

The Phenomenon of the Sharing Economy in Germany

Consumer Motivations for Participating in Collaborative Consumption Schemes

Master thesis to reach the degrees of

M.Sc. Business Administration

(University of Twente)

M.Sc. Innovation Management and Entrepreneurship

(Technische Universität Berlin)

Fanny Schiel
Vorwerkstraße 1
01067 Dresden
f.schiel@student.utwente.nl

Student ID UT: s1493566
Student ID TU: 0346579

Supervisor UT: Dr. M. L. Ehrenhard, School of Management & Governance
Supervisor TU: Prof. Dr. K. Blind, Chair of Innovation Economics

Word count: \approx 22,158 words + references
Submitted: August 20, 2015

Abstract

Collaborative consumption describes the growing trend from ownership to joint access of resources. Being extremely fashionable amongst social-innovative consumers, the sharing economy is also increasingly debated in popular science and politically of interest. With regard to academic discourse, current theory is insufficiently developed. Above all, a gap exists in the understanding of *why* users engage in sharing schemes in the first place. Therefore, I immersed myself into the field to collect explorative knowledge on the phenomenon and to provide a snapshot of the sharing economy today, with particular focus on Germany. Drawing from research into motivations, consumer culture and sustainable behaviour, I derive an overview of benefits and thus reasons of people to use peer-to-peer marketplaces. A quantitative analysis ($n \approx 600$) clarifies the impact of different types of motivations onto attitude towards and participation in co-consumption models. Findings suggest that the majority of respondents has been in touch with alternative modes of use and consumption. Across sharing categories, participants are driven by a triad of economic, ecological and social motivations. At the same time, respondents with no sharing history differ significantly in demographic attributes and personal values. Concluding, this study has found evidence that shared ownership is not only a trend but an alternative to hyper consumption as more people intend to participate. Limitations to this research are essentially rooted in its sample composition. Nevertheless, it yields valuable contributions to an underdeveloped field. From here, larger scale research can depart e.g. to investigate on consumer profiles, the issue of trust in digital marketplaces or conflicting motivations when sharing.

Keywords: sharing, consumerism, asset-light lifestyle, collaborative consumption, collaborative economy, peer-to-peer marketplace, communities, peer economy, access economy, shareconomy, shared economy, freeconomy, recommerce, lifestyle of smart simplicity, non-ownership consumption, transumerism, fractional ownership, shared value, sharity, we-dentity

Table of Contents

1. Introduction	6
2. Research Objective	8
2.1 Problem Description	8
2.2 Central Questions	9
2.3 Structural Approach	9
3. Theoretical Background	11
3.1 Definitions	11
3.2 Study Context	18
3.3 Motivations for Sharing	20
3.4 Drivers Behind	26
3.5 Benefits of Participation.....	31
3.6 Conditions, Constraints & Critique.....	35
4. Methodology	38
4.1 Pilot Study	38
4.2 Main Study.....	39
5. Results.....	48
5.1 Descriptive Statistics	48
5.2 Variance Analysis.....	58
5.3 Regression Results	60
6 Discussion.....	63
7 Future Research Recommendations	68
8 Contributions & Limitations.....	70
8.1 Academic Contributions	70
8.2 Research Limitations	71
9 Conclusion & Outlook.....	73
10 Acknowledgements	75
11 Appendix	II
References	XV

List of Tables

Table 1: The three types of sharing practices	12
Table 2: Elaboration of motivational factors from literature.....	34
Table 3: Structure of the survey	39
Table 4: Pros and cons of the chosen research method	43
Table 5: Operationalization of constructs	45
Table 6: One-way ANOVA results of selected variables between sample sub-groups	58
Table 7: Percentage of sharers per income group	59

List of Figures

Figure 1: Economic forms in the sharing economy	12
Figure 2: Research model	35
Figure 3: Sample characteristics I	43
Figure 4: Sample characteristics II	44
Figure 5: Sample characteristics III	44
Figure 6: Participants' language preference and nationalities (Q1)	48
Figure 7: Distribution of alternative use and ownership formats (Q2).....	49
Figure 8: Attractiveness of borrowing and shared use of objects (Q3)	50
Figure 9: Importance of personal, collaborative consumption-relevant values (Q4)	50
Figure 10: Consumer opinion on product attributes (Q5)	51
Figure 11: Attitudinal statements of consumers (Q6)	51
Figure 12: Platform recognition and familiarity (Q7)	52
Figure 13: Participants' recent sharing activities (Q8).....	53
Figure 13: Sample division in sharers vs. non-sharers (Q8)	53
Figure 15: Participants' sharing intensity (Q8)	53
Figure 16: Participants' reasons against sharing (Q9)	54
Figure 17: Participants' sharing motivations (Q10)	55
Figure 18: Top motivational reasons per sharing activity (Q10)	56
Figure 19: Five years forecast (Q12).....	57
Figure 20: Likelihood of future participation (Q13)	57
Figure 21: Opinions on future income component (Q14).....	57
Figure 22: Willingness to pay (Q15)	57
Figure 23: Overall sympathy (Q16)	57

List of Appendices

Appendix 1: Co-consumption companies organized on P2P platforms	II
Appendix 2: Survey tool tracking	IV
Appendix 3: Impressions of survey look and postings online.....	V
Appendix 4: Survey items, labels and scale origins	VI
Appendix 5: Bivariate cross-correlations matrix acc. to Pearson	XII
Appendix 6: Descriptives and outcome of one-way analysis of variance (ANOVA).....	XIV

1. Introduction

“The relationship between physical products, individual ownership, and self-identity is undergoing a profound evolution. [...] In other words, we don’t want the stuff but the needs or experiences it fulfills.”

Rachel Botsman

Imagine being able to wear the latest designer accessories, use appropriate power tools as you need them, eat fresh and green without gardening or ride that fancy car whenever you desire – without worrying about the risks and costs of permanent ownership. These scenarios are reality for the increasing consumer segment that participates in the sharing economy (also: shared economy, shareconomy) today ([Lawson, 2010](#); [Budczynski, 2011](#); [Abel, 2013](#); [Heinrichs & Grunenberg, 2013](#)).

Certainly, **sharing is not new** ([Felson & Spaeth, 1978](#); [Aigrain, 2007](#); [Scholl et al., 2010](#); [van de Glind, 2013](#); [Schor, 2014](#)). Sharing something is a natural, pro-social behaviour and has always been a sign of solidarity, cooperation and mutual aid ([Benkler, 2006](#)). But today, it seems to become more relevant again as we move from an industrial information economy to a *networked* information economy. Further, *corporations* have been sharing for a long time: computer services, storage capacity, car fleets – even critical functions can well be outsourced¹ today ([Wharton UoP, 2011](#)). However, now, it is *consumers* who increasingly monetize unused assets or lend objects the moment they need them. This too, is not entirely new: **Fractional ownership** is a popular practice within the upper middleclass, sharing rather expensive lifestyle properties and status symbols² – except that now, communities of *average users* start doing the same ([Steffen, 2007](#)). To give an example, car leasing is fractional ownership at its best: It allows the temporary ownership of a vehicle originally above a buyer’s affordability threshold without the responsibilities of automobile ownership ([Lawson, 2010](#)). Furthermore, one might think of a weekend’s typical flea market or [eBay](#) and the US classified ads website [craigslist](#) where people buy and sell all sorts of goods. Still, these are different in that providers usually look for means to dispose things they do not need or want any longer ([Botsman, 2010](#); [Stallbaum, 2013](#)). In the *center* of the sharing economy, however, people share objects they care about – the most popular examples being their homes ([Heinrichs, 2013](#)).

¹ e.g. to a shared service provider

² see for instance offers on [fractionallife.com](#), a UK-based lifestyle platform in the property marketplace with rental categories such as *aviation, boats and yachts* or *super cars*.

But what has changed with **collaborative consumption**? Is it simple non-reciprocal behaviour or is there much more behind it? As a fact, one key characteristic is different today: Consumers in the sharing economy do not simply value a car on a timeshare basis but they pursue these experiences *across all consumption categories* (Levenson, 2007). Still, the question remains: Why have people come to rethink traditional modes of consumption? A possible answer is that “consumers want to own less but [to] gain more” (Böckmann, 2013, p. 4). They seem to contribute because it is cheaper, easier and social – strengthening existing ties and tapping new contacts – and “because we want to and because we now can”, thanks to social networks (Frick et al., 2013, p. 5).

As described in Lisa Gansky’s influential book ‘*The mesh*’ (Gansky, 2010), the peer-to-peer (P2P) marketplaces of the sharing economy facilitate the exchange not only of classical products and services but of data, information, assistance, talent and long-kept knowledge. According to her, the sharing lifestyle has the power to replace prevailing economies and mainstream consumerism. Again: Is this euphoria justified? What encourages people to participate in co-consumption offers? In trying to answer these questions, it becomes obvious that surrounding research so far has mainly focused on individual consumption in the commercial sector, sustainable development practices or general sharing behaviour among community members. Existing studies on the sharing economy are “theoretical, conceptual and normative and only rarely cite empirical findings”, making “a retrospective assessment of trends [...] difficult” (Heinrichs & Grunenberg, 2013, p. 12). Indeed, many popular science material exists but little journal publications are available. In this, academic discourse on the sharing economy largely lags behind public practice (Scholl et al., 2010; Hamari et al., 2013; Heinrichs & Grunenberg, 2013; Woods, 2015). The **goal of this thesis** is now to address the identified research gap. In doing so, it examines consumer motivations in the sharing economy and increases the existing knowledge pool on the phenomenon.

2. Research Objective

„You start disconnecting from your life when you have too much...“

Unknown (interviewee within the study of Marchand et al., 2010)

2.1 Problem Description

It is well known that today's production and consumption patterns do not suffice to ensure next generations meet their needs unrestrictedly (Preston, 2012). The materials economy and a steady inflow of disposable goods are what characterize the mainstream consumerism (Underhill, 1999; Leonard, 2010). Yet, as described by Rachel Botsman & Roo Rogers (2011) in their key publication 'What's mine is yours', an increasing socio-economic awareness conquers the long-established conduct of the global throw-away culture. Since 2010, also Heinrichs (2013) observes a trending movement from hyper consumption to collaborative consumption. It revives concepts of sharing, lending, swapping, gifting, renting, and trading while being reinvented and made future-proof by technology and online social networks (Gaskins, 2010; Gorenflo, 2010; Karmann, 2013). Popular examples in the sharing economy are carsharing, swapping wardrobes or the booking of private accommodations while on travel. More recently evolved models of shared use include private micro-loans, the sharing of food or gardening space, the rental of instruments and equipment and many more. According to Bauwens et al.'s P2P Foundation report and following the initial quotation above, sharing models that link formerly disconnected communities and concentrate on "goods with frequent idleness periods", i.e. (often) unused objects, hold great potential (Bauwens et al., 2012, p. 341). Most kinds of collaborative consumption schemes are facilitated by an online platform to coordinate suppliers and recipients of products or services and to organize their transaction – regardless of whether money is involved or not.

For some time now, we can observe more and more of these sharing-based business models infiltrating national economies. But do they simply reflect their founders' ideologies or do they cater to a larger, like-minded population of sharers? Opportunities to engage seem manifold and technologies and social networks add up to their value but what is the underlying rationale for consumers to initiate in collaborative consumption schemes? What are consumer segments and perceived benefits and motivators that are likely to lead to an involvement in collaborative consumption? These aspects have not been discussed prior to this study. This is highlighted by Scholl et al. (2010) saying that a

better understanding of the socio-economic motivations behind sharing is needed. “There is an absence of research on the motivations of fractional ownership. [...] Transumers have not been specifically studied in the consumer behaviour literature.” (Lawson, 2010, p. 842). Thus, little is known about how and why consumers engage in the sharing economy.

2.2 Central Questions

The illustrated research problem shows the need to gain intelligence on what thrives consumers to join alternative forms of consumption. Therefore, the **objective** of this research is to address motives of users to participate in collaborative consumption via online sharing platforms. Subsequently, the **research question** is formulated as follows: What are motivational factors that drive consumers in the sharing economy?

From here, a number of **subquestions** can be derived: What is collaborative consumption? How widespread are those alternative forms of use and consumption? What are the most prevalent platform types and engagement modes behind sharing economy schemes, i.e. which sharing opportunities are most familiar and practiced? How is it positioned within the traditional economy? What are intrinsic and extrinsic motivational factors causing users to engage? Are the identified motivational factors coupled with the perception of collaborative consumption and how? Is there a link between perception and participation? Which personal values do they hold? What are product preferences? These subquestions shall be included in the following sections’ literature analysis and will recur as part of the results, altogether helping to understand the concept of collaborative consumption.

2.3 Structural Approach

Following a **multi-method design**, the goal of this thesis is to create explorative and descriptive knowledge onto the factors that motivate people to take part in collaborative consumption schemes. Hopefully then, by understanding the motivational factors behind, it will be possible to grasp the social-economic transition our traditional consumerism undergoes (Rifkin, 2001; van de Glind, 2013; Dubois et al., 2014). To get there, I will investigate the phenomenon and the current formats under the umbrella concept of the sharing economy. With the definitions clarified, I move on to explain the study’s context

that is “critical to the interpretation of consumer motives in a way that will lead to useful results” (Thomas, 1998; Batra & Kazmi, 2008, p. 53). Next, the most relevant research areas around sharing get introduced: consumer culture, motivation research, sustainable development, environmental behaviour. Following these theoretical underpinnings, concrete factors driving the sharing movement are explained from a macro-level perspective. Turning to the individual participant, a number of benefits that come with consuming collaboratively can be derived, concluding with a conceptual model based on authors from related research fields. Subsequently, the analysis of a user survey will shed light on what motivates contributors to shape the transition to a more collaborative economy. The paper ends with limitations to this research and suggestions for future ones.

3. Theoretical Background

“Collaborative consumption models by definition focus on minimising idleness or excess capacity of goods by optimising access to information concerning the locus of these excess and to information concerning parties interested in them.”

Bauwens et al., 2012, p. 341

3.1 Definitions

a) Relevant Terms

A first glance at past decades' literature suggests the term 'share economy' means the reformation of classical compensation systems towards such where remuneration is aligned with firm success. Thus, old debates involve concepts around profit sharing and bonus incentives for managers and employees (Weitzman, 1986; Lueb, 1999). Clearly, this is not what today's discussion is about. Rather, it centers on alternative consumption and ownership models, leading the way towards common access to products or services.

But first of all, what *is* **consumption**? According to Zukin and Maguire, consumption is to be defined as the economic, cultural and social process of making product choices – a process that reflects opportunities and limitations of the modern societal lifestyle. Individuals “experience consumption as a project of forming, and expressing, identity” (Zukin & Maguire, 2004, p. 173; Ahuvia, 2005).

The most precise explanation of **collaborative consumption** (also: co-consumption) has recently been adopted by The Guardian where Frenken et al. define it as “consumers granting each other temporary access to under-utilised physical assets, possibly for money” (Frenken et al., 2015, p. 1). In other words, idle capacity is shared on a P2P basis when and where needed. That makes productive resources out of individual owners' under-utilised possessions.

When defining the **sharing economy** this thesis follows Botsman & Rogers (2010) who include not only P2P services but also *product-service systems* and *redistribution markets*. The first grants customers access to products while ownership stays with the provider. The second covers marketplaces where new or used objects change hands. Third, *on-demand services* bring together individuals to get a job done (Frenken et al., 2015). Thus, also people business receives attention in the sharing economy since under-employed people represent spare assets, too, with regard to their time and skills.

To clarify the scope of the sharing economy, [Figure 1](#) illustrates these neighbouring concepts. Altogether they make up the sharing economy. Collaborative consumption sits at the heart of this economy ([Bauwens et al., 2012](#)). As the dotted lines indicate, the three concepts are associated with but do not account for the majority of sharing offers.

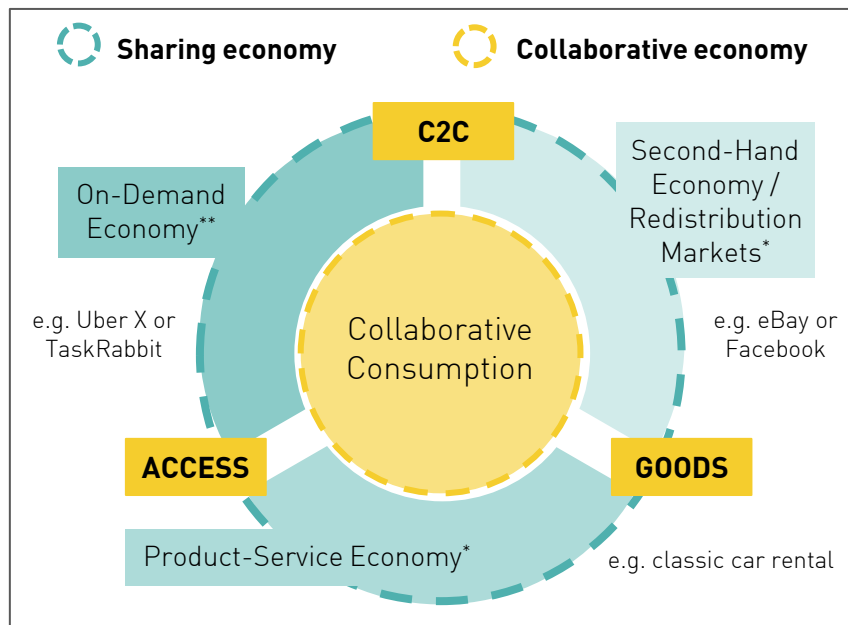


Figure 1: Economic forms in the sharing economy
Reference: [Botsman & Rogers* \(2010\)](#) and [Frenken et al.** \(2015\)](#), own depiction

As it was the generally adopted interpretation of the sharing economy in early 2014 ([cf. Tunguz, 2011; Botsman, 2013](#)) and since on-demand services are not as diffused in Germany yet, [Table 1](#) only goes into the three types of sharing practices according to [Botsman & Rogers \(2010\)](#).

	Explanation	Examples	Sources
Product-service systems (PSS)	PSS are professionalized services for rarely used assets. PSS are the opposite of traditional, physical product sales. Instead, customers pay for the product's purpose. Examples are carsharing, tool libraries, rental systems, equipment-sharing schemes.	Zipcar, Netflix, Barclays Cycle Hire	Manzini & Vezzoli, 2002 ; McDonough & Braungart, 2002 ; Tukker, 2004 ; Worldchanging (2007) ; Steffen, 2007 ; Tuhus-Dubrow, 2010 ; Botsman & Rogers, 2011 ; p2pfoundation.net, 2012
Redistribution markets (RS)	Used or previously owned products are reallocated to where they are needed. This includes the private selling and buying of things at flea markets or online platforms.	eBay, freecycling groups on Facebook	
Collaborative lifestyles (CL) i.e. collaborative consumption	Thought of as the 'real' sharing experience, CL is consuming together, i.e. sharing or exchanging assets and resources like products, time, space, skills, food, money, etc. from and / or with peers.	Uber, Lending Club, Helping	

Table 1: The three types of sharing practices

The **terminology** of the sharing economy usually denotes the wider, ‘monetized’ part of collaborative consumption. Still, it “co-exists with an equally important trend towards ethically-inspired economic practices that combine material benefits with a more explicit value system” (Bauwens et al., 2012, p. 151). Therefore, please note that I involve *paid-for* transactions as well as *money-free* services and that the terms *sharing economy* and *collaborative consumption* will be used interchangeably from here onwards³. Still, the main research part focuses on C2C platforms, with few exceptions. So, generally, when speaking of motivations in the sharing space, it is referred to P2P models that promote temporary access for a more efficient use of assets, both physical and immaterial.

With regard to other economic models, the sharing economy can be distinguished along the **four pillars** it is based on (PwC, 2015; Frenken et al., 2015): First, co-consumption offers are hosted as online services. The platforms then match spare capacities with local demand, easily accessible via digital devices, in real-time. They link consumers to consumers, rather than providing a one-sided B2C portfolio⁴. Second, despite the many different formats of renting, lending, subscribing, reselling, swapping, donating, etc., all sharing economy schemes have one aspect in common: They give more choice to the user and at the same time moderate or eliminate costs of ownership. Thereby, it is about access to a product, not necessarily about the transfer of its ownership. Third, this new form of consumption is much more personalized since it is largely based on social interaction and trust. Forth and last, sharing offers are designed for an individualized user journey, striving to create emotional relationships. Ease of use, confident imaging and support give these platforms a face and add a flavour of friendship to transactions. Whether construed through marketing efforts or self-sustaining, these socially-oriented experiences can virtually sell themselves.

³ The reasons for these decisions are: simplicity and the explorative nature of this thesis, linguistic alternation and the fact that so far, no die-hard definitions have been established in literature. I *do* acknowledge that current debates rank around the difference of such terms but without final conclusions yet.

⁴ Nevertheless, this research includes rather classic rental services, too, as some of them have helped shaping the sharing economy. This is the case with B2C offers like DriveNow and car2go; further explanation follows.

b) Related Concepts

The notion of sharing within an explicitly free-of-charge setting is often referred to as **civic economy** or **freeconomy** and describes dedicated local sharing relations for the purpose of pure help and conviviality, possibly even leading into co-production⁵. Still, this happens on a smaller scale and usually fairly unorganized. Another “socially friendly form of capital ownership” (Bollier, 2012, p. 2) and thus, a bordering concept to sharing, is the **social economy** or **solidarity economy**, led by individuals, social enterprises and non-profits whose behaviours are grounded in the strive for grassroots democracy and power redistribution, social justice, cooperative leadership and associated political goals (Weber, 2011; Bauwens et al., 2012). Again, cooperatives, associations, worker-owned companies and the like are not new but rather revived – in part because of financial instabilities and other socio-economic crises (Bauwens et al., 2012; Schor, 2014) (→3.4). As proof point that this economic sub-sector should not be ignored, Rheannon argues that “the 300 largest cooperatives have sales totalling more than \$1 trillion per year” (Rheannon, 2012, p. 2). In Germany, the idea originates partly in worker cooperatives and codetermination; a practice bound by law conditions democratic workers representation and stimulates workers’ self-management (Rothschild, 2009). The difference between the social or solidarity economy and collaborative consumption shall be clarified in the way that doing justice and addressing social inequity goes beyond what collaborative consumption may accomplish effectually. Weber⁶ says: “To transform an economic system which fails to meet community needs, we have to move from a sharing economy to a solidarity economy [that] is based on democratic control and social justice, not just cooperation and ecological sustainability. It’s about sharing power.” (Weber, 2011, p. 2). In that, the solidarity economy goes a step further and involves more politically motivated bodies of thought whereas the sharing economy ‘only’ follows the “basic principle to facilitate the share of resources between persons” (Gabillard & van der Heijden, 2015).

The concept of the sharing economy goes into the direction of **cradle-to-cradle**, an eco-effective, zero waste approach on product design. Similarly, it leans towards aspirations of **circular economy** advocates who speak for an economy transformation where production waste becomes “a valuable input to another process” (Preston, 2012, p. 1).

⁵ An example is freecycle.org, a network organising local groups for the free exchange of goods no longer needed.

⁶ Weber is an economic justice organizer and writer at SolidarityNYC, a solidarity economy advocacy collective, working to develop the solidarity economy in New York City.

c) Sharing Formats

During the past years, a multitude of sharing platforms has sprung up so that an overview of schemes can only be attempted but most certainly not completed (**Fehler! Verweisquelle konnte nicht gefunden werden.**). Special attention will be received by the areas *housing, mobility, lifestyle, experience, retail* and *food* sharing. Beyond these, people share office space, insurances, books, parking ground, clothes and toys for children and much more (Gansky, 2010; Ortmann, 2013).

‘What’s mine is yours’ does not count for every item one could possibly share: Easiest to share are goods that are exchangeable, of limited material and personal value (tools) and usually shared anyway (food); conditional sharing of higher value goods happens less often as owners consider their risk of loss and reliability of the recipient before giving away e.g. equipment and electronics. The same holds true for clothes and blankets which are only reluctantly given away for hygiene and cleanliness reasons. Things a person would not want to share as they are naturally considered intimate are: bank accounts, laptops, mobiles, tooth brushes, underwear. In general, peoples’ sharing mood is largely influenced by the characteristics of the counterpart: if friendly or tidy, reliable and accurate, providers are more generous (Frick et al., 2013). Generally, goods and services with an initial outlay exceeding € 100 bear the most potential for sharing on a grand scale. Furthermore, it is about objects that are costly in maintenance or used only sporadically. Long-term sharing occurs when the burden of keeping an item is larger than the desire of owning it by oneself only. Objects that an individual cannot easily afford, that increase personal flexibility and mobility, that can conveniently be obtained and given back and that boost the user’s reputation, are predestined for sharing (Frick et al., 2013).

These attributes are valid for **carsharing** – the segment that is most developed and fastest growing in the new economy format (Frick et al., 2013). In fact, carsharing ‘dematerializes’ the car and with it, the traffic. This is because sharing a car removes other passenger cars from the street, in other words users “get the personal mobility without the annoyances of car ownership” (Worldchanging⁷, 2007). Thereby, different modes of mutualization, related to ownership, governance mechanisms, purposes and use intensity, can be observed: For one, there is fleetsharing or **B2C** carsharing where a

⁷ Worldchanging has been one of the top environmental websites, run by The Open Architecture Network, an online open-source community. It was founded by the charitable organization Architecture for Humanity that only recently had to file bankruptcy.

corporate owner rents out its vehicles such as the US service [Zipcar](#) and its German counterparts [Car2go](#) or [DriveNow](#) do. Although being commercial operators, these industry players fall under the umbrella term sharing economy as they allow flexible point-to-point rentals at pay-per-use rates, therefore abandoning the necessity of owning a car. The **C2C** pendant involves individual owners only, allowing multiple users to access the same car, for example in their neighbourhood. Platforms such as [autonetzer.de](#) and [tamyca](#) make P2P carsharing an alternative that is more capital efficient: No capital investment is needed to get the assets on board as they are provided by the community. Thus, a P2P platform operates at a fraction of what Zipcar needs to inject ([Tunguz, 2011](#)). Although such carsharing offers are manifold, the most established concept remains carpooling, or rather ridesharing. The largest German platform with nearly 7 m drivers and passengers was [mitfahrgelegenheit.de](#), operated by Carpooling which has been bought by French competitor [BlaBlaCar](#) in 2015. A whole different option are municipal cooperatives, i.e. non-profit, publicly owned fleets like [City CarShare](#) in San Francisco or [Autolib'](#) in Paris. In populous places like these the advantages of carsharing seem obvious: "Car overcapacity and overpopulation in cities make carsharing amongst individuals a must", says Robin Chase, founder of Zipcar ([Geneste, 2011](#)). But also new needs and wants in the mobility area and "behavioural changes towards the car"⁸ ([Bauwens et al., 2012, p. 336](#)) are driving this evolution, or better socialization, in private transportation, also framed by the word 'sociopleasure' ([Frick et al., 2013](#)).

A similar tendency is observable in P2P hospitality services, i.e. **home sharing**, where private and for-profit firms such as [Airbnb](#) operate alongside civic, for-benefit solutions, like the free accommodation platform [Couchsurfing](#). As 'housing' already takes the largest share in the expenditures of French and German household budgets ([Bauwens et al., 2012; Destatis, 2015](#)), this form of sharing becomes popular with people travelling or owning unoccupied space. Short-term rental suits tourists best and offers new perspectives through local, non-standard experiences around a destination ([Bauwens et al., 2012](#)).

Another sharing area on the upswing is the **food sector**. Here, a strong desire to set-up short-cuts between producers of food and its consumers has been observed, called

⁸ E.g. possessing an own car becomes less important among younger US citizens ([Spiegel, 2012](#)): A study from the University of Michigan found "a substantial decrease in the percentage of young people with a driver's license" over the past 25 years ([Sivak & Schoettler, 2011](#)).

autonomous collaboration ([Bauwens et al., 2012](#)). Also, the line between both parties increasingly blurs, for instance with projects such as [The Food Assembly](#), an online network for fresh food exchange where pop-up markets function as meeting points between local producers and a community of consumers. Food as a strong enabler for social ties has also brought up several meal and garden sharing communities such as [Shareyourmeal](#), [landshare](#) and [meine ernte](#). Moreover, many people have chosen to adopt a healthier way of living, e.g. by subscribing to a weekly farmer's box of vegetables delivered to their doorsteps. Concerns for health have also inspired the first sharing service for consumer **healthcare**: [HelpAround](#) is a mobile safety network for people with diabetes that crowdsources nearby advice and emergency support from relatives, caregivers and patient communities.

As a last reference point, the luxury and **fashion industry** shall be mentioned as it is ideally suited for the sharing and transumerism lifestyle ([Lawson, 2010](#)). This is because temporary ownership aligns well to seasonal business. Examples are the accessory subscription retailer [Rocksbox](#), P2P social shopping marketplace [Kleiderkreisel](#) or the temporary outfit rental [Kleiderlei](#) Hamburg. More sharing platforms are introduced throughout this work.

3.2 Study Context

To date, the sharing economy is not receiving the level of attention and resources it needs to be fully grasped. And yet, the phenomenon experiences explosive growth thanks to information and communication technologies (ICT), with a current 77 % of the developed world being connected to the Internet (Nuwer, 2014). For instance, Airbnb has 1.5 m shared accommodations on offer, BlaBlaCar's 20 m members arrange 2 m rides per month and foodsharing has saved 2 m kg of food from being wasted. Sharing reduces environmental impact, promotes a more efficient use of resources, and functions as facilitator for new social contacts (Bagó, 2011; van de Glind, 2013; Dubois et al., 2014; Schor, 2014). Thus, "sharing potentially has a lot to offer to society" (Frenken et al., 2015, p. 2). Addressing this topic, I will start with explaining the study's context, e.g. that of sustainable consumption⁹, following the suggestion by Phipps et al. to first approach the problem in general, "rather than relying on theory as a starting point" (Phipps et al., 2013, p.1233).

