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How does a Facebook flea market create value?
Value co-creation and value outcomes in a digital platform

Marketing

Master's thesis

Heini Toivanen

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Department of Marketing
Aalto University
School of Business

Aalto University
School of Business

Aalto University, P.O. BOX 11000, 00076 AALTO
www.aalto.fi

Abstract of master's thesis

Author Heini Toivanen

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Abstract

The aim of this thesis is to build more understanding on a recent phenomenon of Facebook flea markets. In a more extensive context, the topic is part of sharing economy, which covers peer-to-peer exchange more thoroughly. The chosen standpoint looks at the phenomenon through a value creation lens, more specifically how these flea markets create value for their users. The thesis builds on service-dominant logic (S-D logic) where value is a central underpinning. In order to bring practicality to S-D logic, platform structure is infused to it to better evaluate the complex value co-creation process. In the crossroads of the two literature streams, a framework for the thesis is developed.

The research question was studied with a qualitative approach, where a Facebook flea market Kallio kierrättää acted as the target case. Selected users of this platform were interviewed with semi-structured interviews, and a qualitative content analysis was conducted on the transcribed records. The thesis follows a realism paradigm where the researcher is able to analyze the shared reality of individuals. Prior theory also plays a significant role in realist studies.

The central findings illustrated that the value co-creation process is different from what was expected based on prior theory. In addition of merely interacting through ICT, Kallio kierrättää users connect in the flea market context outside the platform in physical surroundings, mainly in Kallio area in Helsinki. Furthermore, the sense of community is built both online and offline, leading to the conclusion that the digital and the physical complement one another.

In addition, instead of users being only consumers of the platform they are in fact the main force behind the group. The traditional division between value proposition side and user side was changed as users were actively taking the admin role. Thus, users are creating value for each other more directly through having established and using Kallio kierrättää, where the interference of middlemen is not present the same way as in e.g. basic flea markets or online platforms. Moreover, the rules seem to act as a glue that keeps users connected and the group functioning.

Regarding value outcomes, the main finding indicated that negative experiences play an important role in determining the final value outcome. The suggestion is that S-D logic inherited the net benefit view of value that has been first introduced more than 25 years ago. More generally, the thesis has demonstrated that platform structure can be successfully used in analyzing value co-creation. One suggestion for further research is to see if the same logic could be applied in other contexts where the platform exists on a more abstract level.

Keywords service-dominant logic, value, value co-creation, platforms, sharing economy, Facebook, flea market

Aalto-yliopisto
Kauppakorkeakoulu

Aalto-yliopisto, PL 11000, 00076 AALTO
www.aalto.fi

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Tiivistelmä

Tämän tutkielman tavoitteena on rakentaa lisää ymmärrystä tuoreeseen ilmiöön, Facebook-kirpputoreihin. Laajemmassa kontekstissa aihe on osa jakamistaloutta, joka kattaa yksilöltä yksilölle -vaihdannan perusteellisemmin. Valittu näkökulma katsoo ilmiötä arvonluontilinssin läpi, tarkemmin miten nämä kirpputorit luovat arvoa käyttäjilleen. Tutkielma rakentaa service-dominant logic -teorian pohjalle, missä arvo on keskeinen tukipilari. Jotta S-D logic -teoriaan voi tuoda käytännöllisyyttä, siihen yhdistetään rakennetta platform-kirjallisuudesta. Näin voidaan paremmin arvioida monimutkaista arvon yhteisluontiprosessia. Tutkielman viitekehys luodaan näiden kahden teoriasuunnan risteyksessä.

Tutkimuskysymystä tutkittiin kvalitatiivisella otteella, jossa Facebook-kirpputori Kallio kierrättää toimi kohdetapauksena. Tästä alustasta valikoituja käyttäjiä haastateltiin semistrukturoiduilla haastatteluilla, ja kvalitatiivinen sisältöanalyysi tehtiin pohjautuen litteroituihin tallenteisiin. Tutkielma seuraa realismiparadigmaa, jossa tutkija voi analysoida yksilöiden jaettua todellisuutta. Aiemmalla teorialla on myös merkittävä rooli realistisissa tutkimuksissa.

Keskeiset löydökset osoittavat, että arvon yhteisluonnin prosessi on erilainen kuin mitä oli odotettavissa aiempaan teoriaan pohjautuen. Sen lisäksi, että Kallio kierrättää -käyttäjät ovat vuorovaikutuksessa ICT:n välityksellä, he kytkeytyvät toisiinsa kirpputorikontekstissa digitaalisen alusta ulkopuolella fyysisessä ympäristössä, lähinnä Kallion alueella Helsingissä. Edelleen, yhteisön tunne rakentuu niin verkossa kuin sen ulkopuolellakin johtaen siihen päätelmään, että digitaalinen ja fyysinen täydentävät toisiaan.

Lisäksi, sen sijaan että käyttäjät olisivat vain alustan kuluttajia, he ovat itse asiassa oleellisin voima ryhmän takana. Perinteinen jako arvolupauspuoleen ja käyttäjäpuoleen muuttui, sillä käyttäjät ottavat aktiivisesti ylläpitäjän roolia. Näin ollen käyttäjät luovat arvoa toisilleen suoremmin perustamalla ja käyttämällä Kallio kierrättää -ryhmää, jossa välikäsien vaikutus ei ole niin näkyvä kuin esimerkiksi peruskirpputoreilla tai verkkoalustoissa. Sen lisäksi säännöt tuntuivat toimivan ikään kuin liimana, joka pitää käyttäjät yhteydessä ja ryhmän toimivana.

Mitä tulee arvoseurauksiin, päälöydös osoitti, että kielteisillä kokemuksilla on merkittävä rooli lopullisen arvoseurauksen määräytymisessä. Ehdotus on, että S-D logic -teoriaan lisättäisiin jo yli 25 vuotta sitten esitetty nettohyötynäkökulma arvoon. Yleisemmin tutkielma on näyttänyt toteen, että alustarakennetta voi onnistuneesti hyödyntää arvon yhteisluontia analysoidessa. Yksi ehdotus lisätutkimukselle on tutkia, voiko samaa logiikkaa soveltaa muissakin konteksteissa, joissa alusta on olemassa abstraktimmalla tasolla.

Avainsanat service-dominant logic, arvo, arvon yhteisluonti, digitaalinen alusta, jakamistalous, Facebook, kirpputori

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My thesis process started last spring in Montreal with a first draft of potential thesis topics and many advancements have been taken after the initial plan. In the beginning of the summer, I had already set on a topic on my mind, but that changed along the way, as did many other things.

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For my family and friends, huge thanks for your support, sparring and bearing with my thesis updates and outpourings. A special thank you goes to my other half Niko, who had an important role in making me believe in myself throughout the process.

The topic of this thesis has been an interesting one to study, and I genuinely hope that the larger phenomenon of sharing economy will be researched more in the future.

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1 INTRODUCTION

> *"We know nothing about most the people around us, yet there is always a chance they could be hugely valuable to us."*
>
> Scott Heiferman, CEO and co-founder of Meetup

Information and communications technology has enabled entirely novel ways of interaction as well as doing business. Scott Heiferman, CEO and co-founder of Meetup, an online service helping people organize local community groups, hits the nail on the head with his comment quoted above. There seems to be a vast potential in harnessing the benefits from peer-to-peer exchange, among others, instead of relying on the traditional setting where companies provide a product or a service and consumers consume it.

How and where we shop has changed tremendously over the past decade or so. Only in 2002, online retailers have been described to have overestimated the appeal of electronic shopping (Burke, 2002), while today the market size of e-commerce was at almost 840 billion USD in 2014 (A.T. Kearney, 2015). Not only do we shop from retailers, but from each other as well. Sharing economy refers to an economic model where people exchange goods and/or services through sharing, bartering, lending, trading, renting, gifting and swapping, facilitated by technology – a phenomenon also called collaborative consumption or sharing economy (Botsman & Rogers, 2010). The market size of sharing economy is estimated to grow from $15 billion to around $335 billion in 2025 (PwC, 2015). Furthermore, platforms play a significant role in sharing economy by creating value through enabling interaction between otherwise disconnected groups (Hagiu, 2014). Examples of such platforms can be found in Airbnb and Uber.

Sharing economy exists in a larger topic of circular economy, which is an industrial system that replaces the end-of-life concept with restoration (Ellen MacArthur Foundation, 2013). This means that physical materials are used in a cycle rather than a linear value chain that ends up in disposal. Hence, sharing economy is one way of enabling the circularity in the system. Botsman and Rogers (2010) distinguish between three main systems that operate within the sharing economy and collaborative consumption: product service systems, redistribution markets and collaborative lifestyles. Product service systems enable users to pay for the use of a product without ownership. Redistribution markets make it possible to reallocate goods or services that are no longer needed by the original owner or

in the original place to those who need them or to where they are needed. Collaborative lifestyles systems allow people to share and exchange less tangible assets such as time or space. (Ellen MacArthur Foundation, 2013).

An interesting phenomenon that exists thanks to social media and ICT are flea markets on Facebook. In Botsman and Rogers' (2010) categorization, they fall under the category of redistribution markets. These flea markets have grown organically in Facebook communities instead of a push from Facebook (the platform owner) or from app developers or advertisers (traditional platform complementors). These flea markets are becoming more and more popular, which gave room for the thought that there must be some kind of value in using them. Furthermore: what are the mechanisms in value creation?

Kallio kierrättää (2015) – translates as Kallio recycles – flea market group on Facebook offers a case example for diving deeper into what makes a Facebook-based flea market valuable for its users. Being a recent phenomenon, prior studies in the area are limited if not non-existent. There is unleashed potential in developing innovations towards a more circular economy and this thesis aims to provide more understanding on how digital platforms are used innovatively and how they create value for users.

1.1 Research gap

Flea markets or second-hand markets have been studied from a number of points-of-view: consumer motives for buying second-hand products (e.g. Roux & Guiot, 2008), consumer behavior and culture (e.g. Wikström, 1997; Xu et al., 2014), role of trust in C2C e-commerce (e.g. Lu et al., 2010), supply chain management (e.g. Kogan, 2011), success factors of sellers and seller types on eBay (Walia & Zahedi, 2013) and purchase decisions from an economic point-of-view (e.g. Chu & Liao, 2010; Liao & Chu, 2013), only to give some examples. However, studies on organically formed online flea markets are limited and especially Facebook-based flea markets are not discussed in research.

Even though the types of value that second-hand shoppers experience has been studied (see e.g. Xu et al., 2014), the *process* of value creation has been left without much research. Service-dominant logic (S-D logic) offers a holistic view on exchange in general as based on service and focuses on value as co-created (Vargo & Lusch, 2004). Since its introduction over ten years ago, the paradigmatic S-D logic has been evolving theoretically but it still lacks practical implications and empirical support. The latest development in S-D logic theory has provided insight of service ecosystems which represent the complex

networks where value is co-created (Vargo & Lusch, 2012). Furthermore, S-D logic has been accused of being too managerial and firm-centric, but its developers have suggested that it could be used outside the traditional marketing discipline as well (Vargo & Lusch, 2008a).

This thesis attempts to bring practicality in the value co-creation model proposed by S-D logic by infusing platform research into the logic. Smedlund (2012) has approached value creation from a service platform business model point-of-view and his value co-creation model acts as a starting point for building a framework for the study at hand. The model is enhanced with more recent platform research in that the roles of platform participants are proposed to be seen as non-fixed (Gawer, 2014), whereas Smedlund's model sees some platform actor roles more fixed. This question is crucial taking into consideration the studied phenomenon, as C2C exchange requires that formerly labelled "consumers" are able to acquire the roles of both buyers and sellers. The rationale for combining S-D logic and platform theories stems from the ecosystems view, which is shared by the two streams. Also, platforms are seen as enablers of value co-creation, orchestrating value (Kijima, 2015).

Another valid reason for choosing platforms as a frame-of-reference is that platforms are seen as both technological wholes and multisided markets (Gawer, 2014). These two main views on platforms are present in the research object, Kallio kierrättää Facebook group (2015). Also, while a lot of recent platform research focuses on innovations (e.g. Tuunainen & Tuunanen, 2011), a similar focus on service innovation is seen in S-D logic related literature in service science (e.g. Maglio & Spohrer, 2008). Even though innovation is not the main focus of this thesis, it provides understanding on the emergence of a new type of C2C e-commerce platform.

In addition to proposing a practically based model for assessing value co-creation process in a digital platform, the literature review potentially further structures the so far fragmented platform literature. The literature review on platforms is largely based on three recent overviews on platform literature (Thomas et al., 2014; Gawer, 2014; Porch et al., 2015), and it combines the views and finds underlying commonalities between them. All in all, significant points of parity tie S-D logic and platform theory together, which would point to a notion of "alliance" between the two, similarly to S-D logic and Consumer Culture Theory (CCT) (Arnould, 2007). The potential of platform logic being used on an abstract basis is discussed in chapter 7.

1.2 Research objective and research questions

The main objective of this research is to contribute to service-dominant logic by bridging theory and practice. Within S-D logic, the focus is on value: both value creation processes and value outcomes, or nature of value. In order to create a practice-driven framework for evaluating value, platform-related theory is infused to S-D logic and empirical support is used to illustrate the value co-creation process and outcomes. The main research question is:

- *How does a Facebook flea market create value for its users?*

The main research question is studied with the help of following sub-questions:

- *What kind of positive and negative value outcomes do users experience?*
- *What are the particularities in the value creation process?*

1.3 Definitions and limitations

A Facebook flea market is a marketplace for individual users, where a traditional platform owner does not exist the same way as in professional platforms, such as eBay. These flea markets are created on Facebook, and essentially they function the same way a normal Facebook group would function – Facebook users can join in the group and some users act as admins. In addition, Facebook has recently provided these flea markets with some technological improvements, such as a sales template, but otherwise the groups are independent of Facebook interfering the activities in the group.

A platform is a structure with a certain type of modular architecture with a core and a periphery (Baldwin & Woodard, 2009). In addition, platforms enable the use of leverage, i.e. it is more beneficial to perform an activity through a platform instead of performing it independently of the platform (e.g. Gawer, 2014; Thomas et al., 2014). Digital platforms are consequently platforms that exist on ICT solutions, where leveraging ICT is a significant characteristic (e.g. Hagiu, 2014). Platforms are more thoroughly defined through a literature review in chapter 3.

The limitations of this research should also be acknowledged. A possible limitation to the study is in the chosen single case study method, as only one Facebook flea market, Kallio kierrättää, is analyzed in this thesis. While the results are able to provide deeper understanding on the phenomenon in a limited context, they might not be similar in

other cases. In addition, the Finnish context might affect the results. Hence, it would be beneficial to perform a similar study in different contexts, as well as to study the same phenomenon with different targets and methodologies.

1.4 Structure of the thesis

In order to study the research gap systematically, the theory will be addressed from two different angles. The case is studied in the crossroads of two research streams, value creation in S-D logic and platforms especially focusing on digital platforms. Leaning to these research topics, the aim of this study is to explain the use of a certain kind of a digital platform flea market from a user or customer value point-of-view.

The following three chapters will discuss theory. Chapter 2 explains first the principles of service-dominant logic, whereas the main focus of the chapter will be on the nature of value and value creation processes. Chapter 3 takes a look at platform literature. Due to the fragmented nature of the topic, platform literature is covered from previous 10 to 15 years. An important stream within platform literature sees platforms as markets, and these multisided markets forming multisided platforms (MSPs) are assessed more thoroughly. A model from prior theory is presented, and innovation in platforms is discussed shortly in order to understand the phenomenon better. Chapter 4 combines the two literature streams and presents the value assessing framework, which guides the analysis of the case.

In chapter 5, I will present the methodological approach and present the methods and empirical materials that were obtained. Chapter 6 consists of looking at the findings and analyzing the data from interviews with the help of the framework presented in chapter 4. In chapter 7, I will discuss the findings and contributions of the study in the chosen theoretical context.

2 SERVICE-DOMINANT LOGIC

The concept of service-dominant logic (later S-D logic) was first introduced in marketing literature by Stephen Vargo and Robert Lusch in 2004. Now, more than a decade later, S-D logic has been widely discussed and has been moving towards a status of a paradigm (e.g. Vargo & Lusch, 2008a; Vargo, 2008; Vargo et al., 2010). While S-D logic covers marketing as well as possibly other disciplines rather holistically on a foundational level (Vargo & Lusch, 2004; 2008a), the main focus in this research is how *value* is considered according to S-D logic. In this part, I will look at the general premises of S-D logic, how value outcome is defined and how value creation occurs in S-D logic. In addition to merely describing the logic, I will take a look on how it has been criticized and how this critique might open new streams for future research.

2.1 Principles of service-dominant logic

Vargo and Lusch (2004) introduced service-dominant logic (S-D logic) as an evolving worldview, parts of which had been discussed in academic literature under different themes. One of the main proposals is that exchange is based on service rather than goods, and that even in the event of exchanging goods it is in fact service that is being exchanged. Even though S-D logic has been understood to offer a new paradigm for marketing (e.g. Achrol & Kotler, 2006), it is described by its original developers more as a mindset with which exchange can be potentially viewed more clearly (Vargo & Lusch, 2008a). To clarify the concept of service, within S-D logic the term is used to describe the *process of using competences for the benefit of another actor*, and it should not be confused with "services" which is commonly used of intangible products or outputs (Vargo, 2009). In comparison, in goods-dominant logic (G-D logic) service is considered either as an intangible output or as an add-on to product, which is the most critical distinction between G-D logic and S-D logic (Vargo & Lusch, 2008b).

S-D logic is usually seen as a framework consisting of originally eight foundational premises (FPs) that were introduced by Vargo and Lusch (2004). It provides a model for assessing value co-creation (Vargo, 2011). FPs were later revised and extended – as a result of academic discussion and debate – to consider altogether ten FPs (Vargo & Lusch, 2008a). The ten foundational premises offer a brief introduction to what S-D logic stands for. The FPs are presented below in Table 1.

Premise		Explanation/justification
FP1	Service is the fundamental basis of exchange	The application of operant resources (knowledge and skills), "service", is the basis for all exchange. Service is exchanged for service
FP2	Indirect exchange masks the fundamental basis of exchange	Goods, money and institutions mask the service-for-service nature of exchange
FP3	Goods are distribution mechanisms for service provision	Goods (both durable and non-durable) derive their value through use - the service they provide
FP4	Operant resources are the fundamental source of competitive advantage	The comparative ability to cause desired change drives competition
FP5	All economies are service economies	Service (singular) is only now becoming more apparent with increased specialization and outsourcing
FP6	The customer is always co-creator of value	Implies that value creation is interactional
FP7	The enterprise cannot deliver value, but only offer value propositions	The firm can offer its applied resources and collaboratively (interactively) create value following acceptance, but cannot create/deliver value alone
FP8	A service-centered view is inherently customer-oriented and relational	Service is customer-determined and co-created; thus, it is inherently customer-oriented and relational
FP9	All economic and social actors are resource integrators	Implies that the context of value creation is networks of networks (resource-integrators)
FP10	Value is always uniquely and phenomenologically determined by the beneficiary	Value is idiosyncratic, experiential, contextual, and meaning-laden

Table 1: Foundational premises in S-D logic (Vargo & Lusch, 2008a; Vargo 2009)

Even though Vargo and Lusch (2008a) list ten different FPs, some of them can be in fact logically derived from others, leaving only two FPs as axiomatic. These are FP3 and FP10 (Table 1), first of which relates to service and relationships and latter to the nature of value (Williams, 2012). However, stating all of the ten FPs builds a clearer and a wider understanding of what important aspects one should consider while studying S-D logic.

