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Faculty of Business Economics

Master of Management

Master's thesis

What drives customer satisfaction in a sharing economy?

Polina Peredera

Thesis presented in fulfillment of the requirements for the degree of Master of Management, specialization International Marketing Strategy

SUPERVISOR :
Prof. dr. Alexandra STREUKENS

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Abstract

The phenomenon of sharing economy introduced new goods and services to the markets. The sharing mobility sector has been developing tremendously in the past years and introduced the sharing electric scooter services. The shared scooters are available in the big cities and easily unlocked with the help of the mobile application. As the service of shared scooters is relatively new, this study aimed to evaluate the customer perceived value and its impact on customer satisfaction and loyalty. Customer satisfaction and loyalty are important indicators of the competitiveness and profitability of the business. Drawing upon the conceptualization of the value, this study included five value constructs – functional value, economic value, emotional value, green value, and ethical value. In addition, it was also important to understand the impact of customer value on loyalty in the context of shared scooters. In the end, this study found several significant and insignificant relationships between the value constructs, customer satisfaction, and loyalty. The meaningful relationships were found between functional value, economic value, emotional value towards customer satisfaction. The meaningful relationships were also found between functional value, emotional value, and customer satisfaction towards loyalty. There was no meaningful relationship found between green value, ethical value towards customer satisfaction. Additionally, no meaningful relationship was found between economic value, green value, ethical value towards loyalty. Scooter-sharing companies could apply the insights of how value constructs impact satisfaction and loyalty to remain competitive and profitable.

Keywords: Sharing economy, the conceptualization of value, customer perceived value, customer satisfaction, loyalty

Disclaimer

This master thesis was written during the Covid-19 crisis in 2020-2021. This global health crisis might have had an impact on the (writing) process, the research activities, and the research results that are at the basis of this study.

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Executive summary

The emergence of digital and technological advancements has introduced consumers to the phenomenon of **sharing economy**. The sharing economy is described as a system of decentralized networks and markets that unleash the value of underutilized assets by matching needs and haves in ways that avoid conventional intermediaries (Botsman, 2015). Sharing platforms have revolutionized production and consumption patterns in cities worldwide. One of the actively developing branches of sharing economy is shared mobility. Shared mobility has grown tremendously since 2014 due to growing environmental and economic concerns. Shared electric scooters represent one of the most innovative branches of shared mobility. Scooter-sharing services have become a common means of transportation in many big cities, including Brussels, Belgium. The scooters are spread around the city and easily unlocked with a few clicks via the mobile application.

As consumers were gaining more interest in shared scooter services, the main purpose of this research was to examine perceived customer value and its impact on **satisfaction** and **loyalty**. The application of the concept of **perceived customer value** creates more satisfied customers, but more importantly, it appears to have a direct effect on loyalty (Lin et al., 2005). Customer satisfaction has a significant impact on the performance and profitability of a company. Numerous studies have demonstrated this effect indirectly through customer loyalty (Fornell, 1992; Rust, Zahorik, & Keiningham, 1995). This study evaluated the impact of customer perceived value and its constructs (functional value, economic value, emotional value, green value, ethical value) on satisfaction and loyalty in the context of scooter-sharing services. In addition, the impact of customer satisfaction on loyalty was also evaluated.

In the scooter sharing context, the functional value represents the condition and accessibility of the scooters. The economic value refers to the benefits and costs of riding the scooters compared with alternative means of transportation. The emotional value is about joyfulness and safety from riding the scooters. The green value refers to the way shared scooters serve customers' environmental needs. Finally, the ethical value is based on the belief and trust of the customers towards information use and privacy management of the mobile applications.

The secondary research showed that customer value has a major impact on satisfaction and loyalty, yet value constructs are dependent on the context of the study Jiang et al. (2019) framework is incorporated in the study. Jiang et al. (2019) researched the impact of value constructs on customer satisfaction in the context of sharing economy and Airbnb accommodation services. In the previous literature, multiple researchers agreed that customer satisfaction significantly impacts loyalty.

AA questionnaire was designed and distributed across shared mobility communities on Reddit and Facebook. The analysis of the primary research revealed that customer perceived value, which constitutes functional value, economic value, and emotional value, has a positive impact on customer satisfaction in the context of shared mobility and shared electric scooter services. At the same time, loyalty is impacted the most by functional value and emotional value. Additionally, customer satisfaction is strongly associated with loyalty in sharing electric scooter services. There was no

meaningful relationship found between green value, ethical value, and customer satisfaction. Also, no meaningful relationship was found between economic value, green value, ethical value, and loyalty.

This study encountered several limitations. The first limitation concerns the setting and the sample of the study. The study sample was relatively small as it was conducted among Belgian users and most users living in Brussels. The limited sample leads to limited generalization and lowers the representativeness of the sample. The second limitation is concerned with the way the questionnaire was designed. The questions in the questionnaire were based on the previous research of Jiang et al. (2019) and the context of Airbnb accommodation services which could lead to the loss of important nuances. In addition, formulating more questions for each value construct could provide more insights on data and could lead to new findings.

After analyzing the findings, a few recommendations could be given to scooter-sharing companies. First, it was discovered that functional value, emotional value, and economic value significantly impact customer satisfaction. This means that companies have to focus on the condition of the scooters, ease of access, safety, and setting an adequate price for a journey. Second, it was discovered that functional value, emotional value, and customer satisfaction significantly impact loyalty. In this case, scooter-sharing companies need to analyze the customer journey and identify the special moments where the biggest impact could be made. Since the communication is limited and most of the communication between the users and the scooter-sharing companies takes place via an app, companies have to establish ways of enhancing emotional engagement virtually. Scooter-sharing companies could apply the insights of how value constructs impact satisfaction and loyalty to remain competitive and profitable.

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1. Introduction

Many of the services that are considered to be the fundamentals of digitally-driven, urban lifestyles, such as Airbnb, Uber, and eBay, have sprung from the phenomenon of economic exchange - **sharing economy**. The basis of the sharing economy is simple: by leveraging the internet to build networks, the needs of one consumer can be easily supplied by another community member (Botsman, 2015). The sharing economy is defined as a system of decentralized networks and marketplaces that unlocks the value of underused assets by matching needs and haves in ways that bypass traditional middlemen (Botsman, 2015). The phenomenon of the Sharing Economy has been growing for over a decade. It is fueled by fast digitalization and technological penetration. Sharing platforms have revolutionized production and consumption patterns in cities worldwide. The sharing economy is expected to increase at a rate of more than 25% annually. In the rising sharing economy trend, people choose to appraise and utilize physical or intellectual resources rather than owning them (Hamari et al., 2015).

One of the actively developing branches of sharing economy is shared mobility. Since 2014, shared mobility has grown dramatically as a consequence of renewed interest in urbanization, growing environmental, energy, and economic concerns, and a rising demand for sustainable alternatives. Simultaneously, advancements in electronic and wireless technology made asset and data sharing easier and more efficient. This has resulted in new solutions ranging from large physical networks to mobile applications designed by automobile manufacturers, rental car companies, venture-backed startups, and city-sponsored programs to change routes, fill empty seats, and combine fare media with real-time arrival and departure information (Shared-Use Mobility Center., 2020).

Scooter-sharing represents an alternative method of shared mobility. In scooter sharing, individuals get access to scooters by joining a mobile application of a company that owns and operates a fleet of scooters in various areas. The scooter service provider typically provides charge and maintenance. Users pay a fee per journey and trips can be roundtrip or one way (SAE International, 2022). For example, Dott, Lime, and Bird provide free-floating shared scooters in Brussels, Belgium. They don't have a fixed parking space (VisitAntwerpen, 2019). The potential user can find the location of the scooter and activate the device via an app on their smartphone. At the end of the journey, the user can leave the scooter in any place where it does not disturb anyone. As scooter sharing is actively becoming popular in bigger cities of Europe and represents a new branch of sharing economy, it was chosen as the research context for the current study.

1.1. Research Motivation

It was mentioned previously, as the sharing economy is taking over multiple areas in the lives of consumers with new business models, it is time to reevaluate the importance of customer value for the companies. An applied concept of customer perceived value helps gain more satisfied consumers and was previously found to have a direct impact on customer repurchase intentions and loyalty. (Lin et al., 2005). Customer-perceived value is defined as the consumer's total appraisal of a product's utility based on perceptions of what is received and what is offered (Zeithaml, 1988, p. 14).

According to prior research, consumer perceived value has a substantial impact on customer happiness and loyalty. The more advantages a product or service provides, the more satisfied the consumer will be, therefore this will lead to positive customer behavior (Aulia et al., 2016). Customer Satisfaction is the most accurate "scorecard" for measuring delivered Customer Value (Wahyuningsih, 2005). Satisfied consumers, according to Ranaweera et al.,(2010), show positive behavioral outcomes and, as a result, the financial advantages gained from satisfied customers. Customer loyalty is a strong commitment to reacquire a chosen product or service in the future, despite the possibility of switching behavior due to situational variations and marketing efforts (Oliver, 1999). More specifically, customer loyalty may be characterized as a combination of attitude and behavior (Rai, Medha, 2013). Loyalty is defined as the intent to repurchase as well as the inclination to recommend the supplier's goods to others (Cronin et al., 2000; Zeithaml et al., 1996). It also involves a desire to repurchase as well as a propensity to suggest the supplier's goods to others (Lai et al., 2009; Wirtz and Lee, 2003; Zeithaml et al., 1996).

Customer loyalty is a guaranteed source of long-term growth and profits. It gives a firm a strong competitive advantage by increasing market share and profits from loyal consumers who are less price-sensitive, encouraging positive word-of-mouth promotion, and challenging competitors' efforts (Lewis and Soureli, 2006). Loyal customers are a great asset because they provide a communication channel for the firm to build its image make it more difficult for competitors to attract customers, and allow setting higher prices of goods and services. Another advantage of having stable customers is the reduction of marketing expenditures as such customers are already familiar with the firm and the quality of its products or services (Martinovic, 2018).

The main objective of this research is to understand the impact of customer perceived value on satisfaction and loyalty in the context of scooter sharing.