With the current mentality, speed and intensity of global production, unsustainability is driven further, spurring on e.g. climate change, resource scarcity, biodiversity loss and soil depreciation (WWF, 2012). Given this environmental degradation caused by human activities, it is no secret that "new pathways to foster sustainable development must be explored" (Heinrichs, 2013, p. 228). Still, ethical and eco-friendly products or innovative and more efficient industry processes may not be enough to reach sustainable development (Jackson, 2005a). A "reduction in the *scale* of consumption" is needed (Marchand et al., 2010, p. 1432), i.e. on a global level people need to consume less in terms of volume and quantity (Princen, 2003; Fuchs & Lorek, 2005).

In consequence, ambitious debates rank around fair growth, post-growth, new forms of life quality and alternative measurements of GDPs (Jackson, 2005a; Paech, 2012). Parallel to these considerations, a strong belief in the sharing economy has emerged. It unites numerous developments and provides new perspectives towards a more fundamental vision of sustainability. Utilizing common market intelligence and network effects, the concept has become more than a hype (Fournir et al., 2013; Bitkom, 2013).

⁹ Sustainable consumption shall be defined as consumption that simultaneously optimizes the environmental, social, and economic consequences of acquisition, use and disposition in order to meet the needs of both current and future generations (Luchs et al., 2011; Phipps et al., 2012).

With this sustainability debate intensifying, a new actor appears on the scene. Long identified by trend researchers, this new type of consumer, the *transumer*¹⁰, enjoys access to desired goods or services and does not want to worry about ownership costs (Lawson, 2010; Grant, 2013). Transumers are defined as “consumers driven by experiences instead of the ‘fixed’, by entertainment, by discovery, by fighting boredom, who increasingly live a transient lifestyle, freeing themselves from the hassles of permanent ownership and possessions.” (trendwatching.com, 2006). Thus, as transumers pursue non-ownership consumption convenience, they acquire products for a certain period – not a lifetime, against a usage fee – not the original price.

The study “Zukunftsfähiges Deutschland” (future-viable Germany) was the first to acknowledge that a consumer society that wants to comply with the future in the long-term, will align great parts of its goods logistics to the utilization of the same – not to their ownership (BUND & Misereor, 1996, p. 219). Also the Federal Environment Office declared the reorientation of consumption with regard to utilization instead of ownership of products a “meaningful new aspect” UBA (1997, p. 246). In the US, much more attention has been given to Jeremy Rifkin’s book ‘The age of access’ where he speaks of a profound change in developed economic systems, predicting a civilization moving away from owning property towards valuing access and an economy commercializing human time and experiences instead of only products (Rifkin, 2000).

Furthermore, a growing distrust from crises and industry scandals leads people to “join community groups [and] connect with neighbours” (Smith, 2006), rebuilding a sense of trust and the social relations that have become weaker and looser over time. This trend is supported by disruptive ICT catering real-time interaction and trust mechanisms such as profiling, rating schemes and recommendation systems (Pick, 2012; Swallow, 2012). As a result, sharing schemes developed on self-organized platforms, through social media or via at least partly commercial intermediaries (Botsman & Rogers, 2011). With regard to Germany, researchers reveal that more than half of the country’s consumers have had contact with some part of the sharing economy, even portraying nearly 25 % as “social-innovative co-consumers” (Heinrichs & Grunenberg, 2013, p. 9). But before this study collects own data, the next chapters undertake an excursion into relevant research fields.

¹⁰ From *transient* and *consumer*, cf. business and research enterprise trendwatching.com, a leading trend firm for emerging consumer evolution.

3.3 Motivations for Sharing

a) Main Research Areas

Since purely academic publications are rare, it seems advisable to apply scattered theoretical and empirical insights across different facets of the sharing economy, i.e. to combine pieces of theory from various disciplines (Heinrichs & Grunenberg, 2013). But from which perspectives can collaborative consumption be looked at? Different areas of scientific research will be highlighted in the following.

In parts of the population there has been a change in consumer habits: A culture of sharing extends itself from online information products such as photos, text, music and videos to physical goods (Rodrigues & Druschel, 2010; Frick et al., 2013) – with the difference that the latter becomes less or (temporarily) unavailable to the owner or even handed over for good. Thus, it shall be looked at the reasons for sharing, knowing well that the discipline of **motivational research** is complex and challenging. A great deal of works originates from economics and particularly marketing research, psychology and the sociology arena. Generally, it examines underlying reasons for people to act and consume the way they do, i.e. their unconscious and conscious motives of behavior (Thomas, 1998). To see through all these factors and influences and therewith generate insights to better understand an audience – that is the goal of motivational research. In that, perceptions and trends, cultural rules and biases, sociological forces and economic factors all play along in forming a person's attitudes and intentions.

As a multi-faceted construct studied by multiple disciplines, motivation has seen many definitions. Guay et al. put it simply as the "reasons underlying behaviour" (Guay et al., 2010, p. 712). Ryan & Deci describe motivation along the orientations or degrees *internal* and *external* to a person or an organism (Ryan & Deci, 1985). When internal, something is done for the sake of it, i.e. "because it is inherently interesting or enjoyable" (Ryan & Deci, 2000, p. 55) while, when external, motivation to do something is reward- or outcome-oriented and "emergent [...] from particular contexts" (Nupke, 2012, p. 11). Most commonly these dimensions are referred to as *intrinsic* and *extrinsic* motivation. Literature also indicates that, on occasion, motivation receives quantification and scope, i.e. the 'amounts' as well as the level or scope of intrinsic motivation and extrinsic motivation respectively can change (Ryan & Deci, 2000; Nupke, 2012).

Although referring to an educational context here, it is indicated that one's intrinsic motivation originates from "the individual's natural self, the home or family setting, social or peer pressure [...] or a combination" of these (Nupke, 2012, p. 12). While someone extrinsically motivated will concentrate on the results or rewards of an activity, the intrinsically motivated focuses on processes and details. Deci points out that external rewards only boost one's intrinsic motivation in a temporary and thus limited way (Deci, 1971). What indeed pushes motivation is agreement with the counterpart's personality or institutional culture (Nupke, 2012). Transferred from the classroom to the current (sharing) context, it can be believed that shared values, ideologies and authenticity help forming intrinsic motivation. Thus, when in accordance with the participant's beliefs and expectations, he or she is likely to support the cause and engage in the sharing scheme. The same holds true for when positive relationships and confidence towards the tutor – in this context the user's counterpart in a sharing activity – are at play, both leading to sustained motivation (Deci, 1971). Non-complex processes, clear structure, feedback practices and assessments are further powerful motivators (Nupke, 2012).

Illuminating **motives of sharing in the past**, Belk (2007, 2010) suggests two approaches or "prototypes for sharing": First, *mothering* or *sharing-in* for sharing as an act of unconditional caring, free from obligations, mostly around one's loved ones. And second, *pooling* or *sharing-out* as sharing for an improved provision of joint possessions and resources in use by members of a family or community with the expectation of future re-use without constraints. Both are different from economic commodity exchange that is a calculable, impersonal, reciprocal market transaction, e.g. buying a bread. Frick et al. (2013) extend this dichotomy by Belk, claiming that sharing has become an instrument to build and / or intensify social bonds, therefore they add *socializing* as third basic motive for sharing and expand the sphere of the involved to a *sharing-with*.

According to Price, we were born to share: Humans are social beings, in need of constant exchange with their environment. When sharing, the social relationship is in the foreground, not any economic advantage (Price, 1975). In the past, sharing has become less important. The gain in wealth and cheaper goods from mass production lead to people being able to afford more. At the same time, with more one-child families and single-person households, the number of people decreased with whom to share. Thus, the daily practice, routine and implicitness of sharing was long lost until now it became a conscious act of networked lifestyles again (Böckmann, 2013). And because it has not

been part of day-to-day life anymore it becomes interesting and meaningful, an approach to life, an attitude towards other people.

When turning to **motives of sharing today**, Frick et al. (2013) distinguish three fundamental mindsets towards sharing: First, a *holistic attitude* towards life, following the ‘what-goes-around-comes-around’ principle of generalized reciprocity¹¹; second, a ‘*tit-for-tat*’ strategy based on the expectation of receiving something of equal value in return for sharing; and third, *appreciation and sympathy* – an attitude of sharing as ‘doing good’ and acting with regard to ecological, social and moral aspects. This majority of respondents in Frick’s study shared in order to invest in a stronger society and because it created joy and positive feelings. Also Marchand et al. (2010) identify four profiles of ‘simplifiers’. The most prevalent features and concerns of their lifestyles were to consume less, to be perceptive to social and environmental problems, to lead a sustainable lifestyle and to commit to a ‘better world’ and ‘quality of life’. To achieve these, both groups take *efficiency*, i.e. consuming eco-friendly, and *sufficiency*, i.e. consuming less, approaches. As opposed to their initial objective, the researchers found that “self-interest represented an important facet of responsible consumption” (Marchand et al., 2010, p. 1433). Thus, it can be expected that self-interest motives, i.e. perceived personal benefits play a role in responsible lifestyles.

Regarding the **motivation to engage in environmentally responsible behavior**, it is *self-interest* that replaces *altruism* in the heads of people. While traditionally self-interest and personal gains were discredited as the causes of social and environmental problems, they are not necessarily destructive to sustainability – as newer research confirms: De Young argues that self-interest is not to be mistaken for ‘selfishness’ and can indeed be a positive and constructive motivator for people taking care of themselves and being concerned about their environment (De Young, 2000). Similarly, also Kaplan notes a shortcoming of altruism as the only approach to solve these environmental problems: He sees altruism and pure selflessness as models of “sacrifice rather than quality-of-life-enhancing solutions” (Kaplan, 2000, p. 491). Kaplan further suggests not to exclude the gain-related perspectives when considering human nature and the behavior towards environmental responsibility (Kaplan, 2000). Criticizing today’s consumerist culture, also Soper describes a new, “emergent structure of feelings” (Soper, 2007, p. 222) where

¹¹ For more information see Nelson & Radermacher (2009): ‘From Trash to Treasure’.

those citizens troubled by moral concerns and a high-velocity, work-dominated lifestyle have developed a different idea of self-interest. Soper further frames an “alternative hedonism” concept that calls for different forms of individual pleasure and satisfaction and “a fairer global distribution of resources” (Soper, 2007, p. 223). Hereby, living a more meaningful life involves more quality time with friends and family as well as undertaking activities for self-realization and the reduction of stress or discontent (Marchand et al., 2010).

Another relevant viewpoint from which to identify **factors influencing sustainable consumption** may be social cognitive theory (Phipps et al., 2013). It suggests that human behavior is not only *outcome* but also *antecedent* to influences of personal (cognitive) and environmental nature (Bandura, 1989 & 2001). Putting these three factors (behavioural–personal–environmental) in a reciprocal interdependency, the model captures the underlying dynamic of sustainable consumption behaviours (Phipps et al., 2013), in particular by assuming that “past behavior can influence both personal and environmental factors and, in turn, affect future behaviours” (ibid., p. 1228). Many models have tried to predict pro-environmental behavior. In contrast to these, Phipps et al. propose a non-linear approach where behavior is not simply the result of values, beliefs and personal norms but also acts “as a determining variable” (ibid., p. 1229). Therefore, consumer behavior is the product of an ongoing feedback loop (reciprocal determinism). This iterative process involves tangibles (outcomes, benefits, reactions) and intangibles (feelings, personal evaluation, awareness of consequences), with influencing factors never to be seen in isolation. In addition, Thøgersen & Crompton (2009) speak of spill-over effects and show that pro-environmental action in one field can leak into others. Reportedly, the positive experience made with clothes swapping as a sustainable activity can for instance trigger the participation in skill or carsharing (Phipps et al., 2013). Previous behavior shapes future behavior: As people learn how to control consumption efficiency and reduce their footprints they develop more ambitious goals towards sustainable consumption, thereby motivating themselves.

Renaud-Dubé et al. (2010) show that the adoption of positive environmental behavior is based on autonomous environmental motivation. Self-determination theory claims individual behaviour, i.e., environmental engagement, to be rooted in a person’s interest, originating from the self (Deci & Ryan, 1985). It further suggests that higher levels of choice and volition (willpower) lead to higher levels of autonomous motivation – in

contrast, outer influences such as pressure and control, do not (Ryan & Deci, 2000). Higher motivation toward the environment, in turn, leads to more frequent environmental performance such as recycling, paper reuse, and energy conservation (Renaud-Dubé, 2010). Reasons behind were primarily of intrinsic rather than of external nature, and thus, motivated by personal interest, identification, moral values and meaning.

In contrast, in their example of household water consumption methods in Australia, Phipps et al. (2013) demonstrate that social monitoring and community pressure for environmental change both activate the rethinking of one's own values which in turn motivates new environmental behaviours and possibly social norms. Also from a community perspective, in a study about free contribution in four sports communities Franke & Shah conclude that „the strongest motivations [...] are reflective of social processes, not personal benefit” (Franke & Shah, 2003, p. 27).

From self-report questionnaires Lawson (2010) found out that the strongest motivators for **non-ownership consumption** were status awareness and environmental consciousness. Other individual difference variables investigated to relate to attitude and intentions were possessiveness, materialism, variety seeking and frugality. Seeking for status and acting environmentally responsible at the same time may appear counterintuitive but as the definition of status and success in life has diversified, consumers prefer products that reflect the concerns for social and environmental matters since these have become personal values. And even if this may still be luxury goods, the perceived need to own them has diminished and the acceptance of a leasing lifestyle has risen (Lawson, 2010; Scholl et al., 2013). As a person's values have been found to influence motivational processes, a number of individual difference variables will be examined in this research (Eccles, J. S. & Wigfield, A., 2002; Parks & Guay, 2009).

b) Other Concepts of Relevance

According to [van den Broek et al. \(2012, p. 2\)](#) on **social entrepreneurship theory** social entrepreneurs “fulfil social needs while creating economic value by offering products or services”. They do so using online platforms for “reach, speed and social infrastructure” ([ibid, p. 6](#)). As Rachel Botsman put it in a TED talk, collaborative consumption empowers “people to make and save money from their assets” ([Botsman, 2010](#)), turning them into micro-entrepreneurs ([Pless, 2012](#)). This research shall help to understand whether this applies to participants in the sharing economy, too, and uses respective items with regard to motivations to do so.

The **theory of planned behaviour** has not been fully employed here as it has been found to predict health-related behaviour¹² better than types of behaviour affected by emotion. As the participation in sharing schemes is not expected to be exclusively based on such behaviour but may indeed be influenced by various emotional feelings this particular theory is only partly applied. Note that the main outcomes are attitude and intention, not intention and behaviour because actual participation was only measured in retrospective (a longitudinal study was no possibility). Thus, the present model investigates at an earlier stage of the behaviour formation process. Also, the theory of planned behaviour involves many complex concepts of key variables (beliefs, controls, etc.) which would have made the study too specific and loosen its explorative character. As advised by [Thomas \(1998\)](#), motivational research should not rigidly adhere to theory only.

In order to focus this work, detailed research into **new technologies** and **online collaboration**, i.e. Web 2.0, social media or open source, have been left aside. These minor subject matters involved are absorbed in the upcoming chapters; **other areas** of research that possibly hold parallels to study in the future, are the makers movement, knowledge sharing, co-creation and crowdsourcing.

¹² Thematic foci of past studies are smoking, drinking, leisure, exercise, health services utilization, nutrition, breastfeeding or condom use.

3.4 Drivers Behind

With regard to economic, cultural and social forces, the global marketplace is changing dynamically (Rifkin, 2001; Lawson, 2010). After the extensive study of many popular science publications and a number of existing academic works on the sharing economy, the emergence of collaborative consumption can be said to be rooted in a group of ecological, technological, cultural and economic factors. They are explained below and summarize the emergence of this socio-economic trend on a **macro-level**.

a) Environmental Concerns

Macro physical environmental changes can lead to consumer response in the form of behavioural changes. Phipps et al. make the case with extensive drought leading to water conservation – an example currently gaining attention in parts of California (Phipps et al., 2013). As a fact, climate change receives growing awareness and so do unsustainable consumption practices (Kuhndt et al., 2013).

As reported by CNN, each year, over 25 % of America's food is thrown away, the U.S. Department of Agriculture estimates; the University of Arizona sees the same number at around 50 % (Oliver, 2008). In her 'Story of Stuff' environmental planner and investigator Annie Leonard discovered that 99 % of consumer materials in product or use "is trashed within 6 months" (Leonard, 2010). Moreover, Rachel Botsman quantifies the part of objects owned by an average US household that is used only once per month or less – it amounts to 80 % (Botsman & Rogers, 2011). An upward number of people gives thought to these alarming developments (Scholl et al., 2010).

What is being done? "Mutualising certain infrastructures, say for example for transport such as carsharing, can have huge positive implications for sustainability" (Bauwens et al., 2012, p. 137). Recycling and the re-use of products are solutions helping to combat environmental depletion and the waste of resources. The practice of sharing products allows consumers to actively reduce their environmental footprints since sharing replaces the need for purchasing new goods.

b) Technological Speed

As can be observed with ICT developments, a continual technological advancement has matured the Internet into "a shared nervous system that links much of humanity",

democratising the access to knowledge onto an “unprecedented level of information egalitarianism” (Mackay & Sisodia, 2013, p. 28). Today, approximately 40 % of our worldwide population is connected to the Internet; in Germany nearly 87 % of people have access to the web (Internet Live Stats, 2015). With this, an ordinary person can tap “virtually limitless information on any subject, anytime, anyplace, instantly [and] at almost zero cost” (Mackay & Sisodia, 2013, p. 28). Networking technology and sophisticated web applications make it easy to find what one searches for (Zukin & Maguire, 2004; Bauwens et al., 2012; Frick et al., 2013). Additionally, new delivery systems and the dematerialization of data storage, e.g. through cloud computing, add up to an increasing permeation of technology in our society¹³. Often, these technology-enabled service ideas are “powered by the social web” (Kolson, 2012) and many social media sides grow rapidly. Next to qualitative content and social interactions, their success can be credited to network externalities (Belvaux, 2011). It is agreed that sharing intangibles on the web scales sharing in the offline environment (Gaskins, 2010a; Bauwens et al., 2012), leading to a dramatic reduction in transaction and communication costs (Schor, 2014). This way, interaction on P2P marketplaces happens directly and cheaper; the threshold to engage declines and so do time and effort necessary for sharing activities and community relationships (Bauwens et al., 2012). With mobile devices, geo-location sensors and online-based coordination the Internet becomes a “magic rental store” and sharing a ‘real alternative’ (Kelly, 2009, p. 1; Gansky, 2012). It can be thought of as an ecosystem of “technology-mediated market-places” (Phipps et al., 2013, p. 1232). Thus, the paradigm-shift based on immaterial needs and social values (read below) gets largely enabled by new technologies (Botsman & Rogers, 2011).

c) Change in Cultural Values

Next to new technologies, consumption spaces are created by changing ideologies and new needs and wants (Zukin & Maguire, 2004). Self-expression is part of this new modernity and today’s consumer societies generate a proliferation of options for the individual. At the same time, a change takes place in the perception of what a desirable lifestyle is. Sharing has become part of the politically correct behaviours that express a conscious and smart urban way of living. Other such social and ecological value creators

¹³ An example of this relentless digitalization is the music industry where access is already superior to ownership.

are saving energy, recycling, walking instead of driving, eating healthy, and do-it-yourself, to name but a few (Scholl et al., 2010; Frick et al., 2013). Promoting the 'age of access' in 2001, Jeremy Rifkin predicted a significant shift from physical assets to social experiences (Rifkin, 2001). Ten years later, David Bosshart calls for the 'age of less' and a new, consciously moderate lifestyle marked by frugality and sufficiency (Bosshart, 2011). With this value change comes greater self-evaluation which in turn can lead to behavioural change and perceived self-efficacy, i.e. the belief in one's own capabilities (Phipps et al., 2013).

A concept that has gained momentum again in the sharing debate and that relates to simple living is called 'voluntary simplicity' (Marchand et al., 2010). Voluntary simplifiers especially foster sustainable consumption patterns like choosing greener and socially responsible products or services and overall consuming less. The practice counteracts dominant consumption standards "in contemporary industrially developed countries" (Shaw & Newholm, 2002; Marchand et al., 2010, p. 1433). Here, the young and opportunistic generations prefer goods and product-service systems that help saving "time, money, and care in replacement, maintenance or repair" (Marchand et al., 2010, p. 1441). Pursuing the 'good life', Generation Y stays independent, commits less, explores more – for instance different work and family formats (Frick et al., 2013). With an urban lifestyle and the need for mobility and flexibility, ownership becomes an obstacle. Adding to this, our personal spheres are oversaturated and the interest in material property and wealth declines. Personal definition and differentiation no longer happen via material possessions but through experience and immaterial property. True to the saying 'money can't buy you happiness', Bauwens et al. make reference to an 'experience economy' (Bauwens et al., 2012) while journalist and digital consultant Simon Smith blogs his 'transumer manifesto', declaring experiences to be more satisfying than purchasing material things (Smith, 2010). And correctly so, researchers have long found well-being not to be correlating with material wealth (Kahneman, 2010; Karmann, 2013). This increasingly "critical attitude towards material prosperity" and a discourse on non-sustainable consumption have become factors driving the sharing economy (Heinrichs & Grunenberg, 2013). This being said, sharing supports the participants' value priorities like anti-consumption, volunteering and environmentalism (Ozanne & Ballantine, 2010). This concrete psychological and cultural shift in parts of the population is in line with value change theory based on the World Value Surveys by Inglehart (Delhey, 2009, p. 30) who

noticed a “pattern towards post-materialist happiness [...] driven by [...] a devalorization of material concerns”. In ‘Better than owning’, Kevin Kelly¹⁴ wrote about the burden of ownership, a perceived change towards post-materialist practices and a belief that soon, “access trumps possession” (Kelly, 2009, p. 1). Thus, omni-access seems to be superior because it delivers “the same benefits with fewer disadvantages” (Bauwens et al., 2012, p. 133).

Along the same road comes a somewhat new design-related thinking and trend towards ‘design-for-sustainability’ or ‘creating-for-sharing’: product-service systems that give access to convenience needs, comfort and quality of life (Worldchanging, 2007). Along with station-free car or bike sharing – as observable with DriveNow or [Social Bicycles](#) – it is the simple solutions for urban life, centering around space, mobility, safety and neighbouring, that appeal to a wide community.

Adding to this, a deep “mutualization of knowledge through open source practices and [...] shared innovation commons” has paved the way for access infrastructures, away from isolated and maximized consumption towards individual scarcity in favour of use communities (Bauwens et al., 2012, p. 149). This shift in vision and perspective of life has promoted the evolution of product-service systems and collective ownership models.

d) Economic Difficulty

In some places, a certain mistrust in ‘the system’ drives the search for new ways of acquiring the products or services people want and need – at smaller personal and environmental cost (Gansky, 2011). With the global recession, state debts and perceived political powerlessness (European Social Survey, 2012), for many people a tipping point has been reached where egoistic values have become enemy traits. This “economic climate marked by growing uncertainty and precariousness” sets the course for alternative consumption schemes (Bauwens et al., 2012, p. 339). Moreover, stagnating or shrinking income of the middle class forces societies to make more out of what is available. As Nobel prize winner Elinor Ostrom argued in her work on the management of common property, this will only be possible through sharing (Ostrom, 2011). Thus, collaborative consumption represents a fast, smart, and social way to reduce the

¹⁴ Kelly is the founder of WIRED, an online magazine on future trends in technology.

utilization of resources and distribute them intelligently – above all in the light of worldwide resource shortages.

On that note, economic difficulty and the need for local resilience is another driving factor. Richard Heinberg¹⁵ argues that the decentralized and mutualized provision of necessities makes a lot of sense in a period marked by austerity politics and resource depletion (Heinberg, 2012). He brings forward pragmatic, not ideological, reasons for the social sharing movement, mainly being the urgency to reduce dependence on states and financial institutions when it comes to providing basic commodities in life. In response “to a daunting and worsening set of environmental [...] problems” and “in the context of a shrinking economy”, Heinberg anticipates this vital shift to be the “fight of the century” (Heinberg, 2012, p. 2).

e) Business Potential

While the interest in and demand for sustainability and responsibility grows, conscious consumers become the target for businesses to capitalize on the trend of environmental awareness by bringing alternative consumption modes to the market (Lawson, 2010). Rachel Botsman estimates the consumer P2P rental industry to mount to \$ 26 b (Botsman & Rogers, 2010), others value it at \$ 110 b (Horowitz, 2013). From mid-2010 onwards, investors started to take an interest in these themes and in 2011, Jeremy Barton¹⁶ estimated venture capitalist investment in P2P marketplaces to be \$ 257 m (Bauwens, 2012; Buczynski, 2012).

Moving back to the participants’ side, with collaborative consumption all involved parties can accomplish savings – after all, services are mostly obtained at lower costs (Schor, 2014). This holds true for individuals and communities on the demand side and for infrastructure and service platforms, as well as providing individuals on the supply side (Sasserath, 2013). Research from related fields shows that financial aspects are rarely the sole motivators (Lindenberg, 2001; Bauer, 2006; Boudreau & Lakhani, 2013). Likewise, in the sharing economy, it is crucial to understand why people participate. The next chapter examines the sharing economy’s potential gain creators on a personal i.e. **micro-level**, ranging from economic and functional to emotional and societal.

¹⁵ Heinberg is author, educator, speaker and senior fellow at the Post Carbon Institute.

¹⁶ Barton is co-founder of [Legit](#), a reputation credit system for the sharing economy that recently [joined Facebook](#).

3.5 Benefits of Participation

Since the German top technology fair CeBIT adopted the theme 'Shareconomy' in 2013, the growing collaborative consumption trend has experienced an enormous gain in awareness. Expectations are high: Participants and authors of various studies conclude that the world's situation could be improved sustainably and society could become more humane if people would share more (Frick et al., 2013). Gansky predicts the rapid expansion of the sharing economy while in the majority of consumer product markets appropriate sharing platforms already exist (Gansky, 2010). Still, it remains to be seen whether the often postulated massive economic potential (Economist, 2013; Forbes, 2013) can really be expected from the sharing economy. A number of expected **individual benefits** as highlighted in previous research are listed below:

a) Economic

Possibly the most promoted and obvious reasons to engage in collaborative consumption are of economic and individualistic nature: 'Saving money' has been found to be the top benefit in a 2012 US consumer study by Carbonview Research (Kolson, 2012). That is because costs and expenses get reduced through second hand purchases and the reuse of products (Marchand et al., 2010; Gerstner, 2014). When renting out physical spaces, the "revenue production potential of private houses" becomes highly relevant to sharing (Bauwens et al., 2012, p. 340). This monetization aspect of sharing is by far the most cited one (Bagó, 2011; Bauwens et al., 2012; Hamari et al., 2013; Khan, 2014). Further, the exchanged product or service itself is an element to look at: Quality and uniqueness of the received commodity, i.e. the fact that it cannot be found elsewhere, reflect another economic reason – mainly with regard to the price-performance ratio (Gerstner, 2014; Owyang et al., 2014).

b) Practical and Rational

Practical reasons are considered an intriguing motivational factor, too: First, sharing often is convenient in coordination and transaction and thus a favoured way to acquire things. In a recent study titled 'Sharing is the new buying' 75 % of respondents named convenience as a reason "for using a peer-to-peer site" to participate in their last sharing activity (Owyang et al., 2014, p. 19; Khan, 2014). Next, considering the maintenance of

objects, it can be expected that sharing or giving away goods will decrease time and effort spent on them because the (temporary) disposal of things being rarely used allows to invest one's spare energy and resources elsewhere (Marchand et al., 2010). In connection to that, using something only once usually does not require buying and possessing it. To many, lending or swapping the item poses a reasonable, rational solution (Böckmann, 2013). Moreover, through sharing, the consumer becomes more independent from conventional providers and their conditions (Marchand et al., 2010). Being able to access an array of products for a flexible time span is an appealing model for participants of library concepts or in the areas of e.g. fashion or media sharing. A similar motive that has been reported before is that of 'trying before buying' (Phipps et al., 2013).

c) Social and Emotional

That sustainable consumption patterns are motivated through a personalized value and certain beliefs rather than anticipated economic outcome expectations has been realized before (Vergragt, 2006). Researching on an example of toy libraries in New Zealand, Phipps et al. found "a supportive social environment", i.e. a community with similar values, being a reason that reinforced future participation (Phipps et al., 2013, p. 1230). Collaborative consumption activities strengthen social cohesion and support sufficient behaviours (van de Glind, 2013; Owyang et al., 2014). Referring to 'companionship', Belk calls sharing "a communal act that links us to other people" (Belk, 2010, p. 717). The attached social benefits come with sharing: Participation brings joy, recognition and thus, self-confidence and satisfaction (Bagó, 2011; Hamari et al., 2013; van de Glind, 2013; Owyang et al., 2014). A participation in sharing can be triggered through social networks and word of mouth, i.e. the recommendation of friends (van de Glind, 2013; Wall Street Journal, 2013; Owyang et al., 2014) or self-expressive fans of a sharing service on social networks (Wallace et al., 2014). Sharing is further facilitated by a certain altruist tendency to helping other individuals: The criterion 'generosity to myself and others' ranked as top emotional benefit in the afore mentioned US consumer study by Kolson in 2012. The author further explains that while "rational benefits center on reduction and practicability, emotional ones deliver affirmation and belonging" (Kolson, 2012, p. 2). It is thus also natural that people talk about their experiences and express their positive attitudes (Lawson, 2010; van de Glind, 2013).

d) Ecological and Ideological

As a last category of perceived benefits that come with sharing, a number of ideological and ecological motives shall be summarized. Research suggests that environmental consciousness and with it, the green marketing of products increases. As Lawson puts it, transumers participate in the leasing lifestyle to move away from cluttered materialism towards non-ownership consumption (Lawson, 2010). Things they *do* buy are to “reflect their concern for the environment and social issues” (Lawson, 2010, p. 842). A last motivational factor in terms of sustainability and reducing the individual environmental impact is the wish to adopt a healthier way of living and to “avoid unnecessary environmental burden” (Bagó, 2011; van de Glind, 2013, p. 25; Owyang et al., 2014).

