Sharing material goods for reduced consumption

Overview of literature; local, national, and regional strategies; legal frameworks; and available modes of sharing in Oslo

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Frida Øvregaard Lunde

UNIVERSITY OF OSLO

Table of Contents

List of abbreviations *4*

1. Introduction *5*

1.1 Aim 5

1.2 Outline 5

2. Current discourse on the sharing economy *7*

2.1 Conflicting definitions of the sharing economy 8

2.2 Different framings of the sharing economy 9

2.3 Access-based consumption 14

2.4 Ownership transfer 15

3. Modes of sharing *17*

3.1 Peer-to-peer sharing 17

3.2 Business-to-consumer sharing 18

3.3 Non-profit sharing 19

4. Barriers and potentials for reduced consumption *22*

4.1 The importance of trust 22

4.2 Required effort 25

4.3 Financial aspects 26

4.4 Social factors 28

4.5 Variety 30

4.6 Ownership 31

4.7 Sustainability and environmental concern 32

4.8 Hygiene 33

4.9 Upscaling 34

4.10 Governance 34

5. Government policies and regulations *37*

5.1 Government policies and regulations in the EU 37

5.2 Government policies and regulations in Norway 38

5.3 Government policies and regulations in Oslo 40

6. Available modes of sharing in Oslo *44*

7. Summary *48*

7.1 Limitations and suggestions for further research 48

References *50*
Appendix *57*

List of abbreviations

B2B – business-to-business sharing

B2C – business-to-consumer sharing

CEs – community enterprises

PSS – product system service

P2P – peer-to-peer sharing

SE – sharing economy

SEBMs – sharing economy business models

SES – sharing economy service

1. Introduction

Household consumption contributes to 72% of global greenhouse gas emissions (Hertwich & Peters, 2009) and is responsible for much of the habitat loss, biodiversity loss, and climate change present on a global scale (Curtis & Lehner, 2019: 1). As one of the countries with the highest consumption levels per capita, Norway is a great contributor here (Alvarado & Pettersen, 2021). The Circularity Gap report on Norway labels Norway as a Shift country, which together with the other Shift countries "produce 66% of gross domestic product (GDP), while having only 20% of the global population" and "consume the largest share of the 100.6 billion tonnes of materials globally" (2020: 21). The report further states that it is important to reduce consumption, as "… impact prevention through reduction is better than mitigation in all cases" (ibid.: 8). As an increasing number of countries around the world become developed and their consumption levels continue to rise, this creates an enormous dilemma. How can we navigate the consumption of goods without contributing to the detrimental effects on the environment and the planet? This is where sharing and the sharing economy enters the fray.

1.1 Aim

The aims of this report are to (1) identify important knowledge gaps in the academic literature on sharing of material household goods related to potentials for and barriers against reduced consumption; (2) map how sharing of material goods is addressed, promoted and inhibited in relevant municipal (Oslo), national (Norway) and regional (EU) plans, strategies and legal frameworks; and (3) create an overview of available modes of sharing in Oslo, within the realm of consumer goods (i.e., accommodation and mobility not included) across different organizational models (size, services, commercial/non-commercial).

1.2 Outline

This report is divided into seven chapters.

- Chapter 2 presents the current discourse on the sharing economy and its four divides.

- Chapter 3 examines the various modes of sharing within the sharing economy.
- Chapter 4 looks at the potentials and barriers for reduced consumption as a result of sharing economy initiatives.
- Chapter 5 reviews the current plans, strategies, and legal frameworks that address, promote, or inhibit the sharing economy in Oslo, Norway, and the EU.
- Chapter 6 features an overview of the available modes of sharing in Oslo.
- Finally, chapter 7 summarizes the main findings and their implications, before addressing limitations of the report and suggestions for future research.

2. Current discourse on the sharing economy

This chapter will present the current discourse on the sharing economy. But before delving into what the sharing economy is and what it entails, it is necessary to examine the act of sharing. Sharing can be described as "the act and process of distributing what is ours to others for their use, and/or the act or process of receiving or taking something from others for our own use" (Belk, 2007: 126). According to Curtis and Lehner (2019), sharing can mean a variety of things depending on the context. It could, for example, mean sharing "as an act of division into equal parts; as an act of distribution; as a form of common ownership; as an act of communication; or as a form of individual expression online" (ibid.: 3). In the context of this report, sharing is mostly used with the intention of looking at the distribution of various goods[1].

While sharing has been a common practice within families and communities for a long time, the *sharing economy* has emerged as an overarching term describing various consumption practices and organizational models, including "sharing, renting, borrowing, lending, bartering, swapping, trading, exchanging, gifting, buying second-hand, and even buying new goods" (Curtis & Mont, 2020: 1). Exactly how and when the influence of the sharing economy began to rise is difficult to pinpoint, but some scholars argue for a strong link between the sharing economy and the financial crisis of 2008 (Castells et al., 2012; Stephany, 2015; Gansky, 2010; Howard, 2015; Slee, 2015). Their argument is that the financial crisis created a situation where both customers and businesses needed to ensure a way to consume in which costs were reduced (Martos-Carrión & Miguel, 2022: 10) and found the solution in the form of sharing. Martos-Carrión and Miguel (2022) explain that aspects such as "community building, social relationships, altruism, sustainable lifestyles, and non-monetary exchanges" (15) played a key role in earlier understandings of the sharing economy. These aspects have now come to be employed as marketing strategies by sharing economy platforms, resulting in the previous raison d'être of the sharing economy to shift into a monetizing market scheme (ibid.; Bardhi & Eckhardt, 2012: 883).

[1] The definition including common ownership could also have been used in this report, but since I was unable to find any offers in Oslo (excluding car and house sharing), the focus fell on distribution.

There are of course still offers by non-profits, governments, and/or peer-to-peer (as will be presented below), where the previous cause of the sharing economy remains the same.

2.1 Conflicting definitions of the sharing economy

The sharing economy is often viewed as a circular solution to many of today's problems tied to overconsumption by encouraging more sustainable patterns within society. Cheng et al. (2021) share this view and describe the impact of the sharing economy on three different levels: 1) the individual level, 2) the organizational level, and 3) the country level. The positive impacts include activities such as promoting sustainable behavior, providing flexible employment, creating more business opportunities, and promoting sustainable development, among other things (637-638). Not everyone is convinced about the sharing economy's sustainability potential, however, as it can be blamed for various negative effects as well (Schor, 2016). Martin (2016), for example, argues that it will reinforce the current capitalistic paradigm and could therefore ultimately lead to an increase in consumption (Plepys & Singh, 2019; Curtis & Mont, 2020). This is much due to the fact that the digital platforms enable consumers to access more goods and services than what would have been provided locally or by their social network (Anzenbacher & Wagner, 2020; Schor, 2016; Xiang et al., 2022). Martin's view is shared with Banning (2016), who presents a negative aspect of the digital platforms used in sharing economy activities:

> As a fundamental feature of the apparatus, online sharing greases the wheels of the neoliberal machine and co-opts some of the best impulses of humanity, the affective and altruistic esprit de corps aspect of sharing, to fuel its practices of economic exploitation (489).

Because of these two sides of the sharing economy, the concept is described as paradoxical, in that it provides solutions as well as more challenges tied to environmental, economic, and social issues (Cherry & Pidgeon, 2018: 939; Richardson, 2015). Before going deeper into the different framings of the sharing economy, it can be useful to examine the sustainability aspect a bit more.

Sustainability and the sharing economy

Sustainable consumption (and production) refers to:

> "the use of services and related products, which respond to basic needs and bring a better quality of life while minimizing the use of natural resource and toxic materials as well as the emissions of waste and pollutants over the life cycle of the service or product so as to not jeopardize the needs of future generations" (United Nations Environmental Programme, n.d.).

As stated above, the current consumption levels around the world are resulting in devastating problems for the environment and the planet and this is where the sharing economy can be viewed as a disruptive force (Botsman & Rogers, 2011) and contribute to sustainable development. Cherry and Pidgeon (2018) explain that the sharing economy can serve as a method for reducing both resource use and carbon emissions, while simultaneously "encourage[ing] economic growth by creating new financial and employment opportunities at all levels of society, and increase[ing] social cohesion and quality of life" (941). When describing what the sharing economy would look like with the perspective of sustainability, Curtis and Lehner (2019) list five properties that inform their definition: 1) the fact that it is ICT-mediated, 2) non-pecuniary motivation for ownership—meaning goods not purchased with the intent of sharing—3) temporary access, 4) rivalrous, and 5) tangible goods (13; Curtis & Mont, 2020). Curtis and Lehner (2019) also state that the sharing economy "may be co-opted or exploited in ways that the purported sustainability potential is not realized" (2). This often results in 'share-washing,' which can be described as "exploitative economic ventures that operate under the "warm glow" of the sharing economy umbrella" (ibid.) and is similar to how some businesses exploit the term sustainability to increase their profits.

2.2 Different framings of the sharing economy

Lai and Ho (2020) explain that one major theme of the sharing economy is that scholars acknowledge it to be "a superior business model that adopts 'disruptive innovation' for completely changing how businesses are run" (2). Some sharing economy business models (SEBMs) will be discussed more in detail below. Other major themes relate to the study of

consumer behavior tied to motivation for sharing and the impacts of the sharing economy on social, economic, and environmental aspects (ibid.). These themes can be found in Martin's (2016) six framings of the sharing economy as seeking to either empower- or resist the development of the niche[2]. The first framing seeking to empower the sharing economy presents it as the solution to increasing both employment and economic growth. The second framing relates to the "the environmental and social impacts of unsustainable consumer behavior within capitalist economies" whereas the third argues that the "on-going environmental degradation, climate change and growing inequality" (ibid.: 154) is caused by said capitalist economies. These framings posit the sharing economy as the solution, as it will offer empowerment to individuals, improve the utilization of resources, and create economic, social and environmental value. The fourth framing has a critical approach, arguing that the increasing unregulated online marketplaces that follow the sharing economy threatens already established and regulated businesses while posing a risk for consumers. The fifth framing is also critical of the sharing economy "and its role in reinforcing the neoliberal economic paradigm" (ibid.: 155). Finally, the sixth framing is based on the confusion around the sharing economy. This framing argues that the sharing economy is "an incoherent field of innovation […] which: has little to do with sharing; is framed very differently by different actors; creates a mix of positive and negative impacts; and, is discussed using confusing and interrelated terminology" (ibid.). The fourth framing seeks to have sharing economy platforms regulated like other businesses, while the fifth aims to emphasize social and environmental values to shape a 'real' sharing economy. The sixth framing calls for "stronger definitions of the scope of the sharing economy; the formation of a more coherent sharing economy movement; and, greater social networking and collaboration between public, private and non-profit sector sharing economy actors" (ibid.).