The shift from goods to service is especially described by FP3 and its logical consequence FP1: “Goods are a distribution mechanism for service provision” and “Service is the fundamental basis of exchange” (Table 1). FP3 can be viewed as a positive statement (Williams, 2012), meaning that it is widely accepted and describes things as they are, and can be thus regarded as a starting point for logical deduction. As a logical direct consequence, FP1 clarifies the key point of S-D logic: service is dominant of goods when exchange is considered. These two FPs together mean that the goods only become valuable when they are used or something is done to them, i.e. operant resources are applied to them. Within the logic, it is not stated that service would be superior to goods in importance, but merely that the function of goods is to deliver service (Vargo & Lusch, 2006). S-D logic in general is mirrored with goods-dominant logic (G-D logic), where the distinction between operand and operant resources is helpful when understanding the differences between the two dominant logics (Vargo & Lusch, 2004).

Operand resources are usually tangible resources on which an act is performed to produce an effect, and goods can be characterized as such resources (i.e. raw materials or finished products). As opposed to operand resources, operant resources are mostly intangible resources such as knowledge or skills that are used to create a change in another resource, be it operand or operant. (Constantin & Lusch, 1994, cited in Vargo & Lusch, 2004.) According to S-D logic, goods transmit operant resources, as for example technology is required to transform a natural resource into an object that is sold to the customer. Similarly, the customer participates in the creation of the service that is exchanged through the object (goods) because he or she is the user of the object, making the customer an operant resource from the firm point-of-view rather than an operand resource as seen in traditional G-D logic. Above all, operant resources are seen as primary in S-D logic due to their capability of transforming other resources as something that has a potential to be valuable. (Vargo & Lusch, 2004). Hence, it is not the object that the customer buys, it is the function it performs that is being bought.

Having shaken the traditional order of goods-dominant logic, service-dominant logic has ignited discussion and received a lot of criticism. As an example, S-D logic has been criticized for being too managerial of its nature. Vargo and Lusch (2008a) admit that the original focus has been managerial and firm-centric, as the discipline of marketing has managerial roots in history, but suggest that S-D logic could be applied outside the marketing discipline. This notion is crucial when the focal phenomenon of this thesis is studied. Since the target of this empirical study does not include a firm but is based on the activities of individual consumers, this notion becomes necessary.

Another view that supports the consideration that S-D logic can be used outside managerial context comes from Consumer Culture Theory (CCT). Arnould (2007) finds several points of reference between S-D logic and CCT, one of which is analyzing how customer use firm offerings in context to build identity in CCT tradition. In S-D logic, the similar phenomenon is linked to FP3, "Goods are a distribution mechanism for service provision" (Vargo & Lusch, 2008a). CCT also emphasizes the cultural context in which value is determined, which expands S-D logic's view on value further from managerial settings (Akaka et al., 2013). All in all, CCT aims to understand consumer's life world and could enrich the view of implicit customer orientation in S-D logic, whereas S-D logic could provide CCT with structure and managerial legitimacy (Arnould, 2007).

Deriving from the connection of CCT and S-D logic, it would be interesting to see whether the evolution of marketing thought presented by Lusch and colleagues (2007)

would move from "market with" into "customer/consumer with" where the role of firms was put less emphasis. One of the aims of this study is to analyze how the direct absence of firms affects the experience of value when consumers engage in exchange.

When we look at the other axiomatic FP (Williams, 2012), FP10: "Value is always uniquely and phenomenologically determined by the beneficiary", it conveys the other important pillar on which S-D logic is built: the nature of value. FP10 itself concerns directly the value outcome or the definition of value, but its logical consequences also deal with the actors that are involved in value creation. Williams (2012) notices that FP6 ("The customer is always a co-creator of value") can be directly derived from FP10 but that it does not go the other way round from a logic point-of-view. Even if value was always co-created by the customer (in addition to another entity), it does not mean that value could not be determined by someone else as well. In addition, it is an interesting statement to create an equation between "beneficiary" and "customer". If S-D logic is looked from the viewpoint of a more general understanding of exchange and not only in a managerial setting, underlining of "customer" seems irrelevant. However, it should be noted that the very key statement reflecting the nature of value is encapsulated in FP10, and thus the relevance or the phrasing of FP6 can be discussed without the basic idea becoming threatened. Value and value creation as determined in S-D logic are one of the main interests of this thesis and they are further discussed in the following parts.

2.2 Nature of value

Value has been studied for over a 2000 years since the times of Aristotle and Plato, but value researchers have not reached consensus on the matter (Ng & Smith, 2012). S-D logic offers one way of looking at value creation and value outcomes but it is worthwhile to recognize other types of research streams that study value as well in order to justify why S-D logic would offer a suitable framework for analysis. Gummerus (2013) offers a categorization of value research in her review between *value creation process* research and *value outcome* research. This division between general topics is also used in this literature review as both topics are present in S-D logic as well. Within Williams' (2012) distinction regarding the foundational premises of S-D logic, we mainly focus on FP10 and its descendants which relate to the nature of value and who are involved in value creation. However, it should be noted that some of the FPs that are derived from FP3 – according to Williams (2012) – also coincide with the process of value creation. While this and the following part will mainly

focus on value outcome or definition and value creation as determined in S-D logic, other research streams are also briefly introduced.

In her marketing theory focused review, Gummerus (2013) distinguishes between four different research streams within value outcome research: value as means-ends, value as benefits/sacrifices, value as experience outcomes and value as phenomenological. In addition to these streams, Ng and Smith (2012) recognize value as utility, value as economic worth and perceived satisfaction as firm-centric approaches, whereas the streams described by Gummerus (2013) are in Ng and Smith's review under the topic of customer-centric approaches. They have also combined phenomenological and experience value under the same category, whereas Gummerus (2013) has distinguished between them. Before focusing on value in S-D logic, I will briefly go through what these different streams say about value, first the firm-centric and then the customer-centric approach.

Firm-centric approaches to value

Value as utility theories imply that value is a part of a product that can be obtained directly through exchange and comes visible when the product is being used. This theoretical view on value was popular especially from the 1940's to the 1960's but has appeared in literature after that as well. This view is largely based on the foundation of economic science and sees the customer as rational, lacking contextual nature and customer's resources at consumption. (Ng & Smith, 2012). Value as utility is one of the key characteristics of G-D logic as well (Vargo & Lusch, 2006).

Continuing the firm-centric focus, value as economic worth refers to the value that a customer creates for the firm, often discussed under the term Customer Lifetime Value (CLV), which can be calculated (see e.g. Venkatesan & Kumar, 2004). Customer's role is to be the payer and value is considered in monetary terms. This view is not necessarily contradictory to value definition in S-D logic and could simultaneously with S-D logic assumptions be used as tool for customer profitability evaluation in firms, but it might not take into consideration that when contexts change, the customer may want other types of value propositions that are not offered by the firm (Ng & Smith, 2012), which again affects the CLV calculations. It should be noted that CLV-related theories are not meant to be used in explaining how customer sees value but that the focus is firm-centric on purpose. Finally, a third firm-centric approach sees value as perceived satisfaction of the firm's offering, often measured by the firm (Ng & Smith, 2012). The role of the firm is to deliver value (what is

expected) or superior value (exceed expectations) and customers merely consume the offering (see e.g. Narver & Slater, 1990), regardless of the firm having a customer-oriented view in their strategy. These firm-centric approaches reflect value-in-exchange, which is further explained later in this chapter.

Customer-centric approaches to value

Within customer-centric approaches, value as means-ends inspects how product attributes, attribute performances and consequences in use situations help the customer achieve his or her goals and purposes while using the product. Hence, customer value is the evaluation of how well the product will contribute to the customer in these three levels. (Woodruff, 1997). While this research stream takes into account the choice situation, it might not consider the contextual value created through actions, practices and interactions (Ng & Smith, 2012). Research stream of value as net benefit, or benefits/sacrifices, builds on Zeithaml's (1988) seminal article (Gummerus, 2013). According to this view, value is the difference between received benefits and sacrifices made, or as Zeithaml (1988, pp. 13) puts it, "value is what I get for what I give". This view continues to be popular, even though it has been criticized for implying that consumers would rationally calculate costs and benefits (Gummerus, 2013).

The third stream in customer-centric value research sees value as experience outcomes. The aim is to enrich the view of customer as a rational decision-maker by adding emotional aspects to customer experiencing value (see e.g. Hirschman & Holbrook, 1982). Holbrook (1994, cited in Gummerus, 2013) defines value as being experience based on interaction between a subject and an object, as well as being relative. Studies within this stream also include the identification of hedonic and utilitarian value (e.g. Babin et al., 1994). This view is close to value as phenomenological but according to Gummerus (2013), the distinction is that value as experience outcomes focuses on consumer experiences rather than holistic experiences with context having a significant role. However, Vargo and Lusch (2008a) despite choosing to use the term "phenomenological" of value (FP10) parallel it with "experiential" value, but have only chosen to focus on "phenomenological" due to "experiential" being possibly associated with only experiencing events, such as going to Disneyland. Ng and Smith (2012) discuss value as phenomenological experience, combining the literature under the same concept.

According to Vargo and Lusch (2012), value is a central, if not the most central, concept in S-D logic. After its introduction, S-D logic was criticized for not taking

a clear stance on how value is determined. Vargo and Lusch (2008a) cleared this statement by adding FP10 in S-D logic framework: "Value is always uniquely and phenomenologically determined by the beneficiary". While the tenth FP was only added in 2008, Vargo and Lusch claim to have always considered value this way. Other FPs that directly concern value are FP6 ("The customer is always a co-creator of value") and FP7 ("The enterprise cannot deliver value, but only offer value propositions") (Vargo & Lusch, 2008a), which can be logically derived from FP10 (Williams, 2012). A fourth FP that indirectly involves value creation processes is FP9 ("All social and economic actors are resource integrators"), which is more discussed in chapter 2.2.3. An important distinction between different types of value that are used in S-D logic literature results in three concepts: value-in-exchange, value-in-use and value-in-context (e.g. Vargo et al., 2010). Vargo and colleagues (2008) specifically distinguish between two general views of value, value-in-exchange and value-in-use that have been discussed since Aristotle, but the view on value is extended to value-in-context to better capture the way value is seen in S-D logic (Vargo et al., 2010). Next, I will go through these three concepts and how they are discussed within S-D logic.

2.2.1 Value-in-exchange

Earlier marketing thought inherited the view that value was embedded in products from economics, meaning that value was essentially seen in monetary terms or value-added (e.g. Vargo & Lusch, 2004; Vargo et al., 2010). This type of value is called value-in-exchange, which is central in G-D logic where exchange revolves around goods and they are seen as having "utile", something valuable embedded in it (Vargo & Lusch, 2006). The background for the primacy of value-in-exchange stems from Adam Smith's (1776/1904, cited in Vargo et al., 2010) work, where despite acknowledging the application of skills central to exchange, he was seeking a normative explanation for what promotes national wealth. Shifting the focus to value-in-exchange made it easier to quantify value due to value-in-exchange being more or less quantifiable with market prices.

Even though S-D logic focuses on value-in-use (or more recently value-in-context), value-in-exchange has its role as well within the logic. Value-in-exchange is best visible in the monetary system as it provides "financial feedback" which makes it possible to learn about the marketplace (Vargo & Lusch, 2006). It also serves as an intermediary for service provision (Vargo et al., 2010). Value-in-exchange cannot exist without value-in-use and things cannot have value-in-exchange, whereas value-in-use can exist on its own without

value-in-exchange. In a firm context, value-in-exchange is captured in accounting systems and monetary instruments are used to acquire other service, which is the ultimate goal and has potential to create value for the receiver. (Vargo & Lusch, 2006). The meaning of value-in-exchange becomes more important as the need to access resources from others increases and resources cannot be attained naturally, such as breathing versus using an oxygen tank when diving (Vargo et al., 2008). Value-in-exchange alone is not enough for designing marketing strategies either as it does not reflect customer perspective of value, even though the cash flow perspective is seen important as well because it provides a possibility of accessing service in the future (Vargo & Lusch, 2006). A key characteristic for value-in-exchange is that it makes exchange easier as it is in many cases impossible to exchange service to service directly. This is reflected in FP2, "Indirect exchange masks the fundamental basis of exchange" (Vargo & Lusch, 2008a). Value is thus driven by value-in-use (or value-in-context) but mediated and monitored by value-in-exchange (Vargo et al., 2008).

2.2.2 Value-in-use

Since the introduction of S-D logic, the primacy of value-in-use in S-D logic has been clearly stated (Vargo & Lusch, 2004). Historically, use value was already discussed by e.g. Aristotle and researchers in the medieval times (Vargo et al., 2008), but it was left in the background largely due to Smith's (1776/1904, cited in Vargo et al., 2010) influence on the development of economic thought, as explained before with value-in-exchange. The essence of value-in-use is implied in FP6, "The customer is always a co-creator of value" (Vargo & Lusch, 2008a), as "there is no value until an offering is used – experience and perception are essential to value determination" (Vargo & Lusch, 2006). Therefore the nature of value is tightly knit with the view on how value is created, which is discussed in detail in the following part. Contrary to the G-D logic view that value was embedded in products, value is seen as a human cognitive process that cannot be stored but is always unique (Williams, 2012). Goods become valuable as transmitters of service and value is ultimately determined upon use, which also affects the logic of when and for how long does value exist (Ballantyne & Varey, 2006).

As the locus of value creation moves from exchange to use, value is understood more as a process than units of firm output, and the role of the beneficiary is more of a value co-creator than a destroyer, as is implied within G-D logic (Vargo et al., 2008). The

distinction between operand and operant resources is important when understanding value-in-use. Resources are not, they become (Vargo & Lusch, 2004), and the social construction on what is considered valuable affects this transformation (Akaka et al., 2012). In order for resources to become, operant resources need to be applied, which highlights the importance of active participants.

Despite being one of the central theses in S-D logic originally, value-in-use has been recently described as a transitional term that does not fully reflect S-D logic thought. Value-in-use does still describe the value that is experienced in a moment in a specific context, but it does not take enough into account the networked nature of value creation, which is further explained in the following part. (Vargo et al., 2010). Gummerus (2013) notices that there is an asymmetry with creating and determining value as the former is considered as networked and having multiple actors participating in it, while the latter has an individual perspective. In other words, even though many actors co-create value, only one individual determines it. Gummerus (2013) suggests that all actors participating in value co-creation would determine value from their own perspective, a view which is implicit in the foundational premises of S-D logic. Within this view, value would still remain unique because the multiple perspectives need not be symmetric (Gummerus, 2013).

2.2.3 Value-in-context

Regardless of its centrality in S-D logic, value-in-use could be a problematic concept due to it possibly becoming subject to misinterpretations – it could be understood as functional benefits embedded in the product and not a phenomenological interpretation of the beneficiary (Vargo et al., 2010). Therefore a more recent shift within S-D logic has been towards the concept of value-in-context, which better captures the nature of value as described with FP10 ("Value is always uniquely and phenomenologically determined by the customer"). Value-in-context emphasizes the unique combination of integrated resources and relationships and the use context that affect the determination of value-in-use (Akaka et al., 2012). It should be noted that the availability of resources has an effect on the context and thus value is not entirely in the hands of the beneficiary (Vargo & Lusch, 2012).

Value-in-context was first proposed by Vargo, Maglio and Akaka (2008) as a combination of FP9 and FP10 (see Table 1), which merges the view of multiple actors participating in value co-creation with unique and phenomenological nature of value. This implies that the customer also has a "supply chain" that affects value determination (Vargo,

2008). This view on value succeeds better in reflecting the networked value creation process that has been discussed under e.g. many-to-many marketing (Gummesson, 2006). The nature of context is heterogeneous and distinctive, which means that when service is used and value is created, there cannot be another similar time and place in which an actor determines value (Chandler & Vargo, 2011).

Continuing the alliance between S-D logic and Consumer Culture Theory (e.g. Arnould, 2007), Akaka, Schau and Vargo (2013) propose a framework for value-in-cultural-context. This view emphasizes not only the social aspects of value-in-context but also cultural factors – practices, norms, meanings and resources – that affect how value is determined or derived. Context can be further analyzed on micro, meso and macro levels, where the unit of analysis are dyads (exchange between actors), triads (exchange between dyads) and complex networks (exchange between triads), respectively (Chandler & Vargo, 2011). Combined, these two views make theoretical value creation analysis complex, which might further complicate finding empirical support for value-in-context.

Vargo and Lusch (2008a) use the term "beneficiary" to describe the actor who determines value. Gummerus (2013) notes that the chosen terminology might trap one to think that the outcome of a use situation of value proposition is always positive, as "beneficiary" has a positive connotation. She suggests that S-D logic could extend or explicate value outcome to include negative experiences as well. It could be that this view is implicit in S-D logic as value is determined in use and in context, where circumstances may result in a negative perception of the value proposition. Also, the ISPAR (Interact-Serve-Propose-Agree-Realize) model, based on S-D logic, sketches out ten possible outcomes of service system interaction, pointing towards the assumption that S-D logic implicitly includes negative outcomes (Spohrer et al., 2008). It also has some similarity to net benefit view of value where the ultimate outcome of value is the difference between benefits and sacrifices (Zeithaml, 1988). Net benefit thinking does not necessarily contradict with S-D logic in all ways and it could be used for example in firms when determining value propositions as maximizing benefits and minimizing sacrifices (Rintamäki et al., 2007).

2.3 Value creation processes

Value creation process research in marketing can be roughly divided into three streams: firm-created, co-created and customer-created (Gummerus, 2013). Early theories in marketing viewed value as created by the firm. This goes hand in hand with the evolution of marketing

as well – customer was merely a receiver of value and not part of its creation, as marketing was viewed as something that was done on customers or markets. Some examples of theories reflecting firm-centric creation of value are Porter's value chain model or competitive forces framework (1985) and resource-based view, RBV (see Gummerus, 2013). The main idea in these theories is that value is created inside the firm within different firm activities and the goal is to maximize the usage of incoming resources. This view gives value a static nature, a status of an "end product". On the other end at the spectrum are theories that see value creation only in the hands of the customer. The focus is on what the customer does with products and services in his or her own life or "sphere", as defined by Grönroos and Voima (2013). Value is created in consumption and not in the firm or the provider of the service or product. This view is very different from traditional marketing worldview (see e.g. Kotler, 1972) in which marketing cannot be considered within an activity that does not include a firm. According to the customer-created locus on value, the firm should focus on how it can appear and have an influence in the consumer life sphere and not focus purely on the outcomes of its own activity.

Co-creation of value places value creation processes between the firm and the customer. It has been offered as an alternative logic to firm-centric value creation mostly due to the notion that the firm operates in an environment of other actors (Gummerus, 2013). While Vargo and Lusch (2004) propose the co-creation aspect of value, they are not the first researchers to do so. Value co-creation has been discussed by e.g. Prahalad and Ramaswamy (2004) around the same time when S-D logic was introduced. Ramaswamy (2009) describes co-creation as a new paradigmatic piece in value creation theory, and explains value co-creation from a managerial and practical point-of-view, where customers are invited to participate in the firm offering creation in intentional firm-customer collaboration. In S-D logic, this kind of activity where the customer participates in the creation of firm offering is called "co-production", which is a type of co-creation more generally (Vargo, 2008). To avoid the misinterpretation that co-creation would only refer to co-production within S-D logic, the original FP6 was reformulated from "co-producer" to "co-creator" to better describe the more general idea of how and where value is created (Vargo & Lusch, 2008a). More generally, it is noticed within S-D logic that the lexicon used in describing a transcending, dominant logic is challenging due to the lexicon's history in goods-dominant logic (Vargo, 2008).