People that have given the matters of sharing serious thought may even prompt to explicitly say *I value access over ownership*. Nevertheless, for a person to say so, there must certainly be underlying root causes that the above presented reasons attempt to cover. Therefore this motive has *not* been included as survey item; all others are summarized below – collected from literature and personal discussions.

Label / Colour Code	Survey Item to Be Rated	Literature Source
Extrinsic Motivational Factors		
Economic Reasons		
Savings	It came at a better price, so I needed to invest less or no money.	Bagó, 2011; Kolson, 2012; Frick et al., 2013; Owyang et al., 2014
Quality	I received superior quality, compared to a traditional offer.	Owyang et al., 2014
Monetization	I earned money with it.	Bauwens et al., 2012; Hamari et al., 2013
Practical / Rational Reasons		
Convenience	For me, it was just convenient and practical to share.	Frick et al., 2013; Owyang et al., 2014
Uniqueness	I couldn't find the product (or service) elsewhere.	Owyang et al., 2014
Dispensability	There was no need to buy and possess it myself.	Owyang et al., 2014
Autonomy	I liked being independent from traditional providers.	Marchand et al., 2010
Trial	I wanted to try the product before buying it myself.	Phipps et al., 2013

Label / Colour Code	Survey Item to Be Rated	Literature Source
Intrinsic Motivational Factors		
Social / Emotional Reasons		
Word of mouth	It has been recommended to me, so I was curious.	van de Glind, 2013; Owyang et al., 2014; Wallace et al., 2014
Enjoyment	It's fun – I enjoyed it.	Bagó, 2011; Hamari et al., 2013; van de Glind, 2013; Owyang et al., 2014
Social cohesion	It allowed me to meet interesting people – online and locally.	Bagó, 2011; Frick et al., 2013; van de Glind, 2013; Owyang et al., 2014
Altruism	I like being generous to myself and others, it's satisfactory.	Kolson, 2012; van de Glind, 2013
Self-marketing	It's a cool new initiative and I like talking about it.	Lawson, 2010; van de Glind, 2013
Ecological / Ideological Reasons		
Lifestyle	It's my personal interest to lead a healthy life.	Bagó, 2011; van de Glind, 2013, p. 25; Owyang et al., 2014
Environmental consciousness	I consider throwing away goods and not utilizing spare resources as counterproductive to sustainable lifecycles.	Lawson, 2010; Frick et al., 2013; van de Glind, 2013
Indirect reciprocity	I believe one day I will gain something in return for helping out others.	Klein, 2010; Chen & Hung, 2010

Table 2: Elaboration of motivational factors from literature (Q10)

Ultimately, a user's motivation is to strive for one or more of the perceived benefits and value creating factors mentioned above. Thus, for the purpose of this investigation, these **benefits equate with the motivational factors** of a participant in the sharing economy. To solve the research question, the items above will be rated with different answer options¹⁷. In the end, it is assumed that participants' outcome expectations, i.e. motivations, influence attitude and behavioural intention towards sharing (Phipps et al., 2013). The research model can be seen in Figure 2. It presents the independent variables (predictor, antecedent) which are thought to influence the dependent variables (criterion, effect, consequence) (Blumberg et al., 2008).

¹⁷ Options are: *I agree, I'm neutral, I disagree, not applicable*.

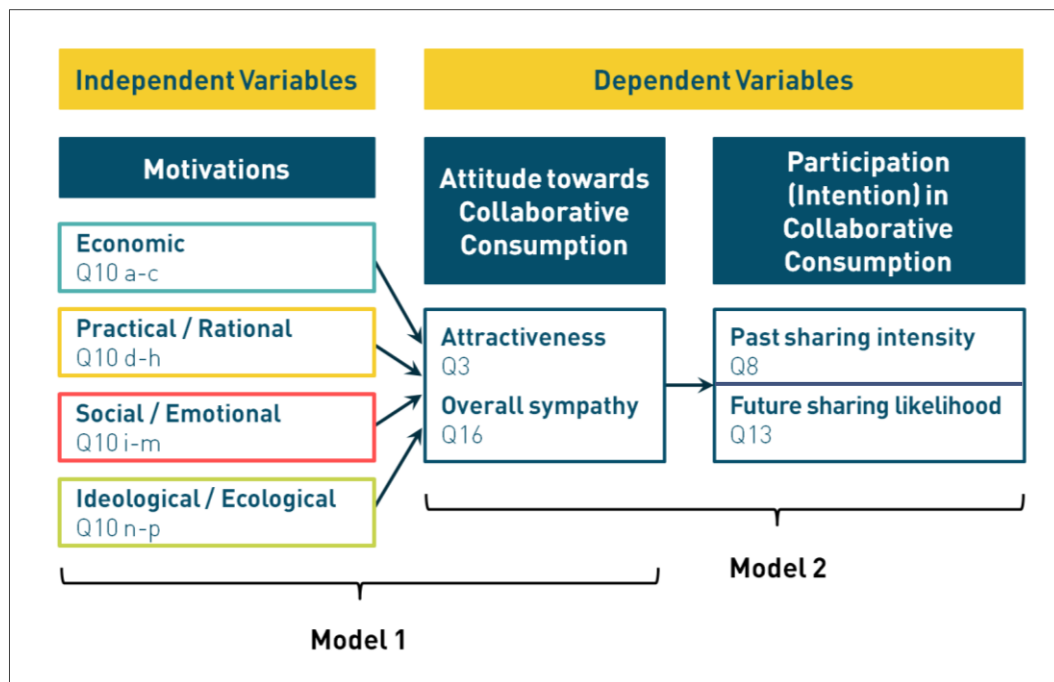


Figure 2: Research model

Most constructs and items applied in this model are derived from past works and represent proven measures as indicated in the above **Fehler! Verweisquelle konnte nicht gefunden werden.** Mostly, the original English items were adopted; slight modification to fit the context are an exception. A comprehensive translation into German was elaborated and double-checked by a linguist. Before describing the methodological approach taken, I want to turn attention to critics' arguments against the sharing economy in order to get a differentiated picture.

3.6 Conditions, Constraints & Critique

Broadly speaking, developed markets where people possess private property and access to the Internet is a requirement for sharing. Beyond these, [Botsman & Rogers \(2010\)](#) have put down four structural elements for a sharing space to work out: a critical mass of people, idling capacity of a good and a general belief in the commons. According to [Sasserath \(2013\)](#), Germans demand further **preconditions** for sharing, to be specific: insurance of the good (54 %), reliability of the identified lending partner (20 %) and sharing platform (11 %), plus the verification of personal data (11 %). From this, the two main concerns of people can be deduced: fear of privacy invasion and that of material loss. Naturally, these motivational reasons lead to refused engagement in the sharing economy. And indeed, trust is a "decisive condition" as the commercial reputation of

strangers becomes part of the sharing deal¹⁸ (Smith, 2010; Pick, 2012; Rinne, 2013). On top, it is issues of quality and value that makes non-sharers reluctant (Kolson, 2012). It will be a sub-focus of this thesis to find out more about the restraints to sharing.

With regard to **critiques on the term**, Frick et al. (2013) argue that the carsharing market has little peer-to-peer character anymore: Industry players enter to join fleets with smaller cars to be able to sell larger volume cars and still complying with CO₂ average requirements. In contrast to positive prognoses, lower actual carsharing adoption rates and an ever increasing number of new vehicle registrations, e.g. in Berlin, speak for a limited carsharing success (Dierig, 2015).

Opponents of the sharing theme point out a number of related risks and dangers: Derived from Bolton et al.'s (2006) research into boomerang effects, there is evidence that gives reason to believe people "may treat pro-environmental behaviors as an excuse to engage in less eco-friendly practices later on" (Phipps et al., 2013, p. 1230). In connection to this, counter-sustainable influences and negative consequence arise – for instance, paper use may increase with widespread paper waste recycling; or, elevated consumption efficiency and cheaper prices can lead to more demand and higher actual consumption (as e.g. with petrol use and heating units). Similarly, carsharing may cause more congestion or emissions than people would generate without this opportunity and thus not travelling in the first place. These **rebound phenomena** can offset the original advantages of collaborative consumption which is why a more nuanced understanding of such unintended effects would be valuable. Fortunately, more and more data is about to be generated but not much profound research has been published to date¹⁹.

Also, the sharing economy has been under fire for the erosion of workers' rights (Strauss, 2013; Fründt et al., 2014; Schor 2014; The Economist 2015). TaskRabbit, for example, may lead people into **dependency** and precarious job situations: The rabbits get evaluated after each task done and negative feedback can cause them to be jobless (Frenken et al., 2015). Along this trend, the part of US workers being freelancers (one third) is expected to rise (Shapiro, 2012). Further, the sharing economy creates **new competition** for regular companies: UberX, an app that enables car owners to act as taxis, license-free. Critiques

¹⁸ This issue of credibility has become the business model of reputation platforms such as the formerly mentioned Legit and [Trustcloud](#), a credit system that gathers information to certify service providers on P2P sites.

¹⁹ A list of articles has been collected by the Journalist's Resource Project, based at Harvard's Shorenstein Center on Media, Politics and Public Policy ([Penn & Wihbey, 2015](#)).

refuse the service to be a form of the sharing economy since without it, most drivers would not have made the trip at all (Meelen & Frenken, 2015). However, when used for carpooling, idle capacities, i.e. empty seats become occupied and thus utilised. The same criticism applies to users on Airbnb that permanently rent out flats they do not live in themselves – in some places, this is illegal²⁰. It may threaten local hotel industries and cause higher rents as available apartments become less (Orsi²¹, 2009; Geron, 2012 & 2013; Schor, 2014). Further critique lies in overrated environmental gains and the tendency towards monopoly. Yiannopoulos (2013) queues up with these and calls sharing a 'cult'. Kalamar (2013) cautions about 'sharewashing', i.e. the practice of platforms to shift risks to employees, while Baker (2014) sees the trend dying against regulations and the law.

As said, few studies exist that illuminate consumer surplus changes or prove a significant magnitude of negative effects. In contrast, Scott Wallsten from the New York Technology Policy Institute for instance found Uber's growth to be "associated with decreases in per-trip complaints²² to the city" (Wallsten, 2015, p.20). Thus, taxis improved quality as a response to Uber competition which in turn also benefits traditional customers.

Overall, support for or opinions against the sharing economy are dependent on whether it is perceived as a "threat to local businesses or an opportunity to improve economic growth" (Minder & Scott, 2014, p. 1). In either way, terminology and scope of the sharing economy are controversial. Yet, the impact is there – even though hardly quantified so far (Schor, 2014). Both problems and promises will be subject to further scientific research but do not influence the study at hand.

²⁰ In Berlin for instance, short-term rental is banned without the approval of authorities.

²¹ Janelle Orsi is a sharing lawyer and director of the non-profit Sustainable Economies Law Center Oakland California and author of the book *Practicing Law in the Sharing Economy*.

²² Complaints for example concerned „broken credit card machines, air conditioning and heating, rudeness, and [drivers] talking on cell phones" (Wallsten, 2015, p. 1).

4. Methodology

„Without sufficient methodological rigor, research findings will lack credibility, and without sufficient theoretical development, the same findings will be difficult to apply and build upon.“

Phipps, M. et al., 2013, p. 1233

In general, as a researcher of motivations, one shall take an „eclectic, wide ranging and open-minded philosophical perspective“ ([Thomas, 1998](#)). It must be acknowledged that I absorbed the idea of sharing in such a way that I am no longer independent concerning the topic of my choice. Thus, a qualitative approach felt no longer viable which is why I chose a quantitative instrument instead. Still, the model on page 35 does not formulate ‘cast in stone’ hypotheses but rather certain outcome expectations evolved from literature and preliminary research.

4.1 Pilot Study

a) Online Research

Next to desk research on literature, an **online news observation** of the sharing space and its participants was undertaken. This rather unusual research method, due to selectivity and subjectivity ([Pick, 2012](#)), involves a systematic scanning of the blogosphere, websites, Google alerts, Twitter feeds and similar sources. The so collected insights helped draw an image of the people taking part in sharing schemes. Through prolonged observation, the group under study and their consumption patterns, practices and values could be understood better ([Creswell, 2003](#)). The same was done with regard to collaborative consumption trends: All information on new ventures, new tendencies, surrounding business models, policies and else was taken in, e.g. via Google News or [Quora](#).

To give an example: In the web, the words ‘carsharing’, ‘carpooling’ and the like are most prominent in the context of lifestyle topics, consumption tips, new technologies and gadgets or in debates centred around smart, environmentally aware consumption, mobility services and apps or food and travel. Words associated most with carsharing were: ‘green’, ‘change’, ‘mobility’, ‘services’, ‘electronic cars’, ‘better’, ‘sustainable’, ‘social’ and ‘network’. This corresponds with [Frick et al.’s \(2013\)](#) conclusion that to actors in the collaborative economy *sharing* is more important than the *car*.

b) Offline Research

Out of interest and in order to dive deeper into the field of collaborative and sustainable consumption, I visited a number of **special events**, for instance the City Link Congress Hamburg on cities, culture and sustainability, the Leipzig Degrowth Conference and local events of the Junior Economic Chamber Dresden and the Berlin Institute for Ecological Economy Research. With meeting these experts and other peers, plus myself taking part in sharing transactions, it was frequently talked about why and under which conditions people used a service. Also, I lead discussions on related ideas or exchanged episodes and advice from past experiences. One could call these **participant interviews**.

In this “initial exploratory research stage” (Marchand et al., 2010, p. 1435) I abandoned the option of producing visual or audio data in order not to disturb, influence or confuse the conversation partner. In fact, these were merely interviews but rather encounters or Q&A chats at different events, i.e. when people were not even aware of the reason for my presence – and, at the beginning, neither was I, being in the researcher-participant mode. Later, to avoid embarrassment or stress, writing protocols felt unnecessary and saved operational difficulties. Instead, I took field notes at maximum to keep it to a natural environment. With regard to other methods, personal or video observation would have been too expensive and inconvenient while for the nondirective style of focus groups it is difficult to achieve spontaneous interaction (Thomas, 1998).

4.2 Main Study

Altogether, the pre-study represented over 400 hours of online and participant observation, allowing for a first examination of underlying reasons for people taking part in co-consumption schemes. To validate or disprove these, a **quantitative survey** served as main empirical study instrument. It comprised 23 questions, divided into 5 parts (Table 3).

	Part	What it is about	Questions
1	Introduction	Experience with and attractiveness of sharing types	01-03
2	Explorative I	Personal attributes, values and attitudes	04-06
3	Main topic	Recent participation, motives for / against, giver / taker	07-11
4	Explorative II	Future development and intention	12-16
5	Demographics, Explorative III	Control variables and factors potentially influencing the decision to participate	17-23

Table 3: Structure of the survey

Employing a uniform survey allows for structured data being gathered from a single, primary source. In-between messages added to the logic order, context and relevance to keep participants focused and to avoid rushed responses. Questions 8 and 11 divide the sample into participants or non-participants in sharing schemes as well as into providers of own resources or recipients of others' resources. With the exception of two follow-up questions, all participants received the same questions so that (significantly) different answers could be traced back to their response pattern and group characteristics.

The **survey platform** to be considered needed to allow question-answer-piping and multiple languages. [Typeform](#) became the tool of choice. On a single-page survey users were able to zip from one question to the next, just like an interactive conversation. A *pro* account was acquired to profit from superior design options. Upon survey completion, many respondents left a note of praise in the comment field. [Appendix 2](#) shows a screenshot from the Typeform survey page tracker including information on the time spent and devices used for survey completion.

With regard to human **language** a match was found between clear, scientifically correct but colloquial language. Therefore, the German translation addresses participants informally by saying 'Du' instead of the formal 'Sie'; Also, the wording of items was designed carefully to form a parsimonious survey that is easy to grasp and not to be misunderstood.

Qualitative answer categories were uniform and consistent to the respective question. Alternatively, numerical scales were applied, mostly with five points. Four-point scales have been used only to compare to other results found in recent reports or in the media. A short comparison of pros and cons on **neutral answer options**, i.e. 'prefer not to say' options and odd-numbered Likert scales, is worth mentioning: First, **proponents** argue that *abstention*, i.e. a no-vote, reflects as much an opinion as the scale extremes do. This way, it avoids a forced choice and guarantees an explicit answer. After all, reality leaves the possibility for in-between options without a clear yes or no tendency, too. Also, the alternative of 'I don't know' is viable as it predicts the entirety of a group better. Similarly, 'not applicable' gives participants the chance to opt out of a single question instead of quitting the whole polling process. Overall, neutrality is preferred over not answering at all or, worse, not answering truthfully and randomly as the latter distorts the result. [Schnell et al. \(1999\)](#) advise to allow neutral answer options like 'no opinion',

‘undecided’, ‘neither’ and found out that for certain questions a participant share of 10 % to 30 % gave a neutral option once this category was available – which in reverse means these participants would have given a wrong answer otherwise. In contrast, **opponents** argue it possibly impedes a clear analysis of results as there may be different reasons causing a participant to opt for the answer choice in the middle²³. This survey used a mix of questions with a tendency of providing neutral answer options to avoid misinterpretation or discomfort and thus non-response, making it a supportive and structured multiple-choice survey experience (Malhotra et al., 2012). Moreover, sensitive items such as net income were moved towards the end. Open-ended questions capture additional thoughts and remarks of respondents but can be skipped.

a) Data Collection & Measurement of Constructs

The empirical study at hand involves no particular industry but reaches out to average consumers in Germany, representing the analysis unit at individual level. To approach potential participants, a short introductory note including a link to the survey instrument has been distributed via multiple online networks. Mainly, these were Facebook, Twitter, XING and e-mail distribution lists; for an impression see [Appendix 3](#).

Since this study is of **explorative nature**, no distinct hypotheses have been postulated. Thus, no predictions about the phenomenon are to be explicitly confirmed or denied. Rather, the results will hold a number of answers to the research questions posed earlier. Therefore, in the following, it shall be explained how certain constructs elaborated in previous chapters have been operationalized in the survey. As commonly required in quantitative empirical studies, the applied measures are assessed in terms of reliability and validity.

Beyond efficiency reasons like a broader geographic coverage, wider accessibility and little processing errors, a number of other attributes spoke in favour of applying the chosen research method: Advantages such as a decreased interviewer bias, targeted sample selection, process efficiency and cost effectiveness are clear advocates of **online surveys**. What increasingly holds potential participants back from answering or completing online questionnaires are data privacy concerns. Reportedly, this lowers

²³ Possible reasons for neutral options are manifold and thus difficult to capture; examples can be: ‘sometimes yes’, ‘sometimes no’, ‘I don’t know’, ‘I don’t want to comment on this’, ‘I don’t find this important’, ‘I don’t like this question’.

response rates (Rogelberg & Stanton, 2007; Shih & Fan, 2008; Dillman et al., 2009). To counteract a possible non-response bias, a few facilitating steps were taken: A data protection advice followed suit after entering the survey, informing respondents about purpose and usage of their answers and assuring anonymity. This way, respondent confidentiality and consent issues have been dispelled. Moreover, a manageable survey length of only ten minutes was communicated before start²⁴ and five Amazon vouchers were offered as monetary incentives to activate participants (Pickreign & Whitmore, 2012). Further fixes against non-response seemed overly complex, not fail-safe either and too costly (Peytchev, 2013). Additionally, to prove authenticity, a photo of the researcher and the institutions' logos introduce the survey's entry site. Together with a personalized or otherwise relevant advance note accompanying the survey link, respondents were approached in the most suitable manner. Next to distributing it myself, a number of Facebook pages and initiatives were kind enough to post the survey invite onto their walls, helping to spread the word, limit truthfulness concerns and increase credibility. Nevertheless, with participants from an online environment, strong encouragement to really take the survey or a possibility to follow-up are hardly given. Moreover, survey completion depends on external factors, too, such as the algorithm Facebook uses to show or hide posts on an individual's news feed. For the survey invitation to be visible to a potential participant, that person had to be member, follower or subscriber of a page or group the link was posted to. Thus, an effective response rate is impossible to calculate. Certainly, the specific topic does not appeal to every user and a partly pre-selected sample is not ideal. All considered, the approach described is still taken for the best possible and most feasible option.

Since no direct motivation to participate in the survey existed – especially for people who have not yet been involved in sharing –, **convenience sampling** had to be applied. In other words, data is pulled from those sample units easiest to access. This allows for speedy data collection and a quick formulation of results. With regard to fairly new fields of research, gathering information rapidly helps isolate growing trends. Nevertheless, this straightforward method has disadvantages. Obviously, the results cannot be treated as representative depiction of the general population as the possibility of over- or under-representation of a particular group cannot be ruled out. Still, it is indeed a widespread

²⁴ A pilot test with five respondents as well as supervisors' feedback helped to recognize points of fatigue, to sharpen the survey and verify the time respondents needed to complete the survey.

sampling technique when representative results and replicability are not the number one research objective. Therefore, it is important to resist the tendency of extrapolating to the general population. Treating data results as what they are, they still provide accurate correlations and valuable results as to how variables relate to each other. For a summary of pros and cons of the research method applied, that is convenience sampling in an online environment, please see [Table 4](#) below.

Pro	Contra
Speed	Truthfulness concerns
Flexibility	Privacy and legal concerns
No interviewer bias	Inadequate response rate
Cost effectiveness	Risk of collecting biased results
Privacy and anonymity	Only generalizable for similar subjects
Error-free online data recording	Incomplete conclusions
Ease of access to respondents	No possibility to track for completion
Good for time-sensitive research	
Affordable	
High participation return	

Table 4: Pros and cons of the chosen research method

The survey was active for one month in total, including pre-tests. Data collection stretched over 20 days, starting early March 2015 but promotion mainly happened during the first week. The socio-demographic attributes of the dataset are shown below.

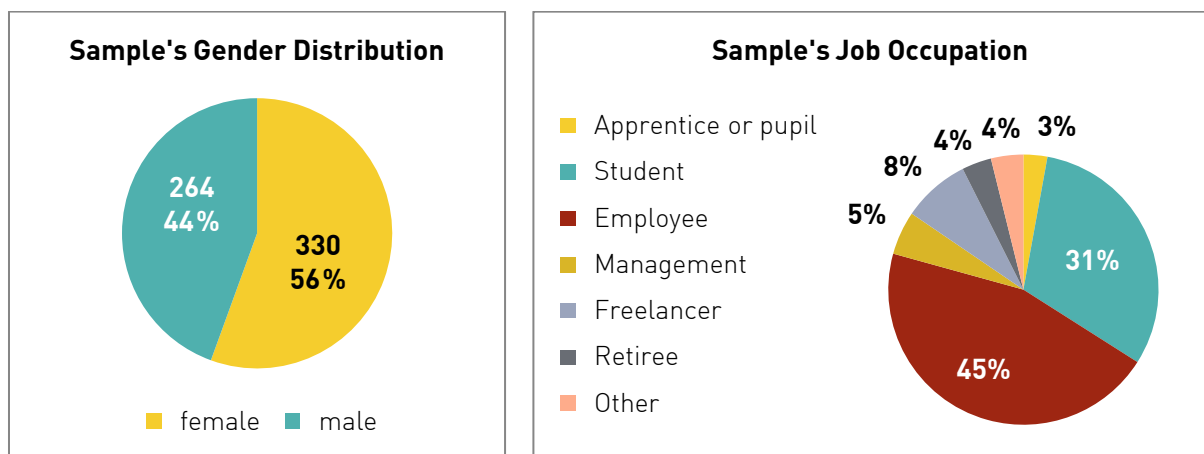


Figure 3: Sample characteristics I

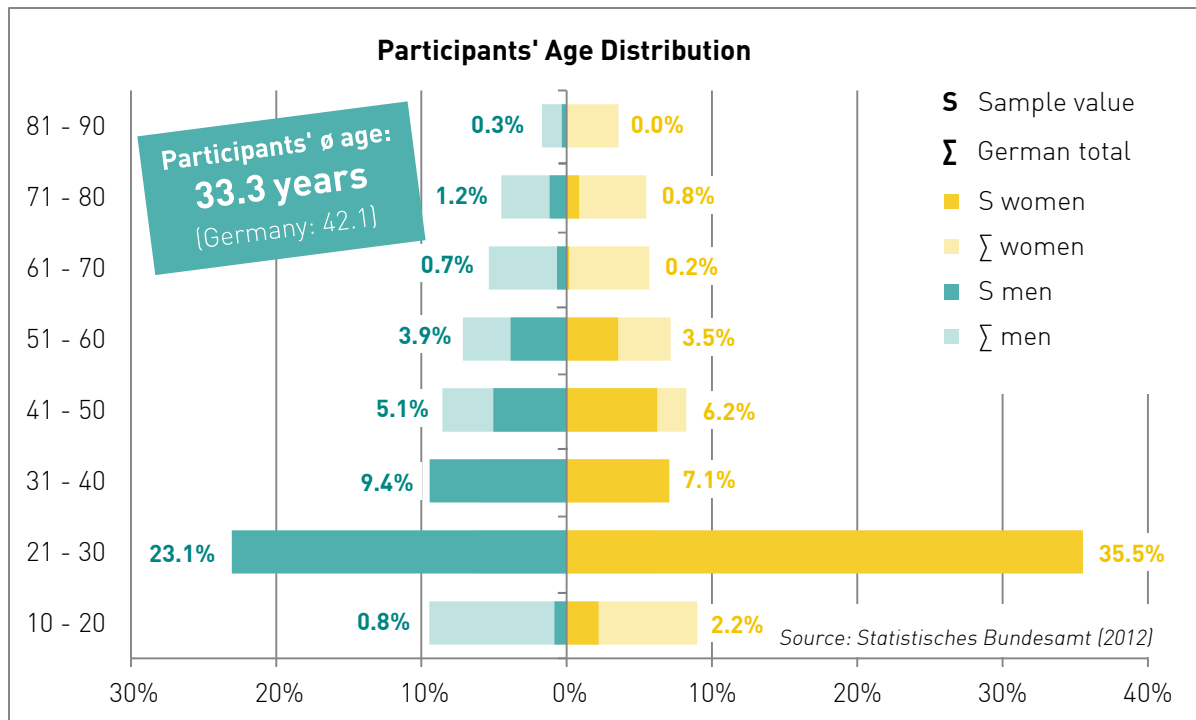


Figure 4: Sample characteristics II

The sample consists of more females (56 %) than males (44 %) and holds a large share of students: 31 % compared to less than 4 % nationwide. Furthermore, it can be concluded that age group 21 to 30 is clearly overrepresented. From the distribution of ages, a picture can be drawn with regard to generations portrayed in the sample (Figure 5). How age influences sharing affinity will be discussed later on in chapter → 6.

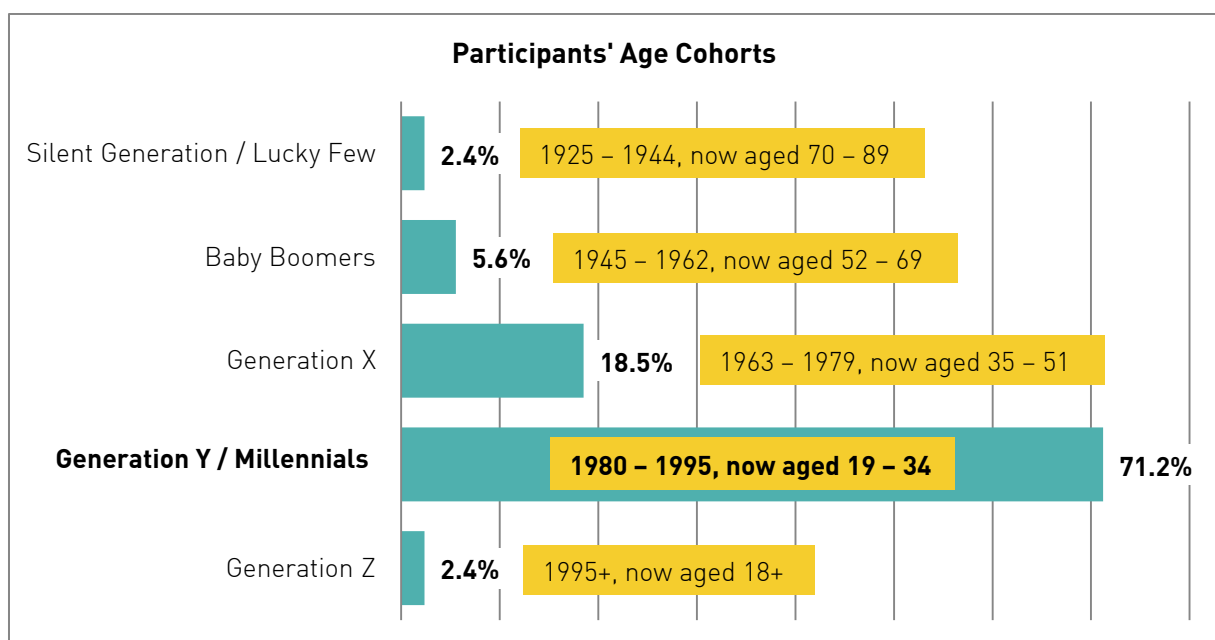


Figure 5: Sample characteristics III

In the following, all model-relevant variable constructs are operationalized and assessed based on consistency, reliability and validity. Also, control variables are thought to have an impact on the research model and therefore find explanation below. The complete survey is listed in [Appendix 4](#).

