articles and as a complement, some works take the focus away from the customer to explore service providers/employees and which behaviors generate the VCD.

The limitations may serve as suggestions for further research and include the collection in other databases or the use of bibliographic analysis in the methodology. We also add alternatives presented by authors cited in this work.

Studies in different segments are suggested, as many articles look at VCD in the tourism and hospitality sector (Camilleri & Neuhofer, 2017) or research on showrooming covering different product categories, along with a larger sample of interviewed customers, adding demographic data, thus opening the possibility of using statistical tools to compare results (Arora & Sahney, 2018). The increase in product diversification is also suggested by Daunt and Harris (2017), with the exploration of the phenomenon in different environments and the use of ethnography as a method. A greater scope could be made by adding webrooming (inverse behavior to showrooming), enabling a better view of the retail that operates in multi-channels (Arora & Sahney, 2018).

Echeverri and Skalen (2011) propose that new research addresses the interactions between the parties in greater depth, for a greater understanding of the formation of interactive value in other environments in B2B and B2C relationships. Sthapit and Björk (2020b) recognize a limitation regarding the sample, as they only consider online customer posts written originally in English, proposing the collection of a greater number of users and comments, along with a better understanding of this interactive value formation.

References

Arora, S., & Sahney, S. (2018). Antecedents to consumers' showrooming behaviour: An integrated TAM-TPB framework. *Journal of Consumer Marketing*.
<https://doi.org/10.1108/JCM-07-2016-1885>

Baker, M. A., & Kim, K. (2019). Value destruction in exaggerated online reviews. *International Journal of Contemporary Hospitality Management*.
<https://doi.org/10.1108/IJCHM-03-2018-0247>

Brizola, J., & Fantin, N. (2016). Revisão da literatura e revisão sistemática da literatura. *Revista de Educação do Vale do Arinos-RELVA*, 3(2).

Buhalis, D., Andreu, L., & Gnoth, J. (2020). The dark side of the sharing economy: Balancing value co-creation and value co-destruction. *Psychology & Marketing*, 37(5), 689-704.
<https://doi.org/10.1002/mar.21344>

Cabiddu, F., Moreno, F., & Sebastiano, L. (2019). Toxic collaborations: co-destroying value in the B2B context. *Journal of Service Research*, 22(3), 241-255.
<https://doi.org/10.1177/1094670519835311>



Camilleri, J., & Neuhöfer, B. (2017). Value co-creation and co-destruction in the Airbnb sharing economy. International Journal of Contemporary Hospitality Management.
<https://doi.org/10.1108/IJCHM-09-2016-0492>

Candel, M., Karrbom Gustavsson, T., & Eriksson, P.-E. (2020). Front-end value co-creation in housing development projects. Construction Management and Economics.
<https://doi.org/10.1080/01446193.2020.1851037>

Corsaro, D. (2020). Value co-destruction and its effects on value appropriation. Journal of Marketing Management, 36(1-2), 100-127.
<https://doi.org/10.1080/0267257X.2019.1696876>

Daunt, K. L., & Harris, L. C. (2017). Consumer showrooming: Value co-destruction. Journal of Retailing and Consumer Services, 38, 166-176.
<https://doi.org/10.1016/j.jretconser.2017.05.013>

Dolan, R., Seo, Y., & Kemper, J. (2019). Complaining practices on social media in tourism: A value co-creation and co-destruction perspective. Tourism Management, 73, 35-45.
<https://doi.org/10.1016/j.tourman.2019.01.017>

Echeverri, P., & Skålé, P. (2011). Co-creation and co-destruction: A practice-theory based study of interactive value formation. Marketing Theory, 11(3), 351-373.
<https://doi.org/10.1177/1470593111408181>

Engen, M., et al. (2020). Continuing the development of the public service logic: a study of value co-destruction in public services. Public Management Review.
<https://doi.org/10.1080/14719037.2020.1720354>

Fan, D. X. F. (2020). Understanding the tourist-resident relationship through social contact: Progressing the development of social contact in tourism. Journal of Sustainable Tourism.
<https://doi.org/10.1080/09669582.2020.1852409>



Finsterwalder, J., & Kuppelwieser, V. G. (2020). Intentionality and transformative services: Wellbeing co-creation and spill-over effects. *Journal of Retailing and Consumer Services*, 52, 101922. <https://doi.org/10.1016/j.jretconser.2019.101922>

Frey-Cordes, R., Eilert, M., & Büttgen, M. (2020). Eye for an eye? Frontline service employee reactions to customer incivility. *Journal of Services Marketing*. <https://doi.org/10.1108/JSM-07-2019-0270>