In S-D logic, co-creation of value is seen as more than merely taking customers into the process of developing new products and services with the firm. It is a mindset with

which the whole context of value creation can be analyzed. The focus shifts heavily towards customer who is characterized as the "beneficiary" (e.g. Vargo & Lusch, 2008a) and the customer is also seen as the main contributor, or a resource integrator, to value. Therefore it could be said that S-D logic is closer to customer-created theories of value, even though the role of the firm is acknowledged as well. S-D logic is very strict on the premise that value cannot be created independently but that interaction is needed (Vargo & Lusch, 2008a).

Again, this proposition tilts towards the customer, without whom value cannot be created, as emphasized in the FPs (Table 1). Gummerus (2013) suggests that value creation processes could be either individual or shared. The proposition implies that value could be created outside the interaction between actors (e.g. the firm and the customer). She supports this proposition by the notion that individuals perform activities without firm participation (Gummerus, 2013). This view is not necessarily contradictory to S-D logic's foundational premises but there is still room for interpretation. Value co-creation as defined in S-D logic could be understood such that firm offering, e.g. a piece of clothing, transmits the service, e.g. sense of warmth or fashion, to the consumer who then applies his or her operant resources to create value out of the offering. Even if this consumer activity happened in the life sphere of the consumer without any (direct) firm interaction, firm activities are indirectly present in the piece of clothing that it has manufactured, i.e. the firm used its operant resources (knowledge, technology) on operand resources (raw materials) to create the product. Hence, actors are intertwined, suggesting a strong focus on a networked reality.

It seems that value co-creation can be understood in many ways and that there are many possibilities on where to draw the line on what counts as contributing to value creation. If we zoom out from the one-to-one exchange of service, it is possible to see a broader network where the activities of multiple actors affect others not only at the event of exchange but over time through use and combination with other resources (Vargo, 2009). Furthermore, the networks of both the firm and the customer – or in fact of any actors in a network – should be taken into account in evaluation value co-creation (Vargo, 2008).

2.3.1 Networks, service systems and ecosystems

FP9, "All social and economic actors are resource integrators" (Vargo & Lusch, 2008a), emphasizes the locus of value creation and extends the concept outside firm-customer relationship. Thus, value creation can be looked at the network perspective as well. Vargo (2008) suggests that the space of value creation is significantly larger than only focusing on

the exchange of two actors. Therefore exchange can be described to occur between networks and not only between individuals, both exchange participants having a network of their own.

Within the same understanding of network-to-network exchange it is not necessary to label the actors as "firm" and "customer", but we can contend that exchange and hence value creation can happen also between other individuals or network actors that are not in the traditional roles of "firm" and "customer" (Vargo, 2009). Similarly, a networked reality is central in many-to-many marketing. Network theories have been mostly applied and developed within business-to-business (B2B) contexts, but it is applicable to consumers or other individuals as well. (Gummesson, 2006). This view also emphasizes the importance of non-firm actors, and their networks, as active participants in value creation.

Vargo and Lusch (2011) take the B2B logic further by proposing that interactions and exchange is all B2B, because the description of "business" could be applied to all actors, again emphasizing that especially using the term "consumer" is unnecessary. The term "business" in B2B could be replaced with "actor" and hence we could use the concept of actor-to-actor (A2A) to better encapsulate the nature of networked exchange (Vargo & Lusch, 2011). Therefore all actors are both providers and beneficiaries, and not fixed as producers and consumers (Vargo & Lusch, 2010).

A concept that coincides the networked nature of value creation is elaborated with service systems. "Service systems" as a term was not used originally in Vargo and Lusch's (2004) propositions but in more recent literature it has been used to describe an actor – a basic unit of analysis – that is engaged in exchange and is thus part of value co-creation (Vargo et al., 2008). Service science focuses on studying how value is co-created in service systems (Spohrer & Maglio, 2008). Its foundations can be seen in S-D logic, which offers a suitable perspective on building the theory further, making service system a basic theoretical construct for S-D logic. Service systems are described as configurations of people, technology, organizations and shared information (e.g. language and laws). The scope of a service systems varies from an individual person to as large as the global economy. Value propositions glue internal and external service systems together, which is another important connection to S-D logic. (Maglio & Spohrer, 2008).

Service systems are dependent on the resources of others in order to survive, which happens through service-for-service exchange. Value is created in different phases of exchange and use: value-in-exchange is created between two service systems, value-in-use is created in the service system affected by the other service system, and value-in-context for a service system includes the service system's network in value creation. Service

providers propose value and other service systems in the larger network will decide whether they wish to accept the value propositions and pay for it (Vargo et al., 2008). Resources from other service systems are used by the beneficiary to create value out of the offering from the service provider. Therefore value is in the end always unique and contextual, as proposed with FP10 (Table 1).

When we look at the networks that are created by service systems, one way of describing the larger combination and relationships between service systems is a *service ecosystem* (Vargo & Lusch, 2011). All actors as resource integrators are tied together in a shared ecosystems or markets (Vargo, 2011). A service ecosystem does not only depict the overall network of relationships within itself but also includes institutions and other socially constructed resources that serve as rules that are created by the actors while co-creating (Vargo & Lusch, 2012). Thus, the value configuration space, where the resource integrators have a network of their own, can be placed within a larger social context (Edvardsson et al., 2011). These social structures both enable and constrain exchange between actors as they act inside the service ecosystem, but at the same time actors can create (and destroy) structures. To add complexity, service ecosystems are often nested, meaning that smaller ecosystems on the micro level are inside larger ecosystems on meso (mid) and macro levels as well, and that ecosystems are partially overlapping as actors are part of multiple ecosystems. (Vargo & Lusch, 2012).

The systemic view of value co-creation goes hand-in-hand with the recognition of value-in-context. Co-creation of value is driven by the ability to access, adapt and integrate resources that are available for network actors in unique configurations, hence value creation is contextual. (Akaka et al., 2012). The service ecosystems view on value co-creation further emphasizes the importance of considering all actors as active participants (see FP9, Table 1). It also paves way to the thought that when value is experienced or created by an actor, it is affected by earlier applications of operant resources in addition to the current ones. This makes co-creation of value highly relational. As an example, when a firm applies operant resources on raw materials to create an offering with a value proposition, a customer – by using the product – creates value for him- or herself. When the customer does not find value in the use of the product any longer, he or she can become the provider and give the product through exchange to another actor in his/her network. This new actor again will create unique value out of the product that was once made by the firm. Thus, the activities that the firm originally directed towards raw materials to make the product affect the value creation process while the new actor uses the product in his/her life sphere. While this

description of relationships between actors is quite simple, connections are far more complex in reality, and that is why a service ecosystems view is necessary to understand the whole (Vargo & Lusch, 2012).

2.3.2 Value propositions

An important part of value creation process is the value proposition. In one of the foundational premises of S-D logic, it is stated that a firm or a provider of service cannot deliver value, but only offer value propositions (Vargo & Lusch, 2008a). As discussed with the nature of value, it is not embedded in the product or service but realized through experience phenomenologically. Value proposition is the key element that connects service systems to each other (Spohrer et al., 2008). Service providers go only so far as offering the value proposition, after which the value proposition is either accepted, rejected or unnoticed by other service systems (Vargo et al., 2008).

Developing a value proposition is an important tool for managers in e.g. retailing (Rintamäki et al., 2007). However, this does not mean that value proposition is always thoughtfully created, because in order to service system interaction to occur, a value proposition is needed to connect the service systems (Spohrer et al., 2008). Value proposition exist on value-in-exchange level, where it represents the negotiated measurement offered (Vargo et al., 2008). Even though money is in many cases the negotiated measurement received (Vargo et al., 2008), it is not the only possible means of "payment". For example, the pricing strategies in platforms do not require monetary payments from all participants, depending on the choices made by platform owners (Eisenmann et al., 2006).

3 PLATFORMS

The concept of a platform has become a commonplace word to describe different phenomena across disciplines, lacking a definition that would sharpen its meaning (Porch et al., 2015). Not only has the use of the term increased dramatically over the past two decades, but the meanings attached to the term are fragmented (Thomas et al., 2014). According to a wide definition by Gawer (2009), platforms are products, technologies or services that act as a basis for developing complementary products, technologies or services. Numerous variants of the term exist, and they are often used interchangeably – platform organization, platform technology, industry platform, product platform and so on (Thomas et al., 2014).

To clarify what a platform stands for, this part consists of a literature review of different kinds of meanings attached to the concept. While the term "platform" has been used in e.g. geology, health and education (Porch et al., 2015), this literature review focuses on how it has been used in management or business contexts. This part will especially focus on how platforms are discussed as markets, but it aims to combine other views to enrich the discussion towards a framework that is suitable for this thesis.

3.1 Theoretical perspectives in platform literature

As mentioned, platform literature is quite decentralized and includes several definitions for a platform. Recent studies have been examining the scattered literature (e.g. Porch et al., 2015; Gawer, 2014; Thomas et al., 2014), and these insights are further elaborated and connected in this chapter. I will look at the different perspectives that take place in the literature and how they could be combined under a joint concept.

Porch, Timbrell and Rosemann (2015) conducted a systematic literature review using algorithmic historiography, including platform studies in management literature in their review. The results show that platform literature is divided in two larger streams where cross-referencing is rare. The older stream is described as interior platforms and the newer stream as exterior platforms. As the study shows, 37 most cited articles in the platform research domain (for a full list, see Porch et al. (2015)) form two distinct streams. The two streams are connected only through two articles: Boudreau (2010) and Boudreau (2012). Next, I will elaborate both interior and exterior platform literatures.

In addition to the distinction between interior and exterior platforms, there are differences in how various disciplines within management have discussed platforms. Gawer (2014) distinguishes between an economics perspective and an engineering design

perspective. These perspectives are included in Porch, Timbrell and Rosemann's analysis, and they are present in both interior and exterior platform literatures. The framework that Gawer (2014) suggests after combining the economics and the engineering perspectives bears resemblance to the interior vs. exterior platform discussion, which is the reasoning for reviewing literature this way in this thesis. The difference is that she distinguishes between supply chain platforms (selectively open interfaces) and industry platforms (open interfaces), whereas these two are combined to exterior platforms in Porch and colleagues' (2015) work.

If interior platform literature is further divided, it is possible to distinguish between an organizational stream and a product family stream (Thomas et al., 2014). These streams are further discussed in the following chapter. Table 2 shows how these three platform literature reviews are connected conceptually. However, it should be noted that there is not an equation between the market intermediary stream (Thomas et al., 2014) and supply chain platforms (Gawer, 2014), but rather that both can be seen under the larger topic of exterior platforms (Porch et al., 2015). What should be noted is that the market intermediary stream resonates largely with the economics perspective literature (Gawer, 2014). As market intermediary stream is inherently exterior to the firm, it is present as a discipline in both supply chain platforms and industry platforms in Gawer's distinction.

The main function of Table 2 is to depict how different recent literature reviews have arrived at somewhat similar conclusions. To further emphasize the interconnectedness, Thomas et al. (2014) explicitly refer to a continuum within the four streams they recognize and divide them into firm-internal platforms and firm-external platforms the same way as they are divided to interior and exterior platforms below.

	Closed ⟷ Open			
Thomas et al. (2014)	Organizational Stream	Product Family Stream	Market Intermediary Stream	Platform Ecosystem Stream
Gawer (2014)	Internal Platforms		Supply Chain Platforms	Industry Platforms
Porch et al. (2015)	Interior platforms		Exterior platforms	

Table 2: Overview of recent platform literature reviews

3.1.1 Interior platforms

Interior platform literature includes research that focuses on how a firm can benefit from a platform internally, using processes, designs and capabilities (Porch et al., 2015). The boundaries of the platform are where the boundaries of the organization are. A significant research stream within interior platform research stream includes product family literature, where the platform is the static asset at the center of a product family (Thomas et al., 2014). A widely used definition of a product platform was given by Robertson and Ulrich (1998, pp. 20), defining it as "the collection of assets that are shared by a set of products". In practice, a product platform could be e.g. a car body in automobile manufacturing upon which parts are added and as a result, different types of cars can be built on top of the same platform (Muffatto, 1999).

A similar characteristic within different definitions in product platform literature is the re-use of components for various products within a product family, which results in the possible occurrence of economies of scope (Gawer, 2014). Hence, a firm is able to leverage the platform to gain flexibility and economies of scope. Another important theme especially in technological literature is modularity in technological architecture (e.g. Ulrich, 1995; Baldwin & Clark, 2000). A modular system comprises of smaller modules that are able to work independently as well as together. In the design of the system, the architecture needs to be such that it allows for both independence for units and integration between them. (Baldwin & Clark, 2000). The notion of modularity is important also in exterior platform literature and it will be further discussed in chapter 3.1.3.

Another research stream within interior platform research stream consists of organizational literature, where the platform is the structure that stores organizational capabilities (Thomas et al., 2014). A platform organization is one that is capable of reconfiguring its resources and capabilities according to what the market and competition require (Caborra, 1996). This stream has strong common ground with dynamic capabilities literature, according to which competitive advantage is gained with the ability to change the structure of skills, resources and functional competences to match the environment (e.g. Teece et al., 1997). This stream is quite independent of the other platform literature streams but shares similar logics of e.g. leverage and modularity (Thomas et al., 2014).

3.1.2 Exterior platforms

Exterior platform literature focuses on platforms that include actors outside the firm (Porch et al., 2015). Within this literature, both economics and engineering perspectives are represented, where the former sees platforms as markets and the latter as technological architectures, similarly than within interior platforms (Gawer, 2014). These perspectives are quite close to the distinction between the market intermediary stream and the platform ecosystem stream, although it should be noted that platform ecosystem stream includes some interest from the economics perspective (Thomas et al., 2014). When we look at Gawer's (2014) framework, both supply chain platforms and industry platforms are exterior platforms but their level of interface openness is different.

The economics perspective on platforms sees platforms as markets and platforms are thus inherently exterior within this stream (Gawer, 2014). The market view has been developing since the early 2000s and it sees platforms as enablers of exchange that serve "two-sided" or "multisided" markets, and are therefore sometimes called "multisided platforms" (e.g. Rochet & Tirole, 2003, 2006; Evans, 2003). Two-sided or multisided markets refer to different sides that act in the market, both producers and users (Thomas et al., 2014). A dominant theme within this literature is the network effect (Porch et al., 2015), which means that the potential value for the one side of the multisided market is largely dependent on how many users are on the other side of the market (Eisenmann et al., 2006).

An early example is credit card systems, where the credit card (platform) facilitates exchange between a merchant and a cardholder, who is the customer to not only the credit card company but also the merchant, enabled by the credit card (Evans, 2003). Network effects are seen as the fundamental drivers of competition between platforms (Gawer, 2014). Overall, this research stream has its roots in literature on network externalities, compatibilities and competition (Thomas et al., 2014). Another important tenet in this literature relates to pricing. Platform providers must decide which side(s) it will charge of the use of the platform, and usually the participants do not pay the same price (Eisenmann et al., 2006). One aspect that affects pricing is multi-homing, which means that the user can choose to use more than one platform (e.g. credit cards) at the same time (Hagiu, 2006). Due to the centrality of platforms-as-markets literature to the topic of the thesis, multisided markets and its tenets are further discussed in chapter 3.2.

Another type of literature regarding exterior platforms has an engineering or a technology perspective. A first move from product platforms within firms was towards

supply chain platforms (Gawer, 2014). Modular networks enable product development and innovation with suppliers and customers, partially outsourcing activities that the firm might otherwise do in-house (e.g. Brusoni, 2005; Zirpoli & Becker, 2011). Platform is only somewhat open and governance is covered with contractual agreements between participants (Gawer, 2014).

A more technology literature related development has shifted the research focus on ecosystems that include actors (firms or others) that do not have traditional buyer-seller relationships but that are interdependent on innovations others do in the network (Cusumano & Gawer, 2002). This research stream builds heavily on information technology and how different technological platforms in e.g. computer industry compete (Bresnahan & Greenstein, 1999). Platform acts as a hub of value creation for platform participants (Economides & Katsamakas, 2006). As with interior platforms, modularity is a theme that continues its importance within platform ecosystems literature (Thomas et al., 2014). Baldwin and Woodard (2009) suggest that all platforms have essentially the same architecture with a core and a periphery: stable components around which other actors interact. Thomas, Autio and Gann (2014) notice that platform ecosystem stream combines the application of product family logic (interior platform) into larger product or service system with market intermediary stream, especially with the concept of network effects. They further emphasize the evolution of platform literature from firm-internal platforms to more complex firm-external platforms. Platform ecosystems and related business models are covered more thoroughly in chapter 3.3. Next, I will look at the common structures between interior and exterior platforms.

3.1.3 Combining the literature streams

What the overall literature review highlights is that platforms exist in different levels of analysis – firm, supply chain, ecosystems – even though that the specific definitions vary between research streams. Despite the differences, commonalities can be found between the distinct streams. Thomas, Autio and Gann (2014) suggest that there are two common logics in the overall platform literature: leverage and architectural openness. Also according to Gawer (2014), all types of platforms share similar technological architecture with modular design and a core and a periphery, sharing Thomas and colleagues' notion of architectural openness. She also notices a conceptual underpinning of economies of scope across literature streams, which resonates with leverage in Thomas, Autio and Gann's study. Thus, these two

analyses share similar thoughts on what platforms essentially are and these views are combined next.

Leverage provides a mechanism to achieve greater outputs from the same level of inputs, which results in competitive advantage. Within platforms, leverage is used through shared assets, designs and standards, and it is driven by economies of scope. (Thomas et al., 2014). Instead of leverage, Gawer (2014) explains the common characteristic between different types of platforms as economies of scope. When these two recent studies are combined, we can say that they are discussing the same underlying commonality across platforms. Thomas and colleagues (2014) distinguish between three types of leverage: production leverage, innovation leverage and transaction leverage. Similarly, Gawer (2014) distinguishes between economies of scope in supply, in innovation and in demand, which resemble the three types of leverage, respectively (Thomas et al., 2014). To summarize, leverage or economies of scope describes the way in which it is more beneficial to participate in the platform than to do the same activity independently outside the platform, whether it is about production/supply, innovation or transaction/demand.

All platforms have modular architecture with a core and a periphery, and these architectures have different configurations that depend on their openness (Thomas et al., 2014; Gawer, 2014). Modularity refers to the nature of platforms as consisting of multiple components, which at the core have low variety and high reusability and at the periphery have high variety and low reusability (Baldwin & Woodard, 2009). It means that the core is stable and is used often in combination with the periphery that consists of a larger number of components that are not always present in value creation.

As a result, there are internal platforms, supply chain platforms (or many-to-one platform) and industry platforms (or many-to-many platforms), which all share the modular architecture with a core and its surroundings (Gawer, 2014; Thomas et al., 2014). Each of these has its own logic of using leverage, but the general idea of leverage is nevertheless the same across platforms. The overall logic of platforms is echoed in "platform thinking", which is the process of identifying and leveraging shared characteristics throughout firm activities (Sawhney, 1998). This view also highlights the importance of platforms in strategies, which in turn are important within marketing discipline. Within the resulting framework of different types of platforms depending on their openness, the phenomenon studied in this thesis can be framed. The literature review conducted in this chapter is helpful in understanding the complex context in which platforms exist. The framework suggests that there is a general way of assessing platforms, which has been the

result of multiple recent studies (Thomas et al., 2014; Gawer, 2014; Porch et al., 2015). Next, I will discuss some important themes under platform literature that relate to the topic of the thesis.