1.2. Problem Statement

Academic research has been done to study the major antecedents that increase individuals' satisfaction and loyalty of shared mobility services from various theoretical approaches, given the rapid expansion of shared mobility in practical implementations. Bicycle-sharing is the most researched model of shared mobility nowadays. Krontalis (2016), for example, used a pro-environmental behavior framework to study the important factors that drive commuters' ridesharing intention in Jakarta. According to the findings, users' behavioral intention is influenced by their attitude, perceived behavior control, and personal norm. Lan et al. (2017) investigated the cognitive elements that increase user involvement in the setting of bicycle sharing in another study. Self-efficacy, sense of duty, reward anticipation, and identity were revealed to be positively connected with user value perceived actions. In a recent study, Shao et al. (2019) looked at the impact of perceived service quality on customers' intentions to use bicycle-sharing services. According to the findings, perceived tangible response, empathy, and reliability are important to service traits that impact customer satisfaction and loyalty favorably.

Previous research on customer perception and satisfaction towards scooter sharing is limited. The gap in the secondary literature drives the research question and the objective of this study. However, the generally applicable models of customer perceived value, satisfaction, and loyalty are available

and applicable to different contexts. This study will adopt the existing frameworks of Jiang et al. (2019), Leroi-Werelds et al. (2013), and apply the findings of Holbrook et al. (1999) to a scooter sharing context. Since the premise of the sharing economy is to unveil value from underutilized personal commodities (Lee et al., 2018), a systematic and comprehensive analysis of value dimensions is required to provide an understanding of value creation in the context of scooter sharing, as well as its impact on customer satisfaction and loyalty (Shao et al., 2019).

1.3. Research Questions and Objective

Based on the previous literature, the research on customer value and its impact on customer satisfaction and loyalty is relevant as it leads businesses to sustained competitive advantage and profitability in the long run. Drawing upon the value creation framework suggested by Jiang et al. (2019) and Leroi-Werelds et al. (2013), the purpose of this study is to research the impact of five value dimensions, regarding the functional value, emotional value, economic value, green value, and ethical value on user satisfaction and loyalty of scooter-sharing services.

To address the aforementioned research objective, the following research questions are proposed:
RQ1: How do the constructs of customer value impact customer satisfaction in the scooter sharing sector?
RQ2: How do the constructs of customer value impact customer loyalty in the scooter sharing sector?
RQ3: Does customer satisfaction have an impact on customer loyalty in the scooter sharing context?

The above research questions lead to the following hypotheses:
H1: Customer Perceived Value has a direct impact on Customer Satisfaction, where Customer Satisfaction is positively influenced by a.) functional value; b.) economic value; c.) emotional value, d.) green value; e.) ethical value.

H2: Customer Perceived Value has a direct impact on Loyalty, where Loyalty is positively influenced by a.) functional value; b.) economic value; c.) emotional value, d.) green value; e.) ethical value.

H3: Customer Satisfaction has a direct positive impact on Customer Loyalty.

The research is organized as follows. In the literature review, the primary focus will be on conceptualization of customer value and its impact on customer satisfaction and loyalty. The conceptual models of the previous research will be adopted in the current study. The second section presents a recap of theoretical concepts applied to the current research, a conceptual model, and corresponding hypotheses. The third section is the methodology which includes setting, sample, and research design. It presents the collected data with the analysis. The fourth section is the discussion, conclusion, and practical implications. Finally, the last section describes limitations and future research directions.

2. Literature Review

2.1. The Sharing Economy

The emergence of digital and technological advancements has led to a new way of sharing goods and services. The definition of "sharing economy", which was initially written by Weitzman in 1986 and later rebutted by numerous researchers during the 1980s and early 1990s, was originally envisioned as a profit-sharing system to combat stagflation. Shared economy is described by Schor and Fitzmaurice (2015) as a phenomena of peer-to-peer sharing of access to underused commodities and services, with a focus on usage and accessibility above ownership. Collaborative economy, collaborative consumption, on-demand economy, on-demand services, gig economy, freelance economy, peer economy, access economy, crowd economy, digital economy, and platform economy are among the most popular definitions of the sharing economy, according to Botsman (2015) and Rinne (2017). The plethora of names reflects the ambiguity that surrounds this topic. After investigating and analyzing the sharing economy concepts and its related definitions, Görög (2018) concluded that there is no single definition to the concept. The term "sharing economy" will be utilized in the following research.

According to Botsman (2015), the shared economy is a system of decentralized networks and markets that unlocks the value of underutilized assets by connecting needs and haves in ways that avoid conventional intermediaries. This study will be based on the definition of the sharing economy by Botsman (2015) as it became a core definition that was used in multiple academic researches and was introduced into the Oxford English Dictionary. The Sharing Economy collectively contributes to the increasing of society's well-being without producing new goods (Dirgová et al., 2018). Between 2011 and 2012, the notion was popularized by the two Silicon Valley success stories — Airbnb and Uber (Martin, 2016). Scholars have established new terminology to capture the varied meanings of the Sharing Economy as it has evolved, such as moral economy from postmodern sociology (Germann Molz, 2013), and access-based consumption from Neo-classical microeconomics (Bardhi and Eckhardt, 2012).

Both the term sharing economy and the related concept of collaborative consumption have their roots in Information and Communication Technology (ICT), which allowed users to interact on the internet (Botsman and Rogers, 2010; Kaplan and Haenlein, 2010; Wang and Zhang, 2012) and offered the possibility of transitioning societies to a post-ownership economy (Botsman and Rogers, 2010; Kaplan and Haenlein, 2010; Wang and Zhang, 2012; Belk, 2014). While no conclusive definition of the Sharing Economy exists, policymakers, academics, and practitioners believe it has begun to transform many aspects of our current social-economic system by allowing individuals, communities, organizations, and policymakers to rethink how we live, grow, connect, and sustain (Department for Business Innovation and Skills, 2015; PwC, 2015a; Schor and Fitzmaurice, 2015). Sharing Economy is associated with multiple drivers and barriers. It is important to mention that this study is focused on the benefits of the sharing economy, possible barriers will be also discussed in the next section.

2.1.1. Drivers of the Sharing Economy

Various factors, including societal (e.g., increasing population density, desire for community, etc.), economic (e.g., monetize excess inventory, increase financial flexibility, etc.), and technological (e.g., social networking, mobile devices, and payment systems), are driving the rapid rise of the sharing economy (Owyang, 2013). These three factors are outlined below in detail. People were increasingly aware of environmental pressures, prompting them to look for more efficient methods of using resources in order to create a more sustainable society (Albinsson & Perera, 2012; Gansky, 2010; Luchs et al., 2011). Academic researchers see the sharing economy as a promising opportunity for individuals to find temporary employment, generate extra income or enhance social interactions (e.g., Dillahunt & Mal-one, 2015; Hamari, Sjöklint, & Ukkonen, 2015). Other studies dispute the sharing economy's collaborative, sustainable, and social framing, pointing to actual or prospective worker mistreatment by sharing economy enterprises. (e.g., Calo & Rosenblat, 2017; Rosenblat & Stark, 2016).

Economic Drivers

The strategy of resource redistribution provides an economic and social framework for enhancing sustainability by effectively utilizing excess resource capacity. As it decreases the production of new items and the use of raw materials, collaborative consumption is thought to help lessen negative environmental consequences (Botsman & Rogers, 2010; Luchs et al., 2011; Walsh 2011). Consumers favor collaborative consumption, according to Sacks (2011), because it allows them to get the desired product at a smaller price. Hennig-Thurau, Henning, and Sattler (2007), in their study on motion picture file-sharing platforms, indicate that consumers find the sharing economy appealing when the advantages outweigh the costs. As a result, it is possible that consumers are deterred from participating in collaborative consumption due to a perceived lack of economic benefits (i.e., cost savings) (Buczynski, 2013). Olson (2013) further demonstrates that customers are concerned about obtaining low-quality goods and services, and that the benefits of collaborative consumption are not worth the effort.

Societal Drivers

One of the most important aspects of the sharing economy is that it allows people to form and sustain social bonds. Sharing economy's social components might also encourage economic engagement. As previously indicated, the concept of "sharing economy" has also been used to advocate for a change towards the more sustainable economy and the establishment of a collaborative commons (Parguel et al., 2017; Bauwens and Kostakis, 2014). This definition of a sharing economy implements a non-market logic in which exchanges are not primarily coordinated through the price mechanism and actors are primarily motivated by factors other than profit. Such factors are altruistic values - sharing, assisting others, and contributing to a more sustainable way of life (Prothero et al., 2011; Sacks, 2011). Finally, social ties can help to boost the total value of sharing economy services. This finding especially applies to services that provide lodging for guests (Bellotti, 2015). Earning profit is a crucial motivation for involvement, according to Ikkala and Lampinen (2015), and the social component is another key factor that keeps hosts committed.

Technological Drivers

As ICT enables collaborative consumption, the attributes of technology can impact the adoption of collaborative consumption in the eyes of consumers (Barbosa, 2017). The technological platforms and mobile apps bring demand and supply together and group it in a way that is quicker, cheaper, and on a larger scale. The main innovation in the sharing economy's business model takes place in geographical areas or service sectors where the concentration of players is lower and new commercial opportunities are on the rise (Basselier, et al., 2018). The internet facilitates transactions by linking individuals who have assets or services for sale with those who want to utilize them on a broad scale, with instantaneous matching (Basselier, et al., 2018).

The emerging patterns of the digital sharing economy, as well as the norms and regulations that impact them, have large-scale effects on current consumption patterns. The sharing economy's inexpensive and accessible marketplace pushes consumption away from ownership and toward more "access-based" practices. This development has a large potential for saving natural resources due to increased use of existing assets and stimulation of resource-efficient alternatives (e.g., bike-sharing in cities can make the usage of bikes more popular) as well as the emissions and waste associated with their use (Pouri, Hilty, 2018). On the other hand, the increased efficiency may lead to a rise in demand. The increase in demand as a result of increased efficiency is a systemic phenomenon known as the "rebound effect". The "rebound effect" is usually found in the ICT sector, where companies optimized their efficiency on a large scale (Kim et. al., 2017).

2.1.2. Risks and Barriers of the Sharing Economy

While the benefits of these new business models of the sharing economy are widely recognized, they are associated with numerous challeges. This study is focused on the benefits of the sharing economy; however, most important barriers are discussed in this section. Concerns about quality standards, insurance duties, licensing, taxes, employee protection, health and safety regulations have been raised in many European countries and beyond (Spindeldreher, Fröhlich, Schlagwein, 2018). People are discouraged from participating in the sharing economy due to a high perceived effort as well as legal and economic danger (Hawlitschek et al. 2016). The fear of the desired resource not being available at a specific moment was also discovered to be a barrier to involvement (Hawlitschek et al. 2016).