Ge, J., Xu, H., & Pellegrini, M. M. (2019). The effect of value co-creation on social enterprise growth: Moderating mechanism of environment dynamics. *Sustainability*, 11(1), 250. <https://doi.org/10.3390/su11010250>

Gkritzali, A., Mavragani, E., & Gritzalis, D. (2019). Negative MWOM and value co-destruction during destination crises. *Business Process Management Journal*. <https://doi.org/10.1108/BPMJ-07-2019-0278>

Grácio, M. C. C. (2016). Acoplamento bibliográfico e análise de cocitação: revisão teórico-conceitual. *Encontros Bibli: revista eletrônica de biblioteconomia e ciência da informação*, 21(47), 82-99. <https://doi.org/10.5007/1518-2924.2016v21n47p82>

Guan, X., et al. (2020). Scale development of value co-destruction behavior in tourism. *Tourism Management Perspectives*, 36, 100757. <https://doi.org/10.1016/j.tmp.2020.100757>

Järvi, H., et al. (2020). Value co-destruction in hotel services: Exploring the misalignment of cognitive scripts among customers and providers. *Tourism Management*, 77, 104030. <https://doi.org/10.1016/j.tourman.2019.104030>

Järvi, H., Kähkönen, A.-K., & Torvinen, H. (2018). When value co-creation fails: Reasons that lead to value co-destruction. *Scandinavian Journal of Management*, 34(1), 63-77. <https://doi.org/10.1016/j.scaman.2018.01.002>



Jayashankar, P., et al. (2019). Co-creation of value-in-use through big data technology-a B2B agricultural perspective. *Journal of Business & Industrial Marketing*.
<https://doi.org/10.1108/JBIM-12-2018-0411>

Junaid, M., Hou, F., & Hussain, K. (2019). Reviving consumer-alienation in the discourse of consumers' negativity. *International Journal of Market Research*, 61(6), 568-570.
<https://doi.org/10.1177/1470785318814425>

Kaartemo, V., & Känsäkoski, H. (2018). Information and knowledge processes in health care value co-creation and co-destruction. *SAGE Open*, 8(4), 2158244018820482.
<https://doi.org/10.1177/2158244018820482>

Laud, G., et al. (2019). Value co-destruction: a typology of resource misintegration manifestations. *Journal of Services Marketing*. <https://doi.org/10.1108/JSM-01-2019-0022>

Lucas, E. de O., Garcia-Zorita, J. C., & Sanz-Casado, E. (2013). Evolução histórica de investigação em informetria: ponto de vista espanhol. *Liinc em revista*, 9(1), 255-270.
<https://doi.org/10.18617/liinc.v9i1.509>

Luo, J. G., et al. (2019). Co-creation and co-destruction of service quality through customer-to-customer interactions. *International Journal of Contemporary Hospitality Management*.
<https://doi.org/10.1108/IJCHM-12-2017-0792>

Mulcahy, R., & Luck, E. (2020). Row! Row! Row Your Boat! Transformative Value Co-creation and Codestruction in Elite and Olympic Rowers. *Journal of Sport Management*, 34(4), 354-366. <https://doi.org/10.1123/jsm.2019-0381>

Muntinga, D. G., Moorman, M., & Smit, E. G. (2011). Introducing COBRAs: Exploring motivations for brand-related social media use. *International Journal of advertising*, 30(1), 13-46. <https://doi.org/10.2501/IJA-30-1-013-046>



Nascimento, C. A. X., Urdan, A. T., & Costa, B. K. (2018). Co-destruição de Valor como Síncope da Cocriação de Valor e os Impactos na Lealdade do Aluno no Ensino a Distância. Anais do VII SINGEP – Simpósio Internacional de Gestão de Projetos, Inovação e Sustentabilidade.

Neuhöfer, B., Magnus, B., & Celuch, K. (2020). The impact of artificial intelligence on event experiences: a scenario technique approach. *Electronic Markets*.
<https://doi.org/10.1007/s12525-020-00433-4>

Pathak, B., Ashok, M., & Tan, Y. L. (2020). Value co-destruction: Exploring the role of actors' opportunism in the B2B context. *International Journal of Information Management*, 52, 102093. <https://doi.org/10.1016/j.ijinfomgt.2020.102093>

Prahalad, C. K., & Ramaswamy, V. (2004). Co-creation experiences: The next practice in value creation. *Journal of Interactive Marketing*, 18, 5–14.