2.2.1 Four divides of the sharing economy

As evident in several of the framings by Martin (2016), the sharing economy is often described as a socioeconomic system focused on utilizing the idle capacity of goods. Facilitated through online

[2] Martin (2016) explains that in applying a transitions perspective on the sharing economy, it is considered a niche, or "a field of related innovations (i.e. sharing economy platforms) and the intermediaries who support and promote the development of these innovations (i.e. sharing economy advocates and investors)" (150).

platforms, individuals now have the ability to grant "each other access to existing assets, [and] society as a whole can make more efficient use of products, as well as skills and time" (Cherry & Pidgeon, 2018: 939-940; Frenken & Schor, 2017; Gerwe & Silva, 2020: 71; Martos-Carrión & Miguel, 2022: 20). But whether the sharing economy only should be used to describe the sharing of underutilized assets is heavily debated. According to the Timbro Sharing Economy Index (2018), a definition based on the sharing of only underutilized goods will limit a lot of sharing economy activities. Additionally, determining the intent behind the sharing activity will prove difficult – how will those employing this definition distinguish between those renting out their own home versus those buying a second or third house to be able to rent it out? (Timbro Sharing Economy Index, 2018: 16).

As the concept has become increasingly debated, four different divides have emerged: peer-to-peer vs. business-to-consumers, profit vs. non-profit, access-based vs. ownership transfer, and online vs. offline sharing (Cherry & Pidgeon, 2018: 940). These divides and the types of potentials and barriers against reduced consumption connected to them will be discussed below. But first, it is important to note that the conflicting definitions of the sharing economy is one of the main barriers inhibiting its growth and future success. Curtis and Lehner (2019) suggest that the semantic confusion surrounding the sharing economy "has a negative impact on current and future perception of [it]" and thereby threatens "the potential for the sharing economy to mainstream" (2). They further argue that this confusion "hinders the institutionalization of sharing as a consumptions practice and threatens the realization of the purported sustainability potential of the sharing economy at scale needed to address our grand sustainability challenges" (ibid.) The semantic confusion likely stems from the involvement of a wide variety of academic disciplines and results in challenges related to both the design and implementation of sharing economy projects and business models (Belk, 2014; Curtis & Lehner, 2019; Curtis & Mont, 2020). An example of this can be found in the literature review conducted for this report. Here, the Journal of Cleaner Production (belonging to the disciplines of Information Systems and Marketing and Finance and Information Management) was found to have published the most relevant articles about the sharing economy. While no other journals appeared as frequently in the

literature review, articles from journals belonging to the disciplines of Business, Management, and Economics were among the most common. The fact that these three disciplines were amongst the most common could be seen as evidence of Martin's (2016) argument that the sharing economy has shifted into a neoliberal market scheme. As more people recognize the market opportunities connected to the sharing economy, it seems reasonable that disciplines tied to business development and marketing appear most frequently.

2.2.2 The potential of sharing economy business models

With the increasing spread of the sharing economy, a number of different sharing economy business models (hereby referred to as SEBMs) based on the four divides mentioned above have emerged. A business model is regularly based on the concept of value (Yang et al., 2017), as the type of business model will dictate the value creation and capture of an organization (Osterwalder & Pigneur, 2010). Curtis and Mont (2020) define SEMBs as business models of sharing platforms that "mediat[e] an exchange between a resource owner and a resource user to facilitate temporary access to under-utilized goods" which further results "in a reduction of transaction costs associated with sharing" (4). SEBMs contribute to increased resource efficiency and decreased risk of overconsumption (Laukkanen & Tura, 2020) by encouraging consumers to rent, share, swap, or lend idle goods instead of purchasing new goods (Leismann et al., 2013).

As the sharing economy continues to develop into an arena where more businesses can participate for profit, the type of SEBMs that are successful become relevant to examine (Ritala et al., 2018). This is precisely what Laukkanen and Tura (2020) have done. In their conceptual framework developed, as shown below in Table 1, the sustainable value creation of SEBMs are categorized into environmental, social, or economic impacts. Building on the framework by Acquier et al. (2017), they further present 13 SEBM categories, where the following categories are relevant for the scope of this report: 1) B2B access to goods, 4) P2P access to goods platform, 8) P2P redistribution platforms, 9) P2P community-based redistribution platforms, 10) community-based redistribution, 11) community-based services and knowledge sharing, and 12)

Table 1
Conceptual framework for analyzing sustainable value creation.

Environmental	Social	Economic
Increasing resource efficiency Reuse of products, by-products and materials. Elimination/reduction of waste. Use of renewables (e.g. energy, raw-materials).	**Safeguarding health and safety** The health and safety of employees/customers/communities are ensured.	**Increasing cost-efficiency** Increases in efficiency and reduced costs compared to alternatives.
Responsible use of resources Responsible use of natural resources (e.g. water, raw-materials), respecting welfare of ecosystems, people and animals. No creation of rebound effects.	**Respecting laws, regulations and rights** Laws, standards and regulations (e.g. taxes, terms of use) and individuals' rights (e.g. privacy) are respected.	**Increasing profits and business opportunities** Increases in profits and/or creation of new business opportunities and markets.
No harmful environmental impacts and emissions No emissions (e.g. greenhouse gases) harming people or the environment. No harm to ecosystems or the environment.	**Respecting employee, stakeholder and individual rights** Employees' and stakeholders' terms are handled fairly (e.g. via paying living wages and non-discrimination). Equal treatment of employees/stakeholders/individuals.	**Operational stability and risk reduction** Increases in long-term stability and risk reductions.
Increasing environmental well-being Increases in biodiversity and environmental wellbeing by repairing previous damage and solving environmental problems (e.g. reducing ozone depletion).	**Ethical principles and no harmful social impacts** Operations, products and services do not harm people or communities. Human rights are respected (e.g. no child labor). Ethical principles are followed (e.g. caring use of resources, honest competition).	**Increasing attractiveness** Increases in reputation and brand value (e.g. attractiveness as an employee/collaborative partner).
	Increasing social well-being Increases in socio-psychological welfare (e.g. happiness, social cohesion).	**Increasing economic well-being** Increases in socio-economic welfare (e.g. employment).

Table 1 (Laukkanen & Tura, 2020: 3)

community-based access. When cross-examining these 13 categories to the conceptual framework in Table 1, Laukkanen and Tura (2020) were able to determine the positive, negative, or neutral impacts of said categories. An overview of all the findings can be found in the appendix. Their findings reveal that despite the positive intention behind providing better utilization of resources in categories 1, 4, 8, 9, 10, and 12 in, categories 1 and 4 could be linked to rebound effects, which will be discussed in detail below. Something outside the scope of reducing resource use that's interesting to note is that all the economic impacts on various categories were positive. This contrast the few categories in environmental impacts that could be either positive or negative and several of the social impacts that were negative. These findings could serve as further evidence for the argument by Martin (2016) and Banning (2016)—that the online platforms of the sharing economy contributes to the 'neoliberal machine' that furthers economic exploitation.

Some scholars argue for more research on SEBMs in general and in various socio-technical contexts with different stakeholders (Zhu & Liu, 2021; Mont et al., 2020; Laukkanen & Tura, 2020). Laukkanen & Tura (2020), for example, suggest future research comparing "the sustainable value

creation of different (1)[3] B2C access to goods and (4)[4] P2P access to goods platform business models from the perspective of the final consumer" (8). SEBMs often face a design-implementation gap (Baldassare et al., 2020; Geissdoerfer et al., 2018), which poses a challenge to the sustainability impact of the business model. Curtis and Mont (2020) explain that further research on successful implementation could prove fruitful in helping more SEBMs realize their sustainability potential. Others propose that future research should focus on the various motivations for participating in sharing economy and how these differ depending on the type of SEBM (Möhlmann, 2015; Habibi et al., 2016).

2.3 Access-based consumption

According to Bardhi and Eckhardt (2012), access-based consumption entails "transactions that may be market mediated in which no transfer of ownership takes place" (881). This mode of consumption offers solutions to many of the issues mentioned above by encouraging reduced production, improved material efficiency, and financial and social benefits for consumers and societies (Acquier et al., 2017; Hamari et al., 2016; Laukkanen & Tura, 2020; Jain et al., 2022: 1527). Reduced production and improved material efficiency can further result in reduced resource use and fewer greenhouse gas emissions (Cherry & Pidgeon, 2018; Schor, 2016). In addition to positive effects on the environment, access-based consumption allows for more flexibility and adaptability for consumers, such as individuals that can't afford certain goods, don't have the space for it, or choose to not own it for environmental reasons (Bardhi & Eckhardt, 2012: 881). This mode of consumption also relieves consumers from what Berry and Maricle (1973) term the "burdens of ownership." The burdens that follow ownership are tied to risks of product alteration/obsolescence, choosing the wrong items, being responsible for upkeep and repair, and paying the full price for something used infrequently (Moeller & Wittkowski, 2010: 179).

[3] Refers to number one out of the 13 SEBM categories presented by Laukkanen and Tura (2020).
[4] Refers to number four out of the 13 SEBM categories presented by Laukkanen and Tura (2020).

Access-based consumption is characterized into six dimensions by Bardhi and Eckhardt (2012). The first dimension is temporality with possibilities for both short term and long term access. Anonymity is the second dimension, which can be favorable for those wanting to avoid interactions with other people. The option to access goods in a more social way is also an alternative, often found in public or non-profit offers. The third dimension is market mediation. Bardhi and Eckhardt (2012) explain how in modes of consumption that rely heavily on market mediation and where profit is one of the main motives, this can play an important role in shaping consumer/object relationships and different exchange norms. Consumer involvement is the fourth dimension, and it describes how involved consumers are in the experience they are accessing. Similar to the temporality dimension, consumer involvement also has varying levels, with some having a low level of involvement (e.g., car rentals), whereas others require higher levels of involvement (e.g., car sharing) (885). The fifth dimension represents the type of accessed product, where there are varieties in whether the good is experiential, functional, material, and/or digital. The final dimension is that of political consumerism, which according to Micheletti, Føllesdal, and Stolle (2004) entails "the use of market action as an area for politics, and consumer choice as a political tool" (vii). Bardhi and Eckhardt (2012) build on the concept of political consumerism by stating that consumers may choose access to goods rather than ownership over them "as a strategy to articulate and promote their ideological interests to society, business, and government" (885).