Construct	Label	Code	Item
Economic Motivations	Savings	Q10a	It came at a better price, so I had to invest less or no money.
	Quality	Q10b	I received superior quality, compared to a traditional offer.
	Monetization	Q10c	I earned money with it.
Practical / Rational Motivations	Convenience	Q10d	For me, it was just convenient to share.
	Uniqueness	Q10e	I couldn't find the product (or service) elsewhere.
	Dispensability	Q10f	There was no need to buy and possess it myself.
	Autonomy	Q10g	I liked being independent from traditional providers.
	Trial	Q10h	I wanted to try the product before buying it myself.
Social / Emotional Motivations	Word of mouth	Q10i	It has been recommended to me, so I was curious.
	Enjoyment	Q10j	It's fun – I enjoyed it.
	Social cohesion	Q10k	It allowed me to meet interesting people – online and locally.
	Altruism	Q10l	I like being generous to myself and others, it's satisfactory.
	Self-marketing	Q10m	It's a cool new initiative and I like talking about it.
Ideological / Ecological Motivations	Lifestyle	Q10n	It's my personal interest to lead a healthy life.
	Environmental consciousness	Q10o	I consider throwing away goods and not utilizing spare resources as counterproductive to sustainable lifecycles.
	Indirect reciprocity	Q10p	I believe one day I will gain sth. in return for helping out others.
Attitude towards Collaborat. Consumpt.	Perceived attractiveness	Q3	Let's assume [...]. How attractive is it for you to borrow such objects or use them together instead of buying or owning them?
	Sympathy	Q16	All things considered, how do you feel about the principle of 'sharing instead of owning'?
Participation in Collaborat. Consumpt.	Past sharing intensity	Q8	During the past six months, have you participated in one or more sharing activities, coordinated via an online platform?
	Future participation intention	Q13	Is it likely that you yourself will (more) frequently participate in the future?

Table 5: Operationalization of constructs

Control variables may affect the dependent variables or the relationship between independent and dependent variable. Corresponding items have mainly been collected in the final part of the survey. Literature indeed suggests a set of variables possibly having considerable effects. For instance, previous studies assign an influencing role to age, gender, internet usage and income level of actors in the sharing economy (Frick et al., 2013; Owyang et al., 2013; Zipcar, 2014; PwC, 2015). Age was measured as a continuous and gender as a binary variable while income and internet usage utilised a ratio scale range and a 'prefer not to disclose' option. It is claimed that sharing appeals to the younger more than the elderly (Reuters, 2014). Moreover, differences in participation may be attributed to a participant's income (Frick et al., 2013; Fraiberger & Sundararajan, 2015). None of the controls have been included in the research model. Data on e.g. the participants' internet affinity has still been compiled to provide additional contextual information.

Internal consistency reliability tests are a technique to ensure all items deliver consistent scores and constructs are thus measured correctly. Cronbach's alpha allows a researcher to evaluate this reliability. Scoring between zero and one, with 0.7+ being the generally accepted standard (Nunally, 1978), it is a method to determine how well the survey addresses the studied variables and delivers reliable results. Unfortunately, the four motivational groups do not completely reach the recommended threshold (0.564 to 0.716).

Construct validity describes the degree to which a construct captures what it is supposed to and is therefore highly relevant to scientific research like this (Saunders et al., 2009). With regard to the main research part on motivations of participants for sharing, all scales applied in the survey are derived from established studies so that operational definitions should thus reflect the theoretical framework behind. Overall, cross-construct correlations provide evidence that items are adequately grouped into the respective categories.

Similarly, **content validity** is given due to the fact that most measures have been applied multiple times in previous studies. However, the concepts of *attitude* and *participation* were newly developed. Here, it is also a matter of practicality and logic when assessing validities. The pilot study and seeking advice from peers are thought to have minimized mono-method bias. Still, the actual effect of a variable can be clouded – threatening

construct validity – e.g. through participants guessing an hypothesis and thereupon changing behaviour, or through definition and mislabelling errors.

Cross-item correlation matrixes can be found in

. The most significant correlations are positive whereas their magnitudes are rather low (.104 to .524). The values suggest that *perceived attractiveness* and *overall sympathy* towards the idea of collaborative consumption are positively related to *past* and *future participation*. Still, the values measured here reflect a linear relationship only. Thus, even though a correlation value is close to zero, two variables can still influence each other in a way that does not reflect linearity.

b) Data Analysis Methods

Typeform gave out an initial report with main results and exported the dataset to .xls format. All responses classified as valid because questions were marked mandatory to answer, i.e. the survey tool would otherwise not let participants submit the questionnaire. With data collection complete, no value had to be deleted, estimated or substituted – as approaches to deal with missing data ([Nakagawa & Freckleton, 2008](#)). Further preparation happened in Excel. Variables were simply renamed, recoded and sorted according to constructs. Since the statistical method applied is a structure-testing technique both independent and dependent variables needed to be metric. Mostly, numerical coding was used to transform data into SPSS readable measures, i.e. answer options A, B, etc. were coded with 1, 2, etc. while scale measures were left as they are. Then, data was imported and variable properties stores in the background. In addition, new variables have been computed from existing answers, for instance the sum of platforms known to a participant and the intensity of past sharing behaviour. Also, dummy variables for gender and other controls were implemented. Neutral answer options like 'prefer not to disclose' were marked to be excluded from the calculation of means later on. The explained editing process concerned all nearly 100 items.

5. Results

In this chapter, the survey data will be summarized in a descriptive manner before it is applied in an analysis of variance to distinguish between sample groups. A regression model completes the statistical examination.

5.1 Descriptive Statistics

Question 1: A total of 594 respondents submitted the questionnaire online. As expected, the preferred language was German. Still, 50 participants (8 %) chose to answer the survey in English (Figure 7). Altogether, 23 different nationalities took part but were later coded as “Non-German”. Thus, if any, culture-specific conclusions can only be obtained for the majority of Germans (n = 551). Altogether it can be said, that the respondents constitute a German sample.

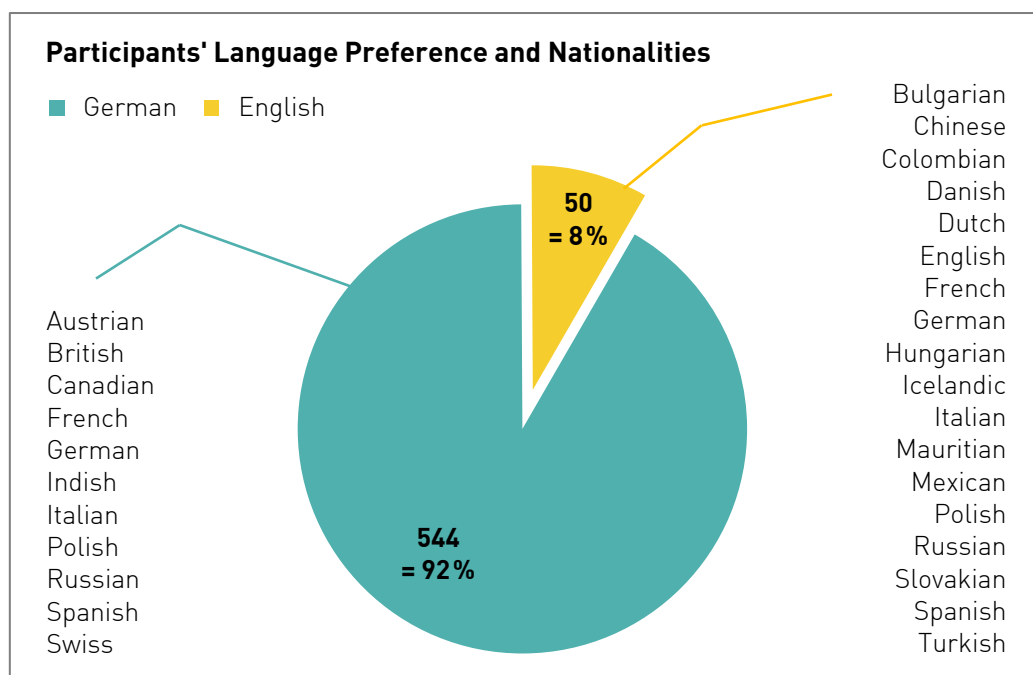


Figure 6: Participants' language preference and nationalities (Q1)

As an entry question, respondents were asked for their experience in moderate alternative use and ownership formats. As explained in chapter → 3.1, three different types of collaborative consumption schemes can be distinguished in social practice (Botsman & Rogers, 2010).

Question 2 aims at two of them: product-service systems (e.g. car hire, equipment rental, tool library, etc.) and redistribution markets (e.g. eBay auctions, etc.). The third type, collaborative lifestyles, is looked at in question 8. Being asked how often they engage in such activities or whether they can imagine doing so, participants answered as follows (Figure 7): Professionalised service systems like rental firms have been or are used by approximately half of the respondents (50.5 % + 11.8 % and 40.6 % + 3.5 %). Redistribution markets are even more widespread: Privately buying and selling objects through online or offline platforms is the norm for 21.1 % and 40.9 % respectively. This indicates that sustainable commerce is on the rise. Thereby, it does not matter whether goods are free, swapped or sold for money (Botsman & Rogers, 2010). Overall, responses show that the vast majority of the sample has been or is frequently in contact with some sort of alternative consumption practice. Surprisingly, only 18 participants (3 %) have never had this contact.

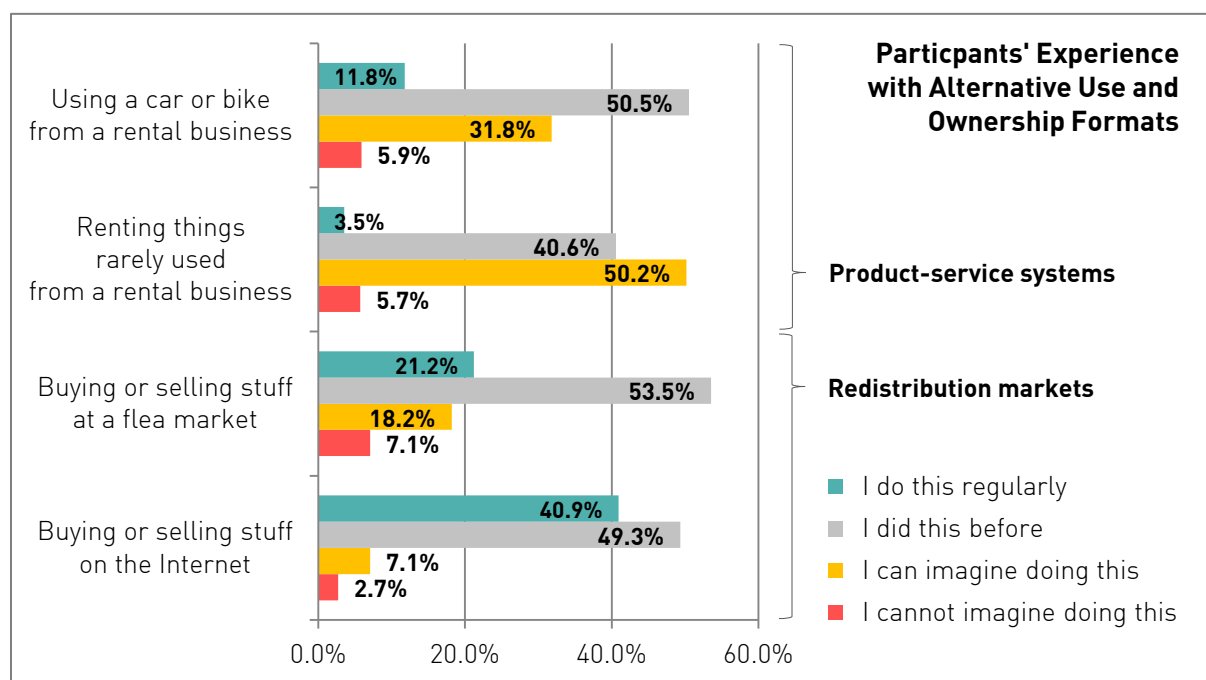


Figure 7: Distribution of alternative use and ownership formats (Q2)

Question 3 attempts to replicate past findings on citizens' interest in the sharing economy from a 2012 representative population survey by the Federal Ministry for Environment, Nature Conservation & Nuclear Safety and the Federal Environmental Agency (BMU, 2013). Making the assumption of a nearby place to borrow things the participants do not need every day, they are being asked to rate the rental and shared use of such objects in terms of attractiveness. In response to this hypothetical question it becomes clear that

sharing, as opposed to buying and owning, is indeed an alternative: 86 % find it (very) attractive. The perceived appeal of making use of offers in the collaborative consumption space seems to have increased compared to the BMU poll in 2012 (Figure 8), although the sample populations are not directly comparable. Here, it can be argued, the ecological relevancy of household organisation and budget management are a frequent motivation, driven by efficiency and the desire to save money.

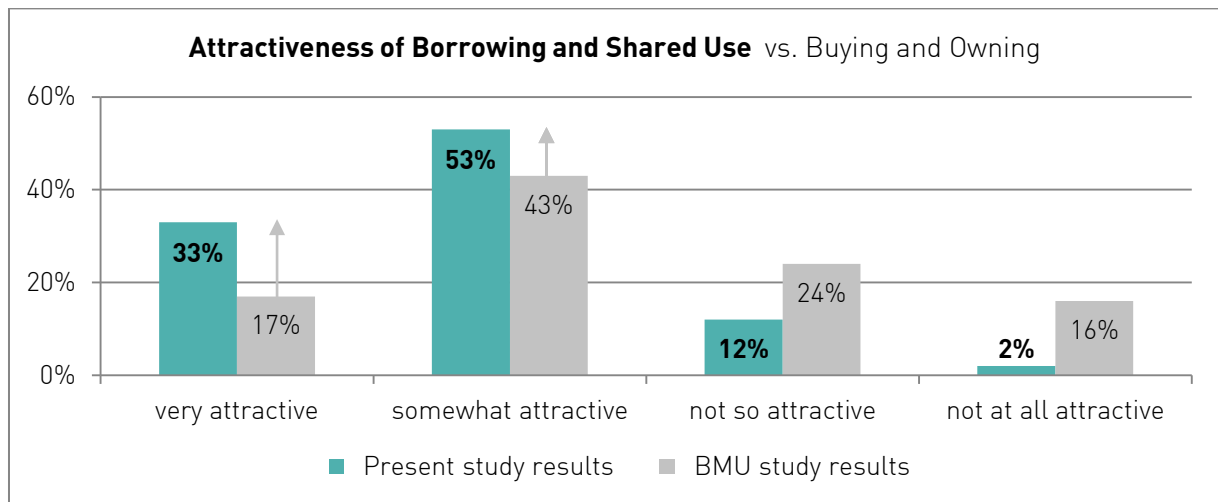


Figure 8: Attractiveness of borrowing and shared use of objects (Q3)

Questions 4 to 6 ask for a variety of individual difference variables. To further investigate participants' point of view on the sharing economy, consumer attributes, product values and general attitudes shall be illuminated. Answers will later be put in relation to the respondents' intensity of sharing. All subsets rated on a 5-point Likert scale.

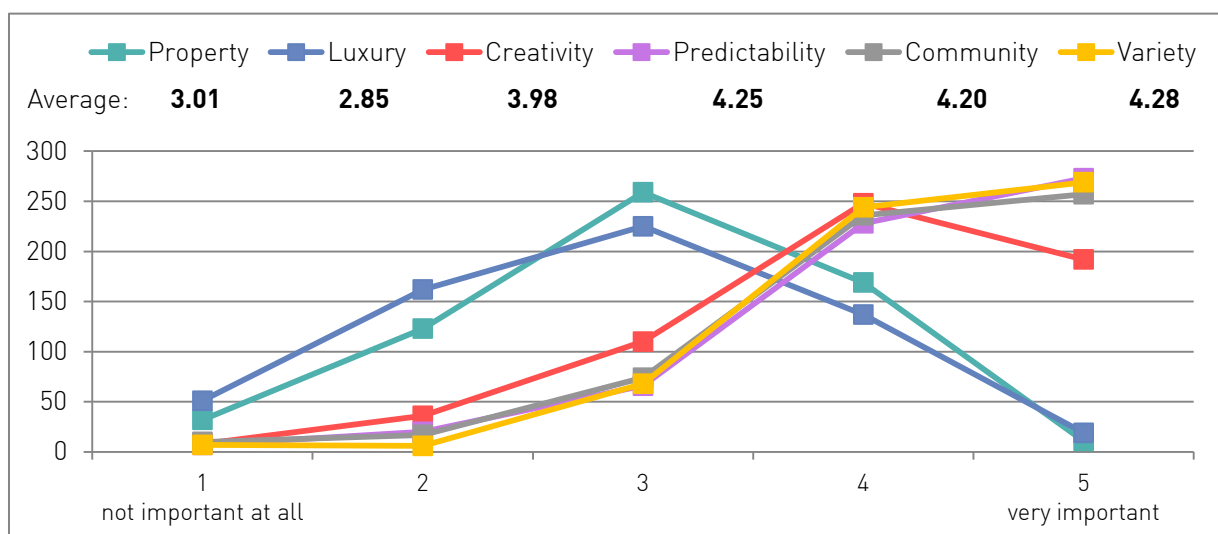


Figure 9: Importance of personal, collaborative consumption-relevant values (Q4)

Looking at personal collaborative consumption-relevant values (Figure 10), a clear picture can be drawn: For the survey sample, material values are less important than immaterial ones such as community as sense of belonging. Figure 10 on respondents' opinions on particular product attributes is less explicit: Only 'quality' seems higher up on the importance ranking than for instance the innovativeness of products ('trend'). Figure 10: Consumer opinion on product attributes (Q5)

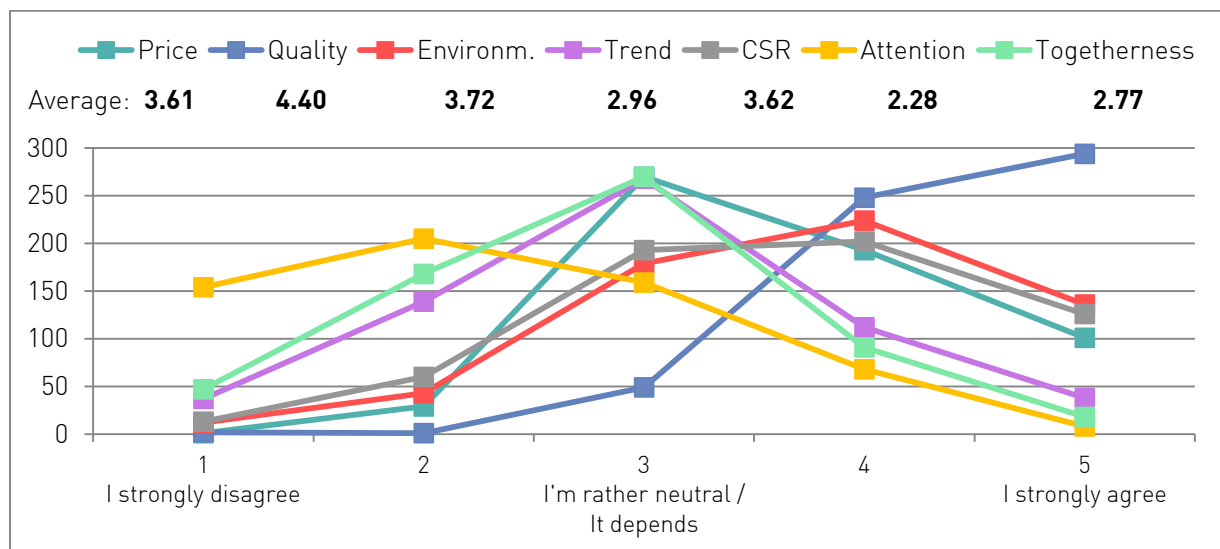


Figure 10: Consumer opinion on product attributes (Q5)

To get a better understanding of participants' mindsets, a 5-point rating of the following attitudinal statements has been obtained; results are presented below (Figure 11):

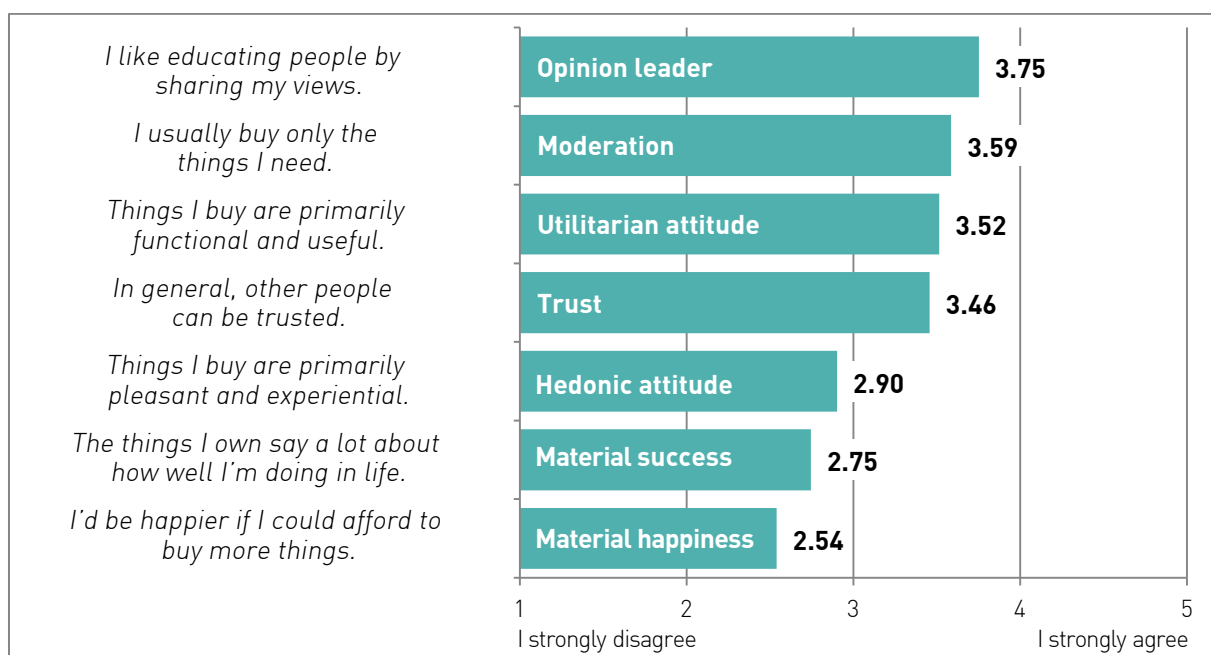


Figure 11: Attitudinal statements of consumers (Q6)

Question 7 asks all participants to select the sharing platforms they have heard of before. For that reason, the most popular platforms²⁵ in their respective sharing category – ten of which in total – were determined for the respondents to choose from. Upon analysis we can learn which websites participants have come across prior to the survey: The German ridesharing pioneer Mitfahrgelegenheit.de is named top most (479). Next come global accommodation marketplace Airbnb, the German clothes swapping platform Kleiderkreisel and the B2C carsharing operator Car2go (344, 336 and 303 respectively). Interestingly, with one in ten mentions going to Foodsharing.de (197), the German food saving site ranks fifth, followed by “the largest crowdfunding community for creative and sustainable ideas in German speaking areas”, Startnext, with 111 scores ([Startnext, 2015](#)). Stuffle, Frents, Skillshare and Lendstar each received far below 100 entries (37, 22, 21 and 13 respectively). Only 42 respondents did not recognize any of the pictured online platforms ([Figure 12](#)).

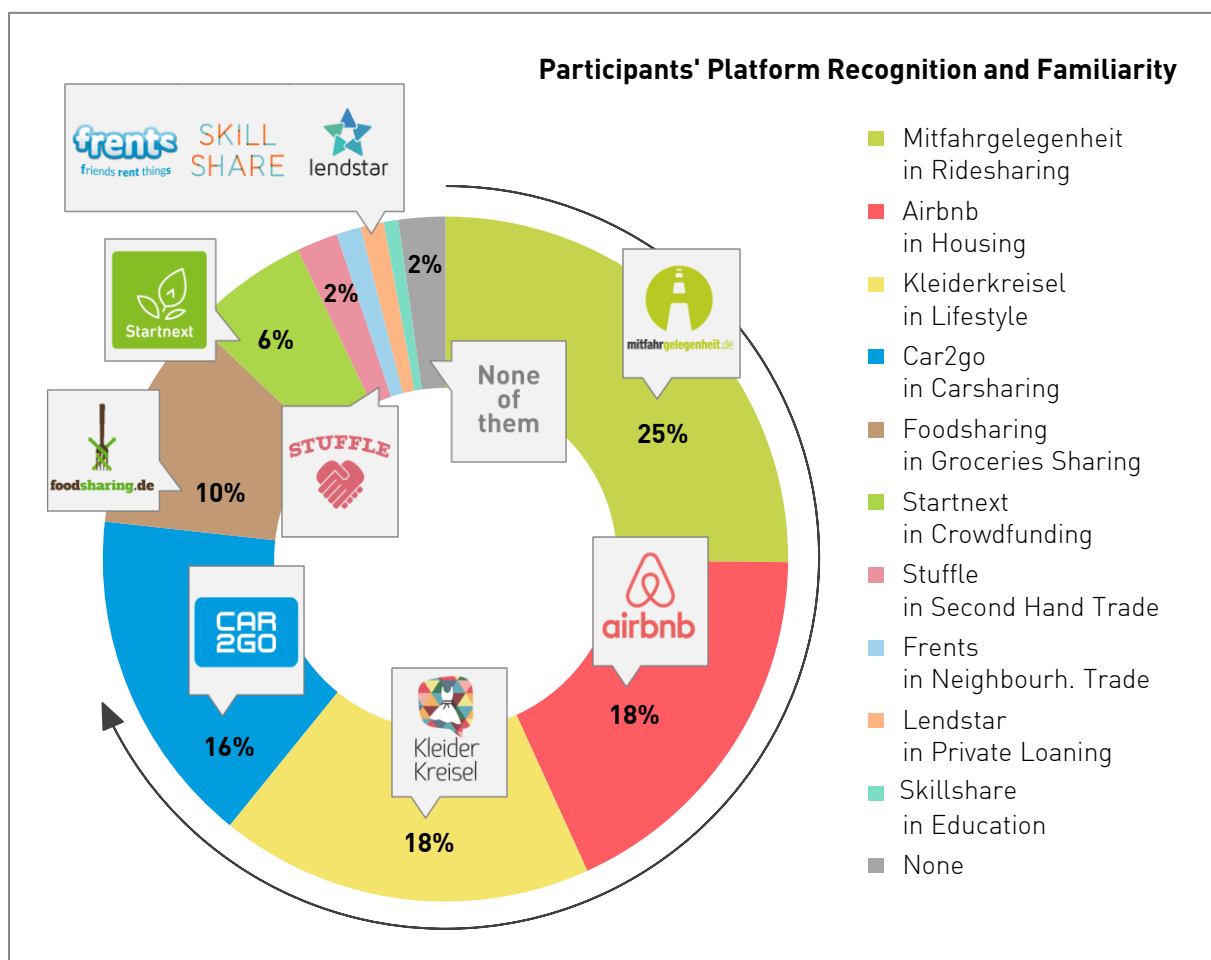


Figure 12: Platform recognition and familiarity (Q7)

²⁵ The platforms were selected based on the number of registered users, only including German or here available services. To answer the question participants need not to have an account. Multiple choices were possible.

Question 8 divides the sample into sharers and non-sharers. By indicating the sharing activities the participants were involved in during the past six months, it becomes visible who follows a truly collaborative lifestyle – as opposed to the moderate options of the sharing economy discussed earlier. While 217 respondents did not take part in any sharing transaction recently (now referred to as non-sharers), 377 people did so (Figure 14). Here, the top three activities are P2P ridesharing (53 %), accommodation rental (43 %) and B2C carsharing (32 %) while garden sharing (3 %), neighbourhood lending (3 %) and private loaning (4 %) are the ones least practiced and coordinated via online platforms (Figure 13). Amongst others, further activities entered by participants were swapping flats and the sharing of books, media, repair garages and network services. Of those 377 who share, the number of activities spreads as follows (Figure 15): Nearly half of the sharers (149, 40 %) made use of a single sharing activity only; that most often being ridesharing (42, 28 %), followed by renting an accommodation (29, 20 %). Correspondingly, both make up the most popular combination for those participants who engaged in two sorts of sharing (110, 29 %).