The sharing economy, in most situations, entails non-face-to-face transactions of non-standardized services between unnamed persons, creating a number of transaction concerns (Spindeldreher, Fröhlich, Schlagwein, 2018). The requirement to share personal data while participating in the sharing economy might potentially deter people from joining (Hawlitschek et al. 2016). Above all, because of the high level of information asymmetry, customers have a difficult time determining the level of service quality, while providers have a hard time knowing and monitoring the consumer. This might result in moral hazards, which could include property damage, criminal behavior (e.g., theft, sexual assault), traffic accidents, defaults, and other concerns depending on the industry. Furthermore, if a transaction risk occurs, dealing with the situation may be difficult due to the present institutional foundations' inability to give specific remedies like insurance coverage or legal

protection. As an example, participation in lodging rental services was also shown to be hindered by a lack of trust, effectiveness, and economic rewards. (Tussyadiah 2015).

Furthermore, one of the most prominent challenges encountered during the implementation of the sharing economy is the clash with current corporate sectors. As sharing economy transactions fill the role of some current transactions that provide similar services, incumbent enterprises' earnings are likely to decrease. The existing lodging and taxi businesses are fiercely opposed to accommodation and vehicle sharing services as a result of this issue (Spindeldreher, Fröhlich, & Schlagwein, 2018).

Now that main aspects of the sharing economy as well as its drivers and barriers were discussed, the next sections will focus on the main focus of the following research – customer perceived value, customer satisfaction, and customer loyalty. As the research context is shared electric scooters, which represent a service in the sharing economy, customer perceived value and its consequences will take the aspects of the sharing economy into account.

2.2. Customer Perceived Value

The notion of perceived customer value is linked to the notion of customer satisfaction. The use of the notion of customer perceived value not only leads to more satisfied customers, but it is also proven to have a direct impact on consumer repurchase intent and loyalty (Lin et al., 2005).

Firms must understand and meet consumers' values in order to gain a competitive edge in the marketplace, according to a value creation approach (Woodruff and Robert, 1997). "The consumer's overall appraisal of the utility of a product based on perceptions of what is received and what is supplied," according to customer-perceived value (Zeithaml, 1988, p. 14). The customer's perceived value is a mental assessment of a certain product or service (Yang, Peterson, 2004). According to the theory of consumption values (Sheth et al., 1991), perceived value is experienced and operationalized as a multi-dimensional construct that reflects the whole experience obtained by a consumer through service consumption (Jiang, Balaji, & Jha, 2019). Porter (1985) defined a firm's competitive advantage as its capacity to produce value for consumers that is greater than the company's expenses of creating this value.

However, continuous technological advancements connected to globalization, changes in buying patterns, and consumers' changed behaviors, on the other hand, have made it more difficult for businesses to stand out in highly competitive environments. This changing economic and social environment requires a reconsideration of marketing's position in the value creation process (Kotler et al., 2010). As a consequence of this radical transformation, businesses must move their attention away from internal efficiency towards developing external resources in their quest for value co-creation with customers (Prahalad and Ramaswamy, 2004a). The roles of the company and the consumer collide and both players become rivals and collaborators at the same time—partners in the creation of value and competitors in the removal of economic value (Prahalad and Ramaswamy, 2004b).

Leroi-Werelds (2019) came up with the most recent insights on customer value and defined seven foundational characteristics. She stated that value is always specific to the context which means that

customers have unique access to market/public/private resources and unique, personal knowledge and skills. The seven foundational characteristics of value include:

1. Customer value implies an interaction between a subject (the customer) and an object (product, service, store, technology, activity, etc.).
2. Customer value involves a tradeoff between the benefits and costs of an object.
3. Customer value is not inherent in an object, but in the customer's experience derived from the object.
4. Customer value is personal since it is subjectively determined by the customer.
5. Customer value is situation-specific.
6. Customer value is multidimensional and consists of multiple value types.
7. Customer value is co-created by the customer by means of resource integration.

Customer value is presented as a major theoretical tool for identifying and specifying the unique qualities of the sharing economy. It is also used for studying how traditional firms and developing sharing-economy platforms understand and utilize their competitive advantages. While the sharing economy provides customers with more cost-effective consumption options, it also offers a unique, personalized, and socially integrated experience.

2.2.1. Conceptualization of Value

Despite the fact that scholars agree on the definition and importance of value, there is disagreement on the conceptualization of consumer value. There are many conceptualization methods proposed in the literature. The current study will look into the work of Holbrook (1999), Leroi-Wereld et al., (2013), and Jiang et al., (2019).

2.2.2. Holbrook's Typology of Customer Value

Holbrook's understanding of the nature and forms of customer value is a valuable contribution to consumer research and marketing. It gives better knowledge of the benefits desired by consumers and therefore, a rise in customer satisfaction. (García Haro et al., 2014).

The findings which are relevant to the current study state that Holbrook's method turned out to be among the best performing methods and included advantages and downsides of the consequences followed (Leroi-Werelds at al., 2013). First, Holbrook's (1999) technique has a categorization framework that might be extremely useful in arranging the various value types in a way that is both comprehensible and appealing . Second, for some of Holbrook's value types, existing scales are available, reducing the time and effort required to build an appropriate measurement tool (Leroi-Werelds at al., 2013).

Holbrook (1999) developed a framework, which reflects three underlying dimensions:

- Extrinsic value versus Intrinsic value (an offering appreciated for its functional, utilitarian ability to achieve something vs. an offering appreciated as an end-in-itself)

- Self-oriented value versus Other-oriented value (an offering prized for the effect it has on one self vs. the effect it has on others)

- Active value versus Reactive value (the customer acts on the object vs. the object acts on the customer)

Consumer value can be considered in three continuous dimensions in Holbrook's (1999) typology. The first dimension is defined as an **intrinsic-extrinsic continuum**. Extrinsic value refers to the function of an object that is appreciated for its capacity to fulfill a task, rather than valued for itself. By comparison, intrinsic value refers to a buying experience that is valued for itself, such as a musical performance. The second dimension of Holbrook is defined as **self-orientation** or **other-orientation**. Self-oriented value is experienced directly by the customer. Other-oriented value is only captured when an additional person is also participating in the consumption experience. The third dimension of Holbrook considers either **active or reactive value**. Active value is created when a customer performs an action, either physically or cognitively, as part of a consumption experience. Consumer value, on the other hand, is reactive when it arises from a consumer's response to an object and entails actions done by a product to or with a consumer as part of a consumption experience.

Each of the three dimensions is handled as a binary element, despite the fact that they should be viewed as a continuum of options ranging from one extreme to the other, with gradations in between (Holbrook, 1999). Holbrook (1999) created a matrix reflecting eight categories of consumer value based on the three aspects indicated above: efficiency, excellence, status, esteem, play, aesthetics, ethics, and spirituality. This is also called Holbrook's Typology of Customer Value (Leroi-Werelds, Streukens, Brady, & Swinnen, 2013).

This typology is characterized by the combination of many forms of consumer value. This implies that a consuming experience includes many, if not all, of the value kinds listed in the typology (Holbrook, 1999). Some of the value categories in Holbrook's framework are so intertwined that operationalizing them individually is nearly impossible. As a result, some writers propose consolidating these value kinds into a single category. The distinction between status and esteem, in particular, can be difficult to draw (Holbrook, 1999), since "the active character of status and the reactive nature of esteem tend to merge together in ways that make the two difficult to differentiate" (Holbrook, 1999, p. 188). When one's own consumption behavior is used to affect the responses of others, social value is created (Holbrook, 2006). In a similar way, altruistic value may be integrated with ethics and spirituality since they both lay outside the arena of regular commercial interactions (Sánchez-Fernández et al., 2009, p. 101). An altruistic value is defined as a concern about how my own consumer behavior impacts others where this experience is viewed as a "self-justifying end-in-itself" (Holbrook, 2006, p. 716).

Holbrook did not explore the cost side of the value construct in his earlier work. Holbrook (1999) recognized that his analysis of the customer value idea implicitly treats value as a cost-free advantage, implying that his method only considers the benefit side of the equation, not the sacrifice side.To get around this dilemma, it is possible to consider this typology as positive outputs that may be compared to negative value inputs (e.g., price, risk, time, effort; Gallarza and Saura, 2006; Oliver, 1997). These negative value inputs were included in recent research by Holbrook (Sánchez-Fernández et al., 2009) by incorporating monetary cost, time, and effort in establishing efficiency

as efficiency encompasses the get-versus-give components of consumption (Sánchez-Fernández and Iniesta-Bonillo, 2007).

2.2.3. The Research of Jiang et al. (2019) on Value Facilitation and Customer Participation

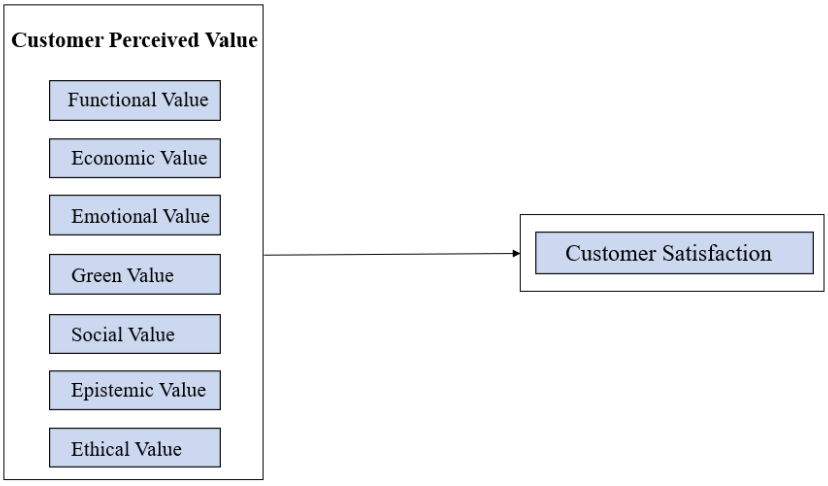

Figure 1. Adopted Conceptual Framework of perceived value and satisfaction by Y. Jiang et al. (2019)

In the research of Jiang et al. (2019), it is discussed that value co-creation is a joint, interactive process between customers and service providers. Further, the seven dimensions (functional value, economic value, emotional value, green value, social value, epistemic value, and ethical value) of the customer-perceived value are expected to influence customer satisfaction in the context of tourism and hospitality (Airbnb service). A part of Jiang's model and research which suggest the relationship between the value types and satisfaction is relevant to the current study. The adopted version of the conceptual model with a proposed relationship is exhibited in Fig. 1. The research of Jiang et al (2019) represents an application of the of framework of Holbrook et al (2015) that was discussed earlier in the literature review. Holbrook's (2019) typology along with the dimensions are reflected in Jiang's (2019) study in the context of tourism and hospitality in sharing economy.

