Car Sharing in Marketing

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Abstract
The objective of this article is to explore several studies on Car Sharing (CS) in the marketing discipline. A total of 1,251 articles was collected from several journals in the Q1 Schimago category. Of these number 165 articles were chosen for research goals. A detailed investigation reduced this amount to 50 articles. The content analysis technique is applied by examining some key aspects, such as theme, authorship, research type, scope, and research design. The results of this study show that top-class journals have not published many articles about CS in the marketing discipline, but this does show an upward trend. Most articles are empirical papers. In general, the findings show a shift in the focus of CS studies in the marketing discipline over time.

Keywords—Online transportation; Sharing economy; Car sharing; Marketing; Content analysis

I. INTRODUCTION
In recent times collaborative consumption has become increasingly popular (Belk, 2014). Collaborative consumption covers business transactions, including Car Sharing (CS) (Hartl et al., 2016). CS is an example of very successful collaborative consumption in Europe and North America (Hofmann et al., 2017). Another study has stated that 42 percent of respondents agreed or strongly agreed that they would adopt CS in the future (Claudy et al., 2015). Large consumer bases in several regions have adopted CS, and it has spread rapidly in many cities throughout the world (Claudy et al., 2015). Based on an investigation from the Boston Consulting Group (Bert et al., 2016), by 2021, as many as 35 million users will order 1.5 billion minutes of driving time every month. Furthermore, vehicle sales worldwide will decrease by around 550 thousand units. Specifically, CS has operated in many cities throughout Italy (Kleinaltenkamp et al., 2018).

Through CS services, owners, service providers and individuals give customers access to cars (Schaefer et al., 2016). One successful CS startup that was built based on a collaborative consumption system is Zipcar (Matzler et al., 2015), which was founded by the Avis Group in 2000 (Bocken, 2017). In 2009 car manufacturer
Daimler launched another CS service, Car2go. Car2go has designed the car in a completely different way so everyone can easily recognize it (Kleinaltenkamp et al., 2018). Car2go focuses its services on certain cities because car ownership is a social status symbol (Dijk et al., 2013). After that, some rivals such as Volkswagen (quicar), and BMW (DriveNow) followed (Baumeister et al., 2015). On the other hand, BMW developed DriveNow’s premium CS business ideas by forming a network of strategic partners (Zimmermann et al., 2014). Table 1 shows the details of CS operators.

| Operator     | Established | Owner                                      | Country       |
|--------------|-------------|--------------------------------------------|---------------|
| Mobility     | 1997        | Mobility Carsharing                        | Switzerland   |
| Zipcar       | 2000        | Avis group (Avis Budget Group Inc)         | USA           |
| BlaBlaCar    | 2006        | BlaBlaCar                                  | France        |
| Car2Go       | 2008        | Daimler                                   | Germany       |
| ShareNow     | 2008        | Daimler and BMW Group (merger between Car2go and DriveNow) | Germany |
| Uber         | 2009        | Uber                                      | USA           |
| E-Vai        | 2010        | Lombardy Regional Administration           | Italy         |
| DriveNow     | 2011        | BMW                                       | Germany       |
| Multicity    | 2012        | Citroen                                   | Germany       |
| Ford2go      | 2013        | FHD GmbH; DB Rent GmbH                     | Germany       |
| Enjoy        | 2013        | Eni                                       | Italy         |
| Mu           | 2015        | Peugeot                                   | French        |
| quicar       | 1995        | Volkswagen                                | Germany       |
| GuidaMI      | 2016        | Azienda Trasporti Milanesi (Europcar Group) | Italy        |

This research was conducted to address contradictions relating to the CS use by examining several articles on CS in the marketing discipline through content analysis. A review of some CS articles to date is expected to be able to map CS study trends in the marketing discipline more accurately. This research needs to be carried out as current research on CS is in an embryonic phase (Belk, 2010; Belk, 2014). There is little research on shared consumption, and most of it comprises conceptual studies (Belk, 2007; Belk, 2010). Furthermore, the empirical literature has been deemed to have paid less attention to CS services, and existing studies have focused mainly on people who have already used it (Prieto et al., 2019). There has not been much research on collaborative consumption as an alternative to individual consumption (Roos & Hahn, 2019). This paper contributes theoretically by identifying a shift in the approach and focus of CS studies over time in the marketing discipline.

II. LITERATURE REVIEW

A. Sharing Economy

Information support and social resources in tourism unite citizens, market entities, and guests, building a complicated service ecosystem (Greitzer et al., 2015). The Sharing Economy (SE) is one of the most representative forms of a service ecosystem as a novel idea yielded from mobile technology (Frenken & Schor, 2017). SE regulates the possession and delivery of products for profit; this system is named “collaborative consumption” (Belk, 2014). In contrast to conventional supporters, the service system in SE gives cost leadership and recommends a novel lifestyle among limited populations through dialogical interaction (Tussyadiah, 2015). The economic pressure accelerated the increase of SE, especially in the tourism industry (Zervas et al., 2017). Noteworthy, this extension further changed trip patterns (Tussyadiah & Pesonen, 2016).

SE can be classified into two ways: access-based economy, and collaborative consumption. According to Belk (2014), the notion of SE is collaborative consumption, as a coordinated activity to obtain, provide, or share services within online-focused settings (Botzman et al., 2010). On the other hand, Bardhi et al. (2012) explained the specific essence of SE, namely providing access to consumers. Therefore, SE is referred to as an access
economy, which offers consumers access to services without conveying possession. SE platforms reconcile purchases by balancing the consumers from supply-demand views (Mair et al., 2017).

The SE has grown rapidly as customers have recognized that numerous things are more easily rented than owned (Belk, 2014). An increase in consumer-to-consumer interaction abilities through technologies has been critical in supporting the SE (Bilaski, 2012). The emergence of SE has been supported by several studies that seek to investigate the critical role of SE in influencing service providers and recipients (Cheng, 2016). The rise of SE has affected the competition for regular actors in wider business segments. For example, the existence of Airbnb has led to significant price cuts and revenue declines by conventional hotels (Aznar et al., 2017). It is essential to see that the contribution of SE only has meaningful rival consequences on business actors after leapfrogging the first barrier of market acceptance (Arnould & Rose, 2016). In addition, Sundararajan (2013) states that the novel SE market has shortened inefficient consumption for consumers.

But, the concern related to SE also becomes a crucial public concern (Ert et al., 2016). Even though the technologies in SE give the foundation of confidence to foreigners, they could not anticipate violations (Bever, 2018). Nevertheless, violations are also difficult to anticipate in the conventional hospitality industry. The hyper-response of the media has intensified concerns about the safety of SE (Guttentag, 2015). Even though the SE is a different model of business, incarcerations from the conventional business look to be a bit unnecessary. The tourist decision-making process regarding the choosing of SE should entirely consider the contemporary situation. Several researchers are showing great interest in investigating the buying processes of SE consumers, in particular unique experience and sustainability (Liang et al., 2018). Besides, consumers’ engagement on SE platforms is crucial for the platform’s success. Consumers’ involvement facilitates firms to generate consumers’ benefits (Nadeem et al., 2021).

B. Car Sharing

Car Sharing (CS) is an innovative concept that has received much public attention (Meijkamp, 1998). The CS concept is one form of service innovation with high involvement (Claudy et al., 2015). In most countries, CS means the use of cars collectively, and in turn, CS services allow a group of persons to share cars (Hofmann et al., 2017). As a service that gives rental vehicles as an option to private vehicles (Meijkamp, 1998), CS is also defined as consumption-based access (Bardhi et al., 2012). CS is an innovative project that gives individuals a short-term connection to cars. Based on the Car Sharing Association, CS is a membership-based service that gives access to cars without ownership. CS is demand-based mobility, where members spend only for the time and/or distance they drive (Car Sharing Association: https://carsharing.org/about/). However, CS is often associated with “product service system” (PSS). Three PSS models related to cars: car rental, CS, and carpooling models (Kim et al., 2016).