2.4 Ownership transfer

A transfer of ownership implies that the responsibilities tied to maintenance, repair, disposal and storage of a certain good is transferred from one person to another. Since second-hand or other redistribution markets allow for the transfer of ownership, Curtis and Lehner (2019) suggest that they are more aligned with existing literature on the circular economy rather than the sharing economy. Although access-based consumption has increased as a result of the spread of the sharing economy, Tukker (2015) explains that private ownership is still the ideal when it comes to consumption, as it allows more control and flexibility over products. As the sharing economy has continued to grow, more businesses have decided to join, causing much of the original focus of

sharing, which was reduced consumption and social inclusion to be replaced by profit. This has also resulted in a variety of business models and a shift from mostly access-granting and sharing to acquiring and consuming as more second-hand markets have emerged. Geissinger et al. (2019) question whether this shift is a consequence of the upscaling of individual platforms rather than a development of the sharing economy itself (428). While some scholars (e.g. Hamari et al., 2016; Ertz et al., 2016) argue for the inclusion of cases of ownership transfer in the sharing economy, the focus in this report will be on modes of exchange where the ownership and the usership of material goods are separated, for instance through renting, borrowing or collective ownership. This is because the most common views on the sharing economy exclude cases where ownership transfers take place, such as in the review performed by the Timbro Sharing Economy Index (2018), where none of the definitions reviewed included transactions where an ownership transfer took place.

3. Modes of sharing

This chapter gives an overview of three of the most common modes of sharing in the sharing economy: peer-to-peer sharing, business-to-consumer sharing, and non-profit sharing.

3.1 Peer-to-peer sharing

Peer-to-peer sharing, also called consumer-to-consumer sharing, PPS, or P2P (hereby referred to as P2P), is one side of the sharing economy that involves sharing between consumers. It is also a part of the peer-to-peer economy, which is further described as "a decentralized economic model" with no formal marketplace that is reliant on online platforms to facilitate the purchase or sale of goods or services (World Economic Forum & PwC, 2017: 7). Moreover, these platforms work by "matching anonymous or semi-anonymous supply and demand requests between private individuals and allowing the parties to settle the arrangements at will" (ibid.). Examples of such platforms in Norway are Finn.no and Tise. While both of these platforms began as online marketplaces to sell goods that weren't being used, they have transformed along with the expansion of the sharing economy. Today, it is possible to make ads where you can rent out your goods on both platforms.

In a review of current literature about consumer motivations, attitudes, and barriers for peer-to-peer sharing, Hawlitschek et al. (2018a) found 17 motives to be recurring, where 12 out of these 17 motives had ties to positive or negative impacts on attitude toward P2P, perceived behavioral control in P2P[5], and actual P2P usage behavior. Based on these 12 motives, Hawlitschek et al. develop 22 hypotheses, where the hypotheses for motives with a positive impact on attitude related to financial benefits, uniqueness, variety, ubiquitous availability, social experience, ecological sustainability, anti-capitalism, sense of belonging, modern lifestyle, and trust could be found. Those related to a negative impact on attitude were concerns about process risk and

[5] Perceived behavioral control: "the perceived ease or difficulty of performing [a certain] behavior and it is assumed to reflect past experience as well as anticipated impediments and obstacles" (Azjen, 1991: 188, as cited in Hawlitschek et al., 2018a: 146).

privacy, resource scarcity, prestige and independence through ownership, and effort expectancy. Motives having a positive impact on perceived behavioral control, or how easy or difficult it would be to participate were familiarity with P2P and trust. Further, the motives positively impacting the behavioral intention to use P2P were attitude, subjective norms[6], and perceived behavioral control. Finally, the motives that were found to have a positive effect on actual P2P usage behavior were perceived behavioral control and behavioral intention (ibid.: 148-151). Since their findings were based on a group consisting of only millennials, there is potential for future research to examine other types of customer groups (ibid.: 154).

3.2 Business-to-consumer sharing

Business-to-consumer sharing, hereby referred to as B2C, "occurs when a business has its own inventory of assets" (Alaei et al., 2022: 190) that is shared with customers often through the form of renting. Curtis and Lehner (2019) argue that B2C models should be excluded from the sharing economy, as this type of sharing doesn't result in a "two- or multi-sided market" (15). That said, the academic debate appears to be in favor of B2C because of the economic opportunities it represents, rather than the solutions it offers to hyper-consumption and environmental issues (Lai & Ho, 2020: 2). As the sharing economy has continued to grow, it has begun to "at least partly mov[e] away from the accessing and sharing between individuals toward professionalization and platform capitalism" (Geissinger et al., 2019: 420). This development has caused individuals and businesses to participate in the sharing economy, working full or part-time, and to earn income and make profit rather than to utilize the idle capacity of their goods (ibid.). Many see potential in the continued growth of the sharing economy in addition to the unregulated market it represents. An unregulated marketplace comes with several other issues, such as making tax avoidance easier and eroding workers' rights (Fieseler et al., 2017; Martin, 2016). Dreyer et al. (2017) explain that critics (e.g., Stein, 2015) find the sharing economy to be "exploiting people rather than empowering them" (Dreyer et al., 2017: 89). This is because those participating and working in the sharing economy often don't have the same benefits, such as health insurance and

[6] Subjective norms: «refers to the perceived social pressue to perform or not to perform a certain behavior» (Azjen, 1991, as cited in Hawlitschek et al., 2018a, 146).

pensions, that those in regular employment would see (ibid.). Alongside a diminished sense of workers' rights, another negative aspect of the sharing economy highlighted by Mont et al. (2020), is that it is not sustainable by default. They explain that as businesses taking part of the sharing economy continue to grow, they often "shed their sustainability aspirations… to fit the mainstream institutional contexts" (ibid.: 7).

3.3 Non-profit sharing

While most of the literature reviewed for this report pertained to P2P or B2C modes of sharing, non-profit sharing is another mode that often occurs in various communities. As demonstrated by the case study on Seoul below, this form of sharing includes projects funded by national or local governments and/or other types of organizations, which can be viewed as a form of collaborative governance. Iaione and De Nictolis (2017) describe this governance as "a way to federate a wide spectrum of commons-based agents in the city (i.e. single city inhabitants or informal groups, civil society organizations, knowledge institutions)" (689). Bernardi and Diamantini (2018) further explain that this governance model is based on the premise that partnerships between public, private, and community actors are used to determine what role each of the actors have and how they can work together to find collaborative solutions for cities (33). With the concept of collaborative governance in mind, Bernardi and Diamantini (2018) develop a conceptual model of a sharing city. This city will be "able to recover the shared nature of the urban commons and become a platform for sharing goods, services, experiences, infrastructure, knowledge, capabilities and spaces" (31). Moreover, they explain that "[i]n doing so, it paves the way for reductions in both spatial and social inequalities and injustices" (ibid.). Based on the Penta Helix Model that includes cognitive institutions, citizens and social innovators, public authorities, businesses, and civil society organizations, this conceptual model displays the relationships of three dimensions: the economic, the technological, and the human, all of which will be further explained in the case study below.

In the case study by Bernardi and Diamantini (2018), the sharing city of Seoul is examined according to the three dimensions of the sharing paradigm discussed above. To cope with the

vast amounts of pollution, the 9000 tons of daily waste from consumption, and several negative social effects that resulted from the industrial and technological boom in Seoul, the mayor of Seoul, Park Won-Soon, launched the "Sharing City, Seoul" in September 2012. Bernardi and Diamantini (2018) explain that the choice of becoming a sharing city was based on four assumptions that sharing provided: 1) more benefits on fewer resources, 2) better offers of service at a lower cost, 3) an increased sense of community as a result of implementing trust-based systems, and 4) a solution to environmental challenges caused by overconsumption and extensive resource use (ibid.: 34). The Seoul Metropolitan Government set up committees to oversee the promotion- and facilitation of sharing, as well as the potential challenges tied to sharing within the city. International experts were also recruited to maintain an overview of global trends in the sharing economy. Finally, the Seoul Metropolitan Government Act for Promoting Sharing was promulgated in January 2014 as a means to "provid[e] the legal frame of reference to support sharing organizations and reinforce consultation among local government departments" (ibid.). With regard to the technological dimension from Bernardi and Diamantini's (2018) sharing city conceptual model, Seoul's position of high technological maturity was reinforced through three major policies: "(1) an open data approach (e.g. the Seoul Open Data Plaza: (2) active interaction with citizens via e-platforms and apps (Community Mapping and m. Seoul – mobile Seoul); (3) and systematic mining of big data to improve municipal services" (ibid.: 35). In addition to these policies, an online information-sharing portal called ShareHub was launched. This portal would connect citizens, businesses, and governments to sharing activities on both a local and international level. By participating in this portal, users are kept up to date on upcoming sharing events and can express any concerns or opinions they have with regard to these. The economic dimension consisted of the local government creating a network of sharing organizations where the organizations could receive "expert advice in communication, marketing, and social business; administrative and financial support; event planning and advertising support; and the use of the brand [logo] (Alimteo)" (ibid.). This network was founded on the objectives of encouraging and supporting businesses development for young people and to create more "Seoul-style" jobs, which would be good, sustainable, and based on sharing and collaboration (ibid.). Finally, the human dimension can be found in the 2030 Seoul Plan, which "envisions a

happy city for citizens based on communication and consideration" (ibid.). To achieve a happy city for its citizens, the local government has created the Citizens' Hall located within Seoul City Hall. This project is based on helping citizens "take initiatives, discuss and make proposals, share opportunities, and organize activities such as performances, exhibitions, forums, lectures, and markets" (ibid.: 36). In addition to Citizens' Hall, idle spaces within the municipality were opened up for public use and there was an increase in sharing locations such as libraries, gardens, common tool warehouses, and shared housing schemes. There was also a Residents' Participatory Budgeting System that encouraged sharing between the city's citizens. The overall goal of Seoul, the Sharing City, can be summarized as to not:

> "promote the profit streams of sharing organizations looking only to create businesses and make money… but to [rather] implement as many smart technologies as possible whilst creating a more collaborative relationship between the city and its citizens" (Hwang and Choe, 2013, as cited in Bernardi & Diamantini, 2018: 36).

Mont et al. (2020) argue for further studies on various economic, social, and cultural contexts to create a better understanding of collaborative governance and how this influences the upscaling of sharing economy projects. The case study by Bernardi and Diamantini (2018) contributes to this area and this report is contributing to current literature by adding an analysis of Oslo municipality's policies and frameworks.

4. Barriers and potentials for reduced consumption

While the sharing economy (SE) studies examined by Cheng (2016) "lack in-depth analysis of how SE negatively or positively transforms individuals" there currently exists a lot of literature on which motives related to sharing serve as potentials for or barriers against participation in the sharing economy. Trust, effort expectancy, and financial benefits have been identified as three of the most important motives, in both a positive and negative sense. That said, there are several other factors that impact the sharing economy, which will be discussed in detail below. While most of these barriers and potentials explicitly state how they contribute to reduced consumption, reduced consumption is more understood as an implicit result of the sharing economy.