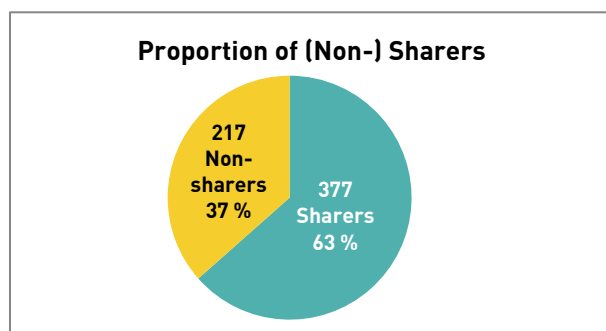


Figure 143: Sample division in sharers vs. non-sharers (Q8)

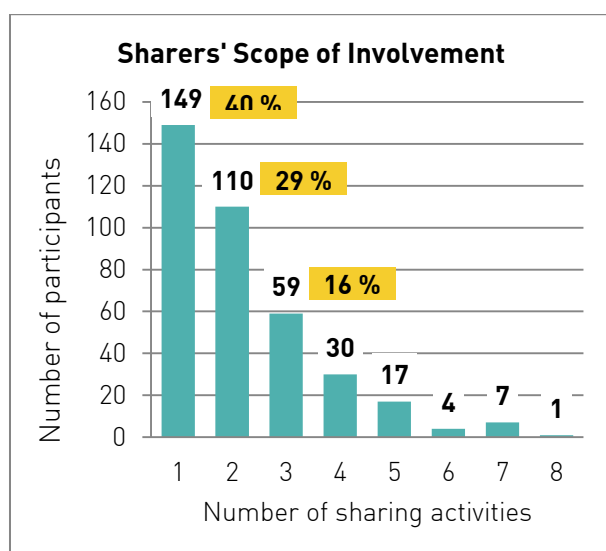


Figure 15: Participants' sharing intensity (Q8)

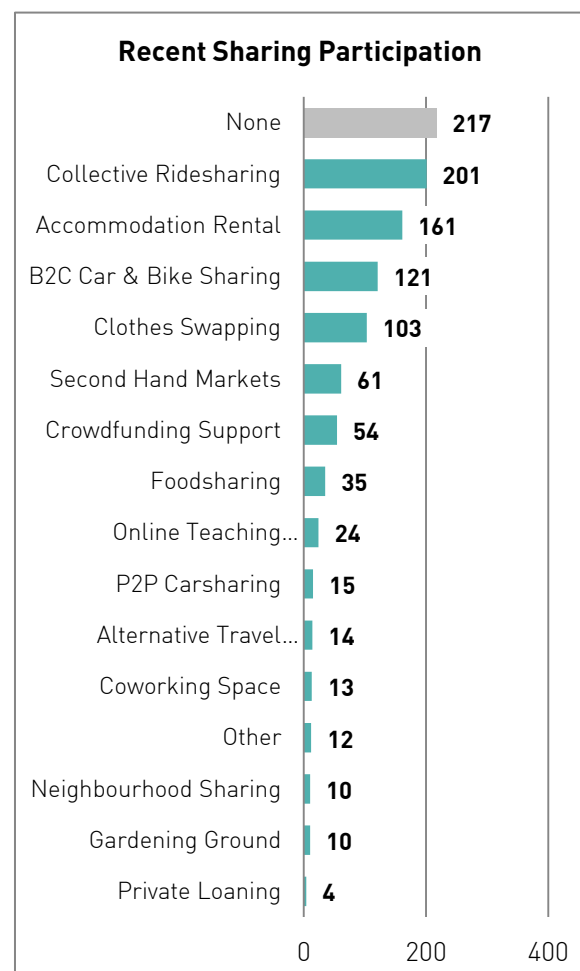


Figure 14: Participants' recent sharing activities (Q8)

Question 9 explores the reasons of non-sharers to circumvent collaborative consumption schemes: One third of them is simply not aware of existing offers (32 %) while others are content with what is out there (21 %). Further, some survey participants seem afraid of other people breaking, losing or not caring about their belongings (14 %). Also, almost one in ten non-sharers does not see how sharing transactions could be of any value to them (9 %) (Figure 166).

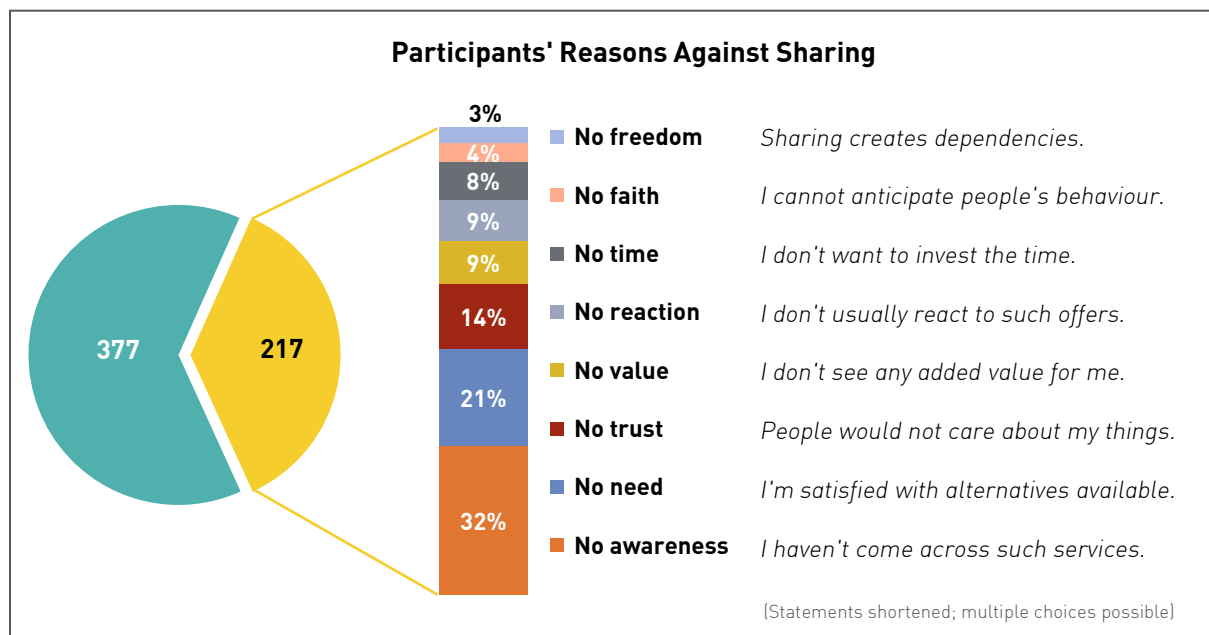


Figure 16: Participants' reasons against sharing (Q9)

Question 10 allows for a general ranking of motivations of participants when deciding for their latest sharing transaction. Four groups of motivations have been established and colour coded as explained in chapter → 3.4. Regardless of sharing categories, the top motivational factor is related to environmental consciousness (79.3 %), closely followed by the intention to save money (78.5 %). Furthermore, feelings of joy (73.5 %) play a similar role like convenience (68.2 %) and a personal interest in healthy living (63.4 %). Surprisingly, social cohesion, i.e. meeting new people, did not seem to be a decisive motivational factor (7.2 %). Overall, intrinsic and extrinsic motivations fairly balance each other (Figure 17). Still, non-monetary reasons – besides that of savings – rank rather low.

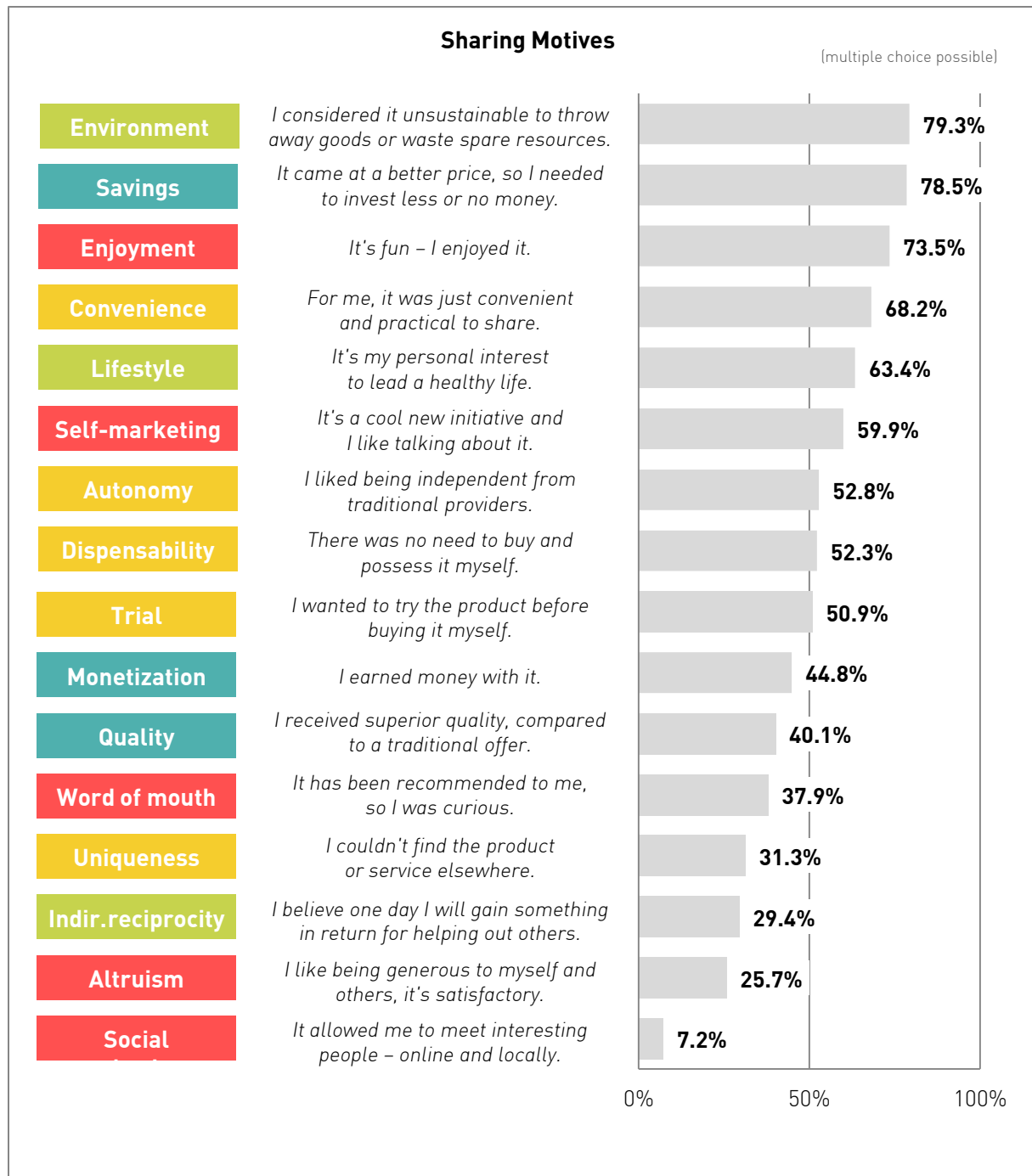


Figure 17: Participants' sharing motivations (Q10)

Participants with multiple sharing transaction in the past six months, were asked to select one activity in order to answer a follow-up question. With their respective choices it is possible to draw a clearer picture of the motivations underlying specific sharing activities (Figure 18). Besides B2C carsharing and crowdfunding campaigns, all other activities were motivated by both economic *and* ecological thoughts.

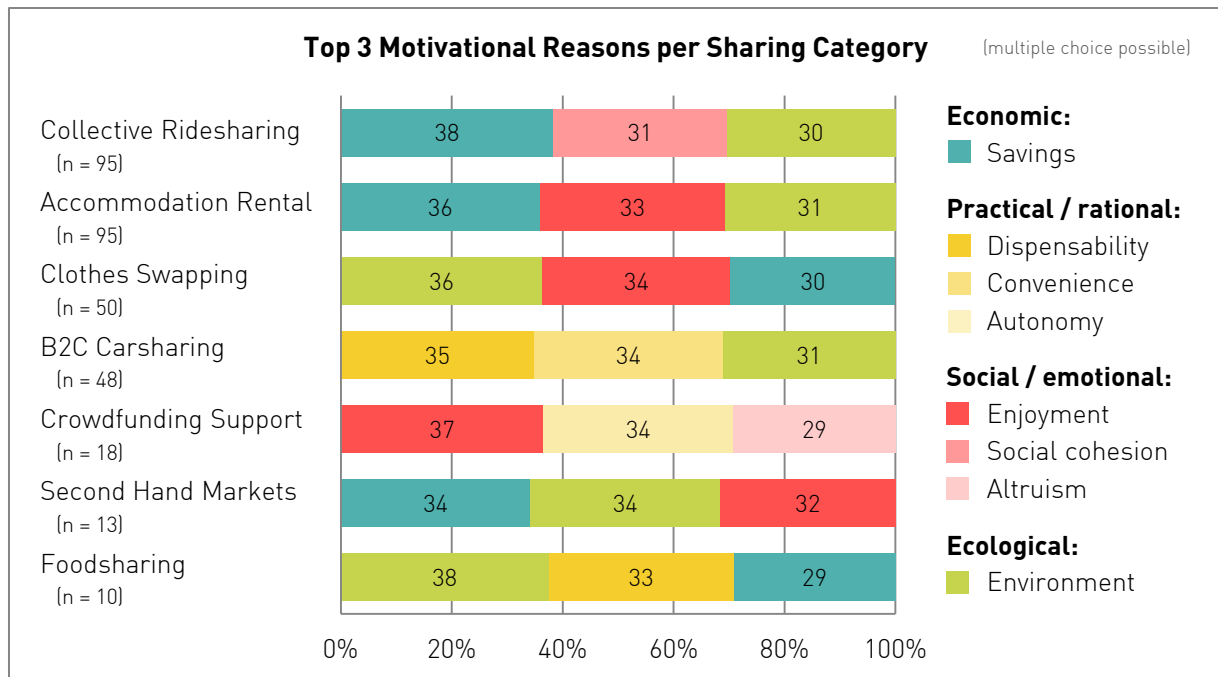


Figure 18: Top motivational reasons per sharing activity (Q10)

Question 11 determines the side a user takes when sharing. It turns out, most participants borrow from others rather than lend out their own: 57 % of sharers are thus ‘takers’ while 11 % say they are “usually the one offering things or activities to others”, entitling them ‘givers’. 32 % claim to do both equally often, making them true sharing advocates. Implications of this finding shall be discussed later.

Question 12 unites sharers and non-sharers again. It marks the first question directed towards the respondents’ perception of sharing and his or her future intention. Being asked whether sharing physical resources generally increases over the next five years, 90 % say it (probably) will (Figure 19).

Question 13 targets the individual respondent by asking whether they themselves are likely to (more) frequently participate in collaborative consumption in the future. 70 % say so while 20 % have not yet made up their mind (Figure 20).

Question 14 supposes that respondents’ opinion on monetization as a motive for sharing differs. While 22 % choose no definite option, the financial component to sharing does not seem worth considering for 28 % of respondents. Answers further suggest that for 50 % it is indeed a trigger for sharing their belongings (Figure 21).

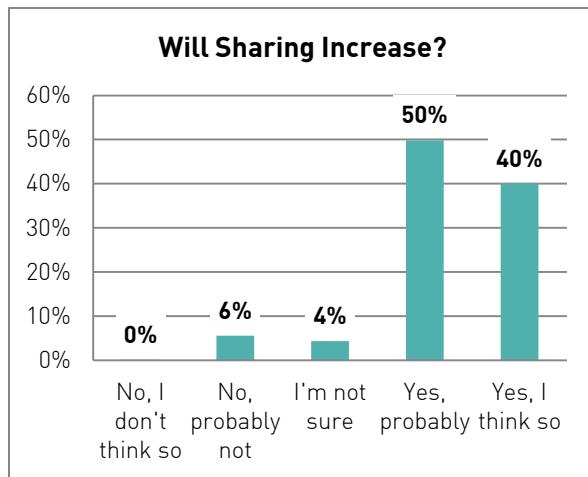


Figure 19: Five years forecast (Q12)

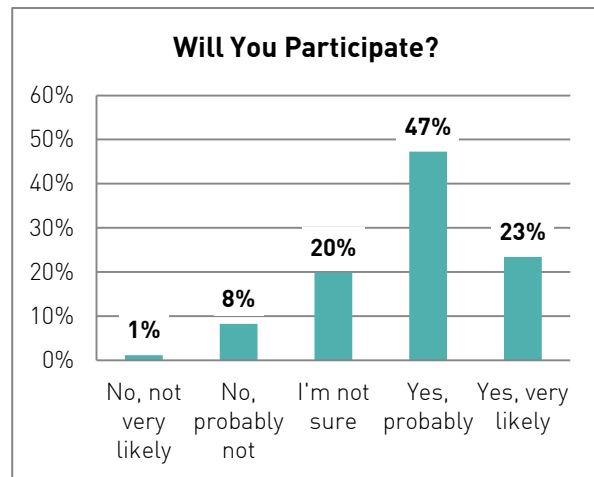


Figure 20: Likelihood of future participation (Q13)

Question 15 explores participants' willingness to pay for a sharing transaction²⁶: Only 3 % of respondents' are prepared to pay more, making them the generous type of person. 39 % of survey contributors would pay the same amount of money which hints to a fair shopping attitude. Interestingly, 58 % of participants would grant less than the usual due price for a sharing agreement or even suggest a free transaction ([Figure 22](#)).

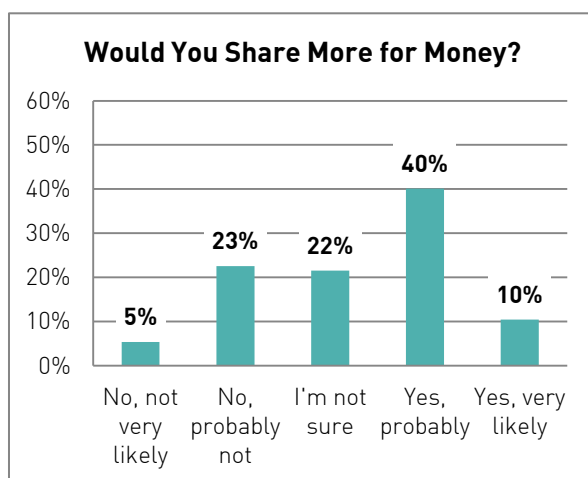


Figure 21: Opinions on future income component (Q14)

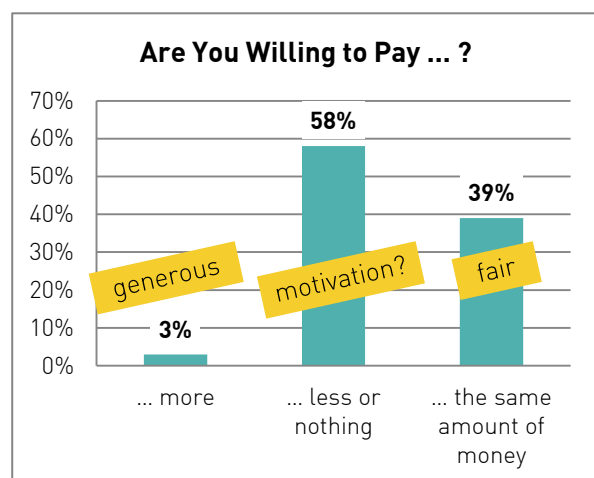


Figure 22: Willingness to pay (Q15)

Question 16 is the final question and all things considered, respondents' general sympathy with the principle of *sharing instead of owning* is high: The symbol rating averages 3.85 thumbs ([Figure 23](#)).

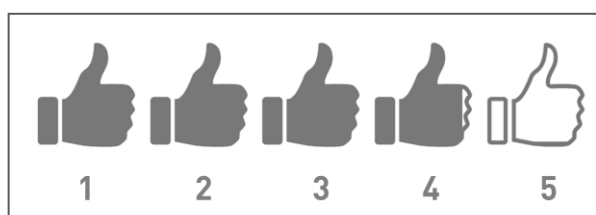


Figure 23: Overall sympathy (Q16)

²⁶ ... as opposed to traditionally available commercial products or services.

5.2 Variance Analysis

In order to analyse data from different sample groups, I measure their mathematical averages, performing a mean comparison test. The variance analysis is hereby preferred over the t-test as the latter only allows to oppose two groups. Asking for people's sharing engagement during the past six months, question 8 allows for a distinction of survey participants into three sample sub-groups or clusters (I, II, III). With a **one-way ANOVA** it becomes visible whether the three sample sub-groups differ in the mean value of a variable when looking at their total population. The variables where no significance is observed are marked with *n.s.* and will not be examined further.

Q	Item	I Non-Sharers = 0 sharing activity (n=217)	II One-Time-Sharers = 1 sharing activity (n=149)	III Multi-Sharers = 2-8 sharing activities (n=228)
3	Attractiveness of CC**	2.92	3.17	3.38
4	Importance of personal values			
	4.1 Property**	3.17 ^{III)}	3.06 ^{III)}	2.82
	4.2 Luxury**	2.95 ^{III)}	2.96 ^{III)}	2.68
	4.3 Creativity**	3.79 ^{III)}	4.03	4.11 ^{I)}
	4.4 Security & reliability**	4.32 ^{III)}	4.43 ^{III)}	4.05
	4.5 Community & social contact*	4.07	4.28	4.27
	4.6 Variety**	4.11 ^{III)}	4.23 ^{III)}	4.48
5	Importance of product attributes			
	5.1 Price ^{n.s.}	3.52	3.67	3.66
	5.2 Quality ^{n.s.}	4.42	4.41	4.38
	5.3 Environm. consciousness**	3.57 ^{III)}	3.64 ^{III)}	3.92
	5.4 Trend ^{n.s.}	2.97	2.91	2.98
	5.5 Togetherness ^{n.s.}	2.69	2.75	2.86
	5.6 Attention ^{n.s.}	2.25	2.28	2.30
	5.7 Responsibility**	3.45 ^{III)}	3.62	3.77 ^{I)}
6	Statements			
	6.1 Trust**	3.29 ^{III)}	3.46	3.61 ^{I)}
	6.2 Opinion leader*	3.67	3.70	3.86
	6.3 Moderation ^{n.s.}	3.54	3.37	3.59
	6.4 Material success ^{n.s.}	2.79	2.80	2.67
	6.5 Material happiness*	2.49	2.75 ^{III)}	2.44 ^{III)}
	6.6 Utilitarian attitude ^{n.s.}	3.64	3.55	3.57
	6.7 Hedonic attitude ^{n.s.}	2.92	2.91	2.88
13	Future participation intention**	3.32	3.85	4.30
16	Sympathy towards CC**	3.29	3.94	4.29
17	Age**	38.19	31.24 ^{I)}	30.28 ^{I)}
19	Nationality** 1 = German / 2 = Non-German	1.04 ^{III)}	1.05 ^{III)}	1.12
22	Income** 2 = €800-1,400 / 3 = €1,400-1,900	2.98	2.22 ^{I)}	2.24 ^{I)}
23	Time online** 2 = 1-3 h / 3 = 3-6 h	2.27	2.55 ^{I)}	2.65 ^{I)}

Table 6: One-way ANOVA results of selected variables between sample sub-groups

Significance: ** $p \leq 0.01$, * $p \leq 0.05$

In order to find out *which* group mean values differ significantly from the other two, post-hoc multiple comparisons were computed. The Tamhane T2 test compares the sample sub-groups' values pairwise against each other. Green values show significant mean differences towards both other sample groups whereas yellow ones mark a significant mean difference towards the sample group indicated with I), II) or III).

From Table 6 I draw the following conclusions: In terms of personal and product values, participants that have engaged into sharing multiple times, score significantly lower in how they value material possessions (4.1), luxury or treats (4.2) and a secure and predictable environment (4.4) compared to both other sub-groups. On the contrary, they put significantly more emphasis on an interesting and diverse lifestyle (4.6) and display a significantly higher concern for products and services being environmentally friendly (5.3). Additionally, they value creativity (4.3) and responsibility of producing companies (5.7) more than do non-sharers.

With regard to age (17), income (22) and internet usage (23), it can be said that non-sharers are significantly older, better-off financially and less online-savvy than their fellow citizens that have been sharing before. Comparing non-sharers' with sharers' income, Table 7 shows a higher percentage of sharers in income groups I and II. With income rising, the percentage drops.

Net Income	Sample Group				Total
	Non-Sharers		Sharers		
X Prefer not to disclose	22	10%	33	9%	55
I Below EUR 800	37	17%	122	32%	159
II EUR 800 – 1,400	25	12%	83	22%	108
III EUR 1,400 – 1,900	36	17%	38	10%	74
IV EUR 1,900 – 2,500	41	19%	62	16%	103
V Above EUR 2,500	56	26%	39	10%	95
Total	217	100%	377	100%	594

Table 7: Percentage of sharers per income group

Although the sample of non-Germans is very small with 50 participants, the probability of international peers to belong to the group of sharing advocates seems significantly higher than the other way around (19).

Finally, the attractiveness of (3) and sympathy (16) towards the principle of 'sharing instead of owning' increase significantly with sharing experience. As a sign of these experiences being of a positive kind, respondents' intention to engage in co-consumption manifests itself the more they have participated in sharing schemes already (13).

5.3 Regression Results

Since the goal is to make informed predictions about a dependent (response) variable y from a number of independent (explanatory) variables x , a **multiple regression** method is chosen. All involved variables were measured along metric scale levels or coded into intervals. For the scope of this work, the model takes no possible moderator or mediator into account. Thus, the proposed relationship is linear and the equation for **model part 1** is this:

$$y = a + b_1x_1 + b_2x_2 + b_3x_3 + b_4x_4$$

a ... constant base amount (intercept)

b ... regression coefficients (slope)

x ... explanatory variable

y ... response variable (estimate)

→ *Attitude towards CC* = $a + b_1 \times \text{economic} + b_2 \times \text{practical} + b_3 \times \text{social} + b_4 \times \text{ideological}$

In words: The differences in people's attitude towards collaborative consumption (perceived attractiveness of *plus* sympathy towards sharing schemes) can be explained (not caused, necessarily) by differently pronounced groups of motivations. The quality of a prediction depends on how much variance is left unexplained. In this regard, correlation values (r) can give a trend already. Since only few of the previously calculated r were moderately high, rather weak predictions of y are to be expected. Still, multiple variables together may explain more of the variation in a response than they could individually.

A hierarchical regression is a stepwise process used to understand how much variance is covered by which variables. First, control variables are introduced and second, the predictors are entered into the model. Results can be seen in [Table 4](#).

Block		b	T	Sign.	R	R ²	ΔR ²	F	Sign.
Intercept		7.266	10.341	.000					
1	Age cohort	.047	.299	.765	.106	.011	.005	.679	.640
	Gender	.054	.342	.732					
	Size of city	.097	1.278	.202					
	Income	-.044	-.773	.440					
	Internet use	-.077	-.897	.371					
2	Economic motivations	.292	1.966	.050	.296	.087	.060	3.159	.001
	Practical motivations	.200	1.683	.093					
	Social motivations	.393	2.855	.005					
	Ideological motivations	-.002	-.016	.987					

Table 4: Model part 1 regression results for *attitude towards CC* (n=377)

Unfortunately but as expected, the complete model explains only very little of the variance in participants' attitude towards sharing (8.7 %). Significance values are colour-coded above and can be interpreted to indeed have an overall influence on the dependent variable. Solely the parameter *ideological motivations* shows rather odd values, with a slightly negative correlation and an implausible significance. This may be caused by an inter-correlation between the predicting motivational factors. Thus, when estimating the regression values it is not apparent to SPSS whether high attitudinal values of people with high social *and* high ideological motivations are attributed to their emotional or environmental orientation. When repeating the regression analysis without the variable *social motivations*, a positive value for *ideological motivations* is calculated and with a significance of .039 seems more reliable.

According to the results, *social motivations* are the strongest predictor for a positive attitude towards sharing. This is surprising since the descriptive computation earlier put more attention to economic and ecological factors. Taking a closer look, it is the motives *self-marketing* and *joy* that are significantly positively related to attitude (.396 and .383 respectively, both at $p \leq 0.01$).

The **model part 2** results indicate the relation between *attitude* and participation outcome in the form of two linear regressions with the dependent variables *past sharing intensity* (Table 5) and *future participation intention* (Table 6). Control variables are included once again.

Block		b	T	Sign.	R	R ₂	ΔR^2	F	Sign.
Intercept		-.777	-1.670	.096					
1	Age cohort	.340	3.355	.001	.334	.112	.103	12.753	.000
	Gender	.208	1.495	.136					
	Size of city	.247	3.770	.000					
	Income	-.130	-2.975	.003					
	Internet use	.215	2.846	.005					
2	Attitude towards CC	.416	9.616	.000	.499	.249	.240	27.954	.000

Table 5: Model part 2a regression results for *past sharing intensity* (n=594)

In retrospect, the *attitude* towards collaborative consumption explains nearly 25 % of the variance in participants' intensity of sharing in the past six months. With regard to the likelihood of respondents to engage in sharing in the future, *attitude* even accounts for nearly 40 % of the variance in *future participation intention*:

Block		b	T	Sign.	R	R ₂	ΔR^2	F	Sign.
Intercept		2.597	9.480	.000					
1	Age cohort	.223	3.726	.000	.281	.079	.070	8.707	.000
	Gender	-.005	-.056	.955					
	Size of city	.128	3.309	.001					
	Income	-.045	-1.731	.084					
	Internet use	.084	1.876	.061					
2	Attitude towards CC	.364	16.201	.000	.627	.394	.386	54.744	.000

Table 6: Model part 2b regression results for *future participation intention* (n=594)

6 Discussion

As has been demonstrated above, **motivations** for using collaborative consumption platforms are very diverse. Throughout my online observation of articles and user comments and during the numerous talks with sharing actors, I clearly felt that basically two fundamental parties and motivations exist: first, the rather materialistic group of people looking to increase income or practical advantages and second, a movement in search of relationships and experiences. The latter kind goes beyond a mere sharing of assets but strives towards a fulfilling lifestyle around the concepts of humanity, sustainability, social change and authenticity. The other group, however, focuses more on additional income or relieving financial pressure.