Consumers who register with CS services can find the nearest car via the internet or an application on their smartphone. Prices are calculated based on usage time and distance traveled (Claudy et al., 2015). Customers using CS must prepare their adoption of the car carefully (Andreassen et al., 2018). In England, CS is sometimes likened to “carpooling.” However, CS is a different phenomenon from “carpooling” (Hofmann et al., 2017; Ciasullo et al., 2018). The latter implies car sharing among private individuals, while CS is a service available to some drivers in a society (CSA).

The growth of CS is driven by the diminishing importance of car ownership as a status (Dijk et al. 2013). CS improvement can be achieved by addressing CS availability and security issues (Claudy et al., 2015). Likewise, knowledge is an antecedent of consumers’ intention to adopt CS. This access-based service provider must prioritize making consumers more familiar with sharing services. Customer competence can enhance their experience (Alba & Hutchinson, 2000; Prieto et al., 2019). Previous involvement with CS and being familiarized about CS services expand the CS use. Consumers need to find information about CS as a plan to reduce uncertainty (Prieto et al., 2019). The use of CS builds consumer awareness of the environmental impacts (Kleinaltenkamp et al., 2018).

CS companies need to reconfigure their ecosystems to provide innovative services, such as building partnerships and integrating activities with other actors in the ecosystem (Lütjen et al., 2019). Besides, regulators or the government can play a role in the diffusion and access of CS by launching proto-institutional regulations. The organization supports the creation of consumer value with CS service providers through proto-institutional regulations (Kleinaltenkamp et al., 2018). Table 2 highlights the reasons for adopting CS.
III. RESEARCH METHODOLOGY

We utilize a structured analysis to reach our research agenda. The essay utilized a systematic review method to combine existing literature regarding car-sharing. A literature review is essential in building fundamental topics and associations among the dimensions under examination, thus encouraging more structured research purposes (Burgess et al., 2006). It intends to integrate prior conclusions, learn how the method maintains the theoretical model, and link forthcoming investigations with existing problems and attentions (Thorpe et al., 2005). A structured analysis performs the broadly utilized approaches, methods, and theories in the area of investigation through figures and tables (Paul & Criado, 2020). The use of this research plan lies in its capability

| Authors | Reasons |
|---------|---------|
| Gielens & Steenkamp (2019) | Can enjoy social interaction with fellow passengers. |
| Akbar (2019) | (i) It is an alternative to the cost and hassle of owning your car; (ii) it is more flexible than public transportation |
| Freudenreich et al. (2019) | Replaces individual car ownership. |
| Bardhi et al. (2012) | (i) Economic problems; (ii) allows consumers freedom of lifestyle; (iii) know CS platforms. |
| Prieto et al. (2019) | (i) Knowledge, environment, ownership links, and car involvement; (ii) economic and environmental benefits; (iii) knowledge sharing; (iv) consumers have access to several brands, several sizes and types of cars, and various types of vehicle (diesel, gasoline, hybrid, electricity). |
| Wilhelms et al. (2017) | Cultural factors and attitudes. |
| Acquier et al. (2017); Martin (2016) | More environmentally friendly. |
| Botsman & Rogers (2010) | Can reduce pollution and ecological footprints. |
| Piscicelli et al. (2015) | It has a pro-environment value that is stronger than consumers who do not share. |
| Barnes & Mattsson (2017) | The adoption of CS services is driven partly by consumer environmentalism. |
| Shaheen et al. (2008) | Reducing the level of car ownership (fewer cars), so air pollution is reduced. |
| Lamberton & Rose (2012) | (i) Financial benefits; (ii) personal interests and utilitarianism. |
| Möhlmann (2015); Mont (2004) | Cost and financial benefits. |
| Guyader (2018) | It allows the use of a car without car ownership. |
| Bocken (2017) | CS makes better use of available resources. |
| Hofmann et al. (2017) | Reasons for “flexibility” and “maintenance.” |
| Martin & Shaheen (2011) | CS reduces average household greenhouse gas emissions in North America. |
| Firmkorn & Müller (2011) | CS can replace up to seven cars. |
| Meijkamp (1998) | Environmental effects and efficiency. |
| Kirby (2003) | Improves relations within the community and helps the environment. |
| Zimmermann et al. (2014) | CS reduces exhaust emissions and increases flexibility for customers. |
| Meijkamp (1998) | (i) CS is much cheaper for those who don’t often use their car; (ii) opportunities to utilize several kinds of vehicles, ranging from small and light vehicles for a short-term trip, to large and very luxurious vehicles for long-term trips; (iii) increases the efficiency of car services. |
| Meijkamp & Theunissen (1997) | (i) Reduces the effect on car use; (ii) stimulates capital transfers; (iii) different car choices; (iv) improves service efficiency; (v) shorter product life; (vi) stimulates the optimization of the use of economic interests. |
| Car Sharing Association (CSA) | (i) Reduces private car ownership; (ii) reduces vehicle mileage; (iii) motivates residents to walk, bike, and ride buses and trains; (iv) reduces dependence on fossil fuels while lowering greenhouse gas emissions (Car Sharing Association: https://carsharing.org/about/). |

Table 2. Reasons for Adopting Car Sharing
to select the references, contributors, themes, and intra-interactions from a collection of papers based on the citations (Martínez-Lopez et al., 2018). Such a “systematic, transparent, and reproducible” review (Dzikowski, 2018) gives a recognition of the current status of a sphere of investigation (Ferreira et al., 2016).

Our study contained a series of schemes in which searching rules were developed to decrease the bias (Crossan & Apaydin, 2010). We organized a complete exploration and review structure by including database search and implementing recognized guidelines (Durach et al., 2017). Based on Denyer & Tranfield (2009), we conducted review questions acquired from conversations with related specialists. This primary examination was necessary to focus on search, review, and integration steps by defining the search time. This research focused on positioning, choosing, and evaluating studies (Denyer et al., 2009). The areas for the search procedure involved journal articles discussing car sharing.

Data were recorded into a spreadsheet. The spreadsheet listed the title, writers, journal name, publication time, research method, research designs, research scope, citations, number of pages per article, research type, number of countries participating in empirical research, number of samples, keyword category, and country of origin. After inserting this data, we utilized a well-organized path to classify the current topics (Braun & Clarke, 2006). The thematic review employed in this investigation was comparable to that developed by Raddats et al. (2019), and the two research assistants decided upon the themes after autonomously interpreting the journal papers. We present a general description of the status quo of relevant articles to drive and guide academic and empirical approaches. Through systematic reviews, we classify, examine, and integrate data from the previous study to provide a meaning of the topic (Palmatier et al., 2018) and generate a basis for promoting understanding and approach advancement (Snyder, 2019).

This study analyzes several articles with the keyword “car sharing and marketing”. The writing on the subject above first appeared in 1943, and subsequent articles only appeared again in 1998 and 2008. We limit the analysis to articles published in the Q1 Schimago category journal. In total, 1,251 articles were identified. These articles were tracked electronically through four subscribed journal databases, namely Proquest (295), Emeraldinsight (233), ScienceDirect (615), and Jstore (108). Of these, 165 articles were chosen for research objectives. A systematic investigation of the text of each publication decreased this number to 50 articles. Other articles were not analyzed because the status of car sharing and marketing was unclear. Each subsequent article was analyzed applying content analysis (Krippendorff, 1980). This technique has been extensively adopted by marketing scholars (Leonidou et al., 1998). The article contents were classified by two researchers. They autonomously examined the summaries and selected the journal articles based on our rules (Suppatvech et al., 2019). They were given a guidebook and worked independently. Lastly, the data were analyzed using statistical analysis. To circumvent subjectivity concerning our inclusion and exclusion criteria (Tranfield et al., 2003), two research assistants in the investigation unit conducted a collective determination in cases the text was ambiguous. To generate novel insights, data interpretation and integration can be noticed as the main outcomes of this study (Crossan et al., 2010). Review of recognized articles divided into two components: (i) analyzing patterns of papers over the investigated time; and (ii) giving recommendations extracted from the description of car-sharing research topics.

IV. RESULT AND DISCUSSION

This part examine the bibliographic review of several articles about CS in the marketing discipline. Specifically, this section discusses the article source, theme, authorship, research method, research designs, and research scope. In all, the articles were distributed in 30 journals. Three journals contained the most articles: JBR (7), JBE (4), and JSM (3). Other journals published one or two articles (see Table 3). Based on these findings, each of the top-tier journals can be said to have not published many articles about CS in the discipline of marketing.