The five dimensions of customer value proposed by Jiang et al (2019) are adopted and relevant to the current study. Jiang et al (2019) measured two additional dimensions (i.e. epistemic value, and social value) in relation to value co-creation process and customer satisfaction in Airbnb, accommodation sharing economy system. In the context of Airbnb, 'functional value' refers to the perceived usefulness derived from certain Airbnb qualities including convenience, lodging quality, and up-to-date amenities (Zhang et al., 2018a,b). When comparing to other accommodation service offers such as hotels, Airbnb's 'economic value' is defined as the perceived utility arising from the benefit and cost results (Chan et al., 2010). Airbnb delivers an enjoyable alternative to standard service offerings based on its 'emotional value' (Mohd-Any et al., 2015; So et al., 2018). The perceived utility of Airbnb depends on how it meets customers' environmental needs is known as a 'green value' (Jiang and Kim, 2015). The perceived usefulness obtained from Airbnb's ability to excite curiosity, offer originality, and fulfill a need for information is known as 'epistemic value' (Zhang et

al., 2018a,b). Finally, the 'ethical value' of Airbnb is its core benefit based on the customer's perception and trust towards how information is used and privacy management (Lutz et al., 2018). In conclusion, the seven characteristics of perceived value represent the guest's experience with Airbnb during their stay (Helkkula et al., 2012).

2.3. The consequences of Customer Perceived Value

This study is going to research the impact of customer percieved value on customer satisfaction and loyalty in the context of the scooter sharing services in the sharing economy. This section is going to focus on the importance of customer satisfaction and loyalty and conceptualization of customer value.

Customer satisfaction has an effect on a company's performance and profitability. Numerous studies have supported this effect indirectly by outlining the phenomenon of customer loyalty (Fornell, 1992; Rust, Zahorik, & Keiningham, 1995). Strategies International (GSI) conducted a statistical analysis of Customer Satisfaction data based on the results of more than 20,000 customer surveys done by InfoQuest in 40 countries. There was a number of interesting findings. According to the findings, a completely satisfied customer generates 2.6 times as much income as a partially satisfied consumer. A completely satisfied customer brings in 17 times more income compared to a somewhat unsatisfied consumer. A completely dissatisfied customer reduces income by 1.8 times the amount a completely satisfied customer contributes to a business.

Loyalty, according to Anderson and Jacobsen (2000), is the outcome of an organization providing a benefit to a customer in order for them to continue or expand their purchases from the company. Customer loyalty has been shown to have a direct, beneficial influence on a business success as measured by return on investment and selected performance indicators (Morgan & Rego, 2006). Many researches show a substantial link between satisfaction and loyalty (Anderson and Sullivan, 1993; Fornell, 1992; Rust and Zahorik, 1993; Taylor and Baker, 1994). Whether the involvement of other variables is present or not (Rowley, 2005), satisfied customers are usually the loyal customers (Coyne, 1989; Fornell, 1992; Oliva et al., 1992).

A recurring purchase is a reliable indicator of consumer loyalty (Ball, Simes-Coelho, and Machás, 2004; Copeland, 1923; Newman and Werbel, 1973; Tellis and Chandy, 1998). In practice, all sharing platforms aspire for repeated purchases because such behavior 1) can appear to show a customer's preference for a product or service (Bowen and Shoemaker, 1998), 2) can reflect a customer's purchase intention (Mellens et al., 1996), and 3) can presumably secure profitability (Reichheld and Sasser, 1990; Rust et al., 2004; Reinartz et al., 2005) by increasing market share (Chaudhuri and Holbrook 2001).

The two concepts of Customer Satisfaction and Loyalty are discussed in detail in the next section.

2.3.1. Customer Satisfaction

Satisfaction is a judgment that a characteristic of a product or service, or the product or service itself, provides a gratifying degree of consumption-related satisfaction (Zeithaml, Parasuraman, Berry, 2009). The more advantages a product or service provides, the more satisfied the consumer will be, and the more likely they will engage in positive behavior (Aulia et al., 2016).Customer satisfaction is the most accurate evaluation method for determining Customer Value delivered

(Wahyuningsih, 2005). Consumers who are satisfied, according to Ranaweera et al., (2010), show favorable behavioral outcomes and, as a result, there are financial advantages gained from satisfied customers.

According to Kotler and Keller (2012), satisfaction is a person's sentiments of joy or disappointment as a result of comparing the performance (or outcome) of perceived products in comparison to his or her expectations. The customer is dissatisfied if the performance fails to meet his expectations; satisfied if the performance meets his expectations; and delighted or very satisfied if the performance exceeds his expectations (Kotler and Keller, 2012). In line with Kotler and Keller (2012), Woodroof (1997) defines satisfaction as the customer's sentiments in reaction to assessments of his or her experience with a product or service.

There are two types of satisfaction identified in the literature: transactional and overall (or cumulative) satisfaction (Spiteri & Dion, 2004). Customer satisfaction after a transaction may be described as appraising a specific purchase after its use (Hunt, 1977; Oliver, 1980, 1993). Transactional satisfaction is short-term and based on the evaluation of a single transaction. It is singularly focused on the acquired product and applies to new customers, which focus on different attributes of a product or service (Wangenheim, 2003). Cumulative customer satisfaction, oppositely, can be defined as the overall satisfaction from a purchase, known as general satisfaction (Fornell, 1992; Johnson & Fornell, 1991). Cumulative satisfaction is an important measure when it comes to business outcomes. Namely, the cumulative evaluation of satisfaction is based on all customer experiences over time (Anderson et al., 1994). To sum up, satisfaction has a strong impact on loyalty and multiple academic researchers including Rowley (2005) concluded that satisfied customers are loyal customers.

2.3.2. Customer Loyalty

According to Oliver (1999), loyalty is a strong desire to repurchase or patronize a favorite product or service in the future, despite situational variances and marketing efforts that could promote switching behavior. More specifically, customer loyalty may be described as a combination of attitude and behavior (Rai, Medha, 2013). Loyalty is defined as the intention to repurchase and the willingness to recommend the supplier's offering to others (Cronin et al., 2000; Zeithaml et al., 1996).

Researchers' initial and most commonly utilized dimension of loyalty was **behavioural**. Despite the fact that the current definition of loyalty encompasses more than simply a behavioral component, some academics continue to focus solely on the behavioral aspect of loyalty (Gremler & Brown, 1996). According to Rauyruen and Miller (2007), a company's efforts to improve customer happiness and build good service systems may retain behavioural loyal. Fournier and Yao (1994) define attitudinal loyalty as a collection of sentiments that result in a general attachment to a product, service, or company (Gremler & Brown, 1996). Day (1969) has critiqued behavioural loyalty and stated that loyalty emerges as a consequence of a conscious effort to assess rival brands. The following critique has prompted authors to pay more attention to **attitudinal loyalty** and treat it as another important dimension of loyalty (Gremler & Brown, 1996). Focusing on relationship development, generating customer trust, commitment, and offering exceptional service systems will help builbuildding and retain attitude loyalty (Rauyruen & Miller, 2007).

Some academics define the **cognitive dimension** of loyalty in addition to behavioural and attitudinal commitment. It is defined as a customer's "first pick" among alternatives, or the first brand, store, or supplier that comes to mind when making a purchasing decision (Ostrowski, O'Brien, & Gordon, 1993; Newman & Werbel, 1973). This implies that a devoted customer will not contemplate or actively seek out other companies to buy from (Gremler & Brown, 1996). According to Gremler and Brown (1996), three loyalty dimensions (behavioral, attitudinal, cognitive) define a loyal customer as a frequent consumer of one service provider or supplier, has favorable views about the organization, and does not consider switching providers.

The following three loyalty dimensions (behavioral, attitudinal, cognitive) is one of the methods to measure customer loyalty. After considering the B2C shared mobility market characteristics and the three loyalty dimensions discussed above, it was decided to measure loyalty according to the four factors that reflect all three loyalty dimensions (Zeithaml, Berry, & Parasuraman, 1996): continuation of use of the shared scooter, considering a certain company to be the first choice for the users, recommending riding the shared scooter to others, and having positive feelings about the shared scooter. These four factors of measurement consider behavioral, attitudial, and cognitive dimensions proposed by Oliver (1999) and reflect on the most important elements: the intention to repurchase and the willingness to recommend the offering to others.

2.3.3. The Evaluation of the performance of the four methods of measuring customer value by Leroi-Werelds et al.

In the research by Leroi-Werelds et al. (2013), the researchers assessed and compared the predictive power of four regularly used approaches for evaluating customer value (Dodds et al., 1991; Gale, 1994; Holbrook, 1999; Woodruff and Gardial, 1996) in terms of customer satisfaction, repurchase intentions, and word-of-mouth in various scenarios. The researchers also looked at the impact of context on the approaches' relative predictive performance.

The research of Leroi-Werelds et al. (2013) is relevant as it is used to understand the impact of value on the following constructs: satisfaction and loyalty in the following research. Word of mouth is not included in the current research. The prior research conducted by Leroi Werelds et al. (2013) validated the existing linkages between the three variables (satisfaction, word of mouth, repurchase intentions). The intent to repurchase (repurchase) as well as the intention to engage in good word-of-mouth and suggestion (referral) are both linked to loyalty (Zeithaml, et al. 1996). Leroi-Werelds et al. (2013) have presented a structural model to show links between customer value, customer satisfaction, repurchase intentions, and word of mouth. The researchers found that customer value should be operationalized in a multi-dimensional, consequence-based manner after comparing the performance of four frequently used conceptualizations of customer value (Leroi-Werelds at al., 2013).