4.1 The importance of trust

Trust has been identified as one of the most important barriers tied to participation in the sharing economy (Cheng et al., 2020; Hawlitschek et al., 2018a: 154; Jain et al., 2022). According to Laudien et al. (2023), the action of sharing in the context of the sharing economy can be risky, as very often, providers and consumers have no pre-existing social ties. As a result, there is a greater need for trust in sharing economy exchanges, as "[t]rust serves as a mechanism to reduce uncertainty" (ibid.: 2). To manage these levels of uncertainty, many online sharing platforms provide rating systems, where potential consumers can learn a bit more about the providers of a certain good or service, which further may motivate or hinder them from participating in the sharing economy.

In a critical literature review on the sharing economy, Rojanakit et al. (2022) identify trust as one of four sociocultural aspects that can impact the legitimacy of businesses or individuals in the sharing economy. Suchman (1995) defines legitimacy as "a generalized perception or assumption that the actions of an entity are desirable, proper, or appropriate within some socially constructed system of norms, values, beliefs, and definitions" (574). An example of trust and legitimacy can

be found in the case study by Catulli et al. (2017). They conduct a study on a government funded research project called REBUS, where a PPS provides infant car seats to families for a timespan of six months. The National Childbirth Trust (NCT) was responsible for promoting the project to parents, whereas a car seat manufacturer was responsible for providing the car seats. This project was initiated to reduce resource use as car seats are only used when a family has a young child and are either discarded or stored away after that. Participants in the project could order a car seat through NCT's online website at the price of £26.25 for six months of access, which included the delivery and collection of the car seat. After the six months were up, the seats were collected and refurbished before they were delivered to new families. This was a great way for participants to reduce costs on a product that mostly had limited use (the purchase of a car seat was around £135) while also getting their fears about safety reassured by the Quality Assurance process set up by the manufacturer. Williams and Widebank (2006) explain that there is uncertainty related to the quality of pre-used goods, as many consumers associate them with deprivation and a lesser standard. The concern for safety was a recurring finding in the case study, with one participant stating that the factory refurbishing was important to establish that it had been safety tested. Furthermore, this participant paid close attention to the terms and conditions "to ensure that it was taken back to the manufacturers and it was refitted to a new standard" (Catulli et al., 2017: 1190). In this study, participants trusted the NCT (national child trust) as it was a non-profit organization and revealed that they "were less sure whether they would trust a PSS provided by a firm" (Catulli et al., 2017: 1191).

When keeping in mind the increasing participation of businesses and firms in the sharing economy, this becomes a significant finding. Armstrong et al. (2016), for example, explain that distrust in service providers originated from a myriad of reasons including: "uncertainty about the business' continuation, unclear company motives, providers' reputation, quality issues, hygiene issues, maintenance issues, durability, and control over the result" (as cited in Jain et al., 2022: 1528). "Sharewashing" is another aspect contributing to distrust of sharing economy businesses. Relating the term to Parquel et al.'s (2011) definition of greenwashing, Hawlitschek et al. (2018b) define sharewashing as "a platform operator's efforts of misleading consumers by

purposely portraying an image of social and ecological principles while the platform's business model is actually centered around delivering utilitarian value" (3). Curtis and Lehner (2019) argue that this term is already being "used to describe exploitative economic entures that operate under the "warm glow" of the sharing economy umbrella" (2). According to Price and Belk (2016), the practice of sharing has become indistinguishable from traditional marketplace exchanges. This is because sharewashing has blurred lines between traditional and newer forms of sharing "to the extent that marketplace exchange is [now] touted as sharing" (ibid.: 193). The distrust for businesses and sharing economy providers as a result of accounts of sharewashing, for example, can result in a decreased rate of participation in both sharing practices and business models (Cherry & Pidgeon, 2018: 946). Moreover, a widespread distrust of sharing economy platforms and firms could inhibit the "development of a positive sharing economy discourse" (ibid.).

Privacy and risk concern are two other barriers tied to trust within the sharing economy. As a solution to risk concerns, Dimoka et al. (2012) and Hawlitschek et al. (2018a) suggest that product uncertainty and risk of scams may be reduced by the introduction of certified users or pictures of the goods being exchanged. Furthermore, the risk tied to payment can be solved by escrow processes and user uncertainty can be settled by offers of customer support of sharing platforms (Hawlitschek et al., 2018a: 154). These various concerns tied to the sharing economy offer several future research perspectives. With regard to sharing platforms, Tran et al. (2022) argue for future research on the role of sharing economy businesses in safeguarding both service providers' and consumers' personal data as a means to reduce data vulnerability. Zhu and Liu (2021) suggest more research on the supervision of the sharing economy, in addition to consumer and social risks. When examining socially responsible consumer behaviors (SRCBs), Huang et al. (2023) establish trust to be an important motivator. They therefore suggest further research on multiple interpersonal factors and how these factors influence socially responsible consumer behaviors.

4.2 Required effort

Another aspect that serves as both a motivator and barrier for participation in the sharing economy is effort expectancy (Jain et al., 2022; Hawlitschek et al., 2018a). Smartphones and the internet are both important in accessing sharing economy platforms, which results in challenges for users lacking in technical knowledge or in emerging economies where access might not be easily achieved (Apte & Davis, 2019; Rojanakit et al., 2022: 1323). This might require consumers to spend a lot of extra time and effort getting familiar with the platform before being able to actually use it (Hazée et al., 2017; Kent & Dowling, 2018). Because of this, Rojanakit et al. (2022) argue for more research comparing the impact of influential factors amongst different regions, as well as examining how sharing economies set in developed economies differ from those in emerging economies. Moreover, Hawlitschek et al. (2018a) offer three solutions to the barrier of effort expectancy. "Technological conveniences, such as mobile, and real-time access", as well as "experience with technology and computer self-efficacy" (ibid.) can reduce the levels of effort on behalf of customers and others participating in the sharing economy. They further argue that platform operators should "attempt to lower entry barriers, [and] clearly communicate how their platforms and services work" (ibid.: 154). This contrast the case study by Bernardi and Diamantini (2018), as it might have been easier to implement sharing economy projects because the city is already highly technological. Additionally, many of the sharing economy projects and initiatives were government funded, making it easier for people to participate without much of the planning involved. Because of examples like the Sharing City of Seoul, Martin (2016) argues for more research on the "role of digital technologies in the dynamics of transitions" (159). Moreover, there has been little research completed on the efforts of the platform providers and their behavior (Rossmannek & Chen, 2023; Tham et al., 2022). By examining the perspective of the platform providers, other perspectives that either support or limit the spread of the sharing economy could become apparent, such as how they work toward reducing effort expectancy for consumers. Rossmannek and Chen (2023) further suggest that looking at cause behind exchanges done offline or without the use of a sharing economy platform could be useful. An example of this is "if a guest likes their home-sharing host and wants to return to the home, they may contact the host directly

next time, without using the SE[7] platform" (ibid.: 10). By examining such cases, differences is the effort expectancy of already established exchange relationships versus new ones could be revealed.

4.3 Financial aspects

Another fundamental finding in the literature review was how financial aspects had both positive and negative impacts on the sharing economy. Some scholars (e.g., Lai and Ho, 2020; Pouri, 2022) argue that current literature frames the sharing economy as an alternative business approach with promising economic opportunities for businesses. As mentioned above, Martin (2016) presents six framings of the sharing economy, some of which share a similar argument. The first two framings regard the sharing economy as a source of "great economic activity" and as a creator of economic value (ibid.: 153-154). A similar perspective can be found in the Sharing Economy Index by Timbro. In this report, Iceland is ranked as the number one country with regards to the sharing economy. In describing how this came to be, the report states that the financial crisis in 2008 caused the country's GDP to fall while unemployment rose. Following this, the fall of the exchange rate, the eruption of the Eyjafjallajökull volcano in 2010, and the Arab Spring—which deemed other popular travel destinations to be unsafe—contributed to a great increase in tourism for Iceland. The tourism rate increased to an extent where the local accommodation offers couldn't keep up, and Airbnb (and other platforms) emerged to meet the demand (2018: 14). However, not everyone shares this point of view. Botsman and Rogers (2010), for example, argue that if the sharing economy indeed was a result of the financial crisis, "it would disappear as soon as the crisis recovers" (Martos-Carrión & Miguel, 2022: 10). Moreover, the fifth framing by Martin (2016) takes a more critical stance and sees the sharing economy as "reinforcing the neoliberal economic paradigm" (155) by creating market opportunities where sharing ideals and communities used to thrive.

With regard to the motivation of consumers for participating in the sharing economy, the financial aspect also plays a key role (Jain et al., 2022; Bardhi & Eckhardt, 2012; Christodoulides et al., 2021). An example of this can be found in the study by Laukkanen and Tura (2020), where cost-

[7] SE: Sharing economy

efficiency was identified as an important motivator for all 13 of the different SEBMs they examined. Moreover, Jain et al. (2022), explain that financial benefits was the number one motivation in their findings, and was especially important for those "with limited financial resources" (1527). Other scholars have had similar findings (see Alvarado & Pettersen, 2021; Alaei et al., 2022; Cherry & Pidgeon, 2018; Curtis & Lehner, 2019; Hamari et al., 2016; Hawlitschek et al., 2018a; Laukkanen & Tura; 2020; Martos-Carrión & Miguel, 2022) when studying motivations and barriers tied to the sharing economy.

The importance of financial aspects in the sharing economy can be found in both of the case studies by Holmes (2018). She conducted two case studies on sharing in the UK—one, based on food-sharing, the other based on clothes-sharing. The first case is Coffee Club, which distributes food to members and non-members once a week at their local primary school in East Lancashire. This club started out as a coffee morning and developed into a food-sharing club once the founders discovered that several parents in their community struggled to provide food for their families. One of the founders, Kate, explains that there are three reasons people join the Coffee Club: 1) to alleviate food poverty, 2) get help with household budgeting, or 3) reduce food waste (ibid.: 141). Since this club is not a foodbank, members pay a monthly membership fee at £4 pounds and a further £2.50 for three bags of food per week. For non-members, the price is £5 per week, meaning it is beneficial to be a member as the costs are reduced. Holmes explains that the membership fee is used to cover the food, which they get from a local Tesco store by using an app called Foodcloud[8] and from FareShare[9]. The fact that food from local stores is shared through Foodcloud and that members of Coffee Club are alerted through a WhatsApp group is an example of the digital platforms often used in the sharing economy. Those participating in Coffee Club are allowed to take one or two items from each type of food and the leftovers go to the school's breakfast- and after school clubs. This has a positive impact on the environment because the food is not going to landfills and it doesn't create a lot of carbon emissions since it is retrieved locally.