Based on the content analysis, the articles about CS in the marketing discipline before 2014 tends to be stagnant. However, after 2014 the number of articles continues to increase every year to reach nine articles in 2019 (see Figure 1). Even though it shows an upward trend, the number of articles on CS in the marketing discipline is still relatively small. From the first article in 1943 to 2019, there were only 50 articles in the journal Q1 Schimago category. The initial article, written by Milton Derber in October 1943, published in the JM. Generally, each article has 11-20 pages with a sample size – for one quantitative research article – of usually
between 300-400. The number of pages in one article tends to fluctuate from year to year. However, the trend shows an increase in articles between 11 and 20 pages. Articles of 10 pages or less tend to decrease.

The study found that most articles were written by two authors (30 percent), followed by three authors (26 percent), four authors (20 percent), and finally one author (18 percent). This finding shows a culture of collaboration between researchers in scientific research and publications. The collaboration of three or more authors per article seems to show an upward trend after 2014. Conversely, articles with one writer show a decline. Articles by three or more authors are dominated by quantitative methods. In contrast, articles by one or two authors are dominated by qualitative methods. Articles typified by experimental research are highly dominated by the collaboration of three or more authors. Likewise, survey research type articles and articles with literature reviews were written by three or more authors. Articles with case studies are mostly written by one author.

Two articles obtained the highest citations based on Google Scholar, namely the writings of Belk (2010) and Bardhi & Eckhardt (2012), with 1,717 and 1,662 citations, respectively. Belk's (2010) and Bardhi & Eckhardt's (2012) articles appeared in the JCR. Table 4 illustrates 12 articles on CS with the highest citations in several Schimago Q1 journals. This study found no evidence of an association between the amount of citation articles and the amount of studies in the article. Articles with the highest citations (more than 1,000) or even the lowest (less than 25) deal with qualitative methods.

### Table 3. Number of Articles per Journal

| Journal Name                                      | Freq. | %  | Journal Name                                      | Freq. | %  |
|--------------------------------------------------|-------|----|--------------------------------------------------|-------|----|
| Journal of Business Research (JBR)               | 7     | 14 | International Journal of Contemporary Hospitality Management (IJCHM) | 1     | 2  |
| Journal of Business Ethics (JBE)                 | 4     | 8  | International Journal of Entrepreneurial Behavior & Research (JEBR) | 1     | 2  |
| Journal of Services Marketing (JSM)              | 3     | 6  | International Journal of Operations & Production Management (IJOPM) | 1     | 2  |
| Journal of Consumer Marketing (JCM)              | 2     | 4  | International Journal of Research in Marketing (JIRM) | 1     | 2  |
| Journal of Consumer Research (JCR)               | 2     | 4  | International Journal of Retail & Distribution Management (IJRDM) | 1     | 2  |
| Journal of Fashion Marketing and Management (JFMM) | 2     | 4  | Journal of Management Development (JMD) | 1     | 2  |
| Journal of Marketing (JM)                        | 2     | 4  | Journal of Manufacturing Technology Management (JMTM) | 1     | 2  |
| Journal of Product & Brand Management (JPBM)     | 2     | 4  | Journal of Service Research (JSR) | 1     | 2  |
| Journal of Service Management (JSM)              | 2     | 4  | Journal of Service Theory and Practice (JSTP) | 1     | 2  |
| Journal of the Academy of Marketing Science (JAMS) | 2     | 4  | Management and Organization Review (MOR) | 1     | 2  |
| MIT Sloan Management Review (MSMR)               | 2     | 4  | Management Decision (MD) | 1     | 2  |
| Service Business (SB)                            | 2     | 4  | Marketing Letters (ML) | 1     | 2  |
| Business Process Management Journal (BPMJ)       | 2     | 4  | Psychology & Marketing (PM) | 1     | 2  |
| Business Strategy and the Environment (BSE)      | 1     | 2  | Supply Chain Management (SCM) | 1     | 2  |
| Industrial Marketing Management (IMM)            | 1     | 2  | TQM Journal (TQM) | 1     | 2  |
Figure 1. Trends in Number of CS Articles in the Marketing Discipline (Source: data processed)

Table 4. Twelve Articles with the Highest Citations

| Authors                  | Titles                                                                 | Journal | Citations |
|--------------------------|------------------------------------------------------------------------|---------|-----------|
| Belk (2010)              | Sharing                                                               | JCR     | 1,717     |
| Bardhi & Eckhardt (2012) | Access-Based Consumption: The Case of Car Sharing                     | JCR     | 1,662     |
| Payne et al. (2009)      | Co-creating brands: Diagnosing and designing the relationship experience| JBR     | 746       |
| Lamberton & Rose (2012)  | When Is Ours Better Than Mine? A Framework for Understanding and Altering Participation in Commercial Sharing Systems | JM      | 702       |
| Hahn et al. (2015)       | Tensions in Corporate Sustainability: Towards an Integrative Framework | JBE     | 416       |
| Spring & Araujo (2009)   | Service, services and products: rethinking operations strategy       | IJOPM   | 355       |
| Matzler et al. (2015)    | Adapting to the Sharing Economy                                      | MSMR    | 271       |
| Schaltegger & Burritt (2014) | Measuring and managing sustainability performance of supply chains. Review and sustainability supply chain management framework | SCM     | 232       |
| Claudy et al. (2015)     | Consumer resistance to innovation – a behavioral reasoning perspective| JAMS    | 169       |
| Hartl et al. (2016)      | Do we need rules for “what's mine is yours”? Governance in collaborative consumption communities | JBR     | 142       |
| Hellwig et al. (2015)    | Exploring Different Types of Sharing: A Proposed Segmentation of the Market for “Sharing” Businesses | PM      | 134       |
| Catulli (2012)           | What uncertainty? Further insight into why consumers might be distrustful of product service systems | JMTM    | 112       |

The authors of the article come from 86 research institutes spread across 20 countries. The institutions that contributed the most are the University of Vienna (five articles). This finding shows that there is no specific institution that has specifically studied CS from the marketing discipline, even though studies on this topic have spread in various institutions in many countries.

The contribution of writers from the USA, especially after 2014, seems to be greater than that of writers from other countries. Researchers from four countries, namely the USA, Germany, the UK, and Switzerland, appear to dominate (see Table 5). There is a very strong correlation between the researcher’s country of origin and the location of the country where the research was conducted. Generally, German researchers research in Germany. In cases where the researcher conducts research in Germany and other countries, this usually happens.
because of collaboration with researchers from other countries. In this study, we found that German researchers also researched in Australia, the UK, Italy, France, the USA, Hong Kong, Korea, Canada, Austria, the Netherlands, Spain, and Denmark because they collaborated with other researchers in these countries.

Overall, the number of writers has increased significantly, especially since 2014, although it declined in 2017. Likewise, the number of writers in the USA and Germany increased after 2014. Conversely, the number of researchers from the UK tends to have stagnated, despite increasing in 2019. A downward trend is seen for the number of researchers from Switzerland. Trends in the number of researchers per country of origin can be seen in Figure 2. Judging from the time dimension, most empirical research articles are cross-sectional studies (97 percent). There is one article in the form of a longitudinal study, namely Gross & Geiger’s (2017) study published in the IJEGR.

| Country of Origin | Frequency | %  | Country of Origin | Frequency | %  |
|-------------------|-----------|----|-------------------|-----------|----|
| USA               | 28        | 21 | Canada            | 3         | 2  |
| Germany           | 23        | 17 | New Zealand       | 3         | 2  |
| Switzerland       | 12        | 9  | Belgium           | 2         | 1  |
| UK                | 12        | 9  | Netherlands       | 2         | 1  |
| Austria           | 10        | 7  | China             | 1         | 1  |
| South Korea       | 8         | 6  | Denmark           | 1         | 1  |
| France            | 7         | 5  | Finland           | 1         | 1  |
| Italy             | 6         | 4  | Greece            | 1         | 1  |
| Australia         | 5         | 4  | Singapore         | 1         | 1  |
| Ireland           | 4         | 3  | Sweden            | 1         | 1  |
| Norway            | 4         | 3  |                   |           |    |

Figure 2. Trends in Number of Researchers per Country of Origin
Most articles are empirical papers (60 percent), followed by conceptual papers (38 percent), and the rest are mixed papers (2 percent). Trends in the number of empirical articles are higher than conceptual articles, especially after 2015. However, this trend declined after 2018. Conversely, conceptual articles show an upward trend after 2016. Besides, most articles are survey research (25 percent), followed by experiments (23 percent), and literature review (22 percent). Other articles are case studies incorporating combined, qualitative, and secondary data (see Table 6). In general, the types of research tend to fluctuate from year to year. Survey and experimental research briefly increased after 2014, but declined after 2016. The number of survey-based research articles, experiments, and literature reviews rose significantly in 2019. On the other hand, literature studies increased significantly in 2019, despite fluctuations in previous years (see Figure 3).