3. Research model and Hypotheses development

This study investigates five dimensions of customer-perceived value proposed and tested by Jiang et al. (2019): (1) functional value, (2) economic value, (3) emotional value, (4) green value, and (5) ethical value.

In the context of scooter sharing, the customers' perceived value plays a significant role in facilitating customer satisfaction and continuance intention. As it was mentioned previously, Jiang et al (2019) researched a total of seven dimensions shown in Figure 1.

This research adopted 5 dimensions to the context of scooter sharing and the reasons behind this decision will be explained further. First, as proposed in Jiang et al's (2018) framework, the existing business model (B2C) of scooter sharing gives consumers an efficient, joyful, and cost-saving traveling approach, which mainly displays customers' perceived functional, emotional, and economic benefits. Second, scooter sharing services may help consumers by lowering pollution and shifting societies toward sustainable development, which demonstrates customers' perceptions of environmental value. In earlier research, Jiang et al (2018) found that in the context of Airbnb, social value is found in addressing consumers' desires for meaningful social connection between the host and the visitor. The social value is not included in the current study since the scooter sharing application does not provide a social interaction feature.

In addition, Jiang et al (2018) points out that epistemic value is derived from the capacity of, in their case, Airbnb to spark interest, bring innovation, and fulfill a need for information. In their research it was closely related to living locals and experiencing lifestyles and cultures when turning to Airbnb accommodation services. In the context of scooter sharing, the epistemic value is not relevant as it does not execute the function of satisfying desire for knowledge as scooters are usually used by locals for short periods of time. In this regard, this study will not include a social value as it requires a deeper understanding of the topic and extensive research.

Given the domain-specific characteristics of shared scooter companies (e.g., cost-effective alternative, environmental impact, and physical and information privacy concerns), the customer-perceived value dimensions of functional value, economic value, emotional value, green value, and ethical value were considered in order to better adapt to the research context of scooter sharing.

3.1. Research Model

Drawing upon the previous literature, this study develops a research model. The purpose of the following research model is to examine the specific influences of five value dimensions of customer perceived value, specifically functional value, emotional value, economic value, green value, and ethical value on customer satisfaction and loyalty in the context of electric scooter sharing.

The constructs related to the customer value (functional value, economic value, emotional value, green value, ethical value) were previously studied by Jiang et al. (2019) and represent left side of the conceptual model in the current study. The model by Leroi-Werelds et al. (2013) where customer value is measured with regard to customer satisfaction, repurchase intentions and word-of-mouth was adopted to the current study. This study did not include a word-of-mouth; however the right

side of the conceptual model of the current study was adopted to the model of Leroi-Werelds et al. (2013) as well as Jiang et al. (2019) and included customer satisfaction and loyalty.

Figure 2 illustrates the research model and corresponding hypotheses. The model will be tested in the empirical part of this study.

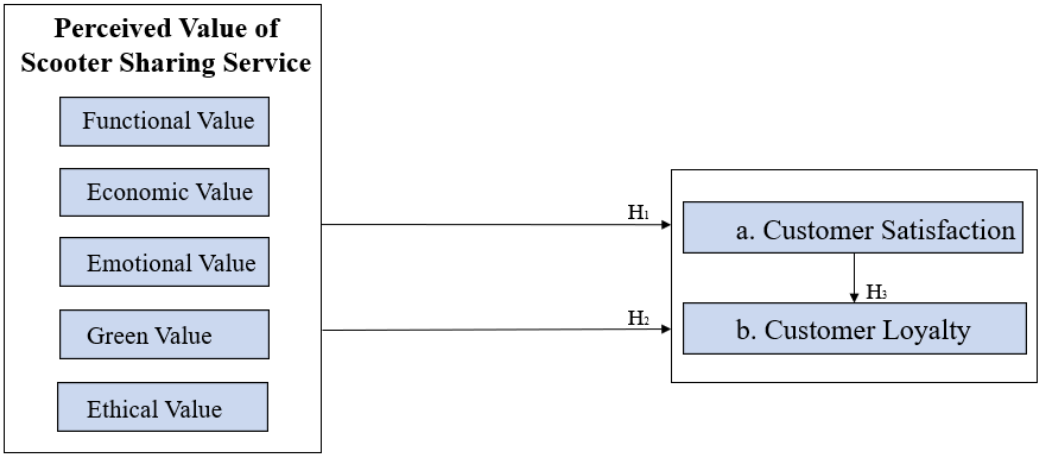

Figure 2. Research Model on the impact of Customer Perceived Value and its constructs on Customer Satisfaction and Loyalty

3.2. Hypothesis Development

Based on the study of Leroi-Werelds et al. (2013), Holbrook et al. (2015) Jiang et al. (2019), it can be hypothesized that:

H1: Customer Perceived Value has a direct impact on Customer Satisfaction, where Customer Satisfaction is positively influenced by a.) functional value; b.) economic value; c.) emotional value, d.) green value; e.) ethical value.

H2: Customer Perceived Value has a direct impact on Loyalty, where Loyalty is positively influenced by a.) functional value; b.) economic value; c.) emotional value, d.) green value; e.) ethical value.

H3: Customer Satisfaction has a direct positive impact on Customer Loyalty.

In this case, every hypothesis has a null hypothesis (**H0**) stating that there is no positive relation between the construct and the consequences, meaning that there is a negative effect.

4. Empirical Study

4.1. Setting

The data collection process took place in Brussels, Belgium. The data was collected online and distributed to scooter sharing and shared mobility communities on Facebook and Reddit. The data collection process started on Wednesday, July 14th and continued until Friday, August 5th.

4.2. Questionnaire Development and Data Collection

For the scope of the research, the focus was put on people that are familiar with shared electric scooters and made use of it. The research was focused on the shared electric scooter brands that are most known and commonly used in Brussels, Belgium. These brands include Lime, Dott, Bird, and respondents had a chance to enter their own used and preferred brand.

A self-administered survey was used to collect data for the empirical section of this study. The program Qualtrics was used to design and construct the survey. To get as many replies as possible, a non-probability sampling technique was chosen. In order to collect different responses, the snowball sampling was used (Malhotra, Nunan, & Birks, 2017). The following survey was distributed via two social media channels – Facebook and Reddit in the communities related to shared electric scooters and users.

The questions of the survey were split into four sections. The first section consisted of descriptive questions about the usage of the shared electric scooters. It included questions whether the respondent has ever made use of the shared electric scooter, the most used and preferred brands, the frequency of use, and the purpose of the journey on the shared electric scooters. These questions were designed by the researcher of the current study.

The next section consisted of five groups of questions related to the five dimensions of perceived customer value (functional, economic, emotional, green, ethical) which were defined in the research by Jiang et al. (2019) and further adopted to the current research. These questions evaluated the dimensions of perceived value towards the experience of the respondents with shared electric scooters.

The third section consisted of two groups of questions related to satisfaction and loyalty which were previously designed in the research by Leroi-Werelds et al. (2013) and further adopted to the current research. These questions evaluated satisfaction and loyalty towards shared electric scooters of respondents. The last section collected information on demographics of the respondents. The response was built on the basis of the 7-point Likert scale. The responses on the Likert scale ranged from "Strongly agree" to "Strongly disagree" with "Neither agree nor disagree" in the middle (Malhotra, Nunan, & Birks, 2017). Prior to publication the survey has been checked for grammar mistakes and fluency issues. The complete version of the questionnaire can be found in the appendix 1.

4.3. Sample

The total sample size of the survey consisted of 157 respondents. The survey included 145 complete responses. There were 62 responses which were deleted from the data set as part of these respondents simply never tried riding shared electric scooters. Some responses turned out to be irrelevant as the respondents skipped questions or data was insufficient.

The survey was filled by 61% of male, 32% of female respondents as well as 6% of the respondents which chose the option "other".

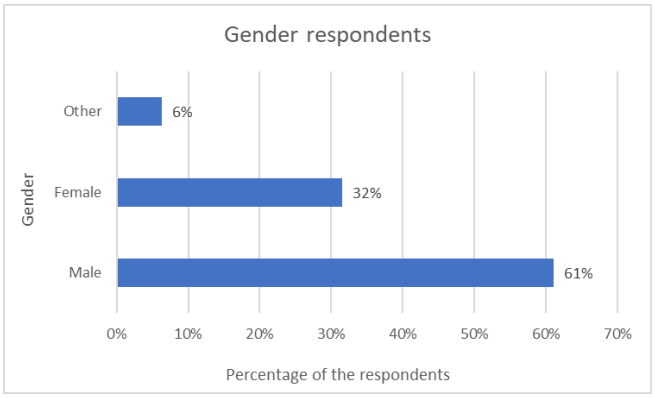

Figure 3. Gender of the respondents

The age of the majority of the respondents varies between the age groups of 18-25 ad 26-49 years. Figure gives an overview of the age distribution.

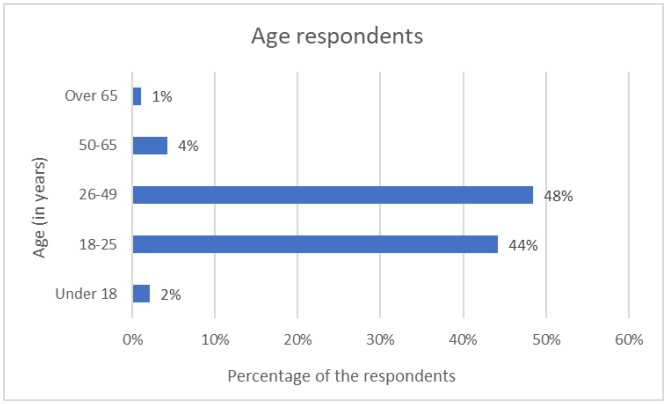

Figure 4. Age of the respondents

The majority of the respondents mentioned they are employed (59%).