Interestingly, this initial perception does not match with overall survey results: The analysis has shown that all sharing activities are motivated by multiple factors. And what is more, economic and ecological reasons are balanced. This twofold stimulus leads to the assumption that for a sharing offer to be attractive and successful a combination of extrinsic and intrinsic motivations is needed. Also [Nupke \(2012, p. 15\)](#) acknowledged that in general, to explain motivations, “there is the **intrinsic-extrinsic symbiosis** to be considered”. Similarly, [Marchand et al. \(2010\)](#) found eco- and socio-altruistic motives, i.e. concerns about the earth and social justice, to be at play in sustainable consumption and even replacing previously perceived individual benefits. And actually, when sharing you need to acquire less, so that a person’s focus may indeed shift from “the pursuit of income growth” to the “quality of social relations with others” ([Marchand et al., 2010, p. 1438](#)). Similarly, participants considered overcoming the traditional work-spend-maintain cycle much more important than possessions (associated with stress, being a burden). These may have been reasons for respondents of the present study, too, to think of alternatives to new products, and thus more frequently rent objects, opt for second hand goods or use product-service systems like carsharing. Concluding, I argue that these bipolar motivations are indeed present when it comes to co-consumption. Still, a different but simple explanation could be that answers in the survey were partly biased, i.e. that participants deceive themselves towards what is commonly expected (social desirability bias). This needs further investigation. In either case, this ambivalence of motivations is also reflected in the wide variation of definitions of the sharing economy.

As important as the question of *why* people share, is that of **who shares**: Results show that for instance people with a pronounced self-marketing motivation ('... and I like talking about it'), paired with an opinion leader tendency ('... educating people by sharing my views') are prone to share. At this point, more research into the mindset of sharers is needed. Furthermore, participants active in sharing can be seen as social entrepreneurs as they merge questions of how to make a profit with that of how to create social value (McKinney, 2013; Parris & McInnis-Bowers, 2014). Regarding the 'hard' factors, socio-demographic analysis can support most expectations as will be elaborated below.

The noticeable tendencies from this research prove that the sharing **trend** among young generations manifests itself further. While cars for instance have been a German status symbol, the top motivation for using B2C carsharing is dispensability, i.e. the reduced need to own a car.

From a study conducted by the renowned Gottlieb Duttweiler Institute (GDI) the tendency of **gender** differences arose, finding that women share more than men, grounded in classic role allocation (Frick et al., 2013). This is in accordance with my data where women are indeed more actively involved in co-consumption than men (68 % vs. 58 %). Still, caution is advisable as correlations are not significant.

A study by PwC (2015) and the GDI report further found that generosity does not depend on **income** – although opposing studies exist. Piff et al. from Berkeley University for instance revealed a provocative study stating upper-class individuals were less generous than lower-income groups and more prone to greed, "a robust determinant of unethical behavior" (Piff et al., 2012, p. 4086; Miller, 2012). From the present survey it can be concluded that participation in sharing schemes is indeed related to income: Among lower-income groups the percentage of sharers is much higher and vice versa. This is in line with recent results citing the Latitude Research Study according to which participants with lower incomes, too, were more likely to share (Bauwens et al., 2012). Thus, in the given context, the statement can be rejected that only the rich – holding so many possessions they have recognized the downside of ownership (Levenson, 2007) – share frequently.

As expected, younger **generations** enjoy sharing more than elder people which conforms to literature and previous studies (Frick et al., 2013; Zipcar, 2014). Indeed, perceived attractiveness and actual sharing transactions in the past months are significantly higher

with participants born in the 80s and 90s. Correspondingly, the willingness to share seems to be influenced by a person's phase of life: students share significantly more often than retirees do. This young-old-deviation is caused by the differences of generations, presumably rooted in historic and technological factors. The former mostly relates to the baby boomers' lifelong quest for self-fulfilment and independence and their association of sharing as an act of charity and non-affordability – while for digital natives it is natural, smart and even 'cool' to share [Kolson, 2012; Frick et al., 2013]. Going hand in hand with this point, **internet affinity** is significantly higher among active participants, after all, platforms linking actors in the sharing economy need to be handled sufficiently.

Regarding **regional differences**, the study holds less clear evidence as the sample is not equally distributed across Germany. Still, the special role of its capital becomes obvious: In the present sample, Berlin shares more than the rest of Germany. Also, the mean difference value of the variable *size of city* for one-time-sharers lies below 1 m whereas that of multi-sharers amounts to more than 1.3 m inhabitants. Thus, potentially it can be said, the bigger a city, the more sharing opportunities.

In general, according to the GDI, people are generous: 48.6 % share „many things“ and 7.2 % share „almost everything“ with others [Frick et al., 2013, p. 17]. Nevertheless most informants only indicated “sometimes” when asked for the frequency of their sharing activities. This, in turn, leads to the suspicion that people would share more when having the opportunity and thus, that the potential of the sharing economy is not yet fully tapped. The same may be concluded by looking at the answers to questions 12 and 13: An overwhelming 89.8 % of respondents think that, overall, sharing physical resources will increase in the **future**. More than 23.4 % find it 'very likely' that they themselves will participate (more) frequently – plus another 47.3 % saying they could well imagine doing so ('yes, probably'). Still, the sum of these stays below that of the above 90 %, suggesting that about 20 % leave active participation to others. Only 9.2 % do not foresee any participation at all whereas 19.9 % are undecided ('I'm not sure').

Regarding the **awareness** of collaborative consumption offers the survey suggests that sharing has arrived in broad levels of the (sample) population. Interestingly, with the three most familiar platforms connecting peers, C2C platforms have received more attention by respondents than their solely commercial B2C counterparts. Only 42 participants (2 %) did not know any of the proposed platforms.

From the two previous discussion points, a phenomenon arises known as **attitude-behaviour gap** in environmental psychology. As reported by multiple authors, explicitly positive attitudes towards sustainability do not per se translate to corresponding consumption patterns (Vermeir & Verbeke, 2006; Carrington et al., 2010; Luchs et al., 2011; Prothero et al., 2011). In the specific case of collaborative consumption, Hamari et al. (2013) and Frick et al. (2013) both confirm a marked discrepancy between an expressed readiness to share and the clearly lower actual sharing activities of people. In the present study, a value-action gap may lurk, too: Opinions on the sharing economy are overly enthusiastic while attitude online makes up 25 % and 40 % of (past and future) behaviour. Why is that? Do they perceive sharing as constraining or a kind of trade-off? More people can imagine taking something from but not giving it to others. This way, it remains to be seen if the equation of the sharing economy to pose a long-term alternative to traditional consumption works out in terms of demand and supply. In connection to that, an imbalance in the **willingness to pay** is prevalent. Hereby, the answer option 'less or nothing' (58 %) most probably unites two sorts of users: those, that refuse to pay more for used articles due to a possible loss in value and those, that act according to the principle of 'sharing is caring', i.e. that do not expect a return. Thus, a better item should have been used here to identify whether respondents are rather stingy or actually caring. As a sharing transaction often is of immaterial, that is e.g. emotional or ecological value, the base motive is not easily determined.

Another reason for people being reserved when it comes to sharing is the issue of **trust**. Remarkably, 64 % of US sharers say that "peer regulation is more important than government regulation" (PwC, 2015) and indeed, most platforms rely on user reviews as most important source for identity and trust generation (Pick, 2012). Also in this survey, the rating of non-sharers onto the statement 'In general, other people can be trusted' is significantly lower than that of sharers (3.1 against 3.6 on a scale of 1 to 5). Explanations are manifold since trust is highly context-specific and varies from person to person. Possibly, non-sharers are more suspicious and introvert types of people and less willing to give up anonymity. On the opposite, participants *with* a sharing history and sense of belonging connect more easily based on similar values and moral behaviours (Brogan & Smith, 2009; Albinsson & Perera, 2012). This, in turn, helps "communities to regulate and monitor themselves" (Pick, 2012, p. 57). It is certain that the discrepancy concerning trust needs further research in the future.

As indicated before, **external validity**, that means generalization, i.e. making accurate predictions for a population, is not entirely given with these sample group results. Still, my statistical analysis has found out a trend – a trend that is probably too optimistic. A 2014 study by PwC found 44 % of US consumers being familiar with the sharing economy but only 19 % of adults having been involved in a sharing transaction ([PwC, 2015](#)). Since co-consumption and many of the most popular platforms have their origins in the US, it is doubted here that numbers for Germany meet those of the sample. Next to this sample bias it needs to be considered why people took part in the survey: Out of kindness? Particular interest? Bad experience? However, an accurate compliance of the sample to the general population had not been aspired and the directional nature of the results is well worth being examined further.

7 Future Research Recommendations

While sharing used to be limited to an immediate circle of family members and friends, today's online co-consumption offers enable us to collaborate and share with almost everyone in society [Sacks, 2011; Schor, 2014]. As research has shown, more and more people (plan to) participate. This fact opens up vast opportunities in terms of more efficient resource distribution and sustainable consumption. Nonetheless, we also need to be sensitive to the increasing criticism over practices in the sharing space. Only touched upon briefly here, more re-search is required. In connection to that, new **policy interventions** need to set a standard frame-work and legal conditions supporting this development. While initiating further long-term research on the sharing trend, authorities could proactively start contrasting the current experience in traditional consumption patterns with more sustainable consumer behaviours in the sharing economy. Local governments could further provide or facilitate community sharing, e.g. through product repair or maintenance events, as well as community supported agriculture concepts or edible city projects.

A further look should be taken into whether the decision of *sharing or buying* is influenced by the **duration of use** of a product [Moore & Taylor, 2008]. For instance, the example of ridesharing gives support to a consumer's choice of acquisition mode (renting) being related to the intended use period (short). Is buying preferred for longer durations and are long-term sharing schemes an alternative?

Following Pick [2012], more research is needed on **users** of P2P platforms. For this purpose the providers of such platforms are urged to make data available to research. Specifically on the issue of **trust** in connection with the manifold **motivations** of part-takers a number of questions evolve. For instance, it would be interesting to know how a discrepancy of motivations between users of platforms is reflected in their behaviours towards others. Would someone with evil intentions take advantage of the sharing system and others' goodwill? Likewise, do people struggle with their own motivations? Competing intentions, e.g. financial value creation and ecological ideology when combining entrepreneurship and advocacy for environmental causes, may cause conflicts [Zahra et al., 2009].

Platform providers use the internet and social media to create a collective identity and engage members [van den Broek et al., 2012, Jain, 2013]. Doing so, they communicate an

experience as number one motivation towards their users – not ecological, practical or social, let alone financial, reasons. How exactly does **communication** influence people to take part? What is the tactical approach and desired impact behind?

In an attempt towards **consumer profiling**, future research could draw from here in order to paint a picture of the collaborative consumer. Further aspects of interest would be a deeper understanding of participants' social-innovative orientation and post-materialist values [Heinrichs & Grunenberg \(2013\)](#). Furthermore, one could ask more specifically for level of education and employment status. Of similar interest would be to learn about people's satisfaction with the current economic situation.

8 Contributions & Limitations

8.1 Academic Contributions

Relevant stakeholders are manifold as the topic is relevant for practitioners and (technology) policy makers alike (Hamari et al., 2013), economic and environmental researchers and civil society leaders (Heinrichs & Grunenberg, 2013). In order to promote their value proposition and plan for constant improvements, also commercial players and not-for-profit platforms ought to know about participant motivation. Overall, this thesis **broadens the discourse** on motivations and sustainable development and sees alternative consumption from a new point of view – that of consumers who follow their own, perceived gains. It helped filling the gap in research as few empirical studies exist that could possibly confirm the attitudes of people towards the sharing economy.

This research contributes to the conceptual **understanding of the phenomenon** that has captured a growing segment of consumers but that is still absent in mainstream marketing literature. This study's purpose was to understand the motivation of these consumers to engage in collaborative ownership models *across* product categories, striving for new experiences “while freeing themselves from the responsibilities of permanent ownership” (Lawson, 2010, p. 842).

With regard to theory, the present work has contributed to this understanding in the way that it has highlighted the importance of multiple motivational factors playing a role in co-consumption. For instance, for the sharing categories ridesharing, accommodation rental, clothes swapping and second-hand trading, a balanced triad of economic, ecological and social motivations is prevalent. By conversion, sharing models seem to find favour with an increasing part of the population *just because* they appeal to multiple inside triggers – or at least do so more specifically than ‘green’ activism like recycling where the expected outcome is solely one-sided. Thus, next to environmental or social advantages, it seems certain that personal benefits, i.e. self-interest motives, lead individuals back to sharing more. Furthermore, it has become clear, that attitude towards collaborative consumption is a well-established predictor of future participation intention. Still, behavioural intention is dependent on the context of sharing and the need supposed to be met with the sharing activity. Thus, realistically kept, many more factors will influence the decision to become active.

With regard to **profoundness and scope** of the research, this work is the first of its kind in Germany. Throughout my pre-study, I have not come across a similar set-up. Thus, this report is initial research on a new field to demonstrate the need for a better understanding of the mechanisms at work in the sharing economy.

8.2 Research Limitations

First of all, I am not a born motivational researcher with particular training in sensitivity and interview skills. Therefore, a standardized online survey was set up to attract participants in the sharing economy. If at all, results are only **representative** for the generation of millennials. To a certain degree, however, the gathered data *does* represent the perspective of consumers who took part in the collaborative economy. Respondents *not* involved in co-consumption served as a reference group although characteristics of non-sharers did not exactly match those from the sharers movement. Next to external validity, “establishing good construct validity is a matter of experience and judgement, building up as much supporting evidence as possible.” (Shuttleworth, 2009). The items were set up to capture the true theoretical meaning of the measured motivational constructs. As they inter-correlate and only explain little of the outcome variable’s variance, the **underlying assumptions** need to be revised. For instance: ‘Enjoyment’ is the strongest factor in the category of social-emotional motivations. Now, one could ask in what motion exactly is the feeling of joy grounded? Is it not rather a motive split between the others of that category and can this be the reason for why social cohesion, i.e. ‘meeting others’, did not collect votes as expected? Also, to be clearer here, a ranking of motivations might have been more meaningful than a simple 5-point rating style. But then again ranking 16 motivators is not handy.

The questionnaire enquired about values, attitudes and reported actions while participants’ *real* sharing activities cannot be proven. Thus, the given information can be false for reasons of image cultivation and self-report bias. Since no direct contact to respondents existed I hope the distortion from **inexact information** is kept within an acceptable limit.

The sampling and data collection process have **methodological shortcomings**: To reach more respondents, I could have posted my concern repeatedly online and send a follow-up e-mail asking participants to distribute the survey further (snowball sampling). Both approached seemed too pushy and would not yield much different results. However, the discussion over pros and cons of convenience sampling shows that a more complete study with a more exhaustive method (random or probability sampling) is necessary, probably only achievable through funds. Until then, the selectivity of the sample and a potential misinterpretation of data have been treated with caution. The chosen method is still an appropriate trade-off for a master's level dissertation (limited budget and time etc.) and provides rich information, detailed demographics and even illustrative quotes as qualitative input to use for further research. Regarding the research instrument, it is still believed that online survey data is superior to that of an equivalent paper-based survey. Only one restriction contradicts this: As the elderly are not as internet-savvy as later generations they may not navigate on social networks and check their emails regularly – thus missing the opportunity to respond in the set time frame.

Maybe the question for people's motivation should have been differentiated according to the three **types** of collaborative consumption initiatives. Because *if* indeed perceived differently, their motivation and willingness to contribute might vary, too. This has been found to be the case with open government projects where motivations differed with project aims ([Wijnhoven et al., 2015](#)).

9 Conclusion & Outlook

This study found the strongest motivations for participants to engage in sharing to be: savings and convenience on the economic and practical side as well as enjoyment and environmental consciousness on the social and ideological part. Besides **motivations**, further points of interest arose from questions around personal values or demographics. Turning to the factor **income** for instance, material scarcity supports sharing intensity: People that cannot afford specific goods, share more often. Thus, the phenomenon may be especially valued across members of lower-income-levels. Concerning **gender**, women are more prone to sharing than men and generations Y and Z do so more frequently than any other **age** cohort.

Throughout my research work the facts have substantiated that collaborative consumption is no longer a short-term trend or superficial media hype but a movement that has advanced from a niche topic to an actual **change in consumer behaviour**. Therefore, the sharing economy is here to stay – alongside traditional economic patterns of consumption ([Scholl et al., 2010](#); [Kolson, 2012](#); [Heinrichs & Grunenberg, 2013](#)).

Currently, profit is unequally distributed and remains mainly with the large players but the more users become aware of the **economic significance** of collaborative consumption they will want to be part of its financial success: In the long run, those platforms will win on which not only pictures, music, bikes and sofas are shared – but also profits ([Frick et al., 2013](#)). This goes with in line with finding multiple motivations causing consumers to participate in sharing.

From the results of this study and in line with [Marchand et al. \(2010, p. 1444\)](#) I believe that “**self-interest motives** for responsible consumption should receive greater recognition”. Self-interest motives lead to reducing levels of consumption while eco- and socio-altruistic motives lead to opting for more environmentally and socially sound products ([Marchand et al., 2010](#)).

The sharing economy grows and differentiates itself further. With regard to the different motivations present in sharing, my assumption is that already in this early phase, different platforms engage different sorts of people and hence create an adequate ambience among their users. New common and hybrid markets continue to evolve between personal property and market-standard products as the line between private and collective further blurs ([Frick et al., 2013](#)), retail becomes ‘rentail’, shopping

becomes 'shwopping'. Sharing marketplace have already begun to transform into **market networks**, still processing market transactions while at the same time incorporating the social aspects of social networks: building communities and a sense of belonging.

Expanding globally on the sharing idea, in threshold countries with fundamental societal needs, the **potential** is high for shared value concepts: Besides products and services also land, mobile data and WiFi capacity is shareable. With mobile internet devices developing and a further unfolding of value consciousness it is likely the collaborative consumption space continues to develop (Heinrichs & Grunenberg, 2013). Solid research will soon provide estimates on the sharing economy's world economic potential. Just then, it can be judged whether the available alternatives will lead from a private property oriented economy to a more resource-efficient consumption.

With machine-to-machine communication and the internet of things, objects will be tagged with identifiers and sensors, making them part of the online network. Besides widespread benefits in our daily lives (smart homes, real-time monitorings, industry automation) (Gartner, 2013; Anderson & Rainie, 2014), this leads to all products staying on the digital market after they have been bought, making them **ubiquitously** accessible (Frick et al., 2013).

In his new book 'The business of sharing' Stephany (2015) quotes Lynn Jurich, the CEO of Sunrun, who calls out the dis-ownership movement by saying "the new status symbol isn't what you own – it's what you're smart enough not to own". Therefore, I assume that soon, those industry players can successfully maintain their stake that work on the '**shareability**' of a product or service. Sharing will remain relevant, possibly for rather high-grade products than cheap throw-aways.

10 Acknowledgements

I chose to study a topic relevant not only to me but to traditional commerce and society as a whole: the sharing economy, a potentially game-changing trend that has emerged over the past three years. Observing this, my thesis was not written in isolation but emerged from many encounters with ideas, discussion rounds, and narratives from identified partakers in the sharing economy. The more I delved into the topic, the more it appealed to me – making me a true sharing advocate. I myself use ridesharing with different platforms for seven years now. During the years I recognized that sharing concepts gain in mass appeal and can potentially set new things in motion – steering away from the hassles of ownership to more flexible options instead.

This has been the first time in my student life that I actually had time and joy studying a subject in very depth. Doing so, I came across a multitude of related research fields relevant to the topic as a whole: happiness research, sustainability sciences, business and educational psychology, behavioural economics, consumer behaviour literature, cultural anthropology, and even bioscience. I have drifted into social science and neuro-psychology and I learned a lot about myself and the generation Y – a great experience.

Often, we find what we set out to find. To avoid this bias, I kept an open mind from the beginning. I read everything I could find. Of course, I preferred purely academic sources but since they were rarely available one year ago, I considered conventional paper press and high quality online magazines, too. I tried not to be overly theoretical but to act objectively instead. I admit this to be the hardest part of research.

I know that the potential and reality of the co-consumption movement are hardly quantifiable – yet. With research data pouring in almost daily, this will change soon. I am very curious as to how the topic develops. Personally, it is my wish to make collaborative consumption more about *collaboration* than about consumption. I believe it is about time to challenge the traditional modes of *possessing* and *owning* towards a culture that allows more people to benefit from what is available within a population and beyond. At the end of this research, I am sure there is a critical mass of like-minded individuals in this population large enough to make an impact by consuming less and more sustainably.

Last but not least, I am very happy to have been given the chance to present at the First International Workshop on the Sharing Economy at Utrecht University and a Hamburg consultancy event on co-consumption.

11 Appendix

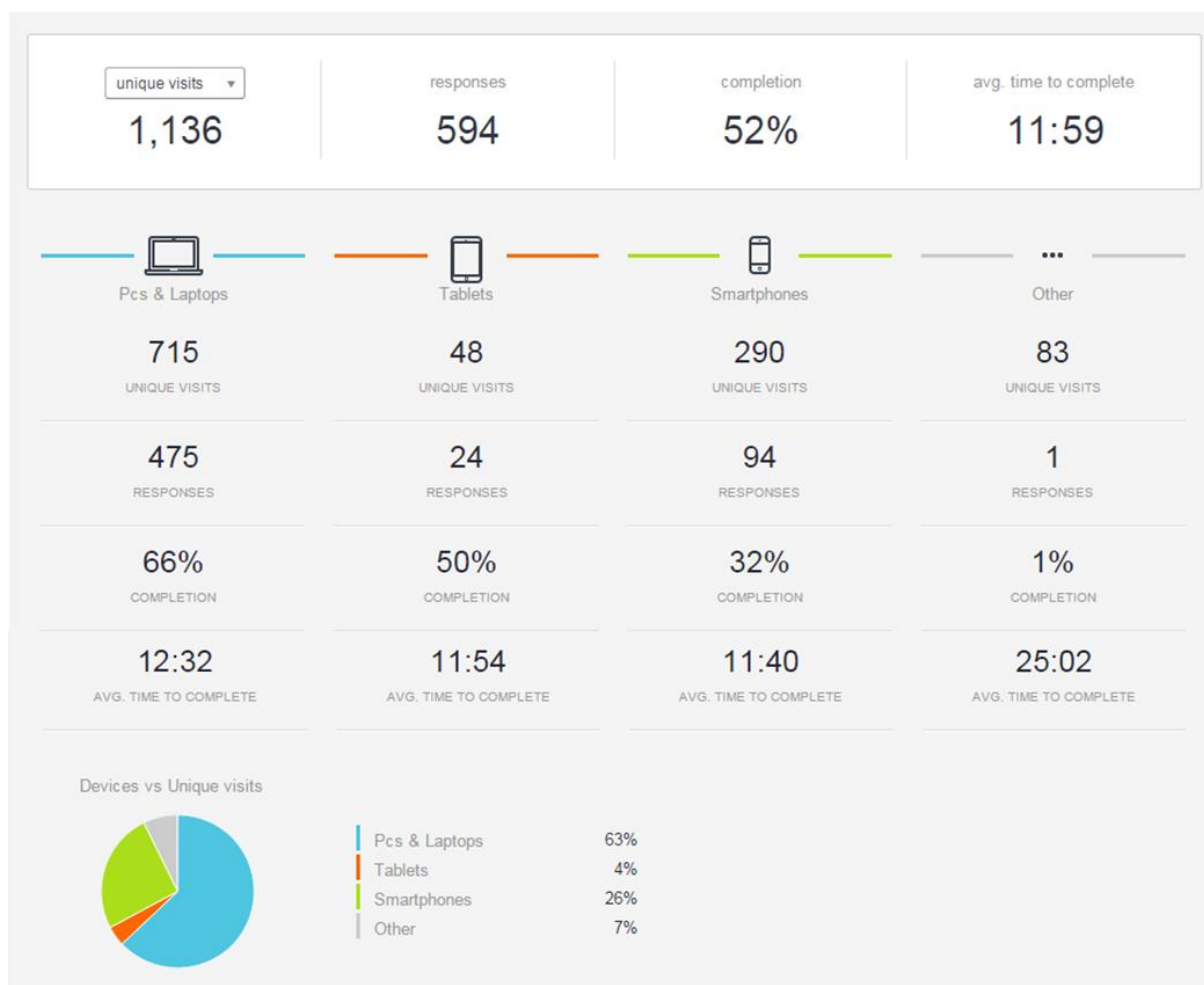
Appendix 1: Co-consumption companies organized on P2P platforms

Category	Subcategory	Examples
Housing / Space / Property	House / Flat / Bed / P2P travel	Airbnb, Couchsurfing, BeWelcome, 9flats, Wimdu, OneFineStay, Roomorama, Crashpadder, Gloveler, globalhoming, HomeAway, iStopOver, Tripping
	Office / Garage	Liquidspace, Shareyouroffice, Citizen Space, Hub Culture, sharedesk, coworking, Basislager
	Storage / Parking space	Sharemystorage, Parkatmyhouse, Parkingspace, Parkingpanda
	Land / Garden ground	Yardshare, Sharedearth, Hyperlocavore, meineernte, Landshare, deinHof
Vehicles / Mobility	Private carsharing (C2C)	autonetzer.de, RelayRides, Getaround, Just Share It, Whipcar
	Ride sharing (C2C)	Mitfahrgelegenheit, BlaBlaCar, Flinc, UBER, Wunder, Lyft, Zimride, Liftshare, Go Car Share, eRideShare
	Free floater (B2C)	Car2go, DriveNow
	Stationary provider (B2C)	Zipcar, Mobility
	Bike	Callabike-Interaktiv, Denver B-cycle, DB Call a Bike
	Other	Sailbox, Cruzin, Weeels
Fashion	Adults	Bibandtuck, Refashioner, Swapinthecity, Kleiderkreisel, Mudjeans, ThredUP, Swapstyle, Clothing Exchange, 99 Dresses, Big Wardrobe, Mädchen-Flohmarkt, Bag Borrow Steal, Bling Yourself, ClothingSwap.com, Renttherunway, Swapforgood, Fashionhire
	Kids (incl. Toys)	ThredUP, Toyswap, Swapitbaby, Swapkidsclothes, meinespielzeugkiste.de
Knowledge / Time / Experience	Housework / Workforce / Favors	Taskrabbit, Mila, Gigwalk, Airrun, Zaarly, Exchange-Me, Hey Neighbor!, Your Job Done, 99designs, Doido, MicroWorkers
	Education & learning	Skillshare
	Experience / Travel	Vayable.com, Guidehop, GrandTourGo (real-life guiding tours), audioguideme (local stories guiding app)
Media & Art	Books	Bookelo, BookHopper, Thebookswap, Paperbackswap, Bookmooch, TauschTicket
	Games & movies	SwapSimple, Dig N'Swap, Swap.com, Goozex
	Art	TurningArt, StudioShare
Food	Groceries	Foodsharing, Youthfoodmovement, Mundraub
	Food preparation / Co-ops	Ampleharvest, Eggzy, Rootdownfarm.net
	Meals	Gobble, Grubwithus, Feastly, Eat With Me, JoinMyMeal, Eathwith, Supperking
Retail &	Re-use / Secondary markets	Swap.com, Yerdle, Uniiverse, Getable, Toygaroo, Rentcycle, AnyHire, Hey Neighbor!, Snapgoods,

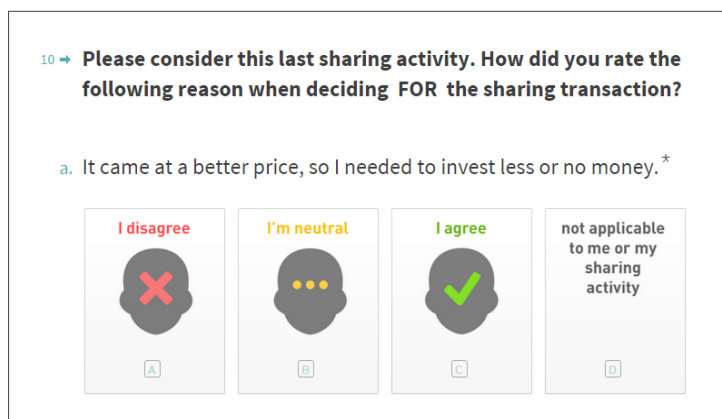
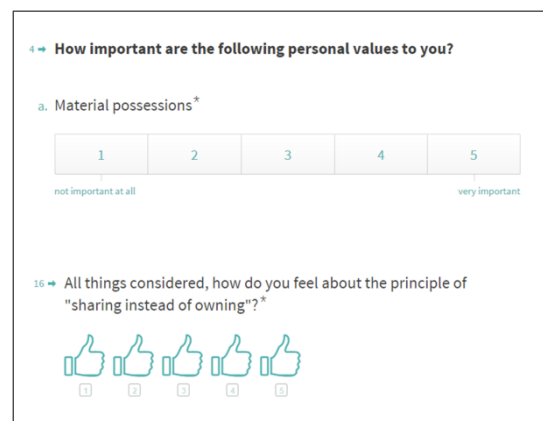
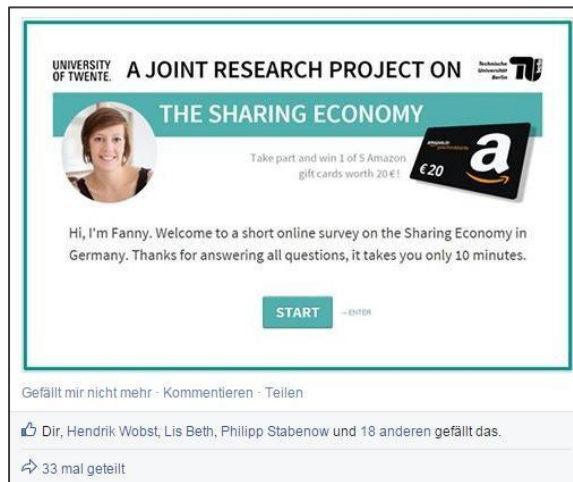
Consumer Goods	Flea markets	Sharehood, Ecomodo, swap-online.com, Tauschticket, Stuffle, Swap-o-matic, Freecycle, Warp-It, Bid and Borrow, share4friends, Craigslist, Zaarly, Leihdirwas
	Neighborhood lending	NeighborGoods, Frents, Sharestarter, StreetBank
	Other	Winhal (furniture), Rentoid (rental & hire)
Money	Social / P2P lending	Lending Club, Prosper, Zopa, Lendstar, Prosper
	Donating / Crowdfunding	Kickstarter, 100-Days, Wemakeit, Cashare, IndieGoGo, Startnext, Seedmatch, betterplace.org
	Credits	smava
Energy	Energy	One Block Off the Grid (solar power)

Table: Overview of sharing economy players

Annotation: Examples include German and worldwide offers, without claiming to be complete. In 'The Mesh', Lisa Gansky created a sharing directory involving as much as 25 categories.