![Figure 3. Trends in the Number of Articles per Research Type](image)

Overall, 22 countries were involved in writing articles about CS in the discipline of marketing. Most of the studies involved participants/respondents in Germany, the USA, the UK, and France. Most empirical research, both qualitative and quantitative, involved respondents/participants from only one country (71 percent) (see Table 6). Other studies involved respondents/participants in two, three, six, and 13 countries. An empirical study conducted by Vith et al. (2019) in the JBE involved 13 countries, namely the USA, the UK, France, Germany, Australia, Hong Kong, Korea, Canada, Austria, the Netherlands, Spain, Denmark and Italy. Each empirical research article usually only involves one country. Article trends in this category are increasing, but are volatile. The upward trend started in 2015, but declined again in 2019. On the contrary, although the number is smaller, articles involving participants/respondents from more than one country increased after 2017 (see Figure 4).

Generally, the sample size for one quantitative research article ranges from 300-400 respondents. Interestingly, there are articles with a sample size of more than 800 respondents. Table 6 shows the sample size for each quantitative research.

Generally, each article contains one study. The number of articles containing one study appears to increase from year to year. Although the number of articles with two or more studies increased in 2015, this number declined from year to year (see Figure 5). Articles with any number of studies are usually conducted in only one country. Articles with locations in three and four countries all cover just one study. The results of the Pearson correlation analysis did not show a significant relationship between the number of authors and the number of countries involved. Most articles involve studies in only one country, with the majority of authors being more than two people. A few articles involving two or more countries were usually written collaboratively by three or more authors.
Table 6. Characteristics of Articles

| Criteria                              | Freq. | %   | Criteria                              | Freq. | %   |
|---------------------------------------|-------|-----|---------------------------------------|-------|-----|
| Number of pages per article:          |       |     | Number of countries participating in empirical research: |       |     |
| 10 or less                            | 8     | 16  | 1                                     | 22    | 71  |
| 11-15                                 | 16    | 32  | 2                                     | 3     | 10  |
| 16-20                                 | 15    | 30  | 3                                     | 1     | 3   |
| 21-25                                 | 7     | 14  | 6                                     | 1     | 3   |
| 26-30                                 | 2     | 4   | 13                                    | 1     | 3   |
| 31 or more                            | 2     | 4   | None                                  | 3     | 10  |
| Amount of authors:                    |       |     | Number of samples for quantitative research: |       |     |
| One                                   | 9     | 18  | 100-200                               | 1     | 5   |
| Two                                   | 15    | 30  | 200-300                               | 2     | 11  |
| Three                                 | 13    | 26  | 300-400                               | 6     | 32  |
| Four                                  | 10    | 20  | 400-500                               | 1     | 5   |
| Five                                  | 1     | 2   | 500-600                               | 2     | 11  |
| Six                                   | 2     | 4   | 600-700                               | 1     | 5   |
| Research type:                        |       |     | 700-800                               | 2     | 11  |
| Survey research                       | 16    | 25  | > 800                                 | 4     | 21  |
| Experimental research                 | 15    | 23  |                                       |       |     |
| Literature review                     | 14    | 22  |                                       |       |     |
| Case study                            | 7     | 11  |                                       |       |     |
| Mixed methods                         | 6     | 9   |                                       |       |     |
| Qualitative research                  | 5     | 8   |                                       |       |     |
| Secondary data research               | 2     | 3   |                                       |       |     |
In general, the study of CS in the marketing discipline is often associated with five keywords, namely “sharing economy” (SE), “sustainability,” “consumer behavior,” “relationships,” and “theory.” Most articles make the SE concept a keyword, followed by “sustainability,” “consumer behavior,” “relationships,” and “theory” (see Table 7). In their development, the keywords in each article are increasingly diverse and were shifted to include concepts, perspectives, or relatively new theories. This can be seen from the emergence of a number of keywords, such as “open innovation,” “dynamic capability,” “business models,” “value creation,” “institutions,” “service ecosystem,” “practice theory,” and “stakeholder theory.”

Related to the SE category, an article before 2010 discussed “resource sharing”. However, during the five years that followed (2011-2015) the discussion on SE was expanded to include the concept of “consumption mode extension”, “car sharing service”, and “pooled resources”. Over the next two years (2016-2017), studies on SE topics have increasingly varied by incorporating the concept of “collaborative consumption”, “collaborative economy”, “service sharing”, “ridesharing applications”, “collaborative consumption”, “access-based consumption”, “access-based services”, “intangibility”, and “car sharing”. Furthermore, SE topics during 2018-2019 are similar to previous periods. These topics include “collaborative consumption” (Ertz et al., 2018; Akbar, 2019; Guyader, 2018; Roos et al., 2019; Prieto et al. , 2019; Gopalakrishnan & Matthews, 2018), “access-based consumption” (Oyedele & Simpson, 2018; Guyader, 2018), and “access-based services” (Akbar, 2019). However, new concepts are being reviewed, such as “ridesharing” (Guyader, 2018) and “carpooling” (Ciasullo et al., 2018) (See Table 8).

Related to the innovation category, articles before 2010 employ a traditional perspective that it is mechanistic, managerial, functional, and based on physical products. This can be seen from several articles that discuss “operations management” (Spring & Araujo, 2009), “product development” (Olson, 2008), and “product differentiation” (Olson, 2008). However, in the five years that followed (2011-2015), discussions about innovation in CS increasingly varied, but still emphasized aspects of production and physical products. This can be seen from the emergence of studies on “concept generation” (Kim et al., 2012), “process reengineering” (Islam et al., 2013), “paradox strategies” (Hahn et al., 2015), “quality function deployment/QFD” (Kim et al., 2012). An interesting development occurred in which two articles discussed the importance of services, which is still based on external units (both tangible goods and intangible services).

For the following years, especially in 2016-2017, discussion of the previous concepts is visible and is still based on production and output units. Some important concepts are discussed, namely “innovativeness”, “adoption model”, “uniqueness”, “product-service system (PSS)”, “evaluation scheme”, and “evaluation criteria”. However, the discussion experienced a shift because it began to involve analysis on a broader perspective outside the company, including the emergence of narratives about “change” (Gross & Geiger, 2017) and “business models” (Bocken, 2017). In the next two years (2018-2019), these patterns continue and begin to accommodate the perspective of networks, systems, or ecosystems through the study of “innovation”, “service
innovation”. Specifically, one article mentions the importance of avoiding commodity traps (or unit outputs) by changing the business model towards an service ecosystem and open innovation, and integrating it with dynamic capabilities (Lütjen et al., 2019). At a glance, the discussion seems to be moving away from commodity domination (unit of output, product) by bringing up narratives about the service ecosystem. However, if examined further, the service ecosystem here is still based on commodities (service as an intangible product), precisely through the development of the discourse on “servitization”.