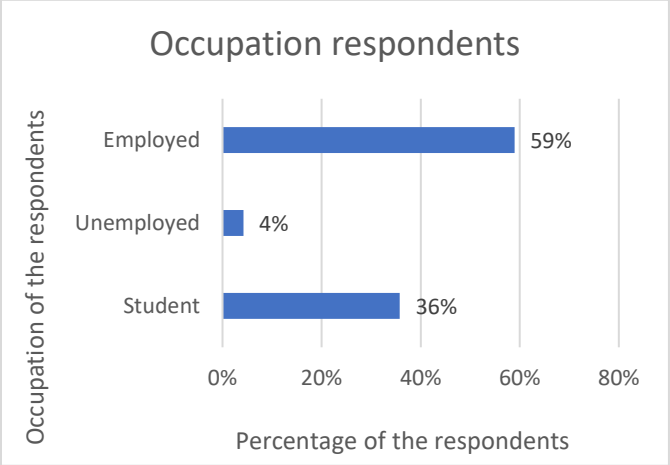

Figure 5. Occupation of the respondents

The most used brand of the shared electric scooters among the respondents is Lime (66%); however, the most preferred brand is Dott (35%). Figures .. and .. show the preferences of the respondents.

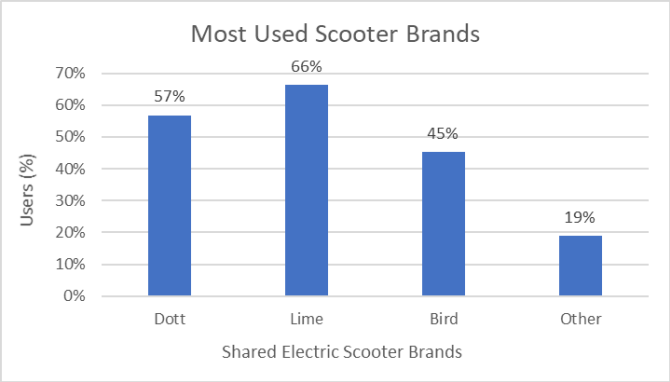

Figure 6. Most used shared electric scooter brands

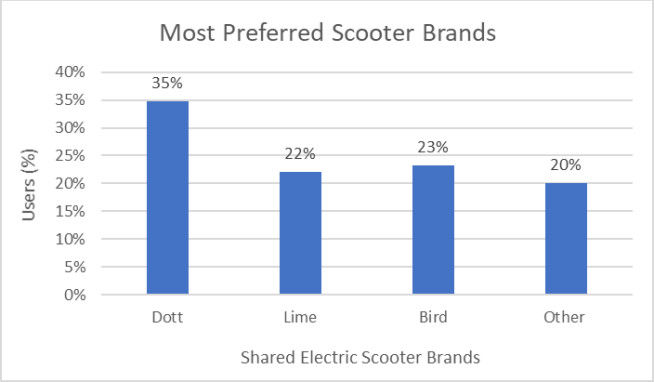

Figure 7. Most preferred shared electric scooter brands

In addition, most of the respondents chose first/last mile as a journey (35%) and leisure (31%) as the purpose of their journey on the shared electric scooters. The most significant percentage of the respondents said they use the shared electric scooters monthly (25%) and 2-5 times a month (35%).

Figures 8 and 9 give an overview on the purpose of the journey of the respondents and the frequency of usage of shared electric scooters.

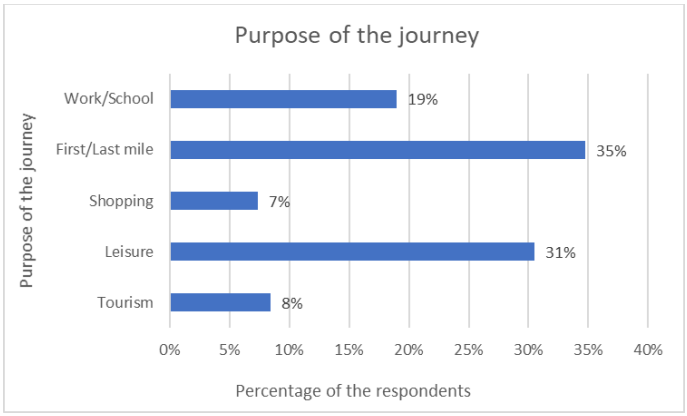

Figure 8. Purpose of the journey

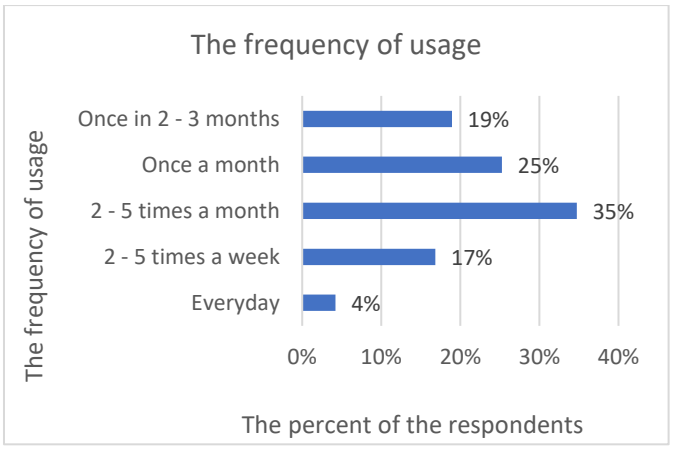

Figure 9. The frequency of usage

5. Methodology

The preparatory and descriptive analysis of the data collected with the survey was conducted using the SPSS Statistics software of IBM, version 26.

According to Jiang et al. (2019) the constructs of customer value were considered a reliable scale. In order to measure the impact of the five constructs of perceived customer value (functional value, economic value, emotional value, green value, ethical value) on satisfaction and loyalty, the correlation analysis and the multiple regression analysis were performed.

5.1. Correlation Analysis

	Mean	*Std. Deviation*
Functional Value	2.3663	.78495
Economic Value	3.6771	1.34769
Emotional Value	2.3177	1.30206
Green Value	2.8646	1.32681
Ethical Value	2.7465	1.04936
Customer Loyalty	2.3789	1.19053
Customer Satisfaction	2.2737	1.16690

Table 1: Descriptive Statistics

	Functional Value	*Economic Value*	Emotional Value	*Green Value*	*Ethical Value*	*Customer Loyalty*	*Customer Satisfaction*
Functional Value	1						
Economic Value	0.392	1					
Emotional Value	0.570	0.362	1				
Green Value	0.458	0.579	0.625	1			
Ethical Value	0.547	0.468	0.687	0.538	1		
Customer Loyalty	0.613	0.472	0.722	0.533	0.558	1	
Customer Satisfaction	0.629	0.542	0.748	0.550	0.607	0.792	1

Table 2: Table Correlation Analysis between constructs

The calculations of the correlation analysis are shown in appendix 2.

5.2. Regression Analysis

In order to test the hypotheses and the conceptual model, two regression analyses have been conducted with the use of SPSS software. The first regression analysis included 5 independent variables (functional value, economic value, emotional value, green value, and ethical value) and 1 dependent variable (customer satisfaction). The second regression analysis included 6 independent variables (functional value, economic value, emotional value, green value, ethical value, and customer satisfaction) and 1 dependent variable (loyalty).

To begin the discussion of linear regression models, the coefficient of determination R-square of the dependent variables of customer satisfaction and loyalty should be evaluated. The coefficient of determination, R-square, describes the amount of variance in the dependent variable associated with the predictor (independent) variables in a linear regression model, with greater R-square values suggesting that the model explains more of the variation, up to a maximum of 1. (IBM Knowledge Center, 2018). The R-square shows if a fit in the construct is present and how strong it is.

Dependent Variables	*The R-square*
Customer Satisfaction	0.712
Customer Loyalty	0.689

Table 3: R-square

Table shows the R-square per variable ranges between 0.65 and 0.7. In this case, it shows that 71.2% of variance in the dependent variable of Customer Satisfaction can be explained by the associated independent variables (functional value, economic value, emotional value, green value, and ethical value). In the case of Customer Loyalty, it shows that 68.9% of variance is formed by the associated independent variables (functional value, economic value, emotional value, green value, ethical value, and customer satisfaction). The table with the calculation of the R-square can be found in appendix 3.

The hypotheses of this study was tested with the help of the regression analysis. The advantage of the linear regression analysis is that it helps evaluate the significance of the relationship between the independent and dependent variables. In order to test the significance of the relationship, the P-value is used. When the p-value is less than 0.05, it means that the result is statistically significant. It also indicated that the null hypothesis is rejected, as there is less than 5% probability the null hypothesis is correct and the results are random. In addition, the Standardized Beta coefficient (β) has to be assessed as it predicts the positive or negative effect of the independent variables (Malhotra, Nunan, & Birks, 2017).

Independent Variable	Significance per dependent variable	
	Satisfaction	Loyalty

	P-value	Standardized coefficient Beta	P-value	Standardized coefficient Beta
FU1.1	0.003	0.264	0.000	0.354
FU1.2	0.104	0.096	0.331	0.063
EC	0.000	0.287	0.013	0.198
EM	0.000	0.465	0.000	0.412
GR	0.639	-0.037	0.959	0.005
ET	0.677	0.033	0.899	-0.011

Independent Variable	*Significance per dependent variable*			
	Customer Satisfaction (H1)		Customer Loyalty (H2, H3)	
	P-value	Standardized coefficient Beta	P-value	Standardized coefficient Beta
Functional Value	0.001	0.250	0.037	0.165
Economic Value	0.000	0.297	0.252	0.093
Emotional Value	0.000	0.517	0.008	0.290
Green Value	0.673	-0.034	0.765	0.025
Ethical Value	0.599	0.042	0.878	-0.013
Customer Satisfaction			0.000	0.415

Table 4: Significance level for H1, H2, H3

Table 4 shows the significance levels as the result of the two regression analysis carried out to test each dependent variable (Customer Satisfaction, Customer Loyalty).

The first regression model tests H1 and results show that such independent variables as functional value, economic value, and emotional value have a positive and significant effect, where p-value is lower than 0.05, on Customer Satisfaction. According to the standardized Beta coefficient, functional value, economic value, and emotional value account for nearly 1.05 unit change in customer satisfaction per 1 unit change in each value construct.

The second regression model tests H2 and H3. It shows that functional value and emotional value have a positive and significant effect on Loyalty as p-value is lower than 0.05. Additionally, Customer Satisfaction has a significant and positive effect on Loyalty where p-value is lower than 0.05. In the case of Loyalty, standardized Beta coefficient shows that functional value, emotional value, and customer satisfaction account for nearly 0.87 unit change in loyalty per 1 unit change in each value construct including customer satisfaction.

In the hypotheses development section, it was previously stated that H0 means that there is no positive, significant relationship between the independent variables and the dependent variables, therefore H0 is rejected. The calculations of the regression can be found in appendix 3.