Appendix 2: Survey tool tracking

Appendix 3: Impressions of survey look and postings online




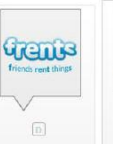






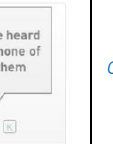
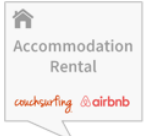


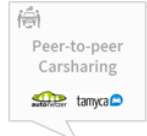



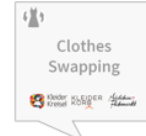










Figures: Screenshots from survey tool and postings on Xing and Facebook, e.g. Ouishare Berlin community

Appendix 4: Survey items, labels and scale origins

Q	Label	Item and Answer Options / Scale	Source
Part 1: Alternative Types of Consumption and Attractiveness of Collaborative Consumption (CC)			
<i>Data protection note: Survey answers are confidential and data will be analyzed anonymously. Responses are reported in summarized format only so they cannot be traced back to individuals. If you enter the draw to win an Amazon gift voucher you'll be contacted once only and your e-mail is deleted afterwards.</i>			
1	Language	Please choose your preferred language. → English → Deutsch	own
“In order to use things, we do not necessarily have to buy and possess them ourselves. Instead, products and services can be rented, exchanged or consumed together. These collaborative consumption schemes are facilitated by online platforms to match suppliers with recipients and to coordinate and secure their transaction. Examples of the sharing economy include car and ride sharing, swapping wardrobes or the booking of private accommodations while on travel. This survey explores the rationales behind sharing goods and services with, most often, previously unknown people.”			
2	Most popular types	How often do you do the following activities? – Using a car or bike from a rental business – Renting things you rarely need from a rental agency, e.g. equipment, furniture, machinery – Buying or selling used things at a flea market or similar event – Buying or selling things privately on the Internet, e.g. via eBay → I do this regularly → I did this before → I can imagine doing this → I cannot imagine doing this	Botsman, 2011; Heinrich & Grunenberg, 2013
3	Attractiveness	Let's assume the following: Close to your home, a possibility exists where you can borrow objects you don't need every day, such as electronic household gadgets, gardening tools, renovation utensils. How attractive is it for you to borrow such objects or use them together instead of buying or owning them? → very attractive → somewhat attractive → not so attractive → not attractive at all	BMU, 2013

“Before we dive into this, let me ask you a few questions about yourself and why you usually buy stuff.”			
Part 2: Individual Difference Variables: Consumer Values, Product Attributes and Attitudes			
4	CC-relev. values: Property Luxury Creativity Predictability Experience Variety	How important are the following personal values to you? (1 to 5 numerical scale) <ul style="list-style-type: none"> – Material possessions – Luxury and treats – Creativity and own ideas – Security and reliability – Community and social contact – Interesting and diverse life <ul style="list-style-type: none"> → not important at all → somewhat unimportant → rather neutral → somewhat important → very important 	Richins, 2004; Heinrichs & Grunenberg, 2013; Phipps et al., 2013
5	Product attributes: Price Quality Environment Trend Togetherness Attention CSR	And how do you rate the importance of the following product or service aspects? (1 to 5 numerical scale) <ul style="list-style-type: none"> – Price is important to me. – Quality is important to me. – It is important to me that it is environmentally friendly. – It is important to me that it is innovative or modern. – I like it when it brings me together with others – It is important to me that it lets me stand out from the crowd. – It is important that the producing company acts responsibly. <ul style="list-style-type: none"> → I strongly disagree → I disagree somewhat → I’m rather neutral → I agree somewhat → I strongly agree 	Heinrichs & Grunenberg, 2013

6	Attitudinal statements: Trust Opinion leader Moderation Material success Material happins. Utilitarian attitit. Hedonic attitude	<p>Great! Now, please vote on the following statements: (1 to 5 numerical scale)</p> <ul style="list-style-type: none"> – In general, other people can be trusted. – I like educating people by sharing my views. – I usually buy only the things I need. – The things I own say a lot about how well I'm doing in life. (R) – I'd be happier if I could afford to buy more things. (R) – Things I buy are primarily functional and useful. – Things I buy are primarily pleasant and experiential. <p>→ I strongly disagree → I disagree somewhat → I'm rather neutral → I agree somewhat → I strongly agree</p>	Heinrichs & Grunenberg, 2013; Cosmas & Sheth, 1980; Batra & Athola, 1990; Richins, 2004
<p>"Now let's come back to this sharing thing."</p>			
<p>Part 3: Recent Participation and Reasons Therefore</p>			
7	Platform recognition and familiarity	<p>Please select the sharing platforms you've heard of so far. * You don't need to have an account.</p> <div>            </div>	own
8	Recent participation	<p>During the past six months, have you participated in one or more sharing activities, coordinated via an online platform? * Multiple answers are possible.</p> <div> <div>         </div> <div>         </div> </div>	own

9	Demotivators: No time No need No interest No awareness No reaction No faith No trust No freedom	Reasons why I haven't participated in any sharing activity (yet) are: * Multiple answers are possible. <ul style="list-style-type: none"> – I don't want to invest the time. – I'm satisfied with alternatives available. – I don't see how this could be of any value for me. – I haven't come across any such services. – I don't usually react to such offers. – I don't like to be with people whose behaviour I cannot anticipate. – I'm afraid other people would not care about my belongings. – I believe sharing things creates dependencies amongst people. 	Luchs et al., 2011; Schwartz, 2012
"Now, about which of your sharing activities may I ask you another question? Please choose one."			
10	Motives: Saving Quality Monetization Convenience Uniqueness Dispensability Autonomy Trial Word of mouth Enjoyment Social cohesion Altruism Self-marketing Lifestyle Envir. Consciousn. Indirect reciprocity	Please consider this last sharing activity. How did you rate the following reasons when deciding for the sharing transaction? <ul style="list-style-type: none"> – It came at a better price, so I needed to invest less or no money. – I received superior quality, compared to a traditional offer. – I earned money with it. – For me, it was just convenient and practical to share. – I couldn't find the product / service elsewhere. – There was no need to buy and possess it myself. – I liked being independent from traditional sellers. – I wanted to try the product / service before buying it myself. – It has been recommended to me, so I was curious. – It's fun – I enjoyed it. – It allowed me to meet interesting people – online and locally. – I like being generous to myself and others, it's satisfactory. – It's a cool new initiative and I like talking about it. – It's my personal interest to lead a healthy life. – Throwing away goods and not utilizing spare resources as counterproductive to sustainable lifecycles. – I believe one day I will gain something in return for helping out others. <ul style="list-style-type: none"> → I agree → I'm rather neutral → I don't agree → not applicable to me or my sharing activity 	Kolson, 2012; Owyang et al., 2014 Bauwens et al., 2012; Hamari et al., 2013; Marchand et al., 2010; Phipps et al., 2013; van de Glind, 2013; Lawson, 2010
11	Provider side: Provider / supplier User / recipient Advocate	When planning a sharing activity via the Internet, which part of the equation are you? <ul style="list-style-type: none"> – I'm usually the one offering things or activities to others. – I'm usually the one responding to others' offers. – I do both equally often. 	own

"We are almost there! But before, please let me know how you think the sharing story will develop."			
Part 4: Future Development			
12	Five year forecast	Generally, do you think that sharing physical resources will increase in the next five years? → no, I don't think so → no, probably not → I'm not sure → yes, probably → yes, I think so	Bauwens et al., 2012
13	Future participation	Is it likely that you yourself will (more) frequently participate in collaborative consumption in the future? → not very likely → no, probably not → I'm not sure → yes, probably → yes, very likely	Hamari, 2013
14	Future income component	Are you more likely to share your belongings if you could make money from it? → not very likely → no, probably not → I'm not sure → yes, probably → yes, very likely	own
15	Willingness to pay	For a sharing transaction – as opposed to traditionally available consumer products – I am willing to pay: ... → more. → less or nothing. → the same amount of money.	own
16	Sympathy towards CC	All things considered, how do you feel about the principle of 'sharing instead of owning'? (1 to 5 symbolic scale)	own
"This is almost the end – just a little statistics left. For demographic analysis, please give accurate information about yourself."			
Part 5: General Demographics			
17	Age	What is your year of birth? → Dropdown list "Select year"	own
18	Gender	I am ... → Female → Male	own

19	Nationality	What is your nationality? → German → Other	own
20	City	What is your current place of residence, i.e. the city you live in at the moment? If you don't want to disclose this information, please type "-" → _____ → Prefer not to disclose	Frick et al., 2013
21	Job	What is your present occupation? → Apprentice / Pupil → Student → Employee → Management → Freelancer → Retiree → Other	own
22	Income	Please give an indication of your income (per month after tax). → Below 800 € → 800 € to 1,400 € → 1,400 € to 1,900 € → 1,900 € to 2,500 € → Above 2,500 € → Prefer not to disclose	own
23	Internet use	How much time per day do you actively use the Internet? → Less than 1 hour → Between 1 and 3 hours → Between 3 and 6 hours → Above 6 hours	own
Thank you very much for your participation! Hold on: Now you may give additional information below or jump to the bottom to leave your details for the chance to win an Amazon gift voucher.			
If you wish, please let me know about your experiences with shared goods or services: Feel free to leave any comment on the survey here:			
Please enter your name and e-mail address:			
Send answers and finish survey.			
Thank you and goodbye!			

Appendix 5: Bivariate cross-correlations matrix acc. to Pearson

	01	02	03	04	05	06	07	08	09	10	11	12	13	14	15	16	17	18	19	20
01 Attractiveness	1																			
02 Past sharing intensity	.309**	1																		
03 Motive savings	.067	.044	1																	
04 Motive quality	.161**	.082	.112*	1																
05 Motive monetization	-.034	-.006	.067	-.070	1															
06 Motive convenience	.133**	.111*	.008	.015	.235**	1														
07 Motive uniqueness	-.064	-.048	.028	.141**	.083	.013	1													
08 Motive dispensability	.060	.146**	.060	.190**	-.036	.200**	.103*	1												
09 Motive autonomy	.039	.140**	.125*	.250**	.035	.102*	.244**	.244**	1											
10 Motive trial	.033	.116*	.007	.133**	.178**	.176**	.202**	.432**	.257**	1										
11 Motive word of mouth	-.061	-.030	.034	.081	-.034	-.040	.024	.098	.138**	.197**	1									
12 Motive joy	.188**	.161**	-.019	.225**	.117*	.191**	.103*	.017	.194**	.082	.178**	1								
13 Motive social cohesion	-.007	.197**	.097	.052	.100	.096	-.047	-.059	.143**	-.053	-.003	.279**	1							
14 Motive altruism	.077	.127*	-.043	.041	.145**	.213**	.041	.049	.131*	.257**	.217**	.268**	.181**	1						
15 Motive self-marketing	.191**	.202**	.077	.159**	.043	.203**	.080	.104*	.212**	.110*	.091	.339**	.174**	.305**	1					
16 Motive lifestyle	-.064	.071	-.013	.019	.010	.167**	.115*	.052	.178**	.194**	.034	.084	.116*	.239**	.310**	1				
17 Motive envir. conscious.	.085	.019	-.061	-.002	.033	.130*	.005	.075	.096	.050	-.010	.134**	.100	.189**	.312**	.418**	1			
18 Motive indirect reciprocity	.041	.023	-.085	.007	.116*	.208**	.081	.105*	.143**	.147**	.044	.171**	.131*	.329**	.274**	.309**	.233**	1		
19 Future participation in CC	.446**	.455**	-.025	.168	-.031	.196**	.010	.178**	.165**	.093	-.021	.250**	.121*	.133**	.313**	.086	.149**	.181**	1	
20 Sympathy towards CC	.369**	.409**	.015	.178**	.002	.078	.039	.104*	.199**	.066	.007	.304**	.114*	.146**	.365**	.120*	.161**	.123*	.524**	1

Table: Bivariate cross-correlations matrix acc. to Pearson r (variables)

** significant on 0.01 level ($p \leq 0.01$)* significant on 0.05 level ($p \leq 0.05$)

Appendix 5: Bivariate cross-correlations matrix acc. to Pearson (cont'd)

	01	02	03	04	05	06	07	08	09
01 Past sharing intensity (d)	1								
02 Income (c)	-.172**	1							
03 Age cohort (c)	.209**	-.282**	1						
04 Gender (c)	.087*	-.220**	.118**	1					
05 Size of city (c)	.174**	.040	.016	-.054	1				
06 Internet use (c)	.153**	.017	.169**	-.182**	.162**	1			
07 Attractiveness (d)	.309**	-.063	.011	-.028	.113*	.063	1		
08 Future participation intention (d)	.455**	-.124**	.224**	.009	.156**	.124**	.466**	1	
09 Sympathy towards CC (d)	.409**	-.130**	.194**	.041	.138**	.053	.369**	.524**	1

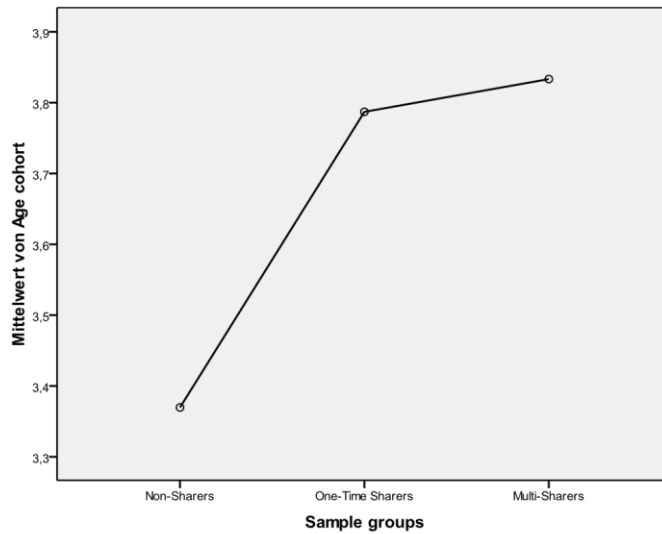
Table: Bivariate cross-correlations matrix acc. to Pearson r (controls)

** significant on 0.01 level ($p \leq 0.01$)* significant on 0.05 level ($p \leq 0.05$)

(c) ... control variable

(d) ... dependent variable

Appendix 6: Descriptives and outcome of one-way analysis of variance (ANOVA)



Numerical codes* of variable *age cohort* (y-axis):

3.0 \triangleq average age Generation X (45 years)

4.0 \triangleq average age Generation Y (27 years)

Sample sub-group acc. to *sharing intensity* (x-axis):

Non-Sharers: 0 activity in past 6 mo.

One-Time Sharers: 1 activity in past 6 mo.

Multi-Sharers: 1-8 activities in past 6 mo.

* Age has been coded into cohorts 1-5 as described in chapter 5.2.1.

Figure: Mean comparison age cohort per sample subgroup

Reference: SPSS output

	n	mean	standard deviation	standard error	95% confidence interval		min	max
					lowest	highest		
Non-Sharers	211	3.37	.860	.059	3.25	3.49	1	5
One-Time Sharers	155	3.79	.645	.052	3.68	3.89	1	5
Multi-Sharers	228	3.83	.538	.036	3.76	3.90	1	5
Total	594	3.66	.725	.030	3.60	3.72	1	5

	sum of square	df	mean of squares	F	significance
Between groups	27.133	2	13.566	28.151	.000
Within groups	284.807	591	.482		
Total	311.939	593			

(1) Sample groups	(2) Sample groups	mean diff. (1-2)	standard error	significance	95% confidence interval	
					lowest	highest
Non-Sharers	One-Time Sharers	-.417*	.079	.000	-.61	-.23
	Multi-Sharers	-.464*	.069	.000	-.63	-.30
One-Time Sharers	Non-Sharers	.417*	.079	.000	.23	.61
	Multi-Sharers	-.046	.063	.845	-.20	.10
Multi-Sharers	Non-Sharers	.464*	.069	.000	.30	.63
	One-Time Sharers	.046	.063	.845	-.10	.20

*significant on 0.05 level [$p \leq 0.05$]

Tables: Descriptives, outcome and significance post-hoc test of one-way ANOVA on variable age cohort

Reference: SPSS output

A significance of 0.0 applies to the hypothesis that all three sample sub-groups show the same mean values for the age cohort variable in the general population. With most probabilities being zero, multiple comparison allows for the conclusion that generation membership differs among the groups.

References

A

Abel, J. (2013). The Rise of the Shared Economy. An article produced for Forbes, accessed on 28/02/2014 via forbes.com.

Accenture (2013). The UN Global Compact: CEO Study on Sustainability 2013. A study prepared by Accenture and the United Nations, accessed on 18/02/2014 via accenture.com.

Ahuvia, A. C. (2005). Beyond the Extended Self: Loved Objects and Consumers' Identity Narratives. *Journal of Consumer Research*, 32(1), 171–184.

Aigrain, P. (2012). *Sharing. Culture and the Economy in the Internet Age*. Amsterdam: Amsterdam University Press.

Airbnb (2012). Deutschland teilt: Auf dem Weg in die "Sharing Economy"? Eine Studie zur Sharing Economy in Deutschland [Germany Is Sharing: On the Way into the Sharing Economy]. A report prepared on behalf of Airbnb, accessed on 12/04/2014 via leuphana.de.

Albinsson, P. A. & Perera, B. Y. (2012). Alternative Marketplaces in the 21st Century: Building Community through Sharing Events. *Journal of Consumer Behaviour*, 11, 302–315.

Anderson, G. (2013). Collaborative Consumption. *Financial Management*, 42(3), p. 13.

Anderson, J. & Rainie, L. (2014). The Internet of Things Will Thrive by 2025. A study prepared by the Pew Research Center, accessed 29/05/2014 via pewinternet.org.

B

Bagó, A. C. (2011). Introduction to Collaborative Consumption. A report prepared for the Barcelona Consensus Grant, accessed 12/10/2014 via scribd.com.

Baker, D. (2014). Don't Buy the "Sharing Economy" Hype: Airbnb and Uber Are Facilitating Rip-Offs. An article produced for The Guardian, accessed 28/05/2014 via theguardian.com.

Bandura, A. (1989). Human Agency in Social Cognitive Theory. *The American Psychologist*, 44(9), 1175–1184.

Bandura, A. (1997). *Self-efficacy: The Exercise of Self-control*. New York: Freeman.

Bandura, A. (2001). Social Cognitive Theory: An Agentic Perspective. *Annual Review of Psychology*, 52(1), 1–26.

Barros, P. (2013). Collaborative Consumption and the Sharing Economy in Developing Markets. An article produced for Sustainable Brands, accessed on 23/02/2014 via sustainablebrands.com.

- Batra, S. K. & Kazmi, S. (2008). *Consumer Behaviour* (2nd edition). New Delhi: Excel.
- Bauer, J. (2006). *Das kooperative Gen. Abschied vom Darwinismus [The Cooperative Gene: Goodbye to Darwinism]*. Hamburg: Hoffmann und Campe.
- Bauwens, M., Mendoza, N. & Iacomella, F. (2012). *Synthetic Overview of the Collaborative Economy*. A report prepared by P2P Foundation, accessed on 30/05/2014 via p2p.coop.
- Belk, R. (2007). Why Not Share Rather Than Own? *The Annals of the American Academy of Political and Social Science*, 2007, 611, 126–140.
- Belk, R. (2010). Sharing. *Journal of Consumer Research*, 36(5), 715–734.
- Belk, R. (2014). You Are What You Can Access: Sharing and Collaborative Consumption Online. *Journal of Business Research*, 67, 1595–1600.
- Belvaux, B. (2011). The Development of Social Media: Proposal for a Diffusion Model Incorporating Network Externalities in a Competitive Environment. *Recherche et Applications en Marketing - English Version*, 26(3), 7–22.
- Benkler, Y. (2006). *The Wealth of Networks: How Social Production Transforms Markets and Freedom*. London: Yale University Press.
- BITKOM (2013). *Das Internet schafft eine Kultur des Teilens [The Internet Creates a Culture of Sharing]*. An article produced for BITKOM, accessed on 05/04/2014 via bitkom.org.
- Bittel, J. (2012). Contagious Ideas in Social Media – A Two-Factor Model on Motivations for Sharing. Accessed via openthesis.org.
- Blumberg, B.; Cooper, D. R. & Schneider, P. S. (2008). *Business Research Methods* (2nd European edition). Maidenhead: McGraw Hill.
- BMU (2013). *Umweltbewusstsein in Deutschland 2012 [Environmental Awareness in Germany 2012]*. A study prepared for the Federal Ministry for Environment, Nature Conservation and Nuclear Safety and the Federal Environmental Agency, accessed on 23/09/2014 via bundesumweltamt.de.
- Böckmann, M. (2013). *The Shared Economy: It Is Time to Start Caring about Sharing; Value Creating Factors in the Shared Economy*. A Bachelor's dissertation at the University of Twente, the Netherlands.
- Bollier, D. (2012). Sharing Is the Biggest Secret in the Global Economy. An article produced for Shareable magazine, accessed on 25/07/2014 via shareable.net.
- Bolton, L. E.; Cohen, J. B. & Bloom, P. N. (2006). Does Marketing Products as Remedies Create "Get out of Jail Free Cards"? *Journal of Consumer Research*, 33(1), 71–81.
- Bosshart, D. (2011). *The Age of Less – Die neue Wohlstandsformel der westlichen Welt [The Age of Less – The New Wealth Formula of the Western World]*. Hamburg: Murmann.

Botsman, R. (2010). The Case for Collaborative Consumption. A video filmed at TED Talks, accessed on 23/04/2015 via ted.com.

Botsman, R. (2013). The Sharing Economy Lack a Shared Definition: Giving Meaning to the Terms. An article produced for Fast Company, accessed on 14/04/2015 via fastcoexist.com.

Botsman, R. & Rogers, R. (2011). What's Mine Is Yours: How Collaborative Consumption Is Changing The Way We Live. London: HarperCollins.

Botsman, R. & Rogers, R. (2010). Beyond Zipcar: Collaborative Consumption. An article produced for the Harvard Business Review edition September–October 2010.

Boudreau, K. J. & Lakhani, K. R. (2013). Using the Crowd as an Innovation Partner. An article produced for the Harvard Business Review edition April 2013.

Brogan, C. & Smith, J. (2009). Trust Agents: Using the Web to Build Influence, Improve Reputation, and Earn Trust. New Jersey: John Wiley & Sons.

Buczynski, B. (2011). The Gen Y Guide to Collaborative Consumption. An article produced for Shareable magazine, accessed on 11/08/2014 via shareable.net.

Buczynski, B. (2012). Collaborative Funding Skyrocketed in 2011. Will 2012 Top It? An article produced for Shareable magazine, accessed on 11/08/2014 via shareable.net.

Busque, L. (2012). How the Sharing Economy Is Helping Small Businesses Thrive. An article produced for the Huffington Post Small Business, accessed on 23/02/2014 via huffingtonpost.com.

C

Carrington, M. J.; Neville, B. A. & Whitwell, G. J. (2010). Why Ethical Consumers Don't Walk Their Talk: Towards a Framework for Understanding the Gap Between the Ethical Purchase Intentions and Actual Buying Behaviour of Ethically Minded Consumers. *Journal of Business Ethics*, 97(1), 139–158.

Cassinelli, E. (2013). How Collaborative Consumption Will Improve Our Production Systems. An article produced for ShareDesk, accessed 30/05/2014 via sharedesk.net.

Castells, M. (2004). *Der Aufstieg der Netzwerkgesellschaft* [The Rise of the Network Society]. Opladen: Leske + Budrich.

Chang, T.-Z. & Vowles, N. (2013). Strategies for Improving Data Reliability for Online Surveys: A Case Study. *International Journal of Electronic Commerce Studies*, 4(1), 121–130.

Chen, C. & Hung, S. (2010). To Give or to Receive? Factors Influencing Members' Knowledge Sharing and Community Promotion in Professional Virtual Communities. *Information & Management*, 47, 226–236.

Clendaniel, M. (2011). A Tour Guide to Collaborative Consumption. An article produced for Fast Company, accessed on 13/04/2014 via fastcodesign.com.

Corbin, J. & Strauss, A. C. (2008). Basics of Qualitative Research (3rd edition). Thousand Oaks: Sage.

Cosmas & Sheth (1980). Identification of Opinion Leaders Across Cultures: An Assessment for Use in the Diffusion of Innovations and Ideas. *Journal of International Business Studies*, 11(1), 66–72.

D

Danby, D. (2005). Product-Service Scenarios for the Bright Green City. An article produced for Worldchanging, accessed 17/07/2014 via worldchanging.com.

Deci, E. L. (1971). Effects of Externally Mediated Rewards on Intrinsic Motivation. *Journal of Personality and Social Psychology*, 18(1), 105–115.

Dervojeda, K.; Verzijl, D.; Nagtegaal, F.; Lengton, M.; Rouwmaat, E.; Monfardini, E. &

Destatis (2014). Continuous Household Budget Surveys: Private Consumption Expenditure. An ongoing statistics report by the Federal Statistical Office, accessed on 08/05/2015 via destatis.de.

Dierig, C. (2015). Das Märchen vom Durchbruch des Carsharings [The Fairytale of the Breakthrough of Carsharing]. An article produced for Die Welt, accessed on 02/04/2015 via welt.de.

Dillman, D. A.; Phelps, G.; Tortora, R.; Swift, K.; Kohrell, J.; Berck, J. & Messer, B. L. (2009). Response Rate and Measurement Differences in Mixed-mode Surveys Using Mail, Telephone, Interactive Voice Response and the Internet. *Social Science Research*, 38(1), 1–18.

Dubois, E.; Schor, J. & Carfagna, L. (2014). Connected Consumption: A Sharing Economy Takes Hold. *Rotman Management Journal*, Spring 2014, 51–55.

Dziallas, T. (2013). Von Reisetipps bis Unterwäsche [From Travel Tips to Underwear]. An article produced for INTERNET WORLD, accessed on 08/03/2014 via internetworld.de.

E

Eccles, J. S. & Wigfield, A. (2002). Motivational Beliefs, Values, and Goals. *Annual Review of Psychology*, 53, 109–132.

European Social Survey (2012). European Social Survey Annual Report 2012. A service granted by Norwegian Social Science Data Services, accessed on 11/04/2015 via nesstar.ess.nsd.uib.no.

F

Felson, M. & Spaeth, J. L. (1978). Community Structure and Collaborative Consumption. *American Behavioral Scientist*, 21, 614–624.

Fournir, S.; Eckhardt, G. M. & Bardhi, F. (2013). Learning to Play in the New “Share Economy”. A case study produced for the Harvard Business Review edition July–August 2013.

Fraiberger, S. & Sundararajan, A. (2015). Peer-to-Peer Rental Markets in the Sharing Economy. Research article draft, accessed on 08/04/2015 via squarespace.com.

Franke, N. & Shah, S. (2003). How Communities Support Innovative Activities: An Exploration of Assistance and Sharing Among End-Users. *Research Policy*, 32(1), 157–178.

Frenken, K.; Meelen, T.; Arets, M. & van de Glind, P. (2015). Smarter Regulation for the Sharing Economy. An article lead-produced by Koen Frenken, Chair of Innovation Studies at the Copernicus Institute of Sustainable Development at Utrecht University, for The Guardian, accessed on 09/05/2015 via theguardian.com.

Frey, Bruno (2010). *Happiness. A Revolution in Economics*. Boston: MIT Press.

Frick, K.; Hauser, M. & Gürtler, D. (2013). Sharity: Die Zukunft des Teilens [Sharity: The Future of Sharing]. GDI Gottlieb Duttweiler Institute, GDI Studie Nr. 39.

Frideres, L. (2013). Business Innovation Observatory: The Sharing Economy – Accessibility Based Business Models for the Peer-to-Peer Markets. A report prepared by PricewaterhouseCoopers for the European Commission.

Friedman, T. L. (2013). Welcome to the “Sharing Economy”. An article produced for The New York Times, accessed on 30/05/2014 via nytimes.com.