Table 7. Keyword Category

| Category                  | Freq. | %  | Category             | Freq. | %  |
|---------------------------|-------|----|----------------------|-------|----|
| Sharing economy           | 41    | 20 | Ownership            | 5     | 2  |
| Sustainability            | 18    | 9  | Social               | 5     | 2  |
| Consumer behavior         | 13    | 6  | Transportation       | 5     | 2  |
| Relationships             | 13    | 6  | Governance           | 4     | 2  |
| Theory                    | 12    | 6  | Product–service system (PSS) | 4 | 2 |
| Branding                  | 9     | 4  | Technology           | 4     | 2  |
| Innovation                | 8     | 4  | Consumption          | 3     | 1  |
| Services                  | 8     | 4  | Entrepreneurship     | 3     | 1  |
| Access                    | 7     | 3  | Norms                | 3     | 1  |
| Product                   | 7     | 3  | Production           | 3     | 1  |
| Research methods          | 7     | 3  | Generation           | 2     | 1  |
| Business model            | 6     | 3  | Resources            | 2     | 1  |
| Service-dominant logic    | 6     | 3  | Competition          | 1     | 0.5|
| Value                     | 6     | 3  |                      |       |    |

Relatively few articles – only five – on CS examine the concepts of “value” and “value creation.” In full, Olson’s article (2008) analyzes “brand value,” while Hwang et al. (2017) examine “perceived value,” which include utilitarian value, hedonic value, and symbolic value. Furthermore, Zhu et al. (2017) examine “perceived value,” which includes functional value, emotional value, and social value. On the other hand, Andreassen et al. (2018) discuss the value-creation process. Slightly different, Freudenreich et al. (2019) link value creation with stakeholder theory and business models. In general, most articles have paid attention to the importance of involving other actors in the network, but the articles are still based on the product (unit of output). On the other hand, articles discussing “brand” or “branding” did not experience significant development from year to year. The discussion does not move much from the concept of brand equity (e.g., Olson, 2008; Thaler et al., 2018).

Discussions about “sustainability” in the context of CS in marketing disciplines emerged after 2015. Interestingly, the articles initially examined “sustainable development” (Hahn et al., 2015; Plewnia et al., 2017), “triple bottom line” (Hahn et al., 2015), and “sustainable consumption” (Bocken, 2017; Ertz et al., 2018). But, current investigations have begun to examine the link between “sustainability” and “business models” through the concept of “business models for sustainability”. Otherwise, there has been a specific discussion on technology since 2018. Several authors have reviewed Twitter, “digital,” “platforms,” and “intermediation” (Gielens et al., 2019).

The study of service and management tends to be less developed, both from the aspect of concepts and perspectives. The articles still seem to be discussing conventional topics, which are highly managerial and unit oriented, such as “customer service management” (Spring et al., 2009), “s-qual,” “reliability,” “responsiveness,” and “assurance” (Catulli, 2012), “empathy” (Hwang et al., 2017), “mitigation” (Bocken, 2017), and “governance” (Hartl et al., 2016). In the past two years (2018-2019), the article examines “crisis management” (Thaler et al., 2018), “servitization” (Lütjen et al., 2019) and “governance,” “public governance,” “urban governance,” and “governance strategies” (Vith et al., 2019). As before, in general, articles are still based on tangible and intangible products as a basis for exchange. However, three articles have introduced a new and different perspective on services and networks through “s-d logic”. Through this new perspective, Payne et al. (2009) investigate “co-creation” and “experience.” On the other hand, Spring et al. (2009) compared various approaches to product and service combinations. Through empirical studies, Kleinaltenkamp et al. (2018) describe the changing ecosystems of services and institutional arrangements through the establishment of proto-institutions.
Table 8. Categories and Details of Keywords

| Category              | Keywords                                                                                                                                 |
|-----------------------|----------------------------------------------------------------------------------------------------------------------------------------|
| Sharing economy       | Collaborative consumption, collaborative economy, car sharing, car sharing service/s, carpooling, share/d economy, sharing, sharing economy, resource sharing, ridesharing, ridesharing applications, service sharing |
| Sustainability        | Corporate sustainability, sustainability, sustainable consumption, sustainable fashion, ecovillage, recycling, triple bottom line, energy utilities, mitigation, climate change, crisis management |
| Consumer behavior     | Consumer behavior, customer misbehavior, consumer acceptance, undesirable customer, materialism, self-efficacy, tensions, choice editing, evaluation criteria, evaluation scheme, risk, risk perception |
| Relationships         | Customer-to-customer interaction, network effects, community, cooperation, ecosystem, peer-to-peer, trust, liminality, intermediation, global cities, experience |
| Theory                | Heterotopia, utopia, practice theory, paradox strategies, spillover effect, fuzzy logic, process model, escapism |
| Branding              | Brand, brand equity, brand management, brand relationship experience, branding, consumer brand equity, marketing communications, co-creation |
| Innovation            | Innovation, innovativeness, open innovation, adoption of innovation, resistance to innovation, service innovation, adoption model, concept generation |
| Services              | Customer service management, servitization, SERVQUAL, empathy, responsiveness, assurance, intangibility, reliability |
| Access                | Access, access-based consumption, access-based services |
| Product               | Product development, product differentiation, product scandal, scarcity, second-hand garments, second-hand fashion stores, uniqueness |
| Research methods      | Practice-based research, SmartPLS, systematic literature review, big data analysis, sentiment analysis, replication |
| Business model        | Triadic business models |
| Service–dominant logic| Institutional arrangements, institutions, proto-institutions, service ecosystems, service-dominant logic, integrative view |
| Value                 | Perceived value, value, value analysis, value creation, utility |
| Ownership             | Car ownership, nonownership, ownership, ownership effect |
| Social                | Social, social applications, social norms, socially responsible consumption, composting |
| Transportation        | Transport capacity, transport management, transportation, empty-truck, truck appointment system |
| Governance            | Governance, governance strategies, urban governance, public governance |
| Product–service system| Marketing of PSS, Product–service system (PSS) |
| Technology            | Citizen consumption, fashion consumption, consumption mode extension |
| Entrepreneurship      | Entrepreneurship, entrepreneurship-as-practice, change |
| Norms                 | Personal norms, values, power |
| Production            | Operations management, process reengineering, Quality Function Deployment (QFD) |
| Generation            | Emerging adulthood, millennials |
| Resources             | Pooled resources, dynamic capability |
| Competition           | Competition |

Several articles have explored CS consumer behavior. However, the theories of consumer behavior examined tend to be less developed, if not stagnant, because they are based on old theories that have matured, such as “behavioral reasoning theory” and “theory of planned behavior”. Nonetheless, there is a trend for the emergence of relatively new theories in marketing disciplines that began to be discussed after 2018, such as “practice theory” (Guyader, 2018), “stakeholder theory” (Freudenreich et al., 2019), and “dynamic capability” (Lütjen et al., 2019).
Regarding the perspective, most articles are based on “g-d logic” (94 percent, 47 articles). A small percentage of articles (6 percent, 3 articles) are based on “s-d logic.” This study found no CS articles based on s-d logic with quantitative designs. The first of three articles based on s-d logic, written by Spring & Araujo (2009) and was published in the IJOPM. The second article based on s-d logic was Payne et al.’s (2009) work published in the JBR. The third article on the subject, by Kleinaltenkamp et al. (2018), was published in the JSTP.

This study also found that there was no evidence of differences in the number of citations of articles based on dominant logic. The number of articles with s-d logic orientation is very small (three articles), but two of them, Payne et al. (2009) and Spring et al. (2009) have relatively high citations. This shows that the s-d logic has diffused outside the topic of CS, but it has not been diffused widely among CS researchers.

V. CONCLUSION AND RECOMMENDATION

The development of the internet of things (IoT) has directed the development of a different approach to marketing research that emphasizes digital or online platforms, including the field of transportation, especially car sharing (CS). However, compared to offline transportation, this field has gotten relatively less concern from researchers (Fauzi, 2018; Husda & Nuramaliafitr, 2020). This research has presented a review of CS articles in marketing disciplines announced by several reputable journals. Through content analysis techniques, this study’s findings show that top-class journals have not published many articles about CS from the perspective of the marketing discipline. However, the number of articles about CS in marketing disciplines is increasing. Most of these articles were written by two authors from 86 research institutions in 20 countries. Judging from the time dimension, most empirical research articles are cross-sectional studies. Most articles are empirical papers, followed by conceptual papers, and the rest are mixed papers. In general, the findings show a shift in the focus of CS studies in the marketing discipline over time. Some recent studies of CS have begun to shift the focus from aspects of products (goods and services) as the basis of exchange (also referred to as g-d logic) to services as the basis of exchange (also known as s-d logic) (see Hastari et al., 2020; Scarlett et al., 2022; Wibowo et al., 2021).