Hypotheses	Supported/Rejected
H1(a): Customer Perceived Value has a direct impact on Customer Satisfaction, where Customer Satisfaction is positively influenced by functional value.	Supported
H1(b): Customer Perceived Value has a direct impact on Customer Satisfaction, where Customer Satisfaction is positively influenced by economic value.	Supported
H1(c): Customer Perceived Value has a direct impact on Customer Satisfaction, where Customer Satisfaction is positively influenced by emotional value.	Supported
H1(d): Customer Perceived Value has a direct impact on Customer Satisfaction, where Customer Satisfaction is positively influenced by green value.	Rejected
H1(e): Customer Perceived Value has a direct impact on Customer Satisfaction, where Customer Satisfaction is positively influenced by ethical value.	Rejected
H2(a): Customer Perceived Value has a direct impact on Loyalty, where Loyalty is positively influenced by functional value.	Supported
H2(b): Customer Perceived Value has a direct impact on Loyalty, where Loyalty is positively influenced by economic value.	Rejected
H2(c): Customer Perceived Value has a direct impact on Loyalty, where Loyalty is positively influenced by emotional value.	Supported
H2(d): Customer Perceived Value has a direct impact on Loyalty, where Loyalty is positively influenced by green value.	Rejected
H2(e): Customer Perceived Value has a direct impact on Loyalty, where Loyalty is positively influenced by ethical value.	Rejected
H3: Customer Satisfaction has a direct positive impact on Customer Loyalty.	Supported

Table 5: Hypothesis Overview

Table 5 shows whether the hypotheses have been supported or rejected as the result of the analysis. As it was mentioned above, not all the constructs of customer value had a significant impact on customer satisfaction and loyalty. H1 (a,b,c), H2 (a,c), H3 were supported as the result of the analysis.

6. Discussion and Conclusion

The aim of this study was to investigate the impact of the customer value and its five constructs (functional value, economic value, emotional value, green value, and ethical value) on customer satisfaction and loyalty in the context of sharing mobility and shared electric scooters in Brussels, Belgium. The main research question of this study asked how does the customer value and its constructs (functional value, emotional value, economic value, green value, and ethical value) impact customer satisfaction and loyalty in the context of shared electric scooter services. In addition, this research aimed to find if there is a relationship between customer satisfaction and loyalty in the context of scooter sharing.

6.1. The findings of the secondary research

In order to answer the research question, primary and secondary research was conducted. The secondary research has emphasized a number of important findings. The Sharing Economy represents a collaborative consumption which led to change in consumption patterns and business models of the companies (Botsman, 2015). Companies had to reevaluate their value creation perspective, yet keep in mind the essence of the value creation perspective: driving customer satisfaction to achieve competitive advantage. Customer value is the conceptual tool to identify how new businesses can recognize and capitalize on their competitive advantage. The findings of Holbrook (1995) confirmed that consumption experience entails all/many value types of his typology (intrinsic/extrinsic, other/self-oriented, active/reactive). He stated that all value types are related and it is difficult to operationalize them separately. Jiang et al. (2019) has measured the impact of the seven constructs of customer value (functional value, economic value, emotional value, green value, social value, epistemic value, and ethical value) on customer satisfaction in the context of Airbnb accommodation services.

Previous research has confirmed that customer satisfaction has a strong impact the performance and profitability of the business. This effect is demonstrated indirectly through customer loyalty. In addition, loyalty has a direct positive impact on a business performance represented by return on investment and selected performance indicators (Morgan, Rego, 1995). In many studies, it was found that satisfaction and loyalty are strongly related (reference).

6.2. The findings of the primary research

As the result of the secondary research, a conceptual model was based on the previous studies conducted by Jiang et al. (2019). The current research adopted the value constructs proposed by Jiang et al. (2019) to the context of the shared mobility and sharing electric scooters and included 5 constructs of value (functional value, economic value, emotional value, green value, and ethical value). Further, three hypotheses were developed and tested. It was hypothesized that all five constructs of customer value (functional value, emotional value, economic value, green value, and ethical value) will have a positive impact on customer satisfaction and loyalty. It was also hypothesized that customer satisfaction will have a positive impact on loyalty in the scooter sharing setting. To test the hypotheses, a questionnaire was designed and distributed to the scooter-sharing

and sharing mobility online communities on Facebook and Reddit. The responses were collected and analyzed statistically by means of correlation and regression analyses.

The results of the analysis partially differed from the hypotheses. It was discovered that customer satisfaction is mostly impacted by functional value, economic value, and emotional value. It was expected that functional value has a positive impact on customer satisfaction because it represents the perceived utility acquired from the specific attributes of riding the shared scooters such as the conditions of the scooters, the accessibility of the scooters in the area and whether it is easily unlocked by the user. Therefore, the factors that constitute the functional value represent a major importance to the users of the shared scooters and are positively associated with customer satisfaction and loyalty. The economic value is the perceived utility resulting from the benefit and cost outcomes of the scooter sharing experience and included a reasonable price, good value for money, and whether it represents an economic alternative to choosing other means of transport. The economic value has a positive impact on customer satisfaction; however, the positive relationship between the economic value and loyalty was not found. The emotional value means that scooter sharing services provide a pleasant and safe alternative to the other means of transport. The emotional value has a positive impact on customer satisfaction and loyalty of the users.

In addition, the analysis confirmed the positive impact of customer satisfaction on loyalty. Multiple researchers in the previous literature confirmed a strong relationship between the two concepts in their studies (Anderson and Sullivan, 1993; Fornell, 1992; Rust and Zahorik, 1993; Taylor and Baker, 1994).

The results showed that no connection was found between green value, ethical value, and customer satisfaction. Also, no connection was found between economic value, green value, ethical value and loyalty. The green value is the perceived utility by the shared scooter services based on how it serves customers' environmental needs. The users did not indicate the green value as a relevant construct of customer value towards customer satisfaction and loyalty. The ethical value is the perceived utility of scooter sharing services based on the belief and trust of the users towards information use and privacy management of the scooter sharing apps. The users found the ethical value irrelevant and therefore, no impact was found on satisfaction and loyalty. It was also found that economic value has no significant impact on loyalty.

6.3. The comparison of the primary findings to previous literature

Despite the fact that the present study's environment differed from that of Jiang et al. (2019), the new study's findings partially matched those of the original study. In the context of Airbnb housing services, Jiang et al. (2019) discovered that functional value, economic value, emotional value, social value, and ethical value - all had a significant impact on customer satisfaction. Jiagn et al. (2019) findings back up those of Zhang et al. (2018a,b), Kim et al. (2018), and So et al. (2018), demonstrating the importance of customer-perceived value in satisfying customers' expectations and influencing consumer behavior to achieve customer satisfaction and loyalty. Jiang et al. (2019) found that Airbnb and/or hosts should provide inexpensive lodgings and practical facilities (e.g., step-free access, well-lit walkway), promote pleasant dialogues with guests, and preserve openness,

transparency, and confidence in the sharing economy system. Furthermore, Jiang et al. (2019) discovered that green value and epistemic value had no effect on consumer satisfaction.

As it was mentioned previously, the current study also discovered a meaningful impact of functional value, economic value, and emotional value on customer satisfaction in the context of shared scooter services. This study did not include the social value and epistemic value as it appeared to be irrelevant in the context of scooter sharing. The findings of the current research can be translated in the context of the shared scooters in the following way: scooter sharing services need to focus on the functionality of the shared electric scooters. By improving the functionality, the emotional factor will be increased as functional vehicles bring pleasant feelings to the journey. In addition, it is important for the shared scooter services to maintain affordable prices as this represents a big advantage of sharing economy services. Contrasting to the study of Jiang et al. (2019), no impact was found of ethical value on customer satisfaction and loyalty. Although, similarly to the findings of Jiang et al. (2019), no meaningful relationship was found between green value, ethical value, and customer satisfaction in the current research. The users of the shared scooter services indicated that the sustainable efforts of the scooter companies as well as transparency and ethics add little to no value to their experience.

6.4. Summary of the findings

To conclude, the objective of this study was to find if the customer perceived value and its constructs (functional value, economic value, emotional value, green value, and ethical value) has a positive effect on customer satisfaction and loyalty. Additionally, the aim was to investigate the impact of customer satisfaction on loyalty in the context of shared electric scooter services. Previous studies were mostly conducted in the area of sharing bicycles as the sharing mobility is a relatively new sector of the sharing economy. In order to explore customer satisfaction and loyalty in the area of the shared scooter services, the existing framework of Jiang et al. (2019) was adopted.

The hypotheses were tested in order to understand which value constructs have a positive impact on satisfaction and loyalty. In addition, the relationship between satisfaction and loyalty was also tested. The results were analyzed by means of correlation and regression analyses. The meaningful relationships were found between functional value, economic value, emotional value and customer satisfaction. The meaningful relationships were also found between functional value, emotional value, customer satisfaction and loyalty. There was no meaningful relationship found between green value, ethical value and customer satisfaction. Additionally, no meaningful relationship was found between economic value, green value, ethical value, and loyalty.

To answer the research questions of this thesis: customer value, which constitutes of functional value, economic value, and emotional value has a positive impact on customer satisfaction in the context of shared mobility and shared electric scooter services. Whereas loyalty is impacted the most by functional value and emotional value. Additionally, customer satisfaction is strongly associated with loyalty in the context of sharing electric scooter services.

6.5. Practical Implications

This research could contribute to the further understanding of customer satisfaction and loyalty in the scooter-sharing sector. This study adopted a framework of perceived customer value in the context of sharing economy and explores the impact of perceived customer value and its five constructs (functional value, emotional value, economic value, green value, ethical value) on customer satisfaction and loyalty. This study could help scooter sharing companies to formulate appropriate strategies regarding development, functionality, and positioning of their scooter services.

As a result of the current study, a number of significant relationships were found. Customer perceived value with its constructs of functional value, economic value, and emotional value were found to have a positive impact on customer satisfaction. Additionally, functional value, emotional value, and customer satisfaction have a positive impact on loyalty in the context of scooter sharing services.

As the results show that perceived customer value has a significant impact on customer satisfaction and loyalty, it is important to consider the relevant value dimensions in positioning shared scooter services.

The functional value appeared to impact customer satisfaction and loyalty. This means that companies have to focus on the overall maintenance of the shared scooters and particularly on sufficient battery charge, decent condition, and availability in various parts of the city.