3.2 Multisided markets and multisided platforms (MSPs)

The concept of two-sided or multisided markets was created in platform theory building within industrial organization economics literature in the early 2000s (Gawer, 2014). For the sake of clarity, I will use the term "multisided markets" because it includes also two-sided markets (Evans, 2003). Multisided markets are such where two or more groups of actors interact through a platform, where the benefit of participants in one group is dependent on other participants in the same or in another group (Armstrong, 2006). This means that there are network effects involved in the use of a platform, a topic which is covered in this chapter. In this view, platform is the facilitator of exchange or any kind of interaction between otherwise non-connected actors and thus acts as an intermediary.

The difference between multisided platforms (MSPs) and traditional market intermediaries (e.g. retailers) is that MSPs do not take ownership of the goods and services that are exchanged via the platform (Hagiu & Yoffie, 2009). Within retailing, virtual channels and their customer interface technologies are often discussed, especially from the viewpoint of what types of applications are appreciated by the customers (Burke, 2002). These online stores should not be mixed with MSPs, even if the technology interface would appear to be similar. Nevertheless, in a broader view, the internet is also a platform and its importance to retailing is significant (Cheng et al., 2009). The focus of this thesis is more in technological platforms, because Facebook is such a platform and the phenomenon is located in this platform (Staykova & Damsgaard, 2015). However, these two research streams (platforms and retailing) could learn from each other, which is a perspective that is left outside this thesis.

Side in multisided platforms refers to the existence of a group that has a similar need or a role for the platform, i.e. actors can be on the same side or on the different side of a platform (Porch et al., 2015). However, defining roles for each actor a priori might restrict from seeing the bigger picture, where actors can play a variety of roles (Gawer, 2014). This notion is especially important in C2C context, where consumers can be either buyers or sellers, or both. Understanding the concept of sides in platforms is key to understanding the importance of network effects as well.

MSPs face a "chicken-and-egg" problem regarding the different sides. In order to become successful, platforms need users and the platform usually becomes more interesting when it already has users in different sides (e.g. Evans, 2003; Rochet & Tirole, 2003; Hagiu, 2006). This phenomenon is more explained with network effects, but it can be addressed with the pricing structure. This important tenet in the MSPs – pricing – differs from other industries and it is further explored in the following chapter. I will also address how competition is discussed within MSP literature.

3.2.1 Network effects

The existence of network effects is essential to most MSP literature as it explains the dynamics between the different "sides" (Gawer, 2014). Network effects represent the utility that a participant derives when the number of participants change (Porch et al., 2015). They are sometimes characterized as demand economies of scale because the more participants join the network, the more utility there is for each participant (Parker & Van Alstyne, 2005). The literature distinguishes between direct and indirect network effects, which may be either positive or negative. These dimensions are discussed next.

Direct vs. indirect effects

Network effects can be either direct or indirect. Direct network effects, or same-side network effects, arise when the platform participants are affected by other actors joining the network in the same side (Gawer, 2014). For example on Facebook or on Skype, users benefit from more users as there are more people with whom they can connect online.

Perhaps even more importantly, platforms enable indirect network effects, or cross-side network effects, to exist. Cross-side effects mean that the benefit to users on one side of the platform is dependent on the number of users on the other side. In order to indirect network effects to arise, there must be cross-side effects to both directions. This way the benefit to a side is indirectly dependent on the number of users on the same side (Hagiu & Wright, 2015). One example of a platform facilitating indirect network effects is video game consoles – when more players buy the platform, more game developers create games for the platform, which in turn attracts more players and so on.

As network effects are sometimes described as having demand economies of scale at least on the same side, Gawer (2014) notes that indirect network effects constitute demand economies of scope. This means that interaction or innovation through a platform is

more beneficial than performing the same activity independently without the platform and hence without the effect from the other side of the platform. The ability to generate indirect network effects is in many cases the key to the success of a platform. MSPs need to get both or all sides on board in order to facilitate the network effects, which is ultimately the value proposition of an MSP (Rochet & Tirole, 2003). Network effects are considered as the main driver for platform competition (Gawer, 2014), which is discussed in more details further in this chapter.

Positive vs. negative effects

Network effects are not always positive, even though the majority of the literature focuses on positive effects (Porch et al., 2015). Direct network effects may be negative for example when a side consists of sellers who would like to see less rivals participating in the platform (Eisenmann et al., 2006). Positive direct network effects arise between e.g. Facebook users as they benefit more from other users through the possibility to network with them.

Cross-side network effects are usually positive, as the virtuous circle that makes a platform successful is dependent on positive cross-side or indirect effects. These effects could be negative in e.g. the case of platform users preferring fewer ads from advertisers (Eisenmann et al., 2006). From the viewpoint of the platform provider, both sides are needed in order to make its business profitable, and therefore users are most likely to tolerate advertisement, because they might not pay anything for the platform use. This is why pricing is an important part of platform business, a topic covered next.

3.2.2 Pricing

Platform providers have to make challenging decisions on their pricing strategies. In competitive industries prices are largely determined by marginal costs, and in industries with high entry barriers the price is set in what the customer is willing to pay (Eisenmann et al., 2006). In comparison, platform providers have to decide which side pays what, and pricing structures are usually skewed towards one side of the market instead of splitting charges equally (Evans, 2003). Pricing strategies are affected by e.g. the competitive situation of the platform and the order in which different sides arrive (Hagiu, 2006).

There are usually two different types of roles for MSP sides regarding the prices that they pay: loss-leader side and profit-making side (e.g. Rochet & Tirole, 2003; Hagiu, 2014). Loss-leader side is the one that is subsidized and thus gains access to the

platform for free or with a smaller price and profit-making side pays relatively more (Rochet & Tirole, 2003). Loss-leader side is attracted due to its volume being of high interest for the profit-making side (Eisenmann et al., 2006). This is the case with e.g. Facebook, where users join for free and advertisers have the possibility to profit from the Facebook users, hence the profit for Facebook comes from advertisers (Hagiu, 2014). To add complexity, Facebook also has a third side, app developers, who are complementors to the platform, i.e. developers of complementary products or services (Gawer, 2014). However, the app developers form a profit-making side, hence they pay for the access to the platform (Staykova & Damsgaard, 2015). The more sides there are, the more complex become the pricing choices.

Hagiu (2014) summarizes pricing principles so that platform providers should charge higher prices when the group has less price sensitivity, and charge more to the side that benefits more from the other side(s), either in monetary terms or otherwise. An interesting twist to pricing becomes visible when the roles of participants in different sides are explored. For example, Facebook users are not necessarily only plain users of the platform but they may get different roles as users, such as buyers or sellers in the flea market that is studied in this thesis. Thus, the roles in each side are not fixed, which could have implications to the pricing strategies that platform providers choose (Gawer, 2014).

3.2.3 Competition

As covered, pricing has a strong influence on attracting users on different sides of the platform. Hence, the choice of business model links to the success of the platform and therefore affects competition between and within platforms (Rochet & Tirole, 2003; Gawer, 2014). Competition between platforms is mostly characterized by the aim to get all relevant sides to participate in the platform. Armstrong (2006) distinguishes between three types of models of MSP competition: a monopoly platform; competing platforms, where agents join one platform; and competitive bottlenecks, where one group joins all platforms.

Monopoly platforms are quite rare, as usually there is the possibility for competitors to enter the market (Armstrong, 2006). Therefore it is more interesting to focus on competing platforms, where an important tenet is whether it is possible to "multi-home" between platforms (Rochet & Tirole, 2003). Multi-homing essentially means that a user of a platform will use simultaneously other platforms for the same need. In the case where the market is in the end served by a single platform, i.e. no multi-homing occurs, companies need to decide if they will share the platform with rivals or fight until only one platform

remains. Single-homing usually arises when multi-homing costs are high, network effects are positive and strong, and neither side's users have a strong preference for certain features. (Eisenmann et al., 2006). An example of a situation with single-homing is the DVD industry, where all above-mentioned conditions apply: multi-homing would be costly as buying several players costs, network effects are positive as viewers would like to access as many films as possible, and no specific features are expected as the platform works fairly simply. These types of dynamics lead to a "winner-take-all" outcome (Eisenmann et al., 2006).

A classic example of multi-homing dynamics is the credit card providers. Consumers may have for example both American Express and Visa, and merchants accept both of those. In this type of a market, competition comes down to effective pricing and differentiation between platforms (Armstrong, 2006; Eisenmann et al., 2006).

One form of competition between platforms is called envelopment. It means that a stand-alone platform is made purposeless by an adjacent platform that leverages the network that the two platforms share and offers the same value proposition as part of a multiplatform bundle, which becomes more cost-efficient to the money-side of the platform (Eisenmann et al., 2006). Of course, an envelopment strategy does not always succeed and sometimes it results in acquisition of the target platform, which happened with Google and YouTube, for example (Eisenmann et al., 2011). The existence of envelopment strategies further depicts the importance of user base and the network effects that relate to platforms' competitive advantage. Eisenmann and colleagues (2006) suggest that a platform can survive envelopment through changing its business model, finding strong partners or suing the attacker platform.

Envelopment relates closely to a situation where a platform provider and a complementor start competing. When a functionality offered by a complementor in a certain platform becomes successful, it becomes interesting for the platform provider to pursue to offer the same functionality, which happened with Netscape (a complementor to Windows) and Internet Explorer (a browser offered by Microsoft) (Gawer, 2014).

3.3 Platform ecosystems

Platform ecosystems can be evaluated with the help of business models. Even though business model literature is quite scattered and a clear consensus has not been formed, common ground between points-of-view is found in e.g. that business models focus on how firms "do business" holistically and that they seek to explain value creation and capture (Zott

et al., 2011). Business model literature is not covered vastly in this thesis but the focus is on the logics of value creation within different types of platforms and what actors are involved in a business model. Hence, platform business model logic is used in understanding the value co-creation processes more in a more modular way, giving structure to otherwise complex reality.

Smedlund (2012) distinguishes between four different types of service platform business models that exist in a two-by-two framework. The framework includes businesses that build platforms themselves and businesses that are complementors to an existing platform. There is some resemblance to what Gawer (2014) suggests with her model with regards to the openness of a platform, only that she explains openness in terms of a continuum rather than an "either or" choice. What is left out from Gawer's (2014) framework are complementors, because the framework focuses on platform types. Smedlund's (2012) framework mainly focuses on service platforms that require ICT whereas Gawer's (2014) framework includes product platforms, which has in fact been among the first streams in platform literature (Porch et al., 2015; Thomas et al., 2014). However, it should be noted that service platforms are in the focus of this thesis due to the nature of the studied phenomenon.

Each of these business models has its own logic of value creation. Smedlund (2012) proposes a capability-based model in assessing these different logics. The main idea is that value is co-created in the network of different actors participating in the platform and that each actor plays a different role in it, and they thus have different business models. These platforms act as a basis for ecosystems that compete with each other (Porch et al., 2015). Platform ecosystems not only describe the participants in one platform but the embeddedness of platforms, such as microprosessors in smart phones that access the Internet where a user can access e.g. Facebook in which multiple smaller apps exist (Gawer & Cusumano, 2014). The ecosystems view of platforms has a connection to S-D logic and service science, where the whole in which value is co-created is called a service ecosystem (Vargo & Lusch, 2011).

One way of looking at business model development is to see it as design for value proposition, where the (re)configuration of people, technologies, organizations and information is based on what the customer or the service recipient expects (Maglio & Spohrer, 2013). This point-of-view is implicit in Smedlund's (2012) model, where digital platform participants play different roles. Value is the outcome of user experience. According to S-D logic, service providers can only offer value propositions, hence value

proposition is the outcome of a chosen business model. Platform is seen as the enabler of value co-creation and thus a platform orchestrates value (Kijima, 2015).

The role of information and communications technology (ICT) is crucial in digital platforms as value proposition is delivered through front-end ICT, or the user interface (Smedlund, 2012). Service that has the potential to create value for the end user is indirectly experienced through goods (the digital platform itself) or service artifacts, which are technological functions of a digital platform aimed at interaction with the user, e.g. Facebook creating a unique newsfeed based on user's previous actions (Smedlund & Eloranta, 2015). Smedlund's (2012) model can be essentially used as a mapping technique for evaluating business models. For example, an open service platform business model would have a value co-creation process where the supplier maintains the front-end ICT and opens it for its customers so that they can access end users through ICT. This model will be used in the value co-creation process mapping for the studied phenomenon.

Platform-based ecosystems enable innovation in a new way as platform participants are not restricted to their traditional roles as either consumers or complementors, for example (Gawer, 2014). Platform ecosystems not only benefit from innovation leverage, but they are also able to use the production logic (modularity) and the transaction logic (multi-sided markets) as leverage (Thomas et al., 2014). Hence, a platform ecosystem is the most developed form of platforms. In an industry platform that is based on an open interface, innovative capabilities are potentially unlimited as no-one is restricted from participating (Gawer, 2014).

Following S-D logic in that all exchange is based on service, the experiences created in platform ecosystems are also service. Therefore it is meaningful to discuss shortly on service innovation, which is one of the main research agenda of service science (Spohrer & Maglio, 2008). Classifications of service innovation have a lot of variety, but a common element in most classifications is the element of novelty that adds value (Tuunainen & Tuunanen, 2011). In order to advance in service innovation, the service system (e.g. a person, a company, a country) needs to be aware of the capabilities and the needs of other service systems and of itself (Maglio & Spohrer, 2008).

Taking the studied phenomenon into account, an example of an ICT-related service innovation is the focus of interest in this thesis. Service innovation in ICT combines technology innovation, business model innovation, socio-organizational innovation and demand innovation, and the goal is improvement of existing service systems, creation of new value propositions or creation of new service systems (Tuunainen & Tuunanen, 2011).

Understanding technology, business, social and human systems is needed to increase innovation in ICT-related service systems (Maglio et al., 2015). The topic of innovation is important in understanding how the phenomenon studied in this thesis was born and how it potentially links to future research suggestions.

4 THEORETICAL FRAMEWORK

The objective of this thesis is to broaden the current understanding on value outcomes and value creation as seen in S-D logic through applying a platform structure of actors to create a value-mapping framework. S-D logic has been evolving for over a decade on a theoretical level, and empirical support is needed more, for example to tap into particular attributes that are present in value co-creation contexts (Akaka et al., 2013). This chapter summarizes the literature review in chapters 2 and 3, and presents a model or a more detailed framework with which value in the studied phenomenon can be analyzed.

The reasoning for choosing S-D logic as the main framework stems from the centrality of value in S-D logic (Vargo & Lusch, 2004). It provides a larger frame outside the traditional firm-customer exchange, and it is relevant for non-profit organizations as well (Vargo & Lusch, 2006). During the past over ten years, S-D logic has been moving towards a more complex view on how value is created. Instead of value co-creation between two actors, value co-creation occurs in a larger service ecosystem, where connections between actors are many. Ecosystems are also nested and overlapping, meaning that the same actors affect value co-creation in multiple networks. (Vargo & Lusch, 2012). Due to its complexity, structure is needed in order to better analyze the value co-creation process.

The attempt of the present study is to build a value co-creation model through infusing platform research into S-D logic. The rationale for this is in the studied phenomenon, Kallio kierrättää Facebook flea market (2015), which qualifies as a platform: it has a modular design (a core and a periphery), and it enables leverage (user benefits more from the use of the platform than performing the same activity independently) (Thomas et al., 2014; Gawer, 2014). Kallio kierrättää (2015) enables otherwise distinct actors to interact with each other, which has potential to create value for the users.

Modularity is one way of assessing complex ecosystems, because it enables the distinction into smaller particles (Baldwin & Clark, 2000). Due to this, platforms provide a reasonable tool for creating structure for value co-creation. Modularity represents especially the technological literature stream in platform literature. From the economic literature stream, platforms-as-markets view plays an important role. Understanding the main tenets of this stream opens up the possible underpinnings of value co-creation in an online flea market, which is essentially a marketplace. Especially the networked nature of value co-creation could be analyzed through network effects (e.g. Parker & Van Alstyne, 2005). Together these streams are building platform theory towards platform ecosystems.

Natural connections between platform literature and S-D logic do exist, platform ecosystems being the most recent and relevant for this study. Whereas service ecosystems are seen nested (Vargo & Lusch, 2012), platform ecosystems are also embedded in each other (Gawer & Cusumano, 2014). Kijima (2015) discusses value orchestration platforms as enablers of value co-creation, which points towards an "alliance" between S-D logic and platforms, similarly to S-D logic and CCT (Arnould, 2007).

Smedlund's (2012) model for assessing different value co-creation logics among platform business models offers a starting point for building an appropriate framework for this thesis. Smedlund's (2012) model is already based on S-D logic, and thus it further rationalizes the choice. The objective of the thesis is not to build on business model literature but to apply the similar logic into building understanding on the value co-creation processes. Smedlund's model is further developed based on the networked nature of value co-creation as explained in S-D logic – network exists for both the service provider as well as the user. One aim for the empirical part is to recognize the actors that affect value co-creation in the user side. In addition, Gawer's (2014) notion of non-fixed roles for actors is taken into account in the model. Platform users need not be only e.g. buyers or sellers, but they can be both and therefore participate in platform activities in multiple ways than merely consuming the offering. This view is also coherent with the view of S-D logic of all actors being resource integrators and the unnecessity of labelling actors as "providers" and "consumers" (Vargo & Lusch, 2010).

Another objective for this research is to evaluate the nature of value. Value co-creation processes are closely intertwined with the value outcomes, as different types of value are present in the process – value-in-exchange, value-in-use and value-in-context (Vargo et al., 2008). Gummerus (2013) suggests that S-D logic could further develop its stance on the nature of value by including negative value more explicitly in the framework. Through the empirical research, different outcomes of interactions will be evaluated and placed within the process.

As a result, the developed model in Fig. 1 depicts *platform ecosystem as a service ecosystem*, where interactions between actors possibly result in value for one or more actors. A crucial ingredient in value co-creation is the value proposition, which connects different service systems (Spohrer et al., 2008). In the model, value proposition covers the process until the user or value proposition evaluator. On the other side, actors are unknown, making the model a preliminary model for the analysis. The model will be re-evaluated in chapter 7.

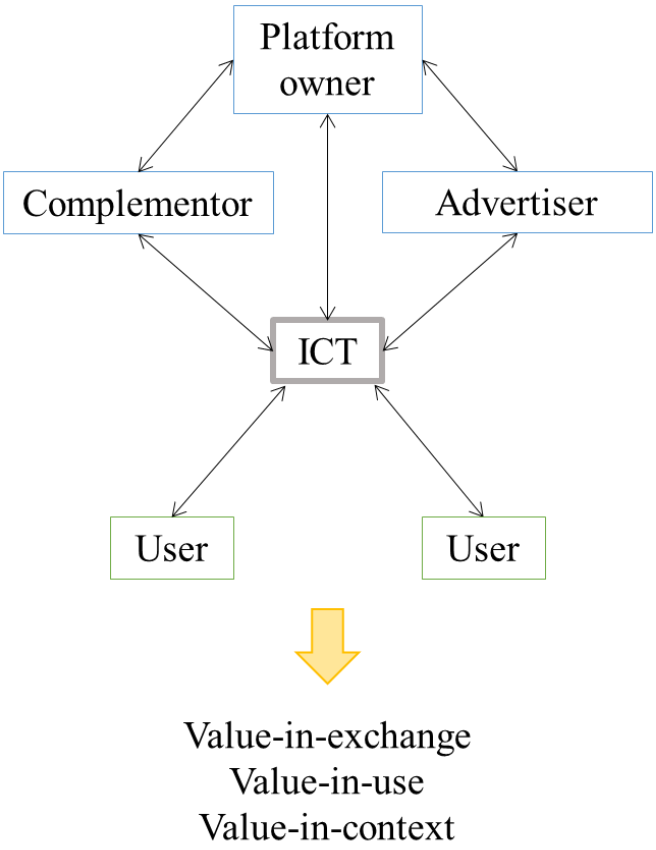

Figure 1: Model for analyzing value co-creation in a digital platform as a service ecosystem

The model in Fig. 1 is built from the standpoint of evaluating specifically digital platforms, where ICT plays a significant role as the enabler (Smedlund, 2012). When compared to Smedlund's original model, the multisided nature of digital platforms is emphasized by adding advertisers as an important profit-making side (Staykova & Damsgaard, 2015). Also, two users are added instead of merely one, as interactions between users are as important as interactions between e.g. a user and an advertiser. In a digital platform, the users are only connected through ICT. Another reason for adding a second user to the model is that it underlines the flexible roles of users, as they can take different roles when acting in the platform (Gawer, 2014). Additional users may be added to the model, but only two are depicted in the model to keep it clearer.