Fründt, S.; Fuest, B. & Kaiser, T. (2014). Quick and Dirty: Eine neue Art des Geldverdienens [Quick and Dirty: A New Way to Earn Money]. An article produced for Die Welt, accessed on 13/06/2014 via welt.de.

G

Gabillard, C. & van der Heijden, T. (2015). Self-empowerment Within the Collaborative Movement. A Master’s dissertation at the Linnaeus University, Sweden.

Gansky, L. (2010). *The Mesh: Why The Future Of Business Is Sharing*. New York: Penguin Group.

Gansky, L. (2011). Do More, Own Less: A Grand Theory of the Sharing Economy. An article produced for The Atlantic, accessed on 15/07/2014 via theatlantic.com.

Gartner (2013). Gartner Says the Internet of Things Installed Base Will Grow to 26 Billion Units by 2020. Press release accessed on 29/05/2014 via gartner.com.

Gaskins, K. (2010a). The New Sharing Economy. A study prepared by Latitude and Shareable magazine, accessed on 18/02/2014 via latdsurvey.net.

Gaskins, K. (2010b). Top Opportunities Areas for New Sharing Offerings. An article produced for Latitude, accessed on 30/04/2014 via life-connected.com.

Geneste, A. (2011). L'économie du partage dans le secteur du transport et de la mobilité [The Sharing Economy in the Transport and Mobility Sector]. An article produced for InnovCity (a website of the Paris Region Innovation Laboratory), accessed on 05/08/2014 via innovcity.fr.

Geron, T. (2012). Airbnb Had \$56 Million Impact on San Francisco: Study. An article produced for Forbes, accessed on 20/05/2014 via forbes.com.

Geron, T. (2013). Airbnb and the Unstoppable Rise of the Share Economy. An article produced for Forbes, accessed on 28/02/2014 via forbes.com.

Gerstner, L. (2014). Cash In on the Sharing Economy. Kiplinger's Personal Finance Journal, 07/2014, 58–60.

Gillner, S. (2013). Soziale Netzwerke beeinflussen Konsumentenentscheidungen [Social Networks Influence Consumer Decisions]. An article produced for INTERNET WORLD, accessed on 08/03/2014 via internetworld.de.

Gorenflo, N. (2010). Is Social Media Paving the Way for an Offline Sharing Economy? An article produced for Shareable magazine, accessed on 30/04/2014 via life-connected.com.

Grant, R. (2013). Disownership is the New Normal: Rise of the Shared Economy. An article produced for VB, accessed on 31/05/2014 via venturebeat.com.

Guay, F.; Chanal, J.; Ratelle, C. F.; Marsh, H. W.; Larose, S. & Boivin, M. (2010). Intrinsic, Identified, and Controlled Types of Motivation for School Subjects in Young Elementary School Children. British Journal of Educational Psychology, 80(4), 711–735.

H

Hamari, J.; Sjöklint, M. & Ukkonen, A. (2013). The Sharing Economy: Why People Participate in Collaborative Consumption. A working paper of a Master's dissertation at the Helsinki Institute for Information Technology, Finland, accessed via ssrn.com.

Hantman, D. (2013). Airbnb Economic Impact Study: Berlin and the Airbnb Community. An article produced for Airbnb, accessed on 13/03/2014 via publicpolicy.airbnb.com.

Heinberg, R. (2012). The Fight of the Century. An article produced for Post Carbon Institute, accessed 17/07/2014 via postcarbon.com.

Heinrichs, H. (2013). Sharing Economy: A Potential New Pathway to Sustainability. GAiA Journal published by oekom-Verlag, 22(4), 228–231, accessed on 22/02/2014 via leuphana.de.

Heinrichs, H. & Grunenberg, H. (2013). Sharing Economy: Towards a New Culture of Consumption? Centre for Sustainability Management, Leuphana University Lüneburg, Germany. Author's personal copy.

Horowitz, S. (2013). It's Time for the Sharing Economy to Become the Sharing Society. An article produced for Fast Company, accessed on 04/05/2015 via fastcoexist.com.

I

Informisten.de (2014). Die essbare Stadt – eine Idee verbreitet sich [The Edible City – An Idea Spreads]. An article produced for Informisten.de (a social debate network), accessed on 11/08/2014 via informisten.de.

Internet Live Stats (2015). Live Statistics Counters. Part of the Real Time Statistics Project, accessed on 01/04/2015 via internetlivestats.com.

Ipsos (2013). Many See Sharing One's Belongings Online as a Great Way to Earn Extra Money. Ipsos poll conducted April 16-19, 2013. Press release accessed on 31/05/2014 via ipsos-na.com.

J

Jackson, T. (2005a). Live Better by Consuming Less? Is There a "Double Dividend" in Sustainable Consumption? *Journal of Industrial Ecology* 9/1–2, 19–36.

Jackson, T. (2005b). Motivating Sustainable Consumption: A Review of Evidence on Consumer Behavior and Behavioral Change. A report prepared for the Sustainable Development Research Network, University of Surrey.

Jain, N. (2013). Trust, Transparency and Shared Economy. An article produced for Forbes, accessed on 28/02/2014 via forbes.com.

K

Kahneman, D. (2010). The Riddle of Experience vs. Memory. A video filmed at TED Talks February 2010, accessed on 15/06/2014 via ted.com.

Kalamar, A. (2013). Sharewashing Is the New Greenwashing. An article produced for OpEdNews, accessed on 16/06/2014 via opednews.com.

Kaplan, S. (2000). Human Nature and Environmentally Responsible Behaviour. *Journal of Social Issues*, 56(3), 491–508.

Karmann, M. (2013). The Rise of Collaborative Consumption on the Example of Couchsurfing. Norderstedt: GRIN.

Kelly, K. (2009). Better Than Owning. An article produced for the Kevin Kelly (thought leader, editor, publisher and founder of the Wired magazine) blog, accessed on 07/07/2014 via kk.org.

Khan, B. (2014). The Sharing Economy: Disrupting Traditional Business Models. *The Market Leader*, Quarter 1, 2014, 31–33.

Kietzmann, J. H.; Hermkens, K. & McCarthy, I. P. (2011). Social Media? Get Serious! Understanding the Functional Building Blocks of Social Media. *Business Horizons*, 54, 241–251.

King, N. (2004). Using Interviews in Organizational Research. In C. Cassell & G. Symon (Eds.), *Essential Guide to Qualitative Methods in Organizational Research*. London: Sage.

Klein, S. (2010). *Der Sinn des Lebens: Warum Selbstlosigkeit in der Evolution siegt und wir mit Egoismus nicht weiterkommen*. Frankfurt: Fischer.

Kroll, S. (2013). *Neue Macht durchs Teilen [New Power through Sharing]*. An article produced for INTERNET WORLD, accessed on 08/03/2014 via internetworld.de.

Kuhndt, M. (2012). *Shared Economy für nachhaltige Lebensstile: Eine Familie stellt sich um [Shared Economy for Sustainable Lifestyles: A Family Changes Over]*. A presentation held by the Head of CSCP (Collaborating Centre on Sustainable Consumption and Production) at the Sharing Economy inspirato conference in Berlin.

Kuhndt, M.; Wagner, T. & Pratt, N. (2013). *Warum teilen und tauschen, statt haben? Wie wird die Sharing Economy zum Massenmarkt? [Why Sharing and Swapping Instead of Owning? How the Sharing Economy Becomes a Mass Market?]*. An article produced for Forum Nachhaltig Wirtschaften, accessed on 20/06/2014 via nachhaltigwirtschaften.de.

L

Lamberton, C. P. & Rose, R. L. (2012). When Is Ours Better Than Mine? A Framework for Understanding and Altering Participation in Commercial Sharing Systems *Journal of Marketing*, 76, 109–125.

Lawson, S. (2010). Transumers: Motivations of Non-ownership Consumption. *Advances in Consumer Research*, 37, 842–843.

Leismann, K.; Schmitt, M.; Rohn, H. & Baedeker, C. (2012). *Nutzen statt Besitzen: Auf dem Weg zu einer ressourcenschonenden Konsumkultur [Using Instead of Owning: On the Way to a Resource-saving Consumer Culture]*. A report prepared for the Heinrich-Böll-Stiftung: Schriften zur Ökologie, Band 27.

Leonard, A. (2010). *The Story of Stuff*. Referenced and annotated script, accessed on 01/04/2014 via dev.storyofstuff.org or as video via storyofstuff.org.

Leonard, A. (2013). *Millennials Will Not Be Regulated*. An article produced for SALON, accessed on 01/04/2014 via salon.com.

Levenson, E. (2007). The Fractional Life: With Jewellery, Yachts, and Vineyards Available by the Slice, Even the Superrich Are Learning to Share. An article produced for *Fortune* magazine Vol. 155(4), p. 131 – 132, accessed on 20/11/2014 via archive.fortune.com.

Lindenberg, S. (2011). Intrinsic Motivation in a New Light. *KYKLOS*, 54, 317–342.

Luchs, M.; Naylor, R.; Rose, R.; Catlin, J. & Gau, R. (2011). Toward a Sustainable Marketplace: Expanding Options and Benefits for Consumers. *Journal of Research for Consumers*, 23(2), 1–12.

Lueb, T. (1999). Die Implementierung einer Share Economy zur Reduzierung der Arbeitslosigkeit in Deutschland [The Implementation of a Share Economy for Reducing Unemployment in Germany]. Frankfurt: Peter Lang.

M

Mackay, J. & Sisodia, R. (2013). *Conscious Capitalism: Liberating the Heroic Spirit of Business*. Boston: Harvard Business Review Press.

Malhotra, N. K.; Birks, D. F. & Wills, P. (2012). *Marketing Research: An Applied Approach* (4th ed.). Harlow: Pearson Education Limited.

Manzini, E. & Vezzoli, C. (2002). *Product-Service Systems and Sustainability: Opportunities for Sustainable Solutions*. An essay written for UN Environment Programme (Production and Consumption Branch), accessed on 27/06/2014 via unep.org.

Marchand, A.; Walter, S. & Cooper, T. (2010). Beyond Abundance: Self-Interest Motives for Sustainable Consumption in Relation to Product Perception and Preferences. *Sustainability*, 2, 1431–1447.

Marszalek, B. (2014). The Sharing Economy = Brand Yourself. An article produced for CounterPunch, accessed 27/05/2014 via counterpunch.org.

McKinney, S. (2013). A Growing Segment of Sharing Economy Users? *Entrepreneurs*. An article produced for Forbes, accessed on 28/02/2014 via forbes.com.

McDonough, W. & Braungart, M. (2002). *Cradle to Cradle: Remaking the Way We Make Things*. New York: North Point Press.

Meelen, T. & Frenken, K. (2015). Stop Saying Uber Is Part Of The Sharing Economy. An article produced for Fast Company, accessed on 30/01/2015 via fastcoexist.com.

Miller, L. (2012). The Money-Empathy Gap: New Research Suggests that More Money Makes People Act Less Human. Or At Least Less Humane. An article produced for New York Magazine, accessed on 03/05/2015 via nymag.com.

Minder, R. & Scott, M. (2014). Sharing Economy Faces Patchwork of Guidelines in European Countries. An article produced for The New York Times, accessed on 14/01/2014 via nytimes.com.

Moore, A. & Taylor, M. (2008). Why Buy When You Can Rent? A Brief Investigation of Difference in Acquisition Mode Based on Duration. *Applied Economics Letters*, 1-3.

N

Nakagawa, S. & Freckleton, R. P. (2008). Missing Inaction: The Danger of Ignoring Missing Data. *Trend in Ecology and Evolution*, 23(11), 592–596.

Nimrode, J. (2013). What Are the Best Online Survey Tools? An article produced for online knowledge platform Quora, accessed 06/01/2015 via quora.com.

Nov, O.; Naarman, M. & Ye, C. (2010). Analysis of Participation in an Online Photo-Sharing Community: A Multidimensional Perspective. *Journal of the American Society for Information Science and Technology*, 61(3), 555–666.

Nunnally, J. C. (1978). *Psychometric Theory* (2nd edition). New York: McGraw.

Nupke, P. (2012). *Motivation: Theory and Use in Higher Education*. Investigations in University Teaching and Learning, London Metropolitan Business School, 8, Summer 2012.

O

Oliver, R. (2008). All About Food Waste. An Article produced for CNN, accessed on 16/07/2014 via edition.cnn.com.

Olson, K. (2012). National Study Quantifies Reality of the Sharing Economy Movement. A study prepared by Carbonview Research for Campbell Mithun, accessed on 21/04/2014 via cmithun.com.

Ostrom, E. (2011). Was mehr wird, wenn wir teilen: Vom gesellschaftlichen Wert der Gemeingüter. Silke Helfrich, Munich.

Orsi, J. (2009). Four Degrees of Sharing. An article produced for Shareable magazine, accessed on 05/08/2014 via shareable.net.

Ortmann, Y. (2013). Alle Konzepte und Plattformen auf einen Blick. An article produced for deutsche-startups.de.

Owyang, J.; Tran, C. & Silva, C. (2013). The Collaborative Economy: Products, Services, and Market Relationships Have Changed as Sharing Startups Impact Business Models. To Avoid Disruption, Companies Must Adopt the Collaborative Economy Value Chain. A report prepared by Altimeter Group, accessed on 17/04/2014 via altimetergroup.com.

Owyang, J.; Samuel, A. & Grenville, A. (2014). Sharing Is the New Buying: How to Win in the Collaborative Economy. A study prepared by Vision Critical and Crowd Companies, accessed on 13/05/2014 via visioncritical.com.

Ozanne, L. K. & Ballantine, P. W. (2010). Sharing as a Form of Anti-Consumption? An Examination of Toy Library Users. *Journal of Consumer Behaviour*, 9(6), 485–498.

P

P2Pfoundation.net (2012). Product-Service-System, via p2pfoundation.net.

Paech, N. (2012). *Befreiung vom Überfluss: Auf dem Weg in die Postwachstumsökonomie* [Leaving the Overabundance: On the Way to a Post-Growth Economy]. Munich: oekom.

Parks, L. & Guay, R. P. (2009). Personality, Values, and Motivation. *Personality and Individual Differences*, 47, 675–684.

Parris, D. L. & McInnis-Bowers, C. V. (2014). Social Entrepreneurship Questioning the Status Quo: Waste as a Resource. *Journal of Economic Issues*, 48(2), 359–365.

- Penn, J. & Wihbey, J. (2015). Uber, Airbnb and Consequences of the Sharing Economy: Research Roundup. An article produced for the Journalist's Resource Project, accessed on 20/07/2015 via journalistsresource.org.
- Perrini, F.; Fazzolari, S. (2006). San Patrignano: A Sustainable Model for Social Entrepreneurship. Northampton: Edward Elgar.
- Peytchev, A. (2013). Consequences of Survey Nonresponse. The Annals of American Academy of Political and Social Science, 645, 88–111.
- Phipps, M.; Ozanne, L. K.; Luchs, M. G.; Subrahmanyam, S.; Kapitan, S.; Catlin, J. R.; Gau, R.; Naylor, R. W.; Rose, R. L.; Simpson, B. & Weaver, T. (2013). Understanding the Inherent Complexity of Sustainable Consumption: A Social Cognitive Framework. Journal of Business Research, 66, 1227–1234.
- Pick, F. (2012). Building Trust in Peer-to-Peer Marketplaces. A Bachelor's dissertation at the Zeppelin University, Germany.
- Pickreign, J. & Whitmore, H. (2012). Evaluating the Effectiveness of Two Strategies to Improve Telephone Survey Response Rates of Employers. Proceedings of the International Conference on Establishment Surveys ICES IV (June 11–14), Montréal, Quebec, Canada.
- Piff, P. K.; Stancato, D. M.; Côté, S.; Mendoza-Dentona, R. & Keltner, D. (2012). Higher Social Class Predicts Increased Unethical Behavior. PNAS Proceedings of the National Academy of Sciences of the United States of America, 109(11), 4086–4091.
- Pless, N. M. (2012). Social Entrepreneurship in Theory and Practice: An Introduction. Journal of Business Ethics, 11, 317–320.
- Preston, F. (2012). A Global Redesign? Shaping the Circular Economy. A briefing paper prepared for the CHATHAM HOUSE, accessed on 20/04/2014 via chathamhouse.org.
- Price, J. A. (1975). Sharing: The Integration of Intimate Economics. Anthropologica, 17(1), 3–27.
- PwC (2015). The Sharing Economy. A report from the Consumer Intelligence Series, accessed on 24/05/2015 via pwc.com.
- Princen, T. (2003). Principles for Sustainability: From Cooperation and Efficiency to Sufficiency. Global Environmental Politics 3/1, 33–50.
- Prothero, A.; Dobscha, S.; Freund, J.; Kilbourne, W. E.; Luchs, M. G.; Ozanne, L. K. & Thøgersen, J. (2011). Sustainable Consumption: Opportunities for Consumer Research and Public Policy. Journal of Public Policy & Marketing, 30(1), 31–38.

R

Renaud-Dubé, A.; Tayler, G.; Lekes, N.; Koestner, R. & Guay, F. (2010). Adolescents' Motivation Toward the Environment: Age-Related Trends and Correlates. *Canadian Journal of Behavioural Science*, 42(3), 194–199.

Reuters (2014). AICPA Survey Shows "Sharing Economy" Has Potential. A press release on the study by the American Institute of CPAs, accessed on 30/04/2014 via reuters.com.

Rheannon, F. (2012). Cooperative Capitalism: Can Coops Rejuvenate the American Economy? An article produced for CSRwire, accessed on 27/06/2014 via csrwire.com.

Richins, M. L. (2004). The Material Values Scale: Measurement Properties and Development of a Short Form. *Journal of Consumer Research*, 31(1), 209–219.

Rifkin, J. (2001). *The Age of Access: The New Culture of Hypercapitalism – Where All of Life Is a Paid-for Experience*. New York: J.P. Tarcher / Putnam.

Rinne, A. (2013). Circular Economy Innovation & New Business Models Initiative. A position paper written by the Young Global Leaders Sharing Economy Working Group of the World Economic Forum in cooperation with Accenture. Geneva: World Economic Forum.

Rodrigues, R. & Druschel, P. (2010). Peer-to-Peer Systems. *Communications Of The ACM*, 53(10), 72–82.

Rogelberg, S. G. & Stanton, J. M. (2007). Understanding and Dealing with Organizational Survey Nonresponse. *Organizational Research Methods*, 10, 195–209.

Roose, K. (2014). The Sharing Economy Isn't About Trust, It's About Desperation. An article produced for New York Magazine, accessed on 30/05/2014 via nymag.com.

Rosenberg, T. (2013). It's Not Just Nice to Share, It's the Future. An article produced for The New York Times, accessed on 07/03/2013 via opinionator.blogs.nytimes.com.

Rothschild, J. (2009). Workers' Cooperatives and Social Enterprise: A Forgotten Route to Social Equity and Democracy. *American Behavioral Scientist*, 52(7), 1023–1041.

Ryan, R. M. & Deci, E. L. (1985). *Intrinsic Motivation and Self-Determination in Human Behavior*. New York: Plenum.

Ryan, R. M. & Deci, E. L. (2000). Intrinsic and Extrinsic Motivations: Classic Definitions and New Directions. *Contemporary Educational Psychology*, 25, 54–67.

S

Sacks, D. (2011). The Sharing Economy. An article produced for Fast Company, accessed on 21/02/2014 via fastcompany.com.

Sasserath, M. (2013). Shared Value – Ein neues Verständnis von Besitz [Shared Value – A New Understanding of Ownership]. A study prepared by Sasserath Munzinger Plus, accessed on 23/06/2014 via slideshare.net.

- Saunders, M., Lewis, P. & Thornhill, A. (2009). Research Methods for Business Students. Harlow: Pearson Education Limited.
- Scholl, G.; Gossen, M.; Grubbe, T. & Brumbauer, T. (2013). Alternative Nutzungskonzepte – Sharing, Leasing und Wiederverwendung [Alternative Utilization Concepts – Sharing, Leasing and Reuse]. Berlin: Institut für ökologische Wirtschaftsforschung (IÖW).
- Scholl, G; Schulz, L.; Süßbauer, E. & Otto, S. (2010). Nutzen statt Besitzen – Perspektiven für ressourceneffizienten Konsum durch innovative Dienstleistungen [Using Instead of Owning – Perspectives on Resource Efficient Consumption through Innovative Services]. Paper 12.4., Wuppertal-Institut.
- Schor, J. (2014). Debating the Sharing Economy. A paper written for the Great Transition Initiative Paper Series, Tellus Institute Boston.
- Schrader, M. (2013). What Drives the Sharing Economy. A presentation held for SinnerSchrader AG, accessed on 03/03/2014 via [slideshare.net](https://www.slideshare.net).
- Schwartz, A. (2012). The Potential for Pitfalls and Success in the Sharing Economy. An article produced for Fast Company, accessed on 12/07/2015 via fastcoexist.com.
- Shaheen, S. A. (2011). Carsharing: A Strategy for Reducing Carbon Footprint & Parking Policy Approaches. A presentation held at the CCPA Conference Oakland, accessed 22/02/2014 via tsrc.berkeley.edu.
- Shapiro, C. (2012). What's The Future Of The Sharing Economy? An Article produced for Fast Company, accessed 15/03/2015 via fastcoexist.com.
- Shaw, D. & Newholm, T. (2002). Voluntary Simplicity and the Ethics of Consumption. Psychology and Marketing, 19(2), 167–185.
- Shih, T. H. & Fan, X. T. (2008). Comparing Response Rates from Web and Mail Surveys: A Meta-Analysis. Field Methods, 20(3), 249–271.
- Shuttleworth, M. (2009). Construct Validity. An article produced for Explorable.com, accessed on 14/07/2015 via explorable.com.
- Sivac, M. & Schoettle, B. (2011). Recent Changes in the Age Composition of U.S. Drivers. Traffic Injury Prevention, 12(6), 588–592.
- Smith, J. A. (2008). The Scandal Industry. An article produced for the Greater Good Science Center, accessed on 21/02/2014 via greatergood.berkeley.edu.
- Smith, J. A. (2010). Learning to Trust Each Other, Online and Off. An article produced for Shareable magazine, accessed on 23/02/2014 via shareable.net.
- Smith, S. (2010). A Transumer Manifesto. An article produced for Shareable magazine, accessed on 15/07/2014 via shareable.net.
- Spiegel (2012). Vernetzt statt unterwegs: Junge US-Bürger verzichten auf den Führerschein. An article produced for SPIEGEL, accessed 23/09/2014 via spiegel.de.

Stallbaum, K. (2013). Die Share-Economy und das Veto der Wirtschaft [The Share Economy and the Economy's Veto]. A blog entry written for Stapag, accessed on 20/03/2014 via stapag.com.

Startnext (2015). About Startnext. Accessed on 11/05/2015 via startnext.com.

Statistisches Bundesamt (2012). Bevölkerung nach Altersgruppen und Geschlecht [Population According to Age and Gender]. A report prepared by the Bundeszentrale für Politische Bildung (Federal Agency for Civic Education), accessed on 20/05/2015 via bpb.de.

Steffen, A. (2007). Use Community: Smaller Footprints, Cooler Stuff and More Money. An article produced for Worldchanging, accessed on 17/07/2014 via worldchanging.com.

Stephany, A. (2015). The Business of Sharing: Making it in the New Sharing Economy. Hampshire: Palgrave Macmillan.

Strauss, S. (2013). 'Welcome' to the Sharing Economy – Also Known as the Collapse of the American Dream. An article produced for the Huffington Post, accessed on 30/05/2014 via huffingtonpost.com.

Sundararajan, A. (2013). From Zipcar to the Sharing Economy. An article produced for the Harvard Business Review Blog Network, accessed on 23/05/2014 via blogs.hbr.org.

Swallow, E. (2012). The Rise of the Sharing Economy. An article produced for Mashable, accessed on 21/05/2014 via mashable.com.

T

Tincq, B. (2013). "Collaborative Consumption Is Still an Elite Movement. We Need to Break That." Says Markus Barnikel from Carpooling. An article produced for the Ouishare community, accessed on 24/04/2014 via ouishare.net.

The Economist (2013a). All Eyes on the Sharing Economy. An article produced for the print edition (Vol. 406, Issue 8826, 13–15, Technology Quarterly part), accessed on 22/02/2014 via economist.com.

The Economist (2013b). Peer-to-Peer Rental: The Rise of the Sharing Economy. An article produced for the print edition (Vol. 406, Issue 8826, 9, Leaders part), accessed on 22/02/2014 via economist.com.

The Economist (2015). Workers on Tap. An article produced for The Economist, accessed on 08/06/2015 via economist.com.

The People Who Share (2013). The State of the Sharing Economy. A report on Foodsharing in the UK, accessed on 13/04/2014 via thepeoplewhoshare.com.

Thøgersen, J. & Crompton, T. (2009). Simple and Painless? The Limitations of Spillover in Environmental Campaigning. *Journal of Consumer Policy*, 32(2), 141–163.

Thomas, J. W. (1998). Motivational Research. An article produced for Decision Analyst, accessed 19/08/2014 via decisionanalyst.com.

Trendwatching.com (2006). Transumers: Consumers Driven by Experiences. A review produced for trendwatching.com, accessed on 21/11/2014 via trendwatching.com.

Tuhus-Dubrow, R. (2010). The Leased Life – Why Own Anything. An article produced for Dallas News, accessed on 27/07/2014 via dallasnews.com.

Tunguz, T. (2011). How Collaborative Consumption Is Transforming Startups. An article written for MIT Entrepreneurship Review, accessed on 13/03/2015 via mter.mit.edu.

Turkle, S. (2011). Alone Together: Why We Expect More from Technology and Less from Each Other. New York: Basic Books.

Tukker, A. (2004). Eight Types Of Product–Service System: Eight Ways to Sustainability? Experiences From Suspronet. *Business Strategy and the Environment*, 13, 246–260.

U

Underhill, P. (1999). *Why We Buy: The Science of Shopping*. New York: Simon & Schuster.

V

Van de Glind, P. (2013). *The Consumer Potential of Collaborative Consumption*. A Master's dissertation at the University of Utrecht, the Netherlands.

Van den Broek, T. A.; Ehrenhard, M. L.; Langley, D. J. & Groen, A. J. (2012). Dotcauses for Sustainability: Combining Activism and Entrepreneurship. *Journal of Public Affairs*, published online in Wiley Online Library.

Vergragt, P. J. (2006). *How Technology Could Contribute To A Sustainable World*. A paper written for the Great Transition Initiative Paper Series, Tellus Institute Boston.

W

Wall Street Journal (2013). Sharing Graduates from Kindergarten: National Poll Shows Ethics, Social Recommendations Fuel the Growing Sharing Economy. An article produced for Airbnb, accessed on 01/05/2014 via online.wsj.com.

Wallace, E.; Buil, I.; Chernatony, L. de & Hogan, M. (2014). Who “Likes” You and Why? A Typology of Facebook Fans: From Fanatics and Self-Expressives To Utilitarians and Authentics. *Journal of Advertising Research*, 03/2014, 92–109.

Wallsten, S. (2015). *The Competitive Effects of the Sharing Economy: How is Uber Changing Taxis?* Technology Policy Institute New York, accessed on 29/06/2015 via techpolicyinstitute.org.

Walsh, B. (2011). 10 Ideas That Will Change the World – Today's Smart Choice: Don't Own, Share (8 of 10). An article produced for the TIME, accessed on 30/05/2014 via content.time.com.

Weber, C. (2011). Sharing Power: Building a Solidarity Economy. An article produced for Shareable magazine, accessed on 25/07/2014 via shareable.net.

Weitzman, M. L. (1986). The Sharing Economy: Conquering Stagflation.

Wharton (2011). Want to Rent out That Spare Room? The Growing Popularity of “Collaborative Consumption”. An article produced for the Wharton School at the University of Pennsylvania, accessed on 21/05/2014 via knowledge.wharton.upenn.edu.

Wijnhoven, F.; Ehrenhard, M. & Kuhn, J. (2015). Open Government Objectives and Participation Motivations. *Government Information Quarterly*, 32 (2015), 30–42.

Woods, B. (2014). Collaborative Economy: Environmental Researchers Need to Get with the Times. An article produced for Worldwatch Institute Europe, accessed on 04/08/2015 via worldwatch-europe.org.

Worldchanging (2007). Principle 13: Product Service Systems. An article produced for Worldchanging, accessed on 19/07/2014 via worldchanging.com.

World Economic Forum (2013). Sustainable Consumption: Stakeholder Perspectives. Geneva: World Economic Forum.

WWF International (2012). Living Planet Report. Biodiversity, Biocapacity and Better Choices. Switzerland.

Y

Yiannopoulos, M. (2013). Don't Believe the Hype: Here's What's Wrong with the “Sharing Economy”. An article produced for TNW, accessed on 03/05/2014 via thenextweb.com.

Z

Zacharia, G. & Maes, P. (2010). Trust Management Through Reputation Mechanisms. *Applied Artificial Intelligence: An International Journal*, 14(9), 881–907.

Zahra, S. A.; Gedajlovic, E.; Neubaum, D. O. & Shulman J. M. (2009). A Typology of Social Entrepreneurs: Motives, Search Processes and Ethical Challenges. *Journal of Business Venturing*, 24(5), 519–532.

Zipcar (2011). Millennials & Driving. A study prepared by Zipcar, accessed on 13/05/2014 via slideshare.net.

Zipcar (2014). Millennials & the “New American Dream”. A study prepared by Zipcar, accessed on 19/07/2014 via slideshare.net.

Zukin, S. & Maguire, J. S. (2004). Consumers and Consumption. *Annual Review of Sociology*, 30, 173–197.