Plé, L., & Demangeot, C. (2020). Social contagion of online and offline deviant behaviors and its value outcomes: The case of tourism ecosystems. *Journal of Business Research*, 117, 886-896. <https://doi.org/10.1016/j.jbusres.2019.06.002>

Plé, L. (2016). Studying customers' resource integration by service employees in interactional value co-creation. *Journal of Services Marketing*. <https://doi.org/10.1108/JSM-02-2015-0065>

Plé, L., & Cáceres, R. C. (2010). Not always co-creation: Introducing interactional co-destruction of value in Service-Dominant Logic. *Keywords. Journal of Services Marketing*, 24, 430-437. <https://doi.org/10.1108/08876041011072546>

Ranjan, K. R., & Read, S. (2014). Value co-creation: Concept and measurement. *Journal of the Academy of Marketing Science*, 44(3), 290-315.

Santos, R. N. M. dos, & Kobashi, N. Y. (2009). Bibliometria, cientometria, infometria: conceitos e aplicações.

Smith, A. M. (2013). The value co-destruction process: A customer resource perspective. European Journal of Marketing. <https://doi.org/10.1108/EJM-08-2011-0420>

Smyth, H., Lecoeuvre, L., & Vaesken, P. (2018). Co-creation of value and the project context: Towards application on the case of Hinkley Point C Nuclear Power Station. International journal of project management, 36(1), 170-183.
<https://doi.org/10.1016/j.ijproman.2017.04.013>

Sthapit, E., & Bjork, P. (2020). Interactive value formation: drivers and outcomes from Airbnb guests' perspectives. Scandinavian Journal of Hospitality and Tourism.
<https://doi.org/10.1080/15022250.2020.1828163>

Sthapit, E., & Björk, P. (2018). Towards a better understanding of interactive value formation: Three value outcomes perspective. Current Issues in Tourism, 23(6), 693-706.
<https://doi.org/10.1080/13683500.2018.1520821>

Sthapit, E., & Björk, P. (2019). Sources of value co-destruction: Uber customer perspectives. Tourism Review. <https://doi.org/10.1108/TR-12-2018-0176>

Stieler, M., Weismann, F., & Germelmann, C. C. (2014). Co-destruction of value by spectators: The case of silent protests. European Sport Management Quarterly, 14(1), 72-86. <https://doi.org/10.1080/16184742.2013.865249>

Trindade, M. G. N. (2020). Economia de Plataforma (ou tendência à bursatilização dos mercados): Ponderações Conceituais Distintivas em relação à Economia Compartilhada e à Economia Colaborativa e uma Abordagem de Análise Econômica do Direito dos Ganhos de Eficiência Econômica por meio da Redução Severa dos Custos de Transação. Revista Jurídica Luso-Brasileira.

Ukeje, U. E., et al. (2020). Organizational level antecedents of value co-destruction in hospitality industry: An investigation of the moderating role of employee attribution. Current Issues in Tourism. <https://doi.org/10.1080/13683500.2020.1763928>

Uratnik, M. (2016). Interactional service innovation with social media users. Service Science, 8(3), 300-319. <https://doi.org/10.1287/serv.2016.0149>

Vafeas, M., Hughes, T., & Hilton, T. (2016). Antecedents to value diminution: A dyadic perspective. Marketing Theory, 16(4), 469-491.
<https://doi.org/10.1177/1470593116652005>

Vargo, S. L., & Lusch, R. F. (2008). Service-dominant logic: Continuing the evolution. Journal of the Academy of marketing Science, 36(1), 1-10. <https://doi.org/10.1007/s11747-007-0069-6>

Vargo, S. L., Maglio, P. P., & Akaka, M. A. (2008). On value and value co-creation: A service systems and service logic perspective. European management journal, 26(3), 145-152. <https://doi.org/10.1016/j.emj.2008.04.003>

Vargo, S. L., & Lusch, R. F. (2004). Evolving to a new dominant logic for marketing. Journal of marketing, 68(1), 1-17.

Vergara, S. C. (2006). Projetos e relatórios de pesquisa. São Paulo: Atlas.

Williams, B. N., Kang, S.-C., & Johnson, J. (2016). (Co)-contamination as the dark side of co-production: public value failures in co-production processes. Public Management Review, 18(5), 692-717. <https://doi.org/10.1080/14719037.2015.1111660>

Yeh, S.-S., et al. (2020). Exploring the value co-destruction model for on-line deviant behaviors of hotel customers. Tourism Management Perspectives, 33, 100622.
<https://doi.org/10.1016/j.tmp.2019.100622>

Yin, J., Qian, L., & Shen, J. (2019). From value co-creation to value co-destruction? The case of dockless bike sharing in China. *Transportation Research Part D: Transport and Environment*, 71, 169-185. <https://doi.org/10.1016/j.trd.2018.12.004>

Zhang, T., et al. (2018). Engaging customers in value co-creation or co-destruction online. *Journal of Services Marketing*. <https://doi.org/10.1108/JSM-01-2017-0027>

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