Like most studies, this research offers interesting insights but is also influenced by several limitations. First, this research excludes publications from journals outside the Q1 Schimo category, conferences, books, book chapters, and dissertations. We recognize that several journals outside the excellent Q1 Schimo category have also made important contributions to car sharing. Second, we focus our review on research related to car-sharing in marketing disciplines. For example, we did not include all car-sharing articles in our sample articles because many of them did not relate directly to marketing. Car sharing researchers in other disciplines might object because we did not include it in the analysis. Therefore, we hope that, in the future, other research can target to provide broader reviews collected in a research basket on car sharing. Third, the high number of citations can also be the result of the “Matthew effect” which states that papers written by famous researchers tend to get higher recognition (Merton, 1968).

REFERENCES

Acquier, A., Daudigeos, T., and Pinkse, J. (2017). Promises and paradoxes of the sharing economy: An organizing framework. In: Technological Forecasting and Social Change. DOI: 10.1016/j.techfore.2017.07.006

Akaka, M.A., Vargo, S.L., and Wieland, H. (2017). Extending the Context of Innovation: The Co-creation and Institutionalization of Technology and Markets. In: Russo-Spena T., Mele C., Nuutinen M. (eds) Innovating in Practice. Springer, Cham.

Akbar, P. (2019). Guiding empirical generalization in research on access-based services. Journal of Business Research, Vol. 100, pp. 16-26. DOI: 10.1016/j.jbusres.2019.02.044

Akbar, P., Mai, R., and Hoffmann, S. (2016). When do materialistic consumers join commercial sharing systems. Journal of Business Research, Vol. 69, pp. 4215-4224. DOI: 10.1016/j.jbusres.2016.03.003

Alba, J.W. and Hutchinson, J.W. (2000). Knowledge calibration: what consumers know and what they think they know. Journal of Consumer Research, Vol. 27 No. 2, pp. 123-156. DOI: 10.1086/314317
Andreasen, T.W., Lervik-Olsen, L., Snyder, H., Van Riel, A.C.R., Sweeney, J.C., and Van Vaerenbergh, Y. (2018). Business model innovation and value-creation: the triadic way. *Journal of Service Management*, Vol. 29 No. 5, pp. 883-906. DOI: 10.1108/JOSM-05-2018-0125

Arnould, E.J. and Rose, A.S. (2016). Mutuality: critique and substitute for Belk’s sharing. *Marketing Theory*, Vol. 16 No. 1, pp. 75-99. DOI: 10.1177/2F1470593115572669

Aznar, J.P., Sayeras, J.M., Galiana, J., and Rocafort, A. (2017). The irruption of airbnb and its effects on hotels’ profitability: an analysis of Barcelona’s hotel sector. *Intangible Capital*, Vol. 13 No. 1, pp. 147-159. DOI: 10.3926/ic.921

Bardhi, F. and Eckhardt, G.M. (2012). Access-Based Consumption: The Case of Car Sharing. *Journal of Consumer Research*, Vol. 39, Issue 4, pp. 881-898. DOI: 10.1086/666376

Barnes, S.J. and Mattsson, J. (2017). Understanding collaborative consumption: test of theoretical model. *Technological Forecasting & Social Change*, Vol. 118, pp. 281-292. DOI: 10.1016/j.techfore.2017.02.029

Baumeister, C., Scherer, A., and Wangenheim, F. (2015). Branding access offers: the importance of product brands, ownership status, and spillover effects to parent brands. *Journal of the Academy of Marketing Science*, Vol. 43, Issue 5, pp. 574-588. DOI: 10.1007/s11747-015-0440-y

Belk, R.W. (2007). Why not share rather than own? *Annals of the American Academy of Political and Social Science*, Vol. 611, Issue 1, pp. 126-140. DOI: 10.1177%2F0002716206298483

Belk, R.W. (2010). Sharing. *Journal of Consumer Research*, Vol. 36 No. 5, pp. 715-734. DOI: 10.1086/612649

Belk, R. (2014). You are what you can access: Sharing and collaborative consumption online. *Journal of Business Research*, Vol. 67 No. 8, pp. 1595-1600. DOI: 10.1016/j.jbusres.2013.10.001

Bert, J., Collie, B., Gerrits, M., and Xu, G. (2016). What’s ahead for car sharing? The new mobility and its impact on vehicle sales, BCG perspectives. Available at: www.bcgperspectives.com_content_articles_automotive-wha.pdf (accessed December 17, 2019).

Bever, L. (2018). Uber eats driver charged with murder in the shooting death of a customer, police say. The Washington Post. (2018.02.19).

Bilaski, P. (2012). Technologies of hospitality: how planned encounters develop between strangers. *Hospitality and Society*, Vol. 1 No. 3, pp. 245-260. DOI: 10.1386/hosp.1.3.245_1

Bocken, N. (2017). Business-led sustainable consumption initiatives: impacts and lessons learned. *Journal of Management Development*, Vol. 36 No. 1, pp. 81-96. DOI: 10.1108/JMD-10-2014-0136

Botsman, R. and Rogers, R. (2010). *What’s Mine is Yours: How Collaborative Consumption is Changing the way of Life*. Harper Business, New York, NY.

Brannon, L.A. and Brock, T.C. (2001). Limiting time for responding enhances behavior corresponding to the merits of compliance appeals: refutations of heuristic-cue theory in service and consumer settings. *Journal of Consumer Psychology*, Vol. 10 No. 3, pp. 135-146. DOI: 10.1207/s15327663jcp1003_2

Braun, V. and Clarke, V. (2006). Using thematic analysis in psychology. *Qualitative Research in Psychology*, Vol. 3 No. 2, pp. 77-101. DOI: 10.1191/1478088706qp063oa

Burgess, K., Singh, P.J., and Koroglu, R. (2006). Supply chain management: a structured literature review and implications for future research. *International Journal of Operations & Production Management*, Vol. 26 No. 7, pp. 703-729. DOI:10.1108/01443570610672202

Catulli, M. (2012). What uncertainty? Further insight into why consumers might be distrustful of product service systems. *Journal of Manufacturing Technology Management*, Vol. 23 No. 6, pp. 780-793. DOI: 10.1108/17410381211253335

Cheng, M. (2016). Sharing economy: a review and agenda for future research. *International Journal of Hospitality Management*, Vol. 57, pp. 60-70. DOI: 10.1016/j.ijhm.2016.06.003

Ciasullo, M.V., Troisi, O., Loia, F., and Maione, G. (2018). Carpooling: travelers’ perceptions from a big data analysis. *The TQM Journal*, Vol. 30 No. 5, pp. 554-571. DOI: 10.1108/tqm-11-2017-0156
Claudy, M.C., Garcia, R., and O’Driscoll, A. (2015). Consumer resistance to innovation – a behavioral reasoning perspective. *Journal of the Academy of Marketing Science*, Vol. 43, Issue 4, pp. 528-544. DOI: 10.1007/s11747-014-0399-0

Crossan, M.M. and Apaydin, M. (2010). A multi-dimensional framework of organizational innovation: a systematic review of the literature. *Journal of Management Studies*, Vol. 47 No. 6, pp. 1154-1191. DOI: 10.1111/j.1467-6486.2009.00880.x

De Luca, S. and Di Pace, R. (2015). Modelling users’ behaviour in inter-urban car sharing program: a stated preference approach. *Transportation Research Part A*, Vol. 71, pp. 59-76. DOI: 10.1016/j.tra.2014.11.001

Denyer, D. and Tranfield, D. (2009). Producing a systematic review. In D.A. Buchanan and A. Bryman (Eds.). *The sage handbook of organizational research methods* (pp. 671-689). Thousand Oaks, CA, US: Sage Publications Ltd.