The model aims to describe the nested or embedded nature of platforms. "Platform owner" is the owner of the main platform, in which smaller platforms might exist. The owner of a smaller platform is called "platform complementor", but it can also be the nested platform owner due to this actor's dual role – it complements the larger platform as well as governs a platform of its own. However, the technological interface is based on the

same technology, thus ICT is the same for all actors in the platform ecosystem and at the same time it is the only route towards platform users. Technology represents the core in the platform which is further leveraged by platform participants.

In order to keep the model understandable and simple, networks for each actor are not depicted in the picture. However, similarly to the original model, each actor has a connection to its own network. It should be underlined that Smedlund's model does not place user in a network, whereas here it is added in the idea, while not existent in the figure. Networks apply to users as well, as service users have their own "supply chain" too (Vargo, 2008). User networks are also connected the same way service providers' networks (depicted in the original model), but they are left out of the figure for clarity's sake. The potential role of organizations for each service provider is taken into account but dropped from the model for now.

As an extension to Smedlund's (2012) original model, value is considered threefold instead of only "value". As explained by Vargo and colleagues (2008), all three types of value (exchange, use and context) play a different role in the value co-creation process. The different types of value could be placed in different phases of value co-creation process, but they are placed below as the result of interactions of the whole "platform as a service ecosystem". This way the model stays more comprehensible.

In addition to enriching the original model, it further takes into account the different levels of value co-creation between users (micro) in a platform ecosystem (meso) which exists in a larger context of networks (macro) (Chandler & Vargo, 2011). It enables the analysis of contextual value due to inclusion of networks on all sides in the model. The focus of analysis in the empirical part of this thesis will be in the platform ecosystem, but potential for finding out signature actors outside the direct platform ecosystem will be noticed, if present in data. An example would be that a study subject links his/her use of the platform to e.g. family members who are not part of the platform themselves.

5 METHODOLOGY

The aim of this study is to build understanding about service-dominant logic (Vargo & Lusch, 2004) by applying some logics from platform literature. In order to do so, an empirical research is in the core of this thesis in building new knowledge. On the basis of the literature review, a theoretical framework was presented in chapter 4. Empirical research will focus on finding evidence on the logic of the model and further develop the model. The present chapter will discuss the chosen methodology and research methods that are in line with the philosophical assumptions. More specifically, I will go through the data collection and data analysis approaches as well as how the research can be evaluated.

5.1 Research approach

Prior to choosing a specific method for data collection, methodology needs to be addressed. Furthermore, methodology is derived from the theoretical perspective, which includes philosophical assumptions on the essence of being (ontology) and what knowledge is (epistemology). Together they form different paradigms where assumptions and methodological decisions are in line. (Gray, 2014; Eriksson & Kovalainen, 2008).

Ontological perspective takes a stance on how reality is formed. Reality can be understood as objective or subjective – it either is independent of people or constructed through social interactions, respectively. Subjective reality is often referred to as constructionism. (Eriksson & Kovalainen, 2008). According to S-D logic, which is a central theory in this thesis, value is dependent on the context and created in use, and thus it cannot be same for everyone (Chandler & Vargo, 2011). This underlying theme in S-D logic drives the ontology in this thesis towards constructionism.

Epistemology tries to understand what kind of knowledge is legitimate and adequate (Gray, 2014). Similarly to ontology, epistemology has an objectivist and a subjectivist view. Objective view sees knowledge as unchanging, existing in a world that is theory neutral. According to subjective view, knowledge can be accessed only through our own observations and interpretations. (Eriksson & Kovalainen, 2008). In line with the ontological perspective, the view of epistemology in this study is subjective.

A closely related concept to epistemology is methodology, which concerns knowledge more practically than epistemologies. The purpose of this study is to understand a phenomenon more deeply and find out meanings in the use of an online flea market. Therefore a qualitative methodology is an appropriate choice for this thesis (Eriksson &

Kovalainen, 2008). Even though the research phenomenon is quite under-researched, the topic of value co-creation has been studied quite vastly. Therefore a more specific methodology with a qualitative approach chosen for this thesis is case research, where the objective is to build theory (Rao & Perry, 2003). Kallio kierrättää (2015) offers a frame or a case, in which the prior theory can be observed and developed, and the focus will be on individual users or admins using the platform. Several other Facebook-based flea markets do exist, making it possible to perform a multiple case study. However, a single case is chosen because it should provide more in-depth data of the phenomenon (Sobh & Perry, 2006). Due to the centrality of prior theory, the research follows an abductive model of inquiry. Empirical data is not only used as a proof for theory as in deductive research, nor is it the sole source for theory building as in inductive research, but both approaches are used. (Eriksson & Kovalainen, 2008).

There are differences in how researchers define a paradigm. Guba and Lincoln (1994) identify four competing paradigms within social sciences: positivism, postpositivism, critical theory and constructivism. They see paradigms as basic belief systems or worldviews that guide the researcher, whereas some researchers see paradigms as practices that define a certain discipline in a particular time period (Eriksson & Kovalainen, 2008). Due to the varying meaning of paradigm, a worldview can be discussed under the terms "philosophical positions", "theoretical perspectives" or "research philosophies", for example. For clarity, I will use the term "research paradigm" to describe the chosen philosophical background for the study, consisting of ontology, epistemology and methodology (Sobh & Perry, 2006). The research paradigm best describing the present research and my personal view is interpretivism in a larger sense. It takes into consideration that the world is interpreted by a researcher and therefore it is close to constructionism as an ontology and an epistemology, hence in line with the ontological and epistemological views stated before. Interpretivism also acknowledges the difference between natural sciences and social sciences, such as marketing, where different types of methods need to be applied (Gray, 2014).

Within interpretivist approach, realism would most accurately describe the philosophical assumptions and the approach taken in this thesis. Within realism, objects of research are available for systematic analysis and the aim of a research is to describe the world as accurately as possible (Gray, 2014). The findings of the study are seen probably true, but it is acknowledged that the values and the participation of the researcher also affect the results. The aim is to paint a picture that is shared between individuals even though it is imperfect in describing the external reality. (Sobh & Perry, 2006). As the objective of this

research is to shed light on the value co-creation processes and value outcomes, a realist approach allows simultaneously the drawing of a systematic process and the view of the reality as a result of social construction inside the studied phenomenon.

5.2 Research methods

Methods are the specific tools that are used in understanding the studied phenomenon. They are often divided into data collection methods and data analysis methods, which will be the division used in this part as well (Eriksson & Kovalainen, 2008). The studied phenomenon in this study is Kallio kierrättää (2015) Facebook flea market, which is one of the largest Facebook flea markets in Helsinki area with more than 25 000 members. The group has ten administrators who take care of the daily routines, such as making sure members follow the rules. Kallio kierrättää is described in the following way on the page (translated from Finnish): "Kallio kierrättää is a recycling group that aims at areal recycling and getting to know people living in your neighborhood while doing so." Kallio is a neighborhood in Helsinki, and it is situated north from the city center.

As the research question poses, the focus is on value co-creation especially from the user point-of-view. Therefore the research objects are mainly users of this platform who have some experience of using it. In addition, one admin is approached to enrich the view. This means that the research is not a traditional case study but it rather gives an empirical context for studying value co-creation. Data collection and data analysis methods are discussed next.

5.2.1 Data collection

The empirical data used in this thesis consists of primary data from eight semi-structured in-depth single person interviews. The main activities performed in the flea market relate to buying and selling, and therefore I wanted to interview people who had experience on either one or both of the activities. As Kallio is a neighborhood in Helsinki, I also included both interviewees living in the area and outside it. One interview was conducted with an admin for Kallio kierrättää in order to build insight from admins' perspective.

Semi-structured interviews were chosen over fully structured or open interviews as a major advantage is that they allow a systematic and comprehensive approach with prepared questions while there is no need in asking each question the same way, making the interview conversational and rather informal (Eriksson & Kovalainen, 2008). Semi-

structured interviews suit the chosen realist research approach, where a lot of emphasis is put on prior theories. Studying prior research and building a preliminary framework gave a natural starting point for designing the interviews and focusing on certain pre-set themes while leaving the opportunity of other things rising up in the interviews.

Comparing personal interviews with focus groups, the former brought more advantages when studying the phenomenon at hand. Even if focus groups have several advantages, such as convenience, it might push participants towards groupthink or conformity (Moisander & Valtonen, 2006). Personal interviews allowed me to focus on the individual and what he or she was saying, as well as to respond to his or her thoughts and answers. I believe that my research question and methodological choices would have allowed for focus groups, but I wanted to avoid the fore-mentioned problems that relate to focus groups. In addition, I wanted to get users' personal opinions and descriptions on the topic, from which I could start building a bigger picture on the phenomenon and how value is co-created in such an environment.

Interviewees

As mentioned, altogether eight interviews were conducted, each taking approximately between 45 and 60 minutes. In order to find these interviewees, I posted a message in Kallio kierrättää group in which I briefly explained my general thesis topic and that I needed interviewees from the group. The message was written in Finnish as I wanted to conduct the interviews in Finnish as well. This way I was able to understand the interviewees better and there was no need for the Finnish participants to speak in a foreign language, which might have caused some tension in the interviewing situation. After posting the message in the group, I received 15–20 answers within a couple of hours and I was therefore able to choose interviewees with the backgrounds I was hoping for.

Seven out of eight interviewees are female, which may be due to female participants being active (at least on the surface) in Kallio kierrättää. As the research question does not focus on gender differences or have gender studies as a starting point, this skewed feature should not affect the data in a way that it could not be studied, as it might in quantitative research. Interviewees were from 23 to 35 of age, and five of them live in Kallio, the rest three living outside Kallio area. During the last interviews data saturation started to be quite apparent, which was a sign that eight interviewees would be enough on getting a rich picture of the phenomenon. The interviews resulted in 7 hours and 8 minutes of recordings and 98 pages of transcribed text.

5.2.2 Data analysis

Realism researchers enter the field with prior theories, which means that the development of a preliminary framework is one way of doing realist research (Sobh & Perry, 2006). Such framework based on prior theory was created in chapter 4. The realist approach follows the abductive logic as a mode of reasoning, where the results of a study are based on both deducing from prior theory as well as inducing from empirical data. As the realist approach admits that there can be a form of external reality, the focus in the analysis is more on what exactly was said rather than how it was said.

As explained, the data was collected through interviews. Each interview was recorded, which enabled a careful transcription of the recorded material. The focus being in the content, interviews were transcribed word-to-word but sighs or other non-verbal noises were left out. With a vast amount of textual data in the form of transcribed interviews, the data needs to be reduced, which enables a systematic analysis. A method used for data reduction is coding, which is used in this study. Coding means that the data is classified on the basis of various features and themes that arise in the data (Eriksson & Kovalainen, 2008). Since prior theory plays an important role in the thesis, a priori coding was used, mixed with emergent coding. This follows logically from the choice of semi-structured interviews, where themes were thought beforehand to the interviews. The framework in chapter 4 acts as a starting point of analysis, but emerging themes were noted in order to further develop the framework.

Coding was done on the basis of qualitative content analysis, which helps reduce data by systematically describing the meaning of the data (Schreier, 2014). The systematic nature of content analysis assists the researcher in not overlooking potential piece of data only because it is not in the a priori coding scheme. Some data could be also overlooked in coding process due to researcher biases. This problem could be addressed by stating researcher's background as to be aware of values instead of removing those values from analysis (Sobh & Perry, 2006). This is why a short description of myself follows.

I am a 25-year-old female Finnish student currently in my Master's phase of studies. In addition to completing my studies, I work in a facility services company. I am very interested in environmental issues, which also tilted me towards the thesis topic. Partly because of my interest in e.g. recycling, I acknowledged that not all Kallio kierrättää users probably see the group initially for recycling purposes, which on the other hand is one of the main reasons I have engaged in the group before. I joined Kallio kierrättää in the spring of

2015 for curiosity but I have not used it otherwise than posting my message concerning voluntary interviewees for my thesis. I have browsed the group and the posts in it but have not bought or sold anything in the group so far. During the interviews, I engaged in discussion with the interviewees while being careful not to impose any of my own thoughts of the phenomenon on the interviewees.

5.3 Research evaluation

Any research that is done aims at providing something new, something of value to the scientific community. Hence, research should be evaluated in order to determine whether it was able to achieve this goal and to what extent, meaning that criteria is needed in judging quality (Patton, 2002). Traditionally, research has been evaluated on the basis of reliability, validity and generalizability, which are not always suitable evaluation criteria for qualitative research (Eriksson & Kovalainen, 2008).

Reliability of a research means the consistency in research so that another researcher would be able to replicate the original study and end up with similar findings (Eriksson & Kovalainen, 2008). What makes the concept of reliability difficult in qualitative research is that in many cases the aim is to understand a phenomenon more deeply, a research setting that could be hard if not impossible to replicate. The chosen paradigm or realism also affects the choice of appropriate evaluation criteria. Healy and Perry (2000) suggest that instead of reliability, realism research would be evaluated with methodological trustworthiness. This can be evaluated by e.g. the use of quotations in the written report.

Validity is a classic criterion used in evaluating whether the conclusions accurately describe or explain what happened, in other words if the results are true (Eriksson & Kovalainen, 2008). Validity can be evaluated in realism research with two distinct criteria: contingent validity and construct validity. Contingent validity stems from the notion that realism research does not aim to prove cause-and-effect relationships rather than finding mechanisms that create connectedness. This is closely related to the ontological assumptions in realism, according to which personal lifeworld do exist but that these realities for an external, independent reality simultaneously. More precisely, contingent validity can be evaluated by the use of theoretical replication or in-depth questions, for example. Construct validity in realism research relates more to methodology and it refers to how well the constructs in theoretical results are measured in the study. It can be evaluated through e.g. the use of prior theory. (Healy & Perry, 2000).

Generalizability means that the results of a research can be extended to concern a wider context than in which the studied phenomenon exists. While it deals with representative sampling in quantitative research, in qualitative research attention should be given to the well-grounded selection of research cases or people. (Eriksson & Kovalainen, 2008). Furthermore, realism research should aim at analytic generalization, which is essentially theory building. This criterion can be evaluated by checking if research issues have been identified before data collection and if data collection is designed to find proof or new dimensions to existing theory. (Healy & Perry, 2000). Analytic generalization can be reached even in a single-case study when studied with sufficient depth, resulting in the possibility to provide a basis for theoretical contribution (Hyde, 2000).

In addition to evaluating methodological choices, Healy and Perry (2000) suggest that ontological and epistemological views be evaluated as well. Realism takes the view on ontology that unique realities do exist but at the same time these realities form a "third world" that can be studied. Hence, the research should focus on studying the shared reality. One way of ensuring ontological appropriateness is to select the research problem to answer to "how" questions. Epistemologically, realism is neither value-free nor value-laden, but instead the researcher should be aware of own values. Techniques to ensuring epistemological consistency are e.g. multiple interviews with broad questions and self-description and awareness of own values.

6 FINDINGS

The results of this study will be presented in this part under two main topics: the value co-creation process and the value outcomes. The aim is to answer the research question and the two sub questions that focus on the foregoing main topics in this part. Within value co-creation process the different roles of participating actors as well as other particularities in the process are discussed, and the discussion related to theoretical contribution is founded. Value outcomes are discussed under the three main types of value – value-in-exchange, value-in-use and value-in-context – as presented in the literature review, and a chapter regarding negative outcomes that users experience is added in order to understand the whole process of value co-creation.

Due to the intertwined nature of value co-creation process and value outcomes, outcomes appear in the discussion within the value co-creation process chapter from the viewpoint of which actors affect which outcomes. Value outcomes chapter will focus on evaluating the different types of outcomes. Therefore the two main topics in this part have some similarities in content.

6.1 Value co-creation process

The process of value co-creation takes place in a networked reality and in order to make it more understandable, platform structure has been applied to it theoretically. The foundation for the analysis lies in the framework developed on theoretical basis, and it was presented in chapter 4. Based on the framework, the structure of this chapter is divided in three parts present in the framework: the value proposition side (the upper part of the model in Fig. 1), the user side (the lower part of the model in Fig. 1) and ICT that connects the two sides in a digital platform.

As the process of value co-creation is networked and takes place in a larger context, it would be extremely difficult if not impossible to map out the whole process where the value for each participant was evaluated. The scope of this thesis is in the user and thus the findings will also focus on the users' experience of the use of Kallio kierrättää and how they have perceived their own reality. I believe that the topic at hand offers an avenue for various further research and therefore I will focus on one aspect of the phenomenon. In practice this means that the role of different participants will be evaluated from the users' point-of-view and how they participate in value co-creation in creating value for users. Value for other participants is not discussed.

6.1.1 Value proposition side

The value proposition side in the framework in Fig. 1 consists of the platform owner, advertisers and complementors, which is a typical division of participant roles in multisided platforms, MSPs (Staykova & Damsgaard, 2015). In the case of Kallio kierrättää, the platform owner is Facebook and Kallio kierrättää itself could be viewed as a complementor because it is an actor that leverages the technology and other features provided by Facebook, creating value co-creation possibilities for other participants in the platform. Furthermore, especially the role of admins in the group in co-creating value to users is evaluated.

All in all, the logic of why Facebook works the way it does is based on network effects, which were explained in chapter 3.2.1. The platform acts as an enabler of interaction both within a side and between sides. In the case of Facebook it means that the platform enables Facebook users to communicate with each other creating direct network effects as well as e.g. advertisers to communicate to and/or with users creating indirect network effects. In this bigger picture, the issue of pricing becomes noteworthy. MSP participants do not usually pay the same amount of money in order to gain access to the platform, and in the case of Facebook, users are granted a free access whereas the profit for Facebook comes mainly from advertisers (Hagiu, 2014). In addition to connecting advertisers and users, Facebook also connects platform complementors to users. This makes Facebook a rather complex environment for analysis.

In the value co-creation model (Fig. 1) and taking the pricing logic behind Facebook into account, advertisers play an important role in enabling the profitability of keeping up such platform. From a user point-of-view however, advertisers do not seem to create much value at least directly. Out of the eight interviewees in this study only one mentioned advertisements and even that was in a negative tone:

> "*-- because I only use mobile -- there is nothing that would disturb, because I can't see any ads" (Minna, 23)*

It should be noted that any specific questions about the potential role of advertisers were not included in the prepared questions but the focus was more on what the interviewees felt as valuable or negative features. Nevertheless, this comment would point to the direction that Facebook users see advertisers as something that they must endure because it enables the free use of Facebook for them. It could be that Facebook users are so accustomed to the

presence of advertisers that they are not bothered by them consciously, and hence they were not mentioned in the interviews even as annoying features but once.