[8] Foodcloud is a trial app by FareShare that "works by altering local organisations when surplus food becomes available" (Holmes, 2018: 141).
[9] FareShare "is the UK's national network of charitable food redistributors, made up of 18 independent organisations" (fareshare.org.uk).

Another development of the club was that as more people joined, they would start sharing recipes, tips, and even other goods between themselves, creating yet another sharing economy within the already existing one. In this way, Coffee Club has created a space for social inclusion as well as a place to reduce food waste and poverty.

The second case study by Holmes (2018) is based on a clothes swap organized by a mom of four (Rebecca), who lives in a suburban area outside of Manchester. She started the swap parties when her family was in a difficult financial situation after her husband had lost his job. At this point the swaps included goods such as kitchen appliances, DVDs/CDs, toys and/or recipes. Later, these swaps developed into focused clothing swaps, as Rebecca wanted to help out those that were in a similar financial situation as she has been. Usually a mix of 15-20 participants, the clothing swaps are based on people Rebecca knows from Facebook, some of which already know each other. There is no requirement to bring any clothing items with you to be able to take something home. People simply bring what they no longer have any use for and spend the time in the swap browsing and trying on the goods, before writing their name on a note by the particular piece of item they want. Rebecca will draw names from a hat if there is more than one person's name on the note by a good and the person whose name is drawn will then get to take that good home. In a similar fashion to the developments in Coffee Club, the attendees of the clothing swaps "come together not just because of the materiality of the clothing, but because of the extra value this materiality affords; talking, laughing, advice, [and] feeling part of a 'community'" (ibid.: 144).

4.4 Social factors

Said to be an antidote to "the isolating nature of social media and digitization" (Harmaala, 2015, as cited in Curtis & Lehner, 2019: 8), the sharing economy enables the creation of communities and new social circles. Curtis and Lehner (2019) state that consumers "are said to be seeking more meaningful social experiences beyond the traditional business-consumer paradigm" (8). Fitzmaurice et al. (2020) argue a similar standpoint in explaining that consumers within the sharing economy "seek genuine human connections" and want "personalized exchanges,

collaboration and community" (88). With these arguments in mind, it becomes apparent as to why several consumers are hesitant to participate in the business-to-consumer part of the sharing economy. Böcker and Meelen (2016) present an interesting perspective on the social factors that motivate participation in the sharing economy: they explain that financial aspects were the main motivator for product-based sharing, whereas those participating in meal sharing and ride sharing saw a greater motivation toward social incentives.

Although the motivation for joining the Coffee Club sharing-initiative examined by Holmes (2018) often came from a financial standpoint, participants experienced several other positive impacts, such as a larger social circle, the sharing of advice and tips, and other material or non-tangible items that people in the group needed. This case also exemplified Curtis' and Lehner's (2019) point about the sharing economy helping "reduce social inequality by allowing for a more equitable distribution of goods and services" (8). In setting up the food sharing initiative, the participants, who often struggled with providing decent food for their families, were able to access goods that otherwise would have been thrown out by paying a small weekly sum. In a similar manner to the first case, the case of clothes swapping also saw the creation of a community of "share-ers," meaning the participants would also gain social benefits from participating. Alvarado and Pettersen (2021) list similar findings. They explain that in the online clothes' repair club and bike repair group, "it is about creating a community of likeminded practitioners who can share knowledge and advice on materials and best practices" (4). Cherry and Pidgeon (2018) suggest further research on how the role of community impacts specific sharing practices and business models. Moreover, they propose looking at new and different angles of how sharing can contribute to creating a sense of community, "whilst still meeting a range of other conditions that govern participation" (946).

In a case study on P2P sharing, Lai and Ho (2020) review the Waste-no-mall initiative in Hong Kong. Since November 2016, Waste-no-mall has facilitated the sharing of both unused and under-utilized goods between participants in the Yuen Long community. The purpose behind Waste-no-mall was to make individuals reflect over reduced consumption by recycling resources and sharing

resources with those that needed them. Additionally, the project sought a new government policy that would allow the public refuse collection points to be transformed into "Community Resources Sharing Centres" (4). Because of the wish to involve individuals and make them reflect over their own consumption, there was no 'real' leadership in Waste-no-mall. The founders simply took on the role as participants so that everyone would feel a sense of collective responsibility. Several of the participants shared the same values as the founders and were thrilled that they had acquired a place to practice what they believed in. Moreover, they had found a place where they could "learn more about environmental issues and how they could be promoted to make concrete changes to halt increasing waste and pollution" (ibid.: 5). Lai and Ho state that there were findings on three different levels within waste-no-mall. At the individual level, participants had gotten more awareness and knowledge about recycling. At the organizational level, Waste-no-mall was able to create a sharing culture for "those who actively participate through self-reflection awareness" (ibid.: 6). Lai and Ho state that while this sharing culture was a positive result of the project, it was also a weakness. It meant that the participants were "a group of insiders" which would make it difficult to spread the project to the degree necessary for "social transformation, especially in advocating policies for recycling, sharing and for a cleaner environment" (ibid.: 7). Finally, at the policy level, the participants observed that there was a "lack of organization in advocating policy changes" (ibid.). Because of this, participants were unsure of how policy changes would affect their recycling work.

The social aspect of sharing economy participation can also be seen from another perspective. Jain et al. (2022), for example, argue that some consumers are not keen on having direct contact with the previous owners of the goods they are accessing. Because of this, "the intention to rent [in C2C] is low compared to B2C" (ibid.: 1528).

4.5 Variety

Another aspect that increases participation in the sharing economy is variety, which allows for flexibility on behalf of those participating in the sharing economy (Alaei et al., 2022; Catulli et al.,

2017). Variety can be regarded as a double-edged sword with regards to impacts on the sharing economy. On the one hand it allows those in difficult economic situations to have access to more goods and experiences. Because many people wouldn't consider buying luxury goods, for example, the practice of offering these luxury goods as rentals makes them available to a larger group of consumers. On the other hand it also contributes to increased rates of consumption. One example where variety played an important role can be found in Catulli et al.'s (2017) case study about product service systems, where "[p]articipants stated that the PSS helped them manage the risk of buying inappropriate products" (1192).

Christodoulides et al. (2021) and Laudien et al. (2023) present the same argument, claiming that renting allows customers to test out various goods before deciding to actually purchase them. The aspect of variety (when tied to fashion sharing) is one reason for why businesses choose to participate in the sharing economy and why they are often more successful than individuals: they are able to offer a greater variety and thus more flexibility for potential consumers (Laudien et al., 2023). Because of the potential of variety in sharing economy participation, Christodoulides et al. (2021) suggest more research on determining the impact of new forms of luxury consumption on social and environmental sustainability. They further argue that future research linking different social, economic, and environmental sustainability orientations toward luxury consumption could prove fruitful (ibid.: 97).

4.6 Ownership

Ownership can also influence sharing economy participation in a positive and negative way. Jain et al. (2022) explain that the "more there is access-based consumption, the higher is the change of curtailing the ownership… [but the] lack of ownership becomes a potential barrier to adopting collaborative consumption models" (1528). While access-based consumption allows consumers to escape the "burdens of ownership," this is not enough to generate widespread sharing economy participation "because consumers usually place a higher value on their owned objects" (ibid.). The challenge of value creation within sharing economy practices appears in Catulli et al.

(2017) as well. The studies on product service systems (PSS) that they examined suggest that "poor PSS diffusion arises from their inability to create sufficient value to overcome a predominately westerns cultural preference for ownership" (ibid.: 1187).

Some scholars (e.g., Wirtz et al., 2020) argue that "it is easier to signal luxury with a good than with a service or experience" whereas Christodoulides et al. (2021) "show that both goods and experiences are used to signal luxury and feed into hedonistic egoism" (94). The lack of ownership occurring when renting luxury goods can lead to value dilution of the certain good or service (Christodoulides et al., 2021), or even brand dilution (Jain & Mishra, 2020; Vogel et al., 2019). Christodoulides et al. (2021) explain that "the dilution of hedonic value through greater accessibility leads to consumers seeking higher social status from new forms of luxury consumption" (95). This search for value and increased consumption is what often causes sharing economy practices to develop rebound effects.

4.7 Sustainability and environmental concern

When compared to the economic perspective of the sharing economy, "[t]he sustainable consumption and decentralised economy framings appear to be considerably weaker" (Martin, 2016: 158). This is because they often don't have the scalability potential as other initiatives and there are therefore fewer 'success stories,' such as with Airbnb and Uber (ibid.). Pouri (2022) echoes this perspective when stating that the original focus of the sharing economy as a method of curbing overconsumption has been replaced with a focus of economic opportunities for businesses and individuals. This changed focus can result in rebound effects and *contribute* to overconsumption rather than *limit* it (ibid.; Cherry & Pidgeon, 2018; Schor, 2016). This could entail freed resources being "used for further consumption and resource depletion" (Geissinger et al., 2019: 421), resulting in uncertainty around the positive impact of the sharing economy on the environment. Rebound effects are not associated with the motivations for or barriers against participation in the sharing economy but are rather negative impacts on the sharing economy's potential for reduced consumption. Curtis and Lehner (2019) suggest further research on rebound effects and their impact on the sustainability of the sharing economy.

A similar perspective can be found in Alaei et al. (2022): their findings showed that sustainability was of least importance when compared to other motivators such as flexibility and economic benefit, which was true in both access-based and ownership-based models (197). As a contrast to the most common framings of the sharing economy and sustainability, Alvarado and Pettersen (2021) explain that the online clothes' repair club in their study saw the environment listed as the number one motivation. This shows that while there is an overwhelming majority of focus on the economic benefits of businesses and individuals participating in the sharing economy, the original motives and motivations tied to the sharing practices have not been completely lost.

4.8 Hygiene

Concern about hygiene and contamination is another aspect influencing participation in the sharing economy (Armstrong et al., 2015, 2016; Baek & Oh, 2021; Clube & Tennant, 2020). Laudien et al. (2020) connect little support for P2P fashion sharing with hygienic issues, arguing that "some pieces are difficult to clean (e.g. an evening dress) and/or are worn closely to the body which makes them extremely personal (such as e.g. underwear)" (2). The hygienic barrier grew in significance during the COVID-19 pandemic. Daglis (2022), for example, states that the measures implemented during lockdown resulted in many people avoiding sharing practices "as a means of virus contraction, especially those perceiving sharing practices as a health threat" (1326). Individuals participating in the sharing economy were not the only ones negatively impacted by the pandemic, however. Many sharing economy facilities were ineligible for financial aid which "unveiled the vulnerability of the current SE practices," and emphasized "the need for better organization and in-depth and careful structure and planning of SE" (ibid.: 1327). This is where regulation, which will be discussed in detail below, becomes important in both supporting and limiting the sharing economy.