Dijk, M., Orsato, R.J., and Kemp, R. (2013). The emergence of an electric mobility trajectory. *Energy Policy*, Vol. 52, pp. 135-145. DOI: 10.1016/j.enpol.2012.04.024

Durach, C.F., Kembro, J., and Wieland, A. (2017). A new paradigm for systematic literature reviews in supply chain management. *Journal of Supply Chain Management*, Vol. 53 No. 4, pp. 67-85. DOI:10.1111/jscm.12145

Dzikowski, P. (2018). A bibliometric analysis of born global firms. *Journal of Business Research*, Vol. 85, pp. 281-294. DOI: 10.1016/j.jbusres.2017.12.054

Ert, E., Fleischer, A., and Magen, N. (2016). Trust and reputation in the sharing economy: the role of personal photos in Airbnb. *Tourism Management*, Vol. 55, pp. 62-73. DOI: 10.2139/ssrn.2624181

Ertz, M., Durif, F., Lecompte, A., and Boivin, C. (2018). Does “sharing” mean “socially responsible consuming”? Exploration of the relationship between collaborative consumption and socially responsible consumption. *Journal of Consumer Marketing*, Vol. 35 No. 4, pp. 392-402. DOI: 10.1108/JCM-09-2016-1941

Fauzi, A.A. (2018). Electronic service quality on mobile application of online transportation services. *Jurnal Manajemen Indonesia*, Vol. 18 No. 1, pp. 2502-3713. DOI: 10.25124/jmi.v18i1.1256

Ferreira, J., Ferreira, F., Fernandes, C., Jalali, M., Raposo, M., and Marques, C.S. (2016). What do we (not) know about technology entrepreneurship research? *International Entrepreneurship and Management Journal*, Vol. 12 No. 3, pp.713-733. DOI: 10.1007/s11365-015-0359-2.

Firnkorn, J. and Müller, M. (2011). What will be the environmental effects of new free-floating car-sharing systems? The case of car2go in Ulm. *Ecological Economics*, Vol. 70, pp. 1519-1528. DOI: 10.1016/j.ecolecon.2011.03.014

Frenken, K. and Schor, J. (2017). Putting the sharing economy into perspective. *Environmental Innovation and Societal Transitions*, Vol. 23, pp. 3-10. DOI: 10.1016/j.eist.2017.01.003

Freudenreich, B., Lüdeke Freund, F., and Schaltegger, S. (2019). A Stakeholder Theory Perspective on Business Models: Value Creation for Sustainability. *Journal of Business Ethics*, pp. 1-16. DOI: 10.1007/s10551-019-04112-z

Gesota, B. (2008). *Ecovillages as models for sustainable development: A case study approach* (Master's thesis). Freiburg, Germany: Albert-Ludwigs-Universitat.

Gielens, K. and Steenkamp, J-B.E.M. (2019). Branding in the era of digital (dis)intermediation. *International Journal of Research in Marketing*, Vol. 36, Issue 3, pp. 367-384. DOI: 10.1016/j.ijresmar.2019.01.005

Gopalakrishnan, S. and Matthews, D. (2018). Collaborative consumption: a business model analysis of second-hand fashion. *Journal of Fashion Marketing and Management*, Vol. 22 No. 3, pp. 354-368. DOI: 10.1108/JFMM-05-2017-0049

Gretzel, U., Sigala, M., Xiang, Z., and Koo, C. (2015). Smart tourism: foundations and developments. *Electronic Markets*, Vol. 25 No. 3, pp. 179-188. DOI: 10.1007/s12525-015-0196-8
Krippendorff, K. (1980). *Content Analysis: An Introduction to its Methodology*. Sage, Newbury Park, CA.
Lamberton, C.P. and Rose, R.L. (2012). When Is Ours Better than Mine? A Framework for Understanding and Altering Participation in Commercial Sharing Systems. *Journal of Marketing*, Vol. 76 No. 4, pp. 109-125. DOI: 10.1509/2Fjm.10.0368

Leonidou, L.C., Katsikeas, C.S. and Piercy, N.F. (1998). Identifying managerial influences on exporting: past research and future directions. *Journal of International Marketing*, Vol. 6 No. 2, pp. 74-102. DOI: 10.1177%2F105444449800600205

Liang, J.L., Choi, H.C., and Joppe, M. (2018). Understanding repurchase intention of Airbnb consumers: perceived authenticity, electronic word-of-mouth, and price sensitivity. *Journal of Travel & Tourism Marketing*, Vol. 35 No. 1, pp. 73-89. DOI: 10.1080/10548408.2016.1224750

Lütjena, H., Schultz, C., Tietze, F., and Urmetzer, F. (2019). Managing ecosystems for service innovation: A dynamic capability view. *Journal of Business Research*, Vol. 104, pp. 506-519. DOI: 10.1016/j.jbusres.2019.06.001

Mair, J. and Reischauer, G. (2017). Capturing the dynamics of the sharing economy: institutional research on the plural forms and practices of sharing economy organizations. *Technological Forecasting and Social Change*, Vol. 125, pp. 11-20. DOI: 10.1016/j.techfore.2017.05.023

Martin, C.J. (2016). The sharing economy: a pathway to sustainability or a nightmarish form of neoliberal capitalism? *Ecological Economics*, Vol. 121, pp. 149-159. DOI: 10.1016/j.ecolecon.2015.11.027

Martin, E.W. and Shaheen, S.A. (2011). Greenhouse gas emission impacts of carsharing in North America. *IEEE Transactions on Intelligent Transportation Systems*, Vol. 12 No. 4, pp. 1074-1086. DOI: 10.1109/TITS.2011.2158539

Martinez-Lopez, F.J., Merigo, J.M., Valenzuela-Fernandez, L., and Nicolas, C. (2018). Fifty years of the European Journal of marketing: a bibliometric analysis. *European Journal of Marketing*, Vol. 52 No. 1/2, pp. 439-468. DOI: 10.1108/ejm-11-2017-0853

Matzler, K., Veider, V., and Kathan, W. (2015). Adapting to the Sharing Economy. *MIT Sloan Management Review*, Vol. 56 No. 2, pp. 71-77.

Meijkamp, R. (1998). Changing consumer behaviour through eco-efficient services: an empirical study of car sharing in the Netherlands. *Business Strategy and the Environment*, Vol. 7, pp. 234-244.

Meijkamp, R.G. and Theunissen, R. (1997). Breaking through Habitual Behaviour; is Car Sharing an Instrument for Reducing Car Use? In: *Proceedings 25th PTRC European Transport Forum*, PTRC, London.

Milanova, V. and Maas, P. (2017). Sharing intangibles: Uncovering individual motives for engagement in a sharing service setting. *Journal of Business Research*, Vol. 75, pp. 159-171. DOI: 10.1016/j.jbusres.2017.02.002

Ministry of VROM. (1997). *Nota Milieu en Economie; op weg naar een duurzame economie, a governmental policy program on environment and economy*. VROM, Den Haag.

Möhlmann, M. (2015). Collaborative consumption: determinants of satisfaction and the likelihood of using a sharing economy option again. *Journal of Consumer Behaviour*, Vol. 14 No. 3, pp. 193-207. DOI: 10.1002/cb.1512

Mont, O. (2004). Institutionalisation of sustainable consumption patterns based on shared use. *Ecological Economics*, Vol. 50 No. 1, pp. 135-153. DOI: 10.1016/j.ecolecon.2004.03.030

Nadeem, W., Juntunen, M., and Hajli, N. (2021). The role of ethical perceptions in consumers’ participation and value co-creation on sharing economy platforms. *Journal of Business Ethics*, Vol. 169, pp. 421-441. DOI: 10.1007/s10551-019-04314-5

Olson, E.L. (2008). The implications of platform sharing on brand value. *Journal of Product & Brand Management*, Vol. 17 Issue 4, pp. 244-253. DOI: 10.1108/10610420810887590

Oyedele, A. and Simpson, P. (2018). Emerging adulthood, sharing utilities and intention to use sharing services. *Journal of Services Marketing*, Vol. 32 No. 2, pp. 161-174. DOI: 10.1108/JSM-09-2016-0344

Palmatier, R.W., Houston, M.B., and Hulland, J. (2018). Review articles: purpose, process, and structure. *Journal of the Academy of Marketing Science*, Vol. 46 No. 1, pp. 1–5. DOI: 10.1007/s11747-017-0563-4
Paul, J. and Criado, A.R. (2020). The art of writing literature review: what do we know and what do we need to know? International Business Review, Vol. 29 No. 4, pp. 1-7. DOI: 10.1016/j.ibusrev.2020.101717.