The free use of Facebook and Kallio kierrättää group itself was seen very important. Many interviewees claimed that they would not use the group if it cost them something. In addition, they saw that using a platform outside Facebook, designed only for flea market use might not be convenient for them. Sellers in traditional flea markets need to pay for the table, which possibly increases the prices, because the seller needs to get at least the amount back that he or she paid for the table. That is one reason why flea markets on Facebook are seen convenient, a feature that is entirely enabled by Facebook and its pricing strategy. Maija (29) is very strict about this:

> *"-- that is a good thing about free use, you don't need to pay anyone for selling there. There is not a rent increase in prices. So that's why I wouldn't use [Kallio kierrättää] if it wasn't free of charge."*

In conclusion regarding the role of advertisers, it seems that it is not very visible to users but at the same time the existence of advertisers enables the free use of Facebook and Kallio kierrättää, which in turn is very important to users. It could be that they are so used to Facebook being free that it would be incomprehensible if they had to pay for the use of Kallio kierrättää, which is basically a group on Facebook, representing a typical function that Facebook offers.

Continuing from that, the users do not see the value of an entirely different platform offering a similar service where they would need to pay, because the function of a flea market is already there on Facebook for free. The technology is quite basic but it is good enough, and there are other benefits or positive experiences that outweigh the lack of superior technological characteristics.

One of the benefits that Facebook provides is convenience. All of the interviewees spend a lot of time on Facebook and they use it to many different types of activities: chatting with friends, participating in events and discussing in groups, for example. Each interviewee mentioned convenience of Facebook as a platform, because they are able to access Kallio kierrättää while they are doing other things on Facebook. This way everything is in the same place, which makes users' media use less fragmented. They do not even need to go to the group because Facebook brings up sales announcements in the newsfeed among other announcements, such as status updates from friends or shared links

to news articles. Some interviewees were even wondering if it is too convenient, because they are spending a lot of their money in buying in the group.

Another perk from using Facebook platform is buried in the same phenomenon of people using Facebook in their everyday life. It seems that people use Facebook as themselves in most cases and present themselves as authentic. This in turn creates trust, which is essential when buying or selling in digital environments. Some interviewees explain how they evaluate the trustworthiness of another user based on his or her profile, even if they could only see a picture and some minor details. The expectation is that everyone is honest and fake profiles are rare.

The fact that Facebook is a central platform in users' everyday life is enabled by network effects. If there were not enough same-side users, the value of using Facebook would probably be significantly lower than it is now. The overall positive network effects present in the whole of Facebook also affect the attractiveness of Kallio kierrättää. Interviewees simply think that Facebook is a familiar platform where everyone is anyway:

> *"-- because everyone is on Face… Well not everyone but most are on Facebook and it is in your everyday life so with the same trouble of using social media anyway, you can just post stuff that you want to sell or…" (Minna, 23)*

The familiarity and centrality of Facebook could be reasons for the users to feel comfortable in the platform and develop the ways in which they use the platform in general. Facebook seems to have reached a critical status in people's lives, and hence users perceive the platform as a place where they can use it the way they want. The role of Facebook is to keep the platform up and running and provide the technology, and within these borders users are able to innovate new ways of using Facebook.

One result of such innovation was Kallio kierrättää group itself. It was created by users for the need of recycling locally. During interviewing and analyzing it became clear that the theoretical model in Fig. 1 would not be sufficient in describing the value co-creation that Kallio kierrättää users experience, because the users themselves form the complementor role and admins in the group are among other users instead of being disconnected the same way more traditional platform complementors are. The user role will be discussed more thoroughly in the following chapter and the focus in this chapter will be on admins' role in co-creating value for users.

Kallio kierrättää has somewhat ten active admins running the group of over 25 000 users. They are chosen among users and according to Katja, one of the admins I interviewed, admins have been changing during the few years Kallio kierrättää has existed. In addition, the original founder is no longer an admin, which would point towards users being active in the group and taking initiative even after the original founder left the group. This view is supported by other notions in the interviews as well and will be discussed more later on.

Based on the interviews, it seems that an important tenet in keeping the group functional is the rules. The existence of rules enables admins to have a control of what happens in the group and to oversee that users are acting according to the rules. Interestingly, the rules are not entirely created by admins themselves but instead, all users have the possibility to participate in rules creation. Rules have been forming as the group has grown and Katja, one of the admins, says that admins have observed problematic situations and then considered bringing up new rules. In many cases, admins have asked users what they would want and therefore the group works in a somewhat democratic manner. In a group with over 25 000 users, the voice of majority needs to be taken into account as the whole existence of the group is based on a group effort. Katja sees admin role being among users:

> *"And above all the fact that it is everyone's group, it is not like us admin gods dictating the rules and so, we have aimed at developing possible new rules based on votings and such, we always ask for their opinion, and if they are doable we aim at implementing the wishes that might be asked."*

Most of the interviewees felt that the rules are good and that they help communication in the group. However, one of the interviewees felt that there are unnecessary rules for individual cases, which makes using the group more complicated. She sees that being in social media the power should be with the people, the users, and thus rules prevent users doing as they would themselves see suitable.

> *"I think it's absurd, we are in the internet and in social media, so who can create and who has the power and who can create boundaries, because I think it is the market that forms the way people create it, and it is not the admins but it is an organic body." (Amalia, 35)*

Amalia does point out an interesting paradox that comes with the rules. Industry platforms, such as Facebook, are usually without any rules because they are open for anyone to join and no-one is in control (Gawer, 2014). Nevertheless, Kallio kierrättää has strict rules about how to use the group for buying and selling while it was formed in an open-based platform without any rules. This notion seems to support the view that Kallio kierrättää is some ways an independent actor within Facebook and that it forms a nested platform inside the larger platform, Facebook. Instead of being an entirely open group, Kallio kierrättää is more closed than Facebook as a whole because users are expected to follow the rules, and based on the rules, the admins have the power to make sure users are actually following the rules. If rules are not followed, admins are able to remove those users from the group. A fact that points more towards Kallio kierrättää being an interior platform is the procedure of taking new users to the group. If a user wishes to join Kallio kierrättää, an existing member needs to recommend him or her before admins will grant an access. This way of taking new members in was chosen so that fake profiles would be left out of the group, not to keep the group closed per se. Katja says that everyone is welcome to Kallio kierrättää as long as they are willing to follow the rules that have been created together with the users.

With the rules behind them, admins have an important role in overseeing that the rules are being followed. To most interviewees, admins were seen as something in the back but that in case of any problems they would turn up actively and try and solve the problems users are having, when needed. Users also expect to see admins taking action when rules are not followed, as described by Leena (30):

> *"They are anyway present always and it is good that they are actively interfering when people are trying to sell so that items are not in Kallio --"*

While users expect admins to be there when needed, some think they might have gone too far in enforcing the rules. Some interviewees are wondering how admins have the energy to be so precise about the rules. Instead, they should be more in the back and not too active. The appropriate role for admins seems to divide users in their opinions – others look for active enforcing of rules and others only want them to be available upon problematic situations. Amalia (35) is quite frustrated with admins:

> *"-- I personally dread too constrained and watching over people type of activity so I don't understand how they interfere with the discussions even if*

business is booming, everything is ok there, and then they come and write messages like "will you write down in your announcement where in Kallio you are selling", I don't get it if there is no problem and people are doing business, why they must interfere."

Within both views to the admin role in terms of activity admins are needed. None of the interviewees said that they would prefer no admins whatsoever. Hence, it could be said that users expect to see some sort of order in the group instead of fully control-free practices and lack of rules. From the admin point-of-view, unnecessary rules are avoided and Katja says it would be nice to have no rules at all. However, reality is not as ideal and therefore rules are in place. Still, even the rules in place, admins cannot force anyone to e.g. buy a product that they have reserved in the group and afterwards they have not showed up to actually buy the item. Their power only extends to the digital boundaries of the group, whereas unspoken, implicit rules come to play in user-to-user interactions outside Kallio kierrättää as a digital platform.

6.1.2 User side

The user side in the theoretical framework for this thesis is depicted with two users who are connected via information and communication technology. The reason for putting two users in the model instead of only one is that it emphasizes the multiple roles that users can take, e.g. being both buyers and sellers in a marketplace. This chapter will discuss the findings that both support the theoretical model as well as build beyond the model. The theoretical background for analyzing the user side is explained in details in chapter 4.

One of the characteristics of user-to-user interactions creating value is the sheer number of users in Kallio kierrättää. There are over 25 000 users in the group, which enables fast exchange that is generally thought positive among interviewees. This further emphasizes the existence of network effects not only on Facebook as a whole but also in Kallio kierrättää as well. Many interviewees mentioned that even if they were not active in the group at the moment, they felt comfortable about the potential of selling because they were sure someone would buy, or take the item if it was given out for free, a common practice especially when people are moving and are trying to get rid of old furniture or other items that they see unfit for asking any money for. There are new members joining in on a continuous basis as the word is spread about the group. At some point, a lot of users were joining the group even

from other cities, such as Vantaa or Espoo, because people see Kallio kierrättää as an extremely active group where anything sells. This was even at the sacrifice of coming to Kallio area to deliver or pick up the item, one of the most central rules in the group.

When the flexible role of users is examined more closely, it is indeed evident that many users are both selling and buying in the group. Interviewees differ in their opinion in which is more useful or valuable for them, buying or selling, because it seems that both activities have their perks and downsides. Nevertheless, enthusiastic buyers and enthusiastic sellers have a platform for encountering, owing to Kallio kierrättää. The value outcomes and negative experiences that relate to both buying and selling will be discussed in chapter 6.2.

In addition to users being flexibly both buyers and sellers, users are also taking an admin role, which traditionally stands on the value proposition side of the platform. First of all, admins in the group are chosen among users and they use the platform for the same purposes as other users, hence they are peers instead of platform owners. Still, the actual admins are given the right or the power to take care of the everyday issues in the group and to enforce the rules, even if the rules were created together with the users. Perhaps more interestingly, some regular users in the group are acting as admins, either by messaging to actual admins about other users disobeying rules or by starting public discussions of whether some activities in the group are according to the ethos of the group of being a flea market primarily:

> *"-- we don't interfere with [users trying to sell with high prices], but many users seem to interfere, it feels that it is important to keep it as much as a flea market as possible." (Katja, admin)*

This finding supports the view that users see the group as their own group, where control is in their hands in principle but that admins are given the role of keeping control for them. Therefore there are a lot of democratic characteristics in the activity, and the line between a provider and a consumer is blurred. This finding is perhaps one of the most central findings of this thesis because it will have implications on how the model presented in chapter 4 would illustrate the reality. Instead of having the value proposition side separately from the user side, the actors are seen more equal in the way they participate in value co-creation in a platform. Facebook users are taking matters to their own hands and innovating new ways of using the otherwise familiar platform in completely new ways:

"And people are so creative, all kinds of things are tried in these internet-enabled environments, would this or that work out." (Maija, 29)

Furthermore, many interviewees accentuate the group being for person-to-person exchange or commerce where middlemen are left out of the process, whereas in traditional flea markets one would need to pay for a table or pay a commission such as in some online flea markets. For some users it is also valuable to be part of a bigger change in how people exchange items and how consumers' role is changing. Ossi (31) values the unofficial nature of exchange:

"And that there is no need for a firm in between but it is person-to-person exchange. -- it's us people doing business, it's not like official commerce."

Even though exchange between members is not considered very official, it seems to be important for many to follow the rules and they expect that from other users as well. The rules are in place for a reason and they should be respected. Because Kallio kierrättää exists on Facebook, the overall platform enables going around the rules and it is up to each user if they are going to respect the rules.

Anna (30) told about a situation in which she was selling a bag and the queue was becoming very long, which in turn led to other users attempting to break the rules. According to the rules, the person who makes the reservation first with a public comment to the sales announcement should be the primary buyer. After that it is possible to queue for the item in case the people before you in the queue did not buy it. Regardless of the rules, many users were contacting Anna with a private message and they offered to pay more than what she asked for in the public announcement. Anna did not sell the bag to any of these users because she wanted to follow the rules, but she was wondering why so many users were trying to buy the bag by jumping the queue. To be exact, the only punishment from not following the rules would be getting kicked out from the group, in addition to probably losing trust from others. It appears to relate to the connectedness of users in a communal manner as seen by Minna (23):

"-- users are that much committed to following the rules, because it is communal, which I think helps in following the rules that have been set --"

Possibly in connection to the unofficial nature of interaction in the group, rules still are only a set of guidelines rather than compelling. As discussed before from the admin point-of-view, rules are needed because otherwise operating in the group would be significantly more difficult. The rules are not created for making interaction complex but for easing it. In a way, the rules ensure in theory certain things, such as that the item can be sold or bought in Kallio area. However, the users themselves have the possibility to flexibility, when convenient for both. Many interviewees described situations where they swapped the items outside Kallio because it was better for both of them. Those who make the rules can also break the rules, where they see fit and where it benefits both sides.

Not only are there written rules about what to do in the group, but also some unspoken rules exist, especially about how people should behave outside Facebook. These rules relate more to common sense and manners in a way, because mostly interviewees expected buyers or sellers to show up on time and buyers to have even money instead of asking for change. I also discussed with some interviewees about what they felt they could sell in the group. While some said that they could probably sell anything, others thought that whatever they might sell should be somehow fancy or special and that Kallio kierrättää is not a suitable sales channel for ordinary things.

> *"-- people don't sell ordinary clothes in my opinion, you must have something more special so that people will be interested." (Maija, 29)*

When the user-to-user connection is evaluated more closely, the data displays that a connection exists outside the platform; hence technology is not a necessary route in value co-creation. Users meet each other face-to-face for exchanging items and money, whereas in many online flea markets or e-auctions the item is sent via mail. Mailing is not encouraged in Kallio kierrättää, because the original idea in the group was to enable local recycling. Due to this, the connection outside Facebook is almost a necessity in fulfilling the value proposition. It follows that Kallio kierrättää as a platform is not restricted to the technology provided by Facebook but it extends into the physical environment as well. This is not to say that face-to-face interaction is *always* needed in value co-creation because as will be noted in chapter 6.2, value does not exist only within buying or selling, but using the platform as such has value too, such as reading funny stories that users post in the group.

Continuing with the outside of Facebook theme, many points seem to come together in the actual location, Kallio, where users should primarily exchange goods. Many

users in the group seem to live in Kallio, and five out of the eight interviewees live in Kallio as well. Kallio brings value to users simply because of a convenient location in Helsinki, as for example it is easy to go there with public transportation, but additionally there seems to be some value that resonates with the culture in Kallio. Kallio kierrättää appears to be an essential platform for many people for participating in the culture of Kallio, and Kallio again plays an important role in creating value for users in Kallio kierrättää. The physical location and the digital platform complement each other in a symbiotic manner. It appears that Kallio kierrättää is included in a larger value co-creation scheme, where it represents great things more than only buying or selling.

> *"Social pressure. Everyone is in Kallio kierrättää group. -- And for sure almost half of my Facebook friends are in really in the group -- It is taken for granted that if you live in Kallio, you are in the group, at least that's how it feels like in my social circle." (Minna, 23)*

Based on this finding, the context appears to be an important factor in value co-creation. Context does not only cover the location or Kallio culture, but the more unique context that each user has also affects the value co-creation process. It could be the location where they themselves live, if they have time for even starting a sales process, or their financial situation. The user evaluates value from his or her standing point and they have a unique idea of value, stemming from their private realities. Therefore it would not seem logical to exclude user's context in the value co-creation process. The value outcomes of user context, as well as negative outcomes and potential barriers to use, are discussed in more details and with examples in chapter 6.2.

When it comes to actual actors in users' own networks affecting value co-creation in Kallio kierrättää, nothing substantial came out of the data. Some interviewees mentioned that they are buying e.g. clothes for their children, in which case the children are actors indirectly affecting the value co-creation in Kallio kierrättää. This could be visible in whether the user is able to find clothes for the child or not, for example. Somewhat indirectly drawing from the previous quote from Minna, user's friends probably influence the value co-creation process. However, these thoughts are stemming from my interpretations and it must be acknowledged that the interviews might have not focused enough on discovering the "user supply chain". The fact that nothing clear came out of the data would point towards

a notion that users are not aware of the effect that the actors in their network might have on how Kallio kierrättää creates value for them.

The importance of extra-Facebook factors in the value co-creation process strongly resonates with the understanding of a contextual quality of the value, as it is explained in service-dominant logic. From the platform viewpoint and especially looking at the theoretical framework for this thesis, networks for each platform participant are recognized, however left out from the actual figure in chapter 4. Nevertheless, I am not convinced if "network" covers the context completely, due to it referring mainly to actors, not abstract circumstances. Regardless of what is explicit or implicit in the model in Fig. 1, prior theory has suggested that value co-creation be integrated in a larger context (Edvardsson et al., 2011). Thus, the finding of meaning of context is not new but it further demonstrates empirically what has been discussed in prior literature.

6.1.3 Role of ICT

As the theoretical model (Fig. 1) suggests, technology does play an important role in value co-creation. The entire platform is based on using ICT as an enabler, and this view has not changed based on the data, as one would expect as well. ICT builds the core of the platform, around which other actors are organized. Nevertheless, more interesting than to simply state the importance of technology is to evaluate how technology creates value for Kallio kierrättää users.

According to Gawer (2014) and Thomas, Autio and Gann (2014) all platforms essentially share two characteristics: that of a modular architecture and that of leverage. Modular architecture includes a platform having a core and a periphery, and as mentioned, the technology builds the core around which other actors gather, forming a platform as a whole. The second important commonality among any types of platforms is leverage, denoting that it is more beneficial to perform a certain activity through the platform than without the platform.

In case of Kallio kierrättää, leverage is a significant driver for its existence. The users are leveraging the technology on Facebook in order to create the group, which based on earlier analysis has its separate logic of functioning; hence it is a nested platform inside Facebook. More traditional complementors would build their own technology that was applicable on the technology Facebook. This is why Kallio kierrättää cannot be described as a traditional complementor, but it is bending the boundaries of what kind of

actors participate in (digital) platforms. When compared to advertisers, they are using the technology provided by Facebook but in order to do so, advertisers need to pay access. It seems that Kallio kierrättää has all the perks and not so many downsides, considering they have the technology there and no costs. Thus, Kallio kierrättää is also in some ways leveraging the pricing logic behind Facebook.

Looking behind the phenomenon, we can see that it comes down to the user revolution, or users doing new things, innovating on Facebook which was discussed in previous chapter. Many interviewees said they would not use Kallio kierrättää if it cost something for them. Some also wondered if they would even use a cost-based, technologically improved flea market outside Facebook because free use is more important than fancy technology. These comments highly resonated with the fact that interviewees thought that it is greatly easier to use only one platform instead of many and that Facebook is very convenient as a platform:

> *"-- Facebook might not be the best one as a platform, but looking at the convenience of it, it is clear enough." (Pirjo, 26)*

A potential disadvantage of using Facebook technology is the dependence on it. Many interviewees had improvement ideas for the technology but they did realize that many of their ideas would not be in admins' or users' hands but it had to come from Facebook. It also causes some inconvenience for the users and admins because they are not able to fix technology-related problems by themselves:

> *"-- some pictures might disappear somewhere and they just suddenly show up, these are Facebook bugs you can't do anything about." (Katja, admin)*

An interesting notion is that Facebook has taken some initiative in improving the technology for flea market use specifically. Last spring, Kallio kierrättää took in a new feature for the group where sellers could choose to use a normal template for writing a message – essentially a white box with the possibility to add a picture – or to post the sales announcement with a template where one needs to fill in what is sold, where, how much it costs and the seller is able to add pictures. Apparently the new template has been working very well, easing the work that admins do as well. It would seem that Facebook sees value in these groups as well, albeit this analysis is left out of this thesis.