Cherry and Pidgeon (2018) suggest that future research examines the role of hygiene and safety "for both participation and perceptions of sharing for a wider range of different products and

services" (946). In a similar vein, Reuschl et al. (2022) propose analyzing whether the sharing economy and SEBMs will change as a result of major events such as the COVID-19 pandemic (104).

4.9 Upscaling

With regard to upscaling sustainability innovations, Augenstein et al. (2020) argue that "growth and broader diffusion is not always considered achievable or even desired goal" (145). One explanation for this is the fact that many local initiatives may be more focused on "devising ingenious local solutions that cope better with their immediate circumstances" (Smith et al., 2014: 8). When discussing community enterprises[10] (which several sharing economy offers can be described as), Bauwens et al. (2022) explain that there are positive and negative aspects tied to scaling up. These community enterprises (CEs) can overcome challenges tied to "a lack of legitimacy, the development of larger-scale infrastructure or technology, and the know-how to offer high-quality goods and services" (ibid.: 139). That said, CEs often face challenges "in integrating the market and corporate logics to scale up their operation" (ibid.), which is why several sharing economy businesses shed their sustainability ties when scaling up. Augenstein et al. (2020) describe this challenge as a scaling-aversion dilemma which "addresses the tensions faced by emerging social or sustainability innovations between remaining in a small, alternative and unique niche versus growing in size and striving for broader societal adoption" (145).

4.10 Governance

Businesses that thrive in the sharing economy usually have controllable internal processes and strategies in place, whereas those that struggle often face uncontrollable features, such as institutional or external constructs. Many scholars argue that the institutional qualities of governments play an important role in developing the sharing economy and therefore require further research (Hong and Lee, 2020; Zhu & Liu, 2021). Moreover, Rojanakit et al. (2022) argue

[10] Community enterprise: "enterprises whose social base lies in a community understood most commonly as a community of place" (Somerville and McElwee, 2011: 327).

for the importance of "[e]xploring the impact of both external and internal factors… [when] analysing the emergence of SEs and in understanding the differences that might exist between DEs[11] and EEs[12]" (1318). In a similar vein, other scholars suggest further research on demographic variables to determine their impact on sharing intentions (Cherry & Pidgeon, 2018; Jain et al., 2022; Mont et al., 2020; Roos & Hahn, 2017; Rossmannek & Chen, 2023).

Unsupportive regulation is another barrier toward the sharing economy (Retamal & Dominish, 2017), which can greatly impact participation of businesses and individuals. Hong and Lee (2020) explain that when disruptive innovations (which the sharing economy has been described as) emerge, "policymakers generally suffer from "status quo bias" … [meaning] they design regulatory policies that slow the growth of the new entrants" (4). In their study comparing sharing economy development in 90 different countries, they found confirmation for four out of the five hypotheses they developed on governments' impact on the sharing economy. Two of these hypotheses associated a greater level of electoral competitiveness and government effectiveness with greater sharing economy development. Two other hypotheses linked a greater association between electoral competitiveness and sharing economy development to countries with depoliticized civil service systems and effective government systems. The only hypothesis that was unable to show any association to greater sharing economy development was depoliticized civil service in its own (ibid.: 5-10).

The lack of regulation can also be a strong motivator for participation, however, such as for those finding loopholes between taxation systems and the sharing economy (Rojanakit et al., 2022). According to the *Collaboration in Cities: From Sharing to 'Sharing Economy'* report, "taxation laws that are not sufficiently defined for new operating models can put traditional market sellers at an unfair disadvantage" (2017: 19). To handle such challenges toward regulatory frameworks of the sharing economy, cities can adopt either a bottom-up or a top-down approach. The first approach entails "monitoring markets and adapting to unique situations while in the early stages of

[11] DEs: Developing economies
[12] EEs: Emerging economies

evolution" whereas the second "impos[es] rules and regulations for sharing platforms to ensure the rights of all participants" (ibid.). These regulations grow in importance as the sharing economy continues to spread and the available modes of sharing begin to upscale.

Because of these motivations and barriers, Cohen and Kietzmann (2014) argue for a merit model that will align the strengths of sharing economy providers and governments. Before such a merit model can be developed, however, it is necessary to examine which frameworks and policies are currently in place. Thus, the government policies and regulations that promote and inhibit the sharing economy in the EU, Norway, and Oslo will be discussed in the chapter below.

5. Government policies and regulations

This chapter reviews how the sharing of material goods is addressed, promoted, and inhibited in plans, strategies, and legal frameworks in the EU, Norway, and Oslo.

5.1 Government policies and regulations in the EU

One important distinction to note before addressing how the EU supports or limits the sharing economy is the fact that the EU refers to it as the *collaborative economy*. According to the EU, the collaborative economy "provides new opportunities for citizens and innovative entrepreneurs" (European Commission, n.d.) echoing Martin's (2016) framing of the sharing economy as a solution for economic growth and increased employment. Since the collaborative economy simultaneously creates "tensions between the new service providers and existing market operators" the European Commission aims to determine how to "encourage the development of new and innovative services, and the temporary use of assets, while ensuring adequate consumer and social protection" (ibid.). *A European agenda for the collaborative economy* aims to do so by giving a brief overview of the current state of the collaborative economy in the EU, while also providing suggestions and examples for how Member States could implement legislation to better regulate the collaborative economy. It also argues that further sharing economy development could prove beneficial for the EU's sustainability agenda and goals toward establishing a circular economy (European Commission, 2016: 2). None of the EU studies examined for this report included Norway, as it is not a part of the EU. Moreover, most of the studies completed or funded by the EU concern accommodation and have therefore not been included as case studies in this report. Despite this, it is relevant to examine policies and regulations in the EU as Norway's consumer policy is still very much influenced by what occurs in the EU (Rotevatn et al., 2021: 63).

The sharing economy is regarded as problematic in applying existing legal frameworks. This is often a result of "blurring [the] established lines between consumer and provider, employee and

self-employed, or the professional and non-professional provision of services" (European Commission, 2016: 2). The blurring of these lines combined with differences in regulations on local and national levels results in a lot of uncertainty about which laws are applicable (ibid.). For example: EU consumer law "applies to any collaborative platform that qualifies as a 'trader[13]' and engages in 'commercial practices' vis-à-vis consumers" (ibid.: 9). Moreover, "[p]roviders of the underlying services also qualify as traders if they act 'for purposes relating to their trade business, craft or profession'" (ibid.). This legislation does not apply to P2P exchanges, which means that unless those providing the good or service qualifies as a 'trader,' they will fall outside the legislation. The EU also identifies taxation as a challenge of the sharing economy because of "difficulties in identifying the taxpayers and the taxable income, lack of information on service providers, aggressive corporate tax planning exacerbated in the digital sector, differences in tax practices across the EU and insufficient exchange of information" (European Commission, 2016: 13). Increased traceability facilitated by sharing economy platforms is one part of the solution to such issues.

5.2 Government policies and regulations in Norway

In Norway, the sharing economy, or 'delingsøkonomi,' "is characterized by a model where different actors offer services or loan/rent goods directly with the help of various communication channels" (translated from Oslo City Council, 2019: 6). In a similar vein to the semantic properties identified by Curtis and Lehner (2019), Norway ties the use of digital platforms as an important aspect of the sharing economy. On a national level, the government of Norway wants to promote the sharing economy by analyzing the potential of taxation and fee systems. This entails examining how proper environmental taxation and other economic means contribute to better resource use, increase circular production and consumption patterns, and stimulate value creation and employment based on circular solutions (translated from Rotevatn et al., 2021: 151). Moreover, they want to evaluate how economic and other relevant means can contribute to

[13] Trader: a person "acting for purposes relating to his trade, business, craft or profession" (Article 2(b) Directive 2005/29/EC 'Unfair Commercial Practices Directive', as cited in European Commission, 2016: 9).

resource efficiency and circular solutions in Norwegian production and consumption patterns, for example in the development of the national budget and in implementing new regulatory requirements from the EU (ibid.).

In *White Paper 45: Avfall som ressurs – avfallspolitikk og sirkulær økonomi (Waste as a resource – waste policies and circular economy)* (2017), the sharing economy practices of renting, reparations, redesigns, and reuse are listed as important methods to prevent textile waste. That said, Norway has a number of laws and regulations in place that limit the expansion of the sharing economy. One of these laws is the Act on Trade in Used and Discarded Items (Used Trade Act), which requires a permit from the police, as well as the registration and checkup of every item before it is sold (Skift, 2022; Lovdata, n.d.). Skift (2022) names the outdoor equipment brand Bergans as one example of the negative impact of this Act when Bergans struggled in opening pawn and reuse locations. Bergans also states that this law could inhibit other actors from wanting to join the second-hand industry (ibid.). Another aspect limiting the sharing economy is the withdrawal tax and value added tax that companies have to pay if they want to donate or give away items they have been unable to sell. These taxes encourage companies to destroy superfluous items to avoid extra costs. Norway could follow France's example and approve an anti-waste law prohibiting the destruction of unsold goods. The French law on the fight against waste and for the circular economy requires companies to "reuse, donate, or recycle their unsold products" (Ellen MacArthur Foundation, 2021: 4) in addition to donating hygiene products to charities. Moreover, several countries in the EU have already removed completely- or greatly reduced the value added tax on reparations and the selling of second-hand goods. Other countries have launched tax reductions as a method of encouraging sharing economy practices (Skift, 2022). If Norway were to implement similar regulations, there would be greater incentive for participating in the sharing economy.

Nasjonal strategi for ein grøn, sirkulær økonomi, or the National Strategy for a Green, Circular Economy (2021), argues that digital marketplaces for used goods and sharing offers are important with regard to the opportunities for better resource use. In suggestions for this strategy the waste

industry, Innovation Norway, Oslo municipality, and Virke identified the digitalization of circular supply chains as a significant barrier for increased reuse and more efficient use of goods. Despite stating that it is in public interest to improve markets for second-hand goods, the strategy argues that it is the private sector's responsibility to establish, organize, finance, and manage the market-based platforms, exchanges, etc. tied to the sharing economy (ibid.: 161).