Payne, A., Storbacka, K., Frow, P., and Knox, S. (2009). Co-creating brands: Diagnosing and designing the relationship experience. Journal of Business Research, Vol. 62, pp. 379-389. DOI: 10.1016/j.jbusres.2008.05.013

Piscicelli, L., Cooper, T., and Fisher, T. (2015). The role of values in collaborative consumption: insights from a product-service system for lending and borrowing in the UK. Journal of Cleaner Production, Vol. 97, pp. 21-29. DOI: 10.1016/j.jclepro.2014.07.032

Plewnia, F. and Guenther, E. (2017). Mapping the sharing economy for sustainability research. Management Decision, Vol. 56 No. 3, pp. 570-583. DOI: 10.1108/MD-11-2016-0766

Prieto, M., Stan, V., Baltas, G., and Lawson, S. (2019). Shifting consumers into gear: car sharing services in urban areas. International Journal of Retail & Distribution Management, Vol. 47 No. 5, pp. 552-570. DOI: 10.1108/IJRDM-08-2018-0184

Raddats, C., Kowalkowski, C., Benedettini, O., Burton, J., and Gebauer, H. (2019). Servitization: a contemporary thematic review of four major research streams. Industrial Marketing Management, Vol. 83, pp. 207-223. DOI: 10.1016/j.indmarman.2019.03.015

Roos, D. and Hahn, R. (2019). Understanding Collaborative Consumption: An Extension of the Theory of Planned Behavior with Value-Based Personal Norms. Journal of Business Ethics, Vol. 158, pp. 679-697. DOI: 10.1007/s10551-017-3675-3

Scarlett, G., Reksoprawiro, R., Amelia, N., and Wibowo, A.J.I. (2022). Institutions and technology in the value co-creation process of restaurant consumers: a service-dominant logic perspective. The TQM Journal, Vol. 34 No. 3, pp. 357-376. DOI: 10.1108/TQM-10-2020-0255

Schaefers, T., Lawson, S.J., and Kukar-Kinney, M. (2016). How the burdens of ownership promote consumer usage of access-based services. Marketing Letters, Vol. 27 Issue 3, pp. 569-577. DOI: 10.1007/s11002-015-9366-x

Schaefers, T., Wittkowski, K., Benoit, S., and Ferraro, R. (2016). Contagious Effects of Customer Misbehavior in Access-Based Services. Journal of Service Research, Vol. 19 No. 1, pp. 3-21. DOI: 10.1177/1094670515595047

Shaheen, S., Cohen, A.P. and Chung, M. (2008). North America car sharing: a ten-year retrospective. Institute of Transportation Service at the University of California, available at: http://escholarship.org/uc/item/8jg510td (accessed 17 December 2019).

Slee, T. (2016). What’s Yours is Mine: Against the Sharing Economy. OR Books, New York, NY.

Snyder, H. (2019). Literature review as a research methodology: an overview and guidelines. Journal of Business Research, Vol 104 pp. 333-339. DOI: 10.1016/j.jbusres.2019.07.039

Spring, M. and Araujo, L. (2009). Service, services and products: rethinking operations strategy. International Journal of Operations & Production Management, Vol. 29 Issue 5, pp.444-467. DOI: 10.1108/01443570910953586

Sundararajan, A. (2013). From Zipcar to the sharing economy. Harvard Business Review. Available at https://hbr.org/2013/01/from-zipcar-to-the-sharing-ecol.

Suppatvech, C., Godsell, J., and Day, S. (2019). The roles of internet of things technology in enabling servitized business models: a systematic literature review. Industrial Marketing Management, Vol. 82, pp. 70–86. DOI: 10.1016/j.indmarman.2019.02.016

Suri, R., Kohli, C., and Monroe, K.B. (2007). The effects of perceived scarcity on consumers’ processing of price information. Journal of the Academy of Marketing Science, Vol. 35 No. 1, pp. 89-100. DOI: 10.1007/s11747-006-0008-y

Thaler, V., Herbst, U., and Merz, M. (2018). A real product scandal’s impact on a high-equity brand: a new approach to assessing scandal impact. Journal of Product & Brand Management, Vol. 27 No. 4, pp. 427-439. DOI: 10.1108/JPBM-05-2017-1469
Thorpe, R., Holt, R., Macpherson, A., and Pittaway, L. (2005). Using knowledge within small and medium-sized firms: a systematic review of the evidence. *International Journal of Management Reviews*, Vol. 7 No. 4, pp. 257-281. DOI:10.1111/j.1468-2370.2005.00116.x

Tranfield, D., Denyer, D., and Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British Journal of Management*, Vol. 14 No. 3, pp. 207-222. DOI: 10.1111/1467-8551.00375

Tussyadiah, I.P. (2015). An exploratory study on drivers and deterrents of collaborative consumption in travel. *Information and communication technologies in tourism*, Edition 127, pp. 817-830, Springer.

Tussyadiah, I.P. and Pesonen, J. (2015). Impacts of Peer-to-Peer Accommodation Use on Travel Patterns. *Journal of Travel Research*, Vol. 55 Issue 8, pp. 1022-1040. DOI: 10.1177/0047287515608505

Van Halen, C., Vezzoli, C., and Wimmer, R. (Eds.). (2005). *Methodology for product service system innovation: How to develop clean, clever, and competitive strategies in companies*. Assen, the Netherlands: Van Gorcum.

Vandermerwe, S. and Rada, J. (1988). Servitization of business: Adding value by adding services. *European Management Journal*, Vol. 6 Issue 4, pp. 314-324. DOI: 10.1016/0263-2373(88)90033-3

Vargo, S.L. and Lusch, R.F. (2004). Evolving to a New Dominant Logic for Marketing. *Journal of Marketing*, Vol. 68 No. 1, pp. 1-17. DOI: 10.1509/jmkg.68.1.1.24036

Vith, S., Oberg, A., Höllerer, M.A. and Meyer, R.E. (2019). Envisioning the ‘Sharing City’: Governance Strategies for the Sharing Economy. *Journal of Business Ethics*, Vol. 159 Issue 4, pp. 1023-1046. DOI: 10.1007/s10551-019-04242-4

Wibowo, A.J.I., Sumarwan, U., Suharjo, B., and Simanjuntak, M. (2021). 17 years of service-dominant logic: Vargo and Lusch’s contributions. *Business: Theory and Practice*, Vol. 22 No. 2, pp. 482-492. DOI: 10.3846/btp.2021.13050

Wieland, H., Hartmann, N.N., and Vargo, S.L. (2017). Business Models as Service Strategy. *Journal of the Academy of Marketing Science*, Vol. 45 No. 6, pp. 925-943. DOI: 10.1007/s11747-017-0531-z

Wilhelms, M.-P., Henkel, S., and Falk, T. (2017). To earn is not enough: a means-end analysis to uncover peer-providers’ participation motives in peer-to-peer car sharing. *Technological Forecasting & Social Change*, Vol. 125, pp. 38-47. DOI: 10.1016/j.techfore.2017.03.030

Wirtz, J., So, K.K.F., Mody, M.A., Liu, S.Q., and Chun, H.H. (2019). Platforms in the peer-to-peer sharing economy. *Journal of Service Management*, Vol. 30 No. 4, pp. 452-483. DOI: 10.1108/JOSM-11-2018-0369

Zervas, G., Proserpio, D., and Byers, J.W. (2017). The rise of the sharing economy: estimating the impact of Airbnb on the hotel industry. *Journal of Marketing Research*, Vol. 54 No. 5, pp. 687-705. DOI: 10.1509/2fjmr.15.0204

Zhu, G., So, K.K.F., and Hudson, S. (2017). Inside the sharing economy Understanding consumer motivations behind the adoption of mobile applications. *International Journal of Contemporary Hospitality Management*, Vol. 29 No. 9, pp. 2218-2239. DOI: 10.1108/IJCHM-09-2016-0496

Zimmermann, A., Gomez, P., Probst, G., and Raisch, S. (2014). Creating Societal Benefits and Corporate Profits. *MIT Sloan Management Review*, Vol. 55 No. 3, pp. 18-21.