The economic value was found to have an impact on customer satisfaction, yet no impact on loyalty. The companies could address this by maintaining an adequate and affordable price per journey. The emotional value appeared to have the largest impact on satisfaction and loyalty among the users of the scooter-sharing services. As emotionally connected customers are highly valuable, it is important that scooter sharing companies would analyze the customer journey and focus on the special moments where the biggest impact could be made. Since the communication is limited and most of the communication between the users and the scooter sharing companies take place via an app, companies have to establish ways of enhancing emotional engagement virtually.

It was mentioned earlier that customer satisfaction was found to have a significant impact on loyalty. This relationship is important for the companies because it is associated with the competitive advantage and profitability of the companies. Customer satisfaction has a major impact on the performance of the company and the effect is often demonstrated indirectly through customer loyalty. Taking this fact into account, scooter sharing companies could apply the insights of how value constructs impact satisfaction and loyalty to remain competitive and profitable.

A number of expected relationships between the value constructs and customer satisfaction and loyalty were not found. For example, no meaningful relationship was found between the green value, ethical value and customer satisfaction, loyalty. It is an important factor that should be taken into account because scooter sharing companies have to understand that their sustainable and ethical efforts have no to little impact on satisfaction and loyalty. Therefore, the companies have to reposition their efforts for better results.

7. Limitations and Future Research

This study has several limitations. The first and biggest limitation is concerned with the setting and the sample of the study. The sample of the study was relatively small as it was conducted among Belgian users and mostly users living in Brussels. This means that the sample might not have been representative enough. In addition, the study had limited generalization. For future research, the study could be conducted in multiple countries and cities where scooter sharing is present. Additionally, different platforms could be used for the future data collection as Reddit and Facebook were the only platforms used for this study. The future study could be conducted in the longitudinal model to examine the fluctuations in customer satisfaction towards electric scooter sharing at different seasons and time periods. This could give insights on the way value constructs evolve and change over time.

The second limitation is concerned with the way the questionnaire was designed. The questions in the questionnaire were based on the previous researches of Jiang et al. (2019) and the context of Airbnb accommodation services. Since the questions were adopted to the context of scooter sharing and differed from the original studies, important nuances could have been lost. It was discovered that about 15% of the respondents mentioned that they have never tried riding shared electric scooters. In the future study, it would be useful to ask the respondents why they never chose to ride the shared electric scooters and understand their motivations behind this decision. This information could provide insights on what changes should be made to shared scooter services in order to attract people to try riding it.

To provide a deeper understanding of each value construct, more questions should be formulated per construct. Also, as some constructs showed no meaningful relationship towards satisfaction and loyalty, it would make sense to reformulate the questions concerning these constructs in the future research to see if the respondents are willing to evaluate them differently. This information could provide insights on what shared electric scooter companies can improve in order to attract more customers and enhance customer satisfaction.

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9. Appendix

9.1. Appendix 1

The Questionnaire

Dear Respondent,

My name is Polina and I am a Master student at UHasselt. My research seeks to explore the customer perceived value in relation to customer satisfaction and loyalty towards shared electric scooters in Belgium. In the past years shared electric scooters have gained in popularity and became a common mean of transportation. The shared scooters can be found anywhere in the city and rented with the help of a mobile app. Most common shared scooters brands are Dott, Lime, and Bird.

It will take approximately 5 minutes to complete this questionnaire. There are no right or wrong answers, it is all about your personal perspective. All the information from this questionnaire will be kept private and strictly confidential.

Thank you for your time and support. Please start the survey now by clicking on the Continue button below.

I agree to participate in the following research and grant permission for the data generated from this questionnaire to be anonymously used in the researchers' publications on this topic

*click Yes to continue

Main questions

Have you ever used the shared electric scooter? (For example Lime, Dott, Bird, etc)

Yes

No

(if no, takes the respondent to the end of the questionnaire)

Which brand of the shared scooter do you prefer riding?

Dott

Lime

Bird

Other *please specify

(the brand chosen here was reflected in the construct questions)

How often do you use the electric scooter?

Everyday

2-5 times a week

2-5 times a month

Once a month

Once in 2-3 months

When was the last time you used the electric scooter?

Last 3 days

Last week

Last month

3 months ago

1 year ago

What is the purpose of your journey on the electric scooter?

Work/School

Shopping

Leisure

Tourism

First/Last mile of a journey

Constructs

Please indicate the extent to which you are satisfied or dissatisfied with your experience in renting shared scooters. Strongly disagree – strongly agree (7 point likert scale)

Functional

The condition of the shared scooter I have used is satisfactory

The condition of the shared scooter I have used is consistent over time

The location of the scooters is convenient and easily determined

There are enough scooters in my region

The scooters in my region are sufficiently charged

The scooter is easily unlocked and started

Economic

Using a shared scooter is a good value for money

Using a shared scooter for my trip is an economical alternative to other means of transport

The price of the renting a scooter is reasonable

Emotional

The ride on the scooter feels safe

Using a shared scooter makes me feel joyful

Green

I find the use of the shared scooter an environmental friendly option

Using the shared scooter enabled more efficient resource use for me

Ethical

The personal information I provided on the app is safe and secure

Prices on the app are transparent

The shared scooter brand that I used (ex. Lime, Dott) is ethical and responsible

Customer Satisfaction

I am satisfied with my experience of riding shared scooters

I believe it's the right decision to ride shared scooters

Overall scooter sharing has met my expectations

Customer Loyalty

Please indicate how likely it is that you would… extremely unlikely – extremely likely (7 point Likert scale)

Say positive things about riding shared scooters to other people

Recommend shared scooters to someone who seeks your advice

Encourage friends and relatives to try riding the electric scooter

Rent a shared scooter again for your journey

Doubt riding the shared scooter again

Demographics

What is your age?

Under 18

18-25

26-49

50-65

Over 65

What gender do you identify with?

Male

Female

Other

What is your occupation?

A student

Unemployed

Employed

Retired

Unable to work

Thank you for your contribution to this research.

9.2. Appendix 2

Descriptive Statistics

Descriptive Statistics

	Mean	Std. Deviation	N
FUavg	2.3663	.78495	96
ECavg	3.6771	1.34769	96
EMavg	2.3177	1.30206	96
GRavg	2.8646	1.32681	96
ETavg	2.7465	1.04936	96
LO1avg	2.3789	1.19053	95
SAavg	2.2737	1.16690	95

Correlation Analysis

Correlations

		FUavg	ECavg	EMavg	GRavg	ETavg	LO1avg	SAavg
FUavg	Pearson Correlation	1	.392**	.570**	.458**	.547**	.613**	.629**
	Sig. (2-tailed)		.000	.000	.000	.000	.000	.000
	N	96	96	96	96	96	95	95
ECavg	Pearson Correlation	.392**	1	.362**	.579**	.468**	.472**	.542**
	Sig. (2-tailed)	.000		.000	.000	.000	.000	.000
	N	96	96	96	96	96	95	95
EMavg	Pearson Correlation	.570**	.362**	1	.625**	.687**	.722**	.748**
	Sig. (2-tailed)	.000	.000		.000	.000	.000	.000
	N	96	96	96	96	96	95	95
GRavg	Pearson Correlation	.458**	.579**	.625**	1	.538**	.533**	.550**
	Sig. (2-tailed)	.000	.000	.000		.000	.000	.000
	N	96	96	96	96	96	95	95
ETavg	Pearson Correlation	.547**	.468**	.687**	.538**	1	.558**	.607**
	Sig. (2-tailed)	.000	.000	.000	.000		.000	.000
	N	96	96	96	96	96	95	95
LO1avg	Pearson Correlation	.613**	.472**	.722**	.533**	.558**	1	.792**
	Sig. (2-tailed)	.000	.000	.000	.000	.000		.000
	N	95	95	95	95	95	95	95
SAavg	Pearson Correlation	.629**	.542**	.748**	.550**	.607**	.792**	1
	Sig. (2-tailed)	.000	.000	.000	.000	.000	.000	
	N	95	95	95	95	95	95	95

**. Correlation is significant at the 0.01 level (2-tailed).

9.3. Appendix 3

Regression Analysis

Value constructs to Customer Satisfaction

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.844[a]	.712	.696	.64381	.712	43.959	5	89	.000

a. Predictors: (Constant), ETavg, ECavg, FUavg, GRavg, EMavg

b. Dependent Variable: SAavg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-.751	.262		-2.864	.005	-1.272	-.230		
	FUavg	.390	.109	.250	3.595	.001	.175	.606	.671	1.491
	ECavg	.265	.063	.297	4.206	.000	.140	.390	.648	1.544
	EMavg	.482	.081	.517	5.963	.000	.321	.642	.431	2.320
	GRavg	-.031	.074	-.034	-.423	.673	-.177	.115	.512	1.955
	ETavg	.050	.095	.042	.527	.599	-.139	.240	.511	1.955

a. Dependent Variable: SAavg

Value constructs and Customer Satisfaction to Loyalty

Model Summary[b]

Model	R	R Square	Adjusted R Square	Std. Error of the Estimate	Change Statistics				
					R Square Change	F Change	df1	df2	Sig. F Change
1	.830[a]	.689	.668	.68614	.689	32.500	6	88	.000

a. Predictors: (Constant), SAavg, ECavg, ETavg, GRavg, FUavg, EMavg

b. Dependent Variable: LO1avg

Coefficients[a]

Model		Unstandardized Coefficients		Standardized Coefficients			95.0% Confidence Interval for B		Collinearity Statistics	
		B	Std. Error	Beta	t	Sig.	Lower Bound	Upper Bound	Tolerance	VIF
1	(Constant)	-.159	.292		-.544	.588	-.739	.422		
	FUavg	.262	.124	.165	2.118	.037	.016	.509	.586	1.707
	ECavg	.085	.073	.093	1.153	.252	-.061	.231	.540	1.851
	EMavg	.276	.102	.290	2.711	.008	.074	.478	.308	3.247
	GRavg	.024	.078	.025	.300	.765	-.132	.179	.511	1.959
	ETavg	-.016	.102	-.013	-.154	.878	-.218	.187	.510	1.961
	SAavg	.423	.113	.415	3.745	.000	.199	.648	.288	3.470

a. Dependent Variable: LO1avg