Another noteworthy finding is that technology is not present in all value co-creation that happens around the platform. Users meet face-to-face in a physical environment and the actual location of Kallio also has its effect on value, a topic discussed in previous chapter. Nevertheless, technology is an essential enabler of the whole phenomenon, because the real life interaction between users requires they first buy/reserve or sell something they see in Kallio kierrättää group, contact the other person with a private message on Facebook, decide on a meeting point and time online, and only then will they meet for swapping. This shows that many different actors affect value co-creation process and not only directly but also indirectly. Even if technology was not present in each phase of the value co-creation process, the entire process would not exist without technology enabling the interaction of otherwise disconnected users in the first place.

6.2 Value outcomes

Service-dominant logic divides value essentially in three stages: value-in-exchange, value-in-use and value-in-context (Vargo et al., 2008). In addition to the positive value outcomes, Gummerus (2013) has called for S-D logic to recognize the negative outcomes as well. Hence, the second sub research question asks what kind of positive and negative value outcomes users experience and this chapter will focus on analyzing the different types of value outcomes. Ultimately the aim is to draw an improved understanding on the results of value co-creation in Kallio kierrättää and analyze how negative outcomes could be included in S-D logic.

In addition to discussing the different outcomes users have experienced, the locus of each outcome will be evaluated. In the theoretical framework for this thesis (Fig. 1), different types of value have not been placed in their potential positions due to keeping the model simpler. This is also due to value outcomes locus not being in the central focus of this thesis and thus its ultimate research question. Value co-creation processes and value outcomes are interchangeably intertwined and therefore covering the value outcomes is integral. Due to the overlapping nature of outcomes and processes, some findings have been mentioned in the previous chapter from the process or actor point-of-view, whereas in this chapter, the focus is on different types of value. Covering value outcomes will give a fuller picture of the whole phenomenon.

6.2.1 Value-in-exchange

Value-in-exchange has been central in traditional goods-dominant logic, as it more or less is a synonym for monetary value. Even though value-in-use and value-in-context are more central in S-D logic, value-in-exchange has its role in value co-creation as well because money helps exchange in practice as it is very difficult to exchange service for service in all circumstances. Value-in-exchange is discussed more specifically in chapter 2.2.1. In this chapter, I will concentrate on monetary benefits that users have experienced from the perspectives of a seller and a buyer.

The most obvious monetary benefit for sellers is that they are able to make some money through selling items they privately own to others, i.e. second-hand. None of interviewees who had been selling said that they had tried to make big earnings by using Kallio kierrättä but that they were happy getting a small amount of money for the trouble for taking pictures of the item, making the sales announcement and taking the item to the buyer. If a user is going through a rough time financially, they can sell unneeded possessions and make a little money, even if the point is not to make profits. Kallio kierrättää is also seen as a marketplace where it is possible to get a better price of more expensive items compared to traditional flea markets where one buys a table for a day or for a week. All in all interviewees say that prices in Kallio kierrättää are modest and even cheap and that nobody would buy things too expensively.

> *"-- you can make a little money with your unnecessary stuff, and then get something more useful instead." (Leena, 30)*

> *"-- there is a certain group of people who want money, they tell that they are going for example to London for a trip and they don't have any money, please help me, and they are collecting --" (Anna, 30)*

From a buyer's perspective, cheap prices are considered valuable in general. They enable users to buy nice things with less and users are able to save money for something else. Interviewees differ in their views of how much they value cheap prices, but it seems they all share the thought of buying value for money, meaning they evaluate if the item is worth the money it is being sold with. When asked what types of things are popular in Kallio kierrättää, many interviewees listed brands, such as Fjällräven, Marimekko or Converse, which are

popular among users. Sometimes these brands are sold more expensively compared to average prices but they are nevertheless very popular. Thus it seems that Kallio kierrättää is a prominent channel for buying quality second-hand items with reasonable prices.

Another theme that came up in the interviews was that users take the risk into account when determining if they should buy an item or not. If the price is low enough, they are prepared to buy the item even if it was not exactly what they had imagined. This comes into questions especially with clothing, because buyers are usually not able to try clothes on before buying them. Many interviewees said that they will sell the items again if they end up being e.g. the wrong size. Regarding the re-selling potential, the risk of "ending up" with the item is also evaluated:

> *"-- how easily will I get it forward, like if there is a queue -- it lowers the risk -- then I will know that I can sell it forward right away --" (Amalia, 35)*

For all users one of the biggest monetary benefits is that they do not need to pay anything for using Kallio kierrättää. They are able to access the platform for free and do any types of actions – buying, selling or otherwise – for free, too. Money only goes to the seller in the event of the swap, usually in cash. As touched upon before, this is in consequence of Facebook's pricing logic, where users are granted free use and e.g. advertisers need to pay for platform usage.

Value-in-exchange is created in interactions between actors, but it does not exist on its own and it can be absent as well. Therefore value-in-exchange is not present in each connection in the value co-creation process. Based on the data at hand, value-in-exchange can exist between two users if they swap items for money, and in case of giving items for free, monetary value is indirect because money is being saved. The same indirect monetary benefit occurs between Facebook and users, enabled through technology. In the bigger picture, value-in-exchange does not play a significant role in the value co-creation process in Kallio kierrättää. Value-in-use and value-in-context are evidently more focal for Kallio kierrättää users, and they will be analyzed subsequently.

6.2.2 Value-in-use

Central to S-D logic, value-in-use describes the value that is created upon use, where a value proposition has first been given and then determined in use. Thus value-in-use cannot be

embedded in a product or a service but it is only realized through a user experiencing value. Moreover, it is seen as a process where all participants take actively part in creating value, instead of producer side determining value and user side consuming it. Value-in-use is discussed in more details in chapter 2.2.2, and this chapter will focus on analyzing the types and locus of value-in-use that users have experienced.

The most obvious value-in-use is the possibility to buy and sell second-hand items. The interviewees were divided on which activity they prefer, buying or selling. From a seller's point-of-view, it is easier to sell on Facebook compared to physical flea markets, because there is no need of leaving one's home, owing to the internet. Upon selling, the seller is able to affect the types of pictures he or she takes and how he or she makes the sales announcement. In the end, the seller is happy about getting rid of useless items he or she has at home. In addition, they are able to sell as many items at a time as they want instead of taking several bags at once to a flea market to minimize the disadvantages, such as paying for a table. For those who prefer buying, the main concern is with the fluent process of exchange. They see selling being more difficult and that there is too much trouble in it, whereas buying is simpler and offers other types of benefits in the end. The cons of both buying and selling are discussed more in chapter 6.2.4.

> *"It offers primarily easiness for selling, because going to a flea market to sell - I haven't actually sold anything in flea markets. -- I think it's more useful in selling than buying because when you're selling you can actually do many things --" (Minna, 23)*

> *"I have a greater chance of influencing the smooth process [when buying], because if I'm selling, I am stuck with the item and then it's up to the buyer, how fluently it goes --" (Amanda, 35)*

Buying-related benefits in using Kallio kierrättää include having the possibility for changing one's style conveniently. Combined with cheap prices, everyone can afford building a fashionable closet. Interviewees describe the selection being diverse, concerning clothes which form the largest segment but also other items. Many said they are sure they would find the weirdest things they were looking for in Kallio kierrättää. Some interviewees shared their stories about strange items on sale in the group, including an old walking stick and a stuffed seagull. Many were sure that the stranger the item, the faster it would be sold. This

particular characteristic seems to be peculiar to Kallio kierrättää. In users' minds, Kallio kierrättää has profiled among other things as a market for the craziest items on sale. In addition to strange items, simply unique finds are among the benefits buyers experience. A lot of the benefits seem to revolve around fashion.

Buying items on Kallio kierrättää saves time as well. Instead of going shopping physically, Facebook is easy and fast to access and time can be used for something else. Shifting shopping habits to Kallio kierrättää might also help in controlling the urge for shopping. Hence, Kallio kierrättää is used for "window shopping", which helps at least Minna (23) to not buy unnecessary things:

> *"-- I have a terrible urge for shopping. It's really unfortunate, but it is better, it helps that I browse Kallio kierrättää group and not buy anything. It helps in controlling it. -- It really helps, it almost like shopping when you feel that you have to [shop]"*

Most of value-in-use is something that is experienced by any type of users regardless of their role being a buyer, a seller, or something else. One of these benefits is the rules, which were discussed in more details previously. Rules enable users to understand what they can and cannot do, whether it is about selling, buying or posting other types of messages. Interviewees did not agree on the level of rules in terms of how strict they are but rules in general were nevertheless seen positive. In connection to the rules, the presence of admins was mainly seen as positive. Some thought admins are interfering in the activity too much but even so, everyone expected admins at least to be there when needed. Users think it is easier to operate in the group when there are rules and when someone is seeing over that rules are being followed. That way those who do not know how to behave in the group will be admins' problem instead of individual users' problem.

> *"It's good that [admins] exist there and in a way as a deterrent, apparently there many of them there, so that it doesn't come down to one or two people." (Maija, 29)*

Despite rules, flexibility is allowed when it suits both parties, a characteristic that is seen as a positive experience in the group. If both the buyer and the seller agree to meet for swapping outside Kallio, they can do that. Hence, it seems that rules are indeed created for helping the

users and giving frames for exchange. Flexibility also relates to time management, as users are able to decide for a meeting any time of the day suits them. Some interviewees tell they have met buyers or sellers even quite late in the evening. In addition, users are able to browse the group whenever they want, which is a common characteristic for any online store. As a consequence, users are not restricted by the opening hours of traditional flea markets.

All of these themes contribute to the fact that all interviewees thought that Kallio kierrättää is simply convenient. What adds to the convenience is that they use Facebook in any case and it is therefore very handy to use Kallio kierrättää at the same time. If they had to use a separate platform for buying or selling, it could be forgotten easily or they might not take the trouble to access the platform. The group is also seen as very fast and active, which adds to convenience. This notion relates heavily to network effects, which describe the outcome of more and more users joining the platform and adding possibilities to acting in the group. Network effects in Kallio kierrättää and on Facebook in general were more discussed in chapter 6.1.

The rules state that "all kinds of spam messages will be deleted", since the idea is to enable buying and selling in the group. Nevertheless, many users are posting messages concerning that they have found lost keys or credit cards in Kallio area, or that they are looking for a missing toy. This way, the group functions as an information channel especially for people who live in Kallio. Katja, the admin, says that they have let these kinds of posts be, because they are considered to be in accordance with the good spirit that the group has. None of the interviewees said that using Kallio kierrättää as an information channel would annoy them or that they had seen someone else being annoyed by it.

> *"-- even if it's not part of the rules, but they might report of something gone missing -- reporting of some stolen bicycles --" (Anna, 30)*

A theme that arose in the data several times was recycling, probably not very surprisingly as the group name Kallio kierrättää (Kallio recycles) and description already state recycling as one of the main aims of the group. Nevertheless, recycling was an important value outcome for many interviewees, and more important for some. One interviewee even said that in addition for the possibility to recycle, it is valuable to see other people recycling. This notion builds a case where value is created through other types of use as well, apart from buying and selling, or recycling.

One interesting value outcome is that users consider it fun or entertaining. Some announcements are written in a fun way, be it that someone is trying to sell “asshole ex-boyfriend’s” jeans or buying a children’s bathtub for her cat to bathe in it. These types of announcements get sometimes hundreds of “likes”, i.e. users click the “like” button on the announcement, which a typical way of showing interest in other’s posts on Facebook. Sometimes users are sharing stories in the group as well, such as telling they have found their best friend through the group or that something funny happened to them while they were swapping items. Interviewees also explained how sometimes when they are bored they would go browsing the group. In addition to reading the funny stories or announcements, they said it is interesting to see what people are selling and buying in general.

> *"It's a kind of a pastime group, if you're a little bored, you can go there, it gets your mood up, there's so weird stuff sometimes, like aww." (Minna, 23)*

> *"-- it's so much fun to arrange the meetings and the stories that are born, they create the extra value, like someone writing that she has done a quick swap somewhere in Sörnäinen metro station platform and the realizing at home she has someone else's shopping --" (Amalia, 35)*

Value-in-use by its definition requires more than one participant in value co-creation. A lot of the value-in-use described here is located between users. In this interaction, users are taking different types of roles. Simplest, they are buyers and sellers doing exchange, and in this value co-creation the technology is the enabler of interaction. User-to-user value outcomes without the mediation of technology will be discussed more in the following chapter within value-in-context. In addition to users being buyers or sellers, they can be just users in the group, reading what others have been posting in the group and browsing sales announcements. This value-in-use is different but it is also created between users, enabled by technology. As it has been discovered, admins in the group are also users, only taking the role of an admin. Therefore the value-in-use created partly by admins is also located in user-to-user interaction, again enabled by technology.

Furthermore, value-in-use exists also between Facebook and the users, again enabled by technology. This concerns the fact that users are able to use Kallio kierrättää while they are using Facebook in general. Facebook as the platform owner is enabling Kallio kierrättää to exist in the same platform, adding convenience to the users. Even though

emphasized in theory, advertisers do not create value-in-use for users. However, advertisers are part of value co-creation in the network indirectly, creating value-in-context.

6.2.3 Value-in-context

Service-dominant logic has been moving towards the focus on value-in-context, because it further acknowledges the networked nature of value co-creation, a central thesis in the theory. Value-in-context describes the value being created in a unique time and place, with unique combination of resources. Hence, this chapter will discuss the types of value-in-context users have experienced. Even though value-in-use could be said to be included in value-in-context because the use of the group happens in a certain context, value-in-use is more focused on the actual use situation, whereas value-in-context here takes into account the larger network and indirect links and effects in value co-creation. More theoretical background for value-in-context is opened up in chapter 2.2.3.

At its largest, value-in-context is the overall possibility of using Kallio kierrättää. There are numbers of actors that have their own role in enabling the activity in the first place. Analyzing the whole picture reveals that all actors that are present in the theoretical model for this thesis (Fig. 1) do play a part in creating value for the user. For example advertisers, who do not directly create value for users, enable Facebook's existence by paying for coverage. If we set Kallio kierrättää and Facebok in an even larger context, we soon notice that the internet as a whole plays a role, as well as companies selling computers and smart phones and making the operating systems for them. As the network can be expanded to cover almost anything, the focus will be in the more direct context that the user has and what value is created in this context. Nevertheless, it is crucial to understand that value co-creation could be examined from the larger network point-of-view as well.

One of the main themes that was found in the data was that Kallio kierrättää is considered convenient, not only in the way it is used on Facebook and other values-in-use described in previous chapter, but also in the sense of location as the context. Five out of eight interviewees live in Kallio and the possibility to swap items right where you live or at least very close was one of the main reasons they were using the group. For those living outside Kallio the location was considered convenient as well because public transportation is very active in Kallio. The importance of location shows that it is not enough to have a functioning platform but that the context outside the digital platform is crucial. Many interviewees explained how the location became especially important when they were

moving in Kallio. The combination of the swapping context and the users' own context of moving made the use of the group even more valuable for them. In these specific circumstances users experience increased value.

Kallio creates value not only because of the convenient location for completing the buying or selling process but because there is cultural value in Kallio as well. Kallio is described as a state of mind, and being a person who lives in Kallio seems to have a special status. Being part of Kallio kierrättää means being part of Kallio culture as well. The group has become some kind of a symbol for Kallio spirit, where community plays an important role. The group is a medium for following what is going on in the area and what kind of people participate in the Kallio state of mind. Maija (29) believes it is the hipster factor that could describe the popularity:

> *"I think, without knowing anything about it, that it is Kallio what makes it, it's like, the people are quite hipster in there, so the hipster quality is pulling them together, and that's the common factor in it"*

As mentioned, the sense community is one of the most important values-in-context users are experiencing. The community seems to exist both online and offline, where Kallio kierrättää is affecting and participating in building the sense of community. Interviewees told many examples of how the community is visible in the group itself. One more specific aspect is that people are willing to help each other. It could be that someone is desperately looking for a pair of bikini or trying to gather essential home appliances for their friend whose apartment burned, but nevertheless there are always people who want to help. All in all, the community that exists online is valuable for the users in different ways.

> *"-- really supportive and so, which is actually quite uncommon in the internet these days. It feels like in the internet it's like things escalating quickly and people misunderstand on purpose. But [in Kallio kierrättää] there is a good spirit in my opinion." (Pirjo, 26)*

> *"-- it just links in general to the fact that I'm so happy to be able to live in Kallio. It just ties me somehow more to the place." (Minna, 23)*

The community also exists outside Facebook, however it is linked to the group. Kallio kierrättää users can sense the community in the streets as well, because they connect with the users face-to-face. All interviewees had had mainly positive experiences about meeting other users for swapping, and any negative experiences were one or two cases. It seems to be a benefit to meet people face-to-face and have at least a quick chat with one another. Meeting also has its perks over e.g. sending the items via mail, because that way the user can be sure of getting the money and no-one will steal the item they're selling. Meeting other users also help building trust for further activity in the group, as users are able to see that swapping goes well. In addition to meeting people yourself, users have noticed other users waiting for a buyer for example in Sörnäinen, which is a node in traffic and where a lot of non-Kallio residents show up for swapping. Seeing other people engaging in exchange in the streets of Kallio enables these users to see the effect Kallio kierrättää has on the community and it further seems to deepen their sense of belonging to the community.

Having the connection outside Facebook enables the chance of making friends with other users. One interviewee described a story she had read in the group that some seller had invited the buyer in for a glass of wine. These types of stories seem to at least build the sense of being part of a community where these sort of things can happen. Katja told that they have become good friends with other admins, further showcasing the possibility of building relationships outside Kallio kierrättää, still brought together by the group. Hence, the effects of Kallio kierrättää do not stay in the digital environment but they go beyond it, to the offline world, so to speak.

Helping others does not stay in the digital platform either. As explained earlier, the group acts as an information channel as well, meaning that lost keys or credit cards possibly find their owners through the group. In addition, Kallio kierrättää has proved that it can take care of people outside Facebook as well. One such situation occurred when an elderly man was seen looking lost and informed through Kallio kierrättää:

> *"-- it was just in the news that when a lonely elderly man had been sitting on a park bench and someone wrote about it in the group that if you go by, could you see if he's still there, and someone had gone there and eventually they had taken him to a hospital or called the police or so, and he had had dementia and was lost." (Anna, 30)*

The user's own context also affects value co-creation. It seems that an important tenet is the possibility to recycle. Recycling was mentioned also as value-in-use, but it seems to be value-in-context as well. Many interviewees told that recycling is important for them in general, and therefore their own values affect what they think as valuable. Kallio kierrättää offers a channel for recycling, and in the larger context it is participating in the trend of eco-friendliness and sharing economy. It seems that the community is linked to the environmental thinking too, because some users have in addition to selling items lend them to other users. This activity goes well together with the community value and the environmental value.

> *"-- when there are these announcements that will someone take it or buy cheaply, or will it go to the bin, so that is usually the worst for me because I'm seeing that someone is throwing something out and I'm trying to think fast, if I had even the smallest need for it." (Ossi, 31)*

> *"-- the sense of recycling, like when I lent a mattress to a guy for a weekend, so that one doesn't need to buy necessarily, if you only need something for the weekend." (Leena, 30)*

The personal context affects value-in-context in other ways as well. A lot is dependent on user's situation regarding e.g. time that he or she has. When the user has enough time to start a selling or buying process that can be done. Conversely, when there is not enough time, the user is not able to do so. This and other barriers to use are discussed in following chapter. Other types of themes determining value-in-context from a user's personal context are for example if they are short on money or if they have items at home that they want to get rid of. In these unique circumstances, being able to buy something for cheap or to sell something very fast become even more valuable due to contextual differences.