5.3 Government policies and regulations in Oslo

When it comes to the sharing economy in Norway, Oslo is setting a great example for other regional areas. In the literature review for this report, most of the strategies, frameworks, case studies, and offers were found to be located in Oslo. One such strategy is Bymiljøetaten's *Framtidens forbruk: strategi for bærekraftig og redusert forbruk 2019-2030 (The Future's Consumption: strategy for sustainable and reduced consumption 2019-2030)*, which list two main goals that relate to the sharing economy:

1. Sharing, reusing, and repair shall be easy in Oslo. Circular systems will be further developed to reduce material consumption
2. Citizens, businesses, and the municipality shall have good knowledge of- and great engagement for sustainable and reduced material consumption, and green employment options shall be created through new sharing arrangements and circular solutions (translated from Bymiljøetaten, 2019: 7, 10).

Oslo municipality has suggested a number of intentions and indicators to achieve these goals, which shall be done in cooperation with businesses, entrepreneurs, and academia. Working toward the first goal, the municipality wants to promote existing sharing and exchange offers, as well as help establish more such offers (ibid.; Oslo Municipality, 2021: 17). Moreover, they aim to develop reuse locations and services for sharing, reuse, and reparations that can be used by a variety of actors, which will make participation in the sharing economy easier. The city council will support initiatives linking sharing practices with work training and integration, promote sharing practices in new housing projects and existing neighborhoods, and create social meeting spaces where sharing practices can be held. Working with businesses, entrepreneurs, and academia,

they also want to explore other arenas where sharing practices can lead to reduced consumption of material goods (Bymiljøetaten, 2019: 9; Oslo City Council, 2019: 19).

Regarding the second goal, the city council aims to promote sustainable and circular consumption patterns through campaigns and various information channels aimed at citizens and businesses, as well as those belonging to the school- and kindergarten sector. Working to increase knowledge capacity on sustainable and reduced consumption for employees in the municipality and promoting businesses that change their organization toward more circular models will also play an important role. The city council will further evaluate the need for establishing arenas and spaces for businesses and startups working toward solutions for reduced consumption. Moreover, Oslo municipality aims to cooperate with businesses, non-profit sector, social entrepreneurs, and research entrepreneurs in testing out various models for reduced consumption, as well as create incentives for pilot projects and initiatives that also promote reduced consumption (Bymiljøetaten, 2019; Oslo City Council, 2019). The initiatives of Vollebekk and Nydalen Fabrikker (factories) are good examples of such arenas, where Oslo district Bjerke, Pådriv Oslo, OBOS, and Aspelin Ramm worked together. The intention of Vollebekk Fabrikker was providing a "temporary space for development and incubation of solutions within reuse, reparations, green production, and business development" (Vollebekkfabrikker.no, n.d.). Despite the intention of being a two-year project, the factory was so successful that it remained open for five years before closing its doors. After closing, some of the businesses remained in the area, whereas others relocated to other places in Oslo or to Nydalen Fabrikker.

The city council of Oslo also aims to promote and test various digital solutions that will enable reuse, reparation, sharing, and swapping in the city. In addition to this work done at a municipal level, they also aim to influence the government in changing taxes and regulations on quality and product lifetime (Bymiljøetaten, 2019: 4, 10).

Other plans and strategies impacting the sharing economy in Oslo are: *Anskaffelsesstrategi 2017 (Procurement Strategy from 2017), Oslos byrådserklæring 2019-2030 (the City Council*

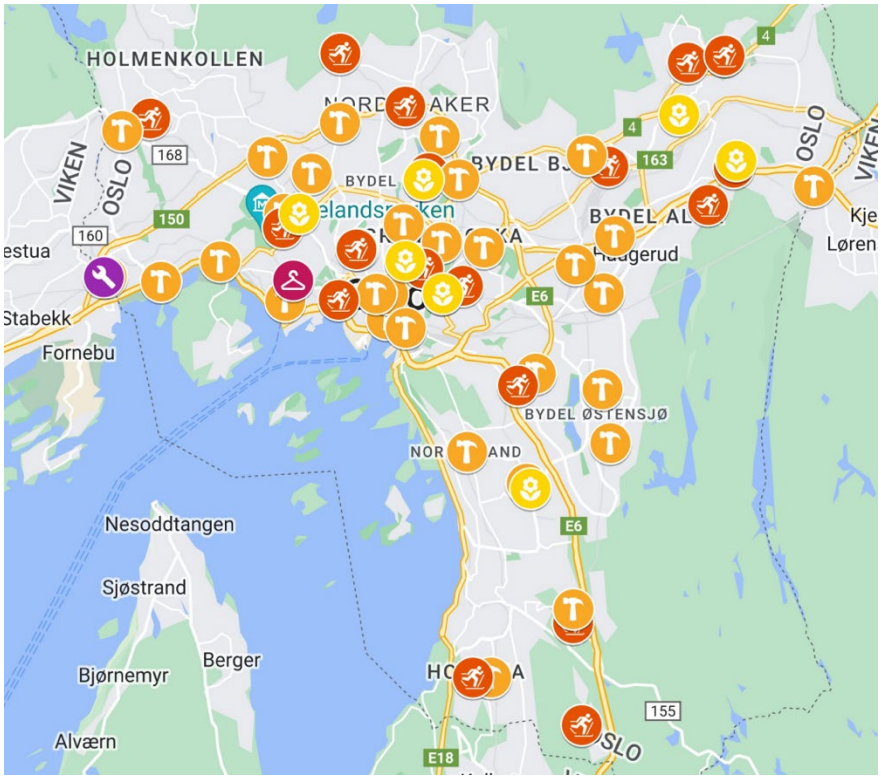
Declaration of 2019-2023), and Klimastrategi for Oslo mot 2030 (Climate Strategy for Oslo toward 2030). Although the Procurement Strategy mostly applies to the municipality as an enterprise, a few of the sub-goals mentioned imply practices that could benefit the sharing economy. These include aiming for the municipality to play a leading leader in recycling, reusing, and sharing, as well as facilitating sustainable innovations and solutions developed by a variety of actors (Byrådsavdeling for finans, 2017: 10-11). Oslos byrådserklæring (2019) also states that the city council wants to test out procurements that reward products that are reusable and easily repaired, meaning they could have a longer life and possibly be used by others in exchanging said products. The declaration echoes several of the aims from the strategy by Bymiljøetaten (2019). The city council intends to establish "reuse-malls" and other public arenas of reparation, redesign, sharing, reuse, and recycling. Among other things, this is to be done by establishing more sharing offers of tools and sports equipment. Ensuring that all city districts have at least one tool library and keeping these open at nights and during holidays is another aim. Moreover, cooperation between the Oslo school, outdoors organizations, and sports would help the municipality toward its sharing economy goals. For this cooperation to be successful, the municipality would also need to further develop support and funding arrangements for ideal and non-profit organizations. Finally, the city council aims to facilitate sharing economy development by promoting new standards and markets for digital, green, and social solutions (ibid.: 21-23, 45, 51).

Klimastrategi 2030 has a number of climate focus areas, where numbers 11, 12, and 13 (concerning consumption and leadership within climate strategies) can be tied to the sharing economy (Oslo Municipality, 2020). Focus area 11 describes the intention to have Oslo municipality promote reduced and more climate friendly consumption on behalf of citizens and businesses. To do so, the city council will work toward easy access of citizens' own greenhouse gas emissions and how they impact these, in addition to promoting reuse and reparation (ibid.: 7, 55). While these intentions do not explicitly mention sharing, the reuse, sharing, and reparation practices of the sharing economy will likely contribute to reducing emissions. Encouraging climate friendly behavior for citizens and businesses through communication, dialogue, teaching and cooperation is Oslo municipality's 12th focus area. The city council aims to achieve this focus area

by communicating climate measures easily implemented in the daily lives of citizens and businesses, as well as informing about climate smart consumption choices (ibid.: 7, 57). Finally, the 13th focus area states Oslo municipality's intention to facilitate climate friendly innovation and adjustments through close cooperation between the municipality and businesses, researchers, organizations, and citizens. To achieve this focus area, the city council will cooperate with and motivate businesses toward more climate friendly behaviour through the implementation of regulations, incentives, and strategic use of market mechanisms. One example of this are the grants Oslo municipality offers toward sustainable and reduced consumption. The areas currently receiving grants are green funds, the deal concerning collecting of reuse goods, sustainable youth work, and the use of cloth diapers. The city council further aims for Oslo to be an arena for development, testing, and demonstration of new climate solutions in cooperation with actors from a variety of sectors and industries (ibid.: 7, 59; Oslo City Council, 2018: 19). As previously mentioned, the Vollebekk and Nydalen Fabrikker are examples of such intentions in practice.

6. Available modes of sharing in Oslo

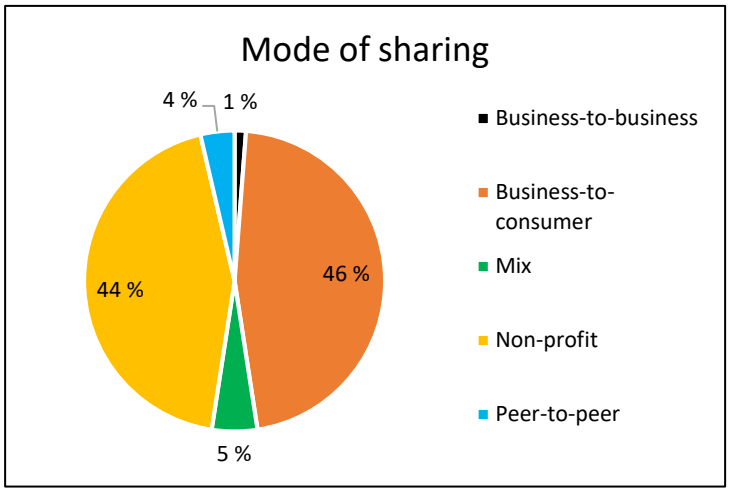
One of the aims of this report was to create an overview of available modes of sharing in Oslo (excluding offers of accommodation and mobility). Below, there will be a number of maps, graph, and charts showing the data collected in an Excel-spreadsheet about the available offers in Oslo.



Map of sharing offer locations in Oslo (link to this Google Map). Full list of included offers can be found in the appendix.

The map on the right-hand side provides an overview of all the sharing economy offers included in the Excel-spreadsheet (see Appendix for full list). There is a cluster of offers

present in the city center, but the spread does appear to reach most corners of the municipality. The graph above shows how the sharing offers are spread depending on the city district, with the average number of offers per district being between four to five. In this graph, it also becomes clear that online offers make up the majority. Further research could examine how the spread of the sharing offers relate to the number of inhabitants in each city district and how online offers compete with and/or compliment the district offers.