The locus of value-in-context is more difficult to determine compared to value-in-exchange and value-in-use. This is due to its complexity and extent over simple interactions. Hence, it could be said that value-in-context is a result of a larger network and it therefore exists in multiple connections between actors, also taking into account the circumstances. When we look at an individual user in Kallio kierrättää and the value he or she experiences, important pieces of the context lie in the location and the connection between users, both online and offline. In addition, the user's own circumstances that are not

tied to the location or other users, such as valuing recycling, affect how value-in-context is created. Moreover, all exchange happens in a larger context, where value-in-context is always different. The most important thing is to realize the networked reality and to not rule out any other potential factors that affect value co-creation in addition to the themes that were discovered in this data.

6.2.4 Negative outcomes

In addition to the three types of value covered previously, the research question aims to cover the negative outcomes as well. This is derived from the notion that S-D logic does not have a clear stance on negative value outcomes and that they should be included in the logic (Gummerus, 2013). This chapter will unfold the negative outcomes interviewees have experienced and in the end aims to find ways in which negative experiences could be theoretically included in S-D logic.

Negative experiences seem to exist in the same levels as do value outcomes, namely in exchange, use and context. In addition to these levels, the strength of the negative experience varies. Some are merely annoying features that exist in the use, whereas some form barriers for using Kallio kierrättää for buying or selling purposes. The negative experiences that disturb value-in-exchange to be realized mainly relate to money. Sometimes users perceive an item being too expensive, and therefore they will not buy it. It could happen in selling as well, if the seller realizes that he or she has sold it too cheap, but in these situations interviewees told that it was more important for them to sell the item in the first place instead of making a lot of money with it. In connection with value-in-exchange, some sellers do not want money for one reason or another, but e.g. a packet of coffee instead. This forces the seller to go to a store to buy coffee instead of going directly to the seller and pay with cash. Also sometimes paying with cash could be inconvenient:

> *"However, there's some trouble in [paying with cash] because you have to be sure you have enough time to go withdraw cash and break it into change, that's sometimes an anxious extra link there --" (Amalia, 35)*

The negative experiences in the use level become visible on Facebook. Some interviewees think admins are interfering in the activity too much, making the use of the group more complex and difficult. They feel that admins are being too specific with enforcing the rules,

because the group is essentially created for the users themselves. Continuing with the rules, they might appear as complex and difficult especially for a beginner. If a new member in the group feels insecure about what abbreviations are used with what activity (e.g. “av” for tentative reservation, or “alustava varaus” in Finnish), it could prevent him or her from using the group efficiently. Getting to know the exact rules that relate to selling could also create a barrier for someone who considers selling something:

> *"Well that's also in the selling thing that I don't have the energy to familiarize myself with how one should, because it feels that there are quite strict rules." (Pirjo, 26)*

For many interviewees, selling seems to include more sacrifices than buying. Many said they do not sell because there is too much wheeling and dealing when they are selling, either by experience or based on what they have heard or expect selling to be like. Those interviewees who have sold items through Kallio kierrättää say that they find it annoying when people cancel too close to the agreed meeting time, or when people do not cancel in the first place but postpone the meeting time and time again instead of saying it straight that they do not want to buy the item. The sacrifice made for selling is mirrored with the positive outcomes that come from selling. For many interviewees, the positive outcomes of e.g. getting a bit of money and recycling an unneeded item outweigh the sacrifices they have to make. They see that selling in Kallio kierrättää is easier compared to traditional flea markets, whereas some interviewees are not willing to see the trouble at all and recycle their clothes by giving them to friends or taking them to charity.

Many negative experiences relate to the digital platform on which Kallio kierrättää is based. The technology is many ways imperfect for using it in flea market purposes. Interviewees tell it is difficult if not impossible to search anything in the group, because Facebook’s search function is not working as good as they would want to. In connection to the search function, looking for certain items in the group is very difficult because there are not any common ways to e.g. tag the sales announcements. The most wanted improvement to the technology was the possibility to label the sales announcements with the type of item it is (e.g. electronics or clothing) and some further details, such as the size. This way it would be easier to try and look for something for oneself instead of browsing the entire group or simply waiting for suitable items to pop up in one’s Facebook

stream. Despite the many big or small technological deficiencies, users thought the technological environment was good enough when compared to the benefits it offers.

An interesting notion that was brought up by a couple of interviewees was that they would want to be more hidden from their Facebook friends as they buy or sell in Kallio kierrättää. At the same time users are expecting other users to be as honest and authentic as possible, but when it comes to friends, it is too close. Perhaps the users are feeling that selling their personal items is not their friends' business and that their friends seeing their activity in the group is somehow too close. What makes this interesting is that users are prepared to tell any details of the item they are selling for total strangers but simultaneously their friends seeing the posts feels too intrusive:

> *"-- if I sell there something or if my friends sell something, at first I removed the setting that it notifies me separately about my friends' posts. That was very annoying and strange in the beginning, there being the presumption that your friends' sales announcement comes there -- if I'm selling my surplus rubbish there, it would be nice to be a bit more anonymous." (Maija, 29)*

Some other disadvantages relate to the way other users are acting in the group. The rules state the basic information that seller has to put in the announcement, but the rest is up to the seller. Negative outcomes occur upon lack of communication and it could result in the buyer getting something he or she did not expect to get. If the seller is not telling enough details about the item they are selling, the buyer might not even know what to ask for. People seem to have different opinions on what is considered broken or how much second-hand items can be worn out. A lot of misunderstandings could be avoided if communication and description of items was increased. In some cases bad experiences in buying have made the users to be very open and honest about the condition of the items they are selling themselves, and many interviewees explained that they are trying to be as specific as they can in order to avoid the buyer becoming disappointed in the purchase.

User-to-user interaction can go wrong also outside Facebook upon the meeting for swapping. A lot of times it relates to the lack of information or sometimes people simply understand things differently. This could result in inappropriate behavior when meeting or not even showing up when agreed. However, these negative encounters were not many and considering the amount of people in the group and the whole group being administrated on a voluntary basis, it seems quite remarkable that not more misuse exists in the group.

Many of the context-related disadvantages are the opposites of the value-in-context discussed before. If one does not live in Kallio area, it could be that they consider it being too far for buying or selling. Even in the case where a user lives in Kallio, they might think that the pick-up place determined in the sales announcement is too far from where they live or where they would pass by, resulting as a barrier to buying. Other downsides that relate to user's own context is the situation where the user does not have enough time for taking pictures, answering questions and everything else that relates to selling. Many interviewees explained that they have decided not to sell when they are short of time, because it will be too difficult to set up a suitable time for meeting with the buyer, which can be weary even if one had more time. Ossi (31) explains why he has trouble selling in Kallio as a person who lives outside Kallio:

> *"-- if you would sell something slightly bigger than something that goes in your backpack, then there is so-called area-related injustice --"*

Some unspoken rules or ways of behaving in the group are seen as negative as well. Even if the user was prepared and ready to sell something from the using point-of-view, there could be contextual barriers in the group culture that inhibit the seller. The group is seen as some sort of a hipster thing, reflecting the city or neighborhood culture. This could be seen in the items that are sold in the group. There are certain brands and apparently a certain style especially in clothing that is more preferred than others. However, this view was not shared by all users, as some said they feel they can sell anything in the group. Still, this feature in the group could create a barrier for some users to sell.

> *"Then there is sometimes the feeling that you can't sell anything really ordinary. The clothes should be something special and exciting and such, before you can sell them." (Maija, 29)*

Despite the negative features, users are still in the group and continue using it. The negative experiences could be roughly divided in two types: those that prevent value from being realized and those that only diminish the value outcome. As a consequence, negative experiences seem to be part of the value co-creation process and they are thus in a way embedded in the resulting value. It could be theorized that negative experiences affect the strength of value outcome. This gives support to Zeithaml's (1988) net benefit thinking,

where the value is the result of positive outcome subtracted with negative outcome. Hence, this view could be included in S-D logic as well.

In case of the user evaluating the negative outcome larger than the positive outcome, they decide not to engage in the evaluated activity in the first place. This does not mean that each user would rationally determine the value outcome, but it is more based on their feelings and own circumstances. Net benefit value has been criticized for the possible rationality assumption, but I do not see this assumption necessary, thus the net benefit view could be inherited by S-D logic as well.

7 DISCUSSION AND CONCLUSIONS

This thesis aims to answer how a Facebook flea market creates value for its users. Specifically, the theoretical focus has been on the value creation process as well as value outcomes that users experience through using such platform. The major theoretical underpinning is set at service-dominant logic (S-D logic), in which platform literature has been infused. By first justifying the theoretical framework and applying it to empirical findings, the focus will be now on highlighting the major findings and discussing both the theoretical contribution and practical implications.

7.1 Theoretical contribution and discussion

The aim of this thesis has been to provide further understanding and empirical support on value as seen in service-dominant logic (S-D logic) that was introduced by Vargo and Lusch in 2004. Value co-creation is a central tenet in S-D logic, and it has been evolving during the past decade more towards realizing the contextual nature of value creation. As a result, value-in-context has been used as the most advanced form of value, even though value-in-exchange and value-in-use still have their role in the logic (Vargo et al., 2008). The contextual nature of value also means that value is created in a network, or in an exchange between networks. Hence, the value co-creation process might become very complex and hard to analyze and specify. Therefore, complexity is tackled with platform structure.

The research question focuses on how a Facebook flea market creates value. The studied phenomenon is a platform, which reasons the choice of platform literature to develop S-D logic. In addition, platform structure better enables the analysis of a complex whole (Baldwin & Clark, 2000). Furthermore, it might be possible to analyze value co-creation with platform structure in situations, where the phenomenon is not a traditional platform but where it meets the requirements of a platform perhaps more abstractly – having a modular architecture with a core and a periphery, and enabling leverage. Kijima (2015) discusses value orchestration platforms as enablers of value co-creation. Thus, a strategic alliance between S-D logic and platforms could be a relevant direction to study.

Based on the two major literature streams, a theoretical framework was developed. It is covered more in details in chapter 4, and the focus will be now on how the framework can be developed and what the findings have revealed about the phenomenon. The phenomenon of a Facebook flea market is relatively new and hence offers a fruitful research subject. The empirical research has showed that the value co-creation process has

been different than expected based on theory. Thus, it seems that the case is at the very heart of service innovation, a topic that is discussed by e.g. Maglio and Spohrer (2008). The complexity of value co-creation, where resource integrators can be many, does provide the possibility of providing service in new ways (Vargo, 2009).

The work on combining S-D logic and platform literature has started before, and a model made for business model mapping purposes by Smedlund (2012) has served as a starting point for mapping out the value co-creation process in a Facebook flea market Kallio kierrättää. The process view has been the focus of one of the two sub research questions that were set in the beginning. This view will be discussed now.

An overview of findings shows that the value co-creation settings in the case of Kallio kierrättää are more equal than the original model proposed. Instead of dividing the platform participants into two different sides based on who proposes value and who determines value, the role of users was perhaps more flexible than was expected. Kallio kierrättää is a great example of service innovation in the sense that users of an already working service platform have found new ways of using the same platform. Because of this, the roles of one side being merely the value proposition side and the other merely the user side were *not* present based on the analysis. A user-independent complementor could not be identified in the case but instead it was the users themselves who created an inner platform inside an existing one, Facebook, thus shaking the user role even more. This change is depicted in Fig. 2 by having added a connection between a complementor and a user. Still in Kallio kierrättää, the role of running the platform is given to admins who in a way represent the complementor role. That is why it was not taken out of the model.

Another change in the process was clearly the user-to-user connection that exists outside the digital platform. The sense of community is built both online and offline and the two realities are inseparable. From a purely digital platform point-of-view, interaction would happen only in the platform. However, in the case of Kallio kierrättää, offline interaction is a crucial part of value co-creation process. In addition, context was added to the model to emphasize its role, even though it has been recognized by prior theory. In this case, the physical place and culture of Kallio affect the value co-creation process, complementing the digital platform. As a result, it can be concluded that ICT does play a significant and indispensable role but it is complemented by the physical reality.

One of the most important findings was that rules play a crucial role in giving frames to activities in the group. This is theoretically interesting, because industry platforms such as Facebook are open and not governed (Gawer, 2014), whereas Kallio kierrättää is

more closed through accepting members only after a small process and it is governed with rules, enforced by admins. The rules are not imposed by admins but they are created together with users, further building the communal nature of how the group works. The notion of a closed platform inside an open platform is interesting, and it further provides evidence on platforms being nested. The nested nature of Kallio kierrättää is portrayed with the abstract evaluation of Kallio kierrättää boundaries drawn with a red area in the figure below. The self-governance model could be a prolific source of further research as well.

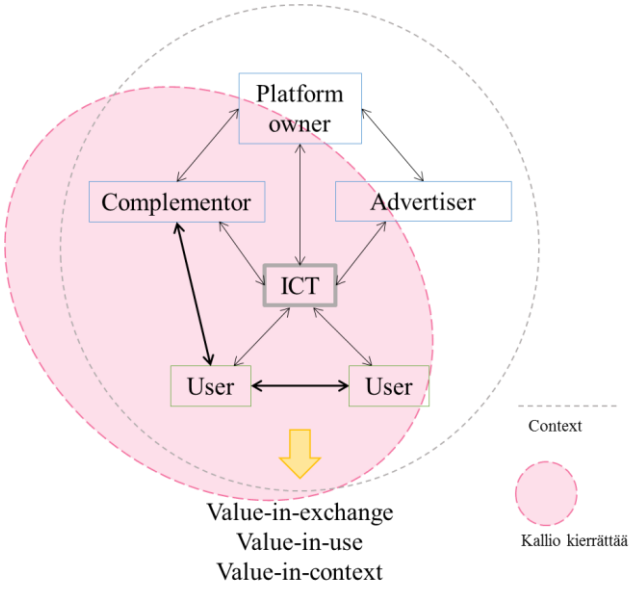

Figure 2: Value co-creation in a digital platform as a service ecosystem: Kallio kierrättää

When the other sub research question of what kinds of positive and negative outcomes exist is evaluated, a deeper answer is provided within findings. What could be highlighted is that analyzing outcomes in general is the other side of the same coin of value, the other being the process, and looking deeper into value outcomes helped determining the value co-creation process as well. The most interesting point theoretically was to analyze how negative experiences affect the value outcome. It was understood that all interviewees have experienced at least some negative parts while being active in the group, but at the same time they had had positive value outcomes as well. Especially negative characteristics were also present in situations where the final outcome was positive. Because of this, it is suggested that S-D logic inherited the net benefit view on value as first presented by Zeithaml (1988). The same applies to situations where negative expectations form barriers to using the platform – a user has evaluated the negative to be more than positive, thus not engaging in

the activity at all. The barriers were now studied from the user point-of-view, and the understanding on the barriers could be extended by including a set of total non-users into the interviewee pool.

The net benefit view has been criticized of assuming people would make rational choices (see e.g. Gummerus, 2013), but I do not see this assumption necessary. Each individual makes the decision in their own context where their feelings and every other aspect in the situation affects the result. By including the net benefit view to S-D logic, Gummerus' (2013) call for taking negative outcomes into account in S-D logic would be answered as well. Taking notice of negative experiences will better enable understanding what creates positive value outcomes and what minimizes the negative experiences.

The analysis has shown that platform structure can be successfully infused into value co-creation. Furthermore, it has shed light on a rather recent phenomenon and especially on how it creates value for those using Kallio kierrättää, the case chosen to represent the Facebook flea market phenomenon in this thesis. The analysis has also brought some needed empirical support on S-D logic (see e.g. Akaka et al., 2013). In addition to advancing S-D logic knowledge, this thesis has opened new avenues for studying platforms. The division of platforms into interior and exterior platforms (Porch et al., 2015) can be further extended in acknowledging that interior platforms can exist nested in exterior platforms.

When the results are linked to a larger phenomenon, the results shed a little light on what is happening in sharing economy, and even more extensively, in circular economy. It appears that individuals have a huge role in future endeavors, coming from the notion that their role is not fixed into being merely consumers. I believe that taking service-dominant logic as a starting point is needed for sharing economy to work. Furthermore, I believe that the economy will be more and more based in what people, individuals, citizens do in addition to what companies do. Perhaps the future lies in the union of the two entities.

7.2 Practical implications

The results indicate that new ways of service provision are created organically in existing platforms. This resonates with the possibilities of sharing economy, which potentially changes the way we see and act in the entire economy. For individuals, the results show that they have the possibility to create value with each other in addition to creating value with

companies. In the case of Kallio kierrättää, companies do play an indirect role while the more direct value co-creation happens between individuals, without middlemen.

When we look at business development, the results also give some food for thought for companies. Looking at the exact phenomenon of online flea markets, this study has illustrated that extra-platform features also play a significant role in value co-creation. Consequently, businesses in digital platform businesses should evaluate which parts outside the actual platform are important in value co-creation from a user viewpoint, and take those views into account whenever possible. If Kallio kierrättää only existed online and users did not meet face-to-face, the value co-creation process would be very different and the value outcomes possibly considerably lesser.

Based on the data analysis, the benefits of using Facebook as well as Kallio-related benefits currently outweigh the technological challenges in Kallio kierrättää. Despite users experiencing value, there seems to be a craving for improvements as well. It would be interesting to see whether a technologically more sophisticated platform could replace organically formed, perhaps even homespun platforms such as Kallio kierrättää. These types of platforms might not be able to compare in the sense of community but their strengths could lie in the technology instead. One limitation of this study is that non-users were not interviewed and therefore it cannot be said, based on the data in this research, what types of features or flea market characteristics non-users of Kallio kierrättää would prefer.

In developing platforms, businesses should pay close attention to the pricing strategies they choose. This has been shown in prior research as well, but the case at hand emphasizes that if a similar service exists for free, there should be a clear justification why they would need to pay for it. All in all, harnessing the power of consumer-to-consumer, peer-to-peer or human-to-human exchange, however one wants to call the phenomenon, could result in successful examples of how sharing economy could work in reality.

7.3 Suggestions for further research

As stated before, the phenomenon of Facebook flea markets is very new and thus provides many potential avenues for further research. Since the focus on this thesis was to look at the value co-creation from user's perspective, future research could see how value is created for other participants in the value chain. An interesting topic would be to evaluate how e.g. Facebook benefits from hosting a closed platform on its own platform. Would it be possible that Kallio kierrättää or other Facebook flea markets, or other collaborative consumption

groups on Facebook, increased the value proposition of Facebook as well? It appears that Facebook does benefit from these types of groups, which is indicated by Facebook having added a selling tool for the use of flea markets. The value co-creation network more extensively could also provide a fruitful area of interest for further research, including more actors and more analysis on the cause-and-effect relationships.

Many interviewees had been using traditional flea markets before joining Kallio kierrättää as well, and therefore it would be interesting to study what would make an online flea market such that it would attract people who have not used flea markets previously. In addition, a comparative study between different Facebook-based flea market groups as well as between separate, professional platforms and Facebook flea markets would offer more understanding on what are the essential characteristics regardless of where the exchange takes place, and what characteristics are seen more important in different platforms.

When the developments in service-dominant logic are evaluated, the suggestion of taking the platform structure infusion research deeper could provide a way of combining S-D logic and abstract platforms theoretically. In this study, the studied phenomenon was a digital platform, but the complex nature of value co-creation might benefit from the infusion of platform structure in other circumstances as well. This suggestion is grounded in the notion that S-D logic and platform literature share many things in common, and each literature stream could benefit from the other.

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