In the search for sharing offers in Oslo, a lot of offers had to be excluded from the final overview because they entailed ownership transfer. This was the case for a lot of peer-to-peer offers, as individuals often join sharing economy as a method of generating extra money. One reason for the overwhelming majority of non-profit and business-to-consumer modes of sharing could be because these are better equipped to tackle many of the personal barriers people have toward sharing economy practices. Hygiene is one of these barriers, where it is easier to trust a business or organization that has set up a standard cleaning system in comparison to individuals making sure their items are cleaned before people can rent or loan them.

In Table 1, the annual numbers of available and loaned equipment, number of loans and users, and the loan efficiency rate (loaned equipment divided by registered equipment) from the 10 BUAs located in Oslo in the years 2020-2022 can be found. With the exception of the numbers marked in red and BUA Løkka (where no data from 2020 was found), all BUAs saw significant increase in all areas mentioned above. This is an interesting find considering the spread of the COVID-19 pandemic in all three of these years. During the pandemic, concerns about hygiene impacted a lot of businesses in Oslo negatively, and it is therefore quite a feat that BUA was able

to grow significantly in most city districts. Funding and support from Oslo municipality to establish new BUAs and increase the available equipment in those already existing is likely one of the reasons behind this.

Table 1

BUA	2022	2021	2020
BJERKE			
Available equipment	2 354	2 162	2 512
Equipment loaned	7 759	6 101	3 906
Number of loans	1 965	1 729	829
Number of users	1 357	1 203	634
Loaning efficiency (loaned equipment / available equipment)	3,3	2,8	1,55
FURUSET			
Available equipment	1 295	1 159	950
Equipment loaned	2 029	1 844	1 245
Number of loans	775	513	240
Number of users	588	351	157
Loaning efficiency (loaned equipment / available equipment)	1,6	1,6	1,3
HOVSETER			
Available equipment	1 176	1 052	844
Equipment loaned	1 283	1 555	671
Number of loans	450	554	179
Number of users	311	270	130
Loaning efficiency (loaned equipment / available equipment)	1,1	1,5	0,8
LØKKA			
Available equipment	1 877	1 225	**No available data from 2020**
Equipment loaned	8 832	935	
Number of loans	2 773	346	
Number of users	1 676	256	
Loaning efficiency (loaned equipment / available equipment)	4,7	0,8	
MORTENSRUD			
Available equipment	1 437	1 091	595
Equipment loaned	3 745	2 990	379
Number of loans	1 223	1 001	99
Number of users	709	515	73
Loaning efficiency (loaned equipment / available equipment)	2,6	2,7	0,64
NORDRE AKER (new in 2020)			
Available equipment	1 250	1 043	771
Equipment loaned	4 271	3 887	888

Number of loans	1 009	907	211
Number of users	551	501	115
Loaning efficiency (loaned equipment / available equipment)	3,4	3,7	1,15
SAGENE			
Available equipment	1 691	1 625	1 212
Equipment loaned	6 954	5 305	1 817
Number of loans	2 027	1 619	513
Number of users	1 325	1 026	358
Loaning efficiency (loaned equipment / available equipment)	4,1	3,3	1,5
STOVNER			
Available equipment	757	768	586
Equipment loaned	1 376	3 618	104
Number of loans	526	1 064	21
Number of users	368	577	20
Loaning efficiency (loaned equipment / available equipment)	1,8	4,7	0,2
ULLERN (new i 2020)			
Available equipment	442	414	135
Equipment loaned	1020	808	42
Number of loans	298	268	13
Number of users	199	143	7
Loaning efficiency (loaned equipment / available equipment)	2,3	2,0	0,3
ØSTENSJØ			
Available equipment	1 492	1 328	842
Equipment loaned	4 278	3 626	1 097
Number of loans	1 220	989	303
Number of users	772	675	217
Loaning efficiency (loaned equipment / available equipment)	2,9	2,7	1,3

(Developed from BUA annual reports from 2020, 2021, 2022)

7. Summary

The sharing economy holds great potential for reducing household material consumption and the negative impacts this consumption has on the planet. However, there are disagreements on whether this potential is achieved in the sharing economy's current form. With scholars debating even the semantic properties of the sharing economy, progressing toward a system that will replace the capitalistic one currently in place appears to be a difficult task. That said, as illustrated above, there exists a lot of literature on various challenges tied to the sharing economy, which indicate a step in the right direction. Trust, effort expectancy, financial benefits, social factors, variety, ownership, sustainability and environmental concern, hygiene, upscaling, and governance were found to play an important role in people's participation in the sharing economy. Moreover, the first three were identified to be most influential.

Moving onto the governance aspects of the sharing economy, this report reviewed how the sharing economy is addressed, promoted, or inhibited in the EU, Norway, and in Oslo. The EU is pushing for the spread of the sharing economy as an opportunity for economic growth and employment creation. In Norway, the sharing economy is viewed in a similar manner, although there is focus on its sustainability potential as well. In Oslo, several strategies, frameworks, and municipality plans have incorporated or plan to incorporate sharing economy practices. This is done by setting intentions and allocating government funding toward sharing offers. Of the offers reviewed in Oslo, the majority were related to the loaning of outdoor- and sporting equipment, but there were also offers of tool libraries, seed libraries, and clothes sharing. Moreover, BUA was identified as an important example of a sharing organization, as it has several locations in Oslo and around all of Norway.

7.1 Limitations and suggestions for further research

Seeing as how this report was based on only six weeks' worth of research and work, there are likely sharing offers, regulations, or gaps in literature that have been overlooked. Moreover, Cherry and Pidgeon (2018) explain that since a lot of research concerns motivation for

participating in the sharing economy, little is known about how the wider public perceives initiatives in the sharing economy (939). This could be a future research area and would benefit from being researched in several different geographic and cultural contexts. From the literature reviewed, there appears to be a lack of focus on the dissemination of sharing economy offers by businesses and individuals. In examining Norway and Oslo's strategies, frameworks, and legal documents, it became clear that a lot of focus was directed toward sharing and the sharing economy. Even so, the offers within Oslo remain 'hidden' for the majority of citizens and the sharing economy therefore needs to find a way to overcome this dissemination challenge. Future research could therefore examine how sharing economy offers are disseminated by businesses or individuals. Moreover, gather data on the usage of various offers (similar to what is displayed Table 1) would be useful.

Below, the link to the overview map shown at the beginning of this chapter can be found. Future research could build on this map by adding more offers, or different types of offers (e.g. those including transfer of ownership as well):
https://www.google.com/maps/d/edit?mid=1Et-ISvhAfrtyhCVniPBKKngt7jHnutw&usp=sharing

Because of the short time period of the work for this report, several of the gaps in academia tied to the barriers and potentials of the sharing economy for reduced consumption couldn't be incorporated into the text. For a complete overview of the gaps reviewed for this report, see the link below:
https://docs.google.com/document/d/19vG3lOY1sYctRWKsJ-GN2LZuhMP-lg1B/edit?usp=sharing&ouid=100048254109261079469&rtpof=true&sd=true

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Appendix

Figure 2

Environmental	1	2	3	4	5	6	7	8	9	10	11	12	13
Increasing resource efficiency	P	P		P	P			P	P	P		P	P
Responsible use of resources	P/N	P		P/N	P/N		P/N					P	P
No harmful environmental impacts and emissions	P/N			P/N	P/N		P/N						
Increasing environmental well-being													

Social	1	2	3	4	5	6	7	8	9	10	11	12	13
Safeguarding health and safety				N	N		N	N	N				
Respecting laws, regulations and rights				N	N		N	N					
Respecting employee, stakeholder and individual rights					N		N						
Ethical principles and no harmful social impacts	P/N			N	N		N	N				N	
Increasing social well-being		P			P	P	P		P	P	P	P	P

Economic	1	2	3	4	5	6	7	8	9	10	11	12	13
Increasing cost-efficiency	P	P	P	P	P	P	P	P	P	P	P	P	P
Increasing profits and business opportunities			P	P	P	P	P	P					
Operation stability and risk reduction													
Increasing attractiveness													
Increasing economic well-being			P	P	P	P	P	P					

Fig. 2. Sustainable value creation potential of different sharing business model categories.

(Laukkanen & Tura, 2020: 7)

Sharing economy offers included in the Excel-spreadsheet:

1. Finn (excluding Mittanbud)
2. Tise
3. Deichman Holmlia
4. Deichman Oppsal
5. Deichman Torshov
6. Deichman Tøyen
7. Deichman Grünerløkka
8. Beitraf
9. Bjørndal IF / BUA
10. FRIGO
11. Skattekammeret St. Hanshaugen
12. Skattekammeret Stovner
13. Skattekammeret Frogner
14. Utlånssentralen Holmlia sportsklubb
15. Hygglo
16. Mittanbud (Finn)
17. Fjong
18. Bergans
19. ReLi
20. Parkdressen
21. Stasforbarn

22. Deichman Furuset frøbibliotek
23. Deichman Grünerløkka frøbibliotek
24. Deichman Lamberseter frøbibliotek
25. Deichman Romsås frøbibliotek
26. Deichman Majorstuen frøbibliotek
27. Deichman Nordtvedt frøbibliotek
28. Deichman Tøyen frøbibliotek
29. Deichman Torshov frøbibliotek
30. Utstyrsbiblioteket (UiO)
31. Vibbo (earlier Nabohjelp)
32. Instagram
33. Utleie.eventpartner norge
34. La Vandre
35. BUA Ullern
36. BUA Furuset
37. BUA Nordre Aker
38. BUA Sagene
39. BUA Løkka
40. BUA Østensjø
41. BUA Bjerke
42. BUA Stovner
43. BUA Hovseter
44. BUA Mortensrud
45. Jernia Gunerius
46. Jernia Bispevika
47. Jernia Torggata
48. Jernia St. Hanshaugen
49. Jernia Thorstensen
50. Jernia Ringnes Park
51. Jernia Hasle Torg
52. Jernia Skillebekk
53. Jernia Colosseum
54. Jernia Manglerud
55. Jernia Holtet
56. Jernia Storo Storsenter
57. Jernia Skøyen
58. Jernia Stadion
59. Jernia Vinderen
60. Jernia Tveita Senter
61. Jernia Lambertseter
62. Jernia Linderud
63. Jernia Bøler
64. Jernia CC Vest
65. Jernia Røa
66. Jernia Mortensrud Senter
67. Jerikobakken
68. Utlånssentralen på Romsås (Romsås frivilligsentral)
69. Utlånsbanken på Ammerudklubben
70. Tooler.no
71. Repairable
72. Utleieverktøy A.S.
73. Skiforeningen
74. Nabolagshuset Petersborg
75. MAXBO Ullern
76. MAXBO Sagene
77. MAXBO Alna
78. MAXBO Alna
79. MAXBO Lørenskog
80. Obs BYGG Alnabru
81. Obs BYGG Haugenstua
82. SiO Athletica Kringsjå